re-licence the sale of pigeon food in Trafalgar Square, and thus reduce the pigeon population of the Square, the result of an unconscious recognition of the spiritual role of the pigeon (or should that be dove) in previous times (Chapter 6)? Such details enliven reading about animal behaviour by providing material outside the often dry and concise text of scientific articles. Often the wonder of animal behaviour is lost by its presentation in the strictly conformist scientific style required by journals, and this book provides a nice antidote to this with this additional material.

Discussion of animal welfare is restricted within the book and is mainly found in the final chapter, despite the book opening with a discussion of the activity of an animal rights activist. The author raises, albeit very briefly, the question of animal responsibilities. If animals are to be given rights, what about their responsibilities? This is a difficult issue, but when posed always raises in my mind the newborn infant — undoubtedly a member of *Homo sapiens* and fully conferred with all the rights that any other member of the species has; but does it have responsibilities? It may be nice to give it responsibility to sleep through the night (!) but it is not realistic to expect the infant at this age to have any responsibilities; moreover, the fact that it does not have responsibilities does not deny it any of its rights. Such areas are difficult and complex areas of animal welfare and although not the purpose of the book they could have been dealt with more fully. The underlying message of the book is encapsulated in its last lines "It's not their like-us-ness that makes animals important: It's their not-like-us-ness that is the better reason to cherish them" (p 244). I wholeheartedly agree with the view that animals should be cherished but I am not sure that opposing their similarity with humans with their dissimilarity with humans advances the case for treating them well. Ensuring the welfare of any animal must be based on the behaviour, structure and function of that particular species, and to obtain this information requires us to acknowledge both that they are different from us and also that they have similarities. Both are important in gaining information with which to enhance animal welfare.

The book is exceedingly well written, and it certainly conveys, as the author intended, some discoveries of modern animal science. It provides excellent background material in those areas of behaviour covered. Importantly, it addresses many of the over-interpretations of animal behaviour that prevail and thus serves an important function in the debate of animal abilities. It emphasises that it is not necessary to demonstrate whether animal abilities are similar to those of humans to ensure their well-being; the behaviour of animals alone is, and should be, sufficient to advance this case. The book is probably aimed more at the general public than at an academic audience but it is an engaging book that deserves to be read.

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Shelter Medicine for Veterinarians and Staff

Edited by Miller L and Zawistowski S (2004). Published by Blackwell Publishing Professional, 2121 State Avenue, Ames, Iowa 50014, USA; or Blackwell Publishing Ltd, 9600 Garsington Road, Oxford OX4 2DQ, UK (www.blackwellprofessional.com). 560 pp. Paperback (ISBN 0 8138 2448 6). Price £59.50.

The title of this weighty tome implies a very broad-spectrum fount of knowledge which aims to satisfy the demands of those named — almost the 'shelter bible'. The basic facts are drawn from the situation in North America and therefore much of the data and information must be regarded with suspicion throughout. This limitation is perhaps most noticeable in the early chapters which deal with the history of re-homing, population dynamics, administration and legal topics. While these cover the North American issues well, they are significantly misleading about the situation in the UK where euthanasia rates are lower and legislation on medicines and other general veterinary issues does not vary between states. The North American propensity to sue for relatively minor issues also gets a mention.

The section on husbandry contains much that is of international relevance — after all, the transmission of canine parvovirus varies little between New York and Birmingham! The section on design and maintenance is particularly useful and contains much good advice that might be of use in designing a shelter or even a veterinary practice. More complex issues such as the control of stress for shelter residents are addressed and some excellent ideas proposed. The complete breadth of species gets a mention, including wildlife species and equids, although the latter chapter is short.

The differences between the two sides of the North Atlantic appear again in the section on disease management and particularly where the use of vaccines is discussed; many of the vaccines are unavailable or irrelevant in the UK. The chapters on infectious diseases and disease recognition are particularly schizophrenic with some parts clearly aimed at veterinary surgeons and others at lay staff. However, they are well written and would be of use to anyone wishing to be reminded of the symptoms of diseases such as cat 'flu. One has to hope that shelter lay staff are not tempted to make diagnoses with such a depth of knowledge! The health planning chapter underlines the principles of planning and is a good exposition of the techniques available and the factors to be considered.

The section on shelter and community programmes is a catch-all. The first chapter on behaviour contains a wealth of useful information on factors that may affect the quality of life of animals in a shelter. There is a really good section on environmental enrichment used in an attempt to control stress. There is a brief chapter on pharmacotherapy that gives good reasons why the use of drugs should not be routine and sets out the disadvantages of attempts to control

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behaviour by pharmacy alone. The chapter also indicates where drugs might be considered and suggests a small range of behaviours that might be modified.

The chapter on foster care is well thought out and gives adequate emphasis to this important area of shelter management. Foster carers are a considerable asset to any active welfare organisation and the chapter gives an indication of how foster carers might be selected and used. Even longterm foster care is mentioned — a technique that is underutilised in the UK.

The chapter on neutering is another schizophrenic one. It gives almost an 'idiot's guide' to such simple surgery as cat castration and I question why such ubiquitously known detail has been included. There is a useful section on paediatric neutering which is a more commonly accepted practice in the US. Some anaesthetic regimes are given and there is a good insight for any veterinary surgeon thinking of taking up very-early-age neutering. Strangely there is little about the post-operative complications most commonly raised in the UK, such as urinary incontinence, or about the advantages of early neutering.

The chapter on euthanasia covers both ethical issues and techniques across a range of species. Again, drugs mentioned are often not licensed for animal use in the UK, but some useful ideas are expounded. There is an important section on the effects of repeated euthanasia on the human undertaking the task which should be taken to heart by some shelters in this country.

The chapters on disaster medicine and animal cruelty do not sit comfortably with the rest of the book. Few shelters here need a plan for dealing with disasters, as this task is usually taken on by other organisations such as the RSPCA and Local Authorities. While it is useful to have issues of animal cruelty highlighted, and particularly the link between human cruelty to animals and to other vulnerable humans, I know of no evidence to show that animals admitted to shelters are more likely to have been subjected to cruelty than animals presented in everyday practice. The research does include the British papers by Monro published in The Journal of Small Animal Practice and it is good to see international recognition for her work

Even at the end of the full five-hundred-plus pages, I was unsure of the target audience. There is much for everyone, from animal carers to veterinary surgeons. It would need to be a selective reader who is able to pick out the parts for their particular purpose. The strong North American influence limits the usefulness of much of the book to the British reader and inevitably this reduces its value for money. While it has much to commend it, I could not recommend it without those significant reservations and I therefore do not believe it could be an effective 'shelter bible' here.

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Environmental Enrichment for Captive Animals

Young RJ (2003). Published by Blackwell Publishing Ltd as part of the UFAW Animal Welfare Series. Blackwell Publishing Ltd, 9600 Garsington Road, Oxford OX4 2DQ, UK (www.blackwellpublishing.com). 240 pp. Paperback (ISBN 0 6320 6407 2). Price £27.50.

There is much to commend in this new book on environmental enrichment for captive animals. It is broad in scope and, with a few minor exceptions, up-to-date in content. The author obviously knows and cares about his subject and, equally obviously, has consulted widely with the key players in this field. Young's précis of the 'animal rights' viewpoint is one of the best I have read in some time. The final chapter provides an excellent summary of information sources about environment enrichment. All the more pity, then, that the text is marred in places by some largely avoidable faults.

The author's stated aim is to produce a book that is "scientifically rigorous but also practical", with an emphasis on "a good basic understanding of animal welfare and the scientific evidence that environmental enrichment does indeed improve animal welfare".

To a large extent, the book achieves this. Young weaves together the theory of animal welfare and the practice of environmental enrichment into a text that will be useful to lecturers and students, zoo curators and zoo keepers, laboratory technicians and farm hands, and many others besides.

The book begins with an overview of the history of the development of environmental enrichment as a tool for improving animal welfare. This is brief but well done. In the chapters that follow, Young explores why, when and how enrichment should be used and considers different types of enrichment for different categories of animals in captivity. There are specific chapters on food and foraging enrichment and on social enrichment. The chapter on housing is the best; I was particularly pleased to find here a detailed discussion of the importance of lighting and photoperiod. This aspect of the captive environment is often overlooked, or treated as if it is of little importance in comparison to food provision and enclosure 'furniture'.

I was surprised to find virtually nothing in the book about olfactory enrichment. Whilst some recent attempts at olfactory enrichment have been lamentably poor (little more than "let's bung this in and see what happens"), there has also been some good work in this area. Olfaction is of such importance to mammals in particular that olfactory enrichment deserves at least a mention.

The black and white illustrations are good quality but are nearly all of zoo animals — in fact, the book as a whole has a strong bias towards zoo animals, yet (as the author acknowledges) far more animals live in captivity on farms or in laboratories than in zoos. It is a pity that the production budget could not have stretched to one or two more photographs and diagrams. The summary of the work by Mason et al (2001), on the welfare of mink on fur farms, cries out for an illustration of the experimental set-up.