
Wild Species: the General Status Program in Canada

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Abstract: In 1998, the Council of Ministers responsible for wildlife in Canada approved the process and structure of the National General Status Working Group. The working group was established by the Canadian Wildlife Directors in order to meet the commitment of monitoring, assessing, and reporting on the status of wildlife as required under the *Accord for the Protection of Species at Risk*. The National General Status Working Group is composed of representatives from each of the Canadian provinces and territories plus the three federal agencies whose mandate includes wildlife—Canadian Wildlife Service, Fisheries and Oceans Canada, and Parks Canada. The focus of the working group process is to determine the general status of full biological species, which is, by necessity, a coarse filter approach to evaluating species' status. The intent is that the general status ranks will be useful in examining overall trends in species' status across a broad range of taxonomic groups and across time. Results of the first round of general status assessments were published in 2001 in the report *Wild Species 2000: The General Status of Species in Canada*. The National General Status Working Group is currently working towards the production of *Wild Species 2005*, which is planned to include assessments for species included in *Wild Species 2000* and over 5000 additional species.

Key Words: wild species, status, assessment, monitoring, general status program, species at risk, Canada

Overview

Canada is home to over 70,000 wild species which occur in varied habitats, including boreal forests, temperate rain forests, tundra areas, grasslands, marshlands, alpine meadows, and marine areas. Preventing the loss of species begins by determining the number and status of all wild species in Canada.

To assess the general status of Canada's wild species, the Canadian Wildlife Directors created the National General Status Working Group in 1998. The working group is composed of representatives from each province and territory plus the three federal agencies responsible for wildlife—Canadian Wildlife Service, Fisheries and Oceans Canada, and Parks Canada, and reports to the Canadian Wildlife Directors and, ultimately, to the Canadian Endangered Species Conservation Council. The Council is responsible for monitoring and reporting on the status of all species in Canada, a requirement of the *Accord for the Protection of Species at Risk* (Environment Canada 1996).

The National General Status Working Group completes general status assessments of Canada's wild species and compiles the results into a national database for the Wild Species web site. The results are then incorporated into periodic reports. The general status ranks are an important source of information for the Committee on the Status of Endangered Wildlife in Canada's (COSEWIC) priority candidate lists. Additionally, the listing of exotic species is significant given the increasing impact and general awareness of invasive species in Canada.

In 2001, *Wild Species 2000: The General Status of Species in Canada* was produced (Canadian Endangered Species Conservation Council 2001). It was the first comprehensive examination of the state of Canada's wild species. The report contains general status assessments of more than 1600 species from various taxonomic groups. A second report, *Wild Species 2005*, is due for release on the Wild Species web site (<http://www.wildspecies.ca/home.cfm?lang=e>) in 2006.

Section 128 of the *Species at Risk Act* states the following: "Five years after this section comes into force and at the end of each subsequent period of five years, the Minister must prepare a general report on the status of wildlife species" (Government of Canada 2002). The first such report is expected in 2008. It is hoped that the general status assessments will form the basis of this report.

Process

To prevent the loss of species, we need to know what species occur in Canada, where they occur, and what their status is. To that end, the National General Status Working Group is responsible for determining which species should be ranked. The focus of the working group process is to establish general status assessments for full biological species. The process is, by necessity, a coarse filter approach to evaluating species' status (National General Status Working Group 2003).

General status assessments are made by teams that include naturalists, scientists, researchers, Aboriginal peoples, or other knowledgeable individuals (National General Status Working Group 2003). A team can be as small or as large as the knowledge base of expertise for a taxonomic group. General status teams make a concerted effort to include all the best information on the species at the very start of the evaluation process. If new information becomes available during the assessment process, the general status teams will incorporate it, if time permits.

The general status of a given species is determined by applying seven selected criteria: population size, number of occurrences, geographic distribution, trends in population, trends in distribution, threats to the population, and threats to habitat (National General Status Working Group 2003). Collectively, these criteria reflect the status of a species' population within specific geographic areas, the provinces, territories, ocean regions, and Canada overall. Definitions of the general status criteria follow Harper et al. (1996) and are based on three sources: The World Conservation Union (IUCN) Red List categories (IUCN 2001); the Convention on International

Trade in Endangered Species of Wild Fauna and Flora (CITES) (Criteria for amendment of Appendices I and II [Conf. 9.24 Rev. CoP12]) [CITES 2002]); and the Natural Heritage Programs and Conservation Data Centres of NatureServe.

The National General Status Working Group's provincial, territorial, and ocean region representatives are responsible for establishing lists of species that occur in their respective jurisdictions. The representatives are also responsible for gathering, compiling, and interpreting the information used to establish the provincial or territorial ranks for a given species. The working group is then responsible for assigning a Canada-wide rank—a national general status rank that interprets the overall status of the species in Canada (National General Status Working Group 2003).

The categories for the national general status ranks presented in *Wild Species 2005* will be as follows (National General Status Working Group 2003):

- *Extirpated*: species that have disappeared from (or are no longer present in) a given geographic area but which occur in other areas
- *Extinct*: species that are extirpated worldwide (i.e., they no longer exist anywhere)
- *At Risk*: species for which a formal detailed risk assessment (COSEWIC assessment or provincial or territorial equivalent) has been completed, and which have been determined to be at risk of extirpation or extinction (i.e., Endangered) or are likely to become at risk of extirpation or extinction if limiting factors are not reversed (i.e., Threatened)
- *May Be At Risk*: species that may be at risk of extirpation or extinction and are, therefore, candidates for a detailed risk assessment by COSEWIC or the provincial or territorial equivalent
- *Sensitive*: species that are believed to not be at risk of extirpation or extinction but which may require special attention or protection to prevent them from becoming at risk
- *Secure*: species that are believed to not belong in the categories At Risk, May Be At Risk, Extirpated, Extinct, Accidental, or Exotic. This category includes some species that show a declining trend in numbers in Canada but which remain relatively widespread or abundant. In such instances, the decline will be highlighted by an asterisk and an associated comment.
- *Undetermined*: species for which insufficient data, information, or knowledge is available with which to reliably evaluate their general status
- *Not Assessed*: species that are known or believed to be present in the geographic area in Canada to which the general status rank applies but which have not yet been assessed
- *Exotic*: species that have been moved beyond their natural range as a result of human activity. In the *Wild Species 2005* report, exotic species have been purposefully excluded from all other categories.
- *Accidental*: species occurring infrequently and unpredictably outside their usual range

Taxonomic Coverage

Wild Species 2000 contains general status assessments for over 1600 Canadian species. The report evaluated species from eight major groups, including most of the country's vertebrate species (freshwater fishes, amphibians, reptiles, birds, and mammals), a representative invertebrate group (butterflies), and two very different plant groups (ferns and orchids) (Canadian Endangered Species Conservation Council 2001). These assessments address just a small fraction—about 2%—of the 70,000 species known to inhabit Canada. Most of the species not included in *Wild Species 2000* are invertebrates, plants, and fungi. Future reports will include greater representation from these groups.

The *Wild Species 2005* report is expected to provide assessments for the same species included in *Wild Species 2000*, plus more than 5000 additional species. The current general status work plan identifies all vascular plants of Canada, Margaritiferidae and Unionidae mussels, crayfish, tiger beetles, dragonflies and damselflies, and marine fishes for inclusion in *Wild Species 2005* (National General Status Working Group 2005). This will require new data that will improve on or update the national database of information on Canada's wild species. Overall, the general status assessments act as the first step in preventing the loss of wild species in Canada.

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