Discovering Jamaican Butterflies and their relationships around the Caribbean, by Thomas Turner and Vaughan Turland (2017)

Caribbean Wildlife Publications; Printers: Friesens Corporation, Manitoba, Canada; ISBN-10: 0692877061; ISBN-13: 978-0692877067. English; Hard Cover, 512 pages; 1000+ color photographs and figures; 10.7" x 8.8" x 1.6"; 4.6 lb.

Date of issue online: 3 October 2018

Electronic copies (ISSN 2575-9256) in PDF format at: http://journals.fcla.edu/troplep; https://zenodo.org; archived by the Institutional Repository at the University of Florida (IR@UF), http://ufdc.ufl.edu/ufir; DOI: 10.5281/zenodo.1421758

© The author(s). This is an open access article distributed under the Creative Commons license CC BY-NC 4.0 (https://creativecommons.org/licenses/by-nc/4.0/).

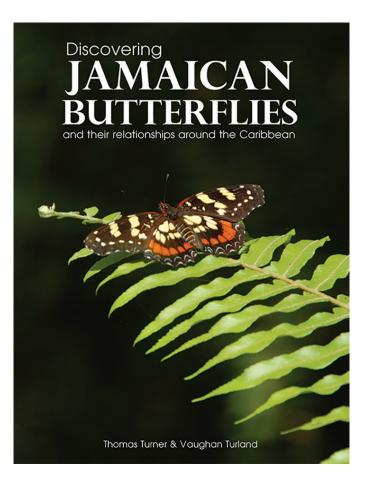
"Discovering Jamaican Butterflies and their Relationships around the Caribbean is the first comprehensive book on the subject since 1972" according to the authors. All butterfly species and subspecies (136) known from Jamaica are described in detail, including distribution, behavior, relationships, larval food plants, and immature stages, including some new information. This book is of especially geared towards persons serious about the natural history of the Caribbean fauna, wildlife protection, wildlife conservation, habitat preservation, taxonomy, systematics, and phylogeny, especially as it relates to tropical butterflies.

I have known of the development of this book since its inception in 2008 and have been eagerly waiting since then – and I was not disappointed. It has been made an even greater pleasure being acquainted with the work of both authors. Both authors bring a wealth of information, experience, and expertise to bear in this book and I was not disappointed at the outcome – it is simply a \$1000 book being sold for under \$200 – that's the simplest way I can put it.

The brief introduction by the authors sets the tone for this book. This book is not one for the casual reader, even though the pictures and illustrations are captivating enough to enamour my three small children from whom I must constantly wrestle the book and on occasions must hide in places they cannot reach. This book is designed especially for "researchers interested in tropical butterflies" and persons "involved with studying the natural history of the Caribbean" and lastly individuals who are "interested in wildlife protection and conservation". In reading the longer description, one gets a good picture of who the authors are, their experience and expertise, and the synergy with which they worked to produce this treasure of knowledge. To produce such a comprehensive assimilation of Jamaican natural history in under 10 years is astounding and a testament to what collaboration and an understanding of the strengths and weaknesses of one another and working with that understanding can do to achieve set goals.

The book starts with homage to Brown and Heineman's (1972) classic work "Jamaica and its Butterflies", which this work effectively replaces, and one should note that the first author of this book had input in the 1972 publication. From early collectors such as Hans Sloane (1687-1688) to present, this book introduces the work that has been done by collectors over the years. With this summary of what early collectors did, the book goes on to establish some important butterfly study

areas on the island, describes habitats and gives suggestions to collectors. The authors then provide a guide to classification and go on to describe butterfly habitats on the island, replete with detailed maps, photographs, and descriptions of habitat across the island. This section could in itself serve as an introduction to Jamaican forest ecology for entry-level college students at least. The authors then provide a table detailing the preferences of Jamaican butterflies for certain habitats. I would have preferred that they did not break the trend of thought from the brief chapter on study areas to the detailed descriptions of butterfly habitats with the chapter on classification. It would have been better to place that chapter right before chapter five (5) that deals with the detailed descriptions of the Jamaican butterflies. However, that is just personal taste and does not detract from the content of each chapter which was well supported by cited



literature; in fact, the whole book is full of citations in support of information it contains, and conclusions drawn.

Chapter five (5) is the heart of the book; here we find detailed descriptions of each species, with the phylogenetic relationships described first, then species descriptions following this established phylogeny. The authors included in each description photographs of adults, pinned and naturally perched, immature stages, distribution maps and images of genitalia. Over 75% of the book is comprised of these detailed species accounts, including unidentified species and new species. This chapter is then garnished with images of eggs of some of the Jamaican butterflies, a table of larval foodplants, a list of important nectar plants for select species and more stunning pictures of butterflies nectaring. Lastly, a table dealing with the status of Jamaican butterfly species and their regional distribution can be found. The wealth of information contained in this section alone will be dissected by graduate students and professors for the foreseeable future and will form the basis for many publications, as did its predecessor "Jamaica and its Butterflies". I hold advanced degrees in Zoology and Entomology and could be classified as a specialist in butterfly systematics, and it has taken me a while to dissect this chapter

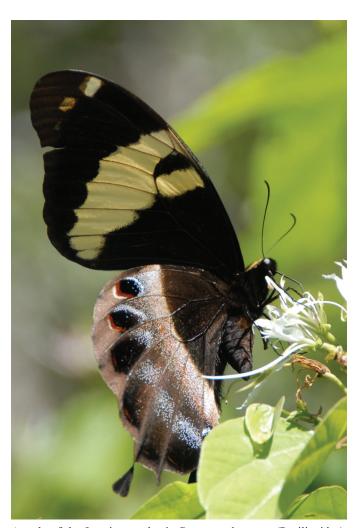
alone; in truth, I am still going over some parts as a lot of the information contained there is original research conducted by these individuals where they show immature stages and discuss behaviour of the species, including many previously poorly known taxa.

The book ends with a comprehensive discussion of the biogeographic origins of Jamaican butterflies and efforts to conserve them, drawing from many recent publications.

The book is not without errors, such as a mistake in the abbreviation of this author's name in the references, and I am sure there may be one or two more, but who would not expect to find errors in a work of this magnitude? All these simple errors can be fixed in the next version, which I hope is already being worked on. All in all, this is a splendid work, very comprehensive and detailed, popping with magnificent images, figures, and tables – simply a must-have.

Delano S. Lewis

Research Associate, McGuire Centre for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida, Gainesville, FL, USA



A male of the Jamaican endemic *Pterourus homerus* (Papilionidae), Jamaica's iconic national butterfly, in the Cockpit Country Protected Area nectaring on *Bauhinia divaricata* (photo by V. Turland).



A female of *Troyus turneri* (Hesperiidae), Jamaica's recently discovered endemic genus and species, restricted to the Cockpit Country (photo by V. Turland).



A male of *Protographium marcellinus* (Papilionidae), a species in danger of extinction through ongoing destruction of its larval food plant (photo by V. Turland).