

**Committee on the Status of Species at Risk
in Ontario (COSSARO)**

**Comité de détermination du statut des
espèces en péril en Ontario**

ANNUAL REPORT

RAPPORT ANNUEL

2025 - 2026

PREPARED FOR:

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Minister of the Environment, Conservation and Parks

PREPARED BY:

The Committee on the Status of Species at Risk in Ontario

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ACKNOWLEDGEMENTS

The Committee on the Status of Species at Risk in Ontario (COSSARO) wishes to acknowledge and thank the observers who attended and contributed to the January 2026 assessment meeting. Observers represented Indigenous communities, companies, industry associations, academic organisations and conservation organizations (listed in alphabetical order). The observers' attendance and interest in the work of COSSARO were helpful and appreciated.

- Big Grassy River First Nation
- Chippewas of the Thames First Nation
- Fleming College
- Georgian Bay Biosphere
- Hydro One
- Mohawk Council of Akwesasne
- Nature Conservancy of Canada
- Nipissing First Nation
- Ontario Nature
- Ontario Power Generation
- Ontario Stone, Sand and Gravel Association
- Saugeen Ojibway Nation Environment Office
- Saugeen Ojibway Nation
- Six Nations of the Grand River
- Wasauksing First Nation

We also wish to express our thanks to the following Indigenous communities who contributed scientific information and Indigenous Knowledge through written or oral submissions to COSSARO:

- Magnetawan First Nation
- Saugeen Ojibway Nation Environment Office

As members on COSSARO, we are grateful to the Hon. Todd McCarthy as the Minister of the Environment, Conservation and Parks (MECP) and his team at the MECP that serves as the Secretariat and provides support to COSSARO. We are grateful to the following MECP team members who worked hard to support COSSARO in 2025-26:

- Adam Byers
- Travis Coulter
- Glenn Desy
- Alyssa Fiedler
- Hailey Huffman
- Germain Collinge Ménard
- Sarah Parna

We are also grateful to the Ministry of Natural Resources (MNR) Natural Heritage Information Centre (NHIC) for providing important Ontario species data to COSSARO

that enabled our assessments. In particular, we wish to thank Colin Jones (Provincial Zoologist, Invertebrates with the NHIC) who serves as a Province of Ontario member on the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). In this role he was able to support COSSARO's access to and understanding of COSEWIC considerations related to species assessments that provides historical context of past assessments and knowledge that is invaluable to our provincial species assessments.

1. INTRODUCTION

The Committee on the Status of Species at Risk in Ontario (COSSARO) is an independent committee of experts that considers which plants and animals should be classified as at risk in Ontario.

The *Endangered Species Act, 2007* (ESA) gives the committee legal recognition and specific responsibilities:

- Maintaining criteria for assessing and classifying species;
- Keeping a list of species that should be assessed and classified (or reclassified) in the future;
- Assessing, reviewing and classifying species; and
- Submitting reports regarding the classification of species and providing advice to the Minister of the Environment, Conservation and Parks.

COSSARO can consist of up to 12 members with expertise in scientific disciplines, community knowledge or Indigenous traditional knowledge. The ESA requires that a minimum of 10 members, including a Chair and Vice Chair, be appointed. A quorum of eight members is required for voting purposes.

This annual report covers work completed by the committee since the last annual report. In 2025-26, COSSARO's activities involved holding one virtual meeting as directed by the Ministry of Environment, Conservation and Parks (MECP), resulting in MECP staff, COSSARO members, presenters and observers participating online. The committee assessed 11 species, of which 1 was deferred to a future assessment date. Voting on the other 10 species was completed at the meeting held on January 13-14, 2026.

Throughout 2025, several COSSARO members were reappointed for 3-year terms: Allison Featherstone, Toby Thorne, Ian Barrett, Jillian deMan and Darren Sleep. In January 2026, Megan Thompson was appointed for a 3-year term as a member and Ashley Thomson was appointed as Vice Chair for a 3-year term.

2. SUMMARY OF STATUS ASSESSMENTS

The table below summarizes the results of the assessments completed on 10 species/populations in 2026. These species are grouped by types of fauna/flora for ease of review. The order is the same used in Attachment 2 to this report.

From the table below, the following observations are offered: 1 species assessment was deferred to a future assessment meeting; 1 species increased in status level (for example, changed from Threatened to Endangered); 3 species decreased in status level (for example, changed from Threatened to Special Concern); 5 species that were not previously assessed were classified as an at risk status (Endangered, Threatened, or Special Concern); and 2 Massasauga populations that were previously assessed separately were assessed as a single population, representing a decrease in status level for 1 population and no change for the other.

SPECIES English, French, Indigenous*, Latin names	CURRENT CLASSIFICATION (UNDER ESA)	NEW COSSARO EVALUATED STATUS (2026)	FEDERAL PROTECTION STATUS
BIRDS			
Least Bittern Petit blongios, (<i>Ixobrychus exilis</i>)	Threatened	Special Concern	SARA: Threatened MBCA protection: Yes
Short-billed Dowitcher hendersoni/griseus Bécassin roux <i>hendersoni/griseus</i> (<i>Limnodromus griseaus hendersoni/griseus</i>)	N/A	Threatened	SARA: Not listed MBCA protection: Yes
Snowy Owl Le Harfang de neiges (<i>Bubo scandiacus</i>)	N/A	Special Concern	SARA: Not listed MBCA protection: No
INSECT			
Macropis Cuckoo Bee Abeille-coucou de Macropis (<i>Epeoloides pilosulus</i>)	N/A	N/A – assessment deferred	SARA: Endangered
FISH			

SPECIES English, French, Indigenous*, Latin names	CURRENT CLASSIFICATION (UNDER ESA)	NEW COSSARO EVALUATED STATUS (2026)	FEDERAL PROTECTION STATUS
Pugnose Minnow Petit-bec (<i>Opsopoeodus emiliae</i>)	Threatened	Endangered	SARA: Threatened Aquatic Species: Yes
MOLLUSCS			
Big-tooth Whitelip Hélice dentifère (<i>Neohelix dentifera</i>)	N/A	Endangered	SARA: Not listed Aquatic Species: No
Lilliput Le toxolasme nain (<i>Toxolasma parvum</i>)	Threatened	Special Concern	SARA: Endangered Aquatic Species: Yes
LICHEN			
Cupped Fringe Lichen Hétérodermie à dessous blanchâtre (<i>Heterodermia hypoleuca</i>)	N/A	Endangered	SARA: Not listed
PLANTS			
Short-fruited Rush Jonc à fruits courts (<i>Juncus brachycarpus</i>)	N/A	Endangered	SARA: Not listed
REPTILES			
Butler's Gartersnake Couleuvre à petite tête (<i>Thamnophis butleri</i>)	Endangered	Threatened	SARA: Endangered
Eastern Massasauga Le massasauga de l'Est (<i>Sistrurus catenatus</i>)	Massasauga (Carolinian population): Endangered	Threatened	SARA: Massasauga (Carolinian population): Endangered

SPECIES English, French, Indigenous*, Latin names	CURRENT CLASSIFICATION (UNDER ESA)	NEW COSSARO EVALUATED STATUS (2026)	FEDERAL PROTECTION STATUS
	Massasauga (Great Lakes/St. Lawrence population): Threatened		Massasauga (Great Lakes/ St. Lawrence population): Threatened

NOTES:

- Not Listed means the species had not been formerly assigned a status in Ontario.
- All English, French and Indigenous names of species are included in Status Reports, where known. Indigenous names are highlighted with an asterisk and these names are not intended to be inclusive of all cultures and languages. Indigenous names are not based upon western scientific methods.
- Species that are listed as Extirpated, Endangered or Threatened on Schedule 1 under the federal *Species at Risk Act* (SARA) that are aquatic species as defined in that act or are protected by the federal *Migratory Birds Convention Act, 1994* (MBCA) receive federal protection on non-federal land.

3. SUMMARY OF 2025-26 COSSARO MEETINGS & OPERATIONS

3.1 Meetings

One meeting was held since COSSARO’s last annual report. The meeting was held virtually in January 2026.

MEETING DATE	MEETING SUMMARY
January 13-14, 2026	<p>This meeting was held virtually with the committee assessing 10 species, with 1 species being deferred to a later meeting date.</p> <p>The committee welcomed two new members, including a Vice Chair. The meeting was also attended by approximately 70 observers, including students from Fleming College studying recovery planning, and a presentation was provided by Saugeen Ojibway Nation Environment Office.</p> <p>In closed sessions, the committee discussed implications of the <i>Species Conservation Act, 2025</i>, on COSSARO reports, plans to enhance COSSARO’s engagement of Indigenous communities and inclusion of Indigenous traditional knowledge in species assessments, and continued discussions on reviewing and updating COSSARO’s status assessment criteria.</p>

3.2 Updates Regarding Other Matters

COSSARO currently has a subcommittee reviewing existing criteria used in the COSSARO assessments. The intention of modifying or strengthening criteria and modifiers is to ensure a defensible assessment and classification of species or populations as new approaches and assessment methodologies are enhanced.

In June 2025, the Government of Ontario passed Bill 5, the *Protect Ontario by Unleashing our Economy Act, 2025*. This resulted in amendments to the ESA, and introduction of the *Species Conservation Act, 2025* (SCA), which is anticipated to replace the ESA in 2026. The amended ESA and SCA added a requirement for Ontario’s Lieutenant Governor in Council to appoint a minimum of 10 members to COSSARO on the recommendation of the Minister, and to designate a Vice Chair. COSSARO’s role of conducting independent species assessments based on the best available scientific information, including community knowledge and Indigenous

traditional knowledge, remains unchanged. COSSARO will continue to submit an annual report to the Minister, and if the Lieutenant Governor in Council makes a regulation listing a species classified by COSSARO (on the Species at Risk in Ontario List under the ESA, or Protected Species in Ontario List under the SCA), the classification of the species must be the same as COSSARO's classification. Additionally, under the SCA, any species classified as at risk by COSSARO will be eligible to receive funding to promote protection and conservation activities through the province's Species Conservation Program.

In August 2025, COSSARO and the MECP finalized and signed a new Terms of Reference. The Terms of Reference outline responsibilities of COSSARO members, its Chair and Vice Chair, and the Ministry in supporting COSSARO to achieve its legislated mandate.

4. 2026 PLAN

COSSARO is planning to hold an open in-person assessment in late 2026, and is planning a closed virtual meeting in February 2026 to discuss approaches to improve engagement with Indigenous communities.

COSSARO generally assesses species that were assessed at the most recent COSEWIC assessment meetings. In addition to these species, COSSARO is always available to review any other species at the request of the Minister, should new information become available that may change a species' or population's classification.

Other species that may be assessed in 2026 include those that have been subject to the provision of additional and/or new data provided in the form of Indigenous traditional knowledge and community knowledge. COSSARO is placing an emphasis on ensuring that assessments are based upon the best available scientific information, including information obtained from community knowledge and Indigenous traditional knowledge. While email notifications are sent out in advance of assessment meetings, information on how knowledge can be shared with COSSARO is available on COSSARO's website year-round.

COSSARO also encourages public participation in our meeting as observers, and aims to provide timely notification of meeting dates once scheduled through postings on the committee's website and through email notifications.

Species Scheduled for Assessment

Species or populations planned for assessment in Fall 2026 are as follows:

	SPECIES SCHEDULED FOR ASSESSMENT	
MEETING DATE	Scientific Name	Common Name
To be determined	<i>Anacamptis lupinella</i>	Lupine Leafroller Moth
	<i>Epeoloides pilosulus</i>	Macropis Cuckoo Bee
	<i>Taxidea taxus jacksoni</i>	American Badger (Southwestern Ontario population)
	<i>Taxidea taxus taxus</i>	American Badger (Northwestern Ontario population)
	<i>Smilax rotundifolia</i>	Round-leaved Greenbrier
	<i>Desmodium illinoense</i>	Illinois Tick-trefoil

ATTACHMENTS

Attachment 1: COSSARO Membership (2025-26)

Attachment 2: 2025-26 Species Summaries

ATTACHMENT 1: 2025-26 COSSARO MEMBERSHIP

<p>1. Ian Barrett, M.Sc. Senior Biologist Senior Manager of Environmental Projects Colville Consulting Inc.</p>	<p>6. Derek Parks, M.Sc. (Chair) Director, Sr. Aquatic Specialist Parks Environmental Inc.</p>
<p>2. Jillian deMan, H. B.Sc. Sr. Terrestrial and Wetland Ecologist Water & Natural Resources, Environment AECOM</p>	<p>7. Darren Sleep, Ph.D. Chief Scientist, Forest Ecology and Conservation Forest Products Association of Canada</p>
<p>3. Gary Epp, Ph.D. Practice Lead for Ecology AECOM</p>	<p>8. Toby Thorne, M.Sc. Supervisor, Field Conservation Toronto Zoo</p>
<p>4. Allison Featherstone, B.Sc. Vice-President Senior Planning Ecologist LGL Limited Environmental Research Associated</p>	<p>9. Megan Thompson, M.Sc. Forestry Ecologist and Forestry Services Superintendent Domtar</p>
<p>5. Shelley Lohnes, H. B.Sc. Vice-President Senior Ecologist GEI Consultants</p>	<p>10. Ashley Thomson, Ph.D. (Vice Chair) Associate Professor Natural Resources Management Lakehead University</p>

ATTACHMENT 2: 2025-26 SPECIES ASSESSMENT SUMMARIES

<p style="text-align: center;">SPECIES</p> <p>English Name French Name (Latin Name)</p>	<p style="text-align: center;">Summary of Species Assessments</p>
<p>BIRDS</p>	
<p>Least Bittern Petit blongios, (<i>Ixobrychus exilis</i>)</p>	<p>Least Bittern (<i>Botaurus exilis</i>) is a small member of the Heron family that mainly breeds in the eastern United States and southern portions of eastern Canada. In Ontario, this species breeds primarily in Southern Ontario, as well as in northern Ontario near Fort Frances, Dryden, and east of Sault Ste. Marie. Northern breeding Least Bittern, including individuals from Ontario, are thought to overwinter in Florida, along the Gulf of Mexico coast through Texas to northern Mexico and Central America, as well as Baja California. The breeding population of Least Bittern in Ontario has been estimated at approximately 2,800 birds, which represents approximately three percent of the global population of this species. The breeding population of Least Bittern in Ontario is currently stable.</p> <p>Least Bittern was previously classified as Threatened by COSSARO and is listed as such on the Species at Risk in Ontario List. It is currently listed as Threatened in Quebec and Endangered in Manitoba and has also been listed as Endangered or Threatened in U.S. states that border Ontario.</p> <p>Overall threats impact to Least Bittern is considered to be medium-low and include habitat loss and degradation, collisions with vehicles and elevated infrastructure, colonization of breeding habitat by invasive plant species, disturbances associated with boating activities, alteration and changes to water levels, pollution and viral and parasitic outbreaks.</p> <p>Least Bittern is classified as Special Concern in Ontario, based on criteria b and is consistent with the definition of status under the <i>Endangered Species Act, 2007</i> (does not meet criterion to be considered Endangered or Threatened, but may become Threatened or Endangered if identified threats are not managed). The change in status of this species is due to a non-genuine reason, with increased search effort leading to higher population estimates than in 2009. Evidence of continuing decline is therefore uncertain.</p>

<p style="text-align: center;">SPECIES</p> <p>English Name French Name (Latin Name)</p>	<p style="text-align: center;">Summary of Species Assessments</p>
<p>Short-billed Dowitcher <i>hendersoni/griseus</i></p> <p>Bécassin roux <i>hendersoni/griseus</i> (<i>Limnodromus griseus hendersoni/griseus</i>)</p>	<p>Short-billed Dowitcher <i>hendersoni/griseus</i> (<i>Limnodromus griseus hendersoni/griseus</i>) is a subspecies of the medium-sized shorebird Short-billed Dowitcher. It breeds in central and eastern Canada in the summer before migrating south to overwinter along the Atlantic coast of the Americas. The species' summer range in Ontario includes the shores of Lake Huron and James Bay. Short-billed Dowitcher <i>hendersoni/griseus</i> is threatened by a combination of factors such as hunting and land use change at its migration and overwintering sites. The International Shorebird Survey suggests a 3-generational decline of approximately 58.94%, and threats are expected to continue.</p> <p>Short-billed Dowitcher <i>hendersoni/griseus</i> is assessed by COSSARO as Threatened in Ontario. The estimated decline in the population of mature individuals of the population meets the threshold for Endangered under Criterion A2bd+4db, but does not meet the definition (i.e., imminent risk of extinction) and is therefore modified to Threatened based on the definition of Threatened under the <i>Endangered Species Act, 2007</i>. This status matches the most recent COSEWIC assessment. Short-billed Dowitcher <i>hendersoni/griseus</i> was not previously assessed by COSSARO.</p>
<p>Snowy Owl</p> <p>Le Harfang de neiges (<i>Bubo scandiacus</i>)</p>	<p>Snowy Owl (<i>Bubo scandiacus</i>) is a large, ground-nesting owl of the Arctic tundra, easily recognized by its white plumage and preference for open landscapes. In Ontario, the species does not breed regularly but occurs as an irregular winter visitor, with numbers fluctuating widely among years in response to prey availability on the Arctic breeding grounds. Individuals are most often observed in open agricultural areas, shorelines, airports, and coastal habitats along the Great Lakes.</p> <p>Outside of Ontario, Snowy Owl wintering range extends across southern Canada and the northern United States, as well as parts of northern and western Europe and northern Asia while its breeding range spans northern Alaska and Arctic Canada, Greenland, and the Arctic regions of Scandinavia and Russia. In Ontario, Snowy Owl is an irregular irruptive species that overwinters sometimes as far south as Lake Ontario depending on conditions in the far north.</p> <p>The persistence of Snowy Owl is threatened by climate-driven changes to Arctic ecosystems that reduce prey availability and breeding success, habitat alteration on breeding grounds, collisions with vehicles and human-made structures during winter, and emerging risks from disease and secondary poisoning. Snowy Owl</p>

<p>SPECIES</p> <p>English Name French Name (<i>Latin Name</i>)</p>	<p>Summary of Species Assessments</p>
	<p>occurs in Ontario primarily as a transient wintering bird, with highly variable abundance, limited long-term monitoring data, rare and anecdotal breeding evidence, and no element occurrence data. However, long term trends in the rest of Canada suggest there is an ongoing threat to the species in Ontario which puts it at risk of becoming Threatened in the province. Snowy Owl was not previously assessed by COSSARO.</p> <p>Based on this evidence Snowy Owl is classified as Special Concern under criteria b. This classification differs from COSEWIC, which classified Snow Owl as Threatened in Canada. The reason for the difference is that despite evidence of declines in Canada, there is a lack of clear evidence that Snowy Owl is declining in Ontario.</p>
<p>FISH</p>	
<p>Pugnose Minnow Petit-bec (<i>Opsopoeodus emiliae</i>)</p>	<p>Pugnose Minnow (<i>Opsopoeodus emiliae</i>) is a small freshwater fish in the family Leuciscidae, native to North America and occurring in Canada only in southwestern Ontario. The species is recognized as a valid taxonomic entity, with no subspecies or designatable units identified in Ontario. Its biology is characterized by a short lifespan (approximately 1.2 years), limited dispersal ability, and use of warm, slow-moving streams with silt, sand, or clay substrates. Although historically associated with clear waters, Ontario records demonstrate that the species also occupies more turbid environments, though it is unclear whether these represent optimal habitat conditions.</p> <p>In Ontario, Pugnose Minnow historically occurred at 11 localities across Ontario, including the Detroit River, Lake St. Clair, Sydenham River, and Thames River watersheds. Since 2010, the species has not been detected at most historical locations despite repeated targeted sampling. All Ontario records from the past decade originate from the Canard River, where detections occurred intermittently between 2013 and 2021. Recent targeted surveys in 2023 and 2024 failed to detect the species at this remaining location, suggesting a continuing decline in distribution and possible reduction in abundance. The currently known Ontario range is highly restricted, with an extent of occurrence of 2.64 km² and an index of area of occupancy of 12 km², representing a single location.</p> <p>Although Pugnose Minnow is globally secure (G5), its condition at the northern edge of its range is poor. Within the broader biologically relevant geographic range, defined as the Great Lakes basin and</p>

<p style="text-align: center;">SPECIES</p> <p>English Name French Name (<i>Latin Name</i>)</p>	<p style="text-align: center;">Summary of Species Assessments</p>
	<p>adjacent jurisdictions with potential for hydrologic connectivity, nearby populations are ranked as critically imperiled (S1) in Michigan and Ohio. These neighbouring populations are few, localized, and unlikely to provide substantial rescue potential to Ontario, given limited dispersal capability and declining habitat quality.</p> <p>The primary threats to the species in Ontario include habitat degradation from increased turbidity, sedimentation, and elevated nutrient inputs associated with agricultural runoff and watershed modification. Additional threats include contaminants and toxic substances, climate-related hydrologic changes, and possible impacts from invasive species. These threats operate at the watershed scale and affect all known element occurrences. COSEWIC threat assessments describe the overall threat impact as High-Low for Canadian populations.</p> <p>Pugnose Minnow was previously classified as Threatened by COSSARO and is listed as such on the Species at Risk in Ontario List. Available evidence indicates continuing declines in distribution, number of locations, habitat quality, and presumed number of mature individuals. Given the extremely small and contracting Ontario distribution, single remaining location, absence of recent detections at historically occupied sites, and ongoing threats across its range, Pugnose Minnow meets the criteria for Endangered under Criterion B1ab(i,ii,iii,iv,v) and B2ab(i,ii,iii,iv,v) (restricted distribution with continuing decline). No status modifiers are applied.</p>
<p>MOLLUSCS</p>	
<p>Big-tooth Whitelip Hélice dentifère (<i>Neohelix dentifera</i>)</p>	<p>Big-tooth Whitelip (<i>Neohelix dentifera</i>) is a large shell (2-2.5 cm diameter) shell land snail is known to occur in at least five sites within mature mixed-wood forest from Perth to south of Algonquin Provincial Park in southern Ontario. It is extirpated from the rest of its historical Canadian range, which historically extended from the east near Quebec City, around Ottawa, and south to Hamilton. In Quebec City it was reported to be found in large numbers in the 1890s. Outside of Canada it has been found throughout much of the Northeast of the US, with apparently secure populations in New York State. It typically lives near boulders on slopes and ravines but is also found under logs in thick leaf litter.</p> <p>The main threats are climate change (particularly droughts and changes in freeze-thaw cycles) and gross habitat alteration, but it is also susceptible to ecosystem modifications from invasive species</p>

<p>SPECIES</p> <p>English Name</p> <p>French Name</p> <p>(Latin Name)</p>	<p>Summary of Species Assessments</p>
	<p>(including exotic earthworms and slugs). The species' restricted distribution, limited dispersal, low abundance at known sites, continued habitat decline and continuing threats make it vulnerable to extirpation from Canada. Based on this evidence, Big-tooth Whitelip (<i>Neohelix dentifera</i>) is classified as Endangered in Ontario as it meets criteria B1ab(iii) and B2ab(iii). Big-tooth Whitelip was not previously assessed by COSSARO.</p>
<p>Lilliput</p> <p>Le toxolasme nain</p> <p>(<i>Toxolasma parvum</i>)</p>	<p>Lilliput (<i>Toxolasma parvum</i>) is a freshwater mussel found in rivers, wetlands, ponds, and sheltered nearshore areas with soft sediments. This species is a small mussel, typically measuring less than 35 mm in length. Its shell is oval or elliptical, thin yet moderately inflated, and displays a smooth surface with a glossy to silky texture. The exterior coloration ranges from yellowish-brown to greenish or dark brown, often with faint green rays, especially in younger individuals. The inside of the shell is bluish-white or pinkish, and the beak is low, rounded, and not prominent. It is native to Ontario, a distinct species, and eligible for assessment.</p> <p>Globally, Lilliput is widespread and considered secure as it occurs in 26 states throughout central North America from the Gulf of Mexico to the Great Lakes. However, Ontario supports the entire Canadian population, making the province especially important for the species' survival in Canada. Specifically, Canada's Lilliput population is limited to southwestern Ontario, within the Lake St. Clair/Detroit River, Lake Erie, and western Lake Ontario drainages. Nearby populations outside Ontario are generally small or declining, and movement of individuals into Ontario is unlikely.</p> <p>Lilliput was previously classified as Threatened in Ontario in 2013 and listed as such on the Species at Risk in Ontario List. Since that time, additional surveys and monitoring have significantly improved understanding of the species' distribution. These efforts have confirmed Lilliput in many more waterbodies than were previously known, increasing the number of recognized locations across southwestern Ontario. All Canadian occurrences of Lilliput are considered a single designatable unit, as no subspecies, varieties, or discrete evolutionary lineages have been identified within Ontario, and there is no population-level genetic data to support further subdivision. Therefore, while multiple locations have been documented, these do not represent distinct subpopulations in the formal taxonomic or conservation sense, but rather a collection of sites within one designatable unit.</p>

<p>SPECIES</p> <p>English Name French Name (Latin Name)</p>	<p>Summary of Species Assessments</p>
	<p>These expanded findings directly influenced the reassessment of Lilliput’s conservation status, as they indicate a wider distribution. Current information shows that, although Lilliput remains restricted to a relatively small area in Ontario, there is no evidence of an ongoing decline in the species’ distribution or number of populations. The increase in known locations reflects improved survey effort rather than recent range expansion.</p> <p>Despite these findings, the quality of habitat used by Lilliput continues to decline in Ontario. Ongoing pressures include poor water quality from urban and agricultural runoff, changes to waterways from dredging and water management, and the effects of climate change such as drought and altered water levels. Additionally, Lilliput’s lifecycle includes an obligate larval parasitic phase where it must find suitable host fishes. The species’ dependence on host fish communities, along with its other specific habitat requirements adds to its sensitivity to habitat degradation. While no single threat is currently causing a clear population decline, the combined effects of these pressures continue to reduce habitat quality.</p> <p>Based on application of COSSARO criteria, the species does not meet quantitative or distributional thresholds for Endangered or Threatened status. However, because it remains vulnerable to ongoing environmental pressures and could become Threatened or Endangered if these pressures are not managed, the species is classified as Special Concern in Ontario based on criteria b.</p>
<p>LICHEN</p>	
<p>Cupped Fringe Lichen Hétérodermie à dessous blanchâtre (<i>Heterodermia hypoleuca</i>)</p>	<p>Cupped Fringe Lichen (<i>Heterodermia hypoleuca</i>) occurs on tree bark and is the only apotheciate species in the genus with non-ascending lobes known to occur in North America. Its photosynthetic partner is a green unicellular coccoid alga in the genus <i>Trebouxia</i>, which is very common. Prior to 1998, Cupped Fringe Lichen was considered possibly extirpated in southern Ontario and Canada, however dedicated searches between 2012 and 2024 have resulted in the discovery of new subpopulations from Peterborough, Hastings, Frontenac, and Renfrew counties.</p> <p>It occurs globally in temperate to subtropical humid forests and woodlands within Central and South America, east and south Africa,</p>

<p>SPECIES</p> <p>English Name French Name (Latin Name)</p>	<p>Summary of Species Assessments</p>
	<p>Australia, and eastern Asia. Its status is not ranked within its broader biologically relevant range which spans into the United States.</p> <p>Cupped Fringe Lichen relies entirely on its host trees and occurs predominantly on ash species. As a result, its primary threat is the Emerald Ash Borer (<i>Agrilus planipennis</i>), which has been shown to cause rapid declines in ash once introduced. With this, it is projected that occupied ash trees will likely succumb to Emerald Ash Borer resulting in a loss of 74% of the Canadian population of Cupped Fringe Lichen.</p> <p>Cupped Fringe Lichen is classified as Endangered based on meeting criteria A3bce+A4bce+C2a(i). This designation is due to the projected decline of Cupped Fringe Lichen over the next three generations due to the loss of ash host trees caused by Emerald Ash Borer. Also, the species' current population is small with no subpopulation containing more than 250 individuals. Cupped Fringe Lichen was not previously assessed by COSSARO.</p>
<p>PLANTS</p>	
<p>Short-fruited Rush Jonc à fruits courts (<i>Juncus brachycarpus</i>)</p>	<p>Short-fruited Rush (<i>Juncus brachycarpus</i>) is a taxonomically distinct native plant within the Rush family (Juncaceae) and is eligible for status assessment in Ontario.</p> <p>Short-fruited Rush is a perennial rhizomatous rush that has erect stems that grow approximately 60-100 cm tall. It can reproduce by seeds or by rhizomes that often extend almost a metre from the main stem. Plants produce seeds annually from July to November once they reach maturity at 2-3 years. The absence of a tail-like appendage on the seeds sets this species apart from other species in the genus <i>Juncus</i>.</p> <p>Short-fruited Rush requires specific mesic to wet-mesic conditions in open prairie ecosystems. These ecosystem types are becoming increasingly rarer in Ontario constituting a threat to the species' survival</p> <p>In Ontario, Short-fruited Rush is found only in the Carolinian Zone of southern Ontario in the City of Windsor Within the range of occurrences in Windsor, there are three extant sites of Short-fruited Rush. Of these three sites, one was excluded from assessment since the individuals at this site were transplanted as part of a recovery plan, but the species had not spread from transplanted sod</p>

<p style="text-align: center;">SPECIES</p> <p>English Name French Name (<i>Latin Name</i>)</p>	<p style="text-align: center;">Summary of Species Assessments</p>
	<p>blocks. Consequently, the site had not demonstrated a positive impact on the species distribution.</p> <p>In Canada, Short-fruited Rush is ranked as Endangered. Outside of Canada, the distribution of Short-fruited Rush extends from Massachusetts west to southern Ontario, Michigan, Illinois, and Kansas, and south to Texas and Georgia.</p> <p>In Ontario, the greatest threat to Short-fruited Rush is ecosystem modification caused by invasive species colonization and growth. Other threats to the maintenance and growth of populations of Short-fruited Rush are fire suppression and human recreational activities due to the proximity of sites to residential subdivisions in immediately surrounding properties. The threats assessment conducted by COSEWIC (2023) assigned an overall threat impact of High. The present COSSARO assessment similarly ranks the overall threat as High.</p> <p>Short-fruited rush is classified as Endangered in Ontario based on meeting criterion B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v) which refers to the species' highly limited distribution that is continuing to decline, and criteria C2a(i,ii)+D1, which refers to the species' small number of individuals with a projected continuing decline. This status of this species is consistent with the definition of Endangered under the Endangered Species Act, 2007. Short-fruited Rush has not previously been assessed by COSSARO. The classification of Endangered is consistent with COSEWIC's classification for the species.</p>
<p style="text-align: center;">REPTILES</p>	
<p>Butler's Gartersnake Couleuvre à petite tête (<i>Thamnophis butleri</i>)</p>	<p>Butler's Gartersnake (<i>Thamnophis butleri</i>) is a small gartersnake, approximately 40 cm long, with three distinct and vibrant yellow stripes along the length of its dark brown back, two of which are centred on the 3rd scale row. Its habitat primarily includes meadows, old fields and tallgrass prairie with nearby permanent or ephemeral wetlands or drainage features. Essential habitat components include dense cover of grasses or forbs with a thick layer of thatch and an abundance of earthworms as prey. It is found in three geographic regions in Ontario: Windsor-Essex, Sarnia-Lambton and Luther Marsh, all of which are in the Carolinian faunal province.</p> <p>Across its broader biologically relevant geographic range, populations vary in status from secure to critically imperiled. The species is</p>

<p style="text-align: center;">SPECIES</p> <p>English Name French Name (Latin Name)</p>	<p style="text-align: center;">Summary of Species Assessments</p>
	<p>concentrated within the Mixed Wood Plains ecoregion and occurs from southwestern Ontario through southeastern Wisconsin, northwestern Ohio, and the Lower Peninsula of Michigan. Butler’s Gartersnake was previously classified as Endangered by COSSARO and is listed as such on the Species at Risk in Ontario List.</p> <p>Agricultural practices, forest succession, and urbanization have historically contributed to the loss and fragmentation of Butler’s Gartersnake habitat. Today, the main threats to this species are transportation and service corridors, residential and commercial development and natural systems modifications that contribute to the reduction in available open canopy habitat. Active management is required to maintain vegetation communities suitable for this species.</p> <p>Butler’s Gartersnake shows very limited movement, with an activity range typically under 1 ha and an average movement distance of about 300 m. It can also persist in urbanized settings such as rail corridors, provided that habitat remains open, earthworms are available as prey, and suitable hibernacula exist. As a result, viable populations can persist within small, isolated habitat patches. Even so, there has been evidence of decline since 2010 with a current index area of occupancy of 288 km².</p> <p>Butler’s Gartersnake is classified as Threatened in Ontario based on the definition of Threatened under the <i>Endangered Species Act, 2007</i> (“not endangered, but is likely to become endangered if steps are not taken to address factors threatening to lead to its extinction or extirpation”). This classification is consistent with the most recent federal COSEWIC assessment. Although the species did not meet COSSARO’s quantitative assessment criteria for Threatened, it met the criteria for Special Concern as a vulnerable species that nearly met the criteria for Threatened under Criterion B (small distribution range and decline or fluctuation). The option of assigning a Special Concern status was considered, but the species was deemed to meet the definition of Threatened given its sensitivity to human activities and natural events, combined with the lack of a demonstrated rescue effect and continued evidence of decline.</p>

<p style="text-align: center;">SPECIES</p> <p>English Name French Name (Latin Name)</p>	<p style="text-align: center;">Summary of Species Assessments</p>
<p>Eastern Massasauga Le massasauga de l'Est (<i>Sistrurus catenatus</i>)</p>	<p>Eastern Massasauga (<i>Sistrurus catenatus</i>) is a relatively small grey to light brown snake with dark saddle-shaped patches along its back and a segmented rattle at the end of its tail. It is one of three species in the <i>Sistrurus</i> genus, and the only extant rattlesnake in Ontario. Eastern Massasauga is known to occupy a variety of landcover types, including wet prairie, old fields, peatlands, shrub thickets, bogs, fens, bedrock barrens, and deciduous and coniferous forests. During the winter this species hibernates in animal burrows and rock fissures below the frost line.</p> <p>While previously more widespread, the species is currently found on the Bruce Peninsula and along the eastern shore of Lake Huron in the Great Lakes / St. Lawrence region, with isolated sub populations in the Carolinian region. Populations in these regions were previously assessed independently as separate designatable units; however, new genetic evidence shows greater connectedness and the populations no longer meet the definition for separate designatable units. Eastern Massasauga was previously classified as Threatened in the Great Lakes / St. Lawrence region, and Endangered in the Carolinian region by COSSARO, and is listed as such on the Species at Risk in Ontario List.</p> <p>In 2025 COSEWIC determined that the Ontario population should be considered a single unit, and COSSARO reached the same conclusion. The Ontario population of Eastern Massasauga is primarily threatened by habitat loss and modification, along with road mortality and persecution due to negative public perception. The global population of Eastern Massasauga extends into multiple U.S. states, but the Broader Biologically Relevant Geographic Range for the Ontario population does not extend beyond Michigan where it is considered critically imperiled. The species is globally vulnerable and declining in all jurisdictions.</p> <p>Eastern Massasauga is assessed by COSSARO as Threatened in Ontario based on criteria A2acd+3cd+4acd, due to past and projected declines over any three generations exceeding 30%. These projected declines are based upon observed, projected, and inferred analysis of occupied habitats, along with roadkill and persecution. A similar decline is expected to occur in future based on continuing threats and population viability analyses of some sub-populations. This status matches the most recent COSEWIC assessment.</p>