

# SSAC

## Species Status Advisory Committee



Water Pygmyweed



Feathery False Solomon's Seal



Alaska Rein Orchid



Tradescant's Aster



Rock Dwelling Sedge



Bodin's Milkvetch

Photos by J.E. Maunder

## Annual Report 2006-2007

# SPECIES STATUS ADVISORY COMMITTEE 2006-2007

## 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 eight members for most of 2006/07.

<b>Ms. Christine Doucet</b> (Chair)	- Terrestrial mammals
<b>Dr. Luise Hermanutz</b>	- Plant ecology, conservation biology
<b>Dr. William Montevecchi</b>	- Birds
<b>Ms. Nathalie Djan-Chékar</b> (co-chair)	- Vascular and non-vascular plants
<b>Mr. John E. Maunder</b>	- General natural history, plants, invertebrates
<b>Dr. Christine Campbell</b>	- Aquatic invertebrates
<b>Ms. Shelley Pardy-Moores</b>	- Terrestrial invertebrates
<b>Mr. Mac Pitcher</b>	- 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](http://www.env.gov.nl.ca/env/wildlife/wildlife_at_risk.htm).

## MEETINGS

The committee met on April 12<sup>th</sup> and 13<sup>th</sup>, 2006. The committee reviewed five status reports and made recommendations to the Minister on listing of the species. Discussion and decisions were also made in relation to the determination of priority species for which status reports can be and should be prepared. A decision was made to proceed with a call for authors to produce 12 status reports on plants species for 2006/07

## 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

Twelve status reports were commissioned in 2006. Mr. John E. Maunder was selected to author the reports. The reports were reviewed by the committee in February 2007 and will be evaluated for status early in the 2007/08 fiscal year. The reports included; **Oval-leaved Creeping Spearwort** (*Ranunculus flammula* var. *ovalis*); **Water Pygmyweed** (*Tillaea aquatica*); **Shaved Sedge** (*Carex tonsa*); **Tradescant's Aster** (*Symphyotrichum tradescantii*); **Lindley's Aster** (*Symphyotrichum ciliolatum*); **Gmelin's Watercrowfoot** (*Ranunculus gmelinii*); **Alaska Rein Orchid** (*Platanthera foetida*); **Sharpleaf Aster** (*Oclemena acuminata*); **Feathery False Solomon's Seal** (*Maianthemum racemosum* subsp. *racemosum*); **Cutleaf Fleabane** (*Erigeron compositus*); **Rock Dwelling Sedge** (*Carex petricosa* var. *misandroides*); **Bodin's Milkvetch** (*Astragalus bodinii*)

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

## **ASSESSMENTS, EVALUATIONS, AND RECOMMENDATIONS**

Status reports on the Crowded Wormseed Mustard (*Erysimum inconspicuum* var *coarctatum*), Mountain Fern (*Thelypteris quepaertensis*), Northern Bog Aster (*Symphyotrichum boreale*), Rattlesnakeroot (*Prenanthes racemosa*), and Mackenzie's Sweetvetch (*Hedysarum boreale* subsp. *mackenzii*) were evaluated by the committee. The committee recommended that the Crowded Wormseed Mustard, the Northern Bog Aster, Rattlesnakeroot, and Mackenzie's Sweetvetch be listed as "endangered" and that the Mountain Fern be listed as "Vulnerable". A written recommendation was provided to the Minister on October 23, 2006. The Lieutenant-Governor in Council did not make a recommendation on these species in the 2006/07 fiscal year. Copies of the SSAC status reports for the species 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.

	Endangered	Threatened
<b>A. Declining Total Population</b>		
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.		
	<ul style="list-style-type: none"> <li>a) direct observation</li> <li>b) an index of abundance appropriate for the taxon</li> <li>c) a decline in area of occupancy, extent of occurrence and/or quality of habitat</li> <li>d) actual or potential levels of exploitation</li> <li>e) the effects of introduced taxa, hybridisation, pathogens, pollutants, competitors or parasites</li> </ul>	
<b>B. Small Distribution, and Decline or Fluctuation</b>		
1. Extent of occurrence	< 5,000 km <sup>2</sup>	< 20,000 km <sup>2</sup>
Or		
2. Area of occupancy	< 500 km <sup>2</sup>	< 2,000 km <sup>2</sup>
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		
<b>C. Small Total Population Size and Decline</b>		
Number of mature individuals	< 2,500	< 10,000
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)
(2) continuing decline, observed, projected, or inferred, in numbers of mature individuals and at least one of the following (a-b):		

	<b>Endangered</b>	<b>Threatened</b>
(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 <sup>2</sup> 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

## 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>Sagina saginoides</i>	Only one known location (White Hills); wide arctic-alpine circumpolar disjunct	S1	S?	N?	G5
<i>Taraxacum phymatocarpum</i>	Only one known occurrence (Northern Peninsula); 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, globally rare	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	Under Review	J.E. Maunder
<i>Symphyotrichum boreale</i>	Northern Bog Aster	Plant	Completed	C. Hanel
<i>Prenanthes racemosa</i>	Rattlesnakeroot	Plant	Completed	C. Hanel
<i>Erigeron compositus</i>	Cutleaf Fleabane	Plant	Under Review	J.E. Maunder
<i>Hedysarum boreale</i> ssp. <i>mackenzii</i>	Mackenzie's Sweetvetch	Plant	Completed	C. Hanel
<i>Catharus minimus</i>	Gray-cheeked Thrush	Bird	Completed	K. Dalley, K. Powell and D. Whitaker
<i>Carex petricosa</i> var. <i>misandroides</i>	Rock-dwelling Sedge	Plant	Under Review	J.E. Maunder
<i>Erysimum inconspicuum</i> var. <i>coarctatum</i>	Gulf of St. Lawrence Wormseed Mustard	Plant	Completed	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	Under Review	J.E. Maunder
<i>Thelypteris quelpaertensis</i>	Mountain Fern	Fern	Completed	M. Burzynski
<i>Cicindela limbata</i> ssp. <i>labradorensis</i>	Goose Bay Blowout Tiger Beetle	Insect	Deferred for further research	S. Pardy Moores
<i>Ranunculus flammula</i> var. <i>ovalis</i>	Oval-leaved Creeping Spearwort	Plant	Under Review	J.E. Maunder
<i>Tillaea aquatica</i>	Water Pygmyweed	Plant	Under Review	J.E. Maunder
<i>Carex tonsa</i>	Shaved Sedge	Plant	Under Review	J.E. Maunder
<i>Symphyotrichum tradescantii</i>	Tradescant's Aster	Plant	Under Review	J.E. Maunder
<i>Symphyotrichum ciliolatum</i>	Lindley's Aster	Plant	Under Review	J.E. Maunder
<i>Ranunculus gmelinii</i>	Gmelin's Watercrowfoot	Plant	Under Review	J.E. Maunder
<i>Oclemena acuminata</i>	Sharpleaf Aster	Plant	Under Review	J.E. Maunder
<i>Maianthemum racemosum</i> subsp. <i>racemosum</i>	Feathery False Solomon's Seal	Plant	Under Review	J.E. Maunder