

Book reviews

Conservation Translocations edited by Martin J. Gaywood, John G. Ewen, Peter M. Hollingsworth and Axel Moehrensclager (2022) 400 pp., Cambridge University Press, Cambridge, UK. ISBN 978-1-108-71457-0 (pbk), GBP 34.99.

Humans have been moving species from one place to another as long as they have been human. First, without intending to, they moved disease organisms and parasites with them, and later, with intent, domesticated animal and plant species. Commensals such as house mice, cockroaches and agricultural weeds hitched rides with the traveling humans, and crops were always being moved by colonists and migrants. Species were moved less commonly for the purpose of hunting or sport, such as rabbits into Britain and the tens of thousands of wild animals moved by the Romans to be killed in coliseums. Moving species reached its apogee in the development of Acclimatization Societies which, in the 1800s, moved species such as red deer and brown trout from their ancestral home in Europe to colonized countries—anywhere from Argentina to New Zealand. In none of these numerous cases were species moved for their own sake, but always for diverse human purposes.

Moving species to save them is a practice that only started during the last century or so, with early examples including the 1830s reintroduction of the capercaillie *Tetrao urogallus* to Scotland and an effort in 1895 to move the kakapo *Strigops habroptilus* from the New Zealand mainland to offshore islands. Since then, there have been well publicized translocation efforts directed at the California condor *Gymnogyps californianus*, scimitar-horned oryx *Oryx dammah* and European bison *Bison bonasus*. And, of course, there are many plants on this list, including grasses, orchids, cycads and trees.

Many of the early efforts failed and the community of practitioners has been exemplary in learning from their mistakes, with much of this captured in *Conservation Translocations*. The touchstone for much of the learning documented in this book is the IUCN Species Survival Commission Conservation Translocation Specialist Group, which has been active in guiding and describing actions implemented around the world. The book is long, with over 450 pages. It is dense with the experience of practitioners, and there is a rich diversity of authors—over 60 contributors from over 15 countries—although the preponderance is European, particularly from the UK. After a couple of useful introductory chapters, the heart of the book consists of 10

chapters on key issues, and 10 short case studies. Between these two, there is an odd section with a single chapter on 'looking to the future'. The book is expensive at almost USD 45 for the paperback edition; there is an e-book version, but unfortunately this is equally pricey. This will undoubtedly limit the reach of this important volume, which deserves to be widely read.

This is a timely publication examining many aspects of the practice defined by the editors as the movement of species for conservation benefit. Such movements include not only the more traditional reintroductions and reinforcements but also assisted colonization, ecological replacement and associated multi-species translocations, ecological restoration and rewilding. The many chapters provide an excellent review of the existing literature, both formally and informally published, and will be an invaluable guide for future practice. Worth singling out is the chapter by Sarah Dalrymple and Joe Bellis, which does an admirable job of orienting those interested in developing new projects, including by highlighting the all-important challenge of defining success.

The Convention on Biological Diversity and the Bern Convention both call for reversing the decline of species through conservation translocation, creating a policy framework within which much of the work described in the book can flourish. The chapters cover virtually all aspects of conservation translocations, from legal constraints and animal welfare to the use of structured decision-making and issues around infectious diseases and parasites. Both animals and plants receive fair treatment, although there is an expected bias towards animal translocations. The authors place a welcome emphasis on the role of stakeholders in shaping and defining success.

With the book's focus being on the ongoing practice of conservation translocation, it is no surprise that the authors have touched only lightly on some of the emerging issues that are starting to face this practice. When conservation translocation began, it seemed to be a fairly straightforward concept: put back desired species where they had been lost. But future practice will not be so simple as changes of climate and land use alter existing niches and the slippery concept of ecological function. Additionally, new technologies are beginning to make it possible to precisely alter genes and thereby potentially change how species experience the challenges of climate and disease. Finally, a growing understanding of the microbial world adds the necessity to also translocate species' microbiomes. We look forward to seeing how this

dynamic and creative community of practitioners rises to these new challenges, to ensure the success of the essential practice of conservation translocation.

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The Sloth Lemur's Song: Madagascar from the Deep Past to the Uncertain Present by Alison Richard (2022) 304 pp., The University of Chicago Press, Chicago, USA. ISBN 978-0-226-81756-9 (hbk), USD 27.00.

As an ecologist native to Madagascar, I am always drawn toward reading materials about the island's fascinating biological diversity. This book taught me more than I expected, in an informative yet entertaining way. It recounts the *tantara* (stories) of Madagascar, its people, ecosystems and wildlife, from the deep past to the present, and also provides a glimpse of what their future may look like in the face of environmental changes. The topics covered span a broad spectrum, including Madagascar's origins, ecology, evolution, culture, geology and more. Organized by events and reflecting on what the author has learnt and witnessed, the book guides the reader through changes that occurred over millions of years: the formation of the island, the arrival of the ancestral species of present-day wildlife, the arrival and establishment of the human population, habitat transformations—both natural and human-driven—and species extinctions.

The stories are told from the perspective of a non-Malagasy, foreign, person—albeit an expert with a lifelong devotion to unravelling the intricate mysteries of the island. Despite this, the book highlights the vital contributions that Malagasy scientists and scholars, as well as local villagers, have made to the important discoveries and the piecing together of the puzzles that have deepened our understanding of this marvellous natural laboratory. The author vividly recounts their stories, knowledge and vision, reflecting on her personal interactions with each of these groups over many decades.

Another aspect I love about this book is its take on environmental issues in Madagascar. The Malagasy ancestors and current populations, specifically those living near critical ecosystems, are often depicted as the villains in accounts of environmental degradation and conservation. But this book paints a different picture, opening the reader's eyes to the complexities of conservation and urging us to look

deeper to find the true villains who benefit off the back of poor farmers. The author also points out that environmental degradation may not always be a result of human activities. Take, for example, the case of erosional gullies (locally called *lavaka*) or the tapestry of grassland systems in Madagascar's highlands that have been long attributed to the destructive effects of human activities such as deforestation, overgrazing by cattle and burning for agricultural practices. This narrative has been perpetuated in many reports, the scientific literature and discussions of land use and

conservation in Madagascar. However, as this book points out with a look at the science behind these geological formations and land-cover types, presenting these phenomena as purely a result of human activities is incorrect as 'natural processes are also at work' (p. 42). In many instances, this book debunks, with evidence-based support, similar widespread and one-sided narratives that tend to blame Malagasy people for the environmental problems that the island's fragile ecosystems are facing.

I highly recommend this wonderful book, not only to the curious ecologist like me,

the Malagasy fellow looking to reconnect with their roots, the scientist or scholar working on any aspect of Madagascar, or the conservationist trying to better understand Malagasy ecosystems, but to everyone. It is beautifully written, and its colourful penmanship makes the reader wish for the stories never to end.

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