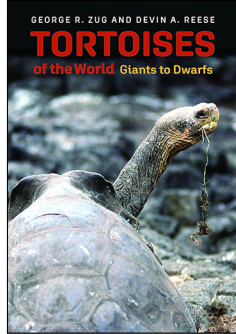


HERPETOLOGY

Tortoises of the World: Giants to Dwarfs

By George R. Zug and Devin A. Reese. 2024. Johns Hopkins University Press. 256 pages, 25 colour photos, 15 black and white photos, and 51 black and white illustrations, 64.95 CAD, Hardcover, 55.99 CAD, E-book.

I think most people know the children's story of the tortoise and the hare. Zug and Reese use this old, familiar fable as an excellent way to introduce their book on tortoises by illustrating the biological differences between tortoises and hares (mammals). Focussed completely on the chelonian (turtle and tortoise) family Testudinidae (tortoises), this work is intended as a semi-technical overview of the biology and diversity of all tortoise species worldwide. The first chapter sets the stage with brief summaries of all subsequent chapters. Topics covered include tortoise anatomy, physiology and behaviour, mating and reproduction, life cycles, ecology, global diversity, evolutionary history, human exploitation, and conservation. The book highlights the range of diversity in tortoises, from the smallest species you can hold in the palm of your hand to the giants occurring on islands such as the Galápagos.



Each chapter of the book has excellent illustrations and black and white photographs depicting tortoise anatomy, behaviour, and general geographic distribution, as well as figures and tables presenting summary data on various aspects of their biology. There is also a series of 25 excellent colour plates consisting of photographs of various species of tortoises doing all the activities described in the book, such as foraging on vegetation, mating, laying eggs in excavated nests, burrowing, seeking shelter as a 'herd' under limited shade, and encountering predators. Particularly, I enjoyed the colour plate of female Aldabra Giant Tortoise coming onshore in Tanzania covered in barnacles after surviving a six-week accidental floating journey at sea (and apparently not much the worse for wear!).

I personally enjoyed reading this book very much, and it reminded me of C. Kenneth Dodd's similar semi-technical work on the genus *Terrapene*, *North American Box Turtles: a Natural History* (University of Oklahoma Press, 2001). There is something in *Tortoises of the World* for both the focussed academic researcher and the more casual reader. In order to make this book approachable to a broader audience, the authors did not include in-text citations or a comprehensive bibliography (however, the latter is available

in an online source document for interested parties; <https://repository.si.edu/handle/10088/117719>). The authors use plain language throughout the book, with more technical terms in parentheses, to make the text digestible for the non-technical reader. I think the authors did a great job in formatting the book to accommodate both audiences.

Even as someone with a professional background in herpetology and turtles (although not tortoises, specifically), I learned quite a lot from this book. My favourite chapters were the last two regarding tortoise exploitation by humans and tortoise conservation, respectively. However, my engagement in these final chapters was greatly enhanced by reading all the content on tortoise biology and diversity in the preceding chapters of the book. Gaining a better appreciation for all the fascinating things tortoises do (and how they evolved and survived over millions of years) made me all the more upset upon learning about their mistreatment by humans through overharvesting (historically and in the present), as well as the spread of disease among tortoises facilitated by humans, and the habitat loss due to human encroachment and climate change. The book culminates in what is (in my opinion) the most important chapter focussing on the success stories, challenges, and complexities of tortoise conservation. Reading this book not only increases one's understanding of tortoise biology but also serves to bolster an understanding of the need to protect tortoises from extinction, especially given that they are one of the most imperilled groups of vertebrates globally.

One important note about this book is that it's intended to be a semi-technical and more general text about tortoise biology. While skimming through the book prior to my cover to cover read for this review, I was initially (mildly) disappointed that the section on tortoise species diversity (Chapter 7) was limited to only a paragraph for each of the world's extant (and recently extinct) species. However, the book highlights many examples of the biology of many individual tortoise species throughout its other chapters. So, in reading the book fully I don't see this as a major limitation. Additionally, this book serves as a great introduction to the species group as a whole, and one could consult other texts for a deeper dive into any focal tortoise species of interest. For example, Carl H. Ernst and Jeffrey E. Lovich's *Turtles of the United States and Canada, Second Edition* (Johns Hopkins University Press, 2009), which is included as

a suggestion at the end of the book for further reading, contains in-depth technical accounts and exhaustive literature reviews on North American tortoise species.

Overall, I greatly enjoyed this book and would highly recommend it for the reading list of anyone

interested in natural history—from the professional herpetologist to the casual naturalist.

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