



COSEWIC
Committee on the Status of
Endangered Wildlife in Canada

COSEPAC
Comité sur la situation des
espèces en péril au Canada

Once More, Aquatic Species in Canada Highlighted at Recent Species at Risk Meeting

Wildlife species found in marine and freshwater habitats were prominent when COSEWIC (Committee on the Status of Endangered Wildlife in Canada) met in Charlottetown, PEI, May 1-6, 2011, to assess the conservation status of 40 Canadian wildlife species. Aquatic species considered at risk included several fishes, molluscs, insects, whales and amphibians, underscoring the continuing vulnerability of aquatic ecosystems to habitat degradation and overexploitation.



Photo © Graeme McInnes

Tuna Trouble – Record Low Numbers for Prized Sushi Species

Atlantic Bluefin Tuna is one of the most highly sought-after fish species in the world with some market prices exceeding \$1000 per kilogram. Unfortunately, its value has driven the species into a steep decline since the 1970s with recent abundance reaching an all-time low. Overfishing remains the single largest threat, and international attempts to improve management have yet to see populations increase. The species is highly migratory, and the fish caught in Canadian waters actually spawn in the Gulf of Mexico. Thus, they are exposed to commercial fisheries not only in Canada but all along the east coast of North America during migration. Atlantic Bluefin Tuna was assessed by COSEWIC as Endangered.

Forecast Grim for Iconic Fish of West Coast First Nations

The Eulachon or ‘candlefish’, so-called because of its exceptionally high oil content and historical use as a candle, was assessed for the first time at this meeting. This small fish was once a cultural mainstay of many First Nations groups of coastal BC and the origin of the famous ‘grease trails’ that linked coastal and inland communities. Since the early

1990s, many traditional fisheries for this species have seen catastrophic declines of 90% or more, and the species is facing extirpation in many rivers. The cause is unclear but may be related to reductions in marine survival associated with shifting environmental conditions, by-catch, directed fishing and predation. Only the Nass River still supports a fishery but even here numbers have declined. The Nass / Skeena Rivers population of Eulachon was assessed as Threatened. Further south, the Central Pacific Coast and the Fraser River populations have experienced even greater declines resulting in an Endangered designation for both populations.

All of Canada's Sturgeon Species Now Considered at Risk

Sporadic episodes of intense fisheries followed by population crashes characterize the history of Atlantic Sturgeon in Canada. This large fish has experienced significant habitat degradation associated with pollution and hydro-electric dams and is known to spawn in two Canadian rivers where some harvest continues. Considerable uncertainty exists regarding how much harvest this species can withstand given its late maturity and slow reproductive rate. Consequently, populations in both of the Great Lakes / St. Lawrence and the Maritimes regions were designated as Threatened. This is the last of Canada's five sturgeon species to be assessed by COSEWIC; all are now considered to be at some risk of extinction.

Degraded River Habitats Endanger Two Invertebrates

Agricultural and urban run-off into streams pose key threats for at least two species at risk in Ontario. The Salamander Mussel has only ever been documented in two rivers in Canada, and its continued existence in one watershed, the Thames River, is in question. Similarly, the globally rare Hungerford's Crawling Water Beetle is known from only three Lake Huron streams. Observed declines coupled with habitat degradation and restricted range led to a designation of Endangered for both species.

Range-wide Declines Remain a Mystery for Well-known Canadian Bird

The Barn Swallow is easily identified by its deeply forked tail and swooping flight as it hunts for insects over lakes and fields. This bird, the most widespread swallow species in the world, is following the pattern of declining trends seen in many migratory birds across North America that eat flying insects. The reasons for declines of up to 76% in the past 40 years continue to baffle bird experts but changes in habitats, insect communities and climate have all been implicated. The Barn Swallow was assessed as Threatened.

Two Ontario Species Lost?

Two wildlife species have not been seen despite ongoing searches since they were last assessed by COSEWIC over 10 years ago. The Small Whorled Pogonia, a woodland orchid known from only one locality in south western Ontario, was last observed in 1998. Similarly, the Blanchard's Cricket Frog has not been seen at any of its Lake Erie locations since 1970. Habitat degradation in this heavily developed region is the main

concern for both species. They retain a status of Endangered awaiting further evidence that they no longer exist in Canada.

Humpback Makes a Comeback!

Reaching up to 45 tons at maturity, humpback whales are the most acrobatic of all baleen whales. When originally assessed by COSEWIC in 1985, the North Pacific population of Humpback Whale was designated as Threatened due to dramatic declines in the early 1900s and continued commercial whaling up until 1967. Recent studies indicate, however, that the population off the Pacific coast is increasing steadily, despite continuing threats including collisions with ships, entanglement with fishing gear and underwater noise. The North Pacific population of Humpback Whales was re-assessed as Special Concern.

Next Meeting

COSEWIC's next scheduled wildlife species assessment meeting will be held in Ottawa, ON, in November 2011.

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 2011 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 635 wildlife species in various COSEWIC risk categories, including 278 Endangered, 158 Threatened, 176 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 14 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 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.

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.

**denotes a COSEWIC risk category*

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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