

shortcomings I have outlined above, it offers a lot of value and interest. I recommend it to the many lepidopterists who are enthusiastic in their rearing and field collecting of larger Saturniidae.

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THE BUTTERFLIES OF MANITOBA, by Paul Klassen, A. Richard Westwood, William B. Preston, & W. Brian McKillop. 1989. Manitoba Museum of Man and Nature, Winnipeg, Manitoba, Canada. vi + 290 pp. with 27 color plates, distribution maps, and various text illustrations. Soft cover (plastic laminate), 20.5 × 25 cm, ISBN-0-920704-16-6; \$18.66 (U.S.) + \$1.70 shipping.

This book is a comprehensive treatment of the butterfly fauna of Manitoba. The introductory pages include such topics as butterflies in perspective, nomenclature, the differences between butterflies and moths, butterfly life histories, Manitoba as an environment for butterflies, Manitoba biomes, butterfly distribution, conservation, and study, with a brief historical perspective on early lepidopterists in Manitoba. The scientific treatment begins with the Hesperioidea and concludes with the Danaidae. Then follows a listing of potential and dubious species, a comprehensive list of references, and a glossary of terms. The six appendices include butterfly collecting methods, a list of larval and adult foodplants, a checklist of Manitoba butterflies, geographic locations (latitude and longitude) of collection sites with a map of major areas, summary of flight periods, and the Lepidopterists' Society's "Statement of the Committee on Collecting Policy." An index of species concludes the book.

Each species entry includes information and topics in the following order: common name, scientific name (author and date) with basic synonyms, plate and figure numbers, description, life cycle, habitat, range, Manitoba records, subspecies, general remarks. A dot distribution map accompanies each entry, with the dots color-coded for each family. The color plates are well done, and, for the most part, the specimen colors are natural (for museum specimens), while the plate backgrounds vary from white to antique-white. Specimens are shown life-size with three illustrations for each species: male dorsal, female dorsal, and ventral (male or female). Scientific nomenclature follows Klassen's 1984 Manitoba checklist published in *J. Lepid. Soc.* (38:32-39), and differs significantly in some groups from the 1981 Miller and Brown catalogue and other recent publications. The Miller and Brown names, however, are shown as synonyms. This is the only area in which I offer adverse criticism, as yet another set of scientific names is introduced, which only further muddles nomenclature.

Manitoba encompasses six vegetation zones ranging from tall grass prairie through boreal coniferous forest to arctic tundra. Consequently there is wide diversity among the 144 butterfly species recorded from this province. Although several subspecies have been described from Manitoba, there are no unique species. The dominant groups are Nymphalidae (40 species), Hesperioidea (33), Lycaenidae (27), and Satyridae (19).

The Butterflies of Manitoba, with an overall format of 8 × 10", is nicely produced and has a pleasing aspect regarding the general layout. The text provides a wealth of information about Manitoba butterflies and is certainly "must" reading for any collector wishing to visit this Canadian province. This book is the most recent addition to the collection, from various publishers, of North American regional butterfly works that have appeared during the past several years. It will be a valuable addition to the bookshelf of any collector with an interest in the North American fauna.

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