

The New Encyclopedia of Mammals edited by David Macdonald & Sasha Norris (2001), xxxi + 930 pp., Oxford University Press, Oxford. ISBN 0 19 850823 9 (hbk), £35.

The dustcover proclaims that this completely revised and updated successor to David Macdonald's 1984 *Encyclopedia of Mammals* is the definitive reference work on mammals for the 21st century. Does the book live up to this hyperbole? In a word, yes. This book may not last the full century but it will certainly be essential reading for anyone with an interest in the biology of mammals for years to come, and I recommend it without reservation. At £35 it represents outstanding value, providing as it does 930 pages packed with authoritative information (the list of internationally renowned authors extends to four pages) and most lavishly illustrated with stunning photographs and superb colour artwork.

The encyclopaedia starts off with a detailed and thoughtful essay on *What is a Mammal* and goes on to deal with all of the mammalian groups in an order that will seem unusual to many readers but which has been carefully chosen and is based on the latest taxonomic research. For each mammalian order there is a general account of the body plan, ecology and evolution of the group members. This is followed by very detailed accounts of the physical features, diet, distribution, breeding biology, social behaviour, evolution and conservation status of the families and species that make up the order. These accounts by their nature occupy most of the volume. Scattered through these general accounts are a series of special features, essays by leading research workers on areas of particular interest; for example there are offerings on *A New Light on the Singing Whale*, *A Specialist for Extremes – Saving the Arabian Oryx*, *A Once-in-a-lifetime Breeding Opportunity – Sex and Death in the Antechinus*, and *Why Primates Kill their Young*. Finally, there are photo-stories that use the very best of wildlife photography to tell a particular story, for example, *An Elephant's Early Years*, *Monkeys in the Snow*, and *Life and Death on the Beaches*.

This book is a prime example of how high quality scientific knowledge and research can be presented in a totally accessible manner. It is visually stunning and a joy to read. One niggle on which to finish; I was saddened to see that Oxford University Press, a depart-

ment of the University of Oxford, had adopted American spelling as the standard! Hyenas indeed!

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Biodiversity in Wetlands: Assessment, Function and Conservation. Volume 2 edited by B. Gopal, W.J. Junk & J.A. Davis (2001), viii + 311 pp., Backhuys Publishers, Leiden. ISBN 90 5782 087 0 (pbk), €89.00

This is the second of a two-volume compilation of articles on many aspects of biodiversity in wetlands. Volume one was published in 2000. This second volume includes 10 chapters, each presented as a free-standing article with no linking passages or rationale to the particular choice of themes or geographic locations. However, chapter 10, by two of the editors, B. Gopal and W.J. Junk, provides an overview of their understanding of biodiversity, the factors that determine levels of biodiversity and conservation of biodiversity, in different types of wetlands.

This is an interesting collection of articles. The book opens with two chapters on riverine floodplains in Europe. The first discusses the biodiversity of the French river Rhône and its floodplain, detailing historical changes and restoration potential. The authors emphasize the importance of morphological diversity and hydrological connectivity to sustain biological diversity on floodplains. The second is about the Lower Danube River System that stretches from the Iron Gate II reservoir to the Black Sea, a distance of 1,080 km. Data on many aspects of biodiversity are investigated within a complex conceptual framework that is not always easy to follow but operates at the landscape, ecosystem and species levels using hydro-geomorphological units as basic units of study. The simultaneous study of both biological and ethno-cultural diversity in the system is an interesting element in this chapter.

The following chapter on the plant diversity of coastal fen landscapes in the Netherlands again emphasizes the importance of natural river and coastal flooding regimes for the creation of conditions for diverse successional stages. In the absence of these hydrological processes, succession proceeds and has to be set back by mowing

regimes. Diversity in the type of floods received through time is the emphasis here, but in the next chapter diversity across space in groundwater-fed wetlands becomes the theme on the coastal plain of south-western Australia. Here, an extensive mapping and evaluation project of the aquatic invertebrate populations of 10,000 basin and flat wetlands shows that biological diversity is maintained by each basin being subtly different from the next in terms of hydro-period, light climate and trophic status. This impressive wetland area nevertheless represents only 30% of the previous wetland extent, most having been drained and reclaimed for agriculture. This theme also dominates a contribution on the wetlands of East Africa, where swamp conversion to agriculture has occurred on a large scale since the 1950s. A second chapter on African wetlands provides a very interesting consideration of biodiversity assessment using different invertebrate groups. The authors comment that, although we have extensive knowledge of the plant and higher vertebrate biodiversity of many Afrotropical wetlands, our knowledge of the highly diverse invertebrates is limited and discontinuous.

In the next two chapters the book moves to South America for a discussion of some large and complex tropical wetland systems and of their dependence on both hydrologic and fire pulses for regulating biotic complexity. Most of the discussion is focused on river floodplains that exhibit wide spatial variation in biotic diversity and at any one location tend to have low biodiversity compared with the total potential diversity, in part related to seasonal changes in water extent. One of the South American chapters is devoted to a detailed discussion of biodiversity in the Pantanal wetland of Brazil. The following chapter also focuses on a particular wetland area, the Keoladeo National Park in India, known for its overwintering population of Siberian cranes. Management problems in the National Park are associated with changing human use of the area following declaration of the National Park in 1982. A broader view of the relationships between wetland biodiversity and climate is given in the penultimate chapter that gives a fascinating account of the large spatial and temporal variability in the monsoonal climate of South Asia and the resulting major year-on-year shifts in wetland biodiversity.

This last chapter highlights a fact that is gradually becoming better understood by wetland scientists, that inter-annual variability in hydrological regimes is as vital to promoting wetland biodiversity as seasonal variability but is more difficult to transfer as a concept to managers and policy-makers.

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The Trampled Grass: Mitigating the Impacts of Armed Conflict on the Environment by James Shambaugh, Judy Oglethorpe & Rebecca Ham (with contributions from Sylvia Tognetti) (2001), 111 pp., Biodiversity Support Program, Washington DC. Also available at <http://www.bsponline.org>

This guide grew out of a project, during 1998–2001, on Armed Conflict and the Environment, which aimed to identify and raise awareness about the negative impacts of armed conflict on the environment, and to promote strategies for mitigating impacts where possible before, during and after conflict. The project investigated impacts of conflict and post-conflict in many parts of sub-Saharan Africa in order to highlight and better understand the challenges for conservation and natural resource management in areas affected by armed conflict.

Is Our Project Succeeding? A Guide to Threat Reduction Assessment for Conservation by Richard Margoluis & Nick Salafsky (2001), 52 pp., Biodiversity Support Program, Washington DC. Also available at <http://www.bsponline.org>

This publication presents a new approach to measuring the success of conservation impacts. The Threat Reduction Assessment (TRA) approach is a low-cost, practical alternative to more cost- and time-intensive approaches to project evaluation. The TRA approach is based on data collected through simple techniques, directly related to project interventions, and readily interpreted by project staff.

Maximum Yield? Sustainable Agriculture as a Tool for Conservation by Richard Margoluis, Vance Russell, Mauricia Gonzalez, Oscar Rojas, Jaime Magdaleno, Gustavo Madrid & David Kaimowitz (2001), 62 pp., Biodiversity Support Program, Washington DC. Also available at <http://www.bsponline.org>

This publication presents the results of research into the link that sustainable agriculture serves between conservation and development. It was found that sustainable agriculture decreases deforestation only under certain conditions, and that it serves as an important mechanism to decrease other threats to biodiversity such as fire.

Adaptive Management: A Tool for Conservation Practitioners by Nick Salafsky, Richard Margoluis & Kent Redford (2001), 100 pp., Biodiversity Support Program, Washington DC. Also available at <http://www.bsponline.org>

The publication investigates ways in which adaptive management can be made into a practical tool by conservation practitioners around the world.

Biodiversity Support Program CD-ROM (2001). Also available at <http://www.bsponline.org>

The CD-ROM and the associated web site contain about 100 publications and reports written in English during BSP's 13-year lifetime. Some publications have been translated into Spanish, French, Portuguese and Bahasa. These documents describe the accumulated knowledge, lessons and tools developed from BSP's work on a wide range of approaches to biodiversity conservation. BSP closed on 31 December 2001 when its funding came to an end.

Africa: An Artist's Journal by Kim Donaldson (2001), 219 pp., Chrysalis Books, London. ISBN 1 86205 482 7 (hbk), £25.00.

This lovely coffee-table book contains a selection of images that the author created from his extensive travels around Africa, including visits to the Masai Mara, South Africa's Cape and Natal regions, the Serengeti and the Zambezi Valley. Replete with information about wildlife, culture and history, the journal uses photographs, sketches, maps and excerpts from the author's diaries and notebooks to create a vivid impression of the African continent.

Other publications received at the Editorial Office

Animal Law. Third Edition by Julian Palmer (2001), xlii + 315 pp., Shaw & Sons Limited, Crayford, Kent, UK. ISBN 0 7219 0802 0 (pbk), £29.95.