

BOOK REVIEWS—RESEÑAS DE LIBROS—RESENHAS DE LIVROS

Edited by John G. Blake

(To whom books for review should be sent)

Wildlife of the Caribbean. — Herbert A. Rafeaele and James W. Wiley. 2014. Princeton Pocket Guides, Princeton Univ. Press, Princeton, New Jersey, USA. Paperback, 304 pp. ISBN 978-0691153827. Costs \$15.68.

This field guide attempts to introduce the reader to the West Indian flora and fauna, including the marine life and some terrestrial invertebrates. In a book like this a line must be drawn somewhere, and size and conspicuousness will be a factor, but I believe the authors erred significantly in this regard. I would have drawn the line differently in order to give a good picture of the overall composition of the wildlife of the Caribbean islands. I would also not have included reef organisms, so as to allow more space for the terrestrial ones. A major problem is that the book is a hybrid between being an identification guide and being informative about the biota; it succeeds incompletely in both objectives. Once I had looked over the book, I began making a list of organisms that should have been included but were not: those that a reasonably observant person walking through various of the islands' habitats might well see or would hope to know about: pines, cycads, ferns, cacti (other than prickly pears), arboreal bromeliads, orchids; onychophorans, land snails (only Cuban tree snails are illustrated), millipedes, centipedes, scorpions, spiders, uropygians (whip scorpions), amblypygians (tailless whip scorpions), native toads, blind snakes, amphisbaenians, skinks, etc. Even some of

the groups that are included are given such short shrift that one gains no idea of their place in the biota. Among the geckos, none of the large, conspicuous natives, such as species of *Aristelliger* (Jamaica and Hispaniola), *Tarentola* (Cuba and the Bahamas), or *Thecadactylus* (Lesser Antilles) are mentioned. It might be objected that blind snakes and amphisbaenians were justifiably omitted, since they are cryptic burrowers. But they are not rare, and are important, distinctive components of the islands' faunas. If you expect to learn something about the fauna, you should know of them. Also, these reptiles, along with many of the invertebrates, might well be observed by a curious person who occasionally turns over a log or rock or is a bit attentive to leaf-litter. The introduced cane toad (*Rhinella marina*) is illustrated and discussed, but no mention is made of the radiation of endemic toads (*Peltobryne*) of Cuba, Hispaniola, and the Puerto Rico Bank. Skinks are not listed at all but are widespread throughout the islands of both the Greater and Lesser Antilles, even though some species and populations have fallen to human activities. Arachnids are often conspicuous members of the faunas. There are places in Cuba and Hispaniola that it would be difficult to avoid fearsome-looking tarantulas, particularly if you go into the woods at night. The islands are of course loaded with interesting but smaller spiders. One anguid lizard, the Hispaniolan *Celestus costatus*, is described, and, although the existence of

other species on other islands is mentioned, the reader could be left with the impression that this is the only Hispaniolan species (there is a large radiation of this genus), and members of the Anguidae (*sensu lato*) are found on all Greater Antillean islands and one Lesser Antillean island. One species of the spectacular endemic Antillean lizard genus *Leiocephalus* is illustrated with no indication that there are other species or where they occur.

The introductory part of the guide briefly discusses West Indian biogeography, habitats, climate, influence of hurricanes, extinctions, introductions of exotic species, climate change, and aspects of conservation. The authors note that significant parts of the flora and fauna, particularly the former, have been introduced by man. Missing is any discussion of the faunal (or physiographic) differences between the Greater and Lesser Antilles. Further, there is bias towards the Greater Antilles. For example it is stated with regard to the royal palms (*Roxystonea* spp.) that "most Caribbean islands host a native species." Six anole species are illustrated, all of them Greater Antillean; but there are some spectacular species in the Lesser Antilles. It would at least have been worthwhile pointing out there is a Lesser Antillean anole fauna that includes some of the most beautiful species.

A major problem with a guide to the wildlife, even the birds (Rafael's and Wiley's specialty) is that it can depict only a small part. If you really want to identify birds, you will need Raffaele *et al.*'s *Birds of the West Indies* or one of the other guides. Likewise, there are numerous guides to the reef biota. Too many species are not discussed in this guide for a user to have much confidence in correctly identifying many species. A way out of this would have been to have more of the general introductions to groups, such as they did with bats on p. 96 (but with a better description of the composition of the bat fauna) or the eleutherodactylid frogs (therein called "tree-

frogs," a misnomer on two counts) on p. 212. This way they could have introduced and illustrated representatives of some important groups that they did not want to illustrate more extensively and could have said more about diversity and distribution.

Miscellaneous errors: The snake genus *Borikenophis* is stated to occur throughout the Caribbean, but that genus is restricted to Puerto Rico and nearby islands. Related colubroid snakes do occur (or occurred) on almost all other islands; it would have been appropriate say something about this diversity and perhaps to warn readers that although having "mildly poisonous" saliva, some are capable delivering a bite dangerous to humans. The names of the boa constrictor and the Hispaniolan boa are reversed on the plate illustrating them, opposite page 208. The Potoo (*Nyctibius griseus*) is not discussed, although it is illustrated on the book's cover, and occurs or occurred on three Greater Antillean islands. *Petrochelidon* is rendered as *Pterochelidon* (p. 152).

The illustrations are variable but generally excellent. The plants, butterflies, crabs, nasute termite (nest and tunnels only), land snails, and the reef plants and invertebrates are illustrated with photographs. Vertebrates are painted or drawn. The bird paintings seem to me excellent, and the same is true for many of the reptile paintings. The frog illustrations are not as well done. Snouts, often a key feature, are often shown too rounded, and the body texture is too bumpy for some of the species.

Seventy-one plants are nicely illustrated and give a good picture of what one is likely to see in many Caribbean habitats (many species have wide distributions); around 37 of the 71 plants shown are introduced. But as I note above, there are significant omissions of major plant groups. — Richard Thomas, PO Box 23360, Biology Department, University of Puerto Rico, San Juan, Puerto Rico 00931, USA.