

Detailed COSEWIC Species Assessments, May 2005

Results are grouped by taxon and then by status category. A reason for designation is given for each species. A short history of status designations follows. The range of occurrence in Canada for each species (by province, territory, or ocean) is provided.

Mammals

Bowhead Whale *Balaena mysticetus* **Threatened**
Hudson Bay-Foxe Basin population
Assessment Criteria D1

Reason for Designation

The population was severely reduced by commercial whaling between 1860 and 1915. Recent population estimates are uncertain, but indicate that there could be as few as 300 mature individuals, of which only half might be females. Threats to this small population include illegal hunting and increased vulnerability to killer whale predation as a result of reduced ice coverage.

Range Arctic Ocean

Status History

The "Eastern and Western Arctic populations" were given a single designation of Endangered in April 1980. Split into two populations (Eastern Arctic and Western Arctic) to allow separate designations in April 1986. The Eastern Arctic population was not re-evaluated in April 1986, but retained the Endangered status of the original "Eastern and Western Arctic populations". The Eastern Arctic population was further split into two populations (Hudson Bay-Foxe Basin population and Davis Strait-Baffin Bay population) in May 2005, and the Hudson Bay-Foxe Basin population was designated Threatened.

Bowhead Whale *Balaena mysticetus* **Threatened**
Davis Strait-Baffin Bay population

Assessment Criteria Meets criterion for Endangered, A1b, but assessed as Threatened, A1b, because commercial whaling -- the primary cause of the population reduction -- has ceased.

Reason for Designation

The population numbered at least 11,000 animals when commercial whaling began. Whaling reduced the population to less than 30% of its former abundance. Recent estimates indicate that the population is growing and is larger than previously thought, but is likely to still number fewer than 3,000 individuals of all ages. The population qualifies for endangered, but is not judged to be in imminent danger of extinction. Threats include illegal hunting and increased vulnerability to killer whale predation as a result of reduced ice coverage.

Range Arctic Ocean

Status History

The "Eastern and Western Arctic populations" were given a single designation of Endangered in April 1980. Split into two populations (Eastern Arctic and Western Arctic) to allow separate designations in April 1986. The Eastern Arctic population was not re-evaluated in April 1986, but retained the Endangered status of the original "Eastern and Western Arctic populations". The Eastern Arctic population was further split into two populations (Hudson Bay-Foxe Basin population and Davis Strait-Baffin Bay population) in May 2005, and the Davis Strait-Baffin Bay population was designated Threatened.

Fin Whale*Balaenoptera physalus***Threatened****Pacific population**Assessment Criteria A1dReason for Designation

Currently sighted only infrequently on former whaling grounds off British Columbia. Coastal whaling took at least 7,600 animals from the population between 1905 and 1967, and thousands of additional animals were taken by pelagic whalers through the 1970s. Catch rates from coastal whaling stations declined precipitously off British Columbia in the 1960s. Based on the severe depletion and lack of sufficient time for recovery, it is inferred that present population is below 50% of its level, 60-90 years ago. Individuals continue to be at risk from ship strikes and entanglement in fishing gear.

Range Pacific OceanStatus History

The species was considered a single unit and designated Special Concern in April 1987. Split into two populations (Atlantic and Pacific) in May 2005. The Pacific population was designated Threatened in May 2005.

Bowhead Whale*Balaena mysticetus***Special Concern****Bering-Chukchi-Beaufort population**Assessment Criteria not applicableReason for Designation

This population was hunted to low levels during commercial whaling. Although supporting a regulated hunt, it is recovering and is currently at about 50% of its historical population size. The population is not yet secure and is potentially negatively affected by climate change, and by oil and gas development.

Range Arctic OceanStatus History

The "Eastern and Western Arctic populations" were given a single designation of Endangered in April 1980. Split into two populations (Eastern Arctic and Western Arctic) to allow separate designations in April 1986. The Western Arctic population was designated Endangered in April 1986. The population was renamed to "Bering-Chukchi-Beaufort population" and designated Special Concern in May 2005.

Fin Whale*Balaenoptera physalus***Special Concern****Atlantic population**Assessment Criteria not applicableReason for Designation

The size of this population was reduced by whaling during much of the 20th Century. However, sightings remain relatively common off Atlantic Canada and they have not been hunted since 1971. The current abundance and level of depletion compared with pre-whaling numbers are uncertain. The whales face a number of current threats including ship strikes and entanglement in fishing gear, but none is believed to seriously threaten the population.

Range Atlantic OceanStatus History

The species was considered a single unit and designated Special Concern in April 1987. Split into two populations (Atlantic and Pacific) in May 2005. The Atlantic population was designated Special Concern in May 2005.

Birds

Williamson's Sapsucker

Sphyrapicus thyroideus

Endangered

Assessment Criteria A4c; C1

Reason for Designation

This woodpecker is associated with mature larch forests in south-central British Columbia; less than 500 individuals breed in Canada. Habitat loss through forest harvest is estimated to have been 23% over the last 10 years and is projected to be about 53% over the next decade.

Range BC

Status History

Designated Endangered in May 2005.

Reptiles

Blanding's Turtle

Emydoidea blandingii

Endangered

Nova Scotia population

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

Reason for Designation

The three small subpopulations of this species found in central southwest Nova Scotia total fewer than 250 mature individuals. These three subpopulations are genetically distinct from each other and from other Blanding's Turtles in Quebec, Ontario and the United States. Although the largest subpopulation occurs in a protected area, its numbers are still declining. The other subpopulations are also susceptible to increasing habitat degradation, mortality of adults and predation on eggs and hatchlings.

Range NS

Status History

Designated Threatened in April 1993. Status re-examined and designated Endangered in May 2005.

Blanding's Turtle

Emydoidea blandingii

Threatened

Great Lakes/St. Lawrence population

Assessment Criteria C2a(i)

Reason for Designation

The Great Lakes/St. Lawrence population of this species although widespread and fairly numerous is declining. Subpopulations are increasingly fragmented by the extensive road network that crisscrosses all of this turtle's habitat. Having delayed age at maturity, low reproductive output and extreme longevity makes this turtle highly vulnerable to increased rates of mortality of adults. Nesting females are especially susceptible to roadkill because they often attempt to nest on gravel roads or on shoulders of paved roads. Loss of mature females in such a long-lived species greatly reduces recruitment and long-term viability of subpopulations. Another threat is degradation of habitat from development and alteration of wetlands. The pet trade is another serious ongoing threat because nesting females are most vulnerable to collection.

Range ON QC

Status History

Designated Threatened in May 2005.

Fishes

Lake Ontario Kiyi

Coregonus kiyi orientalis

Extinct

Assessment Criteria not applicable

Reason for Designation

Last recorded from Lake Ontario in 1964, the subspecies was driven to extinction by commercial exploitation, and predation/competition by introduced species.

Range ON

Status History

The species was designated Special Concern in April 1988. Split into two subspecies (Upper Great Lakes Kiyi and Lake Ontario Kiyi) in May 2005. The Lake Ontario Kiyi was designated Extinct.

Lake Sturgeon

Acipenser fulvescens

Endangered

Western populations

Assessment Criteria A2b

Reason for Designation

The Western Canadian populations of this species have experienced an overall decline estimated to be at least 77% in the latter decades of the 20th century due to exploitation, and habitat loss and degradation related to dams, impoundments and changes in patterns of water use.

Range AB SK MB

Status History

The species was considered a single unit and designated Not at Risk in April 1986. When the species was split into separate units in May 2005, the "Western populations" unit was designated Endangered.

Shortnose Cisco

Coregonus reighardi

Endangered

Assessment Criteria D1

Reason for Designation

Endemic to three of the Great Lakes, this species was last recorded in Lake Michigan in 1982, in Lake Huron in 1985, and in Lake Ontario in 1964. Although it has probably disappeared throughout its range, searches for this species have not been extensive enough to declare this species extinct. The species' apparent demise is suspected to be the result of commercial overfishing and possibly competition or predation from introduced species.

Range ON

Status History

Designated Threatened in April 1987. Status re-examined and designated Endangered in May 2005.

Winter Skate *Leucoraja ocellata* **Endangered**
Southern Gulf population
Assessment Criteria A4b

Reason for Designation

The species possesses life history characteristics that increase vulnerability to exploitation, that reduce rate of recovery, and that increase the risk of extinction. These characteristics include delayed age at maturity, long generation time, low fecundity, and consequently slow population growth rate. Narrow latitudinal ranges and a high degree of endemism have been documented for the skate family worldwide. This population appears to have a restricted distribution, based on distributional maps of fisheries-independent survey catches. Individuals from this population mature at a significantly smaller size than those found elsewhere in Canadian waters. Abundance of mature individuals in the Southern Gulf of St. Lawrence is estimated to have declined 98% since the early 1970s, and is now at a historically low level. The probable cause of decline is an unsustainable rate at which they were captured as bycatch in fisheries directed at other groundfish species.

Range Atlantic Ocean

Status History

Designated Endangered in May 2005.

"Eastslope" Sculpin *Cottus sp.* **Threatened**
St. Mary and Milk River populations
Assessment Criteria D2

Reason for Designation

This species has a very restricted area of occurrence in the St. Mary and Milk rivers in Canada where it has been impacted by habitat loss and degradation from water diversion, conditions that have been exacerbated in recent years by drought.

Range AB

Status History

Designated Threatened in May 2005.

Black Redhorse *Moxostoma duquesnei* **Threatened**
Assessment Criteria D2

Reason for Designation

A freshwater fish with a very small, highly fragmented distribution and area of occupancy, as well as restricted spawning habitat preferences. Native populations are found in only 5 Ontario watersheds in areas heavily impacted by urbanization and agriculture. It is at risk of habitat loss and degradation as a result of increased siltation and turbidity. Dams may adversely affect flow regimes and have fragmented populations in the two major rivers where this species occurs.

Range ON

Status History

Designated Threatened in April 1988. Status re-examined and confirmed in May 2005.

Spotted Gar *Lepisosteus oculatus* **Threatened**
Assessment Criteria D2

Reason for Designation

This species has a very limited range in Canada where it is only known from three coastal wetlands in Lake Erie. Although its distribution is likely limited by temperature, some of the shallow vegetated habitats that it requires for all life stages are subject to the impacts of siltation, dredging, filling, and aquatic vegetation removal and harbour improvements.

Range ON

Status History

Designated Special Concern in April 1983. Status re-examined and confirmed in April 1994. Status re-examined and designated Threatened in November 2000, and in May 2005.

Westslope Cutthroat Trout
Alberta population

Oncorhynchus clarkii lewisi

Threatened

Assessment Criteria A4e

Reason for Designation

This assessment only considered the remaining genetically pure populations within the native range in Alberta. Such populations have become severely isolated and depressed as a result of habitat loss and degradation, exploitation and especially hybridization with introduced species. The rate of hybridization indicates that this population could be at greater risk, however there was not enough information available at the time of the assessment.

Range AB

Status History

Designated Threatened in May 2005.

Winter Skate
Eastern Scotian Shelf population

Leucoraja ocellata

Threatened

Assessment Criteria Met criterion for Endangered, A4b, but designated Threatened because the population is not at imminent risk of extirpation.

Reason for Designation

The species possesses life history characteristics that increase vulnerability to exploitation, that reduce rate of recovery, and that increase the risk of extinction. These characteristics include delayed age at maturity, long generation time, low fecundity, and consequently slow population growth rate. Narrow latitudinal ranges and a high degree of endemism have been documented for the skate family worldwide. This population appears to have a restricted distribution, based on distributional maps of fisheries-independent survey catches. Individuals from this population mature at a significantly larger size than those in the Southern Gulf and have been reported to mature at a significantly different age than those inhabiting waters further south. Abundance of mature individuals on the Eastern Scotian Shelf is estimated to have declined by more than 90% since the early 1970s and is now at a historically low level. The area occupied by the population appears to have declined significantly since the mid 1980s. Larger, older individuals have been severely depleted from this population, producing a significant truncation in the length distribution of the population over time. The probable cause of the decline is an unsustainable rate at which they were captured as bycatch in fisheries directed at other groundfish species. They have been caught, and continue to be caught, in a directed fishery for skate, although current reported catches are low.

Range Atlantic Ocean

Status History

Designated Threatened in May 2005.

Grass Pickerel

Esox americanus vermiculatus

Special Concern

Assessment Criteria Met criterion for Threatened, B2ab(ii,v), but designated Special Concern because there is a rescue effect and the species is not likely to become Endangered or Extirpated in the near future.

Reason for Designation

A subspecies known from 10 locations between Lake St. Louis, Quebec and Lake Huron, Ontario. Its usual habitat is shallow water with abundance of aquatic vegetation. An overall decline of approximately 22% in the area of occupancy has been observed. This decline appears to be related to degradation and loss of habitat due to channelization and dredging operations in wetland habitats where this species occurs.

Range ON QC

Status History

Designated Special Concern in May 2005.

Lake Sturgeon*Acipenser fulvescens***Special Concern****Southern Hudson Bay and James Bay populations**Assessment Criteria not applicableReason for Designation

There are limited population data available for this designatable unit. There have been declines in habitat, and possibly populations decline related to exploitation and the multitude of dams. The increased access to relatively unimpacted populations, and the likelihood of increased hydroelectric development in some areas are causes for concern for this designatable unit.

Range MB ON QCStatus History

The species was considered a single unit and designated Not at Risk in April 1986. When the species was split into separate units in May 2005, the "Southern Hudson Bay and James Bay populations" unit was designated Special Concern.

Lake Sturgeon*Acipenser fulvescens***Special Concern****Great Lakes and Western St. Lawrence River populations**Assessment Criteria not applicableReason for Designation

A very large commercial fishery in the Great Lakes between the mid-1800s and early 1900s (i.e. 3-5 generations ago) reduced to a small fraction of their original size. Some of these populations are estimated to still be at very low levels. Populations are estimated to be declining in parts of the Ottawa River, and disappearing from many of its tributaries, due to dams. There has been a recent decline in the population in the St. Lawrence River likely due to overexploitation. Populations are currently impacted by the direct and indirect effects of dams, contaminants and invasive species. Poaching and genetic contamination through stocking and aquaculture programs might also hamper recovery. However, there are also a number of populations that are stable or showing modest increases and the species still occurs at many locations.

Range ON QCStatus History

The species was considered a single unit and designated Not at Risk in April 1986. When the species was split into separate units in May 2005, the "Great Lakes and Western St. Lawrence River populations" unit was designated Special Concern.

Lake Sturgeon*Acipenser fulvescens***Special Concern****Rainy River-Lake of the Woods populations**Assessment Criteria not applicableReason for Designation

Historically, populations in the designatable unit supported a substantial fishery, which led to a severe decline, however recovery has been sustained since 1970. For this population, dams have not impeded access to important stretches of sustainable habitat.

Range ONStatus History

The species was considered a single unit and designated Not at Risk in April 1986. When the species was split into separate units in May 2005, the "Rainy River-Lake of the Woods populations" unit was designated Special Concern.

Shortnose Sturgeon*Acipenser brevirostrum***Special Concern**

Assessment Criteria Met criterion for Threatened, D2, but designated Special Concern because there are no immediate threats.

Reason for Designation

This is an anadromous species restricted to a single river system in Canada where spawning fish require unhindered access to freshwater spawning sites; but the population may have been divided since 1967 by the Mactaquac Dam. These large, slow growing, late maturing fish are conservation dependent. There is some risk to the species through mortality from hydroelectric facilities, by-catch in alewife and shad fisheries, and poaching. However, there is no immediate threat that would lead to elimination of the population in a very short period of time.

Range NB

Status History

Designated Special Concern in April 1980. Status re-examined and confirmed in May 2005.

Spotted Sucker*Minytrema melanops***Special Concern**

Assessment Criteria not applicable

Reason for Designation

This freshwater fish species is restricted to southwestern Ontario. The greatest threat to this species is habitat degradation through increased erosion and turbidity. The species is also at risk in Pennsylvania but not at risk in Michigan (where it is S3-vulnerable), making rescue effect moderate at best.

Range ON

Status History

Designated Special Concern in April 1983. Status re-examined and confirmed in April 1994, November 2001 and May 2005.

Upper Great Lakes Kiyi*Coregonus kiyi kiyi***Special Concern**

Assessment Criteria not applicable

Reason for Designation

Currently found only in Lake Superior, the subspecies has been extirpated from lakes Huron and Michigan, as the result of a complex of factors, which included exploitation and introduced exotic species. The extirpation in Lake Huron and Michigan occurred more than three generations in the past. The remaining population in Lake Superior appears to be stable, and supports a small, regulated fishery. Other threats, such as the introduction of exotic species, which impacted populations in the lower lakes do not appear to be important in Lake Superior.

Range ON

Status History

The Kiyi was designated Special Concern in April 1988. Split into two subspecies in May 2005 (Upper Great Lakes Kiyi and Lake Ontario Kiyi). The Upper Great Lakes Kiyi was designated Special Concern in May 2005.

Warmouth*Lepomis gulosus***Special Concern**

Assessment Criteria Met criterion for Threatened, D2, but there is a possibility of a rescue effect from neighbouring populations in the United States. Therefore, designated Special Concern.

Reason for Designation

This species has a very restricted Canadian distribution, existing only at 4 locations along the Lake Erie shore between Point Pelee and Long Point. It is sensitive to habitat change which results in loss of aquatic vegetation.

Range ON

Status History

Designated Special Concern in April 1994. Status re-examined and confirmed in November 2001 and in May 2005.

Westslope Cutthroat Trout
British Columbia population
Assessment Criteria not applicable

Oncorhynchus clarkii lewisi

Special Concern

Reason for Designation

Populations are stressed by habitat loss and degradation resulting from agricultural and industrial activities as well as competition and hybridization with introduced species.

Range BC

Status History

Designated Special Concern in May 2005.

Winter Skate
Georges Bank-Western Scotian Shelf-Bay of Fundy population
Assessment Criteria not applicable

Leucoraja ocellata

Special Concern

Reason for Designation

The species possesses life history characteristics that increase vulnerability to exploitation, that reduce rate of recovery, and that increase the risk of extinction. These characteristics include delayed age at maturity, long generation time, low fecundity, and consequently slow population growth rate. The area of occupancy of this species has been stable in the Bay of Fundy and on Georges Bank. Estimates of population status on Georges Bank show no discernible trend over time. Abundance in the Bay of Fundy appears to have been stable over time. There is a high probability that the population receives immigrants from the species inhabiting the American portion of Georges Bank. The population is subjected to bycatch in fisheries for other groundfish shellfish species. There are directed fisheries for this species in U.S. waters.

Range Atlantic Ocean

Status History

Species designated Special Concern in May 2005.

Lake Whitefish
Lake Simcoe population
Assessment Criteria not applicable

Coregonus clupeaformis

Data Deficient

Reason for Designation

Although this population is on its way to extirpation, there is inconclusive evidence regarding its distinctiveness and the best evidence available at this time is insufficient to resolve the species' eligibility for assessment.

Range ON

Status History

Designated Threatened in April 1987. Species considered in May 2005 and placed in the Data Deficient category.

Winter Skate
Northern Gulf-Newfoundland population
Assessment Criteria not applicable

Leucoraja ocellata

Data Deficient

Reason for Designation

The species exists in low concentrations in the Northern Gulf of St. Lawrence, in the coastal waters off the southern coast of Newfoundland, and on the southern portion of the Grand Bank. A quantitative analysis of spatial and temporal variation in population size is not possible because of the infrequency with which the species is caught. The population is subjected to bycatch.

Range Atlantic Ocean

Status History

Species considered in May 2005 and placed in the Data Deficient category.

Arthropods

Ottoo Skipper

Hesperia ottoe

Endangered

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

Reason for Designation

This species has been found at very few locations in the Canadian prairies where it is associated with fragmented and declining mixed-grass prairie vegetation. It has recently been found at only one location.

Range MB

Status History

Designated Endangered in May 2005.

White Flower Moth

Schinia bimatris

Endangered

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

Reason for Designation

This moth is associated with dune habitats and is known from a small number of scattered sites in North America, with only one extant site in Canada. Most dune habitats in Canada appear to be too dry for this species. Dune habitat has undergone serious declines and the moth has likely declined as well.

Range MB

Status History

Designated Endangered in May 2005.

Verna's Flower Moth

Schinia verna

Threatened

Assessment Criteria B2ab(iii)

Reason for Designation

This moth is found only in the Canadian prairies, with one extant site in southeastern Alberta. The species is known historically from very few locations despite its relatively large size, distinctive markings and day-flying habit. It has a small total range in suitable native prairie that is fragmented and declining in quality and extent.

Range AB SK MB

Status History

Designated Threatened in May 2005.

Dark-banded Flower Gem

Melaporphyria immortua

Data Deficient

Assessment Criteria not applicable

Reason for Designation

There are very few and widely scattered records of this moth in North America, and it was most recently found in Canada in 1979. It is suspected of being extirpated from the eastern part of its range. In Canada it has been found in native prairies, a habitat that has been greatly reduced. However, detailed habitat requirements and food plants are not known which makes surveying for this species difficult. Information gaps need to be addressed before a status can be assigned.

Range AB SK MB

Status History

Species considered in May 2005 and placed in the Data Deficient category.

Vascular Plants

Branched Phacelia *Phacelia ramosissima* **Endangered**
Assessment Criteria B1ab(ii,iii,iv,v)+2ab(ii,iii,iv,v)

Reason for Designation

A geographically highly restricted perennial known only from three small populations numbering fewer than 1,000 plants subject to continued habitat loss and population decline from urban expansion and mining activities.

Range BC

Status History

Designated Endangered in May 2005.

Dense Spike-primrose *Epilobium densiflorum* **Endangered**
Assessment Criteria A3c; B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v)

Reason for Designation

An annual herb of a restricted habitat type within the Garry Oak Ecosystem that has undergone significant declines in number of populations and is subject to continued habitat reduction due to development and the spread of exotic weeds. The four extant populations are fragmented, small, and have little chance of being repopulated from adjacent sites in Washington State should they become extirpated.

Range BC

Status History

Designated Endangered in May 2005.

Dense-flowered Lupine *Lupinus densiflorus* **Endangered**
Assessment Criteria B1ab(ii,iii,iv,v)+2ab(ii,iii,iv,v); C1

Reason for Designation

An annual with a highly restricted distribution known from three Canadian locations. The total population size is small and fluctuates considerably depending on climatic conditions. These populations are subject to continued risks from habitat loss and degradation due to activities such as urban development, trampling, mowing and competition with invasive exotic plants.

Range BC

Status History

Designated Endangered in May 2005.

Grand Coulee Owl-clover *Orthocarpus barbatus* **Endangered**
Assessment Criteria B1ab(ii,iii,iv,v)c(iv)+2ab(ii,iii,iv,v)c(iv)

Reason for Designation

A semiparasitic annual restricted to a small area east of the Cascade Mountains. The few small populations are subject to extreme fluctuations in numbers of mature plants and at continued risk from introduced weeds, overgrazing and housing developments. One population in South Okanagan Grasslands Protected Area is protected from development.

Range BC

Status History

Designated Endangered in May 2005.

Spalding's Campion***Silene spaldingii*****Endangered**Assessment Criteria B1ab(iii)+2ab(iii); C2a(i,ii); D1Reason for Designation

This long-lived perennial herb is a globally imperiled species restricted to two small areas west of the Rockies with only a single population in southern British Columbia. The Canadian population is one of the largest populations known but may contain fewer than 250 mature plants. These plants are at risk from on-going habitat loss and degradation especially by introduced weeds.

Range BCStatus History

Designated Endangered in May 2005.

White Meconella***Meconella oregana*****Endangered**Assessment Criteria A3c; B1ab(i,ii,iii,iv,v)c(iv)+2ab(i,ii,iii,iv,v)c(iv); C1+2bReason for Designation

A globally threatened annual plant with a highly restricted Canadian range and area of occupancy present at only five locations within the naturally rare Garry Oak Ecosystem. Its populations, totalling fewer than 3,500 mature plants, fluctuate greatly with varying precipitation patterns and are at imminent risk of major losses from development within the highly urbanized range of the species. Its habitat has also been impacted by the spread of many exotic weedy plants.

Range BCStatus History

Designated Endangered in May 2005.

Baikal Sedge***Carex sabulosa*****Threatened**

Assessment Criteria Met criterion for Endangered B1ab(ii,iii,iv,v)+2ab(ii,iii,iv,v), but designated Threatened because there are large numbers in protected areas and because of the low level of threats within these localities. Criteria met for Threatened B1ab(ii,iii,iv,v)+2ab(ii,iii,iv,v); D2.

Reason for Designation

A geographically restricted species of three sand dune areas that serve as habitat for five populations. These consist of several million shoots produced mainly through asexual reproduction. The species has been impacted by declines in population numbers, size, area, quality of its habitat and on-going impacts from the recreational use of all-terrain vehicles: at Carcross and Bennett Lake. Such activity and much increased tourist visitations at the Carcross dune systems may result in increased impacts on the habitat with the development of a major resort facility at this location by 2006. If the Alsek River is dammed again by the advance of the Lowell Glacier, as has occurred in recent past, the large population at the confluence of the Dezadeash and Kaskawulsh Rivers could be at risk.

Range YTStatus History

Designated Threatened in May 2005.

Cliff Paintbrush***Castilleja rupicola*****Threatened**

Assessment Criteria Met criteria for Endangered, D1, but designated Threatened, D1+2, because it is distributed over several mountain ridges and thus is not at imminent risk of extirpation.

Reason for Designation

A perennial of restricted geographical occurrence found on cliffs, rock outcrops and ridges at high elevations. The small, fragmented, populations consist of scattered individuals, likely fewer than 250 plants, which are exceptionally vulnerable to stochastic events.

Range BCStatus History

Designated Threatened in May 2005.

False Rue-anemone *Enemion biternatum* **Threatened**
Assessment Criteria Met criteria for Endangered, B1ab(iii)+2ab(iii), but designated Threatened because the populations appear stable and not at imminent risk of extirpation. Criteria met for Threatened: B1ab(iii)+2ab(iii); D2.

Reason for Designation

A delicate, spring-flowering, perennial herb restricted to a few fragmented riverside forest sites in southwestern Ontario where its populations are at risk from habitat loss and decline in quality due to a variety of activities including recreational trail use, and expansion of exotic invasive plants.

Range ON

Status History

Designated Special Concern in April 1990. Status re-examined and designated Threatened in May 2005.

Mountain Holly Fern *Polystichum scopulinum* **Threatened**
Assessment Criteria Met criteria for Endangered, B1ab(iii,v)+2ab(iii,v), but designated Threatened because of the uncertainty about the imminent threats from mining activities at the British Columbia sites. The species is also protected in Quebec. Criteria met for Threatened: B1ab(iii,v)+2ab(iii,v); C2a(i); D1+2.

Reason for Designation

A fern of very restricted occurrence on serpentine substrates in three widely separated areas of Canada. These very small populations are at risk from stochastic events and, the 3 in British Columbia, from potential mining activities for precious metals.

Range BC QC NL

Status History

Designated Threatened in May 2005.

Hill's Pondweed *Potamogeton hillii* **Special Concern**
Assessment Criteria not applicable

Reason for Designation

An inconspicuous, rooted, aquatic plant currently known from fewer than 20 Canadian populations and occupying a very small total area of habitat. No imminent limiting factors have been identified that would have significant impacts on this globally rare species, but invasive exotic plants may be impacting some populations.

Range ON

Status History

Designated Special Concern in April 1986. Status re-examined and confirmed in May 2005.

Houghton's Goldenrod *Solidago houghtonii* **Special Concern**
Assessment Criteria Met criterion for Threatened, D2, but designated Special Concern because many of the plants are in inaccessible areas and in a provincial nature reserve.

Reason for Designation

A Great Lakes endemic present in Ontario at the tip of Bruce Peninsula and on Manitoulin Island. The few populations occupy very small areas of provincially rare alvar habitat that are at potential risk from aggregate extraction, use of recreational vehicles and expansion of invasive weeds.

Range ON

Status History

Designated Special Concern in May 2005.

Prototype Quillwort*Isoetes prototypus***Special Concern**Assessment Criteria not applicableReason for Designation

A regional endemic with almost all of its global population in Canada. The species is an aquatic perennial with very specific habitat requirements limiting its occurrence in Canada to about 12 small, unconnected lakes in Nova Scotia and New Brunswick. The species is found in nutrient-poor, cold, spring-fed lakes. Although several sites have been shown to contain large numbers of plants, one half of the documented sites contain small populations. A wide range of potential limiting factors could impact the species, including changes in water quality, boating and shoreline development.

Range NB NSStatus History

Designated Special Concern in May 2005.

Mosses**Banded Cord-moss***Entosthodon fascicularis***Special Concern**Assessment Criteria not applicableReason for Designation

This rare species is endemic to western North America. Almost all Canadian populations of this moss occur in the threatened Garry Oak habitat of southwestern British Columbia. Should habitat destruction continue at the present rate, the species will become increasingly vulnerable.

Range BCStatus History

Designated Special Concern in May 2005.

Pygmy Pocket Moss*Fissidens exilis***Special Concern**Assessment Criteria not applicableReason for Designation

A moss with a limited distribution in eastern North America, but which is widespread in Europe. Few populations have been documented in Canada, primarily in Ontario where it occurs in heavily populated and developed areas where natural habitats are widely known to be at serious risk. Although cryptic in habit, the species often grows with other small species that have well documented ranges. The species prefers woodlands, where it is usually found on bare clay or disturbed soil. Most locations are in areas benefiting from some level of conservation protection.

Range ON QCStatus History

Designated Special Concern in May 2005.

Schleicher's Silk Moss*Entodon schleicheri***Data Deficient**Assessment Criteria not applicableReason for Designation

This is a robust creeping moss of mature riparian mixed wood forest. It is known from 10 localities from Canada in the Northwest Territories, British Columbia and Alberta. At four of these 10 localities, populations have declined or are expected to decline in the future. Threats are urban development and recreational traffic and resource development (logging, oil and gas development). However, riparian habitats cover large areas of western Canada and no targeted searches have been conducted for this species. Hence reliable population estimates for this moss are lacking.

Range NT BC ABStatus History

Species considered in May 2005 and placed in the Data Deficient category.

Lichens

Frosted Glass-whiskers

Sclerophora peronella

Special Concern

Nova Scotia population

Assessment Criteria not applicable

Reason for Designation

This tiny cryptic stubble lichen is very rare or threatened over much of its global range. Two of the three known locations of this species in Canada are in Nova Scotia. Despite considerable efforts to locate this and other rare calicioid lichens in the province, this lichen is known only from the exposed heartwood of red maple trees in mature/old growth hardwood forest. Threats include potential habitat loss and degradation associated with the decline of old growth forest ecosystems. However, in Nova Scotia each of the two populations appear healthy and are situated within large protected areas on Cape Breton Island.

Range NS

Status History

Designated Special Concern in May 2005.

Frosted Glass-whiskers

Sclerophora peronella

Data Deficient

British Columbia population

Assessment Criteria not applicable

Reason for Designation

This tiny cryptic stubble lichen is very rare or threatened over much of its global range. The species is known from only one site in the north-central part of the province where it was found once on a large cottonwood. Although search effort for stubble lichens has been extensive in regions farther south within the province, search effort in the northern region where the species was found was inadequate.

Range BC

Status History

Species considered in May 2005 and placed in the Data Deficient category.

Notes

Report on the Umatilla Dace (*Rhinichthys umatilla*) was withdrawn to incorporate additional information, and will be brought back within two years. Report on the Nugget Moss (*Microbryum vlassovii*) was withdrawn for incorporation of additional information on search effort.

COSEWIC Emergency Assessment, May 4, 2005.

Chinook Salmon
Okanagan population
Assessment Criteria D1

Oncorhynchus tshawytscha

Endangered

Reason for Designation

The Chinook salmon (Okanagan population) are the only remaining Columbia Basin population of Chinook salmon in Canada, and are distinct from all other Canadian Chinook salmon populations. They consist of anadromous salmon that migrate to and from the Pacific Ocean through the Columbia River, and also individuals that remain in Osoyoos Lake. The Chinook salmon (Okanagan population) once occupied the area from Osoyoos Lake to Okanagan Lake, but McIntyre Dam has limited access to only the area below the dam and in Osoyoos Lake. As well as this habitat loss, the population was depleted by historic overfishing in the Columbia River and juvenile and adult mortality due to dams downstream on the Columbia River. Fisheries exploitation in the ocean, deterioration in the quality of the remaining Canadian habitat, and new predators and competitors such as non-native fishes also contributed to the current depleted state of the population. Hatchery projects in the Columbia system may be having detrimental genetic impacts on the current population. With spawning numbers as low as 50 adults, the population faces many stochastic risks. It is unlikely that fish from elsewhere in the Columbia River Basin will contribute to recovery of the Canadian Okanagan population, because these populations are also far below their historic abundances. Already severely depleted, the Chinook salmon (Okanagan population) is now at imminent risk of extinction due to the impending increased exploitation in Columbia River fisheries in 2005.

Range BC Pacific Ocean

Status History

Designated Endangered in an emergency assessment in May 2005.