

**COSEWIC**

Committee on the Status of  
Endangered Wildlife in Canada



**COSEPAC**

Comité sur la situation des  
espèces en péril au Canada

## **An iconic owl, the oldest shark, and the largest starfish**

*(Wendake, Québec, May 15, 2025).* Many Canadians have fond childhood memories of nature – seeing an owl at dusk, tidepooling for starfish, gazing out to sea hoping to spot a shark, or playing on a moss-carpeted log. This week, the expert Committee on the Status of Endangered Wildlife In Canada (COSEWIC) met near Québec City to consider the conservation status of 14 wildlife species, including some memory makers.

Québec's provincial bird, the Snowy Owl, was assessed as Threatened. This iconic species nests throughout the Arctic and winters further south, and is culturally significant to many Indigenous nations. And, while it can still be found in every province and territory in the country, it is declining as a result of some of the impacts of climate change and other threats.

According to Louise Blight, co-chair of the subcommittee overseeing birds, “Not only does this species nest in a region with one of the fastest-changing climates on the planet, but when it heads south for the winter it faces additional threats - collisions, electrocution, rodenticide poisoning, and diseases like avian influenza.”



Snowy Owl © Gordon Court

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The extraordinary Greenland Shark was assessed for the first time, and found to be Special Concern. This large shark frequents the cold, clear waters of Canada's Arctic and Atlantic Oceans. Greenland Shark is considered the longest-living vertebrate species in the world, taking a record-breaking 150 years to reach maturity and then continuing to breed for at least another century. This species is affected by fisheries bycatch and the impacts of an accelerated rate of climate change in Arctic regions. Its extremely long generation time means populations rebound very slowly if they decline.



Greenland Shark © Brynn Devine

Bruce Leaman, co-chair of the subcommittee that oversees marine fish, highlighted the special biology of this species: "The childhood of one individual shark spans the careers of five fishery biologists. However, we do have to keep learning about them, because the species is likely very sensitive to incremental losses, and threats are not declining."

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Sunflower Sea Star © Isabelle Côté

The Sunflower Sea Star is the world's largest starfish - it has up to 24 arms and is able to grow to over a metre in diameter. This Pacific Coast keystone species was assessed as Endangered. This follows a mass mortality event across its entire Alaska-to-Mexico range caused by the mysterious Sea Star Wasting Disease associated with "the blob", the ocean heat wave of 2014-2015. Though highly mobile, Sunflower Sea Stars cannot crawl away from this scourge. Conservative estimates put their decline at over 75%. Some areas of refuge may still exist in the colder waters of northern fjords, but only time will tell.

Isabelle Côté, Professor of Marine Ecology and Conservation at Simon Fraser University, highlighted the situation: "It is hard to overstate the ecological impact of this loss on our marine ecosystems."

A moss and a lichen were also assessed, both as Endangered. Part of the lush green backdrop of BC's forests in the Fraser Valley, the endemic Roell's Brotherella Moss is threatened both by increases in torrential floods and by severe droughts. The Cupped Fringe Lichen grows on the

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bark of broadleaf trees in southern Ontario, Quebec and New Brunswick. As the invasive Emerald Ash Borer kills many of the trees it lives on, this large and attractive lichen is becoming a rare sight.

The nine other wildlife species brought forward include a large land snail, six freshwater fish species, a bee that lays its eggs in the nests of other bees, and one of only three rattlesnake species that occur in Canada.

COSEWIC Chair David Lee summed up the results: “It is disheartening when we learn that iconic species are endangered in Canada. However, identifying threats is critical to ensure we continue to respect the stewardship of our ancestors and to help make memories for our grandchildren.”

### **Next meeting**

COSEWIC’s next wildlife species assessment meeting is scheduled for November 2025.

### **About COSEWIC**

COSEWIC assesses the status of important units of biological diversity considered to be at risk in Canada. To do so, COSEWIC uses scientific, Aboriginal traditional and community knowledge provided by experts from governments, academia and other organizations. Summaries of assessments are currently available to the public on the [COSEWIC](#) website and will be submitted to the Federal Minister of the Environment and Climate Change in fall 2025 for listing consideration under the *Species at Risk Act* (SARA). At that time, the status reports will be publicly available on the [Species at Risk Public Registry](#).

COSEWIC comprises members from each provincial and territorial government wildlife agency, four federal entities (Canadian Wildlife Service, Parks Canada Agency, Fisheries and Oceans Canada, and the Canadian Museum of Nature), four Non-government Science Members, Co-chairs of the Species Specialist and the Aboriginal Traditional Knowledge Subcommittees, and two early career scientists.

At its most recent meeting, COSEWIC assessed 14 wildlife species in various COSEWIC risk categories, including 5 Endangered, 3 Threatened, and 4 Special Concern. In addition to these wildlife species that are in COSEWIC risk categories, COSEWIC assessed 2 as Data Deficient.

### **Definition of COSEWIC terms and status categories:**

**Wildlife Species:** A species, subspecies, variety, or geographically or genetically distinct population of animal, plant or other organism, other than a bacterium or virus, that is wild by nature and is either native to Canada or has extended its range into Canada without human intervention and has been present in Canada for at least 50 years.

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**Extinct (X):** A wildlife species that no longer exists.

**Extirpated (XT):** A wildlife species that no longer exists in the wild in Canada, but exists elsewhere.

**Endangered (E):** A wildlife species facing imminent extirpation or extinction.

**Threatened (T):** A wildlife species that is likely to become Endangered if nothing is done to reverse the factors leading to its extirpation or extinction.

**Special Concern (SC):** A wildlife species that may become Threatened or Endangered because of a combination of biological characteristics and identified threats.

**Not at Risk (NAR):** A wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances.

**Data Deficient (DD):** A category that applies when the available information is insufficient (a) to resolve a wildlife species' eligibility for assessment or (b) to permit an assessment of the wildlife species' risk of extinction.

**Species at Risk:** A wildlife species that has been assessed as Extirpated, Endangered, Threatened or Special Concern.

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<p>For inquiries on amphibians &amp; reptiles (Eastern Massasauga, Snapping Turtle):</p> <p><b>Dr. Sara Ashpole</b> St. Lawrence University Telephone: 315-229-5890 <a href="mailto:sashpole@stlawu.edu">sashpole@stlawu.edu</a></p>	<p>For inquiries on arthropods (Macropis Cuckoo Bee):</p> <p><b>Jennifer M. Heron</b> <a href="mailto:jenniferheron@gmail.com">jenniferheron@gmail.com</a></p>
<p>For inquiries on birds (Snowy Owl):</p> <p><b>Dr. Louise Blight</b> Procellaria Research &amp; Consulting and University of Victoria <a href="mailto:louiseblight@cosewic.net">louiseblight@cosewic.net</a></p>	<p>For inquiries on echinodermata (ad hoc): (Sunflower Sea Star):</p> <p><b>Dr. Arne Mooers</b> Simon Fraser University Telephone (1): 778-782-3979 Telephone (2): 604-358-2313 <a href="mailto:amooers@sfu.ca">amooers@sfu.ca</a></p>
<p>For inquiries on freshwater fishes (Bull Trout, Pugnose Minnow):</p> <p><b>Dr. Margaret F. Docker</b> University of Manitoba Telephone : 204-474-8831 <a href="mailto:margaret.docker@umanitoba.ca">margaret.docker@umanitoba.ca</a></p>	<p>For inquiries on marine fishes (Greenland Shark):</p> <p><b>Dr. Bruce Leaman</b> Telephone: 250-510-3625 <a href="mailto:bruce.leaman@outlook.com">bruce.leaman@outlook.com</a></p>
<p>For inquiries on mosses and lichens (Cupped Fringe Lichen, Roell's Brotherella Moss):</p> <p><b>Dr. André Arsenault</b> Natural Resources Canada Telephone: 709-638-2365 <a href="mailto:Andre.Arsenault@NRCan-RNCan.gc.ca">Andre.Arsenault@NRCan-RNCan.gc.ca</a></p>	<p>For inquiries on molluscs (Big-tooth Whitelip):</p> <p><b>Dr. Dwayne Lepitzki</b> Telephone : 403-762-0864 <a href="mailto:lepitzki@telusplanet.net">lepitzki@telusplanet.net</a></p>
<p>For inquiries on Aboriginal Traditional Knowledge:</p> <p><b>Roger Gallant</b> <a href="mailto:rgallant@gallantenvironmental.com">rgallant@gallantenvironmental.com</a></p>	