

cognition are aware of this, many ignore this important consequence of their work. Is not benefit to animals, in the form of systems and procedures that improve animal welfare, a significant reason for studying animal cognition? For humans, attitudes to different sexes and races have been greatly changed by the finding that there are no clear differences between the cognitive abilities of males and females and none between those of black and white people. In the same way, a knowledge of the extent of sophistication in the abilities of domestic and laboratory animals will alter people's attitudes about how animals should be housed and managed. The protection of wild animals will also be influenced by evidence about their abilities. This book deals with a subject that is extremely interesting, important in several university courses and relevant to any human activity involving animal usage.

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Animal Breeding, Welfare and Society

J Turner (2010). Published by Earthscan Ltd, Dunstan House, 14a St Cross Street, London EC1N 8XA, UK. 324 pp Hardback (ISBN: 978-1-84407-588-1). Price £85.00. Paperback (ISBN 978-1-84407-589-8). Price £24.99.

Animal breeding is a hot topic, and it was about time that someone wrote a rigorous book on it. It is also one of those topics where there is increasing evidence of a situation that is both outrageous and deeply enraging. Fortunately, a book has now been written by an author who has a pedigree in rigorous writing on animal welfare issues (most notably, long-distance live transportation, another deeply enraging issue).

Jacky Turner's new book starts with an excellent briefing on how animal breeding is an industry, and how breeds are now 'brands', and I would advise everyone to read at least this chapter. The next three chapters focus on farm animals, and the next two on companion animals, and the seventh on sports animals — all of which the author points out are 'industries' in every sense. (The laboratory context is left to a brief discussion in Chapter 12).

Each chapter generally starts with a description of the anthropogenic situation, then considers the impact on the animals, and then considers what humans can do about it (corresponding neatly to the three sections of the title). These sections overlap, but the repetitiveness helps to

highlight the fact that the best solution for many breed-related problems is for humans to stop being the cause.

As the author highlights, welfare problems from animal breeding is not a new issue. What is new is perhaps the amount of scientific and medical knowledge we now have to address breeding-related problems. Each chapter is therefore replete with information about the welfare implications of breeding strategies on the husbandry of the parent stock and progeny (eg surgical interventions and early weaning), as well as the impact of breeding strategies on the progeny's genetics. Many primary texts are referenced, although the chapters on farm and companion animals are also the offspring of the recent plethora of reviews. In comparison, the breeding of 'sports animals' remains under-researched, especially given the vast sums of money involved in the horse-racing industry, and this chapter is an excellent example of the usefulness and timeliness of the book.

The three themes — breeding, welfare and society — make the book a cross between academic and journalistic writing styles. It combines 'scientific' data, from both peer-reviewed and non-refereed sources (including several from the recent UFAW conference), with literary references and elucidating examples of the rhetoric of farm animal breeding companies and breed societies. These 'humanities' inclusions are especially evident in the chapters (8–10) that consider general themes, such as surplus animals, rare/traditional breeds and 'pedigree' (a term that the author amusingly suggests should be replaced with 'genetically restricted'). This cross-disciplinary approach provides a 'hybrid rigour' that combines the best traits from different genres, although Jacky Turner's evident aptitude at using language does sometimes border on the polemic.

One recurrent theme throughout the book is the interaction between breeding strategies and husbandry practices. Broiler breeders' genetics lead to a moral dilemma about how to feed them. Greyhound and racehorse injuries can add to the over-breeding surplus. It would therefore be foolish to look at breeding in isolation from environment. Nonetheless, the book could have devoted less time to husbandry-based problems, on which more has been written. Chapter 11 even devotes considerable time to lethal pest control methods, which is as far from birth as one can get.

Given the depth of scientific information, the discussion of the societal aspects could have been more critical or analytic. As one example, Jacky Turner's conclusions that speed and the maintenance of breeds are ethically questionable, self-indulgence may be acceptable. But the goal of food efficiency (specifically espoused by Robert Bakewell) may be less clearly inappropriate, given contemporary concerns for food security.

As another example, the author appears decidedly anti-interventionist, stating (on p 1) that "when, how, how often and with whom" animals breed has moved "ever further from natural selection and nearer to human purposes and choices". The final chapter (13) even provides an interesting criticism of human eugenic and 'breed-purity' movements, with the implication that animal breeding is similarly

morally abhorrent. However, it might have been useful to consider more on how our new scientific and medical knowledge could be a force for good. Indeed, even human 'eugenics' are not universally criticised, and recent years have seen several prominent bioethicists reconsidering the issue of 'procreative beneficence'. Eugenics is not the same thing as breed purity, and could be discussed separately. Plus, even if human eugenics is categorically deplorable, humans have opportunities to alter their husbandry to fit their genetics, whereas animals' environments can be fixed and inappropriate. Given the interactions between breeding and environment, breeding strategies could fit animals to their expected environments. While changing environment to fit the animal might be preferable, this issue needs more in-depth discussion.

Another omission is perhaps a lack of technical explanation, especially of genetic principles (for example, there is limited discussion of 'hybrid vigour'). This suggests to me that the best audience for this book is not students of animal welfare science. They will certainly be engaged and enraged, but they should, by now, be well aware of the problems — especially the environmental aspects. I would consider the book more suitable for those involved in breeding animals and related sciences. For them, I think the engaging, hybrid style and passionate writing should help them realise the outrageous nature of some of the problems. In fact, I think the book is a 'must-read' for all breeders, geneticists and veterinary surgeons, and would like to see it be mandatory text on every genetics, animal science and veterinary medicine course.

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BSAVA Manual of Canine and Feline Behavioural Medicine, Second Edition

Edited by DF Horwitz and DS Mills (2009). Published by BSAVA, Woodrow House, 1 Telford Way, Waterwells Business Park, Quedgeley, Gloucester GL2 2AB, UK. 240 pp Paperback (ISBN 978-1-90531-915-2). Price £74.00, €88.00.

Although it is the British Small Animal Veterinary Association's Manual, 17 of the 26 contributors are based outside the British Isles, so this book has a truly global feel. The editors have done well to bring together a group of practitioners in the discipline of behavioural medicine, an area of growing importance for veterinarians but one that continues to struggle to earn the space it deserves in the veterinary undergraduate curricula. The result is a collection of interesting essays, rather than a traditional manual. The

rather sparse use of referencing by some authors, however, detracts from the edition's merit as a textbook.

The chapter cryptically titled 'Management problems in dogs' may prove the most useful for readers in practice since it focuses on unwelcome behaviours, their treatment and prevention. I sincerely hope they also spend time with the chapter on 'Behavioural medicine as an integral part of veterinary practice', which, despite its strong focus on dogs at the expense of cats, offers a much-needed blueprint for the improved behaviour of veterinarians. The chapter on 'Complementary therapies' is equally timely and fittingly blunt. I expect that practitioners will relish the trove of client handouts and questionnaires that appear on the accompanying CD.

On the downside, some practitioners may struggle to navigate through this book. For example, they will have to assume that the chapters on 'Aggression toward familiar people and animals' and 'Aggression toward unfamiliar people and animals' focus entirely on dogs. Chapter titles as vague as 'Situational sensitivities' contribute to this problem but repetition is the fundamental issue. A chapter called 'The common mistakes owners make' would potentially offer more than the rather aspirational chapters on prevention. Indeed, separate chapters for dogs and cats on 'Basic requirements for good behavioural health and well-being' and 'Management problems', as well as a further chapter on 'Stress' largely repeat material on best practice and account for the overwhelming sense of repetition that mars this otherwise readable text.

Tighter editing, a more logical structure and more attention to the needs of busy veterinarians would improve future editions. It would also be good to see the fundamental importance of oral activity in both dogs and cats given greater emphasis and the roles of neurotransmitters and thyroxine in canine aggression explored more thoroughly.

The animal welfare implications of this publication are considerable. There is a clear focus on the behavioural needs of companion cats and dogs and how these can best be met. The contributors do not shy from providing advice that makes significant demands on owners. Attention should probably have been drawn to the, contraindicated but, nevertheless, persistent use of choke chains by the unskilled mass of dog owners since, apart from taking a strong position on inherited disorders, replacing this item of equipment may be the simplest single step veterinarians in practice can take to improve dog welfare on a significant scale.

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