

## BOOK AND CD-ROM REVIEWS

### ***Principles of Laboratory Animal Science, Revised Edition***

Edited by L F M Van Zutphen, V Baumans and A C Beynen (2001). Published by Elsevier Science BV, PO Box 211, 1000 AE Amsterdam, The Netherlands, or Elsevier Science Inc, PO Box 945, Madison Square Station, New York, NY 10160-0757, USA; www.elsevier.nl. 428 pp. Hardback (ISBN 0 444 50612 8). Price €179.24/\$194.50.

A long-established radio programme in the United Kingdom, *Desert Island Discs*, asks its famous guests to choose the recordings that they would take if they were, by chance, to be stranded alone on a desert island. Guests are also allowed just one book. *Principles of Laboratory Animal Science* aims to be a single book that provides the basic facts and principles required for an introduction to scientists who are going to be responsible for the conduct of animal experiments. A crucial test, therefore, for such a book is: could it be a single book to be held in a laboratory using animals?

The scope of the book is certainly comprehensive: legislation; biology and behaviour; standardisation (general, genetic and microbiological); nutrition; diseases; animal models and experimental procedures; design, organisation and analysis of experiments; pain, distress and its alleviation; and the 3Rs and ethics. There are 50 authors, but two points are notable: the text is uniform and not disrupted by the multi-author approach, and the book remains reasonably small, the equivalent size of about three issues of *Animal Welfare*.

A good balance has been drawn in each chapter, the core base of knowledge usually being balanced with modern methods. For example, the increasingly historical role of biochemical methods of genetic typing is mentioned but the focus is on modern biotechnological methods. Nevertheless, the pace of change is clear. Even though the book was published in 2001, perhaps now more emphasis should be given to more definitive descriptions of standard environmental enrichment methods, the use of individually ventilated cages and the use of the 3Rs in non-toxicological research. A significant proportion of the contents of multi-author texts is usually finalised some time before publication and this perhaps explains how some of the reading lists provided at the end of each chapter appear to lack recent citations, for example on euthanasia, sample collection, microbiology and environmental enrichment.

The editors have used the European environment to provide examples for legislation. This is hardly surprising for a book used as concise notes for the principal European Investigator training courses. However, this book should not be regarded as parochial — it is applicable worldwide.

There are a small number of modern comprehensive texts on laboratory animal science for investigators. This text clearly passes the 'desert island' test: it is a high-quality contribution which could stand alone as the basic, core reference text to ensure good science and welfare practice, and which should be found in any laboratory using animals in research.

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### ***Reptiles as Pets: An Examination of the Trade in Live Reptiles in the United States***

J Franke and T M Telecky (2001). Published by the Humane Society of the United States, 2100 L Street, NW, Washington DC 20037, USA. 146 pp. Paperback (ISBN 0 9658942 4 X). Price per copy \$10.00, or \$9.00 if ordering five or more copies.

Published by the Humane Society of the United States (HSUS), this paperback book consists of 146 pages of detailed information on why reptiles should not be kept as pets by the general public. The publication is divided into six chapters: the live reptile marketplace in the US; the importation of live reptiles to the United States; export and the domestic trade of live reptiles;

reptile store and post-purchase care of reptiles; the illegal trade in reptiles; and discussion and conclusions. The text is well laid out, and the frequent addition of tables, figures, diagrams and black-and-white photographs assists the reader in comprehension. In addition, there are 47 pages of annexes that provide much of the quantitative data on reptile importation and exportation to and from the United States. The reference section is divided into 'literature' and 'personal communications' and is weak, containing very little in the way of peer-reviewed scientific material.

The authors, Joseph Franke and Teresa Telecky, are to be commended on their assimilation and presentation of a large amount of anecdotal information, and for bringing to our attention the unacceptable plight of many reptiles within the pet trade. There are many anecdotal examples given throughout to demonstrate the unfortunate exploitation and unnecessary suffering of many wild and captive-bred reptiles in the US pet trade. Similar examples undoubtedly exist in most countries. The authors suggest that the pet trade considers reptiles as disposable commodities, and they make no attempt to hide their obvious bias that the reptile trade should be banned completely. Unfortunately, this publication is not an objective examination of the reptile trade, but appears to have been published with the sole purpose of encouraging a general ban on privately owned reptiles. This is probably not surprising given the association with the HSUS. There is obviously a need for improving the regulation of this animal trade, but I fear that the authors' reliance on non-peer-reviewed references (especially book chapters and personal communications), coupled with a lack of scientific objectivity, may actually weaken many of the important arguments that they discuss. For example, the importation of wild-caught reptiles carries with it obvious problems including wild population decline, increased animal mortality, and poor long-term animal survival. Very few would disagree that the mass importation of large numbers of wild reptiles for the general pet trade should be curtailed. Indeed, most of the reptile retailers and wholesalers that I have dealt with have actively moved away from wild species, in favour of captive-bred animals. There is certainly no need for the authors to invent their own definition of "captive-bred" (to only include reptiles that have been bred in captivity to at least the second generation) so that they can then state that the vast majority of reptiles sold as pets are wild-caught and imported. This has not been my experience as a veterinarian in England or the United States, where the majority of my clients owned captive-bred leopard geckos, bearded dragons, corn snakes, king snakes, and Mediterranean tortoises. More importantly, such manipulative tactics harm the authors' credibility with the reader.

In addition to animal welfare concerns, this publication cites human salmonellosis as a major reason for banning reptiles. There is no doubt that the faecal-oral transmission of *Salmonellae* is a major public health hazard but one which, according to the Association of Reptilian and Amphibian Veterinarians and the Center for Disease Control, is easily prevented by simple education and hygienic precautions. Nevertheless, given the obvious human health and veterinary implications, it is surprising that no human doctor or veterinarian was involved with the production of this report.

As an 'examination of the reptile trade' this book highlights all the negative aspects and none of the positive aspects of reptile ownership, such as the human psychological benefits of pet ownership and occasional contributions to the conservation of an endangered species. Moreover, no attempt has been made to identify areas of much needed research, the need for improved education, or the requirement for reptile welfare legislation. I cannot help but feel disappointed that such an important and necessary investigation was not more objectively undertaken.

In conclusion, I applaud the authors and the HSUS for highlighting the problems that confront the reptile trade, legislators, human medical and veterinary professions, and for this reason alone the report is worth reading. Unfortunately, it is lacking in several important respects and ultimately the book's conclusions are poorly founded.

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***Animal Pain: A Practice-Oriented Approach to an Effective Pain Control in Animals***

Edited by L J Hellebrekers (2000). Published by Van Der Wees, Uitgeverij, Janskerhof 26, 3512 BN Utrecht, The Netherlands. Obtainable from Blackwell Science Ltd, Osney Mead, Oxford OX2 0EL, UK, or Iowa State University Press, 2121 South State Street, Ames, Iowa 50014-8300, USA. 184 pp. Hardback (ISBN 90 5805 030 0). Price US\$44.95.

New additions to the library of knowledge of animal pain are welcome. This is a reflection of the increasing attention that is now focussed on the problem of pain in animals. The book *Animal Pain* is another useful addition to the library and will appeal to veterinary undergraduate students and to veterinary practitioners whatever their discipline, since pain and suffering affect all our species.

The information in the book is presented in 10 chapters with a preface. There are eight contributors to the book, including the editor, individuals who are all well recognised in the field of animal pain. The editor sets the scene for the contents of the book in chapter one, and this is followed by a challenging opening on the ethics of pain control. Although the title of the chapter refers to companion animals, the author argues for the rise of new social ethics for animals and leads the reader ultimately to ethical management of pain in animals. The reader is exposed to ethical questions around the changing role of animals in society, which are explored further in the following chapter. These chapters are a useful introduction to animal pain and encourage the reader to consider complex issues in some detail. The following chapter focuses on the recognition of pain in various domestic species, and also details the methods available for scoring pain in animals and their limitations. Adequate management of pain depends primarily on adequate recognition of pain, and, given the different behaviour profiles of domestic species and the complex relationships and interactions that humans have with different species, this is an area of animal pain research which requires further work.

There follows an overview of the pathophysiology of pain, and a comprehensive chapter on the clinical pharmacology of analgesic drugs. The treatment of pain in dogs, cats, exotic species and horses is covered in the remaining chapters. Treatment regimens and dosing strategies are detailed, which will be of use to practising veterinary surgeons.

As in many books written by multiple authors, the book contains overlap in content. Dosing regimens are not always consistent and the management of pain in farm animal species is a significant omission. The book is readable and will be useful both as a reference book for dosing strategies and to raise awareness of the subject of pain in animals. Pain management in animals is and should be a matter of concern for all professions dealing with animals, and also for the wider public. This book is targeted at those dealing with the