



COSEWIC
Committee on the Status of
Endangered Wildlife in Canada

COSEWIC
Comité sur la situation des
espèces en péril au Canada

A mixed report card for Canada's species at risk

December 12th 2012 marks the 10th anniversary of Canada's *Species at Risk Act* (SARA). Under SARA, species become candidates for listing following status assessment by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). The committee met in Ottawa, Ontario, November 25-30, and assessed 42 Canadian wildlife species as at risk. These assessments bring the total number of wildlife species recognized by COSEWIC as at risk to 668. One result that emerged from this meeting is that effective protection under SARA can help reduce the risk of extinction for Canadian wildlife.



Plymouth Gentian © Sean Blaney

SARA protection helps three species of Wolffish while other species continue to decline

The Spotted, Northern and Atlantic Wolffishes were protected by the *Species at Risk Act* in 2003 because of declines in abundance caused by overharvesting in fisheries targeting other groundfish species. Conservation measures imposed under SARA now require the release of bycaught Wolffishes. Although still below abundance levels seen in the 1970s, all three species show recent signs of recovery in response to protection and management measures. At this meeting, Spotted and Northern Wolffishes were assessed as Threatened, and the Atlantic Wolffish as Special Concern.

Cusk, a bottom-dwelling fish from the north Atlantic, concentrated off southwestern Nova Scotia and along the Scotian Shelf, was previously assessed by COSEWIC in 2003 as Threatened. In contrast with the three wolffish species, Cusk has no protection under the *Species at Risk Act* and has continued to decline, resulting in an updated status of Endangered. Effective measures to protect Cusk are required to improve the outlook for this species.

Two southern Nova Scotia plants at risk from changes to their lakeshore homes

Many Canadian lakes and lakeshores are being degraded by land-based activities. In addition, sewage and waste water from the rapidly expanding mink farm industry are polluting nearby waterbodies in Nova Scotia. Plymouth Gentian and Pink Coreopsis are striking plants whose Canadian range is restricted to the shores of a few small lakes in southern Nova Scotia. These

species are at risk as a result of phosphorus levels that have increased up to 1000-fold in the last five years. Such dramatic changes favour invasive plant species and blue-green algal blooms, which combine with cottage and hydro development to degrade the shoreline habitat of the gentian, coreopsis and seven other plant species previously assessed as at risk that occur only in this unique part of Canada.

The road(kill) to extinction

Expanding road networks are harmful to many species assessed at this meeting. Three remnant populations of American Badger in southern British Columbia and Ontario, none with more than 250 individuals, were all assessed as Endangered by COSEWIC. Badgers require open habitat with soils that can be dug into stable burrows. Such suitable habitat patches are now often found near roadways, and roadkill poses a significant threat to the badgers. Roadkill was also cited as a major cause of mortality of Massasauga Rattlesnakes and Eastern Ribbonsnakes in southern Ontario, and Western Toads and Western Tiger Salamanders in British Columbia. The toads and salamanders, assessed as Special Concern and Endangered, respectively, migrate *en masse* to and from breeding ponds, crossing nearby roads with devastating consequences.

Emergency assessments of catastrophically declining bats await government response

In contrast to the chronic and cumulative threat posed by roads, sometimes a sudden and severe threat can emerge and produce drastic declines such that a species' very existence in Canada is threatened. In 2011, the government of Nova Scotia requested an emergency assessment of three bat species (Little Brown Myotis, Northern Myotis and Tri-colored Bat) because of the discovery of white nose syndrome, a deadly fungal disease that spreads rapidly in bat colonies that overwinter in caves. The disease has been found in Ontario, Quebec, New Brunswick and Nova Scotia, with populations of all three bat species in eastern Canada showing declines of more than 90% in just two years. COSEWIC completed an emergency assessment in February 2012, assigning a status of Endangered to each species. Canadians still await a response to these emergency assessments from the Federal Minister of the Environment. Protection under SARA would help coordinate a national response to minimize the spread of this disease.

Canadians contribute to species protection

Birdwatchers, anglers and naturalists play an important role in species assessment by collecting information that increases our understanding of the distribution and abundance of Canada's biodiversity. For example, the Breeding Bird Survey, conducted by volunteers, documented the 38% decline in the Canadian population of Wood Thrush that led to an assessment of Threatened. The Massasauga, a shy rattlesnake with two southern Ontario populations assessed as Threatened and Endangered, challenges our willingness to coexist with and protect a species capable of doing us harm. Public education by local enthusiasts and conservation agencies are, however, changing attitudes, especially in the Georgian Bay region where snakes share their habitat with cottagers. Public support for protecting these remarkable snakes is on the rise. Numerous other species of birds, fishes, plants, insects, amphibians, reptiles and mammals benefit from the activities of amateur naturalists and nature enthusiasts. These initiatives offer hope that the next decade for the *Species at Risk Act* will bring further significant improvements for the wildlife that it protects.

Next meeting

COSEWIC's next scheduled wildlife species assessment meeting will be held in Winnipeg, MB, in April 2013.

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 fall 2013 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 668 wildlife species in various COSEWIC risk categories, including 297 Endangered, 159 Threatened, 190 Special Concern, and 22 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.

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