

## BOOK REVIEWS

**FROGS OF SABAH.** Inger, R. F. & R. B. Stuebing, 1990. Sabah Parks Publication No. 10, Sabah Parks Trustees, P.O. Box 10626, 88806 Kota Kinabalu, Sabah, East Malaysia, 132 pp.

With over 100 species of anurans known from Sabah, Borneo, the publication of a layman's book on this state's frogs and toads has long been expected. The authors of the present book are amply qualified to do this. Robert Inger has spent some 40 years studying the herpeto- and ichthyofauna of this region, particularly Borneo, and has established himself as one of the premier herpetologists of the region. His 1966 monograph on Bornean amphibia which he is currently revising, is still a standard reference text for herpetologists in this area. Robert Stuebing has spent many years doing field work in Sabah and has been involved in ecological studies of vertebrates, which in recent years, have centred on Sabahan herpetofauna.

The most striking feature of the present book must surely be the excellent colour plates, almost all of which are by the two authors. Clearly depicting 56 of the more common species; the text is accompanied by crisp descriptions with a minimum of technical jargon but including very useful snippets of their life cycle, larvae, food, calls (if any) and other aspects of their biology. It will certainly be a book useful not only to herpetologists and naturalists but field ecologists as well. A most interesting section on folklore precedes the book. The section on classification is valuable, including a key for most of the known species from Sabah, even those not treated in detail by the main text. A key to all the species would have been even more useful. In cases where species complexes are considered, the authors have chosen not to enumerate the component species, particularly for the difficult *Philautus* group. Although this is convenient, it might perhaps be useful to do so nevertheless to indicate the problems and known taxa present. Similarly, although authors of the species are indicated, the year has been omitted. They should perhaps have been indicated at least once. This bit of information, derided by many as irrelevant, gives a very good idea as to how many were recent taxa as well as allows us to trace the literature pertaining to the species.

Perhaps the most "controversial" part of the book will surely be the designation of common names, as the authors themselves admit in their preface. Kiew (1984) had earlier proposed a list of names for the anura of Peninsular Malaysian. Inger and Stuebing however, have chosen to adopt a completely new set of names, and this is bound to create confusion. It might have been better if they had coined names only for species which had none rather than in toto. The fact that many amateur herpetologists and viviculturists have their own set of common names only aggravates the situation. Although there are no guidelines as to how this should be done: "smooth-sounding" names should be adopted as far as possible. In this task however, I must admit that the amateur viviculturists do a far better job. Sorely missed was a much needed section on references, at least the major ones for this region. A general selection of the more recent relevant literature would have been very helpful. It would provide any prospective herpetologist or serious biologist with a very useful stepping-stone to more detailed work.

There however, can be no denying that this book will prove to be a valuable tool in enhancing the general public's interest in these animals. Its value to ecologists and other field biologists will also be outstanding, especially if used together with Inger's 1966 monograph on Bornean frogs, which hopefully, will be revised soon.

## LITERATURE CITED

Inger, R. F., 1966. The systematics and zoogeography of the amphibia of Borneo. *Fieldiana, Zool.*, **52**: 1-402.

Kiew, B. H., 1984. Conservation status of the Malaysian Fauna. III. Amphibians. *Malay. Nat.*, Kuala Lumpur, **37**(4): 6-10.

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**THE FRESH-WATER FISHES OF NORTH BORNEO.** Inger, R. F. & P. K. Chin. 1990. *Fieldiana: Zoology*, Volume 45 (1962). Reprinted by Sabah Zoological Society, Sabah, Malaysia, with supplementary chapter by P. K. Chin, 268+SC47 pp.

The reprinting and updating of this important ichthyological publication is welcomed and timely, especially considering the growing interest in Southeast Asian freshwater fishes. Since 1962, Inger and Chin's book has served as a key reference text to not only the freshwater fishes of Sabah (= British North Borneo), but also for the rest of Borneo and other parts of tropical Southeast Asia as well.

The first 268 pages of the book is identical to the original publication by the Chicago Natural History Museum which is now out of print. The last 47 supplementary pages written by Datuk Chin Pui Kong is intended to update and include species described or discovered since 1962. 46 new figures have also been added to the 120 in the previous addition. The many new figures, mostly of species not dealt with or illustrated in the original publication, are of a high quality and should prove most useful. This includes species like *Wallago maculatus* Inger & Chin which has never been illustrated before. In total, 85 native and 12 introduced food species are considered, 56 of which are endemic to Sabah or Borneo. Despite the scope of the investigations into Sabahan freshwater fish fauna over the years, it is apparent that much more remains to be done. Chin has added 10 species, mostly gastromyzontids, to their 1962 list of fishes. The fish fauna of many parts of Sabah however, despite the extensive studies of Inger and Chin, still remain poorly or even unsampled, and the number of known species can be expected to increase still further in the coming years.

The single weakness of the new edition of this book must surely be in the taxonomy and nomenclature. While the second author has attempted to update the book with new species and records in his supplementary chapter, it is apparent that he has only considered the literature pertaining directly to Sabah. This selectivity is a problem because the state of fish taxonomy has progressed a great deal since the 1960s, and the failure to refer to or utilise modern taxonomic/nomenclatural changes affects the usefulness of the book. Many groups have been revised between 1962 and 1990, e.g. the cobitids and balitorids (= homalopterids) (Sawada, 1982; Kottelat, 1984, 1987, 1988), barbans (Rainboth, 1981; Banarescu, 1986), channids (= ophicephalids) (Myers & Shapovalov, 1931); cichlids of the *Tilapia* complex (Trewawas, 1983) etc. While it must be granted that supraspecific classifications are often subjective, to follow a dated taxonomy without comment or explanation can be very confusing and reduces the value of the book. This is especially in view of the several regional ichthyological books which have been released since 1962 (e.g. Alfred, 1966; Mohsin & Ambak, 1983; Kottelat, 1989; Roberts, 1989; Lim & Ng, 1990) which use a more modern system of classification. It would have been better if a completely new edition of the book had been prepared, with the new information and figures incorporated in the main text for smoother flow and