



GENERAL GUIDELINES FOR SPECIES STATUS REPORTS¹

This document gives general guidelines for the preparation, review and use of SARC species status reports.

NWT Species at Risk Committee

The NWT Species at Risk Committee (SARC) was established under the *Species at Risk (NWT) Act*. It is an independent committee of experts responsible for assessing the biological status of species at risk in the NWT. SARC will use the assessments to make recommendations on the listing of species at risk.

Species status assessments will be done at the territorial level, and results may be different from assessments done at the national level. Assessments will be based on species status reports that include the best available Aboriginal traditional and community knowledge, and scientific knowledge of the species. SARC must use objective biological criteria in its assessments and does not consider socio-economic factors.

Status report required for assessment

Section 30 of the *Species at Risk (NWT) Act* covers species status reports.

SARC bases its status assessment primarily on a species status report. The status report must be approved by SARC before a species is assessed.

¹ These guidelines were developed by SARC for use in the NWT. They are drawn heavily from, and in some portions reproduced verbatim 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 Unpublished guidelines.

A species status report is a comprehensive report that compiles and analyzes the best available information on the biological status of a species in the NWT, as well as existing and potential threats and positive influences.

Two components of a status report

Each status report may be prepared in two parts: a ‘Traditional and Community Knowledge Component’ and/or a ‘Scientific Knowledge Component’. Detailed instructions for preparing each of these are given in two separate documents:

- *Detailed Instructions for Preparation of a SARC Status Report: Traditional and Community Knowledge Component*
- *Detailed Instructions for Preparation of a SARC Status Report: Scientific Knowledge Component*

A complete status report includes both components linked 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.

Preparation of a status report

SARC may arrange for the preparation of a species status report. Alternatively, if SARC considers that an existing report meets all or some of the requirements of a species status report, SARC may incorporate all or part of the existing report into the species status report.

Separate contracts for the ‘Traditional and Community Knowledge Component’ and the ‘Scientific Knowledge Component’ may be issued because of the different skill sets required.

Contracts are awarded to qualified people through the Government of the Northwest Territories (GNWT) ‘Request for Proposals’ process. Requests for Proposals are advertised on the GNWT contract registry². SARC may also send the Request for Proposals to selected organizations or individuals. A guide for proponents considering responding to a Request for Proposals is available on the GNWT’s Public Works and Services website³.

The funding for the preparation of status reports is provided by the Government of the Northwest Territories, through the Species at Risk Secretariat. The Secretariat manages the preparation, review, revision, and distribution of status reports, and administers the contracts. SARC oversees these processes.

The qualified people who write the status report components are called ‘preparers’. If a preparer is also a member or alternate member of the SARC, he/she will not be involved in decision-making during the assessment of that species. However, he/she may participate in the discussions about that species.

² <http://www.contractregistry.nt.ca>

³ http://www.pws.gov.nt.ca/pdf/publications/Proponents_Guide_October%202005.pdf

If a GNWT employee wishes to be involved in preparing a status report outside of working hours, he or she would first need to get permission from their Deputy Head as required in the GNWT Code of Conduct (sections 69-75).

Status report review and revisions

An effort will be made to keep the two components of the status report together throughout the review process. However, depending on timelines, it may sometimes be necessary to review each component separately. The review and revision process is as follows (a flow-chart is provided in Figure 1):

1. The Secretariat will review a draft of each component for completeness and adherence to guidelines
 - i. Preparers make changes
 - ii. Secretariat ensures that changes were made as appropriate
2. SARC and other knowledgeable persons identified by SARC will be asked to review the draft components for completeness and accuracy of the information in them
 - i. Preparers make changes
 - ii. Secretariat ensures that changes were made as appropriate
 - iii. Secretariat packages the two components together
3. The Management Authorities and relevant Aboriginal organizations will be asked to review the draft status report for completeness and accuracy of the information in it, as required under section 30(5) of the *Species at Risk (NWT) Act*
 - i. Secretariat makes changes
4. SARC will hold a conference call prior to the assessment meeting to approve the status report or to identify any final changes that are needed before approval
 - i. Secretariat makes changes (if any)
5. SARC approves species status report

After the species has been assessed, when SARC provides the assessment to the Conference of Management Authorities (CMA), the approved species status report will also be provided to the CMA and will be made public by posting on the NWT Species at Risk website⁴.

Agency / Timeline in Months	Year 1												Year 2												Year 3
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1
SARC	Initiate										Review 2nd draft												Indepth review/approval		
Secretariat	Prepare for contract						Review		Review/prepare			Review		Review/prepare								Prepare final draft		Revise if needed	
Preparer				Prepare 1st draft of report					2nd draft					3rd draft											
Management Authorities																									
First Nation Governments																									
Other Knowledgeable People											Review 2nd draft														

Figure 1. Review and revision process for species status reports.

⁴ www.nwt-speciesatrisk.ca

To ensure the usefulness of the reviews, it is essential that all drafts be of high quality and as complete, accurate and readable as possible. The executive summary and technical summary must be completed and included in all drafts. Spelling errors, incorrect formatting, missing references and unexplained missing information should be avoided, even in the first submitted draft.

Report ownership

It is essential that status reports and their component parts can be used, edited, reformatted, reproduced, modified, distributed, and shared, in whole or in part, by SARC without infringing on the rights of the preparer. Preparers will be required to waive moral rights and cede copyright to the GNWT on behalf of SARC.

The contract between the preparer and GNWT addresses this issue in Article 4.8:

“4.8 Title to any report, drawing, photograph, plan, specification, model, prototype, pattern, sample, design, logo, technical information, invention, method or process and all other property, work or materials which are produced by the Contractor in performing the contract or conceived, developed or first actually reduced to practice in performing the contract (herein called "the property") shall vest in the GNWT and the Contractor hereby absolutely assigns to the GNWT the copyright in the property for the whole of the term of the copyright.”

For greater certainty, all preparers will be expected to submit a signed statement indicating willingness to waive moral rights, and cede intellectual property to the GNWT on behalf of SARC. Any Intellectual Property belonging to the report writer or anyone else before the status report is undertaken would still belong to the original holder.

SARC is both the author and the publisher of approved species status reports and their component parts. The preparer(s) will be acknowledged in the final status reports, and the roles of other contributors will be recognized. Preparers may, however, opt out of acknowledgement of their role in the status report if they wish. In the case of updated status reports, all preparers involved in the preparation of the original status report on the species and any previous updated reports will also be acknowledged.

Unsolicited status reports

From time to time, a person may wish to submit a status report for a species that has not been solicited by SARC. If the species is not already on the assessment schedule, then the unsolicited report must be accompanied by an application to SARC to assess the species. The application must include reasons for requesting the assessment.

Before preparing an unsolicited status report, potential preparers are asked to contact the Secretariat. Potential preparers will be advised concerning eligibility for assessment, the estimation of threats to the species in question, the imminence of the threats, the species' current

standing on SARC's assessment schedule, valuable sources of information, and other advice concerning the preparation of a status report.

Preparers of unsolicited reports must follow the same guidelines as for a commissioned status report and are required to provide permission to publish, waive moral rights, and cede copyright. The report is subject to the same review process as for a commissioned status report. The preparer is expected to make editorial changes, add available information, and/or delete inapplicable sections of the report as specified by SARC. Failure to comply with such requests may result in a report being returned unreceived by SARC.

Required content of status reports

A status report must meet minimum standards of quality and completeness as outlined in this document. A status report must include:

1. The best available information, including Aboriginal traditional knowledge, community knowledge and scientific knowledge, on:
 - the biological status of the species in the NWT;
 - existing and potential threats to the species and its habitat; and
 - existing and potential positive influences on the species and its habitat.
2. Other required content as outlined under '*Detailed Instructions for Preparation of a SARC Status Report: Traditional and Community Knowledge Component*' and '*Detailed Instructions for Preparation of a SARC Status Report: Scientific Knowledge Component*'.
3. Results of reviews by the Management Authorities, relevant Aboriginal organizations and other knowledgeable people or bodies (as laid out in section 30(5)) that relate to the status of the species.
4. Any other information SARC considers relevant.

'Detailed Instructions for Preparation of a SARC Status Report: Traditional and Community Knowledge Component' and *'Detailed Instructions for Preparation of a SARC Status Report: Scientific Knowledge Component'* are provided as separate documents. Most of the required sections are the same in both components and have the same headings:

- Title page
- Table of Contents
- Executive Summary
- Technical Summary
- Traditional Knowledge/Cultural Preamble (Traditional and Community Knowledge component only)
 - Regional / Cultural Background
 - Spiritual / Cultural Importance
 - Source Summary and discussion of gaps and omissions
- Species Overview
 - Names and Classification
 - Description
 - Distribution

- World or Continental Distribution (Scientific Component only)
- NWT Distribution
- Location(s) (Scientific Component only)
- Search Effort
- Biology and Behaviour
 - Habitat Requirements
 - Movements
 - Life Cycle and Reproduction
 - Physiology and Adaptability
 - Diet and Feeding Behaviour (Traditional and Community Knowledge Component only)
 - Interactions
- State and Trends
 - Population
 - Abundance
 - Trends and Fluctuations
 - Population Dynamics (Scientific Knowledge Component only)
 - Possibility of Rescue (Scientific Knowledge Component only)
 - Other (Traditional and Community Knowledge Component only)
 - Habitat
 - Habitat Availability
 - Habitat Fragmentation
 - Habitat Trends
 - Distribution Trends
 - Threats and Limiting Factors
 - Positive Influences
- Acknowledgements
- Authorities Contacted
- Information Sources
 - Contributors to TK/CK referenced in this report (Traditional and Community Knowledge Component only)
 - Cited Sources
 - Collections examined (*only if needed*) (Scientific Knowledge Component only)
 - Biography of preparer
 - Appendix A: additional details (*only if needed*)
 - Appendix B: sensitive information (*only if needed*)

Throughout both status report components, it is important to identify gaps in knowledge and uncertainty associated with the information and conclusions. When reporting uncertainty quantitatively, specify what measure of variability is used (standard error, standard deviation, quartiles, etc.).

Inclusion of all headings and subheadings specified in the ‘*Detailed Instructions*’ is required (unless otherwise noted). This will ensure coverage of the crucial topics relevant to decision-making by SARC. If information for some subheadings is deficient, this should be indicated

under the appropriate heading. New subheadings may be added as necessary, depending on the species. 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.

The Secretariat will help the preparer with calculations, mapping and GIS tasks where needed.

Sensitive Information

Once approved by SARC, the final status report will become a public document. Preparers should ensure that any detailed information that might imperil a species (such as the precise locality of populations or their habitat) or that is considered confidential (such as specific details relating to Aboriginal traditional knowledge) does not appear in the main body of the status report. Sensitive information 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.

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

Although SARC's business is subject to the *Access to Information and Protection of Privacy Act*, under section 146 of the *Species at Risk (NWT) Act* the Minister of ENR may direct that information not be disclosed if disclosure of the information could be detrimental to the species. This exception also applies to traditional knowledge where a Management Authority requests that it not be disclosed.

Best Available Information

The status report should include the best available information, including scientific knowledge, community knowledge, and Aboriginal traditional knowledge.

SARC notes the GNWT policy definition for traditional knowledge: "*knowledge and values, which have been acquired through experience, observation, from the land or from spiritual teachings, and handed down from one generation to another*" (GNWT Traditional Knowledge Policy 53.03, March 2005). However, SARC has not adopted a working definition for traditional knowledge. SARC recognizes that traditional knowledge is based on the knowledge of the relationships between humans, wildlife, spirituality, environmental conditions, and land forms in a defined locality. It is a term often used to describe the complex and unique knowledge and knowledge systems held by Aboriginal peoples, is often ecosystem-based and does not have a

single species approach, and is long-term community-based knowledge that has been passed down orally from elders and resource users about species' biology.

'Best available information' means all existing information that is pertinent to assessing the status of a wildlife species and can be obtained from literature sources or from the holders of the information. This can include unpublished information and personal communications from knowledgeable people who are willing to share their information. Transcripts of public hearings, notes from formal or informal meetings, records of public engagement or consultation, and co-management planning documents are examples of knowledge sources that may be used in some cases. Information that is not in the literature, that is kept secret by its holders, or that cannot be located following a reasonably diligent search, cannot be included in reports.

SARC does not fund or carry out original research and does not pay people honoraria for providing the best available information. From time to time, if SARC deems that the best available information is not sufficient to do an assessment and that original research is needed, SARC can solicit the Management Authorities to collect more information on a species. The Management Authorities are not obligated to fulfil such a request. If the status report has fully investigated all the best available information and is complete, but there is not enough information to assess the species or assign status, the species would be assessed as 'Data Deficient'.

Management recommendations and suggestions are not usually relevant for determining status unless there is an indication that they will be implemented.

Contacts and sources of information

In addition to conducting a thorough review of the relevant literature, preparers must also use contacts and sources of information specified by SARC. SARC will provide a list of minimally required contacts and a list of required sources of information. The preparer may be asked to provide the Secretariat with a preliminary map of the species' NWT distribution that will be used to assess relevant contacts.

SARC will make the first contact with the required contacts by sending a letter that introduces the preparer and describes the project.

The preparer must make every reasonable effort to communicate with the required contacts about possible sources of the best available information, and to obtain and use all the relevant information sources that are identified. The preparer will be required to fill in a 'contract tracking sheet' and submit updated versions of this sheet with each draft of the report.

Preparers are encouraged to include information from other credible sources, including personal communications with knowledgeable local people and other experts. The preparer's own professional inferences are welcome.

Example of contact tracking sheet:

Name of Preparer:

Species:

Contact/Agency name	Person(s) contacted and date(s)	Outcome
<i>List of required contacts to be specified by SARC and Secretariat at the beginning of report preparation</i>		
...		
<i>List of other contacts made at the initiative of the Preparer</i>		
...		

Permissions and information sharing agreements

In certain cases it may be necessary to obtain permission to use an information source. This may include establishing an information sharing agreement. The preparer shall coordinate with the Secretariat to ensure that SARC, the preparer and the Secretariat are included in permissions and agreements, and to ensure that they include the necessary terms. The preparer will be required to provide a list of all sources for which permission was needed as well as copies of the permissions and agreements. See *Formatting and style – Figures* for more information on permissions.

Formatting and style

Status reports must be written in English. Use Canadian English, not American English. Do not use the first person, as the “author” of the report will eventually be SARC. Where technical terms are used, include brief explanations for these. Consider that the audience for these reports includes non-scientists.

Always italicize scientific names for species and the Latin term “*et al.*” Spell out all acronyms and abbreviations fully the first time they are used. For the Northwest Territories use the abbreviation ‘NWT’ in the text and NT under Information Sources. For other territories and provinces use the official abbreviation (e.g., NU, AB).

Use 12pt Times New Roman font throughout the report. Use 1.5 line spacing and include line numbers. Do not use any special formatting including Microsoft Word ‘styles’. The final draft can contain reference links or cross-referencing in the table of contents. If cross-referencing is used within the text, ensure that each instance is highlighted for easy identification by the Secretariat (given that the final report is moved into a designated template, broken links are common). Where the report refers to another section, the title of the section should be italicized . Example: ‘More details are included in *Threats and Limiting Factors*’.

Use metric units throughout, including on map scales. Include metric conversions in brackets when quoting a source that uses non-metric units.

All direct quotations should begin and end with quotation marks (“”). Direct quotations of less than three lines can be integrated into the paragraph. Direct quotations of three lines or longer should be separate paragraphs indented from the rest of the text.

Spell out numbers up to ten (e.g., ten); use digits for larger numbers (e.g., 11). All units of measurement using decimals should be spelled out in digits (e.g., 5.6). Likewise, all unit ranges should also be spelled out using digits (e.g., between 4 and 11, 4-11, etc.).

The Secretariat will assist with the preparation of distribution maps and the calculation of extent of occurrence and area of occupancy, when needed.

Preparers must submit all unpublished information (species observations / localities, search effort, in press/in prep. documents, meeting notes, personal communications, etc.) provided by themselves or obtained from third parties. Reasonable effort should be made to ensure that the data obtained from third parties can be transferred to SARC by obtaining proper permissions.

Report drafts should be submitted in Microsoft Word format. Figures and tables should be inserted throughout the report.

Figures and tables should also be provided separately along with the final draft. Tables should be submitted as separate electronic files, using the Table function in Word or a spreadsheet program such as Excel. Figures should be submitted separately as electronic files. Figures should use a compressed image format such as JPEG. Image resolution needs only to be good enough for use in a report (150 dpi or lower). Final versions of maps will be submitted in a JPEG format along with the species-specific ESRI Geographic Information System (GIS) projected feature files, and associated metadata, used to create the map.

Tables

Use tables to summarize large amounts of data. Tables must be created using the Table function in Word or in a spreadsheet program such as Excel. Do not insert tables as images. All tables should be numbered and referred to in the text of the report.

Figures

All figures, including photos of the species and its habitat, should be numbered and referred to in the text of the report. Ensure that figures photocopy well in black and white. Ensure that legends and symbols can be interpreted correctly when read in black and white. Ensure that symbols are large enough to be seen properly.

If a figure is taken from a published document or belongs to someone other than the preparer, it must be accompanied by a letter from the copyright holder indicating that rights have been obtained for its use. Record that permission in the figure caption (e.g. reproduced with permission). Obtain permission to use all photos, if necessary, and credit appropriately. The preparer is responsible for soliciting all such permissions.

Citing information sources

All information sources, including literature, personal communications, websites and unpublished data, should be cited.

- Cite multiple references chronologically in the text as follows: (Hanson *et al.* 1989; Briggins *et al.* 1995; Brownell, 1998; COSEWIC 2002) or (Licht 1971a,b; Scott 1986; Trites 1990, 2003; Hogarth 1993).
- Cite personal communications in the text as: (Smith pers. comm. 1999).
- Cite electronic sources in the text as: (Michigan DNR 1998).
- Cite unpublished data in the text as: (ENR unpubl. data 2011).
- Any specific statements or opinions that are attributed to elders, harvesters or other traditional or community knowledge holders, should be cited the same way that they are listed in the original report (e.g., Robert Alexie Sr. *in* Heine *et al.* 2000).
- For a direct quotation, cite author, year, colon, and page number(s); e.g., (Krebs 1989:216) or (John Doe *in* Simpson 2002:23-24).
- When possible, use primary literature. Reviews and compilations can be acceptable sources where they have synthesized or analyzed the information in a useful way. This applies in particular to traditional knowledge where primary information (e.g., interview transcripts) have been verified and summarized in a published document. In this case, it is not necessary to secure copies of the original transcripts. It is also not recommended that preparers call individuals for information as ‘traditional knowledge research’. Cite websites only when the information comes from a credible source and the information is not available in printed form.

All sources that are cited in the text (including publications, personal communications, databases, unpublished data and websites) should be listed under the heading ‘Information Sources’ using the following format:

- List references with a space between each, using hanging indents.
- For Web citations, record full document title, full URL, and “date last accessed:”.
- Alphabetize citations by authors’ name(s), regardless of the number of multiple authors for the same publication. Within alphabetical order the sequence is chronological (e.g., Benton 1980, Benton 1991, Benton and Madison 1979).
- Where there are multiple references by the same author(s) with the same publication date, arrange alphabetically by the title that follows the publication date. Lowercase letters (a, b, c, etc.) should be placed immediately after the publication date:
 - Baheti, J. R. (2001a). Control...
 - Baheti, J. R. (2001b). Roles of...
- Format citations as in the following example. **[Note that the text in bold illustrates the type of citation only and is not to be included in the bibliography]**

Example:

Berger, T. 1975. Transcripts of the Proceedings at the Community Hearing of the Mackenzie Valley Pipeline Inquiry before the Honourable Mr. Justice Berger, Commissioner. Trout Lake, NWT. August 23, 1975. Allwest Reporting Ltd., Vancouver, B.C. **[Transcripts]**

- Briggins, B.G., R.J. Neves, and C.K. Dohner. 1995. Draft strategy for the conservation of native freshwater mussels. Fish and Wildlife Service, Washington, D.C. 2 pp. **[Manuscript]**
- COSEWIC. 2002. COSEWIC assessment and status report on the margined streamside moss *Scouleria marginata* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa, ON. vi + 14 pp. **[Report - COSEWIC Living Document]**
- Environment Canada. 2010. Meeting notes from Boreal Woodland Caribou Recovery Planning Public Meetings in Gamètì. Prepared by Donna Mulders, Environment Canada, Yellowknife, NT. **[Meeting Notes]**
- Environment and Natural Resources, unpubl. data. 2011. Map of boreal caribou range. Unpublished data provided by R. Gau. July 2011. Government of the Northwest Territories, Yellowknife, NT. **[Unpublished Data]**
- Hanson, J.M., W.C. Mackay, and E.E. Prepas. 1989. Effect of size-selective predation by muskrats (*Ondatra zibethicus*) on a population of unionid clams (*Anodonta grandis simpsoniana*). *Journal of Animal Ecology* 58:15-28. **[Journal Article - multiple authors]**
- Hogarth, M.A. 1993. Glochidial functional morphology and rarity in the Unionidae. Pp. 76-80, in A.C. Buchanan and L.M. Koch (eds.). *Conservation and Management of Freshwater Mussels. Proceedings of the Upper Mississippi River Conservation Committee Symposium, St. Louis, Missouri. Illinois Natural History Survey, Champaign, IL.* **[Conference Proceedings]**
- Licht, L.E. 1971a. Breeding habitat and embryonic thermal requirements of the frogs, *Rana aurora aurora* and *Rana pretiosa pretiosa*, in the Pacific Northwest. *Ecology* 52(1):116-124. **[Journal Article – single author]**
- Licht, L.E. 1971b. The ecology of coexistence in two closely related species of frogs (*Rana*). Ph.D. dissertation, University of British Columbia, Vancouver, B.C., Canada. 155 pp. **[Thesis]**
- McKeague, J.A. (ed.). 1978. *Manual on Soil Sampling and Methods of Analysis*. 2nd edition. Canadian Society of Soil Science, Ottawa, ON. **[Edited Book]**
- Michigan DNR (Department of Natural Resources). 1998. Endangered Species Legislation, Michigan Department of Natural Resources. Web site: http://www.dnr.state.mi.us/wildlife/heritage/The_End/end-act.htm [accessed April 1999]. **[Electronic Source]**

Smith, J.D., pers. comm. 1999. Email correspondence to R. Boles. November 1999. Assessment Biologist, Ministry of Species at Risk, Government of Ontario, Toronto, ON. [**Personal Communication**]

Smith, R. L. 1974. Ecology and field biology. Second edition. Harper and Row, New York, NY. [**Book**]

Species at Risk (NWT) Act. 2009. S.N.W.T. 2009, c. 16. [**Law**]

Trites, A.W. 2003. Food webs in the ocean: who eats whom and how much? Pp. 125- 143. *in* M. Sinclair and G. Valdimarsson (eds.). Responsible Fisheries in the Marine Ecosystem, CABI Publishing, Wallingford, WA. [**Book Section or Chapter**]

Wildlife Act. 2010. Inuvialuit Settlement Region Sachs Harbour Hunters and Trappers Committee Regulations R-035-93, s 3(4). [**Regulations**]