

'Dragonflies and Damselflies of South Africa.' Michael J. Samways.

Author: Davies, G.B.P.

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BOOK REVIEW

'DRAGONFLIES AND DAMSELFLIES OF SOUTH AFRICA.' Michael J. Samways. Sofia/Moscow: Pensoft Publishers, 2008. 297 pp., 22.5×14 cm. Softcover. ISBN 978-954-642-330-6. Price: 39 Euro. Available from: PENSOFT Publishers, Geo Milev Str. 13, 1111 Sofia, Bulgaria; Tel.: +359-2-967-40-70, Fax: +359-2-967-40-71; e-mail: info@pensoft.net or pensoft@mbox.infotel.bg; Pensoft Online Bookshop: http://www.pensoft.net.

As attractive, generally large, diurnal, predatory insects, the Odonata have long attracted research interest from entomologists. In our region, a firm foundation for odonatology was laid by Elliot Pinhey, Boris Balinsky and others. This research mantle has been carried forward by Michael Samways and his students, who have devoted the last two decades to their study, firstly in KwaZulu-Natal, and more recently in the Western Cape.

'Dragonflies and damselflies of South Africa' (hereafter 'DDSA') is the culmination of much of Samways's investigation into our dragonfly fauna, and it is unequivocally a significant milestone for South African (and African) odonatology.

As the Odonata are aquatic insects, it is instructive to remember that South Africa is largely an arid country, with vast areas of western South Africa falling below the 600 mm isohyet.



Consequently, our dragonfly fauna is small (*ca* 158 species) relative to tropical Africa, but it does have the advantage of mixing dazzling tropical forms like *Anax tristis* with endemic, localized temperate taxa like the *Ecchlorestes* species.

'DDSA' is a most attractive volume and, although running to nearly 300 pages, the book is nevertheless compact and lightweight. I am not sure whether the author and the publishers intended this as a field-guide or a more formal handbook. The Preface (p. 5) does mention the words field guide, but I get the impression from its large mass of text and data that 'DDSA' is, in fact, a hybrid between the two. This 'schizophrenic' nature is perhaps the book's weakest aspect. As I will discuss below, there are some features that detract from the book's effectiveness as a classic field-guide, while others mar its handbook status.

The book begins with concise chapters on dragonfly biology and ecology. These notes highlight many interesting facets of South African dragonfly biology, e.g.

that certain taxa (such as *Sympetrum fonscolombii*) are migratory, or that Western Cape Odonata divide into two phenological categories, 'spring species' and 'autumn species'. Regrettably, Samways is unable to expand on such interesting topics, and, perhaps even worse, none of the statements in these opening chapters is referenced, making it difficult to trace the primary source of a particular conclusion or result. There are also tips on conservation (a field that Samways has been especially active in), photographing, collecting and even rearing dragonfly larvae and building a 'dragonfly pond' for one's garden. I was interested to learn that pinning specimens with spread wings has fallen out of favour with odonatologists, who now prefer to accession material by placing specimens in plastic envelopes.

There are two keys in the book: one to major groupings and a longer key to species. The latter is liberally illustrated with drawings of genitalia, wings, *etc*. I have not had an opportunity to test the keys, but they appear comprehensive and well-written.

http://www.africaninvertebrates.org.za

The species accounts include notes on identification, a description of the entire insect (face, eyes, prothorax, synthorax *etc.*), distribution (with map, but provincial boundaries are not indicated), habitat, behaviour and comparison with similar species. Usefully, there are also two bar graphs for each account, one showing phenology (flight period) and the other a 'dragonfly biotic index', which shows sensitivity to pollution, habitat disturbance *etc*.

Most accounts have two colour photographs, generally of male and female, although occasionally only one sex is illustrated. All 416 photographs of dragonflies and damselflies are of a high standard, but some appear to have been reproduced too darkly. Samways deserves much credit for successfully photographing all the South African Odonata taxa. Given the often wary nature of dragonflies, this is a most praiseworthy achievement. Sketches of genitalia and wing photos also appear, these duplicating the images from the species key.

It is evident, therefore, that a large amount of information is incorporated into each species account. This is welcome on one level for comprehensiveness, but for field-guide purposes it is a daunting torrent of data to wade through. This abundance of text and data gives Samways's book a rather cramped and 'busy' feel; a definite negative feature.

Possibly as a result of the cramped nature of the individual species accounts, on pp. 204–213 a section entitled 'Additional photographs' appears. It is wonderful to have these additional photos, but something of an oddity to have them divorced from the respective accounts. Why not just insert the relevant photos after each account as an extra page for the particular species?

Inevitably, Samways's book invites comparison with the two-volume field guides privately published by Warwick and Michèle Tarboton (Tarboton & Tarboton 2002, 2005). Those two excellent books broke new ground in being the first field guides to South African Odonata.

'DDSA' has an obvious edge in that the dragonflies and damselflies are all in one volume. 'DDSA' is brim-full of information, as mentioned, and scores points over the Tarboton guides, which were marked by their concision. Samways's colour photos of live or freshly killed individuals also means that the true colours of the insects comes across clearly in his book. The Tarbotons in some cases had to use old museum specimens. A striking example of this is *Lestinogompus angustus*: Samways's photograph (p. 125) shows this stunning dragonfly with its vibrant yellow and black coloration and reddish abdominal apex to great advantage, whereas the same insect in Tarboton is a dried-out, dull, brown husk. On the other hand, the text-heavy feel of 'DDSA' contrasts negatively with the neat, uncluttered layout of the Tarboton guides, which also gave maximum space to the dragonflies themselves rather than to the text.

'DDSA' is finished off with a check-list providing Latin and vernacular names of Odonata and references to relevant pages. The check-list is followed by a glossary of mostly morphological terms, an extensive bibliography that lists 118 publications on taxonomy, ecology and conservation of Afrotropical dragonflies and damselflies, and by a five-page general index. Like butterflies, all South African Odonata now have English common names, but problematically many differ between Samways and the Tarbotons. There is no correct answer to what is a subjective decision on which name to use, but the differences between the books may cause frustration amongst users.

To sum up, 'Dragonflies and Damselflies of South Africa' is an admirable volume which is a credit to author and publisher. 'DDSA' is highly recommended to established entomologists and novices, as well as to ecologists, conservation specialists, naturalists, *etc*. South African scientific community is immeasurably strengthened by having this book available, and the order now begins to rival the butterflies for sumptuous and accessible coverage.

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Tarboton, W. & Tarboton, M. 2002. A fieldguide to the dragonflies of South Africa. Modimolle, South Africa: privately published.

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G.B.P. Davies