



**COSEWIC**  
Committee on the Status of  
Endangered Wildlife in Canada

**COSEPAC**  
Comité sur la situation des  
espèces en péril au Canada

## Species with Small Geographic Distributions at Risk in Canada

At the recent COSEWIC (Committee on the Status of Endangered Wildlife in Canada) meeting in Ottawa, Ontario, November 21-25, 2011, the conservation status of 23 Canadian wildlife species was assessed and species with small geographic ranges were most at risk. Several species of plants, a moss, a mollusc, two arthropod, a fish, an amphibian, two bird, and two mammal species were assessed as Extirpated, Endangered, Threatened, or Special Concern in Canada and illustrated the particular vulnerability of species with small geographic ranges.



Collared Pika © John Nagy

### Canada's Global Responsibility for Two Northern Species

The Yukon Draba, a small plant in the mustard family, and Collared Pika, a pint-sized herbivorous mammal related to rabbits and hares, are survivors from glacial times. The Yukon Draba, which is found only in Canada, occupies less than five square kilometres in southwestern Yukon. The habitat for this plant comprises ancient beaches formed by retreating glacial lakes. These habitats are threatened by degradation from road construction associated with mining, logging, and recreational activities. As a result of these threats, COSEWIC assigned a status of Endangered to Yukon Draba. While more widespread, the Collared Pika also occurs in a restricted habitat type - scattered small boulder fields in alpine meadows of mountainous regions of Yukon, Northwest Territories, and northern British Columbia. The effects of climate change on Collared Pika threaten its persistence and resulted in a status of Special Concern.

More than half of the global population of the Collared Pika occurs in Canada; hence, and as with the Yukon Draba, the persistence of this species depends on its protection in Canada.

### Distinctive Beetle Lost from Canada

The American Burying Beetle is recognizable because of its large size and striking orange-black colouration. This beetle is also remarkable because adults care for their offspring by burying and defending an animal carcass that serves as a food for young beetles. This species was once found in southern Ontario and much of eastern North America, but has now disappeared from most of its former range. This species has not been seen in Canada since 1972; consequently, COSEWIC assessed American Burying Beetle as Extirpated.

### **Threats Faced by Multiple Plants Exacerbated by Their Small Geographic Distributions**

Three species of plants, Eastern Baccharis in Nova Scotia, Bluehearts in Ontario, and False Hop Sedge in Ontario and Québec have extremely limited geographic distributions in Canada, each occupying less than 100 square kilometres of habitat. These small distributions, coupled with relatively small population sizes, make each species especially vulnerable to ongoing threats such as habitat loss and degradation and invasive plants. For example, threats to False Hop Sedge include land drainage from agricultural activities, and the invasive Reed Canary Grass. Consequently, COSEWIC assessed Eastern Baccharis as Threatened and Bluehearts and False Hop Sedge as Endangered.

### **Member of Ancient Line of Frogs is Another Amphibian at Risk**

The Coastal Tailed Frog is one of only two species within a distinctive family of frogs whose closest relatives live in New Zealand. In Canada, the species is found only in coastal mountain ranges of British Columbia and requires cool, clear streams for breeding. COSEWIC assigned a Special Concern status to Coastal Tailed Frog because it is susceptible to the effects of logging and road construction, it produces few offspring, and because a fungal disease that has been linked to global declines in frogs has recently been discovered in Coastal Tailed Frogs.

### **Rare Grassland Mammal Facing New Threats**

The Black-tailed Prairie Dog is a burrowing and colony-forming member of the squirrel family and is confined to only 12 square kilometres of grassland habitat in southern Saskatchewan. Initially assessed as Special Concern by COSEWIC in 2000, increasing threats posed by droughts and a bacterial disease could rapidly eradicate this species. The recent re-introduction of another species at risk, the Black-footed Ferret, into Grasslands National Park adds an interesting twist. The ferret preys on Black-tailed Prairie Dogs, and the fates of the two species are therefore intertwined. For the Black-tailed Prairie Dog, the combination of its restricted distribution and such serious threats resulted in an assessment of Threatened.

### **North Pacific Spiny Dogfish: Another Example of Worldwide Threats to Sharks**

Up to one-third of the world's shark species are at some level of risk, largely from overexploitation. The North Pacific Spiny Dogfish joins eight other species of sharks already assessed as at risk in Canada. This species, found in coastal waters of British Columbia, is a distinctive looking small shark notable for its extraordinarily long pregnancies of up to two years. The existence of a commercial fishery, continuing uncertainty about population trends, and low population recovery potential motivated a status designation of Special Concern for the North Pacific Spiny Dogfish.

## **Survey Efforts Reveal New Records and a Brighter Outlook for a Lichen and Plant**

The Ghost Antler Lichen and Hairy Prairie-clover were previously assessed by COSEWIC. Expanded survey efforts spurred by these assessments resulted in the discovery of additional sites for Ghost Antler Lichen, and a population size ten times larger than previous estimates for the Hairy Prairie-clover. This new survey information was a key factor that led to improved status designations of Not at Risk for Ghost Antler Lichen and Special Concern for Hairy Prairie-clover. Threats such as climate change, habitat alterations, and invasive species remain important concerns for the latter species.

### **Next Meeting**

COSEWIC's next scheduled wildlife species assessment meeting will be held in Kananaskis, AB, in April 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](http://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](http://www.sararegistry.gc.ca)).

There are now 640 wildlife species in various COSEWIC risk categories, including 281 Endangered, 158 Threatened, 177 Special Concern, and 24 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 Canadian Museum of Nature), three Non-government Science Members, and the Co-chairs of the Species Specialist and the Aboriginal Traditional Knowledge Subcommittees.



**False Hop Sedge ©  
Institut de recherche en  
biologie végétale**

## **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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<p>For inquiries on arthropods  (insects and related taxa):  (American Burying Beetle, Okanagan Efferia)</p> <p><b>Dr. Paul Catling</b>  Research Scientist and Curator  Agriculture Canada  Telephone: (613) 759-1373  Fax: (613) 759-1599  catlingp@agr.gc.ca</p>	<p>For inquiries on molluscs:  (Snuffbox)</p> <p><b>Dr. Dwayne Lepitzki</b>  Telephone: (403) 762-0864  lepitzki@telusplanet.net</p>

For inquiries on plants:  
(Bearded Owl-clover, Bluehearts,  
Buffalograss, Eastern Baccharis, False Hop  
Sedge, Hairy Prairie-clover, Heart-leaved  
Plantain, Hoary Mountain-mint, Large  
Whorled Pogonia, Yukon Draba)

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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](http://www.cosewic.gc.ca)