

COSEWIC
Status Appraisal Summary

on the

Harbour Seal Lacs des Loups Marins subspecies
Phoca vitulina mellonae

in Canada

ENDANGERED
2018

COSEWIC
Committee on the Status
of Endangered Wildlife
in Canada



COSEPAC
Comité sur la situation
des espèces en péril
au Canada

COSEWIC status appraisal summaries are working documents used in assigning the status of wildlife species suspected of being at risk in Canada. This document may be cited as follows:

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COSEWIC Assessment Summary

Assessment Summary – April 2018

Common name

Harbour Seal Lacs des Loups Marins subspecies

Scientific name

Phoca vitulina mellonae

Status

Endangered

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.

Occurrence

Québec

Status history

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



COSEWIC Status Appraisal Summary

Harbour Seal Lacs des Loups Marins subspecies

Phoque commun de la sous-espèce des lacs des Loups Marins

Phoca vitulina mellonae

Range of occurrence in Canada: Québec

(Nunavik/ inland lakes: Lacs des Loups Marins, Petit Lac des Loups Marins, Lac Bourdel and potentially Lac à l'Eau Claire)

COSEWIC Status History

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

Wildlife species:

Change in eligibility, taxonomy or designatable units: yes ☐ no ☒

Explanation: No changes.

Range:

Change in Extent of Occurrence (EOO): yes ☐ no ☐ unk ☒

Change in Index of Area of Occupancy (IAO): yes ☐ no ☐ unk ☒

Change in number of known or inferred current locations¹: yes ☐ no ☐ unk ☒

Significant new survey information: yes ☒ no ☐

Explanation:

During consultations held by DFO in Kuujuaapik and Umiujaq in March 2009 (Bérubé, *unpublished*), Inuit hunters expressed their belief that the area of distribution of freshwater seals was larger than that described in the latest status report (COSEWIC 2007). Certain hunters considered that these seals are present in Lac Minto and in the northern part of the Nastapoka River. A survey flown in May 2014 observed one seal south of the Nastapoka River, confirming that seals could be present outside of main lakes.

In March 2015, interviews with Cree trappers from Whapmagoostui and Inuit hunters from Umiujaq and Kuujuaapik were initiated by DFO to obtain information on locations where the Lacs des Loups Marins freshwater harbour seal has been observed or is known to congregate (DFO, *unpublished*). Interviewees considered the current range of freshwater seals to include Lacs des Loups Marins, Petit Lac des Loups Marins, and Lac Bourdel, and reported that other people from their community had seen harbour seals in Lac à l'Eau Claire. Information from these interviews was used to design an aerial survey to estimate the distribution and abundance of freshwater seals in northern Québec flown in May 2015. This survey covered Lacs des Loups Marins, Lac Bourdel, Lac Minto and the lower section of

¹ Use the IUCN definition of "location"

Petit Lac des Loups Marins, and confirmed that the most important areas are Lacs des Loups Marins and Lac Bourdel where 80% and 20% of animals were observed, respectively (Hammill *et al.*, *unpublished*).

Despite the information provided by trappers and hunters and by the most recent aerial surveys, it is not possible to determine whether the range of freshwater Harbour Seals in northern Québec has changed since the last report (COSEWIC 2007). The new survey information confirms that these seals inhabit mainly Lacs des Loups Marins, Petit Lac des Loups Marins and Lac Bourdel (i.e., their identified critical habitat), but can extend to the Nastapoka River, which is part of the historical range of the subspecies. No seal was observed in Lac Minto and Lac à l'Eau Claire during the most recent aerial surveys.

Population Information:

Change in number of mature individuals: yes ☐ no ☐ unk ☒

Change in population trend: yes ☐ no ☐ unk ☒

Change in severity of population fragmentation: yes ☐ no ☒ unk ☐

Change in trend in area and/or quality of habitat: yes ☐ no ☒ unk ☐

Significant new survey information yes ☒ no ☐

Explanation:

No reliable estimate of current abundance is available for this subspecies. The earliest information on population size consists of approximations by Doult (1942; N= 500) and Power and Gregoire (1978; N= 600) based on the annual number of animals harvested as reported by Low (1898). Also, a carrying capacity of 200 individuals was estimated based on fish productivity and theoretical consumption by seals in the Lacs des Loups Marins (Power and Gregoire 1978). Likewise, a small sample size mark-recapture study provided an estimate of 80-100 animals (DFO 2008). Given this limited abundance data, no population trend data are available.

Some of the Cree hunters interviewed in 2009 and 2015 expressed their belief that the freshwater seal population was stable between 1997-2000, and has been increasing since 2000. This idea is based on observations of an increasing number of animals close to hunting camps.

In May 2011, a reconnaissance flight flown over Lacs aux Loups Marins indicated that seals could be more easily counted when hauled-out around melt holes on the ice than on coastlines in summer surveys (Hammill *et al.*, *unpublished*). A total of 52 seals was observed during that flight. Additional surveys were flown in May 2014 and 2015 over Lacs aux Loups Marins, Petit lac aux Loups Marins, Lac Bourdel, and Lac Minto (Hammill *et al.*, *unpublished*). During these surveys, a maximum of 15 and 51 seals were counted in 2014 and 2015, respectively. No attempt has been made to correct these counts for animals not hauled out at the time that the survey was flown. In 2015, Lacs des Loups Marins, Lac Bourdel and the south part of Petit Lac des Loups Marins (i.e., the identified critical habitat of the subspecies) were surveyed twice (Hammill *et al.*, *unpublished*). During the first survey, a total of 51 seals was observed, while no seals were seen during the second survey flown 10 days later. Overall, the surveys do confirm that at least ~50 seals are present in the identified critical habitat of freshwater seals, but they also underline that considerable variability in the number of sightings can occur between surveys flown over the same areas. Therefore, results from such surveys must be interpreted with caution. Total numbers of seals observed in 2011, 2014 and 2015 cannot be used to infer population trends nor to estimate abundance.

Threats:

Change in nature and/or severity of threats: yes ☒ no ☐ unk ☐

Explanation:

Anthropogenic threats identified in the 2007 status report included occasional hunting by the Aboriginal people and hydroelectric development (COSEWIC 2007). However, currently, climate change is likely the most important threat to this subspecies.

Harvest of freshwater seals north of the 55th parallel is limited to the Cree, Inuit and Naskapi under the James Bay and Northern Québec Agreement and the Northeastern Québec Agreement. While Inuit only hunt seals along the coastal shoreline, inland, freshwater seals are opportunistically harvested by the Cree hunters (Consultations, Whapmagoostui, Kuujjuarapik, Umiujaq, 2009; Bérubé, *unpublished*). The estimated Potential Biological Removal (PBR) was calculated to be 0.3 (i.e., 1 seal removed every three years) given a population of 50 individuals (DFO 2008). In order to withstand one removal per year, the population size would have to be ≥ 167 animals (DFO 2008). Although the PBR approach is very conservative, it nevertheless indicates that even a few removals could pose a threat to this small population. Indeed, the population size is within the threshold where the subspecies is vulnerable to extinction due to demographic stochasticity. Exact numbers of freshwater seals harvested per year are not known but according to members of the community, in Whapmagoostui only one family still practices this traditional hunt (Consultations, Whapmagoostui, Kuujjuarapik, Umiujaq, 2009; Bérubé, *unpublished*) and fewer than 10 animals would have been removed over the 3 last decades (DFO 2017). It is not possible to estimate any trend in numbers removed since the last status report in 2007, and the interest in freshwater seal harvest by the next generation of Cree hunters is difficult to predict. A close monitoring of removals would be necessary to evaluate the severity of this threat.

Hydroelectric development can cause habitat destruction and contamination of animals with methyl mercury released from the flooded vegetation. Moreover, the creation of vast water reservoirs associated with hydroelectric development alters upstream water flows. This could impact the seal population through changes in prey distribution and availability. Altered water flow would also lead to the disappearance of ice-free areas which are needed by freshwater Harbour Seals for their source of air when foraging in the winter (Consortium Gilles Shoener & Associés 1991; Smith and Horonowitsch 1987). Indeed, unlike other Arctic seals (e.g., Ringed and Bearded Seals, *Pusa hispida* and *Erignathus barbatus*), Harbour Seals are unable to dig or maintain breathing holes and thus rely on areas of open water. The principal project that threatened the freshwater seal habitat was the hydroelectric development on the Nastapoka River watershed as an extension of the eventual hydroelectric development of La Grande rivière de la Baleine. However, in July 2013, the province of Québec created the Tursujuq National Park (formerly referred to as Lacs Guillaume-Delisle et à l'Eau-Claire Park). This 26 107 km² protected area includes the Lacs des Loups Marins along with the entire Nastapoka River basin, where hydroelectric development is prohibited by the Parks Act (R.S.Q., c. P-9). Therefore, the threat associated with eventual hydroelectric projects altering the freshwater seal habitat is no longer a concern within the boundaries of the park. Nevertheless, hydroelectric development is still possible in potential upstream freshwater habitat located outside the park. Therefore, hydroelectric development remains a potential threat to the species, but of low concern since the creation of the Tursujuq National Park. Similarly, mining exploration and development represent another potential threat to freshwater Harbour Seals by altering water quality and flows (DFO 2017). Mining operations are another anthropogenic activity prohibited within the Tursujuq park boundaries, therefore minimizing the severity of this threat to freshwater seals. However as eventual projects in the northern portion of the Nastapoka River watershed cannot be excluded, mining exploration remains a potential threat of low concern to freshwater seals.

Nunavik is the region of the province of Québec that will be the most affected by climate change (Bourque and Simonet 2008). Accordingly, local Aboriginal communities report that the distribution of predators that could potentially feed on Harbour Seals is extending (Consultations, Whapmagoostui, Kuujjuarapik, Umiujaq, 2009; Bérubé, *unpublished*). Black Bear (*Ursus americanus*) are extending their range northwards, while Polar Bear (*Ursus maritimus*) attempt inland foraging trips beyond their usual

range (Bérubé, *unpublished*). Both of these bear species, as well as Wolves (*Canis lupus*), may potentially prey on Harbour Seals, and given the small population of the freshwater subspecies any increase in predation could threaten the vitality of the population. Because larger aggregations of prey may increase risk of predation, the impact of expanding predator ranges could be magnified by eventual habitat alterations that would decrease availability of winter breathing holes.

Other recent potential threats to freshwater Harbour Seals include tourism and scientific research activity (DFO 2017). The creation of the Tursujuq National Park in 2013 raised some concerns among Cree and Inuit regarding potential increased human presence in the area facilitated by easier access to tourists and scientists (Consultations, Whapmagoostui, Kuujuarapik, Umiujaq, 2009 and 2015; Bérubé, *unpublished*; DFO, *unpublished*). The hunters consulted consider freshwater Harbour Seals easily disturbed by anthropogenic activity. However, as no roads are planned to be built in the remote area of the park occupied by seals, access is not expected to be made easier to tourists. Because of its designation as an Endangered and data sensitive species, scientific research on freshwater Harbour Seals might increase in the near future. Nevertheless, all research permits are granted under the SARA by the Tursujuq National Park, thus special conditions limiting disturbance of animals could be established to minimize the threat associated with research activity.

Protection:

Change in effective protection: yes ☒ no ☐ unk ☐

Explanation:

Harbour Seals from Lacs des Loups Marins were listed as Endangered under SARA in 2007 and have been included into the Québec provincial List of Wildlife Species Likely to be Designated Threatened or Vulnerable. Since then, the subspecies' critical habitat has been identified as including the Lacs des Loups Marins, Lac Bourdel and Petit Lac des Loups Marins (DFO 2017). This area covers approximately 750 km², and it is thought that it could provide habitat for 300 individuals based on estimated fish productivity. It is therefore considered to be sufficient to support a population objective of 210 seals, i.e. 70% of the habitat carrying capacity (DFO 2008). This critical habitat was determined based on the best available information on freshwater Harbour Seals and is considered appropriate to support all functions required for seals to complete their life cycle. The only necessary features identified are the presence of permanent open water areas and sufficient prey availability (DFO 2017). However, as knowledge on population size, distribution range, and required habitat features remains very limited, more research effort is needed in order to obtain a better description of the essential features of the Lacs des Loups Marins Harbour Seal critical habitat.

Critical habitats must be legally protected under SARA. In the present case, a SARA Critical Habitat Order prohibiting destruction of the habitat is anticipated. In the meantime, the creation of the Tursujuq National Park in 2013 resulted in the protection of the entire freshwater seal critical habitat under the Parks Act (R.S.Q., c. P-9). Regulations implemented under this Act prohibit any utilization, harvesting or harnessing of resources within the boundaries of the protected area, thus preventing hydroelectric and mining development, along with hunting activities (except for Aboriginal hunting rights which are maintained). Moreover, the Kativik Regional Government plans on developing a conservation plan within the park which would include adapted level of protection in particular zones of the park to optimize conservation efforts of freshwater seals. The establishment of the Tursujuq Park has therefore increased the protection of the Lacs des Loups Marins Harbour Seal by minimizing the threats related to anthropogenic activities in their identified habitat. Finally, because they appear in the Québec provincial List of Wildlife Species likely to be Designated Threatened or Vulnerable, the Lacs des Loups Marins Harbour Seal would be the subject of particular attention in the case of any project assessed by environmental authorities under the Environment Quality Act.

Rescue Effect:

Change in evidence of rescue effect:

yes ☐ no ☒

Explanation:

Lacs des Loups Marins Harbour Seals (*Phoca vitulina mellonae*) are considered to have been isolated from their marine conspecifics (*P. v. concolor*) since the retreat of the Laurentian ice sheet 3000 to 8000 years ago (Low 1988). Lacs des Loups Marins is located approximately 160 km east of Hudson Bay, where the closest marine Harbour Seals are found, and freshwater seals appear to remain year-round in the Lacs des Loups Marins area. If some genetic exchange between the two subspecies cannot be completely ruled out, morphological, genetic and life-history differences indicate that it would be at an extremely low level (Smith et al 1999). In this context, no rescue effect is expected in this subspecies. Likewise, there is no evidence that such an effect occurred since the last assessment.

Quantitative Analysis:

Change in estimated probability of extirpation:

yes ☐ no ☒ unk ☐

Details: No quantitative analysis has been conducted.

Summary and Additional Considerations:

Lacs des Loups Marins seals are an isolated subspecies of Harbour Seals whose distribution is limited to a few inland lakes in northern Québec. Unlike other Harbour Seal populations that occasionally exploit freshwater habitats in the circumpolar northern hemisphere, *P. v. mellonae* remain year-round in the Lacs des Loups Marins area. Due to their remote distribution and small population size, knowledge on the biology and ecology of this subspecies is scarce. It is listed as 'Data Deficient' by the World Conservation Union (IUCN; Seal Specialist Group 1996). Accordingly, information on this subspecies is insufficient to compute population abundance estimates and population trends. In this context, primary recovery efforts should focus on improving our knowledge of the subspecies' ecology, including life cycle, behavior, predators, etc. (DFO 2017). Similarly, undertaking additional population size, distribution and composition assessments has a high priority in recovery planning. These efforts should also consider developing alternative methods to using aerial surveys to determine abundance and distribution given that not all animals may be hauled out at the same time.

The inclusion of the entire subspecies' Critical Habitat in the Tursujuq protected area represents a considerable improvement in protection and threat minimization for this subspecies since the last assessment. However, it is difficult to evaluate the severity of the different threats that the subspecies faces because of a lack of reporting of subsistence harvests, and impacts of climate change on habitat and predation pressure are difficult to predict. Implementing a monitoring program of the subsistence harvest of the population would help evaluate the severity of the threat associated with removals and help to address existing data gaps.

Because of the small population size, the freshwater seal population is vulnerable to stochastic demographic events. In this context, research activities should be implemented to minimize disturbance to the seals, and invasive methods should be avoided. Moreover, there is significant reluctance by Aboriginal communities regarding telemetry monitoring of freshwater seals (e.g., Consultations, Whapmagoostui, Kuujuarapik, Umiujaq, 2009 and 2015). As research activities and recovery measures need to be implemented in collaboration with local partners including Cree and Inuit authorities, the Aboriginal culture and beliefs play a central role when designing research and recovery strategies.

Acknowledgements and authorities contacted:

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TECHNICAL SUMMARY

Phoca vitulina mellonae

Harbour Seal Lacs des Loups Marins subspecies

Phoque commun de la sous-espèce des lacs des Loups Marins

Range of occurrence in Canada (province/territory/ocean): Québec

(Nunavik/ inland lakes: Lacs des Loups Marins, Petit Lac des Loups Marins, Lac Bourdel and potentially Lac à l'Eau Claire)

Demographic Information

Generation time (usually average age of parents in the population; indicate if another method of estimating generation time indicated in the IUCN guidelines (2011) is being used)	9 yr (COSEWIC 2007)
Is there an [observed, inferred, or projected] continuing decline in number of mature individuals?	Unknown
Estimated percent of continuing decline in total number of mature individuals within [5 years or 2 generations]	Unknown
[Observed, estimated, inferred, or suspected] percent [reduction or increase] in total number of mature individuals over the last [10 years, or 3 generations].	Unknown
[Projected or suspected] percent [reduction or increase] in total number of mature individuals over the next [10 years, or 3 generations].	Unknown
[Observed, estimated, inferred, or suspected] percent [reduction or increase] in total number of mature individuals over any [10 years, or 3 generations] period, over a time period including both the past and the future.	Unknown
Are the causes of the decline a. clearly reversible and b. understood and c. ceased?	a. Unknown b. No c. Unknown
Are there extreme fluctuations in number of mature individuals?	No

Extent and Occupancy Information

Estimated extent of occurrence (EOO)	Approximately 900 km ²
Index of area of occupancy (IAO) (Always report 2x2 grid value).	Approximately 670 km ²
Is the population "severely fragmented" i.e., is >50% of its total area of occupancy in habitat patches that are (a) smaller than would be required to support a viable population, and (b) separated from other habitat patches by a distance larger than the species can be expected to disperse?	a. No b. Unknown, but possibly

Number of “locations”* (use plausible range to reflect uncertainty if appropriate)	1 location including 3 lakes (Lacs des Loups Marins, Lac Bourdel, and possibly Petit Lac des Loups Marins). Some sightings in Nastapoka River and potentially other surrounding Lakes but importance of these for the subspecies is unclear.
Is there an [observed, inferred, or projected] decline in extent of occurrence?	Unknown
Is there an [observed, inferred, or projected] decline in index of area of occupancy?	Unknown
Is there an [observed, inferred, or projected] decline in number of subpopulations?	No
Is there an [observed, inferred, or projected] decline in number of “locations”**?	Unknown
Is there an [observed, inferred, or projected] decline in [area, extent and/or quality] of habitat?	Unknown
Are there extreme fluctuations in number of subpopulations?	No
Are there extreme fluctuations in number of “locations”**?	No
Are there extreme fluctuations in extent of occurrence?	No
Are there extreme fluctuations in index of area of occupancy?	No

Number of Mature Individuals (in each subpopulation)

Subpopulations (give plausible ranges)	N Mature Individuals
Unknown	
Total	Likely <250

Quantitative Analysis

Is the probability of extinction in the wild at least [20% within 20 years or 5 generations, or 10% within 100 years]?	Not available
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Threats (direct, from highest impact to least, as per IUCN Threats Calculator)

Was a threats calculator completed for this species? No.

- i. Climate change
- ii. Hydroelectric development
- iii. Harvest (occasional and opportunistic)

What additional limiting factors are relevant?

* See Definitions and Abbreviations on [COSEWIC web site](#) and [IUCN](#) (Feb 2014) for more information on this term

Rescue Effect (immigration from outside Canada)

Status of outside population(s) most likely to provide immigrants to Canada.	Not applicable
Is immigration known or possible?	No
Would immigrants be adapted to survive in Canada?	Unknown
Is there sufficient habitat for immigrants in Canada?	Unknown
Are conditions deteriorating in Canada?+	Unknown
Are conditions for the source (i.e., outside) population deteriorating?+	Not applicable
Is the Canadian population considered to be a sink?+	No
Is rescue from outside populations likely?	No

Data Sensitive Species

Is this a data sensitive species?	Yes
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Status History

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

Status and Reasons for Designation:

Status: Endangered	Alpha-numeric codes: D1
<p>Reasons for designation:</p> <p>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 subspecies 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 hydroelectric development and mining exploration outside of the identified critical habitat could potentially alter the habitat.</p>	

Applicability of Criteria

Criterion A (Decline in Total Number of Mature Individuals): Not applicable. Population trend is unknown over 3 generations.
Criterion B (Small Distribution Range and Decline or Fluctuation): Not applicable. Insufficient information.
Criterion C (Small and Declining Number of Mature Individuals): Not applicable. No clear information on decline.
Criterion D (Very Small or Restricted Population): Meets Endangered D1. There are likely <250 mature individuals.
Criterion E (Quantitative Analysis): None has been undertaken.

+ See [Table 3](#) (Guidelines for modifying status assessment based on rescue effect)

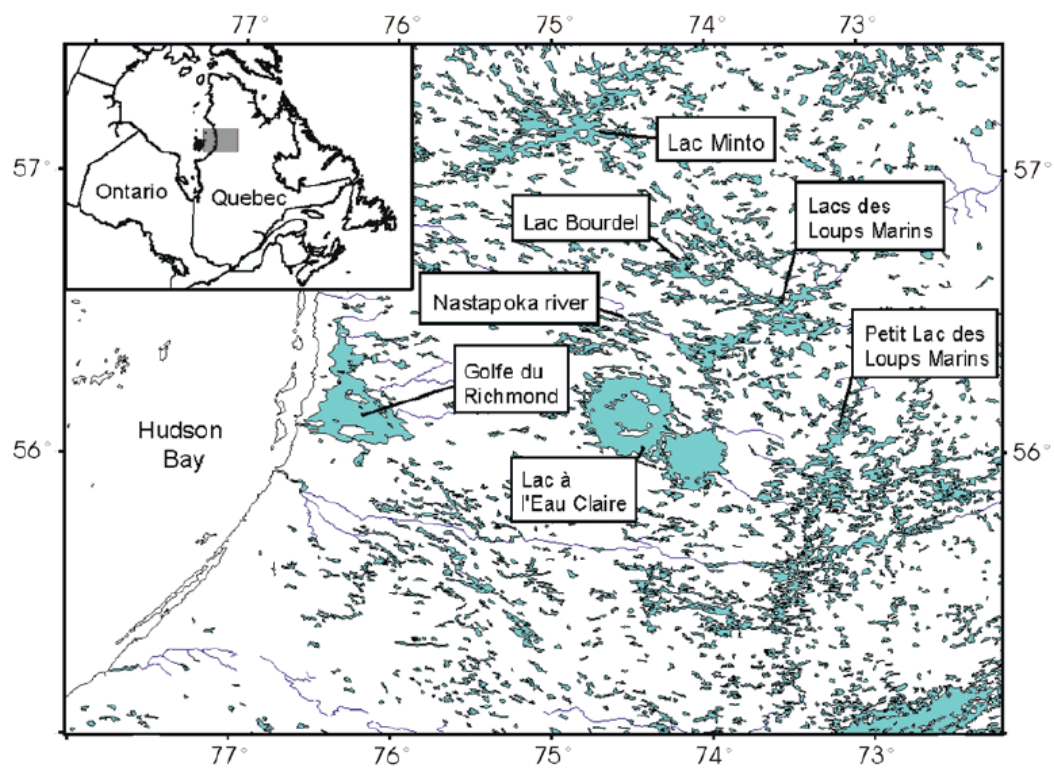


Figure 1. Map showing the lakes identified as likely habitat for freshwater seals: Lac Minto, Lac Bourdel, Lacs des Loups Marins and Petit Lac des Loups Marins.



COSEWIC HISTORY

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) was created in 1977 as a result of a recommendation at the Federal-Provincial Wildlife Conference held in 1976. It arose from the need for a single, official, scientifically sound, national listing of wildlife species at risk. In 1978, COSEWIC designated its first species and produced its first list of Canadian species at risk. Species designated at meetings of the full committee are added to the list. On June 5, 2003, the *Species at Risk Act* (SARA) was proclaimed. SARA establishes COSEWIC as an advisory body ensuring that species will continue to be assessed under a rigorous and independent scientific process.

COSEWIC MANDATE

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assesses the national status of wild species, subspecies, varieties, or other designatable units that are considered to be at risk in Canada. Designations are made on native species for the following taxonomic groups: mammals, birds, reptiles, amphibians, fishes, arthropods, molluscs, vascular plants, mosses, and lichens.

COSEWIC MEMBERSHIP

COSEWIC comprises members from each provincial and territorial government wildlife agency, four federal entities (Canadian Wildlife Service, Parks Canada Agency, Department of Fisheries and Oceans, and the Federal Biodiversity Information Partnership, chaired by the Canadian Museum of Nature), three non-government science members and the co-chairs of the species specialist subcommittees and the Aboriginal Traditional Knowledge subcommittee. The Committee meets to consider status reports on candidate species.

DEFINITIONS (2018)

Wildlife Species	A species, subspecies, variety, or geographically or genetically distinct population of animal, plant or other organism, other than a bacterium or virus, that is wild by nature and is either native to Canada or has extended its range into Canada without human intervention and has been present in Canada for at least 50 years.
Extinct (X)	A wildlife species that no longer exists.
Extirpated (XT)	A wildlife species no longer existing in the wild in Canada, but occurring elsewhere.
Endangered (E)	A wildlife species facing imminent extirpation or extinction.
Threatened (T)	A wildlife species likely to become endangered if limiting factors are not reversed.
Special Concern (SC)*	A wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats.
Not at Risk (NAR)**	A wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances.
Data Deficient (DD)***	A category that applies when the available information is insufficient (a) to resolve a species' eligibility for assessment or (b) to permit an assessment of the species' risk of extinction.

* Formerly described as "Vulnerable" from 1990 to 1999, or "Rare" prior to 1990.

** Formerly described as "Not In Any Category", or "No Designation Required."

*** Formerly described as "Indeterminate" from 1994 to 1999 or "ISIBD" (insufficient scientific information on which to base a designation) prior to 1994. Definition of the (DD) category revised in 2006.



Environment and
Climate Change Canada
Canadian Wildlife Service

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Canada

The Canadian Wildlife Service, Environment and Climate Change Canada, provides full administrative and financial support to the COSEWIC Secretariat.