

controlled or eliminated. Knowledge of infectious agents' natural history, epizootiology, pathogenesis, immunity and control, and of the way in which we influence these through human activity, is important in our quest to prevent such anthropogenic harm to wildlife. The third edition of *Infectious Diseases of Wild Mammals* is an important review of this sort of information.

The book is divided into 29 chapters according to the taxonomy of the disease agent, and is in two parts: first, viral and prion diseases; and second, bacterial and mycotic diseases. The chapters are divided into sections; for example, the chapter on rabies has sections on history and hosts, distribution, etiology, transmission and epidemiology, clinical signs, pathogenesis, pathology, diagnosis, differential diagnosis, immunity, control, public health concerns, domestic animal health concerns and management implications. The book runs to over 500 pages of text and a wealth of referenced information is provided by 72 authors drawn from all over the world. The format is a little dry: there are relatively few photographs (black and white) or diagrams to illustrate points made in the text and the font is small. But this is a textbook of hard and detailed facts and is not intended as a light bedtime read.

*Infectious Diseases of Wild Mammals* is considerably enlarged from the second edition, reflecting the growth of scientific investigation in this field. Important additions include new entities such as transmissible spongiform encephalopathies and emerging infectious diseases such as elephant herpes virus infections, to make this a truly comprehensive text.

Not surprisingly, the book does not consider the welfare implications of the various diseases to wild animal populations because this has been a relatively recent concern for scientists. However, given the recognition that many emerging infectious diseases are attributable to human influence, a useful addition to each chapter or subsection would have been an appraisal of the respective diseases in this context. Equally important are the implications of each disease to biodiversity conservation and, although many of the authors consider the effect of a disease on population size and viability, this point is not emphasised.

Overall, *Infectious Diseases of Wild Mammals* is a tremendous book that provides a wealth of meticulously researched and referenced information, which I am sure will be widely read and used.

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### ***Social Behaviour in Farm Animals***

Edited by L J Keeling and H W Gonyou (2001). Published by CABI Publishing, CAB International, Wallingford, Oxon OX10 8DE, UK; CABI Publishing, CAB International, 10 East 40th Street, Suite 3203, New York, NY 10016, USA. 432 pp. Hardback (ISBN 0 85199 397 4). Price £60.00/\$110.00

Unless editors take a firm hand with multi-authored volumes, the results can be fragmentary and unsatisfactory. In this case, the hands of Linda Keeling and Harold Gonyou have been extremely firm, even to the extent of a page of editors' comments at the beginning of every chapter explaining what each author is writing about. The result, however, is a wonderfully coherent volume about the social behaviour of the most commonly farmed 'species' (neither 'birds' nor 'fish', of course, being species). The chapters on specific animals all cover what is known of the behaviour of their wild ancestors and what happens when our modern breeds go back to the wild. Each of these chapters covers social structure of groups, use of space and

communication before going on to look at behaviour in modern farming systems and the welfare problems that can result.

One great strength of this book is that it does not confine itself to animal welfare and yet provides an extremely coherent background for the discussion of welfare issues. By taking a broad view of social behaviour in an evolutionary setting, it shows how we might use knowledge of the way in which natural selection has shaped behaviour to shed new light on the behaviour of farmed animals now kept in extremely unnatural environments. David Wood-Gush would have loved this book!

A second strength of this book is that it does not take on too much. The firm hand that the editors have taken with their contributing authors they have also applied to themselves. They have resisted the temptation to discuss all behaviour of farmed species and confined themselves to social behaviour. This has paid off. Because all the farmed species are social, and because many of their welfare problems arise from distortions of their social interactions in one way or another, the book is very much at the forefront of major welfare issues such as the stress caused by early weaning and the breaking of social bonds. It provides an extremely useful coverage of a wide variety of issues from domestication to social cognition and the adaptiveness of social behaviour to the role of human–animal interactions. The chapters on individual animals (with the admirable inter-author coherence) form an extremely useful reference base for anyone interested in social behaviour and social interactions.

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***The Conservation Handbook: Research, Management and Policy***

W J Sutherland (2000). Published by Blackwell Science Ltd, Osney Mead, Oxford OX2 0EL, UK; <http://www.blackwell-science.com>. Distributed by Marston Book Services Ltd, P O Box 269, Abingdon, Oxon OX14 4YN, UK. 278 pp. Paperback (ISBN 0 03 205344 5). Price £24.95.

There are fourteen chapters in this book, covering such subjects as the assessment of biodiversity, the monitoring of animals and plants, ecological research techniques, conservation planning, education and ecotourism, the management of species and habitats, and the integration of development and conservation. Twenty pages of (English) references and an index complement the text.

This is an eminently practical publication. Each chapter is divided into sections, rather as in an academic thesis, and in most instances starts with a question — for example, under the section ‘Ecological research techniques’, ‘Why control research?’. This makes reading easier and more interesting. Case studies further enhance the text. The book is packed with useful *information ranging from sections on international agreements, campaigning and fund-raising to descriptions of how to age plants and animals*. As Professor E O Wilson states in his Foreword, “The Handbook is much like a field guide for the identification of species, not to be omitted from one’s luggage or research station”. The strong emphasis throughout on integrating conservation with human development is to be welcomed and will do much to enhance the book’s appeal overseas, especially in developing countries. The author’s sensitivity and concern in this respect is emphasised by the inclusion of at least two Africans amongst the acknowledgements and by his and the publishers’ generosity in making copies of the book available free of charge to practising conservationists in poorer parts of the world.