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The Ohio Lepidopterists

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I was eager to review this publication. When I was a young person, first starting the pursuit of Lepidoptera, any literature that increased my knowledge was as valuable as the specimens I collected. Checklists were especially welcome. A primary purpose for the formation of The Ohio Lepidopterists society was to record the occurrence of Lepidoptera in Ohio. My ardent commitment to document Ohio's fauna over the past 20 years gives me insight into the work necessary to create and produce a publication of this type. My involvement with the Ohio Survey of Lepidoptera led me to work on a similar publication for Ohio, now in manuscript, thus my review of Riotte's work reflects both my interests as a lepidopterist and my experience as the author of a similarly conceived publication.

This publication is nicely prepared and visually pleasing. The photographer of the handsome cover illustration is not credited. I was at first reminded of early lists, such as J. B. Smith's contributions in The Insects of New Jersey (1910. Annual Report of the New Jersey State Museum Including a Report of the Insects of New Jersey 1909. MacCrellish & Quigley, State Printers. Trenton, New Jersey. 888 pp.) which gave me the feeling that Riotte was trying to emulate these long lasting and often looked-to works. Unfortunately, the Ontario book is perfect bound, which allows single sheets to fall out over time. It is unfortunate that Riotte's efforts are compromised because the publisher failed to have the book bound in signatures.

The book begins with a routine Introduction. Included is a map of Ontario that identifies faunal regions based on climatic and geologic factors. The regions are nicely explained, although a key on the map would have helped. Additional maps show districts, counties, and selected municipalities. These place names are linked to the distributional descriptions in the checklist. Because Lepidoptera are herbivores, I would like to have seen a phyto-geographic map to help explain distributions. The Materials and Methods chapter explains the sources of the data by collector, collection, publication, and date. The nomenclature and presentation of the data are described.

The systematic arrangement of higher taxa in the List of Species generally follows the R. W. Hodges et. al. Check List of the Lepidoptera of America North of Mexico (1983. E. W. Classey, Limited and The Wedge Entomological Research Foundation. Washington, D.C., 284 pp.). The Noctuidae are partially rearranged to follow Robert W. Poole's Lepidopterorum Catalogus (new series), Fascicle 118, Noctuidae (1989. E. J. Brill/Flora & Fauna Publications. Leiden, The Netherlands. 3 vols., 1,341 pp.): the species are listed alphabetically; and no subspecies are given. No check list numbers are used, and authors, but not dates of description are given. Other deviations from the
Hodges Check List are briefly explained in the check list. Many groups of moths are not included in the check list: Copromorphoidea (in part), Gelechioidea, Tineoidea (in part), Tortricoidea, and Yponomeutoidea (in part).

The annotations vary considerably depending on group. Minimally, the annotation includes the recorded distribution of the species and common names, if previously published in P. Benoit's *Noms Français d'Insectes au Canada avec Latins et Anglais Correspondants, 4ième éd.* (1975. Agriculture, Québec. 214 pp.). For two groups of moths—Pyraloidea and Noctuidae—the annotations are limited to the occurrence of the species in the four faunal regions. For these two groups, additional notes are sparingly added to cite: localities for species deemed interesting or extremely limited in distribution; Ontario's type localities; and some synonymies. The annotations for other groups are expanded to include specific localities, museums that hold voucher specimens, dates of capture, number of generations per year, relative abundance, subspecies, forms, and the gender of the latinized name. There are no species' distribution maps. The publication concludes with Acknowledgements, Literature Cited, and Index of Scientific Names.

Riotte included the most information about groups that appeal to the most lepidopterists, or for which the most information is known, e.g. Geometridae, which takes advantage of McGuffin's works on the Geometridae of Canada. For lepidopterists of Ontario and neighboring areas, Riotte partially filled a gap, but he missed the mark in the comprehensive treatment of Ontario Lepidoptera by not including all families. He excluded groups, mostly microlepidoptera, which he judged to be too poorly known. Thus his approach compiles existing information, but falls short of being definitive. Lepidopterists, especially microlepidopterists, are often frustrated by the lack of baseline data. The data in the collections of the Canadian National Collection in Ottawa, as well as other collections, should have been used to document the names, if not the complete ranges, of these insects in Ontario. A list of species, even if incomplete, is better than nothing, and collectors of small moths would be much better served. As it is, they have little to gain from this book.

My last comment transcends the parochial school of lepidopterology. Many of us, including Riotte in his Introduction, note the loss of habitat and subsequent reduction in the number of species. Baseline data can be important tools in conserving biological diversity. Publications such as Riotte's can document the occurrence of species for future comparisons. Riotte should have expanded his search for data beyond institutional collections and published papers. The protocol of data collection for the Ohio Survey of Lepidoptera demonstrated that private and individual collections are extremely important for documenting species' occurrences and abundance. Many species that occur in Ohio are not yet vouchered in institutional collections. The usefulness of Riotte's work is also impaired by his failure to describe how and where the data that he collected are filed. Are they on paper or computer files? Are they in his personal possession or in an institution? By including such information, Riotte would have assisted future researchers who may want to compare this relatively well known group of insects to other animals or plants.

When I read lists, such as this one, I always wish authors had included more information. In this case, I feel that the Introduction and/or the Methods and Materials were incomplete. Because Riotte did not fully document his methods, the thoroughness and completeness of his work cannot be known. For example, I was unable to determine how the author decided which synonymies to include, or why they were included. Poole (1989. *Lepidopterorum Catalogus* (new series), Fascicle 118, Noctuidae. op. cit.) syn-
onymized several genera with Apamea. Riotte followed Poole accurately, yet he only cited the synonymy of Trichoplexia. Riotte corrected the genus of the noctuid, Anterastria teratophora, but he did not move it to the Acontiinae.

The prose needs more editing. Although I can surmise the intent of the phrase "moths suffer a more serious lack of material," it is our understanding or knowledge, rather than moths, that suffer. The mixture of complete and incomplete sentences in the annotations is inconsistent.

In keeping with our desire to know more about the distribution of Lepidoptera, Riotte's book fills an important niche. He lists many groups of Lepidoptera, especially the ones that are important to most collectors, and he documents their occurrence in Ontario, cites useful literature, and tells us where to find the specimens if needed for further study. His annotations will help many lepidopterists. My desire for these types of publications has not diminished over the years. As we continue to appreciate the importance of Lepidoptera in our struggles to reduce habitat destruction, conserve biological diversity, and protect our environment, books like Riotte's book become even more important. In spite of the book's deficiencies, I still recommend it as a useful reference.

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