

papers within, and the strong compilation of ideas in one source, I recommend this book to any ecologist or wildlife manager who wishes to learn more about mammals at a landscape level, particularly those concerned with larger-scale processes.

GRAHAM J. FORBES

Director, New Brunswick Cooperative Fish and Wildlife Research Unit, University of New Brunswick, Fredericton, New Brunswick E3B 6C2

Ruddy Ducks and Other Stiffetails: Their Behavior and Biology

P. A. Johnsgard and Montserrat Carbonell. 1996. *Animal Natural History Series*. University of Oklahoma Press, Norman. xiv + 291 pp., illus. U.S.\$ 49.95.

This book is the first in what looks to be a promising series of books based on animal natural history from University of Oklahoma Press. Johnsgard is a veteran author of more than 30 books, while Carbonell is a recent doctoral graduate whose thesis was based on stiffetails. Together, they have assembled a trove of information on the Oxyurini, the stiff-tail ducks. Ironically, Montserrat claims that we know rather little about these birds. While there appears to be room for quite a bit more work on these birds, the vast amount of information in this book cannot be referred to as "rather little".

The book is divided into two main parts. The first takes a comparative approach to overview the biology of the stiffetails. Evolution, taxonomy, morphology, behaviour, and reproduction are covered both to compare species within the Oxyurini and, less frequently, to other ducks as well. Twelve figures and 19 tables summarize several aspects of the biology of these birds. The colour photographs are clustered in this section as well; they are all good, though most of them appear to be of birds in captivity. As such, they are not aesthetically pleasing shots, but they adequately illustrate the appearance of each species.

The second section devotes one chapter to each of the eight species covered. I had feared that this was simply to be a reformatting of the material in the first section, and to some extent that is true, but the detail is actually much greater. Full descriptions are given for each bird, including measurements and all of the plumages (where known). Interestingly, molting sequences for these plumages are given elsewhere in the species' account, a choice which I found odd. Identification tips are given for birds in the hand and in the field.

The habitat preferences and range for each bird are covered, but by far, most of each species account is devoted to behaviour. There are figures (redrawn from cine film sequences) that illustrate often complex behaviours such as sousing and other courtship rituals. Nesting and parental behaviour make up the balance of these sections. No aspect of the known biology of these birds appears to have been left out.

The book is dominated (though not overtly so) by research done on the North American Ruddy Duck (*Oxyura jamaicensis*). This bias undoubtedly arises from several factors including population size (it is the most abundant of the stiffetails) and distribution (present over much of western North America and introduced into Europe, both of which are major centers of research relative to the distribution of other stiffetails). The bias is taken to an unfortunate end in the section dealing with Comparative Biology — the segment entitled Pair Bonding describes behaviour only for the Ruddy Duck. A significant portion of the knowledge of the other species comes from work done at the Wildfowl Trust in England. Although these studies on captive, displaced birds lead to a better understanding of their biology, I do question the value of reporting egg laying dates and other phenological data for captive birds in England whose natural range is tropical South America or Africa.

This book is a very good synthesis of information on the stiffetails and would be suitable reading for both naturalists and professional ornithologists. The authors have pulled together over 150 years of scientific research in a very enjoyable book.

RANDY LAUFF

Department of Biology, St. Francis Xavier University, Antigonish, Nova Scotia B2G 2W5

The Amphibians and Reptiles of the Yucatán Peninsula

By Julian C. Lee. 1996. Cornell University Press, Ithaca. xii + 500 pp., illus. + plates. Cloth. U.S. \$175.00.

Amphibians and reptiles captivate the imaginations of most people from early childhood, instilling fear in some, curiosity in most, but wonderment in all. In North America, the diversity of species is

greatest in Mexico. Although there are several summaries of the amphibians and reptiles for many Mexican States, few are lucid, and none approach the quality, completeness and excellence of this most recent contribution. In fact, very few herpetological faunal works on any region of the world equal this

masterpiece. First and foremost, Julian Lee's work is a guide to the 182 species on the "hitchhikers thumb" of Mexico, the Yucatán Peninsula. The vast majority of the book is concerned only with this. It is lavishly illustrated with 189 drawings and 187 colour photographs of species, plus 188 detailed dot range maps, and more - much more.

Simple descriptions and lists often leave one wondering about environmental associations of the various species. Unlike many, this book provides a succinct summary of the region's environment, including physiography, climate and vegetation. Lee provides an overview of the major habitats of amphibians and reptiles, complete with colour photographs, and he notes key species restricted to each region. For the herpetological historian, his review of explorations and the taxonomic chronicle will be an indispensable reference for individuals interested in the biological exploration of Mexico.

Most of the book concerns detailed descriptions and identification keys to the amphibians and reptiles of the Yucatán Peninsula of Mexico. The keys, provided both in Spanish and English, are taxon-specific and are distributed throughout the book. For the peninsular amphibians, Lee provides keys to tadpoles, as well as for adult frogs. One criticism of the book is that from the Family-level keys, one must search through the book to find the generic keys, and finally seek out the species keys. There is no cross referencing of pages allowing one to work efficiently either forward, or backwards if the need arises, as is often the case in practice.

The species accounts contain the majority of information. For each species, there is a list of name synonymies. Common names are given in American, Mexican, Belizean, and Maya. The cultural sensitivi-

ty is an uncommon welcome addition. The species are described in sufficient detail to positively confirm their identification. Numerous figures and maps greatly assist in species identification. Within the discussion of species, similar species are noted along with the characteristics that separate them. The range of each species is both described and figured in a shaded map depicting all known locality records. Natural history notes are provided, including observations of behaviour, reproduction, food, and ecology. Lee also provides the etymology of each species name. He also comments on taxonomic problems, and provides a list of all known locality records and location of the voucher specimens.

The book ends with a wonderful review of ethnoherpetology — amphibians and reptiles in the secular, religious lives of the Maya, and with Maya Mythology. Just in case you are not familiar with herpetological terminology, Lee provides a glossary of terms. The literature cited is extensive.

Again, this book is destined to become a clear classic example on how state books should be produced. However, I was surprised that it was not a collaborative effort involving any one of many eminent Mexican biologists, and equally surprised that more of the book was not written in Spanish, as is typical of most more recent endeavours. And even though the book is one of the most outstanding herpetological monographs, its rather steep price will preclude purchase by many, especially those that may need it most, our Mexican colleagues.

ROBERT W. MURPHY

Centre for Biodiversity and Conservation Biology, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario M5S 2C6

The Garter Snakes: Evolution and Ecology

By Douglas A. Rossman, Neil B. Ford, and Richard A. Seigel. 1996. University of Oklahoma Press, Norman. xx + 332 pp., illus. U.S. \$65.00.

Garter snakes are undoubtedly the best-studied group of snakes in North America, if not the world. The literature is enormous and deals with everything from descriptive taxonomy to sophisticated physiological investigations. These snakes have been the focus of numerous evolutionary studies, including molecular genetics, predator/prey investigations, courtship behaviour, dispersion and home range, and life history, among others. This wealth of knowledge is not surprising given their relative abundance, diurnal habits, typically gentle nature, and ease of maintenance in captivity. With 29 species, the garter snake genus *Thamnophis* is one of the most speciose North American assemblages of snakes. Surprisingly, this is the first summary of

the incredible wealth of knowledge in almost half a century.

Three recognized experts of garter snake biology have collaborated to produce a valuable compendium of the state of knowledge, intended for both the lay person and the professional. Given that many a child has garter snakes as their first reptilian pets, the goal of popularizing the vast wealth of technical information is admirable. The first three chapters consist of an authoritative summary of taxonomy and phylogenetic hypotheses, a list of species and subspecies name changes, and valuable keys to the species and subspecies. The review will form a valuable resource for taxonomists, if not a necessary reference. Several new taxonomic arrangements are given in the book, along with an apology for not simultaneously providing the usual justification.



Murphy, Robert W. 1997. "The Amphibians and Reptiles of the Yucatán Peninsula, Julien C. Lee [Review]." *The Canadian field-naturalist* 111(4), 681–682. <https://doi.org/10.5962/p.358294>.

View This Item Online: <https://www.biodiversitylibrary.org/item/110182>

DOI: <https://doi.org/10.5962/p.358294>

Permalink: <https://www.biodiversitylibrary.org/partpdf/358294>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.