

## Turtles of the World

By Franck Bonin, Bernard Devaux, and Alain Dupré (Translated by Peter C.H. Pritchard). 2006. Johns Hopkins University Press. 416 pages. Illus., \$50 (US).

First published in 1996 in French, this guide to the turtles of the world has been translated into English by eminent turtle biologist Peter Pritchard. In the translator's note, Pritchard acknowledges that he has also made some corrections and updates to the text. As such, the book includes recently discovered species such as *Pelusios cupulatta*, only described in 2003.

The book is divided into two sections: General Biology and Identification. General Biology provides a brief (nine pages) overview of the evolutionary history of turtles, their biology and conservation issues. Identification provides information on the approximately 330 recognized species of turtles. The species are grouped by families within the two suborders Pleurodira and Cryptodira. In general, each species account follows the same standardized format: distribution, description, natural history, protection. The species accounts vary from about half a page to three pages in length.

Each species also has a small regional map showing which part of the world the species occurs in and a larger, close-up map showing the distribution as shaded areas. These distribution maps also show major river systems, as well as some political boundaries. In addition, almost every species has one or more colour photographs.

Any attempt to list the names of all the species in the world of a certain group is a daunting task of sorting out sometimes conflicting and constantly changing taxonomy. The authors have accepted the recent splitting of the genus *Clemmys* and duly note this change in the appropriate species accounts. In contrast, the entire genus *Sternotherus* has been subsumed within *Kinosternon* without any explanation. While there has been debate over the validity of *Sternotherus* as a distinct genus, lumping the two genera goes against the current standard North American taxonomy. The authors are also somewhat inconsistent in assigning species status. They do not provide species accounts for *Chelodina mccordi* or *C. pritchardi* (although they are mentioned under the species account for *C. novaeguineae*), yet both these species are widely accepted. On the other hand, they elevate *Hardella indi*, a subspecies of *H. thurjii*, to full species status without any justification. This may explain why *Hardella indi* has the shortest species account in the book – three sentences.

There are some strange oversights in this book. The IUCN Red List of Threatened Species is the standard international ranking system for species at risk of becoming extinct. It designates status for these species from Lower Risk up to Critically Endangered. *Turtles of the World* occasionally mentions if a species has been “red listed,” but not consistently, even within the same genus. For example, all four species within the genus *Acanthochelys* are on the Red List, yet the species accounts mention this for only one of the species. The book says one of the other species is on the “IUCN priority list” and the “IUCN is worried” about another. None of the species accounts provides the IUCN status, so the reader will not learn that *A. pallidipectoris* is considered the most endangered of the four species.

A thorough reference section is also lacking. The references for this book do not even fill two pages and almost all of the references are to other books on turtles. Accordingly, most of the information in the book is presented without any reference to a specific primary source. However, occasionally a statement is referenced and in almost every case that reference is absent from the reference section.

Of the Canadian species, the map for *Graptemys geographica* (Common Map Turtle) excludes the Ottawa area and all of the Quebec part of the range, and maps for both *Glyptemys insculpta* (Wood Turtle) and *Emydoidea blandingii* (Blanding's Turtle) omit Nova Scotia. *Terrapene carolina* (Eastern Box Turtle), a species never confirmed to have been historically present in Canada at all, is shown as ranging across all of southern Ontario as far north as Toronto. The range is also over-extended in Michigan, Ohio, Pennsylvania and New York.

Despite these criticisms this is a significant book in turtle biology. The photographs are often excellent. The natural history section, while sometimes too short, provides insight into an incredible variety of life history strategies. For many species, the contents of the protection section provide important information on threats, as well as a wide diversity of conservation measures. This volume is not the definitive statement on any of these 300+ species but it is a good introduction to the diversity of turtles.

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