



## Book reviews

**Wilson, D.E.; Mittermeier, R.A. (chief editors): Handbook of the Mammals of the World. Vol. 4. Sea Mammals, Lynx Editions, Barcelona (2014). 614pp., 30 colour plates, 667 colour photographs, 147 distribution maps, Hardback, €160, ISBN: 978-84-96553-93-4.**

This book is the fourth volume of a series of eight. It covers the pinnipeds (eared seals, walrus and earless seals), whales (Cetacea) and sea cows (Sirenia: dugong and manatees). As in some other volumes, this is a completely non-phylogenetic grouping as the pinnipeds belong to the Carnivora, the whales to the Cetartiodactyla, and the sea cows are close relatives of the elephants and thus part of the Afrotheria. The reader learns very little about phylogenetic relationships (even in the chapters headed “Systematics”), but on all other aspects of biology there is again a wealth of information including about 2800 references, which makes this volume, just like the first three, an instant classic for years to come. There is even room for some humour when the reader is told that dugongs look like a cross between a walrus and a dolphin “or like a manatee that goes to the gym!” And of course, there are once again hundreds of superb and often spectacular photographs that do justice to the publisher’s reputation. The colour plates are also again of very high quality and aim at depicting complete or near-complete intraspecific variation – for the orca, there are altogether nine illustrations, including resident and transient as well as all four (A–D) Antarctic forms.

A particular focus is the conservation status and the protection of sea mammals. Apart from a section “Status and Conservation” in each of the species accounts there is an introductory chapter called “Sea Mammal Conservation”. No less than 50% of all sea mammal species evaluated by the IUCN (i.e. those that were not data-deficient) are threatened or near-threatened, and some are already extinct, e.g. the Caribbean monk seal and, perhaps most famously, Steller’s sea cow (which in the introductory chapter is wrongly said to have become extinct later than the 18th century). The threats to sea mammals are manifold but what they have in common is that they are almost all anthropogenic, from interactions with fisheries and direct take to habitat loss, pollution and climate change.

The taxonomic approach fortunately is much more cautious this time than in, for example, the ungulate volume when it comes to species splitting; there are no huge discrepancies between the species lists of this volume and Wilson and Reeder’s *Mammal Species of the World*. This is not to say that aquatic mammal diversity is at present fully uncovered, but the null hypothesis should be a single species until good and preferably multidisciplinary evidence tells us otherwise.

On the whole, this volume is a huge success and yet another must-have for every mammalogical library. It will be the first choice for information on any of the covered species; the extensive list of

references will then help the reader to go deeper. However, this volume shows the same shortcoming as the first three in the series (and probably also the remaining four): the references are not given in the running text but only at the end of each species account, thus making it impossible to know where exactly which information comes from. This is not uncommon for handbooks of this kind but might be worth giving a second thought should a second edition ever be published.

Frank E. Zachos  
Vienna, Austria

E-mail address: [frank.zachos@nhm-wien.ac.at](mailto:frank.zachos@nhm-wien.ac.at)

Available online 16 September 2014

<http://dx.doi.org/10.1016/j.mambio.2014.08.003>

**Behaviour and Management of European Ungulates, R. Putman, M. Apollonio (Eds.). Whittles Publishing, Dunbeath, UK (2014). X+293 pp., Black and white figures, Hardcover, £ 44.99, € 56, ISBN: 978-1-84995-122-7**

This book is the third and probably last volume of a groundbreaking series on European ungulates initiated by a conference held in Erice (Sicily) in 2004. The first volume presented a comparative country-by-country overview of ungulates and their management (distribution, legislation, translocations etc., see book review by Zachos 2010), while the second dealt with several topics of ungulate management reaching from pathogens, public health and traffic collisions to climate change and relationships with large carnivores. The present, third volume is similar to the second in approach (the editors call it “cross-cutting”) and also in scope, but somewhat broader, and apart from expected topics such as reintroduction programmes or effects of selective harvesting, there are also chapters on fertility control (e.g. by means of immunocontraception) and welfare issues. Particularly the latter is often neglected in wildlife management, and the editors/authors rightly emphasise this aspect and our ethical responsibility towards the animals in *all* our regulation and management efforts: “the moral duty of care for animals is absolute and independent of context” (p. 260)! While often the damage done by ungulates to crops or forests is what comes to mind first, ungulates also have an immense value (including economic value!). The first chapter after the introductory one therefore deals with “Valuing Ungulates in Europe”. It is 30+ pages and contains a detailed overview of all kinds of values these iconic animals have had for centuries or millennia (aesthetic, cultural, sacred and, not the least, about 100 million euros in potential hunting revenue – annually!). Unavoidably, much of the book is about human impacts on ungulates, and of particular interest in this regard may be the two chapters on reintroductions (of both

native and alien species) and the chapter on effects of selective harvesting (both intentional and unintentional) which summarises important findings and research carried out over the last decades and highlights the sometimes immense evolutionary consequences of harvesting regimes. Chapters on management in urban areas – some wild boar populations within city limits are notorious, but also less known species such as muntjak are becoming more and more urban –, protected areas and cross-border regions will also find thankful readers among practitioners. The number of figures and tables is overall low, but there are extremely useful tables among them, for example a nice continent-wide overview of releases of red deer, roe deer, wild boar and Alpine chamois, including references.

The present book and its two sister volumes are an invaluable source of information for everybody working on and/or with ungulates in Europe – scientists, game managers, conservationists, environmentalists and stakeholders in agriculture and forestry.

Perhaps someone will go through all these efforts again and produce something equivalent for other taxonomic groups, for example European carnivores . . . ?

### Reference

Zachos, F.E., 2010. Apollonio, M.; Andersen, R.; Putman, R. (Eds.): *European Ungulates and their Management in the 21st Century*. Cambridge University Press, Cambridge etc. (2010). XIII + 604 pp., Numerous black and white figures, Hardcover, £70.00, h83, ISBN: 978-0-521-76061-4. *Mamm. Biol.* 75, 474.

Frank E. Zachos  
Vienna, Austria

*E-mail address:* [frank.zachos@nhm-wien.ac.at](mailto:frank.zachos@nhm-wien.ac.at)

Available online 8 October 2014

<http://dx.doi.org/10.1016/j.mambio.2014.09.003>