

that the foreign printer was to have used computer masking to eliminate shadows, and that both the publisher and authors were surprised at this result.)

Every lepidopterist interested in the faunas of southwestern North America and the neotropics will want to buy a copy of this inexpensive and beautifully produced book. Its comprehensive, indeed exhaustive, treatment of all the significant collections of Baja California material, and the outstanding combination of authoritative authorship and editorial care by the publisher, guarantee that this work will remain the standard reference on the butterfly fauna of Baja California for many decades to come. The work will also be of interest to those who study the biogeography and evolutionary history of butterflies. Baja California, because of its isolation and relatively well-known geological history, offers insights that are widely applicable and of interest to the worldwide community of lepidopterists. I recommend this book enthusiastically.

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BUTTERFLIES AND SKIPPERS OF OHIO, by David C. Iftner, John A. Shuey, and John V. Calhoun. 1992. Bulletin of the Ohio Biological Survey, New Series, Volume 9, Number 1. The Ohio Lepidopterists Research Report No. 3. College of Biological Sciences, The Ohio State University, Columbus, Ohio 43210. 212 pp., 40 color plates. Softcover, 21.5 × 28 cm, ISBN 0-86727-107-8. \$40.00 (plus \$5 p & h). Order from Ohio Biological Survey, 1315 Kinnear Road, Columbus, Ohio 43212-1192.

This well-designed book (the cover painting and design are by John V. Calhoun) consists primarily of 144 species accounts arranged according to family. It is an unusually thorough text and could well be used as a model for future regional or state books of butterflies and skippers. The book is dedicated to Ohio lepidopterists, who likely will supply the bulk of the sales; however, this is an excellent reference volume for every lepidopterist.

Butterflies and Skippers of Ohio begins with a foreword by Paul A. Opler of the United States Department of the Interior Fish and Wildlife Service. A subsequent preface by the authors tells the reader that one of the major goals of the book was to make this publication as complete as possible so that it could be used as a foundation for the study of Ohio lepidoptera. In this they have certainly succeeded.

The introductory section is completed with a brief introduction and a section on the history of butterfly study in Ohio, accompanied by the names and photographs of some of the more significant researchers and collectors (the massive butterfly net of Homer F. Price surely must have cast fear into the hearts of butterflies within his reach!). All joking aside, this is an interesting, historically worthwhile section, and something that is lacking in most regional books about butterflies and moths.

The authors then provide us with an overview of previous research on Ohio's butterflies and skippers, a section on education and conservation (well-done, but too short), and an overview of the ecological and historical factors that influence the distribution of species in Ohio. These sections are well done and highly readable, in particular the section concerning the ecological parameters of Ohio's butterflies. Here they discuss the geological setting of Ohio, the influence of the glacial periods, the physiographic regions of Ohio, the botanical communities of Ohio (forest types, prairies, wetlands, and modified habitats), and postglacial biogeography.

A subsequent methods section details the sources and handling of data presented, and describes the format used in the species accounts. A checklist of species reported from Ohio completes the introductory material.

The species accounts section is introduced with a state map that records the number of species from each Ohio county, followed by a species richness map based on the number of resident species recorded from each county. Each individual account lists the species' residential status, as well as its distribution/range, habitat, and larval hostplants. Adult energy resources and flight periods are also given. Following each species identification is a list of similar species (the authors identify diagnostic characters that separate look-alike species), and general comments (including observations concerning behavior, phenotypic variability, and aberrations). A distribution map and a histogram (if there are enough data) that details the seasonal flight period are also included—the latter alone should be extremely useful to all lepidopterists in the state. Each species account ends with a listing of unverified county records.

The text concludes with a discussion of species that may occur in Ohio (even though they have not yet been recorded), and a section about species that have been erroneously reported from the state. There is a brief (but very usable) glossary of terms that may be unfamiliar to amateur lepidopterists, and a sound bibliography with over 300 entries that provides full references to literature cited in the text and that serves as general reference. Following the glossary and bibliography are an appendix that lists regional lepidopterological societies and an appendix that lists the abbreviation codes for Ohio counties as used in the plate captions. There are also an index to reported Ohio hostplants, an index to common names of butterflies and skippers, and an index to taxa of butterflies and skippers.

The 40 color plates which conclude the book illustrate the natural vegetation of Ohio (Plate 1), a geographic and cross section of Ohio (Plate 2), and photographs of typical habitats that support uncommon to rare lepidopterans (Plates 3–6). Plate 7 is an excellent composite photographic summary of butterfly behaviors (including basking behaviors), and Plates 8–40 illustrate Ohio's butterflies and skippers (the species here are represented in phylogenetic order, which approximates the order of the species accounts in the text—a useful feature for cross-referencing). For most species, ventral and dorsal figures of both sexes are illustrated. In total, over 600 specimens are figured.

I agree with Paul Opler, who found this text to be one of the most accurate, thorough, and complete treatments of a state's butterfly fauna yet published—the result of 10 years of cooperation among the Ohio Lepidopterists, the Ohio Biological Survey, and the Ohio Department of Natural Resources, Division of Wildlife. It far exceeds the caliber of similar state guides. This book will be a valuable reference and a useful field (and research) resource for professional and amateur lepidopterists, conservationists, wildlife managers, and all those who are generally interested in the wildlife of Ohio. I also believe this book will set a new standard for regional (Lepidoptera) texts and I applaud the authors for taking such a bold new approach.

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