## **BOOK REVIEWS**

THE BUTTERFLIES OF THE MALAY PENINSULA, by A. Steven Corbet and H. M. Pendlebury, 3rd ed., revised by J. N. Eliot. 1978. Malayan Natural History Society, Kuala Lampur, Malaysia. v-xiv + 578 pp., ill.

Col. Eliot has done a magnificant job of revising "the" standard reference to Malaysian butterflies, which was no easy task, inasmuch as the original Corbet and Pendlebury treatment produced perhaps the finest regional text available anywhere. Eliot has thoroughly modernized the treatments of all groups of butterflies, save most of the Hesperiidae which are left nearly as Evans had classified them in 1949. Among the new taxa proposed by Eliot in this book (a practice that I do not like, because such descriptions are better made available in journals) are five hesperiid genera, and since most new taxa add to clarity, the book is helped by them.

Introductory treatments of the morphology of various stages (could have been a bit more detailed), nomenclature and classification, geographical distribution of butterflies, wing patterns, duplex species, sex ratios and the history of collecting on the peninsula lead off the book. All sections are well done and the information presented is sound.

The discussions of species and higher categories are competent and comprehensive. As is the case with so many modern books, the nomenclature is not so conservative as that in the earlier literature; but in this case, the reasons behind these nomenclatorial changes are well elucidated. No reviewer can be expected to wholeheartedly agree with everything in a book; this book and this reviewer are not exceptions. On page 128, Eliot mentions my 1968 higher classification of the Satyridae, stating that it "... ignores the male genitalia, takes little account of secondary sexual characters and is not adopted here." Male genitalia were not considered in the revision chiefly because the genitalia of Satyridae are so simplified that they offer very few good characters for higher classification; for generic and specific determination, they are very appropriate. The use of male secondary sexual characters, so abused by Moore and others around the turn of the century as the basis of new genera, were not used mainly because geneticists tell us that a characteristic can be shifted in position on a wing through the action of a single gene, hardly enough to warrant a change in tribal status, the lowest point to which my classification went.

The larvae of some Neotropical Morphidae feed on monocots (others on dicots), which characteristic makes that family a pivotal one in the evolution of the nymphalid complex. At this time, though, I am inclined to consider at least part of the Morphidae (*Taenaris*, etc.) to perhaps be satyrids, and were I doing the revision today, I should consider the genus *Penthema* to be a satyrid in the Elymniinae, as suggested by Japanese correspondents.

I am pleased to see that *Cethosia* is unequivocally placed in the otherwise Neotropical Heliconiinae. This genus sits in the Heliconiinae in about the same position (that of an outlier of a Neotropical group) as does *Tellervo* in the Ithomiidae.

Lycaenid classification has benefitted in this book by Eliot's use of his own superb higher classification of that family. Classification of members of that family has always been a problem with traditional treatments, and the original Corbet and Pendlebury handling of the group was no exception. The success Eliot has had with his classification should send a signal to the rest of us that it *works*, better than any other. It should be expected to treat the Malaysian fauna well (it was based chiefly on Malaysian examples), but it is certainly adaptable to lycaenids from other regions.

A brief word about other features of the book must include mention of the very useful keys scattered throughout the text. Many amateurs do not like keys, preferring to rely instead on illustrations, preferably colored, but keys are the most economical way of presenting differences (and similarities) between taxa. These keys are much expanded over the original Corbet-Pendlebury ones, thus adding to the utility of the volume for both professional and amateur alike.

For those who admittedly refuse to use keys, there are high quality illustrations as well. Not all of the species are figured (nor are their genitalia in the plates of those), but the illustrations are of good quality and clarity. In conjunction with the keys, the reader should be able to identify any Malaysian butterfly from the species illustrated on the plates.

In short, this book should be on the shelves of anyone with an interest in the butterflies of this region, even if he has another edition of Corbet and Pendlebury. Eliot has done a fine revision that would make both Corbet and Pendlebury happy to have their names associated with, and nothing finer can be said about a revision of an older book.

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THE CUTWORM MOTHS OF ONTARIO AND QUEBEC by Eric W. Rockburne and J. Donald Lafontaine, with photographs by Thomas H. Stovell. 1976. Agriculture Canada, Research Branch, Publication 1593. 164 pp., 613 col. figs. Obtainable from Canadian Government Publication Centre, Supply and Services Canada, Hull, Quebec K1A 0S9. \$US 10.50, \$CAN 8.50.

This hard-bound, lavishly illustrated little book is primarily a collection of life-size colored illustrations of noctuid moths from the Agaristinae to the Catocalinae (in the sequence of the McDunnough, 1938, check list), intended as an identification guide for the amateur. It has a brief text of usually three or four lines per species, giving distribution within the two provinces, food plants, and flight period, and a 5-page introduction consisting of elementary information on classification, life history, adult structure, and collecting. It treats all Noctuidae represented by specimens from Ontario or Quebec in the Canadian National Collection with the exception of the Hypeninae, Rivulinae, and Hermininae (in the sense of McDunnough). My only complaint about the book is that these latter three also could have been covered with the addition of only two and one-half pages to the 41 pages of illustrations already included, making it a nearly complete guide to the Noctuidae of that region. The term "cutworm moths" is construed as encompassing such a large part of the Noctuidae that it might just as well have been applied to them all.

This book is essentially without errors, and the nomenclature is current as of the time of publication. The colored illustrations are not perfect, but they would have to be regarded as adequate to excellent when one considers the modest price. The original photographs, made against the traditional pale-blue background by the same photographer who did the illustrations for the *Butterflies and Moths of Newfoundland and Labrador*, were obviously very well done. As in the work just cited, the legends give no locality data, but the stated purpose of Rockburne and Labratione was only to produce "a handbook intended for amateurs." Also, I could see nothing in the illustrations to reveal that the figured specimens were from anywhere other than Ontario or Quebec.

I do not hesitate to recommend this book as a useful aid to the identification of noctuid moths of the Northeast and suspect that it will find an important place on the bookshelves of many entomologists who do not think of themselves as amateurs.

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