

Book Review:
Amphibians and Reptiles of Trinidad and Tobago

John C. Murphy. 1997.

Malabar, Florida: Krieger. 245 pp. hb US\$ 72.50.

ISBN 0-89464-971-X.

This user-friendly book addresses the need for a single comprehensive guide to the herpetofauna of Trinidad & Tobago. Aside from uncertain records and sea turtles, the author records 32 species of amphibians (all frogs) and 67 species of reptiles from Trinidad, and 14 amphibians and 37 reptiles from Tobago.

Amphibians and Reptiles of Trinidad and Tobago is a physically attractive volume with large-format pages. Given its size, it is clearly not designed for field use. One copy that we have used is showing decided wear in the spine, suggesting that the binding may not sustain the expected heavy use. The presentation is clear and engaging, allowing the author's enthusiasm for the subject to show while maintaining a high scientific level throughout. In this respect, it is an exemplary treatment.

The book comprises three main parts. The opening chapters are a concise introduction to the islands (geology, geography, climate, vegetation) and the background to herpetology. In a readable, no-nonsense way, they set the scene for the substance of the book. Many local naturalists whose main interests are not in land vertebrates will also find this introductory part instructive. The review of vegetation relies heavily on Beard's classic — and now very much out-dated — studies of 1944 and 1946. To note this is not to criticize the author, but to add our voices to those calling for a new, fundamental survey of vegetation patterns.

There follows a 17-page section of keys to species, which will be welcomed by those interested in identifying specimens. These assume a certain degree of familiarity with standard terms and characters, so that beginners will have some difficulty in using them.

The keys are well written, with ample, high-quality drawings to illustrate particular features. It is unfortunate that the drawings are not captioned, which would have added very little effort and would certainly be a big help. As it is, any naturalist owning the book will want to write captions in her/his own copy. Professionals will also note that authors are not included in species names in the keys,

so that these must be looked up elsewhere in the book, a minor annoyance. Another complaint about the keys concerns species whose presence here is highly suspect; it is a good idea to include these species, but they should be tagged **in the key itself** as dubious.

The bulk of the book is a straight-forward, comprehensive set of species accounts. It is mainly these that will set the book's value as a reference work. The author (describer) of the species is usually included in the species name at the head of each account, but not always. This irregularity should have been caught in proof-reading.

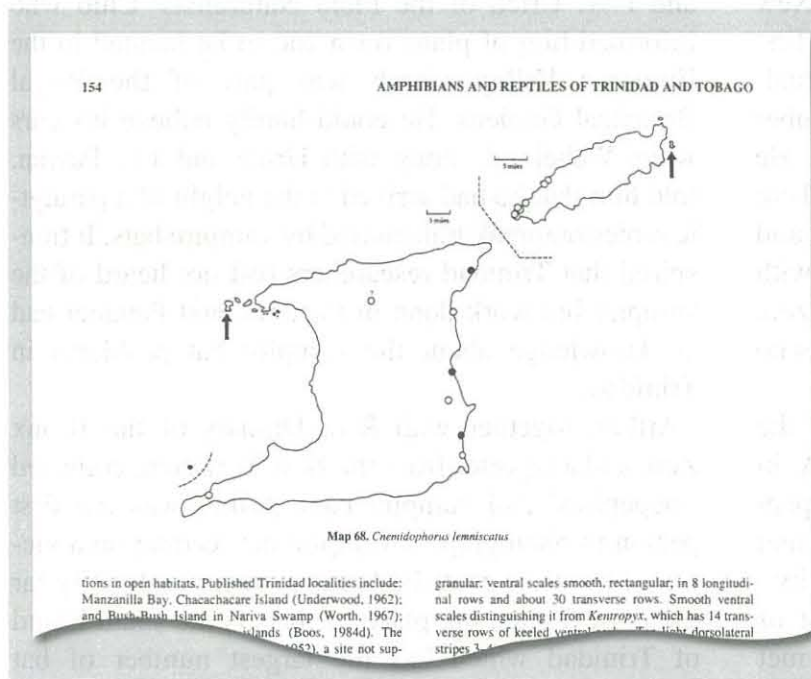
In a standard format, each species account gives common names, the species's total range and where it is found in Trinidad & Tobago (with map), a detailed physical description, natural-history notes, and a list of specimens examined by the author. The descriptions of some lizards and snakes are supplemented with high-quality drawings to show the scale patterns on the head, a valuable feature.

Some species accounts also include comments on nomenclature, especially where more than one scientific name is available. Not all of Murphy's choices among available names will be accepted by everyone, but none is capricious, absurd or outdated. In some respects, he follows a conservative nomenclatural policy. This is seen, for example, in treating under two different names the Trinidad and Tobago populations of our single dendrobatid frog genus. Murphy argues against Hardy's view that these are two different species, but admits that it is not definitely proven that they are one, and so provisionally retains the separation "in order to avoid prematurely resynonymizing" the two populations. This shows good sense.

The formal recognition of subspecies is increasingly unfashionable in zoology, and for good reason. Murphy takes a middle course between adopting a subspecies name wherever one is available for the local form and disregarding subspecies altogether. This critical attitude

is exemplified in a curt agreement with an earlier author that "The subspecies of *Ameiva ameiva* make no sense." Where he does recognize subspecies, he gives both its range and that of the species as a whole, a sound policy.

The 111 range maps are clear and informative, but also very wasteful of space. Each occupies about 45% of a page and, as seen in the example here, comprises an outline of both Trinidad and Tobago.



By simply moving Tobago further west and cropping the margins, the author could have saved half of this space, even without eliminating any part of either island. As it is, the dead space around the maps amounts in sum to a little over 25 pages, or just about 10% of the book. Unless it is proposed that readers should use this space to write notes into personal copies, such profligacy is little short of shocking.

Further economy could be realized in some cases by putting more than one species on a map. As an example, an entire map of both islands is devoted to the single dot (Charlotteville) for *Atractus univittatus*. The very next species, *Chironius carinatus*, is not known from Tobago, yet it too gets a full map of both islands. This sort of thing is almost comically wasteful, although readers with an eye to the book's price are unlikely to be amused.

On the other hand, in a few cases two species share a map in just the suggested way. And wherever the known range includes one or more of the smaller islands, the author has done well to indicate this clearly with arrows.

In our view, Murphy has been too cautious with respect

to species ranges within Trinidad & Tobago. For most it would have been useful and legitimate to indicate the inferred range on the map (e.g. as a dashed line) on the basis of topography, vegetation and presently known records.

An especially attractive feature is the 48-page section of colour photographs. The 172 photos are mostly portraits of living animals, with a few dead specimens, juveniles and habitat shots included. The bulk of them are by the author, and most are excellent. Aside from their utility in illustrating particular features and aiding in identification of specimens, it is a great pleasure to simply look at these pictures.

The photos have informative captions, some of which could be much improved by adding details. As an example, Fig. 127 shows a Suriname specimen of *Erythrolamprus aesculapii*, captioned as such. We understand that it is far better to show a live specimen from elsewhere than the one known dead specimen of this snake from Trinidad, but what is not said is that the colour patterns are quite different, so that for identification purposes the figure is misleading. In this and other cases, the desired additional information is found in the species

accounts, but the reader cannot be expected to consult these along with each figure. This is one situation in which some redundancy would have been valuable.

Murphy's review of the literature is thorough, as seen in the mass of citations throughout the text and a list of about 670 references at the end.

The price of the book will unavoidably limit its distribution, especially in the tropics. We are aware of only eight legitimate copies in Trinidad & Tobago, a number that is unlikely to increase significantly. This is a very serious shortcoming. It continues the long-standing problem of the general unavailability to serious amateur naturalists of major works on our herpetofauna. Earlier key treatments have tended to be published in professional journals or in short press runs, and now an otherwise very useful book is priced beyond the reach of most.

In summary, then, *Amphibians and Reptiles of Trinidad and Tobago* is a very good book that will be used and treasured by those naturalists who can afford it.

Christopher K. Starr and Hans E.A. Boos