BOOK REVIEW

A FIELD GUIDE TO THE BUTTERFLIES OF THE WEST INDIES, by Norman D. Riley. 1975. Quadrangle/The New York Times Book Co., 10 East 53 St., New York, N.Y. 10022, 224 p., illus. + 24 plates. Price \$12.50 (U.S.).

Although Riley's *Butterflies of the West Indies* is a welcome addition to the literature of the butterflies of the area, it has several shortcomings that detract from the usefulness of the book. These shortcomings will be discussed section by section.

Illustrations. In general the illustrations by Gordon Riley were found to be very good, but those by Brian Hargreaves, especially of the Satyridae and the Lycaenidae, left a lot to be desired. In some cases, it is doubtful that they will help identify the species involved.

Introduction. The introduction is very good. The only criticism is that on Fig. 2 the veins of the wings are identified in the usual European manner, i.e., using numbers. This might not create any complications, except that in the key to the families the veins are identified by their names. For the specialist this inconsistency will not pose any problem, but for the amateur it probably will.

Glossary. The glossary was found to be satisfactory.

Taxonomic discussions. In the taxonomic discussions many errors and omissions were found. Some of these might be because the author apparently has not done a great amount of collecting in the area and has worked mostly with preserved museum specimens and the available literature. This method of obtaining information about the biology of an area is not the best one, but in this case it is probably excusable because the West Indies are a politically and geographically heterogenous group of islands where travel to some of the smaller islands is very difficult, expensive, and time consuming.

What is not excusable, are those errors and omissions that pertain to islands such as Cuba, Jamaica, and Puerto Rico which have rather well known lepidopterous faunas. The more obvious errors and omissions are the following: Danaus gilippus cleothera is not mentioned from Puerto Rico, although it has been reported before; Danaus cleophile is reported from Puerto Rico where it does not occur, the specimen reported in the literature as belonging to this species was described by Clark in 1941 as Danaus plexippus portoricensis.

Lycorea ceres cleobaea is reported from Jamaica. As far as I know, this is the first time this butterfly has been reported from the island, but no additional information is given about the new record.

Prepona antimache insulicola is placed in synonymy of Prepona amphitoe Godart 1823, this I find to be correct, but Puerto Rico is not included in the distribution of the species even though it has been reported many times from the island.

Marpesia petreus is a common butterfly in Puerto Rico, not a rare one as is stated in the book.

There is no subspecies of *Eurema dina* present in Puerto Rico. Therefore, the statement that the black border is present in the hindwing only in the Puerto Rican subspecies is erroneous. The species present in Puerto Rico is the closely related *Eurema leuce sanjuanensis*, which does not have a black border in the hindwing. Probably the author was confusing *E. dina* with *Eurema portoricensis*, the male of which has a black border in the hindwing.

Although admittedly seasonal, *Kricogonia lyside* is a very common butterfly in Puerto Rico. The statement that the records of *K. lyside* of Cuba should probably refer to *K. cabrerai* is erroneous. Salvador de la Torre was one of the first lepidopterologists to consider *castalia* and *lyside* as conspecific. He published a paper on the genus *Kricogonia* in Cuba in which he clearly distinguished between *lyside* and *cabrerai*.

Aphirissa statira cubana breeds in Puerto Rico, where it has been found to breed

on "quenepa" (Melicocca bijuga L.) and in Cassia sp. Therefore, the statement that the specimens collected in Puerto Rico are migrants is incorrect.

Battus polydamas is present in Puerto Rico as subspecies thyamus Rothschild & Jordan, not as subspecies policrates Hoffer.

Papilio machaonides is reported for the first time from Puerto Rico, but again no additional information is given, even though the butterfly used in the illustration is a male apparently collected in Puerto Rico. Papilio androgeus epidaurus occurs in in Puerto Rico, but the island is not included in the distribution of the species.

The statement that *Epargyreus zestos* is not present in any of the Greater Antilles is incorrect, it has been reported from Puerto Rico by Wolcott (*The Insects of Puerto Rico*), Comstock (*The Insects of Puerto Rico and the Virgin Islands. Lepidoptera Rhopalocera*), and Brown and Heineman (*Jamaica and its Butterflies*). Comstock, and Brown and Heineman also report it from Hispaniola.

Ephyriades zephodes is reported as present in Puerto Rico although the only record that I know is a single specimen at the British Museum, however E. arcas philemon which is a rather common skipper in Puerto Rico is not reported as present in the island.

Synapte malitiosa malitiosa is not reported from Jamaica, although it has been reported by Brown and Heineman to be rather widespread on the island.

Euphyes singularis insolata is reported for the first time from Puerto Rico, but again the information is rather scanty.

Panoquina panoquinoides panoquinoides has been collected in Puerto Rico a number of times but it is not listed as present on the Island.

Checklist. The checklist has also some errors and omissions. In some cases, species reported from an island in the discussion are not included under that island in the checklist (e.g., Danaus gilippus jamaicensis and Cyanophris crethona from Jamaica, Strymon acis mars and Euphyes singularis from Puerto Rico). On other occasions, species not reported from an island in the discussion are included in the checklist for the island (e.g., Cyanophris crethona from Hispaniola and Polites dyctinna from Puerto Rico). There is some inconsistency on what is considered doubtful or vagrant, e.g., Authochton neis, Colgia calchas, and Nisoniades bessus are considered vagrants in Jamaica, and Antigonus nearchus is considered as doubtful. But all of them are considered as doubtful by Brown and Heineman because they doubted the correctness of the locality labels of the specimens in the British Museum.

Some misspellings were found throughout the checklist: *Urbanus tellus* instead of *teleus*, *Anetia briaria* instead of *briarea*, and *Calisto herophilus* instead of *herophile*. *Bibliography*. The bibliography is good, it includes the most important references

for the area.

In summary, I consider this a good book which could have been an excellent one if the author had paid more attention to certain details.

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