author does not claim that his advice will improve this relationship, it is nonetheless a reasonable assumption that a better understanding of equine behaviour, behavioural needs and an understanding of positive training methods will lead to better human-animal relationships and thus better welfare

This book should be essential reading for horse owners, veterinary surgeons working with horses and horse trainers. It offers practical and pragmatic advice, based on a sound understanding of equine behaviour, and it should make a positive contribution to equine welfare, by promoting the humane management of horses.

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The Laboratory Primate: The Handbook of **Experimental Animals Series**

Edited by S Wolfe-Coote (2005). Published by Elsevier Academic Press, available in Europe, Middle East and Africa from Elsevier, Customer Service Department, Linacre House, Jordan Hill, Oxford OX2 8DP, UK, and in the USA and Canada from Elsevier, Customer Service Department, 11830 Westline Industrial Drive, St. Louis, MO 63146, USA. 650 pp Hardback (ISBN 0 12 080261 9). Price £125.00.

The other books, on the rat and the mouse, in this series of weighty tomes will be familiar to many. This one on primates is equally large — 621 pages divided into 4 major parts, with further subdivision into 35 chapters. The overall presentation of the book is pleasing on the eye with headings and page numbers at the side of each page which makes it easier to find what you are looking for, the index seems to work well and each chapter has numerous references. The typeface and layout are good, the photos of rather variable quality but many are excellent.

Part 1, The Definition of the Primate Model, deals with taxonomy, anatomy, similarities to humans and goes through pathology of non-infectious diseases, viral and parasitic diseases and male and female reproduction. The final chapter in this section covers primate natural history and social behaviour and the implications this has for laboratory housing. The chapters in this section are well written, interesting and provide a good background of knowledge for anyone carrying out biomedical research using primates. The conclusion of the final chapter however misses an opportunity to make any statements about how to improve welfare. After detailing that monkeys live in complex social environments and that both movement and exploration are important behavioural responses, the conclusion lamely states "a number of environments might suffice depending on the setting and research protocol". Suffice? Is merely sufficient an adequate way for a book of this type to recommend housing an experimental primate?

Part 2 covers Primate Management so I read eagerly, looking for inspiration and innovative ideas. I wasn't merely disappointed, I was quite frankly appalled. The chapter on management of Old World primates (10 pages) does contain a sentence referring to welfare but the supporting pictures of rows of individual small, metal cages suspended over a washable floor gives no evidence that welfare is genuinely a consideration, let alone a priority. There are only two references cited in this chapter, from 1984 and 1985, leaving the reader nowhere to go to find alternative sources of information and no up-to-date information at all. The chapter on management of new world species is better, and quite comprehensive, but suffers from poor proof-reading and lapses into an irritating note style. The chapter on nutrition is mainly concerned with formulations and requirements and makes no mention of foraging, but there are two pages on feeding as enrichment in the chapter on environmental enrichment by Victor Reinhardt. This is an adequate review of the literature on enrichment and there is one page on training primates. The conclusion recommends pair housing, foraging and a trust-based relationship with attending personnel but misses the opportunity to provide inspirational guidance for future developments. This section also has chapters on development of SPF (specific pathogen free) colonies of primates and a very good chapter on medical care which will be useful for vets with no previous experience of working with primates. The section concludes with a chapter on the factors affecting the choice of species.

Part 3 is on Research Techniques and Procedures and contains chapters on anaesthesia, endoscopy, ultrasound imaging, functional magnetic resonance imaging, radiographic imaging and positron emission tomography using primates. Each one is a good overview of the subject, supported by plenty of references. The endoscopy chapter is illustrated with some excellent photographs, unfortunately spoiled somewhat by the omission of the illustrative arrows referred to in the legends.

Part 4 covers Current Uses in Biomedical Research. The first introductory chapter does have a sub-section entitled welfare considerations and refers to the necessity to provide psychological well-being programmes for non-human primates. The remaining chapters cover the use of the primate in models of chronic disease, in pharmacological studies, in models of ageing, neurological disease, respiratory disease, studies of reproduction, in virological research and in disease due to parasitic infection. There is also a survey of primate genetics and its application to biomedical research. These all provide a very useful and interesting background to the various subject areas and will be invaluable reading to those moving into these fields.

This book will undoubtedly find itself on the shelves of many libraries across the world and will establish itself as THE textbook on the laboratory primate. From a scientific viewpoint, this is good as it should help ensure that researchers not only choose the right model but also understand the background and limitations. Also it should mean animal care staff have a greater knowledge about the relevance of the primate model and perhaps understand a little about its use. Unfortunately from an animal welfare perspective this book is a disaster. On the back cover it

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indicates that the book is aimed not just at biomedical researchers but also at those caring for primates. It states that it "presents guidelines on primate management, with special reference to ethical approaches to maintaining healthy primates in an enriched environment". It also claims "animal management personnel involved in all types of primate facilities are provided with all the information needed for the responsible care of their subjects". It further states that the book will "preclude the need for further liter-

ature searches". I sincerely hope not. The book must be recognised for what it is — a very good review of the literature around the use of primates in biomedical research with detail on the models used in each field; but it must not be allowed to jump on the bandwagon of primate welfare as it falls seriously short of the mark.

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