## A WORLD OF BUTTERFLIES: their Lives, Behavior and Future

by Phil Schappert

2000. Key Porter Books, Toronto, Ontario, Canada. 320 pp (22 x 28 cm). \$45.00 cloth. ISBN: 1-55263-154-0.

The central purpose of this beautifully illustrated new book is to encourage the conservation of butterflies and their remaining natural environments. The author chooses to develop this theme in five chapters, liberally illustrated on every page by color photographs donated by a number of lepidopterists from around the world. While intended for the amateur lepidopterist, presumably one who is just starting out and seeking to know what he or she could do besides simply collect butterflies, the book includes much information of value to advanced lepidopterists as well.

The text begins with the question of why we have such an interest in butterflies, and includes a little about the history of the study of butterflies as well as basics about their life cycle, body form, and structure. Chapter 2, "Butterflies of the World," surveys the families of butterflies, using descriptions of their physical features, statistics on the numbers of subfamilies, genera, and species, and names to elucidate their evolution and historical relationships.

Chapter 3, "A World of Butterflies," looks at the geographic distribution of butterflies and the aspects of butterfly ecology that influence that distribution, including topics as diverse as island biogeography and what determines commonness and rareness of butterfly species.

Chapter 4, "A Butterfly's World," discusses the life history in more detail and talks about predation, mating rituals, egg-laying, structural and behavioral features that help survival, and a respectable breadth of other

Chapter 5, "A World for Butterflies?", gets to the heart of the author's theme. Here, Schappert concentrates on the causes of butterfly endangerment, from spraying and habitat loss to overcollecting, release of living butterflies at weddings, and supposed protective measures such as listing by the IUCN or under the CITES Treaty which actually impede their further study. He then looks at six selected case studies to try to highlight different problems that cause extirpation or extinction of butterflies, and what can be done to stop it. This last topic is the focus of one of the most interesting parts of the book to the amateur, namely, "What can I do?" Here we learn about rearing and life history studies, habitat restoration and butterfly gardening, and teaching children to respect nature.

The book ends with an Appendix containing a web site reference for promised continuously updated resource listings on butterflies, a detailed Glossary with excellent definitions, and a very comprehensive bibliogra-

Having written a number of butterfly books myself, I know the difficulty of writing for a general audience versus a specific audience. The publishers clearly desired a book for the general public here and their design of widely spaced text, uncropped photographs, few subheadings, and no textual references to the comprehensive bibliography used by the author, all contribute to that effort.

A few problems may be noted. For those who wish to know the specific reference to material discussed in the text, there is no alternative but to read exhaustively through the bibliography to seek cross-references to the original source of the textual discussion. Likewise, the reading level of the text varies tremendously, from a very popularized approach in some sections which is highly readable to anyone, to highly technical sections which may have more difficulty holding the interest of the beginning amateur lepidopterist. Very probably, the average person to whom this book is primarily pitched will read the introductory sections very rapidly or skip over them and concentrate on the latter chapters dealing with the butterfly's world and the conservation questions surrounding butterflies (which won't be a bad thing at all because that, after all, is the primary theme and goal of this book).

Certainly this book will be an effective addition to the rapidly

growing literature on butterfly conservation and should be in every school library and public library (in multiple copies) for the education of future generations on the merits of preserving butterflies through wise conservation practices.

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