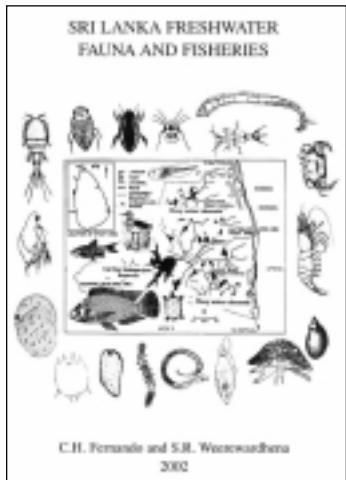


BOOK REVIEW



Sri Lanka Freshwater Fauna and Fisheries.
Fernando, C. H. & S. R. Weerewardhena, 2002.
A Third Millennium Book, Colombo, Sri Lanka, and Volumes Publishing, Kitchener, Canada. ISBN 955-97697-0-7. Orders to the authors at chfeman@scibiol.uwaterloo.ca or zoosrw@kln.ac.lk

This weighty tome - 634 A4 pages – landed on my desk with a resounding thump.

Its heft is due not only to physical bulk. C. Herbert Fernando, the senior author, has half a century of experience in tropical limnology, and is indisputably one of the founding fathers of this research area. The book is subtitled ‘A guide to the freshwater fauna and the genesis of inland fisheries’ and is made up of a number of papers by Fernando and his collaborators published between 1956 and 2002. There is only one item in the book that has not appeared elsewhere, and it the only paper that features the two authors. The original papers do not seem to have been modified in any way. The lack of editing means that there are some redundancies in the text, but the difficulty of obtaining some of Fernando’s original papers means that a reprint of this type is welcome. It is also helpful to have these papers bound collated into a single volume. I stress here that this volume is by no means a full representation of Fernando’s prodigious output.

A particular pleasure is to come across Mendis & Fernando’s seminal guide to the freshwater fauna of Sri Lanka (then, of course, called Ceylon). This 160-page paper is in itself a small book. It covers all major groups, from protozoa to otters, and is illustrated by the many delightful hand drawings of G.D. Kariyawasam. (My particular favourite is a picture of the Stork-billed kingfisher, *Pelargopsis capensis*.) I have my own, now rather dog-eared original of this paper and got a great deal of use out of it when I first started working in Asia. Of course, it is incomplete, and really only fully applicable to Sri Lanka, but it is an example of what is possible when a couple of young scientists decide to develop a tool that will help others make sense of a poorly known fauna. This first attempt was followed, over the years, but

five supplements, each written by Fernando, plus papers on rotifers and copepods co-authored with collaborators. The fifth supplement was specially prepared by this volume by Fernando and Weerewardhena, and brings knowledge of the fauna up to date. Nomenclatural changes are taken into account also. As might be expected from Fernando’s own research interests in the group, zooplankton are particularly well covered in this volume. But this group aside, it is probably true to say that the freshwater fauna of Sri Lanka is as well known, or perhaps better known, than any other tropical country of an equivalent size. There is still plenty to do, however. The Chironomidae (Diptera), for instance, are very poorly known but the family is likely to be highly species rich.

Papers that describe the development of freshwater fisheries in Sri Lanka, primarily reservoir fisheries, take up the rest of the book. These are based mainly upon the exploitation of exotic tilapias (*sensu lato*), there being no native fishes adapted to lacustrine habitats. This fact has encouraged Fernando to expound on his politically-incorrect view that exotic species can, under certain conditions, be valuable additions to local faunas (especially on pages 621 & 622). He quotes Charles Elton’s classic 1958 monograph on biological invasions (Elton, 1958) in support of this opinion, proposing that conservation should involve enhancing biological variety in as many places as possible, even if that means the addition of exotics. Moreover, Fernando thinks that that exotic species are not always threats to native biodiversity, suggesting that worldwide cultivation of chickens has reduced the pressure to harvest wild birds. There is something to be said for his views. Exotics have been and are being introduced throughout Asia in an unplanned, *ad hoc* manner. It may be better to accept that some exotics will arrive anyway, and manage or facilitate the introduction species that are least likely to impact native biotas. Many readers may disagree with Fernando’s view, but the evidence that he has assembled deserves careful consideration. Certainly, it should not be dismissed out of hand. I confess that as a native biodiversity chauvinist (i.e. native = good; introduced = bad), this was my initial reaction.

This volume contains a lot of useful information. However, some of it is hard to locate. A frustrating feature, although an understandable one considering its genesis, is the lack of an overall index. There are three partial indexes, which cover pages 162-422 and 445-485, and the contents of the original Mendis & Fernando paper. The third of these is well done, but a test of the first revealed that it was incomplete. From

page 507 onwards there is no indexing at all. In order to find entries on a given taxon, the reader has to consult all three indices, but even then cannot be confident that a useful nugget of information hasn't been missed.

On the back cover, the subtitle is slightly different from that on the frontispiece, and is given as 'A guide to the freshwater fauna of Sri Lanka and a genesis of the fisheries'. The blurb goes on to say '... this is the only comprehensive book on the freshwater fauna and fisheries of any country in the world. It was written and updated over a period of nearly 50 years'. Need I say more?

The Indo-Pacific scyllarine lobsters (Crustacea, Decapoda, Scyllaridae). Holthuis, L. B., 2002. *Zoosystema*, 24(3): 499-683. Publications Scientifiques du Muséum national d'Histoire naturelle, Paris. ISSN 1280-9551.

The flathead lobsters of the family Scyllaridae are very diverse, and of the four recognised subfamilies, the Scyllarinae has the most species. Until this revision, this subfamily had only one very speciose genus, *Scyllarus* Fabricius, 1775, its members occurring in all the major oceans. Within the Indo-Pacific, identifying *Scyllarus* species has always been a major problem, with 41 available names. The present revision solves this headache. The present author is the acknowledged world expert on lobsters, and has worked on them for decades. Already, he has reorganised the subfamilies within the Scyllaridae and has revised the Ibacinae (see Holthuis, L. B., 1985: A revision of the family Scyllaridae (Crustacea: Decapoda: Macrura). I. Subfamily Ibacinae. *Zoologische Verhandelingen*, Leiden, No. 218: 1-130), but the one group for which a revision was most needed was without doubt the Indo-Pacific Scyllarinae. In fact, the roots of the present revision were planted over 40 years ago, and it has taken that long for it to be finally finished. But the wait has certainly been worth it. The author shows that the genus *Scyllarus* s. str. is restricted to the Atlantic and Mediterranean; and establishes 13 new genera for the species from the Indo-Pacific. In the process, he also describes eight new species. The largest Indo-Pacific genus is now his new genus, *Eduarctus*, with seven species. Almost all the species

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are described and figured in detail, with colour figures provided for 12 taxa. Habitat, depth and larval data is provided and discussed whenever possible. Two monotypic genera, *Antarctus* and *Antipodarctus*, however, were only briefly diagnosed, the full treatment of these southern ocean species been left to John Yaldwyn of New Zealand. One regret would be that the author has not revised *Scyllarus* s. str. as well and sorted out the problems within it. As things stand, this task will almost certainly have to be taken up by his successor (whoever he or she may be).

Noteworthy is also that the journal ZOOSYSTEMA is now taking on large monographs like Holthuis' present masterpiece on the Scyllarinae. This journal has had a very long history and throughout most of the last few decades, has been better known to its users as the BULLETIN DU MUSÉUM NATIONALE D'HISTOIRE NATURELLE, 4th SÉRIE, SECTION A, ZOOLOGIE, PARIS. In its new format and name, which is now past its fifth year, the journal has had a timely revival and is set to carry on the excellent traditions and roles of its predecessors.

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