REVIEWS BOOK

Cuban Herpetology

Barbour, T. and C.T. Ramsden. 2003. The Herpetology of Cuba (facsimile reprint of the original 1919 edition, with an introduction by R. Ruibal). Society for the Study of Amphibians and Reptiles, Ithaca, New York. vii + 142 pp. (numbered 71-213 + cover and 15 plates, as in the original publication). Hardcover. \$55.00.

Rodríguez Schettino, L. (ed.). 1999. The Iguanid Lizards of Cuba. University Press of Florida, Gainesville. xx + 428 pp. Hardcover. \$85.00.

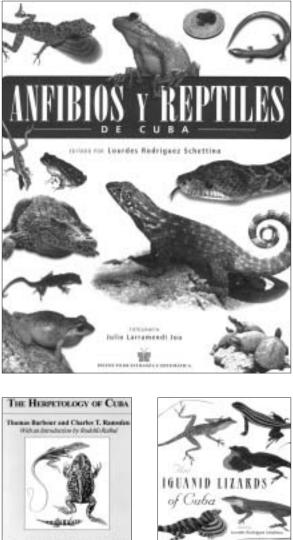
Rodríguez Schettino, L. (ed.). 2003. Anfibios y Reptiles de Cuba. Photography by J. Larramendi Joa. Instituto de Ecología y Sistemática, La Habana, Cuba. vi + 169 pp. Hardcover. U.S. price not established (currently unavailable).

About 200 species of amphibians and reptiles are known to occur in Cuba, and more are being described each year as researchers more thoroughly investigate that island nation's less-explored regions and implement modern methods to better understand relationships within this phenomenally diverse herpetofauna. Our collective knowledge of the Cuban biota is growing exponentially, and ecological and behavioral work on at least some species is beginning to catch up with systematic research, but the biodiversity remains one of the least well-documented in the Americas. Although geographically proximate to the United States, current political realities preclude most U.S. citizens (and researchers) from experiencing Cuba's many unique biotic communities. Residents of other nations are free to travel to Cuba, but most of the recent work on amphibians and reptiles is being conducted by Cuban nationals, whose commitment and expertise is frequently impaired by scarce resources, both human and material - and both the quality and quantity of their work is testament to their dedication.

In this brief review, I introduce the reader to three recently published volumes (one a reprint of an historically important work that appeared initially in 1919). They collectively serve as an effective introduction to Cuba's amphibians and reptiles.

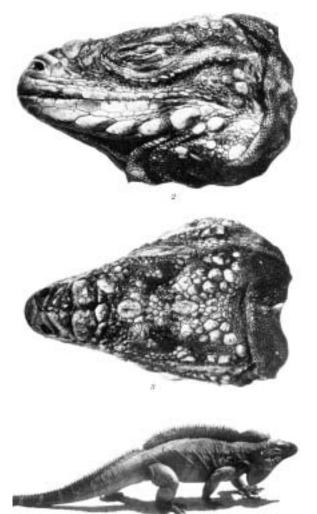
Thomas Barbour and Charles Ramsden's synthesis of all that was known in 1919 about Cuban herpetology was an update of Juan Gundlach's 1880 Erpetología Cubana. In the foreword of the original edition, Barbour noted that "... in the natural course of events many changes have taken place since that time [1880] which have affected the nomenclature and status of the species treated, while new forms have been discovered." That statement would be just as relevant today. Barbour and Ramsden's work listed 68 species and two more were added in a postscript. This stands in stark contrast to the approximately 200 Cuban species recognized today. Also, in addition to the many new taxa, much of the nomenclature has changed (a perpetual process that is as necessary as it is sometimes confusing; see, for example, the article on p. 78 of this issue) and we have certainly learned much about the distributions and ecological relationships of the various species.

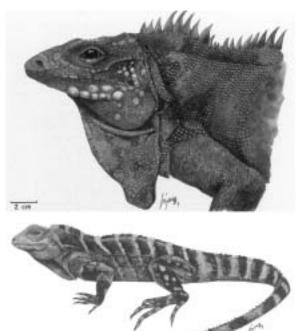
The question may arise why anyone other than the most ardent bibliophile would want to invest in a reprint of a very old





book, much of the content of which is dramatically out-of-date. I would respond that the study of history is just as important in biology as in world affairs. We gain considerably by knowing where we've been; if nothing else, such knowledge provides us with insights on how we've gotten to where we are now and may also tease us with a glimpse of where we might go in the future. Furthermore, Barbour's writing (he claimed responsibility for having written the text, noting that Ramsden's contributions consisted mostly of information gleaned during his many years of residency in eastern Cuba) clearly demonstrated not only his knowledge but also his passion for the fauna and all things Cuban. Rudofo Ruibal, in his introduction to the facsimile





Representations of *Cyclura nubila*: "*Cyclura macleayi*" from the Valley of Luis Lazo, western Cuba (from Plate 11 in *The Herpetology of Cuba*) (upper left); adult male and juvenile (plates 7 & 8 in *The Iguanid Lizards of Cuba*) (above); Iguana (from *Anfibios y Reptiles de Cuba*) (left).

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reprint, made a point of stating that Barbour described himself as "aplatanado" (bananafied), a Cuban term for a foreigner who has acquired Cuban characteristics. That attitude is clearly evident, causing a perusal of the book to be pleasurable as well as educational.

The Iguanid Lizards of Cuba is a thorough review of the phenomenally diverse Cuban species in the family Iguanidae (sensu lato; for discussion of the familial status, see the article by Köhler et al., IGUANA 10(3): 79-81). After an introduction, which includes an overview of the subject and a summary of studies on Cuban species, chapters of varying length and detail cover morphology (with keys to the identification of Cuban species), ecology and behavior, genetics, parasites, and biogeography. These are followed by systematic accounts of the Cuban species. Each account provides a list of synonyms, an overview of the species' geographic range followed by a list of specific localities, coverage of subspecies (if applicable), a detailed description, a list of bibliographic sources arranged by topic, notations of morphological, geographic, sexual, and age variation, and extensive comments on natural history. As one might suspect, the accounts for the better known species are extensive and those for the species that have

received less attention are often quite cursory. However, nowhere else can one find as much readily attainable information in one place. Each account is accompanied by a detailed dot map. Centrally located color plates provide illustrations of each species. These were painted from live models by Lázaro González Pino. Many are striking, although a few seem to be a bit too stylized for my taste; nevertheless, the illustrations, although live models were used, often are more effective than photographs in documenting the principal characteristics of each taxon. Also included in the plates is a current vegetation map of Cuba, which confirms the common plight of so many island nations and clearly shows that most of the land is devoted to cultivation or pastures.

This book, like that by Barbour and Ramsden, was written for professional biologists, but the effectively edited text renders it fully accessible to the informed amateur. Also, although illustrated, this is less a taxonomic handbook or guide than it is a phenomenally valuable reference and resource for those who are serious about the study of West Indian reptiles.

The third volume in this brief summary poses an unfortunate conundrum. Although potentially of the greatest interest to the greatest number of readers, it is by far the least accessible of these three books. Not only is it written in Spanish, it is essentially unavailable in the United States at this time. If those hurdles are overcome, however, this volume provides a very effective introduction to the Cuban herpetofauna. The science is solid enough to hold the interest of a professional, but the coverage is very user-friendly. Lacking much of the often stultifying detail of *Iguanid Lizards*, this book concentrates on the bigger picture, addressing questions like: What species live where and why? What do they do to make a living? How do they interact with the nation's human population? What are the principal conservation needs? Furthermore, the book is profusely illustrated with photos of many species and habitats, some of them absolutely breath-taking. It's a pleasure to merely flip the pages, even if one can't read a single word.

The initial chapter, by the editor and entitled "Generalities," introduces the reader to the herpetofauna, describes amphibians and reptiles in broad terms using Cuban species as examples, and provides an overview of the island's myriad habitats. Subsequent chapters are organized by topics, some of them based on systematic relationships, others on habitat-dependent communities, and still others by particularly intriguing subjects. Contributing authors addressed their own areas of expertise and interest, yet the composite flows nicely, a tribute to the editor and to decisions regarding the common format elements that provide continuity. Individual chapters address treefrogs, cave dwellers, inhabitants of the leaf litter, aquatic frogs, frogs of the city, tiny anurans, toads, reptilian morphology and color, giants and dwarves, terrestrial lizards and snakes, anoles, aquatic reptiles, species that function as human commensals, popular myths, beliefs, and uses of amphibians and reptiles, and endangered species. That on myths, beliefs, and uses, albeit uniquely Cuban in nature, reads surprisingly like comparable chapters detailing the many misperceptions North Americans have about amphibians and reptiles, and the exploitation of many species is but a local chapter in a worldwide volume of abuses. Similarly, the chapter on conservation needs, although focusing on Cuban concerns, deals with situations equally applicable to those of any country, especially those of developing island nations. A checklist showing distribution by biotic provinces, a glossary, a short list of selected references, and information about the authors complete the volume.

Other than the expected discrepancies between the coverages of common, well-studied species and those about which almost nothing is known, the book provides a surprisingly complete coverage. I sometimes found myself wishing for references to source publications, but then I remembered that the intended audience wasn't the professional biologist. I also wanted more detailed accounts of individual species, but had to remind myself that this volume was designed to serve as an overview and not as an intensive reference. Its stated goals, however, to educate and entertain, are admirably achieved. My wanting more speaks eloquently to the quality of what is there. One can only hope for an English translation in the near future.

So, should readers invest a considerable sum of money and possibly even more effort to acquire these books, none of which are likely to be found on the shelves of major retailers or in a neighborhood library? I can't speak for everyone, but I did — and am eminently pleased that I did. I enjoyed each book the first time I opened its pages, and I not infrequently pull one or more of them from the shelf, often to look up a particular piece of information, but at least occasionally to merely experience, albeit vicariously, the Cuban amphibians and reptiles I would dearly love to study firsthand, an opportunity so far denied, except for an all-too brief visit to the Guantanamo Naval Base on a trip to Navassa Island — but that's another story altogether.

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Additional References

Readers who have an interest in the Cuban herpetofauna, or that of the West Indies in general, or merely enjoy the historical perspectives of herpetology might want to examine the following volumes:

- Crother, B.I. (ed.). 1999. Caribbean Amphibians and Reptiles. Academic Press, San Diego, California. This edited volume includes an historical perspective, detailed reviews of the Greater Antillean islands and of the Lesser Antilles (that on Cuba, by Alberto Estrada and Rodolfo Ruibal, is particularly pertinent to this review), plus chapters on ecology, evolutionary relationships, biogeography, and a comparison of the West Indian and Middle American faunas.
- Henderson, R.W. and R. Powell (eds.). 2003. Islands and the Sea: Essays on Herpetological Exploration in the West Indies. Contributions to Herpetology, volume 20. Society for the Study of Amphibians and Reptiles, Ithaca, New York (reviewed by Rick Hudson, IGUANA 10(4): 151–152). Although written by many of the same scientists who contributed to some of the other volumes listed here, the essays contained in this book tell of experiences and events. Although many of the chapters are informative, the delight comes from hearing the stories to which anyone who has participated in fieldwork can relate. An introduction and a chapter on historical perspectives provide some context, with the emphasis on people and their impressions rather than their research.
- Powell, R. and R.W. Henderson (eds.). 1996. Contributions to West Indian Herpetology: A Tribute to Albert Schwartz. Contributions to Herpetology, volume 12. Society for the Study of Amphibians and Reptiles, Ithaca, New York. Still another edited volume, this book includes vignettes about Albert Schwartz, in whose memory it was published, an historical perspective, a checklist of West Indian species (since updated on two occasions in Herpetological Review), and 27 research reports by various scientists working in the region.
- Schwartz, A. and R.W. Henderson. 1991. Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History. University of Florida Press, Gainesville. This volume provides detailed descriptions, dot maps, and extensive notes on the natural history of the region's many species of amphibians and reptiles. Note that this is not a guide, animals are not illustrated — but, for anyone with more than a casual interest in the topic, this volume is essential. The brief "envoi" testifies to the passion of the authors.