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Reseña de "Amphibians and reptiles of the bay islands and cayos cochinos, honduras" de J.R.

McCranie, L.D. Wilson y G. Köhler

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**McCranie, J.R., L.D. Wilson & G. Köhler. 2005**  
AMPHIBIANS AND REPTILES OF THE BAY ISLANDS  
AND CAYOS COCHINOS, HONDURAS  
*Bibliomania!*, Salt Lake, Utah, USA. 210 p.

During the last four years, we have witnessed the publication of several important books that summarized current knowledge on the herpetofauna of Central America: Savage's (2002) *The Amphibians and Reptiles of Costa Rica*, McCranie and Wilson's (2002) *The Amphibians of Honduras*, Campbell and Lamar's (2004) *The Venomous Reptiles of the Western Hemisphere*, and Solórzano's (2004) *Serpientes de Costa Rica*. Recently, McCranie, Wilson and Köhler inspire us with a volume on the species of amphibians and reptiles that inhabit the department of Islas de la Bahia, in the Caribbean sea of Honduras.

As pointed by the authors, the purpose of this volume is to discuss the composition, distribution, natural history, biogeography, and conservation status of the herpetofauna of Islas de la Bahia, goals that are fully attained in a hard cover, guide-formatted volume of 23 cm by 16 cm, printed on high quality glossy paper. The book is easy to carry to the field and is nicely illustrated by more than 188 excellent color photographs of the 55 species known to occur in the islands. It also includes 17 habitat shots, five maps, and 39 draws of major anatomical features, thus making it a valuable field-guide for the identification of this important component of insular fauna.

As explained in the brief introduction section, fieldwork conducted to prepare this volume started in 1967 and concluded in 2004, and involved a combination of 16 years and over 30 trips to the major islands of the department. Hence, the authors have first-hand knowledge of the dramatic changes

in habitat and species composition that these islands have experienced. Material that resulted from those trips was deposited at several museums (Los Angeles County Museum of Natural History, Louisiana State University Museum of Science, Forschungsinstitut und Naturmuseum Senckenberg, and U.S. National Museum of Natural History), allowing for a more detailed evaluation of specimens. A minor failing is that museum numbers are not provided, nor is the information about the species deposited in them.

A section on materials and methods follows the introduction. In this section, general information about the conventions on scientific nomenclature is provided, as well as a description of the different subsections that appear in the species accounts.

The next section includes short but well written descriptions of the physiography, geological origin, climate, and habitats of Islas de la Bahia (Utila, Roatan, Barbareta, Morat, and Guanaja) and of the major islands in Cayos Cochinos. However, there are 52 tiny keys associated with the major islands (Stonich 2000), but no reference is made regarding their characteristics or the species of herpetofauna –if any– occurring there.

Another supporting section on the book includes the social history of the Bay Islands and Cayos Cochinos. This brief but well documented history of the islands introduces the reader to the social and political situation of the area, and provides a preface for the sections on conservation at the end of the book.

The bulk of the book is composed of species accounts of amphibians and reptiles

inhabiting major islands in the department. The herpetofauna of the islands comprises 55 species (seven anurans, one crocodylian, five turtles, 23 lizards, 19 snakes), a figure that represents an astonishing 16 % of the species currently recognized for Honduras. Not surprisingly, amphibians are poorly represented in the islands, comprising merely 7.6 % of the species known in the country. Lizards and snakes comprise 26.1 % and 15.8 % respectively, of the species reported for Honduras. Almost a quarter of the species presented are endemic forms, thus warranting their conservation status. These include: the black iguanas *Ctenosaura bakeri*, *C. oedirhina*, the anoline lizards *Norops bicaorum*, *N. roatanensis*, *N. utilensis*, the geckos *Phyllodactylus palmeus*, *Sphaerodactylus rosaurae*, the colubrid snakes *Enulius bifoveatus*, *E. roatanensis*, *Oxybelis wilsoni*, and *Tantilla tritaeniata*; and the coral-snake *Micrurus ruatanus*.

Before each species account, a brief introduction to each Class is presented, showing schematic representation of morphological features of interest in the identification of different forms. A key to each taxonomic group is also offered. For each account, the common name, description, similar species, general geographic distribution, distribution in Islas de la Bahia, and some comments about their natural history are given. Remarks are provided for several species, mostly being taxonomic notes. A minor criticism however, is that information about the relative abundance and the knowledge about reproductive biology and other aspects of the natural history are not provided for the majority of the species.

Species descriptions are detailed, and technical terms are usually explained in drawings at the introduction of the section or at the glossary section at the end of the book. I could not find any term that was not well explained in either section, and the book is an invaluable source for identifying species distributed there.

The last sections of the book include a brief analysis of the ecological distribution and biogeographic affinities of species occurring in the islands. However, it was the

section concerning the conservation status of this insular herpetofauna what really caught my attention. Based on an index to score predicted vulnerability to anthropogenic damage (Wilson and McCranie 2004) the authors assessed the conservation status of reptiles and amphibians inhabiting Bay Islands. Not only did they categorize the species occurring there in terms of the level of vulnerability of their populations, but also they provided a nice review of the conservation efforts done at different islands, including the presentation of the Conservation Project of Utila Iguana, largely directed by Köhler. Much of the discussion on conservation is centered on the alarming growth of the human population and the effects that immigration might impose to the resources of those islands. However, Malthusian effect alone cannot be the only cause of habitat alteration and a review of the social and economical models of development in Honduras could be pertinent to explain patterns of migration and habitat degradation there.

Finally, a complete glossary with over 263 terms and a well-selected literature cited section closes the book.

McCranie, Wilson and Köhler are to be congratulated for a job well done. Their contribution without any doubt will increase the awareness of the people that live and visit those islands about the unique amphibians and reptiles that live there, and—hopefully—will attract the interest of policy makers to ensure the natural value of these islands in the future.

## REFERENCES

- Campbell, J.A. & W.W. Lamar. 2004. The Venomous Reptiles of the Western Hemisphere, 2 vols. Cornell, Ithaca, New York, USA. 870 p.
- McCranie, J.R. & L.D. Wilson. 2002. The Amphibians of Honduras. Society for the Study Amphibians and Reptiles Contrib. Herpetol. 19:1-625.
- Savage, J.M. 2002. The amphibians and reptiles of Costa Rica: A herpetofauna between two continents, between two seas. Chicago, Chicago, Illinois, USA. 934 p.

Solórzano, A. 2004. Serpientes de Costa Rica. Distribución, taxonomía e historia natural. InBio, Santo Domingo, Heredia, Costa Rica. 792 p.

Wilson, L.D. & J.R. McCranie. 2004. The conservation status of the herpetofauna of Honduras. Amphib. Rept. Conserv. 3: 6-33.

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The book is available from [www.bibliomania.com](http://www.bibliomania.com)

By: JR McCranie, LD Wilson and G Kohler. 210 pages, Col photos. Publisher: Bibliomania. About this book. The Bay Islands and Cayos Cochinos are home to 55 amphibian and reptile species, 12 of which are endemic to these islands. Hog Island Boas occur here as well as five species of iguana (two endemic). McCranie, Wilson and Kohler are the undisputed authorities on Honduran herpetology. Their combined knowledge is pooled here for the first time and complemented with a multitude of photographs to highlight the unique herpetofauna of these islands. By: JR McCranie, LD Wilson and G Kohler. 210 pages, Col photos. Publisher: Bibliomania. LARRY DAVID WILSON is a recognized authority on the reptiles and amphibians of Honduras, based on three and one-half decades of field experience. He is the author of about 230 publications in his field, including the recently published *The Amphibians of Honduras*, coauthored with James R. McCranie. He is currently working on books on Honduran reptiles (with James R. McCranie), the herpetofauna of the Honduran Mosquitia (with McCranie and Josiah H. Townsend), and the herpetofauna of the Bay Islands and Cayos Cochinos of Honduras (with McCranie and Gunther Köhler). JAMES R. (RANDY) MCCRANIE is also a recognized authority on the herpetofauna of Honduras, the result of more than a quarter century of fieldwork. 10 McCranie, J.R., Wilson, L.D. & Köhler, G. (2005) *The Amphibians & Reptiles of the Bay Islands and Cayos Cochinos, Honduras*. Bibliomania!, Salt Lake City, Utah. xiv pp. Parker, H.W. (1940) Undescribed anatomical structures and new species of reptiles and amphibians. *Annals and Magazine of Natural History*, 11(5), Ronquist, F., Teslenko, M., van der Mark, P., Ayres, D., Darling, A., Höhna, S., Larget, B., Liu, L., Suchard, M.A. & Huelsenbeck, J.P. (2012) MrBayes 3.2: Efficient Bayesian phylogenetic inference and model choice across a large model space.