## **Book Review**

## A Field Guide to the Amphibians & Reptiles of Trinidad & Tobago. Trinidad & Tobago Field Naturalists' Club

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(R.J. August, Managing Editor; Foreword by R.A. Thomas) 2018

Twenty years ago, I bought 'Amphibians and Reptiles of Trinidad and Tobago', published by the North American Krieger becoming, with 'Turtles of Venezuela' by Peter Pritchard and Pedro Trebbau, one of the first herpetofauna books in my personal library. Then, I was amazed by the similitude of the herpetofauna of these two island and adjacent islets with coastal Venezuela, separated by barely 15km from the Venezuelan Paria Peninsula. When I received the book, my impression was that everything one needed to know was already there, there were only few topics to investigate; but on the other hand, it also motivated me to investigate the Venezuelan area that is the most similar to those islands: the isolated Paria Peninsula. I was able to publish a note on the reptiles of Sucre State one year late (Rivas and Oliveros 1997 "1998"). Coming back to Pritchard and Trebbau (1984), I noted a picture of a mata mata turtle that arrived to the coast of Trinidad with some barnacles in its carapace, due to its permanence in blackish water. What I read surprised me, how the waters from the Orinoco can carry masses of floating vegetation with reptiles to the coast of Trinidad. That picture also called my attention because the photographer, Hans Boos, had the same surname as a farm ubiquitous in northeastern Venezuela (decades later I noticed this farm have belonged to an uncle of H. Boos).

Years later, in March 2014, travelling with my colleague Tito Barros to Florida, USA, to visit Peter Pritchard to work on the book 'Venezuela y sus Tortugas', we made a brief stop in Trinidad and took the opportunity to meet Mr Boos. Once in the airport, Boos invited us to visit the Emperor Valley Zoo and later visit his home to see his personal library. Then, he showed us his slide collection and I was surprised to see that mata mata picture I had seen 20 year earlier in Pritchard and Trebbau's and Murphy's books. That is how my life history has become what it is, it was written and visualised by those photos that appeared in those two books. That sort of circle, is closed today as I write this modest review. Since then I have been always interested in the herpetofauna of Trinidad and Tobago, and of course of that of the Paria Peninsula. A few years ago, I do not remember who contacted who, John and I started an online friendship, so thatI was looking forward to A Field Guide to the Amphibians & Reptiles of Trinidad & Tobago published by the renowned Trinidad & Tobago Field Naturalists' Club, which fills the gap after Murphy (1997), and surely as it happened with me, it would motivate a new generation of researchers in herpetology. This new Field Guide will certainly be a valuable source of information to understand and preserve this unique biota, shared in part with northeastern Venezuela.

The guide contains information provided by 20 investigators, directed by John Murphy, and edited by Renoir Auguste, a promising young herpetologist from Trinidad. With 336 pages, A Field Guide to the Amphibians & Reptiles of Trinidad & Tobago starts with a list of all authors and their current affiliations, a foreword by Robert Thomas, notable herpetologist from the US, who has worked in South America. These are followed by a preface, acknowledgments, how to use this book, introduction the environment conservation, folklore, measurements & identifying features, waifs & questionable species, amphibian species accounts, reptile species accounts, six appendixes, glossary of terms, list of references cited in the text and finally an index of common names.

We can read in the preface about Anne, a pregnant green anaconda, found in Trinidad and shipped to the Bronx Zoo and how her babies were distributed to many other zoos, or the discovery of a luminous lizard found a cave by Ivan Sanderson, among other histories, being a source of motivation to a next generation of individuals interested in herpetology.

The first part of the Introduction described briefly

but precisely the rate of discoveries of new species of amphibians and reptiles, lack of information, how the geographers consider Trinidad & Tobago a biodiversity hub, the relationships of these islands with the surrounding land masses and features and diversity of the herpetofauna that can be found.

The section of conservation is really useful for all researchers, tourists, as well as hunters that need to know the legislation of the country as well as the laws that protect the wildlife and organisation to grant the permits. In the folklore chapter, the authors mention that Trinidad and Tobago is biologically and culturally very diverse, with a variety of influences, including African, Chinese, Indian and European immigrants and colonisers. This rich cultural mosaic is reflected in folklore and superstitions, including folk medicine. Measurement and characteristics of the different groups, shows the main characteristics to identify the species. Profusely illustrated with drawings, albeit some of the drawings taken from other publications; however, the objective is met. In waif and questionable species, the authors have reviewed all available information and with provide new evidence about the species wrongly cited for the Republic of Trinidad and Tobago.

The species accounts make up the bulk of this treatise, including information on 129 species of amphibians and reptiles (35 frogs, 30 lizards, 11 turtles, two species of crocodiles, and 51 snakes). Ten of them had an exotic origin: the frogs Eleutherodactylus jonhtonei and Scarthyla vigilans, seven lizards (Hemidactvlus mabouia, Anolis aeneus, A. extremus, A. richardii, A. sagrei, A. trinitatis and A. wattsi) and a fresh water turtle (Trachemys scripta elegans). Each species account contains its previous known name, common name, size, identification, similar species, distribution, habitat and biology, a dot map with different colours dots according to the time of the record, and finally profusely illustrated with many pictures and drawing of the species and their habitat, most of them taken directly from the country, except few taken on outside such as Anolis extremus, an exotic species.

Six appendices are provided: the first is on Trinidad frog reproductive modes: spawn, hatching stages, and tadpoles (appendix I), followed by Handling Amphibians and Reptiles (appendix II), Amphibian chytridiomycosis, (appendix III) Snakebite (appendix IV), Herpetological Collections in Trinidad & Tobago (appendix V) and Research Stations and Lodging for Ecotourists (appendix VI). The glossary of biological terms is really useful for all those people familiar or not with biodiversity issues. How it reads on page 3 "the design of this field guide allows ready access to the Trinidad and Tobago herpetofauna. The vocabulary may be most familiar to naturalists, scientists and amateur herpetologists, but for the novice we have supplied a glossary and some detailed explanations". Finally, a wider list of bibliographical references and an index of common names finish the masterpiece.

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The team of authors of A Field Guide to the Amphibians & Reptiles of Trinidad & Tobago have provided us with a useful tool to know and preserve the life of the amphibians and reptiles from these islands. This guide complements those of Kenny (1969), Murphy (1997), and Boos (2001) and those books edited by Hailey *et al.* (2011a,b). I will recommend it to everyone interested in knowing the biodiversity of amphibians and reptiles of Trinidad and Tobago, the Antilles and northern South America.

## REFERENCES

**Boos, H.E.A.** 2001. The snakes of Trinidad and Tobago. W.L. Moody Jr. Natural History Series. Texas A & M University Press. 328 p.

**Hailey, A., Wilson, B.S.** and **Horrocks, J.A.** (eds.) 2011. Conservation of Caribbean island Herpetofaunas. Vol. I. Conservation biology and the wider Caribbean. Brill, Leiden. 227 p.

**Hailey, A., Wilson, B.S.** and **Horrocks, J.A.** (eds.) 2011. Conservation of Caribbean island Herpetofaunas. Vol. II. Regional accounts of the West Indies. Brill, Leiden. 439 p. **Kenny, J.S.** 1969. The Amphibia of Trinidad. *Studies on the Fauna of Curacao and other Caribbean islands*, 8: 1–78+15 plates.

Murphy, J.C. 1997. Amphibians and Reptiles of Trinidad and Tobago. Krieger Publishing, Malabar, FL.

**Pritchard, P.** and **Trebbau, P.** 1984. The Turtles of Venezuela. *Society for the study of amphibians and reptiles, contribution to herpetology*, 2: 1-414.

**Rivas, G.** and **Oliveros, O.** 1997 "1998". Herpetofauna del estado Sucre, Venezuela: lista preliminar de reptiles. *Memoria de la Sociedad de Ciencias Naturales La Salle*, 147: 67–80.

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