

BOOK REVIEW

F.-K. Holtmeier: ANIMALS' INFLUENCE ON THE LANDSCAPE AND ECOLOGICAL IMPORTANCE. NATIVES, NEWCOMERS, HOMECOMERS. - Springer, Dordrecht, Heidelberg, New York, London 2015, 522 p., ISBN 978-94-024-0367-1.

General ecology textbooks treat immense numbers of interrelationships between animals and their environment at the levels from micro- up to macrohabitats. This book has an ambition to put together functional contributions of knowledge to the animal influences on the landscape and/or enlarged ecosystem (biome) levels. The author gets down to a comprehensive analysis of sophisticated impacts of various taxonomical groups or their alliances on higher organization scales of nature. Introduction finds grouping of arguments why it is so important to pay attention to zoocoenoses in midstream of topological space which is omitted by geographically designed landscape science. Chapter 2 (Animal's functional role in the landscape) emphasizes such phenomena as bioturbation - acting ants, termites, worms, burrowing mammals, birds, in general: fluxes of matter and flows of energy through major ecosystems. The size of the problem is discussed across the globe, from the polar regions to the tropics. Zoochory – the dispersal of seeds by ants, mammals and birds – as one of the key mechanism influencing the soil development, geomorphology and vegetation succession refers also to the restoration ecology in cultural landscape (Kovář *et al.*, 2001; Dostál *et al.*, 2005; Vlasáková *et al.*, 2009; Kovář *et al.*, 2013). Chapter 3 (Selected landscapes under the influence of wild herbivorous mammals) studies varying landscape mosaic of drier regions such as savannas under the press of enormous populations of large mammalian herbivores. All the other biomes are included into comparative considerations, and appraisal extends to the impact of feral domestic animals. Chapter 4 (Keystone species) demonstrates the radical determinism of exemplified organisms (termites, beavers, kangaroo rats) in relation to landscape face. Chapter 5 (Introduction and re-introduction of animals) focuses on consequences of introduction of alien animals and re-introduction of animal species to their original habitats. It also discusses the effects on ecosystems of disturbances, digging and trampling by animals. Chapter 6 (Animals in landscape management and nature conservation) addresses the role of zoological subjects in the care for nature and landscape. Conservation and management aspects are related to the impact of newcomer species such as animals (introduced, e. g., into Australia, New Zealand and Europe), and the ecological impacts of reintroduction of species to their home habitat. It also discusses the carrying capacity of natural habit and public attitudes toward the problem. Final part of the book brings a dose of thinking about the effects of climate on interactions between animals and their habitats, partly speculative in relation to predictive scenarios due many uncertainties in this sensitive matter. We can say that this first English-language edition of the book effectively fill up some blank space and/or a gap in traditional landscape ecology.

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