



BOOK REVIEW

A Phenomenally Diverse Herpetofauna

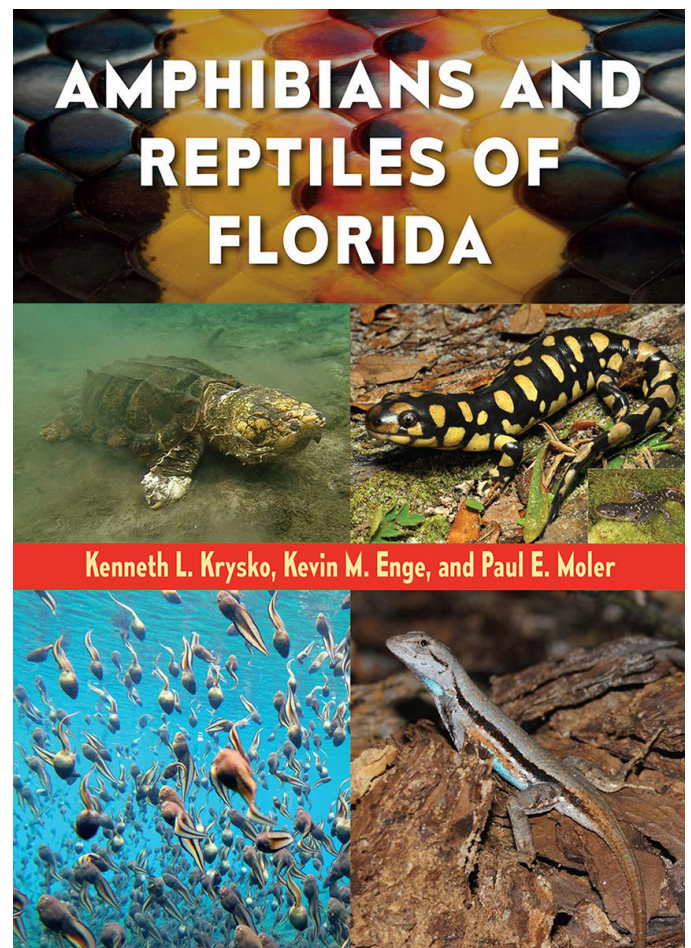
Amphibians and Reptiles of Florida. 2019. Kenneth L. Krysko, Kevin M. Enge, and Paul E. Moler plus a long list of contributing authors. University of Florida Press, Gainesville. xvi + 707 pp. Hardback – ISBN 978-1-68340-044-8. \$80.00.

I am a huge fan of books that deal with the herpetofauna of a state or region—especially those that do more than merely identify an animal and map its distribution. I want context (e.g., who studied a particular species and in what detail) and insights into a species' natural history that can be provided only by authors who know the animals about which they write. Kenney Krysko, Kevin Enge, and Paul Moler certainly qualify for the amphibians and reptiles of Florida. They have a history of collaboration (e.g., the 2011 *Atlas of Amphibians and Reptiles in Florida*, an ambitious project in itself but a modest precursor to the volume addressed herein), have worked closely with nearly everyone involved with the Floridian herpetofauna (33 contributing authors and additional photographers are acknowledged), and, above all, have an extensive record of studying the ever-changing Florida herpetofauna—changes due not only to new taxa being described (*Drymarchon kolpobasileus*, for example, was described by Krysko et al. in 2016b) and range extensions into the state being discovered (e.g., *Incilius nebulifer* was found in Escambia County for the first time in 2015) but also to an ever-growing number of exotic taxa that are becoming established in the state (see Krysko et al. 2016a for a recent summary). However, really knowing the animals takes someone who is not only knowledgeable but not afraid to get dirty—and even a quick review of the authors' publication records provides a clear picture of field biologists not only willing but eager to brave heat, mud, blood-sucking insects, razor-sharp vegetation, and whatever else it takes to become more closely acquainted with the subjects of their research. In short, they combine the knowledge and experience to bring this book to life.

Florida supports a phenomenally diverse herpetofauna. This book describes 57 species of native amphibians, 98 species of native reptiles, and 64 established exotic forms. This abundance is attributable to the size of the state, which extends some 700 km from east to west and north to south and encompasses a vast variety of habitats, and the warm ocean waters of the Gulf Stream that ensures a moist subtropical climate unique within the United States and exceedingly hospitable to the influx of alien species. Although my personal experience in Florida is somewhat limited, reading this book brought back

fond memories of trips during which I marveled at the many alligators (which Floridians take for granted but are a novelty for anyone from a more northerly clime), became reacquainted with a number of species I normally encounter during my forays into the West Indies, and admired a tiny Cornsnake (*Pantherophis guttatus*) in the Florida Keys that valiantly held its ground against an oncoming car.

Although this volume is suitable for a general readership, the evident scholarship will appeal to the professional herpetologist. The layout begins with an introduction that includes sections dealing with biodiversity, the nature of herpetology, and a history of Florida herpetology. The latter reads like a who's who beginning with such notable names as William Bartram, John Edwards Holbrook, Edward Drinker Cope and Albert H. and Anna A. Wright to Archie Carr, Coleman J. and Olive B. Goin, Walter Auffenberg, L. Richard Franz, F. Wayne King, and a



plethora of other herpetologists who were affiliated in some way with the University of Florida, and the hundreds of persons who have conducted research in Florida. The introduction continues with additional sections on taxonomy (which addresses some of the reasons for changing names and the inevitable disagreements that emanate from such novelties), an overview of the environmental setting (physiography, climate, river drainages, biogeography, habitats, many of which are illustrated with maps or photographs), and the status of species (population trends, impacts of habitat loss, degradation, fragmentation, road mortality, nonnative species, diseases, environmental contaminants, unsustainable use, climate change, and regulations and listing of species), followed by survey and research methods (including the sources of locality records) and an explanation of the species accounts, which compose the bulk of the book (over 500 of the volume's 707 pages). The accounts are followed by a glossary, an extensive 86-page literature cited, an index, and a very brief introduction of the authors.

The species accounts are organized taxonomically except a final section on potential or problematic species that addresses taxa with marginal distributions that could extend into the state or introduced species that might or might not be established. All but the latter accounts include a detailed description, comments on taxonomy, and sections on geographic distribution and habitat, reproduction and development, diet, behavior, and conservation. Each is illustrated with multiple photographs of the focal species, a map showing the entire distribution, and a more detailed map showing the range in Florida. The latter employs symbols distinguishing catalogued vouchers, catalogued vouchers for country records only, and unvouchered records and colors to differentiate vouchers and records prior to 1980 and from 1980 to the present.

I really like this book. The abundant photographs often illustrate the considerable variation typical of many species and are of consistently high quality (and even “professional” herpetologists like pretty pictures). The maps are detailed and informative. I have already pulled it off my bookshelf on multiple occasions to check some fact, review a species' distribution, or simply to learn more about some creature with which I am unfamiliar. Nevertheless, I have a few quibbles, generally along the line of wanting more rather than dissatisfaction with the actual content. For example, in the introductory section on the history of Florida herpetology, I wanted to know more about many of the persons mentioned and photographs of the many notable herpetologists who have worked in Florida would have been nice. I would have liked to see illustrations and more details about larval amphibians. Despite being mentioned and briefly described in the sections on reproduction and development, photographs or drawings would have been nice. Although unnecessary for professionals, the appeal of this book to all but the most sophisticated amateurs would have been enhanced by a greater emphasis on some of the unusual facts pertaining to some species. For example, cricket frogs

are great leapers. While this is clearly stated in the sections on behavior in the relevant accounts, that information is buried there. Similarly, the fact that North American coralsnakes can be readily distinguished from nonvenomous mimics because the red and yellow rings touch (“think of a traffic light”) is lost within the description. I suggest that a majority of species have at least one interesting feature that deserves additional attention. Boxed inserts emphasizing such unique attributes would highlight them and maybe entice a novice to delve deeper into biology. Maybe what I missed the most, however, is an even greater emphasis on conservation. Although the “status of species” section in the introduction and the inclusion of conservation in each account appropriately emphasize the uncertain futures of some taxa, I would have preferred a major “chapter” dealing with the topic. Despite its bountiful array of habitats and species, Florida has been the victim of more extensive environmental degradation and outright destruction than any other continental state. By using affected herpetofauna as prime examples, this book could have made a considerably more obvious appeal for greater awareness by the public and its representatives in Tallahassee and Washington. I know that the most egregious violators of environmental quality, those for whom Gopher Tortoises buried under parking lots are seen as the inevitable cost of progress, will not read this book or be swayed by the most eloquent plea for sanity. Nevertheless, we have to continue to make that case. Even a list of responsible environmental organizations worthy of support would have helped.

So, should anyone invest in this 700+ page volume that is too large and heavy to conveniently haul into the field, especially when so many other less bulky books have addressed the Florida herpetofauna? For those who merely want to identify an occasional frog or snake that ventures into a backyard, no; but for readers who want the most current and accurate information possible, I believe the investment is worthwhile. In summary (and despite my quibbles), this is an excellent treatise on the amphibians and reptiles of a remarkable state, well worth the price, and worthy of finding a home in the libraries of herpetologists and all naturalists.

Literature Cited

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Robert Powell
Avila University
Kansas City, Missouri