Field Guide to the Butterflies of Sri Lanka. George Michael van der Poorten & Nancy E. van der Poorten. Lepodon Books 2018. ISBN: 978-1-77136-605-2. Paperback 250pp. + vi; US \$28; AUS ~\$40 Reviewed by Kelvyn Dunn

Field Guide to the Butterflies

of

Sri Lanka



George Michael van der Poorten Nancy E. van der Poorten

An up-to-date field guide to help identify all of the butterflies of Sri Lanka is a welcome piece for visiting naturalists and for those residents of the nation who wish to recognise and learn about their local fauna. There have been a few changes to the butterfly knowledge since the last work of this kind came out in 2013 – a handbook by Rajika Gamage that illustrated the 245 species then known from the island. This new one illustrates 248 of which 31 are endemic forms. Most are shown as live adults in natural habitat, with just a few photos of museum specimens slotted in where quality images from the field were not attained. The guidebook's small size (12 x 19 cm) and slimness (1.5 cm) makes for ease of carrying, which is a good thing. The linen embossed cover

should withstand moderate field handling, and that water-resistance that it will give should ward off some weathering in the tropics! As a synoptic piece, it will also delight both the beginner and the seasoned observer active in the broader Indian region where many of the species occur more widely. The van der Poortens are more than qualified to have authored this guide; they rose to eminence after the publication of the scholarly work, *The Butterfly Fauna of Sri Lanka* (just two years ago), to which the field guide now acts as a companion piece. That tremendous effort has indelibly

linked them into the history of butterfly research in that part of the world, and this new work more than ices the cake!

The introductory section on Sri Lanka and its butterfly fauna, once studied, will enable the reader to make the most of this book. The two maps that show the topography and the four climatic zones give insight into the mosaic distributions of the different species. For most, the species' ranges would seem to align with the elevation and the seasonal rainfall patterns of the island, with the exception of the migratory and cosmopolitan fauna (which might turn up in unpredicted places). Photos of habitats that are typical of each zone will help the naturalist to recognise the haunts of certain species in the wild. And the short precis on conservation and the reintroduction of native species into gardens and parklands reminds of that contemporary need (as a lot of habitat is now gone). Like most field guides, the common names have precedence over technical ones, yet these can vary internationally; the butterfly called the 'Blue Pansy' (p. 159), for an example, will be familiar to readers in the Australian region who will know it as the 'Blue Argus'. The photo of a well-poised swallowtail feeding at a mud soak depicts the basic body parts, labelled to teach the novice. The diagrams that follow show the main regions of the wings and the wing venation (with the names of the veins and the wing spaces between them). Fluency with these terms will enable the student to recognise the characters that distinguish the different species.

The synopses of the species, which describe the sexes, give their usual size ranges and offer notes on their habits, make up the bulk of the book (pp. 24-205). These digests also cover the habitat favoured by each – adults of course can disperse widely at times, but many will remain in the areas most suited to them. The thumb-sized, plotted distribution maps include the boundaries of local shires and display just one species per map; some are inset within the text (if they fitted there), whilst the remainder is at the rear, in an appendix (pp. 206-222). The coloured spots show those reports that are historic (gained from two major sources), those reports that are from after 1950, and those reports that are in need of confirmation (because doubts exist over the accuracy of the identifications). The species' accounts may also list a few locations where the visitor could see certain kinds with good odds and include the names of flowers they often visit in those areas. Three to six images per species placed on the right-facing page opposite the text of each show the sexes and any seasonal forms of one or both alongside the underwing surfaces. All images, of which there are 1154, are of high quality and those of adults in flight (see pp. 25, 27, 161, 169, & 173 for samples) add a touch of photographic prowess. The use of arrows to point out key wing patterns of certain species will help students who are new to the island's fauna. In other places, close-ups of key identification points for some species that can be hard to identify will assist all workers. The varied activities and poses shown, such as feeding, egg laying, basking, roosting, and mating add that aesthetic touch that photos of aged, dry-pined specimens struggle to match in a book of this purpose. The Tamil Teoman (Cirrochroa thais), as one example, is shown laying

имимимимимимимимимими

eggs as a concatenated 'string', suspended below the leaf of its host (p. 132) and so tells more of its story that way. Moreover, those sexes or whole species that look much the same are placed near each other to quicken their recognition in the field. The female of the Danaid Eggfly, for example, can be found below the Common Tiger (p. 129) which it mimics. The male of that same Eggfly (which looks nothing like the female) is, instead, below the male of the 'Great Eggfly' (p. 149) – a member of the same genus that it resembles (as a close genetic relative). Relevant text for the Danaid Eggfly is included in both places, as in other cases too where this layout has been adopted for the visual needs of the casual user. The accounts are fronted by precis of each of the six families that occur on the island, and these include photos of the life history for one species per family, selected as a typical example for each. And, the colour tabs in the top right hand corner of each page (which are visible on the ream when the book is closed) will allow the user to skip to the family desired, to begin identifying the butterfly once spied. The discussions of the various species are telegraphic in style; they have been clipped back to pack in as much information into the smallest number of words as possible (which the book explains). That said, good English does not demand that all sentences should be complete; hence, the careful use of shortened placenames and the excision of some verbal structures in these reviews can still offer effective communication in works of this kind.

The taxonomic keys are technical – they rely on a good familiarity with the nomenclature of wing venation and wing regions - and, so aim at the advanced student. They will ensure identification with good certainty to species (in most cases); the key to *Nacaduba* may be the exception as it is just a guide (as the text explains). A fast but reliable means of identification is important in Sri Lanka because not only do some kinds look alike (as a glance at the photos on p. 79 will show), but also because of the strict conservation laws that operate in that country. As the book states (p. 7), "... all Lepidoptera (butterflies and moths) in Sri Lanka are protected under the Fauna and Flora Protection Ordinance. Even the use of a net for the purpose of identification and release is illegal without prior permission from the Department of Wildlife Conservation" (emphasis added). Alas, most adults will fly away (on good chance) before one can get close to see such fine detail as may be needed to recognise the species. I can only speculate then, that identifications achieved using the keys (in the field) will be tentative ones under this prescriptive means of seeing the fauna. Taking photos of the smaller skippers and blues may help if the important wing markings are visible in the images (which may or may not be the case, as chance will also dictate). And, gaining these may be slow going and likely most frustrating without the 'capture, chill, and release' tactic that many keen insect photographers, with that ticklist in mind, must resort to at times. As an English poet of the eighteenth century once wrote: "Blessed is the man who expects nothing, for he shall never be disappointed" – Alexander Pope (in a letter of 1725). One could add here, that by just enjoying the 'hunt' (through the lens) and by adopting that 'mindset of the moment' (in the wilds), the visitor (with just a short time to do so) may still get some great pictures. That is, if the weather is sunny, if the time of day is right, if adults in good condition are in close range, if the lens does not fog in the humidity, and if the battery does not go flat at that vital moment! And, yet, many times serendipity can see to that due reward (that one's effort ought to have brought at other times, and did not). As a challenge here, the females of some of the 'Line Blues' are still in need of live images (see pp. 83 & 85), so more work in the field may one day fill those gaps.

The three appendices that follow the species' accounts include most of the maps, the checklist of taxa, the taxonomic endnotes, and a list of food sources for the adults and caterpillars. A glossary, the credits for the figures and images, and the references (19 entries) then follow on. The index of both common and scientific names of the butterflies also cross-references the maps for each species. And, a snippet about the authors – we are all curious about other people's lives and their achievements – and the acknowledgements close the work.

The content has been well proof read and so there would seem to be few flaws or matters that are of editorial or scientific concern. There is a mismatch in the font size for a species name on p. 230; those legacies of auto-formatting software, where subtle changes may be made to text (that then go unnoticed). Schappert (2000), which is cited on p. 18, is not in the list of references. A citation of Pavukandy (2018), which is listed in the references, would seem to be missing from the text (at least under the species that the paper deals with). The work by D'Abrera on the island is listed on p. 230 as published in 2000 (not 1998). Given that orange and red are side by side on the colour spectrum, I wonder whether another choice of colour for the map-plots might have eased their distinction on diagrams of that small size. The main concern here is that a measure of doubt shrouds those records that are coloured orange, whereas the red ones are confirmed modern encounters; the abundance of red ones makes the orange ones harder to find too. Finally, the spelling of a nymphalid subfamily as Limenitidinae may receive a second glance by some, but it is the right one! It may come with some surprise then, that the variant in the Zoological Catalogue of Australia (2001, p. 329) and in the tome, Butterflies of Australia by Braby (2000, p. 552) as 'Limenitinae' (with yet a different misspelling on p. ix of the latter, as 'Limenitiinae') is wrong. Everybody makes mistakes, including the likes of us 'down under'!

This new handbook is all about finding and recognising the adult butterfly and so includes just the basics for the task. It more than meets the needs of its intended and varied audiences – professionals, amateurs and beginners, and it is well priced to boot. Hence, I can recommend this field guide to all who have an interest in butterflies of the South Asian region, if not just for the up-to-date treatment of the fauna of Sri Lanka that this work has aimed for, and tells of with excellence.