

Book Review

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Book Review

Wilson D.E., Lacher T.E., Jr. & Mittermeier R.A. (eds.) 2017: The Mammals of the World – Vol. 7, Rodents II. Lynx Edicions, Barcelona, 1008 pp., 58 colour plates, 342 photographs, 1753 distribution maps. ISBN: 978-84-16728-04-0.

The next volume of the Handbook of the Mammals of the World includes the remaining nine families of the placental order Rodentia. The rodents are animals certainly not as attractive as ungulates or carnivores, however, they are exceptionally diverse and frequently poorly known. In this respect, the present volume provides comprehensive and unique information on this mammalian group. The knowledge offered in the book is carefully elaborated and presented in a top graphical form and lay-out.

Similarly as in the previous volumes, the text is concise and up-dated, the colour illustrations and photos are excellent, and the distribution maps are accurately compiled. The book is a multi-author work and more than 40 experts from various countries contributed to the textual parts, and many others supplied photos. The great amount of reported data obviously demanded immense editorial efforts and the editors should be greatly acknowledged for the final results. The arrangement of the book is synoptic and coherent, the list of references is quite comprehensive, and the index facilitates reader's orientation in the text. One of few problems that I noted was the difficulty to associate particular information given in text with a corresponding reference from the list included at the end of paragraphs.

The overall systematic arrangement of the volume follows recent findings on rodent evolution and phylogeny inferred mainly from molecular studies. The book covers two crown clades of extant rodents. i.e. Dipodoidea and Muroidea usually classified as Myomorpha. These groups include remarkable examples of successful adaptive radiations and may serve as study models for many important phenomena in evolution and biology. Some of the families included (Sminthidae, Platacanthomyidae) are thus noteworthy relics of ancient times and their knowledge is essentially important for understanding of past evolutionary events. Other taxa offer illustrative examples of colonization of islands after oversee migrations as exemplified in the endemic Nesomyinae from Madagascar. There are also families remarkable by unusual adaptation for fossorial life underground (Spalacidae) showing various unique features. The Myomorpha also includes the two largest mammalian families, Cricetidae and Muridae. Each of them contains approximately 800 species and, altogether, they represent almost one third of the species richness of extant mammals.

The rodents evolved diverse relationships with the man and human society that comprise many practical aspects such as the damage in agriculture and food stores, the dissemination of infectious diseases, or utilization of some species as research models. Some of the rodents are also threaten and deserve conservation interest. The principal importance of the rodents nevertheless inheres in the role they play in ecosystems almost all over the world. The knowledge of this role is summarized in the present volume and it will apparently serve as an indispensable source of contemporary knowledge about natural history of this animal group. I am sure that readers will greatly appreciate the quality of the book. We are looking forward to the remaining volumes of the Handbook.

Jan Zima