

Appendix 1

Community Consultation Package



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Consultation Package sent by email and mail in January, 2018

- Consultation packages were sent by email and mail to 22 Nunavut communities within the range of the species in January 2018. The packages included: a letter, a factsheet, a PowerPoint presentation, and a questionnaire in English and Inuktitut.
- Follow-up phone calls were made to Hunter & Trapper Organizations between January and April 2018.

List of organizations to whom package was sent:

- Aiviit Hunters and Trappers Organization
- Aiviq Hunters and Trappers Organization
- Amaruq Hunters and Trappers Organization
- Aqigiq Hunters and Trappers Organization
- Arviat Hunters and Trappers Organization
- Arviq Hunters and Trappers Organization
- Baker Lake Hunters and Trappers Organization
- Bathurst Hunters and Trappers Organization
- Ekaluktutiak Hunters and Trappers Organization
- Gjoa Haven Hunters and Trappers Organization
- Government of Nunavut - Department of Environment
- Hall Beach Hunters and Trappers Organization
- Hamlet Council of Whale Cove
- Hamlet of Baker Lake
- Hamlet of Pond Inlet
- Igloolik Hunters and Trappers Organization
- Ikajutit Hunters and Trappers Organization
- Issatik Hunters and Trappers Organization
- Kangiqliniq Hunters and Trappers Organization
- Kitikmeot Inuit Association
- Kitikmeot Regional Wildlife Board
- Kivalliq Inuit Association
- Kivalliq Wildlife Board
- Kugluktuk Hunters and Trappers Organization
- Kurtairojuark Hunters and Trappers Organization
- Mayukalik Hunters and Trappers Organization
- Mittimatalik Hunters and Trappers Organization
- Municipality of Rankin Inlet
- Municipality of Taloyoak
- Nangmoutaq Hunters and Trappers Organization
- Nattivak Hunters and Trappers Organization
- Nunavut Tunngavik Incorporated
- Nunavut Wildlife Management Board
- Omingmaktok Hunters and Trappers Organization
- Pangnirtung Hunters and Trappers Organization
- Qikiqtaaluk Wildlife Board
- Qiqiqtani Inuit Association
- Spence Bay Hunters and Trappers Organization
- Umingmaktok Hunters and Trappers Organization



Canadian Wildlife Service
Environment and Climate Change Canada
PO Box 2310 – 5019 – 52nd Street
Yellowknife, NT X1A 2P7

22 January 2018

RE: Proposed Listing of **Barren-ground Caribou** under the federal Species at Risk Act as a Threatened species

The purpose of this package is to share information and get your feedback on the proposed listing of **Barren-ground Caribou** as a Threatened species under the federal *Species at Risk Act* (SARA).

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) completed the assessment of Barren-ground Caribou in November 2016 as a Threatened species. The assessment report was released in January 2018.

You are invited to submit comments on the potential impacts of amending the List of Wildlife Species at Risk according to this COSEWIC status assessment. Your comments will be considered and will inform the federal Minister of the Environment's recommendation on whether to add Barren-ground Caribou to the list of Species at Risk as a Threatened species.

We are sending you a narrated PowerPoint presentation, fact sheet and questionnaire about the proposed listing of Barren-ground Caribou. Please review these items and complete the questionnaire with input from your board / group members.

The COSEWIC status and assessment report is available for download at: http://sararegistry.gc.ca/document/default_e.cfm?documentID=3189

We hope you will review the information in this package. If you have any additional questions, concerns or information that you feel should be considered in the listing decision, please let us know and we will follow up with you as needed. If you feel this package provides enough information for you to make a decision, please respond in writing to the Canadian Wildlife Service telling us your formal position on the proposed listing of Barren-ground Caribou as a Threatened species. You can either send us a letter or you can fill in the attached questionnaire.

There will also be an opportunity to provide comments during the 30-day public consultation period associated with pre-publication in Canada Gazette Part I.



If you would like to request a call-in or a face to face presentation of this material, please let us know by **April 13th, 2018**. Otherwise, we request your response by **October 22, 2018**.

If you have any questions about this process, please contact:

Amy Ganton, Species at Risk Biologist
Canadian Wildlife Service
P.O. Box 2310
Yellowknife, NT X1A 2P7
Phone: 867-669-4710
Fax: 867-873-6776
Email: ec.sarnt-lepnt.ec@canada.ca

Yours sincerely,

Christian Bertelsen
A/Regional Director | A/Directeur regional
Canadian Wildlife Service | Service canadien de la faune
Northern Region | Région du Nord
Environment and Climate Change Canada | Environnement et Changement
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Government of Canada | Gouvernement du Canada
Website | Site Web: www.ec.gc.ca

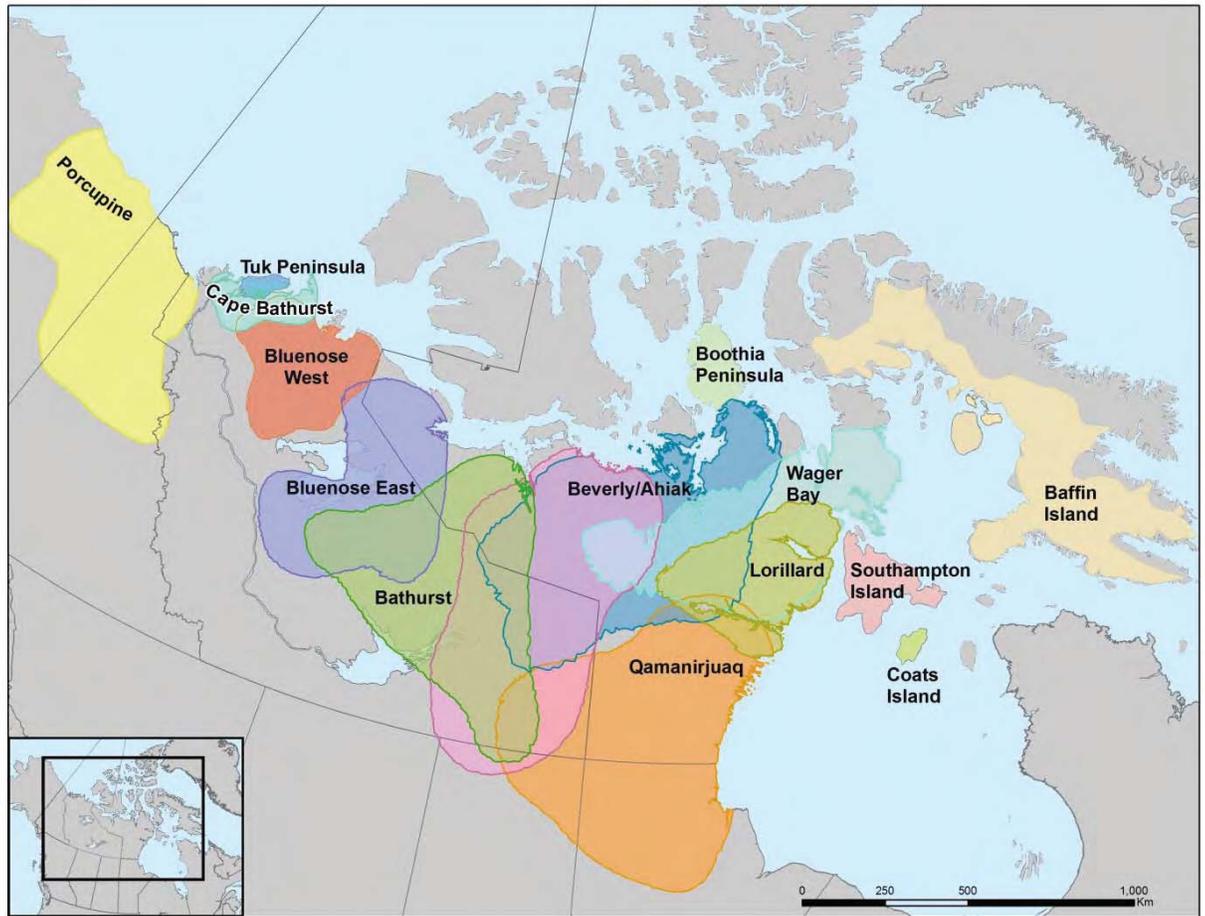


Figure 1. Distribution of Barren-ground Caribou subpopulations. Map by Bonnie Fournier, GNWT.

COSEWIC Wildlife Species Assessments, November 2016

<https://www.canada.ca/en/environment-climate-change/services/committee-status-endangered-wildlife.html>

Barren-ground Caribou | *Rangifer tarandus*

Status: Threatened

Last Examination and Change: Not applicable

Canadian Occurrence: YT, NT, NU



Reason for Designation: Members of this population give birth on the open arctic tundra, and most subpopulations (herds) winter in vast subarctic forests. Well-known for its large aggregations, lengthy migrations, and significant cultural and social value to northern Aboriginal Peoples and other Canadians, its 14-15 subpopulations range from northeastern Alaska to western Hudson Bay and Baffin Island. Numbering more than 2 million individuals in the early 1990s, the current population is estimated at about 800,000. Most subpopulations have declined dramatically, but two are increasing, including the Porcupine Caribou Herd. For 70% of the population with sufficient data to quantify trends, the decline is estimated at 56% over the past three generations (since 1989), with several of the largest herds having declined by >80% from peak numbers. Available survey data for an additional 25% of the total population also indicate declines. Evidence from both local Aboriginal people and scientific studies suggests that most herds have undergone natural fluctuations in numbers in the past; however, available demographic data indicate no sign of rapid recovery at this time and cumulative threats are without historical precedent. Status meets criteria for Endangered because of a reduction in numbers of $\geq 50\%$, but Threatened is recommended because, overall, this population does not appear to be facing imminent extinction at this time. Despite worrisome declines across most of the range, the current numerical abundance of the Porcupine Caribou Herd and the initiation of numerous management actions by governments, wildlife management boards, and communities support Threatened as a more appropriate conservation status. The status of these subpopulations will have to be carefully monitored and may warrant re-assessment within five years.

Status History: Designated Threatened in November 2016



BARREN-GROUND CARIBOU IN CANADA Proposed Listing as Threatened under the federal *Species at Risk Act*

Should Barren-ground caribou be added to the Federal List of Species at Risk as a Threatened species?

Scientific Name: *Rangifer tarandus*

Description:

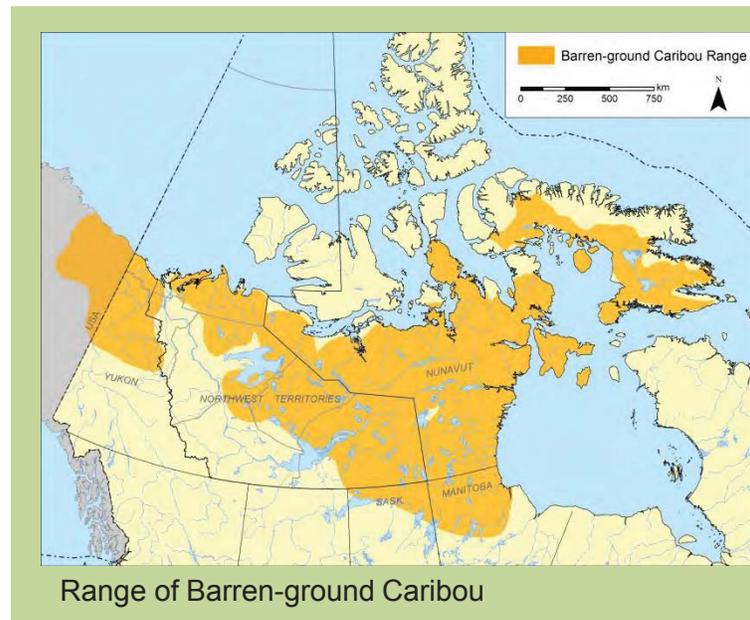
Barren-ground caribou are a medium sized caribou with dark brown legs and backs. They have a distinctive brown and white coat pattern in the fall. They are shorter than Boreal caribou and have longer legs than Peary caribou or Dolphin and Union caribou.



Photo © A. Gunn

Barren-ground caribou travel in huge groups and require large annual ranges to accommodate their long seasonal migrations.

Barren-ground caribou are widespread across northern Canada and into Alaska.



Assessment:

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessed Barren-ground caribou as Threatened in November 2016. A Threatened species is a wildlife species that is likely to become endangered if limiting factors are not reversed.

Most of the Barren-ground caribou herds have declined dramatically. Overall, the decline is estimated at 56% over the past three generations. The Porcupine and Southampton caribou herds are some of few exceptions to this trend and are increasing. There are currently around 800,000 Barren-ground caribou, down from over 2 million in the early 1990s.

Four of the seven subpopulations (Cape Bathurst, Bluenose-East, Bluenose-West and Bathurst) have declined by > 80% in the past 3 generations. Available information for the Tuktoyaktuk Peninsula, Baffin and Beverly-Ahiak herds also indicate declines. The overall decline of the species is so drastic that it could have been assessed as Endangered. However, COSEWIC has recommended the Threatened status.

Threats:

A number of threats are thought to be causing the decline of Barren-ground caribou:

- Climate and weather changes affecting forage availability, predation, parasites and diseases
- Industrial exploration and development
- Fragmentation of habitat in winter range from forest fires and increasing human presence
- Subsistence and sport harvest can be significant causes of mortality

What Happens if Barren-ground Caribou are Listed as Threatened?

If Barren-ground caribou are listed under the federal *Species at Risk Act* a national recovery strategy will be written that identifies the threats to the species and its habitat, and sets population and distribution objectives for the survival and recovery of the species. The national recovery strategy will identify critical habitat to the extent possible. After critical habitat is identified, CWS will work with partners to find the best method to protect the habitat from activities that would destroy it. Prohibitions against killing or harming Barren-ground caribou will automatically come into force if the species is listed. In the territories, these automatic prohibitions only apply on federal lands that are under the authority of

the Minister of the Environment or the Parks Canada Agency, such as National Parks and National Wildlife Areas. As well, these automatic prohibitions do not apply to people engaging in activities in accordance with conservation measures under a land claims agreement.

We want to hear from you!

- Should Barren-ground caribou be added to the federal list of Species at Risk as a Threatened species? Why or why not?
- How do Barren-ground caribou benefit you or the environment? (this can include economic, cultural, spiritual, and environmental benefits)
- Do any of your current or planned activities have the potential to kill, harm or harass Barren-ground caribou?
- What are you currently doing or what could you do to avoid killing, harming or harassing Barren-ground caribou?
- What impact do you think that listing Barren-ground caribou as a wildlife species at risk would have on your activities?
- What impact do you think that listing Barren-ground caribou as a wildlife species at risk would have on the species?
- Do you have any other information or concerns that the federal Minister of the Environment should consider before making a decision on the listing of the species?

To tell us your views or for more information, please contact:

Species at Risk
 Canadian Wildlife Service, Northern Region
 Environment and Climate Change Canada
 PO Box 2310
 Yellowknife, NT X1A 2P7
 Tel: 867-669-4710 Fax: 867-873-6776
 Email: ec.sarnt-lepnt.ec@canada.ca

Cover photos:

Ross' Gull © Environment Canada, photo: Mark Mallroy
 Baikal Sedge © Environment Canada, photo: Syd Cannings
 Peary Caribou © Environment Canada, photo: Charles Francis



Barren-ground Caribou Proposed listing as Threatened

The following questions are intended to assist you in providing comments. They are not limiting and any other comments you may have are welcome. We also encourage you to share descriptions and estimates of costs and benefits where possible.

Questionnaire filled out by:

(Print name / title)

Organization:

Date questionnaire completed:

Have you seen Barren-ground Caribou in your area? Yes No

Do you have enough information to make a decision on your position/opinion on the proposed listing of Barren-ground Caribou as Threatened under the federal *Species at Risk Act*?

Yes No

If you need more information, someone will contact you to see how best to provide this information

What is your organization's position/opinion on the proposed listing of Barren-ground Caribou as Threatened?

- Support the proposed listing of Barren-ground Caribou as Threatened
- Do not support the proposed listing of Barren-ground Caribou as Threatened
- Indifferent to the proposed listing of Barren-ground Caribou as Threatened

What are your reasons for this position?





Do you have any additional comments?

Some points to consider:

- How do Barren-ground Caribou benefit you or the environment? (this can include economic, cultural, spiritual, and environmental benefits)
- Do any of your current or planned activities have the potential to kill, harm or harass Barren-ground Caribou?
- What are you currently doing or what could you do to avoid killing, harming or harassing Barren-ground Caribou?
- What impact do you think that listing Barren-ground Caribou as a wildlife species at risk would have on your activities?
- What impact do you think that listing Barren-ground Caribou as a wildlife species at risk would have on the species?
- Do you have any other information or concerns that the federal Minister of the Environment should consider before making a decision on the listing of the species?





CONSULTATION ON AMENDING THE LIST OF
SPECIES UNDER THE *SPECIES AT RISK ACT*
TERRESTRIAL SPECIES – JANUARY 2018

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CONSULTATION ON AMENDING
THE LIST OF SPECIES UNDER
THE ***SPECIES AT RISK ACT***
TERRESTRIAL SPECIES

JANUARY 2018

Please submit your comments by

May 22, 2018, for terrestrial species undergoing **normal** consultations

and by

October 22, 2018, for terrestrial species undergoing **extended** consultations.

For a description of the consultation paths these species will undergo, please see:

www.registrelep-sararegistry.gc.ca/default.asp?lang=En&n=8CF7461F-1

Please email your comments to the Species at Risk Public Registry at:

ec.registrelep-sararegistry.ec@canada.ca

Comments may also be mailed to:

Director General, Assessment and Regulatory Affairs

Canadian Wildlife Service

Environment and Climate Change Canada

Ottawa ON K1A 0H3

For more information on the *Species at Risk Act*, please visit the Species at Risk Public Registry at:

www.registrelep-sararegistry.gc.ca

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ADDITION OF SPECIES TO THE *SPECIES AT RISK ACT*

Questions to guide your comments

The following questions are intended to assist you in providing comments on the proposed amendments to the List of Wildlife Species at Risk (see Table 1 for the list of species under consultation). They are not limiting, and any other comments you may have are welcome. We also encourage you to share descriptions and estimates of costs or benefits to you or your organization where possible, as well as to propose actions that could be taken for the conservation of these species.

Respondent information

- 1) Are you responding as
 - a) an individual, or
 - b) representing a community, business or organization (please specify)?

Species benefits to people or to the ecosystem

- 2) Do any or all of the species provide benefits to you or Canada's ecosystems? If so, please describe these benefits. If possible, please provide a monetary or quantitative estimate of their values to you.

For example:

- Do any or all of the species provide benefits by supporting your livelihood, for example, through harvesting, subsistence or medicine? If yes, can you estimate the extent of these benefits, for example, how often the harvest takes place, the quantity harvested, and the uses of the harvested species (e.g., medicine, food, clothes, etc.)?
- Do any or all of the species provide cultural or spiritual benefits, for example, recreation, sense of place or tradition? If yes, how?
- Do any or all of the species provide environmental benefits, for example, pollination, pest control or flood control? If yes, how?

Impacts of species listing on your activities and the ecosystem

- 3) Based on what you know about SARA and the information presented in this document, do you think that amending the List of Wildlife Species at Risk with the proposed listing (Table 1) would have:

- a) no impact on your activities or the species;
- b) a positive impact on your activities or the species; or
- c) a negative impact on your activities or the species.

Please explain your choice above, specifically:

- 4) Do you think that listing the species would result in cultural, social, or economic costs or benefits to you, your community or your organization?
- 5) Do you think that listing the species would result in any costs or benefits to the environment or Canada's ecosystems?
- 6) Based on the maps provided in this document, do any of your current or planned activities overlap with any of the species ranges or occurrences?
- 7) Do any current or planned activities that you are aware of (e.g., land conversion for natural resource, industrial, commercial, or residential development) have the potential to kill, harm, or harass the species and/or destroy any part of its habitat?
 - If yes, what are these activities, how would they affect the species, and/or destroy any part of its habitat?
 - If yes, what is being done, planned to be done, or could be done to avoid killing, harming, or harassing the species, or destroying its habitat? Please describe what implications and/or costs may be involved (qualitative or quantitative). Would you personally have to adjust or cease any activities?

Additional information for small businesses

If you are responding for a **small business**, please provide the following details to help Environment and Climate Change Canada gather information to contribute to the required Small Business Lens analysis that forms part of the Regulatory Impact Analysis Statement that will accompany any future listing recommendation.

1. Are you an enterprise that operates in Canada?
2. Do you engage in commercial activities related to the supply of services or property (which includes goods)?

3. Are you an organization that engages in activities for a public purpose (e.g., social welfare or civic improvement), such as a provincial or municipal government, school, college/university, hospital or charity?
4. Is your enterprise owned by a First Nations community?
5. How many employees do you have?
 - a) 0–99
 - b) 100 or more
6. What was your annual gross revenue in the last year?
 - a) Less than \$30,000
 - b) Between \$30,000 and \$5 million
 - c) More than \$5 million

To ensure that your comments are considered in time, they should be submitted before the following deadlines.

For terrestrial species undergoing normal consultations, comments should be submitted by **May 22, 2018**.

For terrestrial species undergoing extended consultations, comments should be submitted by **October 22, 2018**.

To find out which consultation paths these species will undergo (extended or normal), please see: www.registrelp-sararegistry.gc.ca/default.asp?lang=En&n=8CF7461F-1

Comments received by these deadlines will be considered in the development of the listing proposal.

Please email your comments to the Species at Risk Public Registry at: ec.registrelp-sararegistry.ec@canada.ca

By regular mail, please address your comments to:

Director General, Assessment and
Regulatory Affairs
Canadian Wildlife Service
Environment and Climate Change Canada
Ottawa ON K1A 0H3

The *Species at Risk Act* and the List of Wildlife Species at Risk

The Government of Canada is committed to preventing the disappearance of wildlife species at risk from our lands. As part of its strategy for realizing that commitment, on June 5, 2003, the Government of Canada proclaimed the *Species at*

Risk Act (SARA). Attached to the Act is Schedule 1, the list of the species provided for under SARA, also called the List of Wildlife Species at Risk. Extirpated, Endangered and Threatened species on Schedule 1 benefit from the protection afforded by the prohibitions and from recovery planning requirements under SARA. Special Concern species benefit from its management planning requirements. Schedule 1 has grown from the original 233 to 555 wildlife species at risk. In 2017, final listing decisions were made for 44 terrestrial species and 15 aquatic species. Of these 59 species, 35 were new additions, sixteen were reclassifications, three had a change made to how they are defined, two were removed from Schedule 1, one was referred back to COSEWIC for further evaluation and two were the object of ‘do not list’ decisions. In 2017, on the recommendation of the Minister of the Environment, the Governor in Council approved listing proposals for 45 wildlife species. It is proposed that 21 species be added to Schedule 1, 11 be reclassified, 12 would have a change made to how they are defined and one would be referred back to COSEWIC for further evaluation. The listing proposals were published in *Canada Gazette*, part I for a 30-day public comment period and final listing decisions for all 45 species are expected by August of 2018.

The complete list of species currently on Schedule 1 can be viewed at: www.registrelp-sararegistry.gc.ca/species/schedules_e.cfm?id=1

Species become eligible for addition to Schedule 1 once they have been assessed as being at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). The decision to add a species to Schedule 1 is made by the Governor in Council further to a recommendation from the Minister of the Environment. The Governor in Council is the formal executive body that gives legal effect to decisions that then have the force of law.

COSEWIC and the assessment process for identifying species at risk

COSEWIC is recognized under SARA as the authority for assessing the status of wildlife species at risk. COSEWIC comprises experts on wildlife species at risk. Its members have backgrounds in the fields of biology, ecology, genetics, Indigenous traditional knowledge and other relevant fields. They come from various communities, including academia, Indigenous organizations, governments and non-governmental organizations.

COSEWIC gives priority to those species more likely to become extinct, and then commissions a status report for the evaluation of the species' status. To be accepted, status reports must be peer-reviewed and approved by a subcommittee of species specialists. In special circumstances, assessments can be done on an emergency basis. When the status report is complete, COSEWIC meets to examine it and discuss the species. COSEWIC then determines whether the species is at risk, and, if so, it then assesses the level of risk and assigns a conservation status.

Terms used to define the degree of risk to a species

The conservation status defines the degree of risk to a species. The terms used under SARA are Extirpated, Endangered, Threatened and Special Concern. Extirpated species are wildlife species that no longer occur in the wild in Canada but still exist elsewhere. Endangered species are wildlife species that are likely to soon become Extirpated or extinct. Threatened species are likely to become Endangered if nothing is done to reverse the factors leading to their extirpation or extinction. The term Special Concern is used for wildlife species that may become Threatened or Endangered due to a combination of biological characteristics and threats. Once COSEWIC has assessed a species as Extirpated, Endangered, Threatened or Special Concern, it is eligible for inclusion on Schedule 1.

For more information on COSEWIC, visit: www.canada.ca/en/environment-climate-change/services/committee-status-endangered-wildlife.html

On October 24, 2017, COSEWIC sent to the Minister of the Environment its newest assessments of species at risk. Environment and Climate Change Canada is now consulting on changes to Schedule 1 to reflect these new designations for these terrestrial species. To see the list of the terrestrial species and their status, please refer to tables 1 and 2.

Terrestrial and aquatic species eligible for Schedule 1 amendments

The Minister of Fisheries and Oceans conducts separate consultations for the aquatic species. For more information on the consultations for aquatic species, visit the Fisheries and Oceans Canada website at www.dfo-mpo.gc.ca.

The Minister of the Environment is conducting the consultations for all other species at risk.

Approximately 67% of the recently assessed terrestrial species at risk also occur in national parks or other lands administered by Parks Canada; Parks Canada shares responsibility for these species with Environment and Climate Change Canada.

Comments solicited on the proposed amendment of Schedule 1

The conservation of wildlife is a joint legal responsibility: one that is shared among the governments of Canada. But biodiversity will not be conserved by governments that act alone. The best way to secure the survival of species at risk and their habitats is through the active participation of all those concerned. SARA recognizes this, and that all Indigenous peoples and Canadians have a role to play in preventing the disappearance of wildlife species from our lands. The Government of Canada is inviting and encouraging you to become involved. One way that you can do so is by sharing your comments concerning the addition or reclassification of these terrestrial species.

Your comments are considered in relation to the potential consequences of whether or not a species is included on Schedule 1, and they are then used to inform the drafting of the Minister's proposed listing recommendations for each of these species.

Questions to guide your comments are included at the beginning of the document.

THE SPECIES AT RISK ACT LISTING PROCESS AND CONSULTATION

The addition of a wildlife species at risk to Schedule 1 of SARA facilitates providing for its protection and conservation. To be effective, the listing process must be transparent and open. The species listing process under SARA is summarized in Figure 1.

The purpose of consultations on amendments to the List

When COSEWIC assesses a wildlife species, it does so solely on the basis of the best available information relevant to the biological status of the species. COSEWIC then submits the assessment to the Minister of the Environment, who considers it when making the listing recommendation to

Figure 1 : The species listing process under SARA



the Governor in Council. The purpose of these consultations is to provide the Minister with a better understanding of the potential social and economic impacts of the proposed change to the List of Wildlife Species at Risk, and of the potential consequences of not adding a species to the List.

Legislative context of the consultations: the Minister's recommendation to the Governor in Council

The comments collected during the consultations inform the Governor in Council's consideration of the Minister's recommendations for listing species at risk. The Minister must recommend one of three courses of action. These are for the Governor in Council to accept the species assessment and modify Schedule 1 accordingly, not to add the species to Schedule 1, or to refer the species assessment back to COSEWIC for its further consideration (Figure 1).

The Minister of the Environment's response to the COSEWIC assessment: the response statement

After COSEWIC has completed its assessment of a species, it provides it to the Minister of the Environment. The Minister of the Environment then has 90 days to post a response on the Species at Risk Public Registry, known as the response statement. The response statement provides information on the scope of any consultations and the timelines for action, to the extent possible. It identifies how long the consultations will be (whether they are "normal" or "extended") by stating when the Minister will forward the assessment to the Governor in Council. Consultations for a group of species are launched with the posting of their response statements.

Normal and extended consultation periods

Normal consultations meet the consultation needs for the listing of most species at risk. They usually take two to three months to complete, while extended consultations may take one year or more.

The extent of consultations needs to be proportional to the expected impact of a listing decision and the time that may be needed to consult. Under some

circumstances, whether or not a species will be included on Schedule 1 could have significant and widespread impacts on the activities of some groups of people. It is essential that such stakeholders have the opportunity to inform the pending decision and, to the extent possible, to provide input on its potential consequences and to share ideas on how best to approach threats to the species. A longer period may also be required to consult appropriately with some groups. For example, consultations can take longer for groups that meet infrequently but that must be engaged on several occasions. For such reasons, extended consultations may be undertaken.

For both normal and extended consultations, once they are complete, the Minister of the Environment forwards the species assessments to the Governor in Council for the government's formal receipt of the assessment. The Governor in Council then has nine months to come to a listing decision.

The consultation paths (normal or extended) for the terrestrial species listed in Table 1 will be announced when the Minister publishes the response statements. These will be posted by **January 22, 2018**, on the Species at Risk Public Registry at: www.registrelep-sararegistry.gc.ca/default.asp?lang=En&n=8CF7461F-1

No consultations will be undertaken for those species already on Schedule 1 and for which no change in status is being proposed (Table 2).

Who is consulted, and how

It is most important to consult with those who would be most affected by the proposed changes. There is protection that is immediately in place when a species that is Extirpated, Endangered or Threatened is added to Schedule 1 (for more details, see below, "Protection for listed Extirpated, Endangered and Threatened species"). This immediate protection does not apply to species of Special Concern. The nature of protection depends on the type of species, its conservation status, and where the species is found. Environment and Climate Change Canada takes this into account during the consultations; those who may be affected by the impacts of the automatic protections are contacted directly, others are encouraged to contribute through a variety of approaches.

Indigenous peoples known to have species at risk on their lands, for which changes to Schedule 1 are being considered, will be contacted. Their engagement is of particular significance, acknowledging their role in the management of the extensive traditional territories and the reserve and settlement lands.

A Wildlife Management Board is a group that has been established under a land claims agreement and is authorized by the agreement to perform functions in respect of wildlife species. Some eligible species at risk are found on lands where existing land claims agreements apply that give specific authority to a Wildlife Management Board. In such cases, the Minister of the Environment will consult with the relevant board.

To encourage others to contribute and make the necessary information readily available, this document is distributed to known stakeholders and posted on the Species at Risk Public Registry. More extensive consultations may also be done through regional or community meetings or through a more targeted approach.

Environment and Climate Change Canada also sends notice of this consultation to identified concerned groups and individuals who have made their interests known. These include, but are not limited to, industries, resource users, landowners and environmental non-governmental organizations.

In most cases, it is difficult for Environment and Climate Change Canada to fully examine the potential impacts of recovery actions when species are being considered for listing. Recovery actions for terrestrial species usually have not yet been comprehensively defined at the time of listing, so their impact cannot be fully understood. Once they are better understood, efforts are made to minimize adverse social and economic impacts of listing and to maximize the benefits. SARA requires that recovery measures be prepared in consultation with those considered to be directly affected by them.

In addition to the public, Environment and Climate Change Canada consults on listing with the governments of the provinces and territories with lead responsibility for the conservation and management of these wildlife species. Environment and Climate Change Canada also consults with other federal departments and agencies.

Role and impact of public consultations in the listing process

The results of the public consultations are of great significance to informing the process of listing species at risk. Environment and Climate Change Canada carefully reviews the comments it receives to gain a better understanding of the benefits and costs of changing the List.

The comments are then used to inform the Regulatory Impact Analysis Statement (RIAS). The RIAS is a report that summarizes the impact of a proposed regulatory change. It includes a description of the proposed change and an analysis of its expected impact, which takes into account the results of the public consultations. In developing the RIAS, the Government of Canada recognizes that Canada's natural heritage is an integral part of our national identity and history and that wildlife in all its forms has value in and of itself. The Government of Canada also recognizes that the absence of full scientific certainty is not a reason to postpone decisions to protect the environment.

A draft Order (see Glossary) is then prepared, providing notice that a decision is being taken by the Governor in Council. The draft Order proposing to list all or some of the species under consideration is then published, along with the RIAS, in the *Canada Gazette*, Part I, for a comment period of 30 days.

The Minister of the Environment will take into consideration comments and any additional information received following publication of the draft Order and the RIAS in the *Canada Gazette*, Part I. The Minister then makes a final listing recommendation for each species to the Governor in Council. The Governor in Council next decides either to accept the species assessment and amend Schedule 1 accordingly; or not to add the species to Schedule 1; or to refer the species assessment back to COSEWIC for further information or consideration. The final decision is published in the *Canada Gazette*, Part II, and on the Species at Risk Public Registry. If the Governor in Council decides to list a species, it is at this point that it becomes legally included on Schedule 1.

SIGNIFICANCE OF THE ADDITION OF A SPECIES TO SCHEDULE 1

The protection that comes into effect following the addition of a species to Schedule 1 depends upon a number of factors. These include the species' status under SARA, the type of species and where it occurs.

Protection for listed Extirpated, Endangered and Threatened species

Responsibility for the conservation of wildlife is shared among the governments of Canada. SARA establishes legal protection for individuals as soon as a species is listed as Threatened, Endangered or Extirpated, and, in the case of Threatened and Endangered species, for their residences. This applies to species considered federal species or if they are found on federal land.

Federal species include migratory birds, as defined by the *Migratory Birds Convention Act, 1994*, and aquatic species covered by the *Fisheries Act*. Federal land means land that belongs to the federal government, and the internal waters and territorial sea of Canada. It also means land set apart for the use and benefit of a band under the *Indian Act* (such as reserves). In the territories, the protection for species at risk on federal lands applies only where they are on lands under the authority of the Minister of the Environment or the Parks Canada Agency.

Migratory birds are protected by the *Migratory Birds Regulations*, under the *Migratory Birds Convention Act, 1994*, which strictly prohibits the harming of migratory birds and the disturbance or destruction of their nests and eggs.

SARA's protection for individuals makes it an offence to kill, harm, harass, capture or take an individual of a species listed as Extirpated, Endangered or Threatened. It is also an offence to damage or destroy the residence of one or more individuals of an Endangered or Threatened species or an Extirpated species whose reintroduction has been recommended by a recovery strategy. The Act also makes it an offence to possess, collect, buy, sell or trade an individual of a species that is Extirpated, Endangered or Threatened.

Species at risk that are neither aquatic nor protected under the *Migratory Birds Convention Act, 1994*, nor on federal lands, do not receive immediate protection upon listing under SARA. Instead, in most cases, the protection of terrestrial species on non-federal lands is the responsibility of the provinces and territories where they are found. The application of protections under SARA to a species at risk on non-federal lands requires that the Governor in Council make an order defining those lands. This can only occur when the Minister is of the opinion that the laws of the province or territory do not effectively protect the species. To put such an order in place, the Minister would then need to recommend the order be made to the Governor in Council. If the Governor in Council agrees to make the order, the prohibitions of SARA would then apply to the provincial or territorial lands specified by the order. The federal government would consult before making such an order.

Recovery strategies and action plans for Extirpated, Endangered and Threatened species

Recovery planning results in the development of recovery strategies and action plans for Extirpated, Endangered or Threatened species. It involves the different levels of government responsible for the management of the species, depending on what type of species it is and where it occurs. These include federal, provincial and territorial governments as well as Wildlife Management Boards. Recovery strategies and action plans are also prepared in cooperation with directly affected Indigenous organizations. Landowners and other stakeholders directly affected by the recovery strategy are consulted to the extent possible.

Recovery strategies must be prepared for all Extirpated, Endangered and Threatened species. They include measures to mitigate the known threats to the species and its habitat and set the population and distribution objectives. Other objectives can be included, such as stewardship, to conserve the species, or education, to increase public awareness. Recovery strategies must include a statement of the time frame for the development of one or more action plans that will state the measures necessary to implement the recovery strategy. To the extent

possible, recovery strategies must also identify the critical habitat of the species, which is the habitat necessary for the survival or recovery of the species. If there is not enough information available to identify critical habitat, the recovery strategy includes a schedule of studies required for its identification. This schedule outlines what must be done to obtain the necessary information and by when it needs to be done. In such cases, critical habitat can be identified in a subsequent action plan.

Proposed recovery strategies for newly listed species are posted on the Species at Risk Public Registry to provide for public review and comment. For Endangered species, proposed recovery strategies are posted within one year of their addition to Schedule 1, and for Threatened or Extirpated species, within two years.

Once a recovery strategy has been posted as final, one or more action plans based on the recovery strategy must then be prepared. These include measures to address threats and achieve the population and distribution objectives. Action plans also complete the identification of the critical habitat where necessary and, to the extent possible, state measures that are proposed to protect it.

Permits and agreements

For terrestrial species listed on SARA Schedule 1 as Extirpated, Endangered or Threatened, the Minister of the Environment may authorize exceptions to the Act's prohibitions, when and where they apply. The Minister can enter into agreements or issue permits only for one of three purposes: for research, for conservation activities, or if the effects to the species are incidental to the activity. Research must relate to the conservation of a species and be conducted by qualified scientists. Conservation activities must benefit a listed species or be required to enhance its chances of survival. All activities, including those that incidentally affect a listed species, its individuals, residences or critical habitat must also meet certain conditions. First, it must be established that all reasonable alternatives to the activity have been considered and the best solution has been adopted.

Second, it must also be established that all feasible measures will be taken to minimize the impact of the activity on the listed species. And finally, it must be established that the activity will not jeopardize the survival or recovery of the species. Having issued a permit or agreement, the Minister must then include an explanation on the Species at Risk Public Registry of why the permit or agreement was issued.

Protection for listed species of Special Concern

While immediate protection under SARA for species listed as Extirpated, Endangered and Threatened does not apply to species listed as Special Concern, any existing protections and prohibitions, such as those provided by the *Migratory Birds Convention Act, 1994* or the *Canada National Parks Act*, continue to be in force.

Management plans for species of Special Concern

For species of Special Concern, management plans are to be prepared and made available on the Species at Risk Public Registry within three years of a species' addition to Schedule 1, allowing for public review and comment. Management plans include appropriate conservation measures for the species and for its habitat. They are prepared in cooperation with the jurisdictions responsible for the management of the species, including directly affected Wildlife Management Boards and Indigenous organizations. Landowners, lessees and others directly affected by a management plan will also be consulted to the extent possible.

THE LIST OF SPECIES ELIGIBLE FOR AN AMENDMENT TO SCHEDULE 1

Status of the recently assessed species and consultation paths

On October 24, 2017, COSEWIC submitted 28 assessments of species at risk to the Minister of the Environment for species that are eligible to be added to Schedule 1 of SARA. Thirteen of these are terrestrial species, and 15 are aquatic species. COSEWIC also reviewed the classification of species already on Schedule 1, in some cases changing their status. Four terrestrial species are now being considered for down-listing on SARA (to a lower risk status) and 3 terrestrial species are now being considered for a higher risk status on SARA. One species, the Sonora Skipper, is being considered for removal from the list, as it was found to be not at risk in its latest assessment. In all, 21 terrestrial species that are eligible to be added to Schedule 1, to be removed from Schedule 1, or to have their current status on Schedule 1 changed are included in this consultation (Table 1).

COSEWIC also submitted the reviews of species already on Schedule 1, confirming their classification. Twelve of these reviews were for terrestrial species. These species are not included in the consultations because there is no regulatory change being proposed (Table 2).

For more information on the consultations for aquatic species, visit the Fisheries and Oceans Canada website at www.dfo-mpo.gc.ca.

Providing comments

The involvement of Canadians is integral to the listing process, as it is to the ultimate protection of Canadian wildlife. Your comments matter and are given serious consideration. Environment and Climate Change Canada will review all the comments that it receives by the deadlines provided below.

Comments for terrestrial species undergoing normal consultations must be received by **May 22, 2018**.

Comments for terrestrial species undergoing extended consultations must be received by **October 22, 2018**.

Most species will be undergoing normal consultations. For the final consultation paths, please see www.registrelep-sararegistry.gc.ca/default.asp?lang=En&n=8CF7461F-1 after **January 22, 2018**.

For more details on submitting comments, see the section “Comments solicited on the proposed amendment of Schedule 1” of this document.

Table 1: Terrestrial species recently assessed by COSEWIC eligible for addition to Schedule 1 or reclassification

Taxon	Species	Scientific Name	Range
Species eligible for addition to Schedule 1 (13)			
Endangered (4)			
Lichens	Golden-eye Lichen (Great Lakes population)	<i>Teloschistes chrysophthalmus</i>	ON
Mammals	Caribou (Eastern Migratory population)	<i>Rangifer tarandus</i>	MB ON QC NL
Mammals	Caribou (Torngat Mountains population)	<i>Rangifer tarandus</i>	NU QC NL
Molluscs	Eastern Banded Tigersnail	<i>Anguispira kochi kochi</i>	ON
Threatened (2)			
Birds	Lark Bunting	<i>Calamospiza melanocorys</i>	AB SK MB
Mammals	Caribou (Barren-ground population)	<i>Rangifer tarandus</i>	YT NT NU AB SK MB
Special Concern (7)			
Arthropods	Magdalen Islands Grasshopper	<i>Melanoplus madeleineae</i>	QC
Arthropods	Transverse Lady Beetle	<i>Coccinella transversoguttata</i>	YT NT NU BC AB SK MB ON QC NB PE NS NL
Birds	Evening Grosbeak	<i>Coccothraustes vespertinus</i>	YT NT BC AB SK MB ON QC NB PE NS NL
Birds	Harris's Sparrow	<i>Zonotrichia querula</i>	NT NU AB SK MB ON
Lichens	Golden-eye Lichen (Prairie / Boreal population)	<i>Teloschistes chrysophthalmus</i>	MB ON
Reptiles	Bullsnake	<i>Pituophis catenifer sayi</i>	AB SK
Vascular Plants	Long's Bulrush	<i>Scirpus longii</i>	NS
Reclassifications: Up-list (3)			
From Threatened to Endangered (2)			
Birds	Pink-footed Shearwater	<i>Ardenna creatopus</i>	BC Pacific Ocean
Reptiles	Blanding's Turtle (Great Lakes / St. Lawrence population)	<i>Emydoidea blandingii</i>	ON QC
From Special Concern to Endangered (1)			
Arthropods	Monarch	<i>Danaus plexippus</i>	NT BC AB SK MB ON QC NB PE NS NL
Reclassifications: Down-list or Delist (5)			
From Endangered to Threatened (2)			
Reptiles	Western Painted Turtle (Pacific Coast population)	<i>Chrysemys picta bellii</i>	BC
Vascular Plants	Spotted Wintergreen	<i>Chimaphila maculata</i>	ON QC
From Threatened to Special Concern (1)			
Vascular Plants	Anticosti Aster	<i>Symphotrichum anticostense</i>	QC NB
From Endangered to Special Concern (1)			
Mosses	Rusty Cord-moss	<i>Entosthodon rubiginosus</i>	BC SK
From Special Concern to Not at Risk (1)			
Arthropods	Sonora Skipper	<i>Polites sonora</i>	BC

**Table 2: Terrestrial species recently reassessed by COSEWIC
(no consultations – species status confirmation)**

Taxon	Species	Scientific Name	Range
Status Confirmations (12)			
Endangered (8)			
Arthropods	Gold-edged Gem	<i>Schinia avemensis</i>	AB SK MB
Birds	Burrowing Owl	<i>Athene cunicularia</i>	BC AB SK MB
Birds	Prothonotary Warbler	<i>Protonotaria citrea</i>	ON
Mammals	Ord's Kangaroo Rat	<i>Dipodomys ordii</i>	AB SK
Mosses	Nugget Moss	<i>Microbryum vlassovii</i>	BC
Reptiles	Blanding's Turtle (Nova Scotia population)	<i>Emydoidea blandingii</i>	NS
Vascular Plants	Butternut	<i>Juglans cinerea</i>	ON QC NB
Vascular Plants	Western Prairie Fringed Orchid	<i>Platanthera praeclara</i>	MB
Special Concern (4)			
Birds	Rusty Blackbird	<i>Euphagus carolinus</i>	YT NT NU BC AB SK MB ON QC NB PE NS NL
Mammals	Nuttall's Cottontail <i>nuttallii</i> subspecies	<i>Sylvilagus nuttallii nuttallii</i>	BC
Reptiles	Western Painted Turtle (Intermountain - Rocky Mountain population)	<i>Chrysemys picta bellii</i>	BC
Vascular Plants	American Hart's-tongue Fern	<i>Asplenium scolopendrium</i> var. <i>americanum</i>	ON

THE COSEWIC SUMMARIES OF TERRESTRIAL SPECIES ELIGIBLE FOR ADDITION OR RECLASSIFICATION ON SCHEDULE 1

For a brief summary of the reasons for the COSEWIC status designation of individual species, and their biology, threats, distribution and other information, please consult:

http://registrelep-sararegistry.gc.ca/document/default_e.cfm?documentID=3200

For a more comprehensive explanation of the conservation status of an individual species, please refer to the COSEWIC status report for that species, also available on the Species at Risk Public Registry at:

www.sararegistry.gc.ca

or contact:

COSEWIC Secretariat
c/o Canadian Wildlife Service
Environment and Climate Change Canada
Ottawa ON K1A 0H3

GLOSSARY

Aquatic species: A wildlife species that is a fish as defined in section 2 of the *Fisheries Act* or a marine plant as defined in section 47 of the Act. The term includes marine mammals.

Canada Gazette: The *Canada Gazette* is one of the vehicles that Canadians can use to access laws and regulations. It has been the “official newspaper” of the Government of Canada since 1841. Government departments and agencies as well as the private sector are required by law to publish certain information in the *Canada Gazette*. Notices and proposed regulations are published in the *Canada Gazette*, Part I, and official regulations are published in the *Canada Gazette*, Part II. For more information, please visit canadagazette.gc.ca.

Canadian Endangered Species Conservation Council: The Council is made up of federal, provincial and territorial ministers with responsibilities for wildlife species. The Council’s mandate is to provide national leadership and coordination for the protection of species at risk.

COSEWIC: The Committee on the Status of Endangered Wildlife in Canada. The Committee comprises experts on wildlife species at risk. Their backgrounds are in the fields of biology, ecology, genetics, Indigenous traditional knowledge and other relevant fields. These experts come from various communities, including, among others, government and academia.

COSEWIC assessment: COSEWIC’s assessment or re-assessment of the status of a wildlife species, based on a status report on the species that COSEWIC either has had prepared or has received with an application.

Down-listing: A revision of the status of a species on Schedule 1 to a status of lower risk. A revision of the status of a Schedule 1 species to a higher risk status would be up-listing.

Federal land: Any land owned by the federal government, the internal waters and territorial sea of Canada, and reserves and other land set apart for the use and benefit of a band under the *Indian Act*.

Governor in Council: The Governor General of Canada acting on the advice of the Queen’s Privy Council for Canada, the formal executive body that gives legal effect to those decisions of Cabinet that are to have the force of law.

Individual: An individual of a wildlife species, whether living or dead, at any developmental stage, and includes larvae, embryos, eggs, sperm, seeds, pollen, spores and asexual propagules.

Order: An order issued by the Governor in Council, either on the basis of authority delegated by legislation or by virtue of the prerogative powers of the Crown.

Response statement: A document in which the Minister of the Environment indicates how he or she intends to respond to the COSEWIC assessment of a wildlife species. A response statement is posted on the Species at Risk Public Registry within 90 days of receipt of the assessment by the Minister, and provides timelines for action to the extent possible.

RIAS: Regulatory Impact Analysis Statement. A document that provides an analysis of the expected impact of a regulatory initiative and which accompanies an Order in Council.

Species at Risk Public Registry: Developed as an online service, the Species at Risk Public Registry has been accessible to the public since proclamation of the *Species at Risk Act* (SARA). The website gives users easy access to documents and information related to SARA at any time and location with Internet access. It can be found at www.registrelep-sararegistry.gc.ca.

Schedule 1: A schedule of SARA, also known as the List of Wildlife Species at Risk, which presents the list of species protected under SARA.

Up-listing: A revision of the status of a species on Schedule 1 to a status of higher risk. A revision of the status of a Schedule 1 species to a lower risk status would be down-listing.

Wildlife Management Board: Established under the land claims agreements in northern Quebec, Newfoundland and Labrador, Yukon, Northwest Territories, British Columbia, and Nunavut, Wildlife Management Boards are the “main instruments of wildlife management” within their settlement areas. In this role, Wildlife Management Boards not only establish, modify and remove levels of total allowable harvest of a variety of wildlife species, but also participate in research activities, including annual harvest studies, and approve the designation of species at risk in their settlement areas.

Wildlife species: Under SARA, a species, subspecies, variety, or geographically or genetically distinct population of animal, plant or other organism, other than a bacterium or virus. To be eligible for inclusion under SARA, a wildlife species must be wild by nature and native to Canada. Non-native species that have been here for 50 years or more can be considered eligible if they came without human intervention.



Caribou (Barren-ground population)

Photo: © Anne Gunn



Scientific name
Rangifer tarandus

Taxon
Mammals

COSEWIC Status
Threatened

Canadian range
Yukon, Northwest Territories, Nunavut, Alberta,
Saskatchewan, Manitoba

Reason for Designation

Members of this population give birth on the open arctic tundra, and most subpopulations (herds) winter in vast subarctic forests. Well-known for its large aggregations, lengthy migrations, and significant cultural and social value to northern Aboriginal Peoples and other Canadians, its 14-15 subpopulations range from northeastern Alaska to western Hudson Bay and Baffin Island. Numbering more than 2 million individuals in the early 1990s, the current population is estimated at about 800,000. Most subpopulations have declined dramatically, but two are increasing, including the Porcupine Caribou Herd. For 70% of the population with sufficient data to quantify trends, the decline is estimated at 56% over the past three generations (since 1989), with several of the largest herds having declined by >80% from peak numbers. Available survey data for an additional 25% of the total population also indicate

declines. Evidence from both local Aboriginal people and scientific studies suggests that most herds have undergone natural fluctuations in numbers in the past; however, available demographic data indicate no sign of rapid recovery at this time and cumulative threats are without historical precedent. Status meets criteria for Endangered because of a reduction in numbers of $\geq 50\%$, but Threatened is recommended because, overall, this population does not appear to be facing imminent extinction at this time. Despite worrisome declines across most of the range, the current numerical abundance of the Porcupine Caribou Herd and the initiation of numerous management actions by governments, wildlife management boards, and communities support Threatened as a more appropriate conservation status. The status of these subpopulations will have to be carefully monitored and may warrant re-assessment within five years.

Wildlife Species Description and Significance

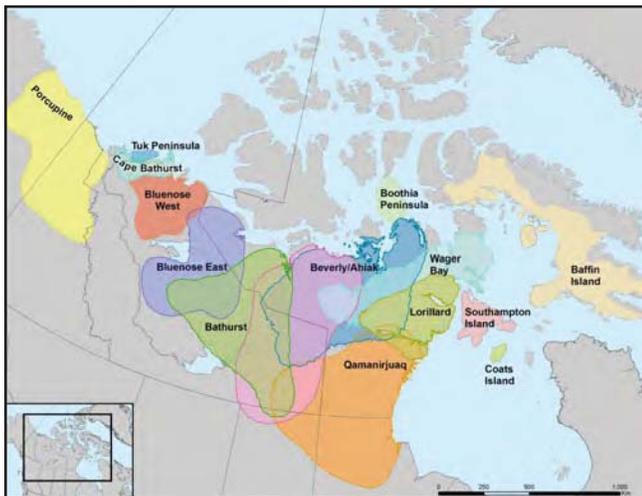
All the world's caribou and reindeer belong to a single cervid species, *Rangifer tarandus*, and are found in arctic and subarctic regions as well as in northern forests. Barren-ground Caribou are characterized by long migrations and highly gregarious behaviour, often travelling in groups of hundreds or thousands. As a relatively large herbivore with an extensive distribution and high numbers, Barren-ground Caribou is a keystone species, playing a key ecological and cultural role in northern ecosystems.

The significance of Barren-ground Caribou to the peopling of northern Canada is evident from archaeological findings tracking the distribution of people and Barren-ground Caribou relative to the retreating glaciers some 8,000 years ago in the central barrens and as long as 12-15,000 years ago in the central range of the Porcupine subpopulation. Barren-ground Caribou have been and continue to be a key resource for people in northern Canada; in some cases these animals have such importance that families would follow their migration. They have significant direct economic value from harvest, primarily for subsistence use. They also contribute to the northern economy through wildlife tourism and recreational hunting; beyond this, they have incalculable cultural value for people throughout the subpopulation ranges.

Distribution

The global range of Barren-ground Caribou extends from Alaska to western Greenland, and is continuous across northern continental mainland Canada, from northwestern Yukon to Baffin Island. The northern extent is the Arctic mainland coast; the southern extent is northern Saskatchewan, Alberta and Manitoba. Sampling efforts and methods have varied among subpopulations, leading to differences in interpreting subpopulation structure; 14-15 are recognized in this report. Some are combined for the purposes of generating population abundance and trend estimates, for a total of 13 units. Ten subpopulations have been consistently identified for the past several decades, mainly through fidelity to calving areas.

Fluctuating abundance of individual subpopulations affects distribution; as Barren-ground Caribou decline in abundance their distribution (especially during winter) changes, reducing the length of fall and pre-calving migration. Mainland subpopulations of Barren-ground Caribou generally migrate toward the Arctic coast to calve, and occur during summer and fall on the tundra of the Southern Arctic ecozone. Western and central mainland subpopulations usually winter in the boreal forests of the Taiga Cordillera, Taiga Plains or Taiga Shield ecozones.



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Habitat

Habitat requirements are partly driven by the need for forage, which depends on the timing of the caribou's annual breeding cycle and its nutritional costs relative to the brief plant growing season and long winters of the sub-arctic and arctic regions. Caribou are generalist foragers, especially in summer, and select among grasses, sedges, shrubs and forbs for nutrient content according to the stage of plant growth rather than plant species. Barren-ground Caribou require large annual ranges (several hundred thousand square kilometres in size) to enable selection of alternative habitats in response to annual variations in the environment, such as snow cover, plant growth, and/or predation or parasite risk. Habitat attributes that are important for calving include those that reduce predation risk and maximize nutrition intake; these vary among calving grounds. Forage requirements depend on the timing of the annual breeding cycle relative to the brief plant growing season and long winter that is characteristic of the sub-arctic and arctic regions. On summer ranges, caribou seek habitats that reduce exposure to insect harassment, while obtaining high-quality forage. While most subpopulations winter in the boreal forest, several remain in tundra habitats at that time.

Within the previous three generations, there has been some reduction in habitat as a consequence of the natural fragmentation of the winter ranges caused by forest fires and increasing human presence (i.e., infrastructure) on the caribou ranges. However, habitat outside the forested winter range is still largely intact at the landscape scale. The generally increasing trends in human population will increase economic development (industrial development, roads and traffic) within Barren-ground Caribou ranges in the future.

Biology

Caribou usually first calve at three years of age, although they can calve at two years when conditions are favourable. Females give birth to a single calf and may breed every year, although if nutritionally stressed they do not conceive every year. Calving is highly synchronized, generally occurring over a 2-week period in June. The breeding system is polygynous. Annual migrations and gregarious behaviour are the most conspicuous characteristics of most Barren-ground Caribou subpopulations. They are adapted to a long winter season when

cold temperatures, wind chill and snow impose high energetic costs. Those costs are met through reducing their maintenance energy requirements and mobilizing fat and protein reserves.

Predation is an important factor affecting many facets of caribou ecology, as caribou movements and habitat choices are often made to minimize exposure to predators. An array of predators and scavengers depend on Barren-ground Caribou: Grizzly Bears (*Ursus arctos*) are effective predators on newborn calves, while Gray Wolves (*Canis lupus*, hereafter referred as Wolves) are predators of all sex and age classes throughout the year. Pathogens (including viruses, bacteria, helminths and protozoa) together with insects, play an important role in caribou ecology with effects ranging from subtle effects on reproduction through to clinical disease and death.

Population Sizes and Trends

The current population of Barren-ground Caribou is estimated at about 800,000 individuals. Between 1986 and mid-1990s, the overall trend was an increase to > two million, followed by a decline, which has persisted through today. Of 13 subpopulation units used to derive abundance estimates, eight are declining, two are increasing, and three are unknown. The median three-generation percentage decline in the total number of Barren-ground Caribou was 56.8% (range = -50.8 – -59.0%), based on the summed population change for seven subpopulations with sufficient survey data, which comprise almost 70% of the total current population. Four of these seven subpopulations declined by >80% during this period, one had a median decline of -39%, characterized by marked variability, whereas the remaining two increased. Available survey data for three additional subpopulations, representing about 25% of the total population, also suggest declines; the current trajectories of another three subpopulations are unknown, due to lack of recent surveys.

Evidence from ATK and scientific study suggests that Barren-ground Caribou subpopulations undergo periods of high and low numbers (fluctuations) that might resemble population cycles. The evidence is, however, insufficient to consistently infer a naturally occurring cyclic increase across the full range of subpopulations. Available demographic data, cumulative changes to the environment, habitats, and harvest regimes for many of these subpopulations are without historical precedent, such that it would

be risky to assume there will be a naturally occurring recovery, at least to numbers recorded in the 1990s, for many of the subpopulations.

Threats and Limiting Factors

Climate and weather influence other limiting factors important for Barren-ground Caribou, including forage availability, predation, parasites and diseases – in complex non-linear and cascading ways. So many aspects of caribou ecology are affected by weather that a warmer climate could have a significant but complicated suite of positive and negative effects.

Industrial exploration and development in Barren-ground Caribou ranges has increased over the past several decades, such that there are several new mines and hundreds of prospecting permits, mineral claims and mineral leases on several subpopulation ranges. Subsistence and sport harvest can be significant causes of mortality that can increase the rate of decline and lead to a lower population size after populations have been reduced for other reasons. Chemical contaminant levels in tissues are generally low at present. The changing conditions on the caribou ranges also include the administrative and political complexity of a mix of settled and unsettled land claims, with changes in jurisdictional boundaries and mandates. The implementation of management actions is challenged by the inter-jurisdictional complexity between political, land management and wildlife management agencies, combined with the migratory nature of caribou and their use of extensive seasonal ranges.

Protection, Status, and Ranks

Protection of Barren-ground Caribou subpopulations by territorial and provincial jurisdictions is through harvest regulation and habitat protection. The co-management regime is a shared management responsibility among governments and bodies established through land claim legislation and through renewable multi-jurisdictional agreements among public governments (for the Porcupine, Beverly and Qamanirjuaq subpopulations). The Porcupine Caribou subpopulation is the only subpopulation of Barren-ground Caribou covered by an international agreement signed between Canada and the United States in 1987. The Barren-ground Caribou designatable unit (DU) was assessed for the first time by COSEWIC as Threatened in November 2016. It is currently not scheduled under the federal Species at Risk Act (SARA). The 2015 national general

status for Caribou in Canada will not be available until the 2015 General Status Report is published August 2017. This Canada-wide rank will apply to all DUs of Caribou combined, with nothing specific to Barren-ground Caribou. The 2015 territorial rank for Yukon for Barren-ground Caribou is Vulnerable to Apparently Secure, and for Northwest Territories is Sensitive. At present, there is no specific rank for Barren-ground Caribou for Nunavut; however, for all DUs combined, the territory-specific general status rank for Caribou in Nunavut is Apparently Secure. Federal protected areas that exclude industrial land uses but allow continued subsistence hunting cover about 6% of Barren-ground Caribou ranges, including eight national parks.

Source: Status Assessment and
Special Report on the Caribou
Population in the Arctic
Territories

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Community meeting presentation. A version of this presentation or the presentation sent in the initial consultation package (previous section) was used in the community meetings. Presentation varied somewhat from community to community as it was updated to improve clarity and to highlight local information.