COSEWIC Wildlife Species Assessments (detailed version), November 2011

Results are grouped by taxon and then by status category. The range of occurrence in Canada (by province, territory or ocean) and history of status designation are provided for each wildlife species.

Mammals

Black-tailed Prairie Dog — ***Cynomys ludovicianus*** — **Threatened**

Assessment Criteria D2

Reason for Designation

This small mammal is restricted to a relatively small population in southern Saskatchewan. The change in status from Special Concern to Threatened is based mainly on the threat of increased drought, and sylvatic plague, both of which would be expected to cause significant population declines if they occur frequently. Drought events are predicted to increase in frequency due to a changing climate. Sylvatic plague was first recorded in 2010. Although the Canadian population is in a protected area, it exists within a small area, and is isolated from other populations, all of which are located in the United States.

Range SK

Status History
Designated Special Concern in April 1978. Status re-examined and confirmed in April 1988, April 1999 and November 2000. Status re-examined and designated Threatened in November 2011.

Collared Pika — ***Ochotona collaris*** — **Special Concern**

Assessment Criteria not applicable

Reason for Designation

This small rabbit-relative is a Beringian relict that is restricted to talus slopes in alpine areas in northern west British Columbia, Yukon, and Northwest Territories. This region comprises over half the global range of this species, and is witnessing climate-driven shifts in habitat, temperature, and precipitation at faster rates than elsewhere in Canada. A demonstrated sensitivity to climate variability, coupled with poor dispersal ability and the naturally fragmented nature of its populations, heightens the vulnerability of this small mammal to climate change. The species is well-studied in a very limited portion of its range, but baseline information on population trends at the range level, and a clear understanding of the extent and severity of climate impacts to this species and its habitat in the coming decades is limited. However, the best available information suggests that this species may be particularly sensitive to a changing climate, including concomitant increases in precipitation variability, leading to reductions in habitat availability. The potential of negative impacts of climate change to the persistence of this species over the long term is substantial.

Range YT NT BC

Status History
Designated Special Concern in November 2011.

Birds

Yellow-breasted Chat *auricollis* subspecies — ***Icteria virens auricollis*** — **Endangered**

Southern Mountain population

Assessment Criteria C2a(ii)

Reason for Designation

This subspecies is a shrub-thicket specialist that occurs at the northern edge of its range in Canada. The small population, which is restricted to the Southern Mountain Ecological Area in British Columbia, is localized to a particular type of riparian habitat. A number of threats have been identified as serious concerns, including cattle tramping of rose thickets, road maintenance and urbanization, agricultural and potential hydro-electric development of the Similkameen River.

Range BC

Status History
The Southern Mountain population of the *auricollis* subspecies was designated Threatened in April 1994. Status re-examined and designated Endangered in November 2000 and November 2011.

Yellow-breasted Chat *virens* subspecies — ***Icteria virens virens*** — **Endangered**

Assessment Criteria C2a(i,ii); D1

Reason for Designation

This subspecies is a shrub-thicket specialist that occurs at the northern edge of its range in Canada. Its population in southern Ontario is localized and very small. Since the last status report was produced, declines have occurred in the Ontario population, owing to habitat loss. The potential for rescue effect has also been dramatically reduced, because population declines are evident across most of the northeastern range of this subspecies.

Range ON

Status History
Designated Special Concern in April 1994. Status re-examined and confirmed in November 2000. Status re-examined and designated Endangered in November 2011.

Yellow-breasted Chat *auricollis* subspecies — ***Icteria virens auricollis*** — **Not at Risk**

Prairie population

Assessment Criteria not applicable

Reason for Designation

This subspecies is a shrub-thicket specialist that occurs at the northern edge of its range in Canada. The discrete population that occurs in the Prairie Ecological Area is localized to riparian systems and is relatively small. However, the population appears to be stable and potentially increasing. Few threats have been identified as serious concerns.

Range AB SK

Status History
The Prairie population of the *auricollis* subspecies was designated Not at Risk in April 1994, November 2000, and November 2011.

Amphibians

Coastal Tailed Frog — ***Ascaphus truei*** — **Special Concern**

Assessment Criteria not applicable

Reason for Designation

This unusual frog of an ancient lineage has a scattered distribution in western British Columbia, where it occupies cool, clear, fast-flowing mountain streams and adjacent older forest. Habitats continue to be lost and degraded as a result of forestry and other human activities that occur throughout much of its Canadian distribution. Siltation of breeding streams and loss of older forest cover associated with resource use are main threats. Threats identified in the previous assessment in 2000 continue to degrade and fragment habitats, and new threats, such as run-of-river independent hydropower projects, have the potential for rapid and widespread increase throughout the species' Canadian range. Specialized habitat requirements, life history characteristics that include low reproductive potential, and patchy distribution make the frogs particularly vulnerable to human activities and climate change.

Range BC

Status History
Designated Special Concern in May 2000. Status re-examined and confirmed in November 2011.

Fishes

North Pacific Spiny Dogfish ***Squalus suckleyi*** **Special Concern**
Assessment Criteria not applicable

Reason for Designation

This small shark is widely distributed in the north Pacific throughout the shelf waters of western Canada. An average of six pups are born every two years; the gestation period of 18-24 months is one of the longest known for any vertebrate, and the age of female sexual maturity (35 years) is one of the oldest. The species is subject to both targeted and bycatch fishing mortality. The species remains relatively abundant in Canadian waters, but low fecundity, long generation time (51 years), uncertainty regarding trends in abundance of mature individuals, reduction in size composition, and demonstrated vulnerability to overfishing are causes for concern.

Range Pacific Ocean

Status History
Designated Special Concern in November 2011.

Atlantic Halibut ***Hippoglossus hippoglossus*** **Not at Risk**
Assessment Criteria not applicable

Reason for Designation

Widely distributed in Atlantic Canada, from the Labrador Shelf to Georges Bank and the Gulf of Maine, this species attains a very large maximum size (3 m) and has a relatively long generation time (greater than 21 yr). Abundance in Canada is probably low relative to historical levels due to large fishery removals in the late 1880s and early 1900s. Trawl surveys provide the only long-term abundance indices but provide limited information on mature individuals, which can avoid this gear. Longline indices better sample mature individuals, but time series are relatively short. Since the 1970s, abundance indices on the Grand Banks and Labrador Shelf declined, but have increased since 2002. Abundance indices show increases, particularly since the 1990s, on the Scotian Shelf and in the Gulf of St. Lawrence. Fisheries (directed and bycatch) were essentially unrestricted prior to the 1980s. Management measures since then include catch limits in most areas and a requirement to release small individuals, but catch limits have been exceeded in the past and minimum size is below size at maturity. However, a recent analysis of the Scotian Shelf/Southern Grand Banks population indicates that the population is productive, abundance is above the level which would give maximum sustainable yield, and fishing mortality is below the level of a maximum sustainable yield.

Range Atlantic Ocean

Status History
Designated Not at Risk in November 2011.

Arthropods

American Burying Beetle ***Nicrophorus americanus*** **Extirpated**
Assessment Criteria not applicable

Reason for Designation

There is sufficient information to document that no individuals of the wildlife species remain alive in Canada. This includes that it: (1) is a large distinctive and conspicuous insect not seen for 39 generations; (2) has not been seen despite a tenfold increase in the number of field entomologists and an estimated 300,000 general trap nights at which at least some should have resulted in capture of this species, as well as studies of carrion-feeding beetles that did not reveal it; (3) comes to lights yet still not seen in thousands of light traps; and (4) a recent directed search in the general area where last seen 60 and 39 years ago that failed to find this species.

Range ON QC

Status History
Designated Extirpated in November 2011.

Okanagan Efferia ***Efferia okanagana*** **Endangered**
Assessment Criteria B2ab(iii)

Reason for Designation

This Canadian endemic is known from only five locations within a very small area of south central British Columbia. The species' grassland habitat is limited and continues to be degraded. Threats include introduction and spread of invasive species, changing fire regimes, pesticide drift and unrestricted ATV use.

Range BC

Status History
Designated Endangered in November 2011.

Molluscs

Snuffbox ***Epioblasma triquetra*** **Endangered**
Assessment Criteria B1ab(iii)+2ab(iii)

Reason for Designation

This small, freshwater mussel is currently found in two rivers in southern Ontario; another population may still survive in the Thames River where one fresh shell was found in 1998. The original COSEWIC assessment (2001) concluded that it had been lost from most of its Canadian range and was confined to the Sydenham River but live mussels from a reproducing population were subsequently found in the Ausable River beginning in 2006. The two remaining populations are in areas of intensive farming and subject to siltation and pollution with siltation being particularly problematic. Invasive Zebra Mussels have rendered much of the historical habitat unsuitable. An invasive fish species, the Round Goby, may pose a new threat by competing with the mussel's two known larval host fishes and by eating juvenile mussels.

Range ON

Status History
Designated Endangered in May 2001. Status re-examined and confirmed in November 2011.

Vascular Plants

Bearded Owl-clover ***Triphysaria versicolor*** **Endangered**
Assessment Criteria B1b(iii)c(iv)+2b(iii)c(iv)

Reason for Designation

This small hemiparasitic annual plant is known from vernal pools and seeps in the endangered Garry Oak ecosystems of southern Vancouver Island. Its small range, fluctuations in number of mature individuals and few locations coupled with destruction of individuals and degradation of habitat through recreational use, grazing by introduced Canada Geese, competition from invasive plant species, and residential development put it at on-going risk.

Range BC

Status History
Designated Endangered in April 1998. Status re-examined and confirmed in May 2000 and November 2011.

Bluehearts ***Buchnera americana*** **Endangered**
Assessment Criteria B1ab(ii,iii,iv)+2ab(ii,iii,iv)

Reason for Designation

A hemiparasitic herbaceous plant which grows in three small populations within the Great Lakes sand dunes habitat in southwestern Ontario. Its small population size and threats associated with water-level changes, disruption of natural process including fire suppression, recreational activities, and invasive plants places the species at on-going risk.

Range ON

Status History
Designated Threatened in April 1985. Status re-examined and designated Endangered in April 1998. Status re-examined and confirmed in May 2000 and November 2011.

False Hop Sedge ***Carex lupuliformis*** **Endangered**
Assessment Criteria B2ab(ii,iii,iv,v); C2a(i); D1

Reason for Designation

In Canada, this rare sedge is found in southern Ontario and Quebec where fewer than 250 mature plants have been found. There have been substantial historical population losses attributed to residential development and other forms of land use. Continued declines are attributed to late season flooding, land drainage, invasive alien species, recreation, erosion, garbage deposition, water regime regulation, and residential and urban development. Recovery efforts have included re-introduction at three sites in Quebec.

Range ON QC

Status History
Designated Threatened in April 1997. Status re-examined and designated Endangered in May 2000 and November 2011.

Heart-leaved Plantain ***Plantago cordata*** **Endangered**
Assessment Criteria B1ab(iii)+2ab(iii)

Reason for Designation

In Canada, only two populations of this semi-aquatic species are known both in undisturbed wet forest patches of the Carolinian zone of southwestern Ontario. The species has declined throughout its range, as a result of deterioration or loss of the clear, shallow streams and seepages in which it occurs. The small range and specific habitat requirements of this species make it vulnerable to declines in habitat quality. The main threats include timber harvesting, agricultural runoff, alteration to riparian habitats, and other activities that contribute to eutrophication or siltation of the aquatic habitat.

Range ON

Status History
Designated Endangered in April 1985. Status re-examined and confirmed Endangered in April 1998, May 2000, and November 2011.

Hoary Mountain-mint ***Pycnanthemum incanum*** **Endangered**
Assessment Criteria B1ab(iii,iv)+2ab(iii,iv)

Reason for Designation

This perennial plant has a historically small distribution in Canada, where it is known to occur in just two populations along the Hamilton bluffs in Ontario. Its highly specific habitat, which is limited to a small shoreline area of the bluffs, makes this species especially vulnerable. The main threats to its persistence are the encroachment of invasive species, the loss of habitat to erosion and fire suppression, which contributes to succession to unsuitable habitat types.

Range ON

Status History
Designated Endangered in April 1986. Status re-examined and confirmed Endangered in April 1998, May 2000, and November 2011.

Large Whorled Pogonia ***Isotria verticillata*** **Endangered**
Assessment Criteria B1ab(iii)+2ab(iii); D1

Reason for Designation

This orchid is known historically from only 3 sites in Ontario, but it has not been seen since 1996 despite searches at two of the three previously known sites. The species requires rich, deciduous or mixed, moist forest on sandy soil with

abundant humus; this habitat continues to decline in quality due to trampling and exotic plants and earthworms. It is possible that this species may still be extant in Canada since many orchids are known to have long dormancy periods and often occur in very low numbers.

Range ON

Status History
Designated Endangered in April 1986. Status re-examined and confirmed Endangered in April 1998, May 2000, and November 2011.

Yukon Draba ***Draba yukonensis*** **Endangered**
Assessment Criteria B1ab(iii)c(iv)+2ab(iii)c(iv)

Reason for Designation

This small herbaceous mustard is limited globally to one meadow complex in southwestern Yukon; it is found nowhere else on Earth. The meadow complex is under threat from industrial activities, nearby human habitation, invasive species, and trampling by humans and forest encroachment. Human use of the meadows is projected to increase, and encroachment by woody species due to natural succession is causing suitable habitat to decline.

Range YT

Status History
Designated Endangered in November 2011.

Eastern Baccharis ***Baccharis halimifolia*** **Threatened**
Assessment Criteria D2

Reason for Designation

The species is an Atlantic Coastal Plain Flora species. A rare Canadian disjunct shrub restricted to very specific salt marsh habitat in southern Nova Scotia. Its coastal habitat is declining due to increasing shoreline development. Further, climate change effects, including rising sea level and increasing and more frequent storm surges, will cause habitat loss and degradation as well as impact individuals over the next few decades.

Range NS

Status History
Designated Threatened in November 2011.

Buffalograss ***Bouteloua dactyloides*** **Special Concern**
Assessment Criteria not applicable

Reason for Designation

This grass occurs in limited areas of remnant short-grass prairie in southern Saskatchewan and Manitoba. Threats to this species include coal strip mining, invasive alien plants and overgrowth by woody vegetation and high grass that were once controlled by bison grazing and fire. However, recent survey efforts have increased the known number of populations and it no longer qualifies as a threatened species.

Range SK MB

Status History
Designated Special Concern in April 1998. Status re-examined and designated Threatened in November 2001. Status re-examined and designated Special Concern in November 2011.

Hairy Prairie-clover ***Dalea villosa*** **Special Concern**
Assessment Criteria not applicable

Reason for Designation

A perennial, herbaceous legume that inhabits sand dune landscapes within the prairies of south-central Saskatchewan and south-western Manitoba. Threats to the extent and quality of habitat continue, including a lack of fire allowing encroachment of competing vegetation, invasive alien plant species, recreational traffic, sand extraction as well as a general decline in open sandy habitat. However, a larger population size is now known due to greatly increased survey effort, and as a result the level of risk is now thought to be much reduced.

Range SK MB

Status History
Designated Threatened in April 1998. Status re-examined and confirmed in May 2000. Status re-examined and designated Special Concern in November 2011.

Mosses

Haller's Apple Moss ***Bartramia halleriana*** **Threatened**
Assessment Criteria B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v); C2a(i)

Reason for Designation

In North America, this moss is restricted to Canada, within a limited area in the Rocky Mountains of Alberta and adjacent British Columbia. The species is a habitat specialist, restricted to non-calcareous cliffs or talus in low elevation forests with high humidity, and it has a low dispersal ability. Only nine locations are known for the species; two of the locations represent greater than 60% of the total number of mature individuals and are threatened by hydroelectric developments. In addition, the species is exposed to a number of threats at most sites, including habitat disturbances from fire, forest harvesting, and Mountain Pine Beetle infestation. The moss has been extirpated at one location.

Range BC AB

Status History
Designated Threatened in November 2001. Status re-examined and confirmed in November 2011.

Lichens

Ghost Antler Lichen ***Pseudevernia cladonia*** **Not at Risk**
Assessment Criteria not applicable

Reason for Designation

This lichen occurs predominantly in montane cloud forests in Quebec and in coastal fog forests in New Brunswick and Nova Scotia. In both the coastal and montane situations the species is found in humid spruce/fir forest where it reproduces by fragmentation and very seldom by sexual reproduction. Since the last status report, many new locations have been found in all three provinces, recent surveys estimate more than three million individuals, at 41 locations. However, in the long term, climate change and anthropogenic threats may reduce populations of this lichen.

Range QC NB NS

Status History
Designated Special Concern in April 2006. Status re-examined and designated Not at Risk in November 2011.