



This work is licensed under the Creative Commons Attribution-Noncommercial-Share Alike 3.0 United States License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/3.0/us/> or send a letter to Creative Commons, 171 Second Street, Suite 300, San Francisco, California, 94105, USA.

A periodical record of entomological investigation published at the Department of Entomology, University of Alberta, Edmonton, Alberta.

Volume 12

Number 3

July 1976

CONTENTS

Book Review – Larochelle, A. 1975. Les Carabidae du Québec et du Labrador	217
Exner and Craig – Larvae of Alberta Tanyderidae (Diptera: Nematocera)	219
Griffiths – Studies on Boreal Agromyzidae (Diptera).	
XII. <i>Phytomyza</i> and <i>Chromatomyia</i>	
Miners on Asteraea (Compositae)	239

BOOK REVIEW

LAROCHELLE, A. 1975. Les Carabidae du Québec et du Labrador. Département de Biologie du Collège Bourget, Rigaud. Bulletin I. 255 pages. Reproduction multilith, binding soft covers. Price \$15.00 Canadian. (Available from the author, Collège Bourget, C.P. 1000, Rigaud, Québec, J0P 1P0).

This publication is based on Lindroth's magnificent "Ground-Beetles (Carabidae excl. Cicindelinae) of Canada and Alaska" (1961-1969, Opuscula Entomologica, supplements 20, 24, 33, 34 and 35), and on new information assembled by Father Larochelle and a group of young amateur entomologists inspired by him.

This guide provides the following for the carabid beetles of Quebec and Labrador: detailed information for each species on synonymy and geographical distribution; abbreviated information about habitat, and occurrence of adults during the year; hibernating stage or stages; names of species that are unrecorded, but may be expected to be resident, and names of species whose presence in the area has been recorded, but not confirmed subsequently. The total number of species known from the area is 439, 56 more than were known in 1969. Knowledge of distributions of most species has been increased substantially.

Virtues of this work are numerous, of which the following are the most important. Distribution and reference data are presented in a highly condensed form by means of a simple numerical system, which I recommend for use in other works on systematic biology. The remaining information is also presented in concise form. There is a map for each species, indicating its geographical distribution. These are easily located because each has the same identification number as that of the species name in the annotated list. Unusual for this type of work is the designation of each locality by coordinates of longitude and latitude to an accuracy of about one square mile. The synonymic index is helpful, especially to associate with the correct species unfamiliar names in old collections. The list of unconfirmed records and potential additions to the fauna encourage collectors to be alert for specimens representing these species. This is one of the rare publications in Canada providing information about insects both in English and French. The table of contents, preface, summary, and directions for use of the catalogue are in both languages. Thereafter, the author rightly assumes that a minimal knowledge of French is adequate.

Some improvements are needed. The title is too general and leads one to think it is a taxonomic treatment, complete with keys and descriptions. Addition of the following subtitle would clarify the nature of the contents: Part I—Distribution, Habitat, and Life History Data. The distribution maps in aggregate have on them symbols of a variety of shapes to indicate localities. It would have been better to use one type, only, preferably dots. Some of the habitat

data are too concise to be useful, such as that for *Bembidion* subgenus *Chrysobracteon*: Father Larochelle writes "edge of rivers and lakes"; I prefer "sandy shores of rivers and lakes". For species with obviously disjunct distributions, rather than "south to Gaspé Peninsula", I prefer "arctic and subarctic regions, isolated on alpine meadows of the Gaspé Peninsula."

The following nomenclatural changes are required: *Anisotarsus* Chaudoir is a subgenus of *Notiobia* Perty, *Anisodactylus interstitialis* Say and *A. sericeus* are members of *Amphasia* Newman, and *Anisodactylus lugubris* Dejean is a member of *Xestonotus* LeConte (see Noonan, G.R., 1973, *Quaest. Ent.* 1973, 9(4): 266-480); the groups named *Platynus* and *Platynidius*, treated by Father Larochelle as subgenera of *Agonum*, are included in a separate genus (*Platynus*) by Whitehead (*Quaest. Ent.*, 1973, 9(4): 173-217).

A list of names of species should have been included whose Quebec-Labrador locality records are in doubt because of local extinction or mis-identification (for example, *Calosoma marginale* Casey, *Stomis pumicatus* Panzer, *Pterostichus madidus* Fabricius, *Nebria brevicollis* Fabricius, and *Bembidion guttula* Fabricius). A map showing relative intensities of exploration of different areas would have been useful.

Because of the substantial contributions to this work by serious amateurs, a word on this topic seems appropriate. Father Larochelle has done much to encourage such persons to do more than simply build collections, important as this activity is. Those influenced by him have learned to observe carefully and to take good notes, as is shown in the pages of this book. Professional biologists should take note, and take a greater role in developing the latent biological talents among the young people with whom they come in contact. Cooperative efforts of a large number of interested persons could lead to development of a series of publications such as Father Larochelle's, for other groups of insects, and other regions of Canada. In the absence of such a cadre of dedicated, enthusiastic persons, it will require a very long time, indeed, to achieve an adequate understanding of the Canadian fauna. Father Larochelle is to be congratulated, both for encouraging development of amateur entomology, and for producing this useful volume.

Henri Goulet
Department of Entomology
University of Alberta
Edmonton, Alberta T6G 2E3