



DETAILED INSTRUCTIONS FOR PREPARATION OF A SARC STATUS REPORT: TRADITIONAL AND COMMUNITY KNOWLEDGE COMPONENT¹

This document is intended for preparers of species status report components for the NWT Species at Risk Committee (SARC). It should be used together with the ‘*SARC General Guidelines for Species Status Reports*’, a separate document that gives other important guidance on the preparation, review and use of status reports.

Each status report is prepared in two parts: a ‘Traditional and Community Knowledge Component’ and a ‘Scientific Knowledge Component’. This document gives detailed instructions for preparing the Traditional and Community Knowledge (TK/CK) Component. A complete status report includes both components presented together, unless one component is deemed by SARC to be not relevant for the species in question. An overall executive summary and an overall technical summary will include information from both components.

Protocols

Preparers should refer to the *GNWT Traditional Knowledge Best Practices Summary*² for general guidance on applying Aboriginal traditional knowledge in status reports. In certain regions and communities of the NWT, specific protocols and policies on traditional knowledge apply. The Secretariat will direct the preparer to these protocols/policies. Where such guidance is not established, the preparer will be asked to follow the *COSEWIC Traditional Knowledge Process and Protocols Guidelines* (to be provided by the Secretariat). It is the responsibility of the preparer and SARC (during draft reviews) to ensure that the appropriate protocols/policies are followed as much as possible.

¹ These guidelines were developed by SARC for use in the NWT. They are drawn heavily from the following sources:

Committee on the Status of Endangered Wildlife in Canada (COSEWIC). 2010. Instructions for the Preparation of COSEWIC Status Reports. Approved by COSEWIC in April 2010. Updated July 2010. Available at:

http://www.cosewic.gc.ca/pdf/Instructions_e.pdf

Newfoundland and Labrador Species Status Advisory Committee. 2009. Status Report Template. Appendix 2 in: Species Status Advisory Committee Annual Report 2008-2009. Available at:

http://www.env.gov.nl.ca/env/wildlife/endangeredspecies/ssac/ssac_annual_report2008_09.pdf

Alberta Conservation Association and Alberta Sustainable Resource Development. 2010. Alberta Wildlife Status Report Series – Schedule B: Guide to Writers. Unpublished guidelines.

² Government of the Northwest Territories. 2010. Summary of Best Practices for Applying Traditional Knowledge in Government of the Northwest Territories Programming and Services. Available at:

http://www.enr.gov.nt.ca/live/documents/content/TK_Best_Practices_Summary.pdf

Some traditional and community knowledge is considered confidential. Where knowledge holders, or the preparers *in consultation with SARC*, have indicated that information should not be made public, it is considered ‘sensitive information’. Sensitive information should not appear in the main body of the report. It must be placed in Appendix B. It should not be explicitly referenced in the status report. However, it should be generally referenced so that a reader of the report can understand its implications for status determination.

Headings should suit the knowledge contained within TK/CK sources about the animal or plant being considered, and a translation into plain English should be included after each heading used. Some headings are required to meet SARC’s needs in assessment – these headings have ‘(required)’ included after the heading in the list below. The required and suggested headings and subheadings for the Traditional and Community Knowledge Component include the following:

- Title page (required)
- Table of Contents (required)
- Executive Summary (required)
- Technical Summary (required)
- Traditional Knowledge/Cultural Preamble (required)
 - Regional / Cultural background
 - Spiritual / Cultural Importance
 - Source Summary and discussion of gaps and omissions
- Species Overview (required)
 - Names and Classification (What names are used for the animal or plant?) (required)
 - Description (What are they like; what do they look like?) (required)
 - Distribution (Where can we find them?) (required)
 - NWT Distribution
 - Search Effort (How do people know about them?)
 - Biology and Behaviour (required)
 - Habitat Requirements (What kind of land and food do they need to survive?)
 - Movements
 - Life Cycle and Reproduction
 - Physiology and Adaptability
 - Diet and Feeding Behaviour
 - Interactions
- State and Trends (required)
 - Population (required)
 - Abundance
 - Trends and Fluctuations (have numbers gone up and down in the past; are they going up or down now?)
 - Other
- Habitat (required)
 - Habitat Availability (How much land is occupied by the animal or plant?)
 - Habitat Fragmentation (How is the land available to the animal or plant being cut in pieces? Are the places they are found changing?)

Habitat Trends (How is the land and food important to the animal or plant changing?)

Distribution Trends (Are they found in fewer places than before?)

Threats and Limiting Factors (required)

Positive Influences (required)

Acknowledgements (required)

Authorities Contacted (required)

Information Sources (required)

Contributors to TK/CK referenced in this report (required)

Cited Sources (required)

Biography of preparer (required)

Appendix A: additional details (*only if needed*)

Appendix B: sensitive information (*only if needed*)

The following instructions give guidance on the types of information to be provided under each heading and subheading, to the extent possible. **Specific questions are provided to help the preparer understand the sort of information that is required by SARC. They are not intended as interview questions.** The preparer should review the best available traditional and community knowledge and summarize the points relevant for assessment, using the questions as a guide. It is recognized that there will not always be information available to answer every question. Where information is available, include both common as well as unusual and rare sightings or behaviours (define what constitutes unusual and rare). The report content and structure should allow for the broader perspectives and holistic information that is often included in TK/CK studies.

As noted above, some headings and subheadings are required. The six main topics required as headings (Distribution, Biology and Behaviour, Population, Habitat, Threats, Positive Influences) need to be covered for SARC's assessment process, although sub-headings under each of these topics will largely be determined by the information available. This will ensure coverage of the crucial topics relevant to decision-making by SARC. If information for some required subheadings is deficient or missing, this should be indicated under the appropriate heading; or alternatively, gaps in knowledge and uncertainty associated with the information and conclusions can be covered in the Preamble. New subheadings may be added as necessary, depending on the species and TK/CK information available. Within a section, the ordering of subheadings is flexible and can be changed.

In some cases information is relevant under more than one heading. In these cases it should be fully described and referenced only once, where most appropriate, but can be briefly referred to elsewhere where relevant.

Status report components may vary in length depending on the amount of information available. They should contain a summary of all relevant information but not all details of all information. The preparer's job is to pick out the relevant available material and succinctly summarize and synthesize it for SARC's use. Preparers should strive to be brief, but bullets and lists should be avoided. In all cases, cite references.

Title page (Required)

Each report should begin with a title page as follows:

DRAFT

SPECIES STATUS REPORT

(Traditional and Community Knowledge Component)

for

[Common Names list in as many languages as are applicable **]**

in the Northwest Territories

prepared for

Northwest Territories Species at Risk Committee

by

[Preparer Name]

[Preparer Address]

Submitted: [Date]

Table of Contents (Required)

Include a table of contents that can be automatically updated.

Executive Summary (Required)

Summarize in simple terms the relevant material contained in the body of the report. Include the main headings used in writing the report: Description, Distribution, Biology and Behaviour, Population, Habitat, Threats and Limiting Factors, and Positive Influences. Under each heading, give a brief summary of the key information and conclusions for that topic.

Do not include information that is not presented in the body of the report. Do not make reference to figures in the report, and do not include citations.

Use plain language. The Executive Summary is intended for the average NWT resident who does not have specialized knowledge of the species and is not a scientist.

Technical Summary (Required)

Questions in the Technical Summary were developed based on the criteria of the International Union for the Conservation of Nature and Natural Resources (IUCN). The IUCN criteria were derived from wide review and consultation with an aim to consistency across a range of species and places. They are a world accepted standard.

All sections of the Technical Summary must be completed. Yes/no answers are not sufficient; brief substantiation is required for each answer. Where the literature offers no information with which to answer a particular question, please indicate this. Complete the Technical Summary after you have finished the report. All information presented in the Technical Summary must be presented in the report. Use the format outlined below.

Population

Generation time (average age of parents in the population) (indicate years, months, days, etc.)	
Number of mature individuals in the NWT (or give a range of estimates).	
Amount of change in numbers in the recent past.	
Amount of change in numbers predicted in the near future.	
Amount of change happening now.	
If there is a decline, is the decline likely to continue if nothing is done?	
If there is a decline, are the causes of the decline reversible?	
If there is a decline, are the causes of the decline clearly understood?	

If there is a decline, have the causes of the decline been removed?	
If there are fluctuations or declines, are they within, or outside of, natural cycles?	
Are there 'extreme fluctuations' (ups and downs) in the number of mature individuals?	

Distribution

Where is the species found in the NWT?	
How much of its range is suitable habitat?	
How many populations are there? To what degree would the different populations be likely to be impacted by a single threat?	
Is the distribution, habitat or habitat quality showing a decline that is likely to continue if nothing is done?	
Is the number of populations or amount of occupied area showing a decline that is likely to continue if nothing is done?	
Are there 'extreme fluctuations' (ups and downs) in the range or the number of populations?	
Is the NWT population 'severely fragmented' (most individuals found within small and isolated populations)?	

Immigration from populations elsewhere

Does the species exist elsewhere?	
Status of the outside population(s).	
Is immigration known or possible?	
Would immigrants be adapted to survive and reproduce in the NWT?	
Is there enough good habitat for immigrants in the NWT?	
Is the NWT population self-sustaining or does it depend on immigration for long-term survival?	

Threats and Limiting Factors

Briefly summarize the threats and limiting factors. For each one, indicate how imminent it is and what the degree/scale of the impact is.	
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Positive Influences

Briefly summarize the positive influences. For each one, indicate how imminent it is and what	
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the degree/scale of the impact is.	
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Traditional Knowledge/Cultural Preamble (Required)

Regional / Cultural Background

Include a brief description of each NWT region where the species occurs: basic social and cultural/language information, with a focus on the traditional economic or cultural activities that support the production and maintenance of traditional and community knowledge. Reference how and to what extent the communities use the species in question, especially in relation to changing harvest patterns over recent generations. Briefly describe the relationship between knowledge holders and the plant/animal to demonstrate how they understand the species within their culture and worldview.

Spiritual / Cultural Importance

Describe, if appropriate, the culturally appropriate ways to discuss the animal (for example, through story-telling). If stories and legends are recorded and available, include reference to them but do not include the stories. If relevant (for example, if the stories shed light on long-term population trends or animal behaviour), include in Appendix A or B, as appropriate.

Include a description of the cultural or social importance of the species to the holders of TK/CK. If known, indicate spiritual significance. Describe medicinal use, including reference to how it may relate to the species' biology or harvest. Include brief mention of traditional use for food or in clothing, crafts, tools, and other uses.

Source Summary and discussion of gaps and omissions

Identify and describe TK/CK sources used, including the following types of information about each source to assist the reader to interpret the information provided: level of peer review with knowledge-holders, adherence to social science standards and/or rigorous TK methodology in gathering the information, whether information gathering was purposeful or incidental, whether the information would be considered current or not, etc.

Describe gaps in TK/CK sources. In particular, describe regional differences in gaps that relate to a lack of recorded TK/CK rather than a lack of knowledge about or presence of the species.

Describe areas of overlap between TK, CK, and scientific knowledge in sources used, and clarify whether or not overlap information was included in the report. Overlap information may include, for example, observations where it is unclear if the source was TK/CK or possibly a narrative observation from a scientist.

SPECIES OVERVIEW (REQUIRED)

Names and Classification (required)

List the common and local names for this species. Refine according to the level of distinct population used, if required. Also, if necessary, describe local conceptions of populations, sub-populations or distinct groups (i.e., describe any relevant local taxonomic classifications for the species).

SARC will work with the preparer to provide names and current spellings in Aboriginal languages from the appropriate regions of the NWT, where available, as well as English and French.

Description (required)

Describe the species, in a way that presents a good understanding of the animal from the perspective of the knowledge holders. This may include, for example, what they look like, how males and females differ, sub-population differences or morphological differences within a population (e.g., known areas with different-looking individuals), distinctive movements, intelligence, sounds, behavioural characteristics, and other interesting facts.

A photograph may be included here. The Secretariat can help with obtaining photographs. If deemed to be useful, a more detailed description, including photographs, may be included in Biology and Behaviour or placed in Appendix A.

Distribution (Required)

Note: This section deals only with geographic ranges, locations and populations, and the numbers or extent of these things. Information relating to population sizes and trends does not belong in this section.

Note: Preparers are not required to provide maps for this component. However, if appropriate maps based on traditional and/or community knowledge are available, they may be included. Include specific caveats about maps in the preamble, if appropriate.

NWT Distribution

Describe the distribution of the species in the NWT, using these questions as a guide:

- Where is the species found in the NWT?
- What is its usual range in the NWT?
- Are there places in the NWT where the species is occasionally found but not usually found?
- If possible, describe whether the species found in a continuous distribution, or whether they are mostly found in populations that are isolated from each other? Are there any populations that are really isolated from the rest?
- Are there distinct populations? If so, how many?

If the species is migratory, distinguish between seasonal ranges if possible.

If the distribution has changed, distinguish between current and historic ranges, if possible.

If the species range has been mapped using traditional or community knowledge, include the map(s), if possible.

Refer only to the species, subspecies or distinct population being reported upon, unless there is some specific reason for doing otherwise.

In all cases, give the source of the information.

For species for which the distribution is best represented by individual site records, a table with details of each record should be included in Appendix A.

Sensitive information (e.g., the precise location of populations) should be placed in Appendix B and referenced in the body of the report.

Search Effort

Describe the state of knowledge about the species' distribution in the NWT. Build on the cultural/regional information introduced above in the TK/CK preamble to indicate how knowledge-holders have gained their information and how comprehensive this information is.

Use these questions as a guide:

- Is the species' distribution in the NWT well known?
- Where do people tend to encounter the species? (e.g., close to communities or only a long distance away?) Has that changed over time?
- How do they encounter the species? (e.g., is the species a target of specific hunting/fishing/gathering trips to certain locations? Is it only encountered opportunistically? Is it baited or otherwise attracted to specific locations?)
- Which areas do people use the most, and know the most about?
- Which areas are not so well known?
- Have these practices or areas changed in recent generations? How? And how does this influence knowledge of the species?
- When was the last time the species was seen in a particular area?

If possible, include maps of harvest records in Appendix B.

Biology and Behaviour (Required)

Under the following sub-headings, briefly outline aspects of the biology of this species in the NWT that could make it susceptible, or that help the reader to assess the level of risk. If appropriate, more detailed information may be placed in Appendix A.

Do not repeat information found under another heading.

Habitat requirements

Briefly describe the habitat(s) that the species uses in the NWT using these questions as a guide:

- What sort(s) of habitat does the species need?
- Are there certain things in the habitat that are important for the species?

Consider things like landscape, plants, food, soils, climate and water quality.

Consider habitat at a large scale, as well as at a small scale (especially for small species).

If the species is migratory, describe the habitat requirements in the different seasonal ranges if possible.

The Secretariat will provide photo(s) of the habitat(s) if appropriate. Photos of the species in its habitat are best.

Movements

Discuss the dispersal, daily movement patterns, and migration of this species in the NWT using the following questions as a guide:

- How does the species disperse from one place to another? (e.g., water currents, carried by birds, walking, intentionally moved by humans)
- How far does the species disperse?
- Are there certain stages of the life cycle that disperse?
- Are there any barriers to dispersal or in the migration routes?
- Does the species make annual or seasonal movements?
- Is the species faithful to a certain area over a long period of time?
- Does the species concentrate in certain areas (e.g., rutting areas, molting areas)?
- Are there daily movement patterns (e.g., roosting, bedding or sleeping areas)?
- Is the species capable of moving over long distances?
- Is the species known to move over long distances?

Include observations on distances the animal may travel.

Life Cycle and Reproduction

Discuss the life cycle and reproduction of this species in the NWT using the following questions as a guide:

- What are the different life cycle stages and/or age classes ?
- What is the development time and feeding strategy of each stage or age?
- What is the reproductive strategy? (e.g., live birth vs. hatching from eggs)
- What are the breeding habits and breeding requirements? (e.g., solitary breeder vs. colonial breeder; requires courtship ground)
- What is the age at which individuals reproduce for the first time (sexual maturity)?
- How big are they when they first breed?
- How long do individuals live?
- What is the ratio of males to females? What are the ratios of different age groups in the population?

- Do any of these stages have a particular role in the population (for example, large bulls or old cows leading herds/groups)?
- What factors can influence reproduction? (e.g., availability of feed, presence of disturbances, levels of body fat, etc.)
- What factors influence survivorship of young in particular? What factors affect survivorship of other life stages?

Include observations on breeding, mate selection, rearing practices.

Physiology and Adaptability

Discuss the physiology and adaptability of this species in the NWT using the following questions as a guide:

- Are there conditions or events that the species cannot tolerate (e.g., weather-related unusual events like heat, cold, flooding, freezing rain, etc.)?
- Does the species have any traits or behaviours that help it adapt to changes and/or unfavourable/extreme conditions (e.g., hibernation, forming spores, regulating body temperature, etc.)?
- Is the species particularly susceptible to changes and/or extreme conditions?
- Is the species territorial?
- What indicators are used to describe if an animal is healthy or not?

Diet and Feeding Behaviour

Discuss the diet and feeding behaviour of the species, using the following questions as a guide:

- What does the species eat?
- Does it require a specific food? If yes, does it require this specific food at any particular time in its lifecycle? Does this change at different life cycle stages? How is this food important to growth and reproduction?
- What influences its ability to find food or the availability of food?
- Does feeding change by season? What can make it differ from year to year?

Interactions

Discuss the interactions with other species, and with others of the same species, in the NWT, using the following questions as a guide:

- Does it rely on other species for its survival? How? (e.g., a parasite that requires a host; a plant that grows better in the presence of a certain fungus)
- Does it interact with other species that affect its survival or reproductive success? How? (e.g., a predator that eats it; a disease that shortens its life span)
- What are the main predators?
- Is it harvested? To what degree?
- Does it compete with others for resources? (e.g., food, space, shelter, mates)
- Are the negative interactions (e.g., predation, disease, competition, etc.) natural or unnatural?
- Do they live in colonies or groups? How is the group important to survival or reproduction?
- How do these interactions influence survival?

If necessary, this subsection may be organized using sub-subheadings such as ‘Interactions with harvesters’, ‘Interactions with predators’, ‘Interactions with competitors’, ‘Parasites and diseases’, etc.

Note: This section should be used to describe the interactions and give the reader a good idea of their importance to the species’ survival or mortality. Information on how these factors are changing or have contributed to declines (e.g., abundance and trends in the number of predators; increasing competition; decreasing supply of specific food plant) should usually go under ‘Threats and Limiting Factors’ instead of this section.

STATE AND TRENDS (REQUIRED)

Population (Required)

Abundance

Discuss the relative and/or qualitative abundance of this species in the NWT, as understood by knowledge holders, using the following question as a guide:

- If the species is divided into different populations in the NWT, what is the relative abundance of these populations?

If good estimates are not available, try to give a range as an estimate (e.g., a few hundred, tens of thousands or hundreds of thousands).

Trends and Fluctuations

Discuss year-to-year changes in numbers and density for the species in the NWT using these questions as a guide:

- Have the numbers of this species in the NWT gone up, gone down, or stayed the same?
- Do the numbers change in multi-year cycles?
- Are there ‘extreme’ fluctuations (ups and downs that are frequent, rapid, and usually more than tenfold)?
- How big are the changes?
- Are the changes part of a natural cycle? What is the approximate timespan of natural cycles?
- What are the causes of the changes?
- When did the changes happen? Are they happening now? Are they expected to happen in the future?
- Is the trend likely to continue if nothing is done?
- What factors could influence changes in the numbers and/or density?
- Have any populations disappeared?
- Have any new populations appeared or been discovered?
- Are there changes in numbers and/or density within a certain population?
- Is the species rare? If so, has it always been this way? Why?

Consider both short-term and long-term changes.

Changes that happened over the last 10 years, or that are expected over the next 10 years, are very useful for assessment. If three generations of the species takes longer than 10 years, this number should be used instead.

Population Dynamics

Discuss the population dynamics of this species in the NWT using the following questions as a guide:

- Does the species have more than one young at a time?
- How many young survive the first year?
- Roughly how many deaths occur each year? (e.g., just a few, lots, etc.) Is it the same every year? Is it mostly young, adults, the old and weak, or a combination? Are there certain times of the year when deaths occur?
- Do you see animals move into or out of the area from other areas (immigration, emigration)? What is the magnitude and/or proportion of these movements? Which individuals does this tend to be? (e.g., young males).
- Have there been changes or trends in age or life stages (e.g., fewer calves compared to the past; or animals not living as long as they used to)?

Other

Discuss any other changes observed in the species in the NWT using these questions as a guide:

- Have there been changes or trends in body size or antler size (e.g., individuals generally smaller than they used to be, seeing fewer large antlered individuals, etc.)?
- Have there been changes or trends in body condition (e.g., less fat or more signs of disease)?
- Has the body size for the species changed, and if so, how?
- Do you see more older animals or more younger animals now, or is it the same as before?
- Has the health of the species changed, and if so, how?
- Has the appearance or behaviour of the species changed, and if so, how?

Habitat (Required)

Habitat Availability

Discuss the available habitat in the NWT using the following question as a guide:

- Are there key habitat areas in the NWT that are known to be important for the survival of the species? If so, briefly describe these and include a map if possible.

Habitat Fragmentation

Discuss habitat fragmentation (natural processes or human activities that break up one patch of habitat into several smaller patches; isolation of patches of habitat from each other) in the NWT using these questions as a guide:

- Is the habitat for this species fragmented?
- Is the fragmentation natural, or is it caused by people?
- How does the fragmentation affect the species? Do individuals tend to leave once an area is fragmented? Do they ever move back? Do other species move into the area? Do other species that move into the area prevent the species from coming back?

- How well can this species move from one good habitat patch to another, if the habitat in between is not good?

Habitat Trends

Discuss the trends in suitable habitat using these questions as a guide:

- Has the amount of suitable habitat changed? Is there more, less, or is it about the same?
- Has the quality of suitable habitat changed? Is it better, worse, or about the same?
- What are the causes of these changes?
- How big are the changes?
- When did the changes happen? Are they happening now?
- Does the habitat change from year to year? Does it change in multi-year cycles?
- Did the species decline or disappear from the NWT because conditions were not favourable?

Consider both short-term and long-term changes.

Distribution Trends

Describe changes in the NWT distribution of the species over time. This section should focus on changes in the range, not population trends in different parts of the range. Use these questions as a guide:

- Has the species distribution in the NWT changed? If so, how?
- Does the distribution change from year to year? Does it change in multi-year cycles?
- How big are the changes?
- What are the causes of the changes?
- When did the changes happen? Are they happening now?
- Have any populations disappeared?
- Have any new populations appeared?
- What factors could influence changes in the distribution?

Threats and Limiting Factors (Required)

Outline existing and potential threats and limiting factors affecting the species and its habitat in the NWT, and explain what impact they are likely to have. Briefly indicate degree (magnitude) and immediacy (imminence) of threats. Use appropriate subheadings and address threats in a logical order (e.g., from most important in NWT to least important in NWT).

Use these questions as a guide:

- What are the threats and/or limiting factors to the species in the NWT? Are these threats past or current?
- What are the potential future threats and/or limiting factors to the species in the NWT?
- What are the threats and/or limiting factors to its habitat in the NWT? Are these threats past or current?
- What are the potential future threats and/or limiting factors to its habitat in the NWT?

- Are there different threats and/or limiting factors in different parts of the species' range and life cycle? If the species is migratory, try to distinguish between factors in different seasonal ranges.
- Are any of these threats cumulative (i.e., do they act together to result in more pronounced effects than expected)?

What should be included:

- Be as specific as possible about each of the factors.
- Where there is uncertainty or disagreement, present the uncertainty and discuss it.
- Any observations regarding cumulative effects that may result in adverse effects to the species or its habitat.
- Focus on actual or imminent factors that can result in harm.
- If the threat is imminent but the potential harm is unclear, discuss it but explain the uncertainties.
- Photos demonstrating the impact of threats can be useful, if available.

What should not be included:

- Avoid general statements.
- If the threat is not imminent, but would likely cause harm if it occurred, it should not be included as a *primary* threat.
- If the threat is not imminent, and may or may not cause harm if it occurred, it should not be included.
- If the threat is not clearly related to the species or its habitat, it should not be included.
- Natural mortality should not be included, unless particular circumstances have caused a recent change.

Examples of threats and limiting factors to consider:

- Food limitation;
- Loss of habitat;
- Reduction in quality of habitat;
- Invasive species;
- Hybridization;
- Competition, predators or disease.

Include harvesting only if it is clearly identified as a threat by knowledge holders. Consider traits that make the species particularly sensitive to disturbance.

Note: some information on threats will have already been addressed in previous sections of the report (e.g., *Interactions*, *Habitat Trends*). The earlier sections can provide the background needed to understand how the threat works and how it affects the species. Then in the *Threats and Limiting Factors* section, focus on how important the threat is (magnitude, immediacy), what the current state of affairs is (e.g., how many predators are there?), and how it may be changing (e.g., proposed industrial development projects).

Positive Influences

Outline existing and potential positive influences on the species and its habitat in the NWT, and explain what impact they are likely to have. Briefly indicate degree (magnitude) and immediacy (imminence) of positive influences. Address positive influences in a logical order (e.g., from most important in NWT to least important in NWT). Include only positive influences that are discussed by knowledge holders.

This section should focus on positive influences that are actual (already happening) or imminent (will happen soon). Management recommendations and suggestions should not be included, as they are not relevant for determining status unless there is an indication that they will be implemented.

Use these questions as a guide:

- What are the current positive influences on the species in the NWT?
- What are the potential future positive influences on the species in the NWT?
- What are the current positive influences on its habitat in the NWT?
- What are the potential future positive influences on its habitat in the NWT?
- Are there different positive influences in different parts of the species' range and life cycle? If the species is migratory, try to distinguish between factors in different seasonal ranges.

What should be included:

- Be as specific as possible about each of the factors.
- Where there is uncertainty or disagreement, present the uncertainty and discuss it.
- Focus on actual or imminent factors that can result in benefits.
- If the factor is imminent but the potential benefit is unclear, discuss it but explain the uncertainties.

What should not be included:

- The effects of management plans, community conservation plans, protected areas strategies, etc., should not be included unless mentioned by knowledge holders specifically as benefitting the species.
- If the factor is not imminent, but would likely have a benefit if it occurred, it should not be included as a primary positive influence.
- If the factor is not imminent, and may or may not result in benefits if it occurred, it should not be included.
- If the positive influence is not clearly related to the species or its habitat, it should not be included.
- Climate change should not be included, unless knowledge holders indicate the species would benefit from climate change.

Examples of positive influences to consider:

- Increase in food;
- Creation of habitat;
- Increase in quality of habitat;

- Protection of habitat;
- Removal of a disease or parasite;
- Reduced competition;
- TK/CK about management actions or species protection.

Consider traits that make the species recover quickly.

Some information on positive influences will have already been addressed in previous sections of the report (e.g., *Interactions*, *Habitat Trends*). The earlier sections can provide the background needed to understand how the positive influence works and how it affects the species. Then in the *Positive Influences* section, focus on how important the positive influence is (magnitude, immediacy), what the current state of affairs is (e.g., how much habitat is protected now) and how it may be changing (e.g., proposed new habitat protection).

Acknowledgements (Required)

Acknowledge individuals, authorities and agencies that provided assistance and/or funding, or otherwise contributed to the report. If the preparer deems that individuals that provided personal communications are worthy of acknowledging, do so here. However, their name(s) should also appear under Information Sources.

If this is an updated status report, acknowledge all report writers involved in the preparation of the original status report and any previous updated reports.

Authorities Contacted

Under a separate subheading, provide a list of authorities contacted together with title, affiliation, city, province/territory/state, and country if outside Canada. The list should include all of the Required Contacts for Information provided at the beginning of the project. However, if none of the attempts to contact were successful, the contact should not be included.

Example format:

Territorial government representatives

Marsha Branigan, Manager, Wildlife Management, Environment and Natural Resources -
Inuvik Region, Inuvik, NT.
Bonnie Fournier, Data Analyst, Environment and Natural Resources - Wildlife Division,
Yellowknife, NT.

Federal government representatives

Donna Mulders, Species at Risk Biologist, Environment Canada, Yellowknife, NT.
Ifan Thomas, Western Arctic Field Unit Superintendent, Parks Canada, Inuvik, NT.

Aboriginal organizations and wildlife management boards

Steven Baryluk, Joint Secretariat, Inuvialuit Game Council – Inuvialuit Renewable Resource
Committees, Inuvik, NT.

Bruce Hanbidge, Resource Biologist, Wildlife Management Advisory Council (NWT),
Inuvik, NT.

Other species experts

Debbie Jenkins, Qikiqtani Regional Biologist, Wildlife Research Section, Department of
Environment, Pond Inlet, NU.

Information Sources (Required)

Include lists of contributing knowledge holders where possible under sub-heading ‘Contributors to TK/CK referenced in this report’. Where relevant or as information is available, include name and community, and organize by published source citations.

List all literature and personal communications cited in the text, figures, tables and appendices under sub-heading ‘Cited sources’. Use the formatting and style described in the ‘*SARC General Guidelines for Species Status Reports*’.

Biography of Preparer (Required)

Briefly outline your background, using the third person (e.g. use ‘He is’, instead of ‘I am’). Stress the qualifications that make you a suitable writer for this report.

Appendix A. Additional Details

This appendix contains any extra details that are useful background support for the main report. Information should be organized under the same headings as the main report. The main report should contain ONLY information that is needed for doing the assessment. The main report should reference any entries included in Appendix A.

For species for which the distribution is best represented by individual site records, a table with details of each record should be included in this appendix. For each record, include (if possible):

- site name,
- date,
- location (if possible, use either lat-long or UTM, including projection, units of measure, zone and datum that the locations were collected in),
- number of individuals,
- estimate of population size and/or the amount of area occupied,
- observer,
- notes (e.g., habitat).

Where detailed information is available, and where practical, records should be listed by individual site. Otherwise, or in addition, the records may be compiled into one or more summarizing tables.

To convert locations from UTMs to latitude and longitude (or vice versa), go to: <http://www.uwgb.edu/dutchs/usefuldata/howuseexcel.htm>.

Appendix B. Sensitive Information

This appendix contains information that is necessary for assigning species status but that should not be released to the public. Information should be organized under the same headings as the main report.

Preparers should ensure that any detailed information that might put a species in danger (such as the precise locality of populations or their habitat) or that is considered confidential (such as specific details relating to Aboriginal traditional knowledge, where the knowledge holders have indicated that the details are confidential) does not appear in the main body of the report. Sensitive information should be placed in Appendix B. It should not be explicitly referenced in the body of the report; however, it should be generally referenced so that a reader of the report can understand its implications for status determination.

Appendix B will be provided to SARC so that a fully informed assessment can be done. Appendix B will not be made public and will not be distributed beyond SARC.

Appendix B should be prepared and submitted **as a separate document** to help maintain confidentiality.