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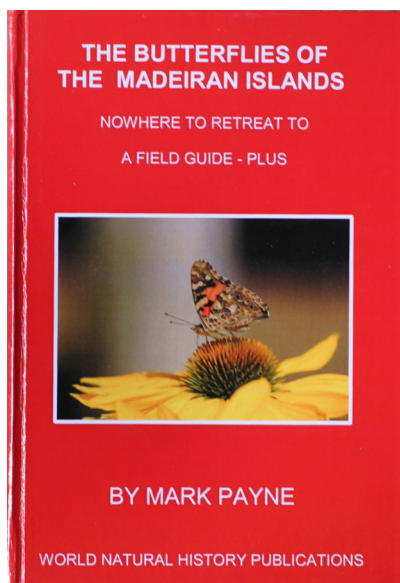
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BOOK REVIEW



*The Butterflies of the Madeiran Islands
Nowhere to Retreat to
A Field Guide – Plus*

By MARK PAYNE, 322 pp., hard back 162 x 240 mm. [No. ISBN number provided]. World Natural History Publications, The Lake District, UK, 2019. Price: £ 60.00.

A book seller's website gives a description of this book indicating that it is an in-depth scientific examination of the butterflies of the Madeiran Archipelago; however, errors throughout the book as described in this review, clearly demonstrate that this is not so. The errors start right at the beginning with the same misspelling of Alfred Russell (sic) Wallace repeated from two of his earlier books (PAYNE, 2019a, 2019b) on page 2 and the opening line of the Preface (p. 4) incorrectly stating that this is the only book on Madeiran Rhopalocera (see alternative book suggestions at the end of this review). Pages 3, 4 and 5 are reprinted almost word for word and with the same errors as in the author's previous book on the Azores butterflies, for example acknowledging the assistance of Matt Rowlands (sic). Had the author read the reviews of his previous books by the Reviewer (2020a) and TENNENT (2020a, 2020b) perhaps he could have made appropriate corrections.

Chapter 1 consists of a reproduction of part of *The butterflies and moths of Teneriffe* (Holt White, 1894) and quotes from de Worms (1964); the Reviewer considers that the first is irrelevant to a supposed field guide to the butterflies of the Madeiran Islands and the second uses butterfly names that are now outdated. The author uses the word 'endemic' incorrectly; he lists *Vanessa vulcania* Godart, 1819 as an endemic of Madeira, at the same time stating (correctly) that it is present in the Cabo Verde and Canary Archipelagos *i.e.* strictly it is an endemic of Macaronesia, not just Madeira (WAKEHAM-DAWSON *et al.*, 2002). Many of the researchers referred to in this section are absent from the bibliography, thus the reader cannot verify what has been reported by the author properly. For example, page 51 consists of a list of butterflies recorded, including some which the Reviewer calls into question as per later comments.

In addition, pictures in this book are most often from the internet or not correctly acknowledged, or at times not directly relevant; for the 26 pictures of Madeiran landscapes plus four of those of Porto Santo, none have a location and all are from the internet. Rose-Marie Haccour is again absent from the acknowledgements, despite providing the same seven photographs of *Vanessa vulcania* as published twice in his previous books (PAYNE, 2019a, 2019b). Also see the Reviewer's later comments regarding photographs used for *L. phlaeas phlaeoides*.

Chapter 3 consists of detailed accounts of species apparently recorded from the Madeiran Archipelago, but often with misleading or unscientific rationale or references that cannot be verified. It begins with *Cacyreus marshalli* (Butler, 1898) (*sic*), showing its presence on a map covering the whole of Madeira is based on one sighting of a single larva, which failed to produce a butterfly, on a cultivated *Pelargonium* sp. (AGUIAR & KARSHOLT, 2006: 92) and thus is misrepresentative of the butterfly's apparent current absence from Madeira. Details of the presence of *Lampides boeticus* (Linnaeus, 1767) on Madeira and Porto Santo follow, with information from previous researchers; however, it follows with a repetition from the author's book concerning the Azores (PAYNE, 2019b: 101-104) of the work done in India by Palem *et al.* (*sic*) (2015) (the author frequently omits proper use of italics in the references) which is not referenced and was not on *L. boeticus* at all (TENNETT, 2020a), so should not be included here. The works of Stefanascu, Jubany and Obregon (*sic*) (2018), Cano (1984), Obregon (*sic*), de Haro, Jordano & Fernandez Haeger (*sic*) (2012) are quoted and cited at length in the text, but none of these references appear in the bibliography, so it is impossible for the reader to consult them. The information about the larvae eating cocoons of the parasite *Cotesia specularis* (Szepliget, 1896) is irrelevant to those found in the Madeiran Islands, since that nearest colony of this parasite is in Germany (https://fauna-eu.org/cdm_dataportal/taxon/99298630-3612-4232-973c-6ae72e3bad12) (accessed 26.04.2020).

The first record of *Leptotes pirithous* (Linnaeus, 1767) in Madeira was made by HALL & RUSSELL (2001), not 2000 as suggested from the author's reference, nor 2002 as suggested in the author's incorrect quotation from Kratochwil *et al.* (*sic*) (2018) (misspelt in the author's references as Kratochwill).

The selected examples above perfectly demonstrate the inability of the author to either give correct dates or accurately transcribe other researchers' articles, of which this book mostly consists.

Since this book includes 'Field Guide' in its title, it would have been appropriate to have some comparative photographs or line drawings of *Lycaena phlaeas* (Linnaeus, 1761) and *L. phlaeas phlaeoides* (Staudinger, 1901) for the reader to compare the differing wing pattern in the endemic Madeiran subspecies, instead of six photographs of European specimens, since photographs of the endemic subspecies can readily be found on the internet. The author has included two and a half pages on the early stages of *L. phlaeas* in Europe (citing ten articles, none of which are referenced in the bibliography), which are irrelevant to the Madeiran butterfly.

The presence of *Phengaris arion* (Linnaeus, 1758) in Madeira reported by DAWSON (1992) is doubted by Wakeham-Dawson *et al.* (2004) in favour of a misidentification of *L. boeticus*. The author however accepts and reports on the existence of the species on Madeira but provides no valid indication as to how it reached Madeira; the author reports correctly that it emerges from a nest of *Myrmica sabuleti* Meinert, 1861, but this ant species has never been recorded from Madeira or The Azores; it has single dubious records from the Canary Islands and Morocco, and other records requiring verification

from Portugal (https://www.antwiki.org/wiki/Myrmica_sabuleti#Distribution_based_on_AntMaps) (accessed 26 April 2020). In the Reviewer's opinion, as per the references cited above, the presence of this species in Madeira indicated by the author's map of the "known distribution of *Phengaris arion*" is unscientific and misleading. The Reviewer also considers the two pages and distribution map provided concerning *Danaus chrysippus* (Linnaeus, 1758) are unscientific and inappropriate; this species has also never been recorded reliably from the Madeiran Archipelago.

Danaus plexippus (Linnaeus, 1758) is discussed in detail but the text includes five pages on its presence on the Azores Archipelago, which the Reviewer considers to be irrelevant to a book concerning butterflies of the Madeiran Islands. Of the eight pages on *Vanessa atalanta* (Linnaeus, 1758), about 90% of the text refers to the species in Europe and includes numerous references, none of which are in the bibliography. The section on *Vanessa cardui* (Linnaeus, 1758) has half a page on its presence in Madeira compared to four and a half pages about its presence in Europe, again with references not included in the bibliography. The presence of *Vanessa virginiensis* (Drury, 1773) was, according to the author, 'recorded' by Rebel (1917), Higgins & Riley (1973) and Oehmig (1977) but this is not so; all merely 'reported' the supposed and unsupported record by Godman (1870), who was probably referring to a different island (AGUIAR & KARSHOLT, 2006: 91). No further observations of this butterfly on Madeira have been recorded or reported yet the book includes five pages of text concerning this species. There are 21 text pages concerning *Vanessa vulcania* (Godart, 1819) (sic) again with many references which are not in the bibliography. The photographs of this species provided by Rose-Maria Haccour have no location of origin provided, and for the third time this lady has no acknowledgement for providing them (see PAYNE, 2019a, 2019b). The colour plates depicting *V. cardui*, *V. atalanta*, *D. chrysippus* and *D. plexippus* amongst others, none with any data or from the locations under discussion, have been used for the third time (see PAYNE, 2019a, 2019b).

Moving on to the Satyrinae, the discussion on *Hipparchia maderensis* (Bethune-Baker, 1891) is extraordinarily long (27 pages), including much on other *Hipparchia* species, which the Reviewer considers to be irrelevant to a book on butterflies of the Madeiran Islands. As has been stated previously, what is needed for a 'Field Guide' is a description of its distinguishing characteristics, compared with say *H. semele* (Linnaeus, 1758), together with some suitable photographs or line drawings, not a text monograph. To this could be added some detail of habitat and places where the species is likely to be seen. The reference to the Russell et al. (sic) (2004) in the bibliography is incomplete as pp. 197-208 should have been included. The author continues with *Hipparchia statilinus* (Hufnagel, 1766) (sic), reporting incorrectly again that it was recorded by Higgins & Riley (1983). Chapter 6 consists of 40 pages dedicated to *Pararge xiphia* (Fabricius, 1775) and *P. aegeria* (Linnaeus, 1758), and the Reviewer questions whether it is all relevant to such a book? The Reviewer again considers that some annotated drawings showing the differences between the two species is needed.

The 'sighting' of *Papilio machaon* Linnaeus, 1758 in Madeira is not yet substantiated with sufficient evidence to be conclusive; in the Reviewer's opinion more evidence is necessary. The author has included *Colias hyale* (Linnaeus, 1758) as being recorded from Madeira as he did in his book on the butterflies of the Azores (PAYNE, 2019b); RUSSELL (2020b) presented the facts, including that there was no specimen caught on the island of São Miguel, as suggested by PAYNE (2019b: 153). The research required to sort out the question of the presence or absence of this species in Madeira has been conducted by the Reviewer and the results published separately (RUSSELL, 2020c). The Reviewer is satisfied that the record should be discounted, as has been done by the majority of entomologists; the nearest verified population of *C. hyale* is currently in north-western Spain, some 2,000 km distant.

The section on *Gonepteryx maderensis* (Felder, 1862) (sic) consists mainly of reproductions of the articles of Aguiar, Wakeham-Dawson & Jesus (2009) and Merit & Merit (2010), of which the latter has not been referenced. Since Matt Rowlings had not been to Madeira and thus was unable to supply the photographs for this species (Plate 39), all are from the internet with no data, in spite of the fact that all the data were available. At this stage the Reviewer makes reference to three molecular cladograms: figure 2 (p. 149 – not 140 as indicated in the author's table of contents, p. 9), figure 8 (p. 202) and figure 10 (p. 245) published against the express wishes of Dr. M. Wiemers. They have been incorrectly attributed by the author to 'Wiemers, 2016', which is a single page abstract of a presentation made at the Island Biology conference 2016, on the butterflies of the Canary Islands and Madeira (see reference) and does not include any of these

cladograms. It should also be noted that some parts of the cladograms have been published by different authors in various publications at different times but the author gives no indication of this and by publishing these figures is considered to have infringed the copyrights of a number of different authors. According to personal communications between the Reviewer and Martin Wiemers on 23 April 2020, Wiemers on 17 January 2020 specifically requested the author, by email, not to publish these figures and the author responded on the same day saying they would be removed from the book, which was not due to be printed until 17 February; however, it has been suggested to the Reviewer that copies of the book were already available at the end of January.

The presence of *Pieris brassicae* (Linnaeus, 1758) was reported by Whiting (1901), who also reported *P. napi* (Linnaeus, 1758) for Madeira; the Reviewer, in common with all other researchers on Madeiran butterflies, doubts the records of both.

The section on *Pieris wollastoni* (Butler, 1886), has recently been confirmed as a full species (WIEMERS *et al.*, 2018), which was accepted by the author but is not in the bibliography (the Reviewer has referenced it). In this section, as has been found to be usual in the author's books reviewed by the Reviewer, there is a great deal of unnecessary and rude comments about other researchers' works. On page 283 there are a number of different molecular cladograms (Fig. 11, p. 283), incorrectly referenced to Wiemers, 2016, and one of these again blatantly infringes copyright. Another of the cladograms in this figure is of the *P. cheiranthi* / *wollastoni* complex, but the author has adulterated this cladogram by crossing out the letters 'oid' from *Pieris brassicoides* Guérin-Méneville, 1849, found in Ethiopia. This makes the resulting 'brassices' a nonsense and demonstrates the unprofessional attitude the author takes to other researchers' work. The Reviewer has received permission to refer to these cladograms from Martin Wiemers (*pers. comm.* 23 April 2020).

The Reviewer also has some comments on the photographs in plate 42, all purporting to be of the taxon *wollastoni*. As has been noted (but not by the author) in descriptions of this species, the distinguishing features of this taxon are threefold: firstly in the female on the upperside, but not the underside, there are two black streaks (sometimes weak) from the discal black spot to the apical black mark; secondly in this sex there are often two or three faint black points between the two large black spots; thirdly the hindwing undersides in both sexes are extensively dusted with black scales (MANLEY & ALLCARD, 1970); there are some excellent pictures in their book of specimens taken by Allcard. It is noted that the bottom left hand photograph in the author's plate 42 is of two of Allcard's females, which demonstrate these characters exceptionally well. When the Allcard collection was dispersed, all his specimens of *wollastoni* passed through the hands of the Reviewer and thus he is very familiar with the variation of this taxon. The photograph of the Madeiran postage stamp has correctly got the forewing black streaks and the general appearance of *wollastoni*. The upper two photographs (one from the Aistleitner collection, origin illegible, and the other from the Ziegler collection, *ex larva* Ribeira Brava) again demonstrate the diagnostic features. The central right-hand side photograph, however, is again from the internet and is not of *wollastoni*, but of *P. brassicae*; as far as the Reviewer is aware there are no photographs of the imago of *wollastoni* in *vivo* and the underside is not heavily dusted with the characteristic black scales. As a point of note the originator of this photograph has allowed for it to be copied, but only with due acknowledgement, which the author has ignored. The central left photograph is reproduced from Holt White (1894: Plate I, Fig. 1), taken from the internet, but this figure is of *P. cheiranthi*, despite the original author's legend and it does not show the definitive characters of *P. wollastoni*. These latter two photographs are a perfect demonstration of the dangers of taking other people's illustrations from the internet without having sufficient knowledge of Lepidoptera to identify the species which they represent; this has been demonstrated in the author's books on many occasions previously (RUSSELL, 2020a, 2020c; TENNENT, 2020a, 2020b). What would have been useful for a book of this nature would have been some accurate line drawings, as provided by OWEN & SMITH (1993: 218), which clearly shows the differences between *P. cheiranthi* and *P. wollastoni*.

It is noted that the Bibliography has been reduced from 55 pages in the authors previous books (PAYNE, 2019a, 2019b) to just over five pages; this probably accounts for the fact that it contains very few of the references quoted in the text. The many omissions make it impossible for the reader to investigate the claims made by the author. This section is also marred by the lack of accented letters and incorrect journal abbreviations.

In the opinion of the Reviewer, this book is hopelessly unscientific and it is not recommended to anyone interested in obtaining a field guide to the butterflies of Madeira, since it bears no resemblance at all to a 'field guide'. If readers are in need of a proper field guide to Madeiran butterflies, then the 2001 one by Wakeham-Dawson, Salmon & Franquinho Aguiar, referenced below, is excellent.

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