COSEWIC Wildlife Species Assessments (detailed version), November 2017*

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

Caribou ***Rangifer tarandus*** **Endangered**

Dolphin and Union population

Assessment Criteria A2ad+4acd

Reason for Designation

This Arctic caribou population is endemic to Canada, occurring in Nunavut and the Northwest Territories. Recognized for its unique migration pattern from Victoria Island across the sea ice to the mainland, observations have shown that its distribution has retracted and expanded since the beginning of the 20th century, in rough correspondence with population size. In the early 1900s, the herd was reported to be large, then a strong decline was likely precipitated by the introduction of firearms, combined with severe winters. A 50-60-year period of low densities and no sign of migration across the sea ice followed. The herd started to increase in the late 1970s, and resumed its migration to the mainland in the late 1980s, increasing in numbers until the 1990s. In 2015, the herd was estimated at about 18,000 animals. Three survey estimates over the last 18 years and Aboriginal Traditional Knowledge suggest a decline as high as 50-60%, which appears to have accelerated since 2010. The population is experiencing multiple threats, including reduced connectivity and disrupted migration between winter and summer range associated with commercial shipping in Dease Strait that is increasingly supported by ice-breakers. Climate change is linked with decreased periods of ice cover and irregularity of sea ice conditions, causing mortality through drowning and delays in migration with consequences for nutrition and parasite burdens. Overharvest has been involved in past declines and recent exploitation levels are unknown, although access opportunities from five additional communities have increased. The spread of insect pests and pathogens as a consequence of climate change is an additional concern. Natural fluctuations of the population remain a source of uncertainty.

Range NT NU

Status History

The original designation considered a single unit that included Peary Caribou, *Rangifer tarandus pearyi*, and what is now known as the Dolphin and Union population of Caribou, *Rangifer tarandus*. It was assigned a status of Threatened in April 1979. Split to allow designation of three separate populations in 1991: Banks Island (Endangered), High Arctic (Endangered) and Low Arctic (Threatened) populations. In May 2004 all three population designations were de-activated, and the Peary Caribou, *Rangifer tarandus pearyi*, was assessed separately from the Dolphin and Union population of Caribou, *Rangifer tarandus*. The Dolphin and Union population is comprised of a portion of the former "Low Arctic population", and it was designated Special Concern in May 2004. Status re-examined and designated Endangered in November 2017.

Grey Whale ***Eschrichtius robustus*** **Endangered**

Pacific Coast Feeding Group population

Assessment Criteria D1

Reason for Designation

Members of this small population migrate annually from their wintering grounds in Mexico to their summer feeding areas in Pacific Northwest waters, where they reside the entire summer. The population estimate is low, at about 243 individuals. Due to its small size, the population is vulnerable to stochastic events and threats including contamination from oil spills.

Range BC Pacific Ocean

Status History

The species was considered a single unit and designated Not at Risk in April 1987. Status re-examined and designated Special Concern in May 2004. Split into two populations in November 2017; the Pacific Coast Feeding Group population was designated Endangered.

Grey Whale ***Eschrichtius robustus*** **Endangered**

Western Pacific population

Assessment Criteria D1

Reason for Designation

Members of this population migrate annually from winter calving grounds in Mexico along the West Coast of Canada to summer feeding areas in Russia. Feeding areas in summer and autumn are located primarily in two small areas off the north-eastern coast of Sakhalin Island and off southern Kamchatka. The population is growing, but remains depleted at about 174 adults. The population faces many threats, including cumulative effects of increasing oil and gas activities in its summer range.

Range BC Pacific Ocean

Status History

This population was not part of the original assessment of the Eastern North Pacific Grey Whale that was considered a single unit and designated Not at Risk in April 1987. This new Western Pacific population was designated Endangered in November 2017.

Grey Whale ***Eschrichtius robustus*** **Not at Risk**

Northern Pacific Migratory population

Assessment Criteria not applicable

Reason for Designation

Members of this population migrate annually from wintering calving grounds in Mexico to their summer feeding areas in the Bering, Chukchi and Beaufort Seas. Despite a decline in 1999 and 2000, numbers have increased and remained well above what they were in the middle of the 20th century and have been relatively stable since the mid-1990s at about 21,000 animals.

Range YT NT BC Pacific Ocean Arctic Ocean

Status History

The species was considered a single unit and designated Not at Risk in April 1987. Status re-examined and designated Special Concern in May 2004. Split into two populations in November 2017; the Northern Pacific Migratory population was designated Not at Risk.

Birds

Williamson's Sapsucker ***Sphyrapicus thyroideus*** **Endangered**

Assessment Criteria C2a(ii)

Reason for Designation

This migratory woodpecker depends on old-growth coniferous and mixed forests in the Southern Interior of British Columbia, with fewer than 1000 individuals breeding in two Canadian subpopulations. Its distribution is largely limited by the availability of large nest-trees, mostly several hundred years old. The main threat to this species is logging and forest harvesting, including removal of dangerous trees for worker safety, forest fires and fire suppression. Lower impact threats are housing and urban development, ranching, and renewable energy development. Despite recent forest harvest regulations in British Columbia intended to protect its nesting habitat, breeding numbers are anticipated to decline further.

Range BC

Status History

Designated Endangered in May 2005. Status re-examined and confirmed in November 2017.

Northern Saw-whet Owl *brooksi* subspecies ***Aegolius acadicus brooksi*** **Threatened**

Assessment Criteria Meets Endangered, C2a(ii), but designated Threatened, C2a(ii), because the species is not at risk of imminent extinction.

Reason for Designation

This distinct subspecies endemic to Canada has a small population of fewer than 2000 breeding individuals, restricted to the islands of Haida Gwaii off the Pacific coast of British Columbia. It is a forest specialist, preferring older coniferous forests with abundant nesting snags and an open understory. Numbers of breeding birds are anticipated to further decline

over the next 15 years as a consequence of ongoing forest harvesting. Other continuing low-level threats to this subspecies include problematic invasive, introduced and native species, accidental mortality from road collisions and effects of forest fires. As just over 70% of Haida Gwaii is now within protected areas reserved from forestry operations, including National Park Reserve, provincial park, and reserves under the Haida Gwaii Strategic Land Use Agreement, this subspecies is not at risk of imminent extinction.

Range BC

Status History
Designated Threatened in April 2006. Status re-examined and confirmed in November 2017.

Peregrine Falcon *pealei* subspecies ***Falco peregrinus pealei*** **Special Concern**

Assessment Criteria Met criterion for Threatened, D1, but designated Special Concern given a continuing increase in numbers, a large part of the population breeding in protected areas, and rescue effect.

Reason for Designation
This subspecies occurs along much of the British Columbia coastline. Despite a continuing increase in numbers, its population remains small. However, a large portion of the population breeds in protected areas, and there is a high probability of rescue from the United States. Conversely, there remains concern that oil spills, or other factors that are capable of reducing seabird populations upon which they prey could result in the subspecies declining.

Range BC

Status History
The Peregrine Falcon in Canada was originally evaluated by COSEWIC as three separate subspecies: *anatum* subspecies (Endangered in April 1978, Threatened in April 1999 and in May 2000), *tundrius* subspecies (Threatened in April 1978 and Special Concern in April 1992) and *pealei* subspecies (Special Concern in April 1978, April 1999 and November 2001). In April 2007, the Peregrine Falcon in Canada was assessed as two separate units: *pealei* subspecies and *anatum/tundrius*. The Peregrine Falcon *pealei* subspecies was designated Special Concern in April 2007 and November 2017.

Peregrine Falcon *anatum/tundrius* ***Falco peregrinus anatum/tundrius*** **Not at Risk**

Assessment Criteria not applicable

Reason for Designation
Following dramatic declines in the mid 20th century, this species has rebounded significantly over the past few decades, with continued moderate to strong increases in many parts of Canada since the last status report in 2007. The initial recovery was a result of reintroductions across much of southern Canada following the ban of organochlorine pesticides (e.g., DDT). Increasingly, the ongoing population growth is a function of healthy productivity and, in the case of urban-nesting pairs, exploitation of previously unoccupied habitat. While pollutants continue to be used on the wintering grounds of some individuals, and can be found in tissue samples, they appear to be at levels that are not affecting reproductive success at the population level. The extent to which populations have recovered relative to historical levels is generally unknown, but the consistent strong growth of the overall population suggests that there are currently no significant threats to the species.

Range YT NT NU BC AB SK MB ON QC NB NS NL

Status History
The Peregrine Falcon in Canada was originally evaluated by COSEWIC as three separate subspecies: *anatum* subspecies (Endangered in April 1978, Threatened in April 1999 and in May 2000), *tundrius* subspecies (Threatened in April 1978 and Special Concern in April 1992) and *pealei* subspecies (Special Concern in April 1978, April 1999 and November 2001). In April 2007, the Peregrine Falcon in Canada was assessed as two separate units: *pealei* subspecies and *anatum/tundrius*. Peregrine Falcon *anatum/tundrius* was designated Special Concern in April 2007. Status re-examined and designated Not at Risk in November 2017.

Reptiles

Prairie Skink ***Plestiodon septentrionalis*** **Special Concern**

Assessment Criteria not applicable

Reason for Designation
The Canadian distribution of this species is restricted to a small area of mixed-grass prairie on sandy soils in Manitoba and

is isolated from the rest of the species' range in the USA by over 100 km. Its prairie habitat has been historically lost and fragmented mainly due to agricultural activities. Aspen succession and invasion by exotic plants continue to degrade remaining habitats. Several new localities have been discovered within the known range since the last assessment as a result of increased survey efforts, and habitat management is ongoing within portions of the skink's range on federal and provincial lands. Change in status from the previous assessment results from a different interpretation of status assessment criteria by COSEWIC. While the species is deemed to no longer be at risk of imminent extinction, it could become Threatened if factors affecting it are unmitigated.

Range MB

Status History
Designated Special Concern in April 1989. Status re-examined and designated Endangered in May 2004. Status re-examined and designated Special Concern in November 2017.

Fishes

Redside Dace ***Clinostomus elongatus*** **Endangered**
Assessment Criteria A2b+3bc+4bc+B2ab(i,ii,iii,iv,v)

Reason for Designation
This small, colourful minnow is highly susceptible to changes in stream flow and declines in water quality, such as those that occur in urban and agricultural watersheds. The Canadian range of this species largely overlaps with the Greater Toronto Area (GTA), where urban land use is widespread and projected to increase in the future. The continued expansion of the GTA has led to ongoing habitat degradation, causing serious declines in range and number of individuals and populations.

Range ON

Status History
Designated Special Concern in April 1987. Status re-examined and designated Endangered in April 2007 and November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Endangered**
Cultus-L population
Assessment Criteria C2a(ii)

Reason for Designation
Cultus Lake is one of the most heavily utilized lakes in BC and it has been developed for recreational, residential and agricultural purposes. The lake's water quality has been degraded as a result of seepage from septic systems, agricultural runoff and domestic use of fertilizers as well as by an introduced Eurasian water-milfoil (*Myriophyllum* sp.). The spawning population has declined steadily since 1950 and the current population size remains very small. This small population continues to face high exploitation rates as bycatch in other salmon fisheries.

Range BC Pacific Ocean

Status History
Designated Endangered in an emergency assessment in October 2002. Status re-examined and confirmed in May 2003 and November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Endangered**
Bowron-ES population
Assessment Criteria A2b

Reason for Designation
This anadromous species faces a number of threats in both freshwater and marine areas which are causing habitat quality to decline. The number of mature individuals in this population has been declining since the mid-1950s and there has been a large decline in the past 3 generations. The most recent numbers have been among the lowest in the time series. Annual exploitation rates have been in excess of 30% for many years while the population has been declining.

Range BC Pacific Ocean

Status History
Designated Endangered in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Endangered**

Harrison (U/S)-L population

Assessment Criteria A2b

Reason for Designation
This anadromous species faces a number of threats in both freshwater and marine areas which are causing habitat quality to decline. The number of mature individuals increased from a low level in 1960 to a peak in 1980. Since then, the numbers have fluctuated in a downward direction to reach a historical minimum in the most recent period.

Range BC Pacific Ocean

Status History
Designated Endangered in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Endangered**

Quesnel-S population

Assessment Criteria A2b+4b

Reason for Designation
The population faces a number of threats in both freshwater and marine areas, which are causing habitat quality to decline. A potential new threat to the population is the failure of a mining tailings pond that drained into Quesnel Lake in 2014. The population has declined consistently since 2000.

Range BC Pacific Ocean

Status History
Designated Endangered in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Endangered**

Seton-L population

Assessment Criteria A2b

Reason for Designation
This anadromous species faces a number of threats in both freshwater and marine areas which are causing habitat quality to decline. The number of mature individuals in this population was relatively high and stable from the mid-1970s to the late-1990s. Since then the numbers have declined considerably to very low abundance and are close to a historical minimum.

Range BC Pacific Ocean

Status History
Designated Endangered in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Endangered**

Takla-Trembleur-EStu population

Assessment Criteria A2b+4b

Reason for Designation
This anadromous species faces a number of threats in both freshwater and marine areas which are causing habitat quality to decline. The number of mature individuals has been declining steadily for over 20 years despite reductions in fishing mortality. Productivity is currently very low.

Range BC Pacific Ocean

Status History
Designated Endangered in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Endangered**

Takla-Trembleur-Stuart-S population

Assessment Criteria A2b+4bd

Reason for Designation

This anadromous species faces a number of threats in both freshwater and marine areas, which are causing habitat quality to decline. The number of mature individuals has been declining steadily for 3 generations yet removals by fishing remained high.

Range BC Pacific Ocean

Status History

Designated Endangered in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Endangered**

Taseko-ES population

Assessment Criteria A2b; C2a(ii)

Reason for Designation

This anadromous species faces a number of threats in both freshwater and marine areas which are causing habitat quality to decline. Poor data quality has caused a gap in population estimates in the middle of the time series (1960s-1990s). The number of mature individuals was relatively high in the late 1990s. Since then the numbers have declined considerably and are close to a historical minimum.

Range BC Pacific Ocean

Status History

Designated Endangered in November 2017.

Lumpfish ***Cyclopterus lumpus*** **Threatened**

Assessment Criteria Meets criteria for Endangered, A2b, but designated Threatened, A2b, because the species is not at imminent risk of extirpation.

Reason for Designation

This marine fish species is broadly distributed across the Northwest Atlantic. Directed commercial fishery landings have declined sharply since 2005, in spite of high market demand. There have been declines in abundance of about 58% indicated in bottom trawl surveys over 19-20 years, conducted in the core part of its Canadian range (off southern Newfoundland). However, abundance appears to have remained stable across other parts of the Canadian range such as the northern Gulf of St. Lawrence, making recolonization possible.

Range NU MB ON QC NB PE NS NL Atlantic Ocean

Status History

Designated Threatened in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Threatened**

North Barriere-ES population

Assessment Criteria C2a(ii)

Reason for Designation

After having been extirpated by dam construction in the 1920s, a new population was established through transplants. Although the population initially grew quickly, the fish now face a number of threats in both freshwater and marine areas which are causing habitat quality to decline. Since 1980, there has been a continuous decline to a low number today.

Range BC Pacific Ocean

Status History

Designated Threatened in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Threatened**

Widgeon (River-Type) population

Assessment Criteria D1

Reason for Designation
This is a naturally small population which faces a number of threats in both freshwater and marine areas which are causing habitat quality to decline. The number of mature individuals was relatively stable from 1950 to 1990, and then declined considerably to a minimum in 2000. Over the past 3 generations the number of fish has returned to pre-1990 abundances. However, the small population size makes them vulnerable to stochastic events and increasing threats.

Range BC Pacific Ocean

Status History
Designated Threatened in November 2017.

Vancouver Lamprey ***Entosphenus macrostomus*** **Threatened**

Assessment Criteria Meets Endangered, B1ab(iii)+2ab(iii), but designated Threatened, B1ab(iii)+2ab(iii), because the species is not at imminent risk of extinction.

Reason for Designation
This endemic parasitic fish is known from only three connected lakes and the lower reaches of larger tributaries within a single watershed on Vancouver Island. The species' spawning areas and juvenile rearing habitats have a restricted distribution in tributary deltas and lakeshore littoral habitat. Slow but ongoing declines in habitat quality and quantity due to threats from droughts and water management, sediment mobilized following upslope logging, and shoreline development threaten the species' long-term persistence.

Range BC

Status History
Designated Special Concern in April 1986. Status re-examined and confirmed in April 1998. Status re-examined and designated Threatened in November 2000, November 2008, and November 2017.

Western Silvery Minnow ***Hybognathus argyritis*** **Threatened**

Assessment Criteria Meets Endangered, B1ab(iii)+2ab(iii), but designated Threatened, B1ab(iii)+2ab(iii), because the species is not at risk of imminent extirpation.

Reason for Designation
This is a small-bodied minnow species that is restricted in Canada to the Milk River of southern Alberta. It is a habitat specialist found in shallow zones of turbid prairie waters with high seasonal flow variability and unstable fine sediments. It is threatened by flow management resulting from water diversions in the US and a warming and drying climate with negative impacts on habitat quantity and quality. Despite meeting criteria for Endangered, the severity of the threats is uncertain and there is no evidence of a decline in abundance since the previous assessment.

Range AB

Status History
Designated Special Concern in April 1997. Status re-examined and designated Threatened in November 2001. Status re-examined and designated Endangered in April 2008. Status re-examined and designated Threatened in November 2017.

Bering Cisco ***Coregonus laurettae*** **Special Concern**

Assessment Criteria not applicable

Reason for Designation
This is an anadromous fish that annually migrates through Alaskan waters of the Yukon River to access the upper reaches of the river in Canada. The abundance of the species in the Canadian portion of the Yukon River is unknown, but low compared to Alaskan sections of the river. The primary threat to the population in Canada is a combination of directed and bycatch fisheries, but these are currently poorly quantified. If harvest is not managed effectively, the species may become Threatened.

Range YT

Status History
Species considered in April 1990 and placed in the Data Deficient category. Status re-examined and designated Special

Concern in November 2004 and November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Special Concern**

Kamloops-ES population

Assessment Criteria not applicable

Reason for Designation

This anadromous species faces a number of threats in both freshwater and marine areas, which are causing habitat quality to decline. However, the number of mature individuals in the population is currently greater than numbers observed 1960-1995. While there has been a decline in the number of mature individuals over the past 3 generations, this decline occurred from the maximum observed in the 65-year time period. However, there has been a decline over the last three generations, and these fish may become Threatened if the factors leading to this decline are not managed effectively.

Range BC Pacific Ocean

Status History

Designated Special Concern in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Special Concern**

Lillooet-Harrison-L population

Assessment Criteria not applicable

Reason for Designation

This anadromous species faces a number of threats in both freshwater and marine areas, which are causing habitat quality to decline. The population increased considerably in abundance between 1960-1990 after which it declined. Although the current abundance is above or similar to levels observed in the 1950-1970 period, the population may become Threatened if current threats are not managed and the population continues to decline.

Range BC Pacific Ocean

Status History

Designated Special Concern in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Special Concern**

Nahatlatch-ES population

Assessment Criteria not applicable

Reason for Designation

The number of mature individuals is small and, if the threats lead to a decline in the number of mature individuals, it could become Threatened. This anadromous species faces a number of threats in both freshwater and marine areas, which are causing habitat quality to decline.

Range BC Pacific Ocean

Status History

Designated Special Concern in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Special Concern**

Francois-Fraser-S population

Assessment Criteria not applicable

Reason for Designation

This anadromous species faces a number of threats in both freshwater and marine areas, which are causing habitat quality to decline. However, the number of mature individuals increased considerably during the period 1970-2000 and the most recent numbers have been among the highest on record. However, there has been a decline over the last three generations, and this fish may become Threatened if the factors contributing to this decline are not effectively managed.

Range BC Pacific Ocean

Status History

Designated Special Concern in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Special Concern**

Harrison (D/S)-L population

Assessment Criteria not applicable

Reason for Designation
The number of mature individuals in the population was very small from 1950-1995 and yet the population has persisted. However, the population may become Threatened if current threats are not managed and the population begins to decline. This anadromous species faces a number of threats in both freshwater and marine areas, which are causing habitat quality to decline.

Range BC Pacific Ocean

Status History
Designated Special Concern in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Not at Risk**

Nadina-Francois-ES population

Assessment Criteria not applicable

Reason for Designation
The number of mature individuals has steadily increased since 1950, and the most recent number is the highest on record.

Range BC Pacific Ocean

Status History
Designated Not at Risk in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Not at Risk**

Chilliwack-ES population

Assessment Criteria not applicable

Reason for Designation
The number of mature individuals has only been monitored since 2001, resulting in considerable uncertainty about how the recent abundance compares to historical values. Nevertheless, there has been an increase in the number of mature individuals in the past 3 generations.

Range BC Pacific Ocean

Status History
Designated Not at Risk in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Not at Risk**

Shuswap Complex-L population

Assessment Criteria not applicable

Reason for Designation
This population has extreme cyclic dominance where the dominant cycle line is on average 600 times larger than the smallest. While the number of mature individuals of the largest cycle line is highly variable, it has never been lower than 500,000 fish, it has exceeded 2.5 million twice (2002 and 2010), and there is no trend in its abundance.

Range BC Pacific Ocean

Status History
Designated Not at Risk in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Not at Risk**

Shuswap-ES population

Assessment Criteria not applicable

Reason for Designation
The number of mature individuals in the population has increased since records were first taken in the mid-1950s. The population does not meet any risk criteria.

Range BC Pacific Ocean

Status History
Designated Not at Risk in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Not at Risk**

Anderson-Seton-ES population

Assessment Criteria not applicable

Reason for Designation
The number of mature individuals in the population has been increasing since records were first taken in the mid-1950s, and the most recent numbers have been the highest on record.

Range BC Pacific Ocean

Status History
Designated Not at Risk in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Not at Risk**

Pitt-ES population

Assessment Criteria not applicable

Reason for Designation
The number of mature individuals in the population is currently much higher than it was in the period 1950 to the late 1990s.

Range BC Pacific Ocean

Status History
Designated Not at Risk in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Not at Risk**

Harrison River (River-Type) population

Assessment Criteria not applicable

Reason for Designation
The number of mature individuals in the population has increased considerably over the past three generations and is now at a historical high.

Range BC Pacific Ocean

Status History
Designated Not at Risk in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Not at Risk**

Chilko-ES population

Assessment Criteria not applicable

Reason for Designation
The number of mature individuals in the population has been increasing since records were first taken in the mid-1950s, and the most recent numbers have been among the highest on record.

Range BC Pacific Ocean

Status History
Designated Not at Risk in November 2017.

Sockeye Salmon ***Oncorhynchus nerka*** **Not at Risk**

Chilko-S population

Assessment Criteria not applicable

Reason for Designation
The number of mature individuals in the population has been increasing since records were first taken in the mid-1950s, and the most recent numbers have been among the highest on record.

Range BC Pacific Ocean

Status History
Designated Not at Risk in November 2017.

Arthropods

Verna's Flower Moth ***Schinia verna*** **Threatened**

Assessment Criteria C2a(i)

Reason for Designation
This moth is endemic to the Canadian prairies. Despite much search effort over the past two decades, it has been found infrequently. This species is believed to be naturally rare within suitable prairie habitat, which is fragmented as a result of agricultural development. The total population is likely small (less than 10,000 adults), divided into smaller subpopulations, based on expert opinion, collection records, and extensive search effort at known localities of this moth.

Range AB SK MB

Status History
Designated Threatened in May 2005. Status re-examined and confirmed in November 2017.

Red-tailed Leafhopper ***Aflexia rubranura*** **Special Concern**

Great Lakes Plains population

Assessment Criteria not applicable

Reason for Designation
This is a flightless species with limited dispersal ability, restricted to remnant grassland and savanna alvar habitats on Manitoulin and adjacent islands, Ontario. The species' only known host plant, Prairie Dropseed, has a wider distribution but is also rare. The species is known from a small number of sites threatened from ongoing aggregate extraction, fire and fire suppression, livestock grazing, and recreational use.

Range ON

Status History
Designated Special Concern in November 2017.

Vascular Plants

Quebec Rockcress ***Boechera quebecensis*** **Endangered**

Assessment Criteria B2ab(iii,v); C2a(i)

Reason for Designation
This plant is endemic to Canada and restricted to limestone cliffs and escarpments of the Gaspé Peninsula in Eastern Québec. There are few individuals located in a small number of scattered sites. It is threatened by rock-climbers, and its growth on unstable rocks makes it vulnerable to rock-fall events.

Range QC

Status History
Designated Endangered in November 2017.

Yukon Wild Buckwheat ***Eriogonum flavum* ssp. *aquilinum*** **Special Concern**

Assessment Criteria not applicable

Reason for Designation
This perennial plant is restricted in Canada to a handful of sites in the southwestern Yukon. It occurs on dry, south-facing grassland slopes, which are uncommon relicts of the vast steppes of unglaciated Beringia. Despite apparently low recruitment, the number of mature individuals remains stable. This species could become Threatened as rapid climate change brings increased precipitation and encroachment of the grasslands by native trees and shrubs.

Range YT

Status History
Designated Special Concern in November 2017.

Mosses

Porsild's Bryum ***Haplodontium macrocarpum*** **Threatened**

Assessment Criteria C2a(i)

Reason for Designation
This rare moss is patchily distributed and occupies very little area across a large Canadian range. It relies on very specific, rare habitats on shaded calcareous substrates with continuous growing-season moisture. These habitats are threatened by drought, ice scour, storm events, and wildfire, all of which are expected to increase in severity with climate change. Some sites are also subject to threats from recreation and industrial development. Many habitat patches are smaller than would be required to support a viable population. With 19 known locations in eastern, western, and Arctic Canada, the distance between these patches exceeds the likely dispersal distance of the species. Although new colonies have been discovered in Alberta, the species is continuing to show declines and colony losses, especially in Newfoundland and Labrador, which will likely result in further declines.

Range NU BC AB NL

Status History
Designated Threatened in November 2003. Status re-examined and confirmed in November 2017.

Spoon-leaved Moss ***Bryoandersonia illecebra*** **Threatened**

Assessment Criteria D1

Reason for Designation
This large, long-lived, profusely branching moss is known in Canada only from southern Ontario, where most locations fall within the highly fragmented Carolinian zone. Potential threats include pollution, recreational activities, forestry, and residential and commercial development. Although it is more abundant within this restricted ecological zone than it was thought to be when first assessed by COSEWIC, it is still uncommon, and its absence from large areas of apparently suitable habitat suggests limitation by additional threats or natural factors. When present, the number of colonies is typically low even with intensive search effort. While the presence of this species in recently created habitats shows that dispersal is possible, the means by which it is achieved is not certain. Only female plants have been recorded in Canada and sporophytes have never been observed.

Range ON

Status History
Designated Endangered in May 2003. Status re-examined and designated Threatened in November 2017.

*The review of classification of the Pale-bellied Frost Lichen *(Physconia subpallida)* was not completed. COSEWIC decided that a fully updated status report is required to assess the status of this wildlife species. The assessments of American Bumble Bee (*Bombus pennsylvanicus)*, Red-tailed Leafhopper (*Aflexia rubranura)* Prairie population, and Smoker's Lung Lichen (*Lobaria retigera*) were deferred. These wildlife species will be re-considered by COSEWIC at a later meeting.