

SSAC

Species Status Advisory Committee

Rattlesnakeroot



Mackenzie's Sweetvetch



Northern Bog Aster

Crowded Wormseed Mustard

Mountain Fern

Annual Report 2005-2006

SPECIES STATUS ADVISORY COMMITTEE 2005-2006

THE COMMITTEE

The Species Status Advisory Committee (SSAC) was established under the Endangered Species Act which was passed on December 13, 2001. Its role is to review and recommend to the minister designations and re-designations of species based on the best scientific knowledge available and on traditional and local ecological knowledge about the species.

MEMBERSHIP

The Act allows a committee of up to nine members. The committee consisted of seven members for most of 2005/06. During the 2005/06 year Dr. Clase's term expired and he did not seek reappointment. We thank him for his work and dedication to Newfoundland and Labrador's species at risk. Ms. Doucet subsequently was nominated to chair.

Dr. Howard J. Clase (Chair)	- General natural history, vascular plants and birds
Dr. Luise Hermanutz	- Plant ecology, conservation biology
Dr. William Montevecchi	- Birds
Ms. Christine Doucet (Chair)	- Terrestrial mammals
Ms. Nathalie Djan-Chékar	- Vascular and non-vascular plants
Dr. John E. Maunder	- General natural history, plants, invertebrates
Dr. Christine Campbell	- Aquatic invertebrates
Ms. Shelley Pardy-Moores	- Terrestrial invertebrates
Mr. Mac Pitcher	- Lichens

An additional member, with expertise in traditional knowledge, is currently being sought.

The secretariat is provided by the Wildlife Division in the person of:

Mr. Joe Brazil, Senior Manager
Biodiversity and Endangered Species Program, Wildlife Division
Department of Environment and Conservation
PO Box 2007, 117 Riverside Dr., Corner Brook, NL, A2H 7S1

Copies of the Annual Reports, Status reports and fact sheets for listed species can be found on the website at: http://www.env.gov.nl.ca/env/wildlife/wildlife_at_risk.htm

THE MINISTER

Responsibility for Species at Risk rests with the Department of Environment and Conservation. The committee met with Minister Osborne, the Deputy Minister, Ms. Brenda Caul, and the Assistant Deputy Minister, Mr. Robert Warren during the year. Issues discussed included listing of species, committee membership and financial challenges faced by the committee in pursuing its mandate. In March 2006, Clyde Jackman became the Minister of Environment and Conservation. The committee did not have an opportunity to meet with the new Minister in 2005/06.

MEETINGS

The committee met twice during the 2005/06 fiscal year: April 20th, 2005 and November 19th, 2005 in St. John's. Most of the discussion and decisions at the April 20th meeting involved the review of three status reports. Discussion and decisions at the November 20th meeting related to the determination of priority species for which status reports can be and should be prepared. Discussions also involved developing mechanisms to assess which species have sufficient information to warrant the commissioning of status reports and which species should be targeted for additional research to provide sufficient information for the production of status reports. The committee also discussed issues around the lack of information available for Labrador as a whole.

PROCEDURES

It was agreed that, while every effort would be made to convene meetings only when all members could be present, a quorum would be 50%+1 of the membership.

Voting on procedural matters will be on the basis of a simple majority of members present. Failing a consensus, status recommendations to the minister will require a two thirds majority of all members, whether present or not.

CRITERIA

The criteria for decisions on the level of risk for a species (endangered, threatened, vulnerable) will follow those of the federal COSEWIC committee, which in turn are based on those of the International Union for the Conservation of Nature and Natural Resources (IUCN) with minor adjustments for local circumstances and conditions. A copy of the COSEWIC criteria can be found in Appendix 1.

STATUS REPORTS AND PRIORITY LISTS

Five status reports were prepared by 2 contracted experts (Mr. Michael Brurzynski and Ms. Claudia Hanel) and reviewed by the Committee. These included: the Crowded Wormseed Mustard (*Erysimum inconspicuum var coarctatum*) and Mountain Fern (*Thelypteris quepaertensis*); the Northern Bog Aster (*Symphyotrichum boreale*), Rattlesnakeroot (*Prenanthes racemosa*), and Mackenzie's Sweetvetch (*Hedysarum boreale* subsp. *mackenzii*). The status of each species will be determined at meetings in 2006 and final reports presented to the Minister in the 2006/07 fiscal year.

Priority lists have been drawn up for vascular plants and mammals based on data on general status of species, gathered by the Wildlife Division (Appendix 2). The SSAC also consulted with people knowledgeable about invertebrates and birds and used the priority lists to select species for status assessment (Appendix 3).

ASSESSMENTS, EVALUATIONS, AND RECOMMENDATIONS

Status reports on the Gray-cheeked Thrush (*Catharus minimus*) by Kate Dalley, Kristin Powell and Darroch Whitaker, the Caspian Tern (*Sterna caspia*) by Tina Leonard and Darroch Whitaker, and the Northern Wheatear (*Oenanthe oenanthe leucorhoa*) by Michael Peckford and Darroch Whitaker were evaluated by the committee. The committee concluded, based on the information provided in the status reports, that the Caspian Tern and the Northern Wheatear did not meet criteria for listing as endangered, threatened, or vulnerable. Based on the information provided in the status report, and using the criteria for status assessment, the SSAC recommended that the Gray-cheeked Thrush be listed as “vulnerable”. The Governor in Council accepted the recommendation and the species was listed as “vulnerable” by the government of Newfoundland and Labrador on February 20, 2005. Copies of the SSAC Status Report on the Gray-cheeked Thrush are available from the SSAC secretariat or on the website.

THE FUTURE

In most cases reports on species identified for status assessment will have to be contracted out to individuals with detailed knowledge of the species. The number of status reports that can be commissioned and evaluated will depend primarily on the committee’s budget, and the availability of authors. Five to 10 reports per year over the next several years can be expected. Bringing the committee up to full membership to cover other taxonomic groups and knowledge bases is important to the advancement of the committees’ mandate.

APPENDICES

- Appendix 1. COSEWIC criteria
- Appendix 2. Priority lists
- Appendix 3. Species identified for status reports

Appendix 1.

COSEWIC quantitative criteria and guidelines for the status assessment of species.

A. Declining Total Population

Endangered

Threatened

Reduction in population size based on any of the following 4 options and specifying a-e as appropriate:

> 70 % > 50 %

(1) population size reduction that is observed, estimated, inferred, or suspected in the past 10 years or 3 generations, whichever is longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any combination of a-e below.

> 50 % > 30 %

(2) population size reduction that is observed, estimated, inferred or suspected over the last 10 years or 3 generations, whichever is longer, where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any combination of a-e below.

(3) population size reduction that is projected or suspected to be met within in the next 10 years or 3 generations, whichever is longer (up to a maximum of 100 years), based on (and specifying) any combination of b-e below.

(4) population size reduction that is observed, estimated, inferred, projected or suspected over any 10 year or 3 generation period, whichever is longer (up to a maximum of 100 years), where the time period includes both the past and the future, AND where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of a-e below.

- a) direct observation
- b) an index of abundance appropriate for the taxon
- c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- d) actual or potential levels of exploitation
- e) the effects of introduced taxa, hybridisation, pathogens, pollutants, competitors or parasites

B. Small Distribution, and Decline or Fluctuation

1. Extent of occurrence Or	< 5,000 km ²	< 20,000 km ²
2. Area of occupancy	< 500 km ²	< 2,000 km ²

For either of the above, specify at least two of a-c:

- | | | |
|---|------------------------|------------------------|
| (a) either severely fragmented
or known to exist at # locations | ≤ 5 | ≤ 10 |
| (b) continuing decline observed, inferred or projected in any of the following: | | |
| i) extent of occurrence | | |
| ii) area of occupancy | | |
| iii) area, extent and/or quality of habitat | | |
| iv) number of locations or populations | | |
| v) number of mature individuals | | |
| (c) extreme fluctuations in
any of the following: | > 1 order of magnitude | > 1 order of magnitude |
| i) extent of occurrence | | |
| ii) area of occupancy | | |
| iii) number of locations or populations | | |
| iv) number of mature individuals | | |

C. Small Total Population Size and Decline

Number of mature individuals	< 2,500	< 10,000
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and 1 of the following 2:

(1) an estimated continuing decline rate of at least	20% in 5 years or 2 generations (up to a maximum of 100 years in the future)	10% in 10 years or 3 generations (up to a maximum of 100 years in the future)
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(2) continuing decline, observed, projected, or inferred, in numbers of mature individuals and at least one of the following (a-b):

	Endangered	Threatened
(a) fragmentation-- population structure in the form of one of the following:	(i) no population estimated to contain >250 mature individuals (ii) at least 95 % of mature individuals in one population	(i) no population estimated to contain >1,000 mature individuals (ii) all mature individuals are in one population
(b) extreme fluctuations in the number of mature individuals		

D. Very Small Population or Restricted Distribution

(1) Number of mature individuals	< 250	< 1,000
(2) Applies only to threatened: Population with a very restricted area of occupancy or number of locations such that it is prone to the effects of human activities or stochastic events within a very short time period in an uncertain future, and thus is capable of becoming highly endangered or even extinct in a very short time period.	(not applicable)	area of occupancy typically < 20 km ² or number of locations < 5

E. Quantitative Analysis

Indicating the probability of extinction in the wild to be at least:	20% in 20 years or 5 generations, whichever is longer (up to a maximum of 100 years)	10% in 100 years
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Special Concern:

those species that are particularly sensitive to human activities or natural events but are not endangered or threatened species.

Species may be classified as being of Special Concern if:

- a. the species has declined to a level of abundance at which its persistence is increasingly threatened by genetic, demographic or environmental stochasticity, but the decline is not sufficient to qualify the species as Threatened; or
- b. the species is likely to become Threatened if factors suspected of negatively influencing the persistence of the species are neither reversed nor managed with demonstrable effectiveness; or
- c. the species is near to qualifying, under any criterion, for Threatened status; or
- d. the species qualifies for Threatened status but there is clear indication of rescue effect from extra-limital populations.

Examples of reasons why a species may qualify for "Special Concern":

- A species that is particularly susceptible to a catastrophic event (e.g., a seabird population near an oil tanker route)
- A species with very restricted habitat or food requirements for which a potential threat to that habitat or food supply has been identified (e.g., a bird that forages primarily in old-growth forest, a plant that grows primarily on undisturbed sand dunes, a fish that spawns primarily in estuaries, a snake that feeds primarily on a crayfish whose habitat is threatened by siltation)
- A recovering species no longer considered to be Threatened or Endangered but not yet clearly secure

Examples of reasons why a species may not qualify for "Special Concern":

- A species existing at low density in the absence of recognized threat (e.g., a large predatory animal defending a large home range or territory)
- A species existing at low density that does not qualify for Threatened status for which there is a clear indication of rescue effect

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Appendix 2. Priority Lists.

For information on rankings see the SSAC 2003-2004 Annual Report.

SSAC Vascular Plant Priority List

Species/ Population	SSAC Priority Rationale	S-rank (NF)	S-rank (Lab)	N-rank	G-rank
<i>Astragalus bodinii</i>	Only one known occurrence (near Cook's Harbour), northern Cordilleran disjunct, near area of human activity	S1		NNR	G4
<i>Erigeron compositus</i>	Only one known occurrence (near Corner Brook), calciphile; arctic-alpine disjunct	S1		N5	G5
<i>Carex petricosa</i> var <i>misandroides</i>	Only five occurrences, relocated at only a single location in NF, reported for Labrador	S1	S?	N1N2	G1G2Q
<i>Platanthera foetida</i>	Only one known occurrence, cordilleran disjunct, calciphile, small population	S1		N9	G5
<i>Potamogeton strictifolius</i>	Only one known location (Flower's Cove), grows in alkaline waters; type locality	S1		N?	G5
<i>Sagina saginoides</i>	Only one known location (White Hills); wide arctic-alpine circumpolar disjunct	S1	S?	N?	G5
<i>Taraxacum lyratum</i>	Only one known occurrence (Northern Peninsula); maybe second population at Big Brook; wide arctic disjunct	S1	S?	N?	G5
<i>Poa laxa</i> subsp. <i>fernaldiana</i>	Less than five known occurrences (Gros Morne National Park, Northern Peninsula and Southern Labrador) on quartzite	S1	S?	N2	G2G3

SSAC Mammal Priority List

Species/ Population	SSAC Priority Rationale	S-rank (NF)	S-rank (Lab)	N-rank	G-rank
Arctic Hare (NF) <i>Lepus timidus</i>	Population status difficult to determine, small isolated populations	S3	S5	N5	G5
Northern Myotis (NF) <i>Myotis septentrionalis</i>	Population status unknown, national status -sensitive	S2S3		N4	G5
Rock Vole (Lab) <i>Microtus chrotorrhinus</i>	Population status unknown		S1	N4	G5
Little Brown Bat (NF) <i>Myotis lucifugus</i>	Population status unknown, winter hibernacula areas may be limiting or under threat	S4	S4	N5	G5
Gray Wolf (NF) <i>Canis lupus</i>	Population extirpated or extinct, genetic work to confirm species status	SX	S4	N4	G4

Appendix 3.

Species identified for status assessment reports.

Species	Common Name	Group	Report Status	Author(s)
<i>Astragalus bodinii</i>	Bodin's Milkvetch	Plant	Seeking author	
<i>Symphotrichum boreale</i>	Northern Bog Aster	Plant	In preparation	C. Hanel
<i>Prenanthes racemosa</i>	Rattlesnakeroot	Plant	In Preparation	C. Hanel
<i>Erigeron compositus</i>	Cutleaf Fleabane	Plant	Seeking author	
<i>Hedysarum boreale</i> <i>ssp. mackenzii</i>	Mackenzie's Sweetvetch	Plant	In preparation	C. Hanel
<i>Catharus minimus</i>	Gray-cheeked Thrush	Bird	Completed	K. Dalley, K. Powell and D. Whitaker
<i>Carex petricosa</i> <i>var. misandroides</i>	Rock-dwelling Sedge	Plant	Seeking author	
<i>Erysimum inconspicuum</i> <i>var. coarctatum</i>	Gulf of St. Lawrence Wormseed Mustard	Plant	In Preparation	M. Burzynski
<i>Lepus arcticus</i>	Arctic Hare	Mammal	Seeking author	
<i>Sterna caspia</i>	Caspian Tern	Bird	Completed	T. Leonard and D. Whitaker
<i>Oenanthe oenanthe</i>	Northern Wheatear	Bird	Completed	M. Peckford and D. Whitaker
<i>Platanthera foetida</i>	Alaska Rein Orchid	Plant	Seeking author	
<i>Thelypteris quelpaertensis</i>	Mountain Fern	Fern	In Preparation	M. Burzynski
<i>Cicindela limbata</i> <i>ssp. labradorensis</i>	Goose Bay Blowout Tiger Beetle	Insect	In preparation	S. Pardy Moores
<i>Rangifer tarandus</i>	Red Wine Mountain Caribou	Mammal	In preparation	C. Doucet