Publications

Wildlife Restoration: Techniques for Habitat Analysis and Animal Monitoring by Michael L. Morrison (2002), vii + 209 pp., Island Press, Washington, DC, USA. ISBN 1 55963 936 9 (hbk), $50.00, 1 55963 937 7 (pbk), $25.00.

This slim volume marks the start of a new Island Press series being compiled by the Society for Restoration Ecology, an NGO whose members are involved in ecosystem repair and management in over 35 nations. In keeping with the international scope of the Society, and in recognition that ecological restoration is emerging as a distinct discipline, the objective of the series is to create a new international forum to advance restoration science and practice. The aims of this lead publication on wildlife restoration are to provide restoration biologists with a better understanding of the field of wildlife biology, and to assist wildlife biologists in placing their studies within a restoration context.

There are eight core chapters that introduce a series of basic concepts and techniques: population structure, habitat restoration and wildlife restoration approaches (Chapter 1), habitat measurements (2), historic assessments (3), an introduction to scientific method and study design, and the fundamentals of monitoring (4, 5), a taxonomic overview of sampling methods for assessing terrestrial vertebrate species richness, distribution and abundance (6), issues in reserve design (7), and a summary chapter (8). References are arranged by chapter, which necessitates some flicking back and forth, but there is a comprehensive index. Line diagrams are used to good effect to illustrate concepts and examples, but the yellow recycled paper used by Island Press does not do justice to black and white photo reproduction.

The author's important overarching theme is that wildlife studies should be undertaken with a high degree of rigour, proceeding only after careful planning within a clear conceptual framework, and that wildlife-habitat restoration is a complex undertaking. The material is presented in an attempt to provide both a flavour of this complexity, and to summarize some key concepts and approaches. My main quibble with this book is that it attempts too much too concisely, resulting in a lack of depth that assists neither professional nor amateur restoration biologists. Professionals will learn little and may be put off by the terse treatment of their specialist areas, while amateurs may be misled into thinking that things are easier than they actually are. For example, the chapter on sampling methods aims to provide an overview of methods for assessment of, among other things, population abundance. The distinction between estimates of absolute abundance and indices of relative abundance is not clearly made. Line transect (distance sampling) data is mentioned in the section on birds, but there is no explanation of why the precise and time-consuming measurement of perpendicular distances is necessary, nor how such data should be analysed. Mark recapture methods of abundance estimation are not dealt with, and the distinction between open and closed populations is not covered. Radio-telemetry, a valuable tool in determination of distribution, habitat selection and dispersal patterns, is not mentioned. Having said that, the chapters on habitat, and especially the one on reserve design, do provide useful reviews of terms, principles and techniques, and nicely capture some current debates, such as the value of reserve corridors.

It was disappointing to see that the narrow definition of wildlife was upheld as referring only to terrestrial vertebrates. Immediately this seems to limit the audience of the book to those concerned with terrestrial vertebrate restoration; an unnecessarily narrow focus, particularly when on the same page the author states that effective conservation and restoration must take an ecosystem approach and consider a diversity of organisms. Issues of scale and focus arise in a number of places, for example in the introduction to chapter one where the ultimate goal of wildlife restoration is said to be to ensure the survival and protection of ''individual animals''. This is in contrast to the statement in the forward by Paul Krausman that the importance of restoration lies in enhancement and maintenance of biodiversity.

Case studies and examples are used throughout to illustrate key points, although with an overwhelming North American bias. This is nowhere more evident than in Chapter 3, where the techniques for historic assessment of faunal distributions focus solely on the use of listed collections, databases and references for North America; how might one proceed in less developed regions? Overall a more complete picture of the scope, complexity and approaches involved in species and ecosystem restorations could have been achieved with

reference to some of the vigorous and innovative programmes under way in Europe and, admitting my own bias, Australasia.

The book does provide a useful signpost to the literature that presents more detailed treatments of the various topics, including the recent excellent publication by the author and colleagues on *Wildlife Study Design*, and this is perhaps its greatest value. Some omissions do stand out however; the brief section on reintroduction and translocation, for example, fails to mention the IUCN guidelines on reintroductions. In general, as the first book in the series, it would have been useful to trace the history of restorations, to perhaps attempt the creation of a framework for the unification of the varying disciplines, and to identify their core underlying principles and challenges. As the focus internationally has shifted from species-specific conservation projects towards management at the ecosystem level, there is increasing need to draw together such fields as habitat restoration, protected area creation and management, captive breeding, and reintroduction, to name a few – all of which have their own, or several, international coordinating bodies. In addition, it would have been interesting to see some deeper consideration of what is the key restoration dilemma – what condition are you trying to restore? This raises a number of questions, such as: what were pre-existing conditions and how stable were these, what degree of human modification do you accept and what were truly unmodified conditions, and what about the effects on a site of recent and future changes in such fundamentals as climatic conditions?

It is unclear exactly who might most benefit from the book, whether it is ''ecologists, restorationists, administrators and other professionals'' or the rather mysterious ''restorationist'' alone. The lack of depth in treatment means that professional ecologists and wildlife biologists will not learn anything new, and ecologists may well be put off by such bold statements as ''… ecology as a discipline has failed to provide reliable knowledge … because its practitioners have failed to treat it as rigorous science'' (p. 85). On the other hand, as the term restorationist seemingly encompasses largely untrained, but well-meaning, practitioners, it seems questionable whether all sections of this book adequately convey the complexity of the issues involved in ecological restoration.

It will be clear from the comments above that I can't really identify a suitable audience to which to recommend this book, or one that would not be better served by compiling some of the more comprehensive treatments of research and management techniques for animal populations that are currently available. The author does conclude with a call for feedback for future revisions and I would encourage readers to do this. The topic is

an important one and the objectives of the book, and the series, are worthwhile, but ones which might be better launched with a broader treatment of restoration themes that leaves the technical details for others to cover.

Philip Seddon
Department of Zoology, University of Otago
P.O. Box 56, Dunedin, New Zealand
E-mail: philip.seddon@stonebow.otago.ac.nz

The Whaling Season: An Inside Account of the Struggle to Stop Commercial Whaling by Kieran Mulvaney (2003), 348 pp., Island Press, Washington, DC, USA. ISBN 1 55963 978 4 (hbk), $26.

As the title suggests, this book provides an insider's account of the operations of the International Whaling Commission, Japan's 'scientific whaling', and in particular of the several voyages to the Antarctic organized by Greenpeace to attract publicity against ongoing commercial whaling in the face of the international moratorium. Data on the current plight of many of the species and populations discussed in the book are summarized in the Action Plan below.

Dolphins, Whales and Porpoises: 2002–2010 Conservation Action Plan for the World's Cetaceans compiled by Randall R. Reeves, Brian D. Smith, Enrique A. Crespo & Giuseppe Notarbartolo di Sciara (2003), xi + 139 pp., IUCN/SSC Cetacean Specialist Group, IUCN, Gland, Switzerland and Cambridge, UK. ISBN 2 8317 0656 4 (pbk), unpriced.

This is the third Action Plan for cetaceans, earlier ones having been published in 1988 and 1994. Most of the projects recommended in the 1994 Plan have been initiated and some conservation progress has been made. However, as the current plan testifies, two species (the baiji *Lipotes vexillfer* and the vaquita *Phocoena sinus*) and several geographical populations of whales and dolphins are categorized as Critically Endangered on the IUCN Red List, with the main threats being fishery bycatch, habitat degradation and very low numbers due to past hunting. The six chapters of this new Action Plan cover conservation status, threats, possible solutions, status of species and selected populations, recommended initiatives and recommended conservation actions.

Equids: Zebras, Asses and Horses. Status Survey and Conservation Action Plan edited by Patricia D. Moehlman (2002), ix + 190 pp., IUCN/SSC Equid Specialist Group, IUCN, Gland, Switzerland and Cambridge, UK. ISBN 2 8317 0647 5 (pbk), unpriced.

Most of the remaining seven species of equids and their various subspecies have a threatened categorization (i.e. Vulnerable, Endangered or Critically Endangered) on the IUCN Red List, one species is Extinct (*Equus quagga*) and one subspecies *Equus ferus przewalskii* is categorized as Extinct in the Wild. Most of the extant species live in desert and savannah ecosystems in which the future conservation of wildlife, if it is to be successful, will have to be closely linked to the participation of pastoralists in conservation management. The aim of the 13 chapters and various appendices in this Action Plan is to assist researchers, management authorities and all other bodies, including local resource users, to prioritize and activate conservation on threatened and endangered equids. The Action Plan covers all seven extant equid species, and includes recommendations for conservation action.

Polar Bears: Proceedings of the 13th Working Meeting of the IUCN/SSC Polar Bear Specialist Group, 23–28 June 2001, Nuuk, Greenland compiled and edited by Nicholas J. Lunn, Scott Schliebe & Erik W. Born (2002), vii + 155 pp., Occasional Paper of the IUCN Species Survival Commission no. 26, IUCN, Gland, Switzerland and Cambridge, UK. ISBN 2 8317 0663 7 (pbk), unpriced.

The Contracting Parties to the *Agreement on the Conservation of Polar Bears and Their Habitat* (Canada, Denmark, Norway, USSR – now Russia – and the US) have an obligation to conduct research on polar bears, particularly relating to their conservation and management. Representatives of the signatory nations joined specialists at this Meeting, which reviewed progress in research and management of polar bears during the period 1997-2001. The meeting recognized that future challenges for conserving polar bears and their Arctic habitat will be greater than at any time in the past because of the rapid rate of ecological change as a result of climate change and pollution.

Policing International Trade in Endangered Species: The CITES Treaty and Compliance by Rosalind Reeve (2002), xxi + 346 pp., Earthscan, London, UK. ISBN 1 85383 875 6 (hbk), £45.00, 1 85383 880 2 (pbk), £19.95.

This book – ''… the first definitive study of the CITES compliance system …'' according to the flyer – contains, in the first three sections, an overview of the compliance system, and reviews of the primary rules, compliance information and non-compliance response. The fourth section identifies weaknesses in CITES and draws lessons from other compliance systems (such as Multilateral Environmental Agreements). The fifth section makes recommendations for the future, and concludes with the comment that a crucial element to the future development of the CITES compliance system is political will; that although CITES often attracts publicity this is not matched by political action and the increased funding that is required for achieving compliance.

The following publications have been received at the Editorial Office and may be of interest to readers:

Important Bird Areas in Tanzania: A First Inventory by Neil & Elizabeth Baker, ii + 303 pp., Wildlife Society of Tanzania, Dar es Salaam, Tanzania. ISBN 9987 558 04 6 (pbk), unpriced.

Conservation of the African Lion: Contribution to a Status Survey edited by Philippe Chardonnet (2002), 171 pp., International Foundation for the Conservation of Wildlife, France and Conservation Force, USA. ISBN not given (pbk), €60.

The Adélie Penguin: Bellwether of Climate Change by David G. Ainley (2002), xiv + 310 pp., Columbia University Press, New York, USA. ISBN 0 231 12306 X (hbk), £42.50.

A Plague of Rats and Rubbervines: The Growing Threat of Species Invasion by Yvonne Baskin (2002), viii + 377 pp., Island Press, California, USA. ISBN 1 55963 876 1 (hbk), $25.00.