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THE BIOTA OF CANADA: A CENSUS OF CANADIAN SPECIES

A new Biological Survey of Canada initiative

The diversity and importance of Canadian species

In 1995, it was reported that about 71 000 species, spanning all 6 Kingdoms of life, were known from Canada and that an additional 68 000 species are likely to occur (Mosquin *et al.* 1995). Human health and prosperity are intimately dependent on (or impacted by) biota and the economic, ecological and social bounty that species provide. Consequently, knowledge about the biota among which humans live and interact with is of importance to Canadian society. For some taxa such as plants and vertebrates, recent lists of Canadian species and their distribution are readily accessible. Nonetheless, there are still enormous information gaps, particularly concerning hyper-diverse groups such as invertebrate animals, bacteria and fungi that are relatively poorly studied in spite of their influence on human health and prosperity. Clearly, much remains to be discovered (and disseminated) about Canada's biota. At this time we do not even have an inventory of which species live in Canada.

Our capacity to respond to and predict societal emergencies and services involving other species requires detailed understanding of how we interact with those species and the roles that they play in the ecosystems on which we depend. Detailed study of all species in Canada is likely not achievable or affordable in the lifetimes of current Canadians, however, a basic inventory including information about the known distribution and functional roles of species in Canada is an achievable goal that is foundational to meet international obligations (e.g., Convention on Biological Diversity Aichi Targets) and fully implement the Canadian Biodiversity Strategy.

The Biota of Canada project: an ambitious proposal

The Biological Survey of Canada (<http://www.biology.ualberta.ca/bsc/bschome.htm>) is building a consortium of partners to launch a new project to develop a comprehensive and easy-to-access census of species diversity in Canada. This project aims to collate, summarize, analyze and disseminate to the general public both new and already existing information about the species diversity of Canada. The Biota of Canada project is inspired by, and will be somewhat modelled after, an earlier BSC project that culminated in the publication of *Canada and Its Insect Fauna* (Danks 1979). However, this new initiative will expand its coverage beyond terrestrial arthropods to all species in Canada and build an open-access, web-based dynamic product that can be updated continuously and into the foreseeable future. To avoid duplication of effort, existing information and data sources will be linked to the Biota of Canada project, while other information and data will be compiled *de novo* as part of the project.

References:

- Danks, H.V. (Ed.). 1979. *Canada and its insect fauna*. Mem. ent. Soc. Can. 108. 573 pp.
 Mosquin, T. Whiting, P.G. & McAllister D.E. 1995. *Canada's biodiversity: the variety of life, its status, economic benefits, conservation costs and unmet needs*. Canadian Museum of nature, Ottawa, ON. 293 pp.

You are needed!

This is an opportunity for you to become involved in this project and have an influence on its design, content and functionality.

Please send your feedback

either via email to David Langor (dlangor@nrcan.gc.ca) or
 by using the SurveyMonkey questionnaire available at
<http://www.surveymonkey.com/s/N8D58PP>

Consult http://www.biology.ualberta.ca/bsc/news31_2/bscwinter2012.pdf for a complete version of the Biota of Canada vision document.



Biological Survey of Canada / Commission biologique du Canada

<http://biologicalsurvey.ca/>

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