

COSEWIC Wildlife Species Assessments (detailed version), April 2018*

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

Harbour Seal Lacs des Loups Marins subspecies

Phoca vitulina mellonae

Endangered

Assessment Criteria D1

Reason for Designation

This land-locked subspecies is endemic to Québec and may number less than 100 individuals. It inhabits a small series of lakes in northern Québec and is the only sub-species to live entirely in fresh water. Climate change could cause pervasive changes to habitat and could increase predation pressure on the population. The population was and is being harvested by the Cree at low, but unknown, rates. Eventual hydro-electric development and mining exploration outside of the identified critical habitat could potentially alter the habitat.

Range QC

Status History

Designated Special Concern in April 1996. Status re-examined and designated Endangered in November 2007 and April 2018.

Birds

Coastal Vesper Sparrow

Poocetes gramineus affinis

Endangered

Assessment Criteria A2ac; B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v); C2a(i); D1

Reason for Designation

This songbird is a distinct subspecies limited to the Pacific coastal plains of western North America, breeding in sparsely vegetated grasslands with scattered trees or shrubs and patches of bare soil. Its numbers are declining throughout its range, due to loss and degradation of breeding and wintering habitat. Despite targeted surveys, no breeding attempts have been confirmed in Canada since 2014, and the current Canadian population is near zero. Remaining patches of suitable nesting habitat are scarce on southeastern Vancouver Island and the Lower Mainland of British Columbia and continue to decline in extent and quality.

Range BC

Status History

Designated Endangered in April 2006. Status re-examined and confirmed in April 2018.

Red-headed Woodpecker

Melanerpes erythrocephalus

Endangered

Assessment Criteria Meets Threatened, C1, but designated Endangered because the Canadian population is likely a sink dependent on immigration from a declining population in the United States.

Reason for Designation

This boldly patterned woodpecker, which inhabits open deciduous forests, has experienced a substantial long-term population reduction. This decline is associated primarily with reduced quality of breeding habitat, particularly the loss of standing dead trees needed for nesting, fly-catching, and food caching. Other threats include increased competition for nest sites from native and non-native bird species. The Canadian population is now likely less than 6,000 mature individuals, almost all in Manitoba and Ontario. It appears to not be self-sustaining, and ongoing declines may accelerate given that numbers are also decreasing in adjacent parts of the U.S. range.

Range SK MB ON QC

Status History

Designated Special Concern in April 1996. Status re-examined and designated Threatened in April 2007. Status re-examined and designated Endangered in April 2018.

Streaked Horned Lark*Eremophila alpestris strigata***Endangered**Assessment Criteria B1ab(iii)+2ab(iii); D1Reason for Designation

This songbird is restricted to the Pacific coastal plains of western North America and is globally at risk. It is dependent on open natural or anthropogenically modified, sparsely vegetated grasslands or other areas with bare ground. It was last confirmed breeding in Canada in 1978, with the most recent indications of potential breeding in 2002; the current Canadian population is likely zero. However, the small subspecies breeds in Washington State and patches of potentially suitable habitat remain on Vancouver Island and in the lower Fraser River Valley in British Columbia, although these continue to decline in both extent and quality. The primary threats to this subspecies in Canada are habitat loss and degradation due to urban development, intensified agricultural practices, invasive plant incursions, coastline management activities, and recreational disturbance.

Range BCStatus History

Designated Endangered in November 2003. Status re-examined and confirmed in April 2018.

Chimney Swift*Chaetura pelagica***Threatened**Assessment Criteria A2bce+4bceReason for Designation

This aerial insectivore is a long-distance migrant, breeding in central and eastern Canada and wintering in South America. It has experienced a long-term population decline of close to 90% since 1970 in areas outside towns and cities, including a reduction of 49% over the past three generations (14 years). However, most roost counts in towns and urban areas show relatively stable numbers. A significant cause of decline is the reduced availability of aerial insects, likely due to the effects of agricultural and other pesticides, changing agricultural practices, and broad-scale ecosystem modifications in much of its breeding, migratory and wintering range. Reduced availability of roosting and nesting sites in chimneys and similar human-made structures, and in large hollow trees, is also likely contributing to declines. Greater frequency and severity of weather extremes may be reducing productivity, and increasing mortality during migration.

Range SK MB ON QC NB NSStatus History

Designated Threatened in April 2007. Status re-examined and confirmed in April 2018.

Common Nighthawk*Chordeiles minor***Special Concern**Assessment Criteria not applicableReason for Designation

This aerial insectivore is a widespread bird across southern and boreal Canada. Its population in southern Canada has declined by 68% since 1970, but the rate of decline has slowed appreciably over the past decade, and the species appears to be quite abundant in suitable boreal habitats. Concerns remain over the effects of human activities and changing climates in reducing food and nest-site availability. The causes of decline are not well known, but include threats that reduce the numbers of aerial insects on which this species forages, which can be attributed to agricultural and other pesticides, and changes in precipitation, temperature and hydrological regimes. An increasing frequency of severe or extreme weather events is also likely impacting this species by reducing its productivity and increasing mortality.

Range YT NT NU BC AB SK MB ON QC NB PE NS NLStatus History

Designated Threatened in April 2007. Status re-examined and designated Special Concern in April 2018.

Olive-sided Flycatcher*Contopus cooperi***Special Concern**Assessment Criteria not applicableReason for Designation

The Canadian population of this widespread forest songbird has experienced a substantial long-term decline, although the rate of decrease has slowed over the past decade. Loss of wintering habitat in northern South America is likely the greatest threat facing this aerial insectivore, but the species may also be affected by changes on the breeding grounds such as the effects of altered fire regimes and climate change on nesting habitat quality, and reductions in the abundance and availability of aerial insect prey. Concerns for its status remain, as most of these threats are continuing, and those

related to climate change may increase.

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

Status History

Designated Threatened in November 2007. Status re-examined and designated Special Concern in April 2018.

Reptiles

Gray Ratsnake

Pantherophis spiloides

Endangered

Carolinian population

Assessment Criteria A2cd+4cd; B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v); C2a(i); D1

Reason for Designation

One of the largest snakes in Canada, this species is characterized by late age of maturity and low reproductive rates. Once spread across most of the Carolinian zone of southwestern Ontario, it occupies an increasingly fragmented region of Ontario and is threatened by ongoing development and expansion of road networks. This population presently contains only two small disjunct subpopulations, surrounded by intensive agriculture, and residential and commercial development. Although accurate estimates of abundance are lacking, the number of mature individuals is most likely less than 250. Two additional subpopulations in this population appear to have been extirpated in the past 10 years, and its geographic range has declined precipitously over that same period. Development especially threatens communal hibernacula. Roads represent a significant mortality threat as snakes bask on them. Additionally, this species is persecuted, both along roads and at hibernacula. Rescue from other populations is unlikely as the Carolinian population is disjunct and separated from adjacent populations in the U.S. by Lake Erie.

Range ON

Status History

The species was considered a single unit and designated Threatened in April 1998 and in May 2000. Split into two populations in April 2007. The Carolinian population was designated Endangered in April 2007. Status re-examined and confirmed in April 2018.

Gray Ratsnake

Pantherophis spiloides

Threatened

Great Lakes / St. Lawrence population

Assessment Criteria A2acd+3cd+4cd

Reason for Designation

One of the largest snakes in Canada, this species is characterized by late age of maturity and low reproductive rates. It occupies an increasingly fragmented region of southern Ontario and is threatened by ongoing development and by expansion of road networks. The extent of its occurrence appears to have declined significantly. Mark-recapture analyses from several subpopulations indicate decreasing population trends at some sites, although widespread estimates of abundance or population trend are lacking. Development especially threatens communal hibernacula. Traffic on roads where snakes bask represents a significant mortality threat. Additionally, this species is intentionally killed, both along roads and at hibernacula. Rescue from other populations is unlikely since this population is already separated from upstate New York by the St. Lawrence River and by at least 100 km from the main species range in New York.

Range ON

Status History

The species was considered a single unit and designated Threatened in April 1998 and in May 2000. Split into two populations in April 2007. The Great Lakes / St. Lawrence population was designated Threatened in April 2007. Status re-examined and confirmed in April 2018.

Eastern Painted Turtle

Chrysemys picta picta

Special Concern

Assessment Criteria not applicable

Reason for Designation

This widespread species is subject to a suite of continuing threats, including road mortality, habitat degradation and loss, invasive species, and subsidized predators, which are unlikely to diminish in the future. Although data on declines of this species are poorly documented, the 'slow' life history of turtles, characterized by late maturation, long lifespan, and long generation time, increases vulnerability and limits population resilience to these threats. The species may become Threatened if these threats are neither reversed nor managed with demonstrable effectiveness.

Range QC NB NS

Status History

Designated Special Concern in April 2018.

Midland Painted Turtle

Chrysemys picta marginata

Special Concern

Assessment Criteria not applicable

Reason for Designation

The loss of > 70% of wetlands in southern Ontario over the past 200 years (< 6 turtle generations) has very likely resulted in significant regional declines in both abundance and distribution of this species, although quantitative data on declines are poorly documented. The species is subject to a suite of continuing threats, including road mortality, habitat degradation and loss, invasive species, and subsidized predators, which are unlikely to diminish in the future. The 'slow' life history of turtles, characterized by exceedingly late maturation, high adult survival, and long generation time, increases vulnerability and limits population resilience to these threats. The species may become Threatened if these threats are neither reversed nor managed with demonstrable effectiveness.

Range ON QC

Status History

Designated Special Concern in April 2018.

Amphibians

Allegheny Mountain Dusky Salamander

Desmognathus ochrophaeus

Endangered

Appalachian population

Assessment Criteria B1ab(iii,v)+2ab(iii,v)

Reason for Designation

This salamander with aquatic larvae inhabits forested brooks, cascades, springs, and seeps, where there is abundant cover in the form of crevices between stones, logs, or leaf litter. Its entire Canadian distribution is confined to a small area at Covey Hill, Québec, and is isolated from other populations in Canada and in the United States. Its small range makes this salamander highly susceptible to environmental fluctuations and chance events, and effects of various human activities. All occupied streams emanate from a single water source and are thus vulnerable to any activities or events that could lead to drying of habitats or contamination of the water source. Within the past decade, increased survey efforts have allowed better delineation of occupied areas and clarified threats, but substantial threats remain, and the risk to the population has increased due to increasing demand for water.

Range QC

Status History

The species was considered a single unit and designated Special Concern in April 1998. Status re-examined and designated Threatened in November 2001. Split into two populations in April 2007. The Great Lakes / St. Lawrence population was designated Threatened in April 2007. Population name changed to Appalachian population in April 2018; status re-examined and designated Endangered.

Allegheny Mountain Dusky Salamander

Desmognathus ochrophaeus

Endangered

Carolinian population

Assessment Criteria B1ab(iii,v)+2ab(iii,v); C2a(i); D1

Reason for Designation

This salamander with aquatic larvae inhabits forested brooks, cascades, springs, and seeps, where there is abundant cover in the form of crevices between stones, logs, or leaf litter. Its entire Canadian distribution is confined to two streams within a small area of Niagara Gorge, Ontario, and is isolated from other populations in Canada and in the United States. Increased survey effort within the past decade has expanded the known area of occupancy from one to two streams. However, the small range and population size, probably fewer than 100 adults, makes this salamander highly susceptible to environmental fluctuations and chance events, and effects of human activities. The population would be lost if the groundwater flow or water quality in the two streams would become compromised by human activities or effects of climate change.

Range ON

Status History

The species was considered a single unit and designated Special Concern in April 1998 . Split into two populations in April 2007. The Carolinian population was designated Endangered in April 2007. Status re-examined and confirmed in April 2018.

Spring Salamander

Gyrinophilus porphyriticus

Data Deficient

Carolinian population

Assessment Criteria not applicable

Reason for Designation

The historical presence of this salamander in Ontario is based on a record comprising three specimens dating from 1877. Only one of the three museum specimens associated with this record remains. The identification of this specimen cannot be ascertained with confidence due to its early developmental stage and poor present condition. While the possibility remains that this is a native species to Ontario and the Carolinian population is valid, this cannot be confirmed at present.

Range ON

Status History

The species was considered a single unit and designated Special Concern in April 1999 and May 2002. Split into two populations in May 2011. The Carolinian population was designated Extirpated in May 2011. Species considered in April 2018 and placed in the Data Deficient category.

Fishes

Lake Whitefish

Coregonus clupeaformis

Extinct

Como Lake small-bodied population

Assessment Criteria not applicable

Reason for Designation

Lake Whitefish are a species complex that has coevolved in certain lakes as species pairs—a larger species and a smaller species. This particular species is known only from Como Lake, Ontario. Both species in the Como Lake pair have become extinct, likely in response to the introduction of an efficient invertebrate planktivore, the Spiny Waterflea. This aquatic invasive species has altered the food-web structure of the lake, eliminating the unique evolutionary processes that maintained the persistence of the species pair. Whitefish still occur in the lake, but the distinct species pair has become a different, more uniform population of large fish.

Range ON

Status History

Designated Extinct in April 2018.

Lake Whitefish

Coregonus clupeaformis

Extinct

Como Lake large-bodied population

Assessment Criteria not applicable

Reason for Designation

Lake Whitefish are a species complex that has coevolved in certain lakes as species pairs—a larger species and a smaller species. This particular species is known only from Como Lake, Ontario. Both species in the Como Lake pair have become extinct, likely in response to the introduction of an efficient invertebrate planktivore, the Spiny Waterflea. This aquatic invasive species has altered the food-web structure of the lake, eliminating the unique evolutionary processes that maintained the persistence of the species pair. Whitefish still occur in the lake, but the distinct species pair has become a different, more uniform population of large fish.

Range ON

Status History

Designated Extinct in April 2018.

Basking Shark *Cetorhinus maximus* **Endangered**
Pacific population

Assessment Criteria A2ad; C2a(i); D1

Reason for Designation

In Canada, the species was once subject to directed fisheries and control programs. While such activities have long ceased, they reduced abundance to very low levels. The species is especially vulnerable to incidental fishing mortality because of its low intrinsic productivity. This species continues to suffer from human-induced mortality, primarily through entanglement with gear. Fisheries and Oceans Canada has engaged in research and monitoring to better understand the current status and the habitat requirements. There has also been increased public awareness. Despite the increase in overall attention to this species, there is no evidence of recovery and the designation of Endangered is still supported by the limited new information available since the last assessment.

Range BC Pacific Ocean

Status History

Designated Endangered in April 2007. Status re-examined and confirmed in April 2018.

Carmine Shiner *Notropis percobromus* **Endangered**

Assessment Criteria B1ab(iii)+2ab(iii)

Reason for Designation

The range of this small, colourful minnow is restricted to Manitoba. Although there is limited information on population trends since the last assessment, projected declines over the next 10 years related to the threat of habitat loss and pollution will put the species at risk of extinction in Canada.

Range MB

Status History

Designated Special Concern in April 1994. Status re-examined and designated Threatened in November 2001 and in April 2006. Status re-examined and designated Endangered in April 2018.

European Whitefish *Coregonus lavaretus* **Threatened**
Squanga Lake small-bodied population

Assessment Criteria D2

Reason for Designation

Lake Whitefish and European Whitefish are a species complex that has coevolved in certain lakes as species pairs—a larger species and a smaller species. This smaller species is known from a single lake in southern Yukon, where it coexists with a species derived from the Lake Whitefish. Its persistence is threatened by the risk of establishment of invasive species that could alter the ecological niches of the species pair. If exotic species invade, this fish could become extinct in a short period of time.

Range YT

Status History

Squanga Whitefish (*Coregonus* sp.) was considered a single unit and designated Special Concern in April 1987. In April 2018, the unit was split into three separate species of European Whitefish, *Coregonus lavaretus*, and the Squanga Lake small-bodied population of European Whitefish was designated Threatened.

European Whitefish *Coregonus lavaretus* **Threatened**
Little Teslin Lake small-bodied population

Assessment Criteria D2

Reason for Designation

Lake Whitefish and European Whitefish are a species complex that has coevolved in certain lakes as species pairs—a larger species and a smaller species. This smaller species is known from a single lake in southern Yukon, where it coexists with a species derived from the Lake Whitefish. Its persistence is threatened by the risk of establishment of invasive species that could alter the ecological niches of the species pair. If exotic species invade, this fish could become extinct in a short period of time.

Range YT

Status History

Squanga Whitefish (*Coregonus* sp.) was considered a single unit and designated Special Concern in April 1987. In April 2018, the unit was split into three separate species of European Whitefish, *Coregonus lavaretus*, and the Little Teslin Lake small-bodied population of European Whitefish was designated Threatened.

European Whitefish *Coregonus lavaretus* **Threatened**
Dezadeash Lake small-bodied population

Assessment Criteria D2

Reason for Designation

European Whitefish are a species complex that has coevolved in certain lakes as species pairs—a larger species and a smaller species. This smaller species is known from a single lake in southern Yukon. Its persistence is threatened by the risk of establishment of invasive species that could alter the ecological niches of the species pair. If exotic species invade, this fish could become extinct in a short period of time.

Range YT

Status History

Squanga Whitefish (*Coregonus* sp.) was considered a single unit and designated Special Concern in April 1987. In April 2018, the unit was split into three separate species of European Whitefish, *Coregonus lavaretus*, and the Dezadeash Lake small-bodied population of European Whitefish was designated Threatened.

European Whitefish *Coregonus lavaretus* **Threatened**
Dezadeash Lake large-bodied population

Assessment Criteria D2

Reason for Designation

European Whitefish are a species complex that has coevolved in certain lakes as species pairs—a larger species and a smaller species. This species is known from a single lake in southern Yukon. Its persistence is threatened by the risk of establishment of invasive species that could alter the ecological niches of the species pair. If exotic species invade, this fish could become extinct in a short period of time.

Range YT

Status History

Designated Threatened in April 2018.

Lake Whitefish *Coregonus clupeaformis* **Threatened**
Opeongo Lake small-bodied population

Assessment Criteria D2

Reason for Designation

Lake Whitefish are a species complex that has coevolved in certain lakes as species pairs—a larger species and a smaller species. This species is known from a single lake in Algonquin Provincial Park, Ontario. Its persistence is threatened by the risk of establishment of invasive species that could alter the distinct ecological niches required to maintain the coevolved species pair. If exotic species invade, this fish could become extinct in a short period of time. In fact, recent surveys suggest that this smaller member of the Opeongo Lake species pair may already be extinct.

Range ON

Status History

Designated Threatened in April 2018.

Lake Whitefish *Coregonus clupeaformis* **Threatened**
Opeongo Lake large-bodied population

Assessment Criteria D2

Reason for Designation

Lake Whitefish are a species complex that has coevolved in certain lakes as species pairs—a larger species and a smaller species. This species is known from a single lake in Algonquin Provincial Park, Ontario. Its persistence is threatened by

the risk of establishment of invasive species that could alter the distinct ecological niches required to maintain the coevolved species pair. If exotic species invade, this fish could become extinct in a short period of time. In fact, recent surveys suggest that the other member of this species pair may already be extinct.

Range ON

Status History

Designated Threatened in April 2018.

Lake Whitefish

Coregonus clupeaformis

Threatened

Little Teslin Lake large-bodied population

Assessment Criteria D2

Reason for Designation

Lake Whitefish and European Whitefish are a species complex that has coevolved in certain lakes as species pairs—a larger species and a smaller species. This species is known from a single lake in southern Yukon, where it coexists with a smaller species derived from the European Whitefish. Its persistence is threatened by the risk of establishment of invasive species that could alter the ecological niches of the species pair. If exotic species invade, this fish could become extinct in a short period of time.

Range YT

Status History

Designated Threatened in April 2018.

Lake Whitefish

Coregonus clupeaformis

Threatened

Squanga Lake large-bodied population

Assessment Criteria D2

Reason for Designation

Lake Whitefish and European Whitefish are a species complex that has coevolved in certain lakes as species pairs—a larger species and a smaller species. This species is known from a single lake in southern Yukon, where it coexists with a smaller species derived from the European Whitefish. Its persistence is threatened by the risk of establishment of invasive species that could alter the ecological niches of the species pair. If exotic species invade, this fish could become extinct in a short period of time.

Range YT

Status History

Designated Threatened in April 2018.

Arthropods

False-foxglove Sun Moth

Pyrrhia aurantiago

Endangered

Assessment Criteria B2ab(iii,v)

Reason for Designation

This rare moth is extant at three locations in Canada, all within the oak-dominated savannas and open woodlands of southern Ontario. It is estimated that 99% of this habitat type has been lost in Ontario. The larvae depend on Smooth Yellow False Foxglove and Fern-leaved Yellow False Foxglove, both of which are species at risk in Canada. Canadian subpopulations of this moth are mostly in protected areas where the primary threats are over-browsing of the larval host plants by native White-tailed Deer and the effects of competition from invasive plants on the host plants.

Range ON

Status History

Designated Endangered in April 2018.

Red-tailed Leafhopper
Prairie population

Aflexia rubranura

Special Concern

Assessment Criteria not applicable

Reason for Designation

This flightless leafhopper has limited dispersal ability. It is restricted to remnant oak savanna grassland habitat in southern Manitoba, a habitat that has largely been lost from the province. It relies on the presence of the host plant Prairie Dropseed. The species is known from 8 sites at present, but there are likely to be additional sites found. Current and cumulative threats include agricultural habitat conversion and native and non-native plant succession from fire suppression and overgrazing.

Range MB

Status History

Designated Special Concern in April 2018.

Molluscs

Banff Springs Snail

Physella johnsoni

Endangered

Assessment Criteria B1ab(iii)c(iv)+2ab(iii)c(iv)

Reason for Designation

This is a Canadian endemic species with a distribution entirely within the upper reaches of fewer than five separate clusters of thermal springs in Banff National Park, Alberta. These short-lived animals undergo extreme natural annual fluctuations in numbers. This snail is a habitat specialist requiring a steady supply of warm thermal-spring water containing a high concentration of dissolved minerals and a complex microbial community that provides food and habitat. All thermal springs historically or currently occupied by this species have been impacted by human activities. Habitat disturbances continue but the effects of climate change (increased frequency of springs drying and storms with more rain) also are important threats to this species' survival.

Range AB

Status History

Designated Threatened in April 1997. Status re-examined and designated Endangered in May 2000, April 2008, and April 2018.

Striped Whitelip

Webbhelix multilineata

Endangered

Assessment Criteria B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v)

Reason for Designation

This large terrestrial snail is present on Pelee Island in Lake Erie and at three sites on the mainland of southwestern Ontario: Point Pelee National Park, Walpole Island, and Bickford Oak Woods Conservation Reserve. The species appears to have been extirpated from four other historically known mainland sites and at least one site on Pelee Island. Human-driven habitat loss and alteration led to decline and population isolation. Threats are extreme weather events (e.g., droughts), prescribed burns, and human disturbance (i.e., trampling as the species forages on trails in moist conditions). Wild Turkeys on Pelee Island and in Point Pelee National Park also might eat this snail.

Range ON

Status History

Designated Endangered in April 2018.

Vascular Plants

Downy Yellow False Foxglove

Aureolaria virginica

Endangered

Assessment Criteria B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v)

Reason for Designation

This perennial plant species has a distribution restricted in Canada to southwestern Ontario. There are few individuals in the five remaining locations within oak savannas and woodlands. Declines have been observed in its distribution and quality of habitat. Fire suppression and browsing by White-tailed Deer threaten the remaining extant locations.

Range ON

Status History

Designated Endangered in April 2018.

Tall Bugbane

Actaea elata

Endangered

Assessment Criteria B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v); C2a(i)

Reason for Designation

This large western North American plant is a relatively long-lived perennial herb that inhabits mixed coniferous-deciduous forests. The species requires sunlit canopy openings in mature and old forests. Its few, small subpopulations in southwestern British Columbia are scattered and isolated in a single mountain river valley, where they continue to decline as its forest habitat continues to be reduced or degraded by invasive alien plants, largely associated with disturbances related to increased road access and recreational activities. Competition from native plants on previously logged sites and herbicide drift are also potential threats.

Range BC

Status History

Designated Endangered in May 2001. Status re-examined and confirmed in April 2018.

Tall Woolly-heads

Psilocarphus elatior

Endangered

Assessment Criteria B1abc(iii,v)+2abc(iii,v)

Reason for Designation

This small annual plant only occurs in a few, small, specialized habitats on southeastern Vancouver Island. Habitat destruction and modification at one site has resulted in significant decline in the Canadian population. Competition from invasive species and management of drainage are the primary continuing threats; other threats include recreational activities, habitat disruption by non-native resident Canada Geese, and haying/mowing.

Range BC

Status History

Designated Endangered in May 2001. Status re-examined and confirmed in April 2018.

Fern-leaved Yellow False Foxglove

Aureolaria pedicularia

Threatened

Assessment Criteria B1ab(iii)+2ab(iii)

Reason for Designation

This short-lived plant species has a distribution restricted in Canada to southwestern Ontario. The remaining individuals occur in a small number of locations within oak savannas and woodlands. Declines have been observed in quality of habitat. Fire suppression and residential development threaten the remaining extant locations.

Range ON

Status History

Designated Threatened in April 2018.

Smooth Yellow False Foxglove

Aureolaria flava

Threatened

Assessment Criteria B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v); C2a(i); D1

Reason for Designation

This perennial plant species has a distribution restricted in Canada to southwestern Ontario. There are few individuals remaining in a small number of locations within oak savannas and woodlands. Declines have been observed in its distribution and quality of habitat. Fire suppression and browsing by White-tailed Deer threaten the remaining extant locations.

Range ON

Status History

Designated Threatened in April 2018.

Athabasca Thrift *Armeria maritima ssp. interior* **Special Concern**
Assessment Criteria not applicable

Reason for Designation

One of a group of endemic plants restricted to dune habitats of northwestern Saskatchewan. Although dune habitats are naturally dynamic, the rate of forest encroachment at Athabasca dunes now surpasses the rate of dune formation, likely as a result of climate change impacts on this species. Invasive species are a potential threat, but none are currently known in the dune habitat. This plant occurs on "gravel pavements", which are impacted by recreational activities like hiking and off-road vehicle use, but the access to these areas is very limited.

Range SK

Status History

Designated Threatened in April 1981. Status re-examined and designated Special Concern in April 1999. Status re-examined and confirmed in May 2002 and April 2018.

Blanket-leaved Willow *Salix silicicola* **Special Concern**
Assessment Criteria not applicable

Reason for Designation

One of a group of endemic plants restricted to dune habitats of northwestern Saskatchewan. Although dune habitats are naturally dynamic, the rate of forest encroachment at Athabasca dunes now surpasses the rate of dune formation, likely as a result of climate change impacts on this species. Invasive species are a potential threat, but none are currently known in the dune habitat.

Range SK

Status History

Designated Special Concern in May 2000. Status re-examined and confirmed in April 2018.

Floccose Tansy *Tanacetum huronense var. floccosum* **Special Concern**
Assessment Criteria not applicable

Reason for Designation

One of a group of endemic plants restricted to dune habitats of northeastern Alberta and northwestern Saskatchewan. Although dune habitats are naturally dynamic, the rate of forest encroachment at the Athabasca dunes now surpasses the rate of dune formation, likely as a result of climate change impacts on this species. Invasive species and recreational use are potential threats.

Range AB SK

Status History

Designated Special Concern in May 2000. Status re-examined and confirmed in April 2018.

Large-headed Woolly Yarrow *Achillea millefolium var. megacephala* **Special Concern**
Assessment Criteria not applicable

Reason for Designation

One of a group of endemic plants restricted to dune habitats of northwestern Saskatchewan. Although dune habitats are naturally dynamic, the rate of forest encroachment at Athabasca dunes now surpasses the rate of dune formation, likely as a result of climate change impacts on this species. Invasive species are a potential threat, but none are currently known in the dune habitat.

Range SK

Status History

Designated Special Concern in May 2000. Status re-examined and confirmed in April 2018.

Mackenzie Hairgrass *Deschampsia mackenzieana* **Special Concern**
Assessment Criteria not applicable

Reason for Designation

One of a group of endemic plants restricted to dune habitats of northwestern Saskatchewan. Although dune habitats are

naturally dynamic, the rate of forest encroachment at Athabasca dunes now surpasses the rate of dune formation, likely as a result of climate change impacts on this species. Invasive species are a potential threat, but none are currently known in the dune habitat.

Range NT SK

Status History

Designated Special Concern in April 1999. Status re-examined and confirmed in November 2001. Status re-examined and confirmed in April 2018.

Sand-dune Short-capsuled Willow *Salix brachycarpa* var. *psammophila* **Special Concern**
Assessment Criteria not applicable

Reason for Designation

One of a group of endemic plants restricted to dune habitats of northwestern Saskatchewan. Although dune habitats are naturally dynamic, the rate of forest encroachment at Athabasca dunes now surpasses the rate of dune formation, likely as a result of climate change impacts on this species. Invasive species are a potential threat, but none are currently known in the dune habitat.

Range SK

Status History

Designated Special Concern in May 2000. Status re-examined and confirmed in April 2018.

Turnor's Willow *Salix turnorii* **Special Concern**
Assessment Criteria not applicable

Reason for Designation

One of a group of endemic plants restricted to dune habitats of northwestern Saskatchewan. Although dune habitats are naturally dynamic, the rate of forest encroachment at Athabasca dunes now surpasses the rate of dune formation, likely as a result of climate change impacts on this species. Invasive species are a potential threat, but none are currently known in the dune habitat.

Range SK

Status History

Designated Special Concern in May 2000. Status re-examined and confirmed in April 2018.

Mosses

Acuteleaf Small Limestone Moss *Seligeria acutifolia* **Endangered**
Assessment Criteria B2ab(i,ii,iii,iv,v)

Reason for Designation

This minute, habitat-specific moss has a very restricted distribution in Canada, where it is known from only two sites on Vancouver Island, British Columbia. It is confined to limestone outcrops near sea level beneath a high, coniferous forest canopy in hypermaritime climatic regions near the coast. Primary threats include impacts to habitat from quarrying, logging, and roads. The site near Kennedy Lake is currently not expected to be harvested. However, plans to quarry the marble deposit at the site near Wood Cove, where two-thirds of the known Canadian population occurs, imminently threaten this subpopulation.

Range BC

Status History

Designated Endangered in April 2018.

Lichens

Smoker's Lung Lichen

Lobaria retigera

Threatened

Assessment Criteria A3c+4c

Reason for Designation

This lichen is strongly associated with humid old growth forests in British Columbia and is a "flagship" species for a suite of rare and uncommon lichens and bryophytes. More than 50% of the North American range is in Canada. The Canadian population comprises three subpopulations; however, nearly all remaining individuals (> 90%) are found in the Northwestern subpopulation (Kispiox and Skeena valleys). The threats to this species in Canada are extensive forest harvesting, both past and present, leading to declines in the population from the direct impacts (removal of host trees), as well as indirect impacts (edge effects) in adjacent habitats. Predicted climate change may lead to further declines in the remaining populations of this lichen.

Range BC

Status History

Designated Threatened in April 2018.

*The review of classification of the Hotwater Physa (*Physella wrighti*) was completed. COSEWIC decided that a fully updated status report is required to assess the status of this wildlife species.

27/04/2018