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BOOK REVIEW

BUTTERFLIES OF SOUTHEASTERN ARIZONA.

by Richard A. Bailowitz and James P. Brock.

1991. Sonoran Arthropod Studies, Inc., P. O. Box 5624, Tucson, Arizona 85703-5624, U.S.A. 342 pp., illustr. 90 col. pls., 624 half-tone figs. Softcover, 15.3 x 22.7 cm. ISBN 0-9626629-0-9. Price: \$29.95 (plus \$3.00 shipping/handling).

This impressive work is the first published book to deal specifically with the butterflies of Arizona, a fascinating state whose southeastern region has strong natural affinities with the Mexican Sierra Madre range and the adjacent deserts of the state of Sonora. Illustrated with abundant diagnostic figures and with color plates of the most representative species from this southeastern Arizona butterfly fauna, this book is destined to become a classic and will be a necessary reference for anyone interested in the Neotropical butterflies of Mexico and adjacent areas of North America.

The 246 species which have been recorded from southeastern Arizona are covered fully in the book. The authors treat each species in a text account which includes a half-tone illustration of the adult stage; a general verbal description of the species, its habitat and habits; larval food plant records; discussion of the flight period in southeastern Arizona; and a final paragraph describing the distribution of the species in the region. The reader is referred to other books such as Emmel and Emmel (1973), Scott (1986), or Ballmer and Pratt (1988) for descriptions of the immature stages; these are not included. All black-andwhite photographs are life-sized and are of perfect pinned specimens. Likewise, the section of four full-page color plates illustrates 90 perfect specimens of the most noteworthy or distinctive Arizona species. All of these species accounts and illustrations are extremely well done and will generate a great deal of interest among many out-of-state collectors who visit Arizona annually. It is also certain to expand the resident Arizona lepidopterist group, as it is a perfect field and lab companion for both the beginning lepidopterist and professional. The section on skippers alone is well worth the purchase price to those of us who have puzzled over the many similar-appearing species from the northern Neotropics.

In addition to the wealth of material contained in the species accounts, the first part of the book includes an introduction to observing butterflies in southeastern Arizona, with a discussion of the geography and topography of this part of the state. Each major mountain range in the region is described, together with typical species and a brief habitat description. This section will be invaluable to those interested in biogeography, or in tracing old locality records for the species described from early expeditions through Arizona and northern Mexico, or just finding the best areas to visit for particular species today.

Following the species accounts are a series of appendices, including full data on the specimens illustrated in both the color plates section and the half-tone figures distributed throughout the text. In addition, the authors helpfully include a summary of the collecting policy for lepidopterists published by the Lepidopter-

ists' Society, and a list of resource organizations (including the Association for Tropical Lepidoptera) where the lepidopterists can secure further information about butterflies and their conservation. The book ends with an excellent references section, an index to larval food plants, and an index to both common and scientific names of the butterflies of southeastern Arizona.

Between them, the two authors have more than 30 years of experience studying the butterflies of Arizona and the Sonoran desert region, and much new information is included in this book. The expert photography by Charles A. Hedgecock makes the book even more useful than the normal state field guide. A large number of residents and out-of-state lepidoptersts also contributed their records to this work, and the care in writing and editing these data shows throughout the text.

This book is destined to be the standard reference on the butterflies of southeastern Arizona and adjacent areas just above the northern Neotropics. It will be an invaluable resource for anyone interested in the butterflies of Mexico, Arizona, and the neighboring states of California and New Mexico. The modest price and high-quality printing and binding insure that it will be a popular permanent addition to private and institutional libraries alike. The authors are to be commended for their efforts in producing this outstanding contribution to the biology and systematics of the butterflies of southeastern Arizona!

THOMAS C. EMMEL

Division of Lepidoptera Research Department of Zoology University of Florida Gainesville, Florida 32611