



COSEWIC
Committee on the Status of
Endangered Wildlife in Canada

COSEWIC
Comité sur la situation des
espèces en péril au Canada

Habitat matters for Canadian wildlife species

Thirty-five Canadian wildlife species, from whales to mosses, were assessed as at risk at the recent COSEWIC (Committee on the Status of Endangered Wildlife in Canada) meeting in Kananaskis, Alberta, April 29-May 4, 2012. Once again, habitat loss emerged as the most common threat to Canadian wildlife, underscoring that all species, not just our own, need a healthy home in order to thrive.

Fishes face increasing pressure from declining habitat

Habitat loss and degradation are the most common cause of species decline worldwide and Canada's freshwater fishes are no exception. It's not just freshwater fishes that rely on streams and rivers; a very large fraction of Canadian biodiversity including birds, insects, plants and amphibians rely on healthy aquatic habitats. Seven freshwater fishes were assessed by COSEWIC as being at risk in Canada. These include the Northern Madtom, Blackstripe Topminnow, Pugnose Minnow and Silver Chub, all of which are found in southwestern Ontario. In this region, the Sydenham River alone is home to a number of additional species previously assessed as at risk by COSEWIC. These include three additional freshwater fishes, five mussels and the Spiny Softshell. In every case, loss or degradation of habitat was key to these designations. While some aspects of water quality in the Sydenham River have improved as a result of environmental regulation that limits industrial pollution of the river, the habitat of these non-commercial fishes and other species remains threatened by agricultural inputs and urbanization. The unique biodiversity of this region will only improve with careful monitoring and rigorous protection of fish habitat.



Grizzly Bear © Emily Court

Canadian icon faces an uncertain future

Few species can match the Grizzly Bear as an emblem of Canadian wilderness. While grizzlies are at least twice as strong as the average human, in reality they are likely to pay with their lives when our two species interact. Over the past century, human-caused mortality and declining habitat have reduced the Grizzly Bear's global range by more than 50%. Today, Canada has a major

responsibility for safeguarding remaining grizzly populations. In the southern part of their range, where they are in regular contact with humans, many populations are declining. In the north, the impacts of ongoing and escalating extraction of natural resources are a cause for concern. Considering these threats, the Grizzly Bear was assessed as Special Concern by COSEWIC. This assessment concludes a two-year process incorporating science and Aboriginal Traditional Knowledge.

Enigmatic American Eel swims against the current

American Eels are remarkable fish. They spend most of their lives in freshwater then return to the sea, migrating from streams and rivers that span Greenland to South America to spawn in the mid-Atlantic Sargasso Sea. Young eels journey over 7000 km to rivers and streams where they live for up to 20 years before starting their downstream migration to the sea. This complex lifestyle exposes the eels to a variety of threats over large areas and timespans, which resulted in a Threatened designation. American Eels that migrate to Lake Ontario and the upper St. Lawrence River have declined drastically over the past 40 years. Despite improvements to hydroelectric dams that reduce risks to young eels migrating upstream, older eels still suffer high mortality during the downstream migration. In Atlantic Canada, existing fisheries place additional pressure on the American Eel.

Canada's other beaver can't handle the heat

While nearly all Canadians can recognize the North American Beaver, its distant relative, the Mountain Beaver is probably unknown to most. Mountain Beavers occur in Canada only in the Coast Mountains and south of the Fraser River in British Columbia. Mountain Beaver, the last living representative of an ancient lineage of rodents, was assessed as Special Concern. These beavers live in underground dens built in deep, loose soil along the edges of cool, forested streams. These sites can be degraded by forestry practices that compact the soil. Mountain Beavers are highly intolerant of heat and drought, and are especially sensitive to climate change. The Magnum Mantleslug, another wildlife species assessed as Special Concern, is similarly restricted to edges of cool streams and seepages and also faces threats from logging and climate change.

No avoiding human impacts

Northern and ocean-dwelling species should be buffered from human activity because more than two-thirds of all Canadians live within 200 km of our southern border; this is not true for many Canadian wildlife species. As with the grizzly, whose movements are increasingly disrupted by human encroachments into boreal and arctic regions, other northern and marine species live under the specter of human activities. For the Buff-breasted Sandpiper, a shorebird assessed as Special Concern, increased resource exploration on their Canadian Arctic nesting grounds poses a threat. The Marbled Murrelet, assessed as Threatened, is a charismatic diving bird that occurs in Canada along the BC coast where it is vulnerable to the loss of ancient forests where it nests. In the marine environment where murrelets feed, proposed increases in shipping traffic pose an additional threat. On the Atlantic coast, Leatherback Sea Turtles encounter fishing gear while feeding in Canadian waters. Entanglement with fishing lines and ropes attached to traps pose a key threat to this wildlife species, assessed as Endangered by COSEWIC. These species demonstrate how Canadian wildlife depends critically on habitat protection.

Next Meeting

COSEWIC's next scheduled wildlife species assessment meeting will be held in Ottawa, ON, in November 2012.

About COSEWIC

COSEWIC assesses the status of wild species, subspecies, varieties, or other 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 (www.cosewic.gc.ca) and will be submitted to the Federal Minister of the Environment in late summer 2012 for listing consideration under the *Species at Risk Act* (SARA). At that time, the full status reports and status appraisal summaries will be publicly available on the Species at Risk Public Registry (www.sararegistry.gc.ca).

There are now 650 wildlife species in various COSEWIC risk categories, including 287 Endangered, 161, Threatened, 179 Special Concern, and 23 Extirpated (i.e. no longer found in the wild in Canada). In addition to these wildlife species that are in COSEWIC risk categories, there are 15 wildlife species that are Extinct.

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), three Non-government Science Members, and the Co-chairs of the Species Specialist and the Aboriginal Traditional Knowledge Subcommittees.

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.

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.

<p>Dr. Marty L. Leonard Chair, COSEWIC Department of Biology Dalhousie University Halifax NS B3H 4R2 mleonard@dal.ca</p>	<p>For general inquiries: COSEWIC Secretariat Canadian Wildlife Service Environment Canada 351 St. Joseph Blvd, 16th floor Gatineau QC K1A 0H3 Telephone: (819) 953-3215 Fax: (819) 994-3684 cosewic/cosepac@ec.gc.ca www.cosewic.gc.ca</p>
<p>For inquiries on marine mammals: (Blue Whale)</p> <p>Dr. Randall Reeves Okapi Wildlife Associates Telephone: (450) 458-6685 Fax: (450) 458-7383 rreeves@okapis.ca</p>	<p>For inquiries on terrestrial mammals: (Grizzly Bear, Mountain Beaver)</p> <p>Dr. Justina C. Ray Executive Director and Senior Scientist Wildlife Conservation Society Canada Telephone: 416-850-9038 x 22 Fax: 416-850-9040 jray@wcs.org</p>
<p>For inquiries on birds: (Baird's Sparrow, Buff-breasted Sandpiper, Hooded Warbler, Marbled Murrelet, Western Screech-Owl)</p> <p>Jon McCracken Director National Programs Bird Studies Canada Telephone: (519) 586-3531 ext. 115 Fax: (519) 586-3532 jmccracken@bsc-eoc.org</p>	<p>For inquiries on amphibians and reptiles: (Blue Racer, Leatherback Sea Turtle, Northern Dusky Salamander, Pacific Gophersnake, Pacific Pond Turtle)</p> <p>Dr. Ronald J. Brooks Department of Integrative Biology College of Biological Science University of Guelph Telephone: (519) 836-8817 Fax: (519) 767-1656 rjbrooks@uoguelph.ca</p>
<p>For inquiries on freshwater fishes: (American Eel, Blackstripe Topminnow, Benthic and Limnetic Enos Lake Threespine Stickleback, Northern Madtom, Plains Minnow, Pugnose Minnow, Silver Chub)</p> <p>Dr. Eric B. (Rick) Taylor Professor Department of Zoology University of British Columbia</p>	<p>For inquiries on marine fishes: (Smooth Skate, Thorny Skate)</p> <p>Alan F. Sinclair alanfsinclair@me.com</p>

<p>Telephone: (604) 822-9152 Fax: (604) 822-2416 etaylor@zoology.ubc.ca</p>	
<p>For inquiries on arthropods (insects and related taxa): (Behr's Hairstreak, Island Blue, Weidemeyer's Admiral)</p> <p>Dr. Paul Catling Research Scientist and Curator Agriculture Canada Telephone: (613) 759-1373 Fax: (613) 759-1599 catlingp@agr.gc.ca</p>	<p>For inquiries on molluscs: (Magnum Mantleslug)</p> <p>Dr. Dwayne Lepitzki Telephone: (403) 762-0864 lepitzki@telusplanet.net</p>
<p>For inquiries on plants: (Goldencrest, Tiny Cryptantha)</p> <p>Bruce Bennett Coordinator Yukon Conservation Data Centre Telephone: (867) 667-5331 Fax: (867) 393-6263 brbennett@klondiker.com</p>	<p>For inquiries on mosses and lichens: (Incurved Grizzled Moss, Margined Streamside Moss, Silver Hair Moss)</p> <p>Dr. René Belland Devonian Botanic Garden University of Alberta Telephone: (780) 987-3054 ext. 2240 Fax: (780) 987-4141 rbelland@ales.ualberta.ca</p>
<p>For inquiries on Aboriginal Traditional Knowledge:</p> <p>Dr. Donna Hurlburt Telephone: (902) 532-1341 Fax: (902) 532-1341 donna.hurlburt@ns.sympatico.ca</p>	

Further details on all wildlife species assessed, and the reasons for designations, can be found on the COSEWIC website at: www.cosewic.gc.ca