BOOK REVIEWS


The foreword on the dust jacket of Lord’s Mammals of South America makes 2 ambitious assertions, it “… provides the most vivid snapshot of South American fauna ever produced …” and “… will serve as a valuable reference for both students and professional mammalogists.” Clearly, there are few widely available works that have adequately documented large portions of the South American mammalian fauna with photographs. In terms of the number of color images of mammals endemic to South America, this volume could make a case for the 1st claim. However, other books, such as that by Macdonald (2006), have photographs of many of the same species that are equally, if not more, vibrant. With regard to the accompanying text, Lord’s book is largely cursory in nature and falls short of its aim to be a reference book of great value to mammalogists. 

In the Preface, Lord emphasizes South America’s equatorial location, its diversity of life zones and habitats, presence of extraordinary geologic features (e.g., the Andes, Amazon River, and Amazon forest), and the great species richness derived from these attributes. He provides an overview of the major radiations of South American mammals and compares and contrasts them primarily with the fauna of North America, specifically highlighting those groups that have representatives on both continents. These discussions are general and perhaps sufficient for the layperson, but they do contain errors. When speaking of mammalian invasions of South America, Lord states “Since those early invasions, other invasions have also occurred, most notably of rats and mice. They invaded South America during the late Oligocene or early Eocene, traveling across the Panamanian land bridge ….” Whether present in the original text or due to subsequent editing (although the same text also is present in the section on Cricetidae), such a glaring error as either confusing the earlier hystricognath invasions with those of the much later sigmodontine rodents or actually placing the sigmodontine invasion and the presence of a land bridge in the Eocene or Oligocene doesn’t lend itself to reader confidence or the book’s use as a reliable reference for students and mammalogists. For a current discussion on hypotheses of arrival and diversification for the sigmodontines in South America, see Steppan et al. (2004), who suggest a date of around 6 million years ago.

A brief section on biogeography includes descriptions and a map of the major biomes of South America and provides a quick overview of their role in associated mammalian radiations.

The heart of the book is composed of the species accounts. These are arranged by order but listed by the common name, an example of how the author seems to struggle with trying to make this book work for both the lay public and professional mammalogists.

In the accounts, Lord provides a nice collection of photographs (252) from a subset of the recognized taxa and makes strong inroads into illustrating the tremendous diversity of the mammalian fauna of South America. The photos are an assortment of close-ups providing excellent individual detail and more distant shots melding the animal with its habitat. This provides a nice balance in terms of visual images. Accompanying the photos are textual accounts broken down by family, containing a blend of natural history, descriptive and diagnostic characters, interesting anecdotes, and taxonomic information. Common and scientific names are mixed throughout. There is enough taxonomy to confuse laypeople but not enough to provide any rigorous treatment of the groups. No keys are provided and the inclusion of diagnostic characters is somewhat random, serving more as descriptive text than a tool useful in diagnosing taxa. Anecdotal natural history information is wide ranging and will be of interest to readers not already familiar with these taxa. Topics range from diseases of human interest (e.g., leprosy in Dasypus and leishmaniasis in Bradypus) to coprophagy in the caviids to pollination and seed dispersal by bats.

Within the accounts, the coverage of the fauna is often unbalanced, with many taxa left out and more charismatic species given many pages (e.g., more than 40% of the text about Chiroptera is on vampires). Although some accounts do contain ample natural history, ecological, and ancillary information, no citations are provided. The reader is left wondering how these data were derived.

The accounts are followed by a species distribution table that lists all the currently recognized species occurring in South America (arranged by order and family following Wilson and Reeder [2005], then alphabetically by genus and species). The table includes common names of the higher-level groups and denotes the presence, possible presence, introduction, or extirpation of each species in each South American country. This table may be of use in compiling country lists or very gross species distributions, but it provides no finer-scale information such as habitat associations.

Finally, Lord includes a list of 41 references presumably used when compiling the natural history information and occurrence data included in the accounts and distribution table. These include many “Mammals of” works, field guides, and a few more focused works on specific South American taxa, but we do not know how these resources were actually utilized.

In short, this book provides a general introduction to the diversity of the mammalian fauna of South America through an array of quality photographs and assorted descriptive text and could serve as a useful and enjoyable book for the lay public or secondary education students. Unfortunately, it lacks the depth and completeness necessary for use in research by active professional or student mammalogists.—JON L. DUNNUM, Museum of Southwestern Biology, University of New Mexico, Albuquerque, NM 87131, USA; jldunnum@unm.edu.