

## BOOK REVIEWS

GANNON, M. R., A. KURTA, A. RODRÍGUEZ-DURÁN, and M. R. WILLIG. 2005. Bats of Puerto Rico. An island focus and a Caribbean perspective. Texas Tech University Press, Lubbock, xv + 239 pp., 8 colour plates. ISBN 0-89672-551-0 (pb), price US\$ 19.95.

Bats have suffered a bad rap for many years due to their secretive, nocturnal habits, but also for their sinister roosting sites (caves) and the myths that have grown up around them in many cultures. Fortunately there is a growing worldwide interest in protecting these interesting animals through both the role of conservation agencies (such as the Bat Conservation Trust in England, Bat Conservation International, and the Program for Conservation of Mexican Bats), and a steady stream of new books for the general public and biologists alike. Although some books have been concerned with major areas, like Europe (Richarz and Limbrunner, 1993) or North America (Barbour and Davis, 1969; Tuttle, 1988), recent efforts have focused on summarizing the information on bats from a single country, like Argentina (Barquez *et al.*, 1999), New Guinea (Bonaccorso, 1998), Egypt (Qumsiyeh, 1985) and the like. The bats of Puerto Rico fits this genre, and although the number of species on Puerto Rico is low (13), nonetheless it is an important entree to the bat fauna of the Caribbean.

The book is an interesting and enjoyable read. It begins with a general regional description of the island of Puerto Rico, and then goes on to describe the island's biodiversity and the importance of its conservation. Moving on to the unique native mammals currently inhabiting the island, the bats, it turns into a rich, but easy to read, description of the different bat species and all of their natural history. Beginning with a synthetic description of biological and ecological facts about bats, it then concentrates on the 13 bat species from the island.

Those belong to five families, each of which is described along with their representative species, which include: the greater bulldog bat *Noctilio*

*leporinus*, the Antillean ghost-faced bat *Mormoops blainvillii*, Parnell's mustached bat *Pteronotus parnellii*, sooty mustached bat *P. quadridens*, Jamaican fruit bat *Artibeus jamaicensis*, Antillean fruit bat *Brachyphylla cavernarum*, brown flower bat *Erophylla sezekorni*, greater Antillean long-tongued bat *Monophyllus redmani*, red fig-eating bat *Stenoderma rufum*, big brown bat *Eptesicus fuscus*, red bat *Lasiurus borealis*, velvety free-tailed bat *Molossus bondae*, and Brazilian free-tailed bat *Tadarida brasiliensis*.

For each species, scientific and common names, both in English and Spanish, are provided. Then taxonomic comments follow, mostly addressing the nomenclatural history of the species, including the etymology of the species name. Biological data are summarized in the following sections: distribution and status, measurements and dental formula, description, and natural history, all in considerable detail. Drawings of bat faces, skull and mandibles are very clear and show useful diagnostic characters. Maps for each species with collecting localities complete the information.

The penultimate chapter deals with conservation issues on the island, and provides some recommendations for helping to save this important and interesting fauna. Threats to the bats are detailed, and reasons for their protection are given. The final chapter contains dichotomous keys for the Puerto Rican bat species, one for external characters, and another using cranial and dental characters.

Appendices contain the most updated and complete technical information on the bat fauna, including a list of plants used as food by bats; body and cranial measurements; ectoparasites or arthropods associated with bats; chromosomal characteristics; technical names of plants and animals mentioned in the text; and a quite useful gazetteer. Those are followed by an extensive glossary, list of references, and the index.

The four authors have a total of 60 years of experience in studying the bats of Puerto Rico, and we could smell the smoke of their campfires, so to speak. They clearly enjoyed writing this book, and their descriptions provide even the most technical details