The chapter on captive breeding contains two sections, one on mating and one on the incubation of python eggs, which provides some general data on temperature, moisture and substrate. The chapter care in captivity is divided into sections on housing (with primitive drawings of vivariums), furnishing the vivarium, heating and lighting, food, handling, parasites and diseases (mites and ticks, worms, gastroenteritis, bacterial infections, nutritional diseases, colds, peritonitis).

I am rather amazed by the "informal key to the boid genera" of which it is said straight forward that it may not work for all species. In that case I wonder why it was published at all.

The checklist at the end of the book is presented in the form of a table and is mainly adopted from Stimson's (1969) well known checklist. The persistent error that two subspecies of Epicrates cenchria (cenchria and maurus) would occur in the Guianas is continued here. On p. 166 it is stated that E. c. assisi would occur in NW Brazil, which should be NE Brazil.

It is a pity that the author refers to a notoriously uncritical checklist of Australian reptiles, about which the last word has not been said yet, because not only taxonomic and nomenclatural matters are involved, but also ethics.

The short chapter on CITES and its effects on boids is useful and should occur in all similar books.

The book does not provide new data, it is a recapitulation of existing literature and would only be useful to budding keepers of boas and pythons who need an introduction to the group. It provides access to further literature.

Marinus S. Hoogmoed (Leiden)


This book set out as an effort to make a "revised" version of Noble's (1931) Biology of the Amphibia. As is immediately clear from the size of the volume, the small print used and the lay-out in two columns it has become much more than that and its information content is much larger than Noble's book. This is not only due to the fact that in recent years the knowledge of amphibians has greatly increased (in old fields, and especially in new fields like biochemistry, cytogenetics, acoustics, ecology etc.) but also to the fact that the authors, both well known authorities in the field, together encompass a much broader view than a single person could.

The book contains 19 chapters, which are grouped into four parts: Part 1: life history (reproductive strategies; courtship and mating; vocalization; eggs and development; larvae; metamorphosis), Part 2: ecology (relationships with the environment; food and feeding; enemies and defense; population biology; community ecology and species diversity), Part 3: morphology (musculoskeletal system; integumentary, sensory, and visceral systems), Part 4: evolution (origin and early evolution; cytogenetic, molecular, and genomic evolution; phylogeny; biogeography; classification). The first chapter is an introduction to the amphibia and contains a short history of amphibian research and some reflections on prospects for the future. Each chapter is divided into several subchapters, which in turn contain several paragraphs. This makes the book easily accessible and the reader is greatly helped by the extensive index of 57 pages, which provides entries to taxa, subjects and authors.

The part dealing with life history is the most extensive (181 pages) and beyond doubt summarizes some of the most interesting processes and data presented in this book. In a next edition this section probably has to be extended even more, because new facts in this area are being discovered 'every day' and often provide taxonomists better insight into the processes of evolution, biogeography and into relationships. The part on ecology, which partly could have been dealt with under life history as well, with 89 pages is by far the smallest section of the book and considering the work that has been done recently in this field, this section might have been extended beyond its present size. However, it does provide a good overview and gives the references that can further direct the interested reader. The part on morphology counts 125 pages and most (76) of these deal with the musculoskeletal system, whereas integumentary, sensory and visceral systems only occupy 49 pages. Probably this has something to do with the fact that both authors are taxonomists (one of them a morphologist as well), who realize the importance of musculoskeletal data for modern taxonomy. It is debatable whether in a book such as this it really was necessary to go into such details about muscles as
was done here, whereas most drawings and descriptions can be readily found in some standard works. However, one must admit it is handy to have all data together, which makes comparison between different groups easy. Another extensive part is that on evolution, which is a rather misleading catch-all for chapters on origin and early evolution, on cytogenetic, molecular and genomic evolution, on phylogeny, on biogeography and on classification (which accounts for 60 of the 139 pages). As a taxonomist I think this is a most useful part. Especially the last chapter on classification, which presents the state of our knowledge of the Amphibia and gives definitions of all families recognized, lists of genera (number of species given) per family, distribution-maps and photographs of several representatives per family, will turn out to be very useful, both to beginning students in the field and to old hands that want to quickly check on certain data, though it is not always clear exactly in which characters families differ from each other. This classification strictly adheres to that in Frost’s (1985) Amphibian species of the world, which, considering the origin of both books, is not too remarkable.

The text part of the book is followed by a literature cited section of 53 pages, with an average of 50 titles per page, which makes it a very useful source of references. The index has been mentioned before.

What amazed me was the relatively large number of typos in this book, which was produced with sophisticated electronic means and could have been easily corrected. Most of them are evident, but it becomes a little more serious when scientific names are spelled wrong, e.g. *Bufo mauritanicus* (p. 129, 622) instead of *Bufo mauritanicus*, *Caecosterum* (p. 545) instead of *Caecosurium*.

It is unfortunate that, though works in several languages (though mostly English) have been consulted, a number of e.g. Dutch publications have not been consulted or at least mentioned, as they contain pertinent information and in some instances even more extensive than the titles cited. E.g. Lodewijk (1948) on neoteny in Dutch species of *Triturus* and Sparreboom (1981) on *Pareasnovitroon caudopunctatus*.

Some mistakes made in the past are continued in this book, e.g. among workers in South American frogs it has long been known that the schools of large black tadpoles described by Duellman and Lescure (1973) as belonging to *Osteocephalus taurinus*, actually belong to *Hyla geographica*. This would have been a good place to make a correction.

On p. 49 the text does not agree with what is showh in fig. 2-21. E.g. it is stated that “The area B-D-F is occupied by dendrobatid frogs and *Eleutherodactylus*”, but in the figure they appear in area A-C-F, etc. On p. 487 one of the headings reads “Madagascar-Seychelles-Australia” and this clearly should be Madagascar-Seychelles-India. The text on p. 184 states that Stiftchenzellen “are unknown in adults”, but in table 7-3 they are listed as being present in the adult epidermis, of mitochondria-rich cells it is said that they do not occur in the epidermis of adults, but again the table lists them as being present in the adult epidermis.

Not all information is as complete as it could be, and it is clear that the authors’ experience mainly is in the New World. E.g. when listing (p. 248) genera containing species with a striped pattern they did not mention *Rhadophorus leucomystax*, one of the most well-known Old World striped frogs. Apparently the authors are not aware of the extensive radiation of *Mertensiella* in southwestern Turkey, as they do not list that area under the distribution. Also *Hydromantes* does not occur to southwestern France, but only reaches southeastern France. *Bolophryne*, is still recognized, though several authors already synonymized it with *Alytes* before 1986. Knowing Suriname rather well, I was rather amazed by the distribution map of the family Dendrobatidae, which in the interior of Guyana and Suriname shows areas where this family would not occur. Apparently these blank areas supposedly coincide with savanna areas, but even there some dendrobatids are found in forest-islands or in gallery forest. I assume that the blank area in eastern Amapa and on Marajó island is due to a mistake in preparing the figure, because there is no reason why these areas would lack dendrobatids.

Fig. 19-27B does not depict *Discoglossus pictus*, but *D. jeanneae* Busack.

Only for families of salamanders and wormsalamanders the characters on which subfamilies are based are clearly stated. For frogs one has to be content with references to other works, or without any justification at all, and that is a pity.

Some of the information, especially on reproduction, is given in more or less the same words in several places, but this is a consequence of the way the book was prepared, and is not of such a level that it would become annoying.

Though my foregoing remarks may seem to be rather negative, they are not meant to subtract of the value of this book, which undoubtedly is the standard work for a long period to come. The speed with which batrachology (to use a favourite word in certain circles) develops in the next few years will determine the period over which the book keeps its value as an up-to-date reference work, but even when such developments (probably spurred by this book) would produce much new information, the book will stand as