

## Book Reviews

### **Zoo Animals: Behaviour, Management and Welfare**

G Hosey, V Melfi and S Pankhurst (2009). Published by Oxford University Press, Great Clarendon Street, Oxford OX3 6DP, UK. 614 pp Paperback (ISBN 978-0-19-923306-9). Price £27.99.

Zoos are diverse establishments with a huge variety of mainly wild and exotic animals. They therefore provide a unique source for education, research and conservation as well as attract huge numbers of people from the general public and professionals worldwide. Because of the diversity of different animal species the appropriate management of a zoo requires a wide range of knowledge about the specific needs and issues of each species to guarantee the welfare of all animals.

This book gives an excellent overview of important topics such as animal identification and record-keeping, animal behaviour, health, feeding and nutrition, housing and husbandry, enrichment as well as breeding and how they affect the welfare of different zoo animal species. In addition, the chapter about human and animal interaction in a zoo shows what impact visitors can have on zoo animals and their behaviour and welfare.

Besides the information about the day-to-day management of the animals in a modern zoo, the book gives an interesting general review of the history and development of zoos during the centuries, starting with the origin of zoos in Ancient Egypt through many changes of their appearance and philosophy to the modern zoo. Following this, it shows how zoos as scientific institutions today are involved in *ex situ* and *in situ* conservation and in ways which national and international organisations and networks zoos work together to improve their success rate. A thorough explanation of the laws, regulations, guidelines and codes of practice for zoological gardens in the UK and abroad follows on from this.

Finally, the authors give an outlook for the future and critically analyse the situation, surmising that, despite the huge progression in animal welfare and conservation standards made in zoos during the last few decades, the process of development of zoos remains ongoing and many zoos worldwide are still below the desired standard. Also, the authors show in a thought-provoking way how limited our knowledge of our zoo animals still is and suggest where further research would be needed and most useful.

Each chapter is written in an easy-to-understand style in just the right amount of detail and using a well thought-out format, which manages to provide a lot of information, while still being very enjoyable to read. Interesting examples, case studies, clear statistics and diagrams as well as many cross references to other chapters make it easy to dip in and out of.

Although this book is aimed primarily at knowledgeable specialists like zoo professionals and college/university students, who study zoo animals as part of their course, the writing style and the good explanations make it also recommendable for members of the public who have an interest in zoos and want to learn more about this field. It gives a very good idea about relevant topics concerning zoo animals and how a zoo operates. For readers who want to investigate in more depth about a specific topic there is further reading; websites or other resources conveniently listed at the end of each specific chapter. There is also a considerable list of references at the end of the book.

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### **Perfecting the Pig Environment**

P Smith, H Crabtree and N Bird (2009). Published by Nottingham University Press, Manor Farm, Church Lane, Thrumpton, Nottingham NG11 0AX, UK. 84 pp Paperback (ISBN 978-1904761-81-5). Price £28.00.

It is relatively uncommon to find books written by those at the 'sharp end' of pig production technology. The authors of this volume, whilst academically trained, have been working for many years in the consultancy and supply sector of the industry and thus have a very practical grasp of events occurring on pig farms. This book is the successor to an earlier publication by the same authors, in which they described the scientific principles underlying management of the pig environment. It builds on this earlier version, assuming a basic knowledge of both theory and practice, by addressing the issue of environmental monitoring for a target audience comprising students, pig farmers and those working within the allied industries. It is therefore beneficial that it relies heavily on case study material from the authors' own experience "to demonstrate how systematic monitoring can expose shortcomings, their effects on profitability and support cost-effective solutions".

The book comprises eight short chapters, preceded by a substantial introduction outlining the reasons for common problems and the role of environmental monitoring in ensuring pig welfare. It emphasises the point that inadequate pig environments are both commonplace and costly. The opening chapter discusses the theory, common practice and best practice of environmental monitoring. It describes how monitoring technology has developed, and explains the principles of real-time monitoring and remote data downloading systems. Whilst written from the perspective of IT-expert proponents of such technology, it clearly describes in simple terms how such equipment functions and the possibilities it offers.