Book review

McCranie, J. R. 2011. The Snakes of Honduras
Systematics, Distribution, and Conservation. Contributions to Herpetology, Volume 26. Society for the Study of Amphibians and Reptiles, Thomson-Shore, Inc., Michigan. 724 pages, 65 figures, 23 tables, 20 color plates.

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Despite its high levels of species diversity and endemism, Central America continues to represent one of the least-studied biodiversity hotspots of the world. Although the history of herpetological studies in the region dates back to the early nineteenth century, monographic works with a modern coverage of the herpetofauna, either for the region (e.g., Villa *et al.* 1988, Köhler 2008) or for selected countries (e.g., Lee 1996, Campbell 1998, McCranie and Wilson 2002, Savage 2002, Köhler *et al.* 2006), are still sparse. The appearance of James McCranie's comprehensive book "Snakes of Honduras" is cause for celebration as it sheds light on one of the least-known group of reptiles in the region.

The emotional ties linking the author to Honduras are evident and were created through more than 40 years of dedication to the study of its herpetofauna. Such a special relationship with the country and its people, along with the obvious qualities of McCranie as herpetologist and taxonomist, are the main ingredients responsible for the production of this meticulously written book that provides detailed coverage of 136 species of snakes known to occur in Honduras.

The book is attractively printed on high-quality paper, with reinforced binding that provides comfortable reading. It is divided into 14 chapters that include introductory material (Preface, Materials and Methods, Acknowledgments, The Environment, A Brief History of Reptilian Study in Honduras), systematic accounts (Composition of the Honduran Snake Fauna with Keys to Families, Species Accounts, Snake Species of Probable Occurrence in Honduras), biogeographic and conservational material (Distribution of Snakes in Honduras,



Conservation Status of Snakes of Honduras), and a short Epilogue followed by color plates, glossary, gazetteer, literature cited, and indexes for scientific names and authors.

The book begins with a brief Preface that serves as introduction (2 pages) and a synthetic (3 pages) Materials and Methods section. The latter allows the reader to fully appreciate the breath and scope of the study; the nomenclatural information provided by the author for each species (including type series, synonymy, original description, etymology) is based on a meticulous and critical review of the literature whereas morphological descriptions and geographical distributions are drawn from the analysis of 6160 specimens. The chapter on the Honduran environment consists of 19 pages and nine maps, four of which are in color, describing the geopolitical, physiographic, climatic, and physiognomic divisions of the country.

The bulk of the book is composed by the systematic accounts of nine families, 67 genera,

and 136 species. Identification keys in both Spanish and English are provided for families, genera, and species (where appropriate). Characters used in the keys for families and genera are illustrated, for the most part, with black and white photographs in which the relevant feature is pointed out or highlighted with line drawing. Some of the keys for species are also accompanied by useful character illustrations (*Coniophanes, Geophis, Imantodes, Sibon*). Although most illustrations associated with the identification keys are visible and serve their purpose, some are poorly reproduced or are not at the right magnification (too dark or gray) and fail to illustrate the character correctly (e.g., Figs. 10–12, 27–29).

Systematic accounts for each species are organized in alphabetical order within each family, and follow a uniform format that includes a list of synonymy, geographic distribution, description, diagnosis, illustrations, remarks, natural history comments, etymology, and specimens examined. Descriptions are generally detailed and based on specimens examined. They include a list of the specimens, an overall description of its external anatomy, including body length and scalation separated by sex, description of the hemipenial morphology for the species, and its color in life and preserved in alcohol. Hemipenial descriptions are generally informative, although information on the condition of eversion (level of inflation and expansion) of the organ(s) used for the description is lacking and would have been of great relevance because the author does not provide illustrations. The author offers a large array of taxonomic and ecological information in the Remark and Natural History sections of most species that will be of great interest for a broad number of specialists.

Distribution maps are provided for all species, in which (mostly) specimens examined and (rarely) specimens recorded in the literature are plotted distinctively. Maps are appropriately provided along with the text of the referred species or at the end of the first species account, when it holds more than one species. A gazetteer provided at the end of the book (before the literature section) furnishes coordinates and additional detailed information for all localities used in the maps. Color photographs are provided for 132 of the 136 species and are organized, separately from the text, in plates with six to ten pictures each. The photographs are generally too small and fail to depict details of coloration and scalation in most species. Photos showing details of the head and venter, color variants or ontogenetic changes would have been much appreciated. However, it is noteworthy that snakes are difficult subjects of photography, and that a well-illustrated book on snakes would require a larger number of photos that often make its commercialization impracticable.

In sum, McCranie's "Snakes of Honduras" is an extremely valuable resource for any professional interested in the Neotropical fauna, and a necessary book for any herpetologist working on snakes.

References

- Campbell, J. A. 1998. Amphibians and Reptiles of Northern Guatemala, the Yucatán, and Belize. Norman, University of Oklahoma Press. i-xx + 380 pp.
- Köhler, G., Veselý, and Greenbaum, E. 2006. *The Amphibians* and Reptiles of El Salvador. Malabar, Krieger Publishing Company. i-ix + 238 pp.
- Köhler, G. 2008. *Reptiles of Central America*. Herpeton, Verlag Elke Köhler, Offenbach, 400 pp.
- Lee, J. C. 1996. The Amphibians and Reptiles of the Yucatán Peninsula. Ithaca, Cornell University Press. i-xii + 500 pp.
- Savage, J. M. 2002. The Amphibians and Reptiles of Costa Rica – A herpetofauna between two continents, between two seas. The University of Chicago Press, Chicago, i-xx + 934 pp.
- Villa, J., L. D. Wilson, and J. D. Johnson. 1988. *Middle American Herpetology*. A bibliographic checklist. Columbia, University of Missouri Press. i-xxxvi + 132 pp.

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