

angle — tick resistance involves grooming, an aspect of host phenotype that is accessible to direct study, as well as aspects of morphology of the host.

The book concludes with two chapters on metabolic and production diseases (in sheep and cattle, Chris Morris and Sin Phua, and poultry, Paul Hocking). Most of the cattle diseases here relate to grazing animals, with some (to the layman) bizarre and extraordinary conditions caused by toxins from fungal spores. Here, it is evident that whether genetic selection is applied depends on whether economic justification can be found. Regarding poultry, in a commendably multidisciplinary approach in this final chapter, behavioural disorders are treated along with musculoskeletal disorders, cardiovascular diseases and other conditions distressingly prevalent in intensive poultry husbandry.

Farm animal welfare practitioners and researchers should have access to this book which will provide valuable context for their own studies, research and practice. Highly recommended.

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Behaviour of Exotic Pets

Edited by VV Tynes (2010). Published by Wiley Blackwell, 9600 Garsington Road, Oxford OX4 2DQ, UK. 248 pp Paperback (ISBN 978-0-81380-078-3). Price £46.99, €61.90, C\$89.99, US\$74.99.

This is a must-read book for those interested in exotic animal welfare and behaviour. It covers both normal behaviour in each species as well as associated behavioural issues. The book will appeal to veterinarians, veterinary personnel, animal carers and owners who keep or are interested in exotic pets. It is also a vital reference source for those studying for further qualifications in this field. The book is well-written and clearly laid out with current and relevant references. Whether using it as a quick reference source or reading it in more detail, it provides easy to assimilate information that is clearly presented.

While this is not the only book about exotic pet behaviour on the market, in its favour is that it is competitively priced, has been written by animal behaviourists and covers a greater variety of exotic species than other books.

The book follows a set format throughout each chapter making each subject easy to follow for the reader. Each chapter covers a different exotic pet species from birds, snakes, chelonia and reptiles, through to small commonly kept pet mammals. There are 17 species or groups of species covered in total in the book. More unusual exotic pet species are also covered including hedgehogs, prairie dogs, sugar gliders and South American camelids. Each chapter covers normal behaviour of the species, provides background information on social and reproductive behaviour and considers common behavioural problems encountered. Practical tips are given on clinical assessment of cases, history taking, diagnostic tests and management of behavioural issues.

In particular, I found the chapters on avian and rabbit behaviour most interesting. These are species that commonly present with behavioural issues due to inappropriate care and management in captivity. Understanding the normal behaviour of these species and how these behaviours change in captivity is essential to improve the welfare and husbandry of pet parrots and rabbits.

Finally, the book finishes with three summary chapters. The first covers universal principles and select procedures of applied behavioural analysis. The second covers the principles and application of behavioural pharmacology in exotic pets. The final chapter is a comprehensive discussion of the welfare of exotic animals kept in captivity. The latter questions what level of animal welfare should be achieved in these species in captivity, discusses planning a welfare strategy and describes ways in which welfare may be assessed. These chapters help to formulate and cement ideas that have been introduced throughout each species chapter in the book and are also useful as quick references to refer to whilst reading through the book.

The only criticism I have of the entire book is that the photographs inside the book are in black and white and disappointing. It is difficult to see clearly in some cases what the photographs are depicting. I was excited when I first received the book as the glossy cover with brightly coloured photographs of exotic pet species promised more such photographs within. It was a disappointment on opening the book to find only the occasional black and white photo presented. The large amount of text could put some readers off at first glance; however, I would urge you to persevere and read the book as it is well-written and provides practical information on assessing and managing behavioural problems in exotic pets. Understanding normal behaviour of exotic pets is an essential tool and will improve the welfare of these species when kept in captivity. This knowledge can then be applied in a clinical situation to help understand and treat commonly seen behavioural issues.

This is an excellent textbook which I have no hesitation in recommending to those interested in this field.

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Beyond Animal Rights: Food, Pets and Ethics

T Milligan (2010). Published by Continuum International Publishing Group, 11 York Road, London SE1 7NX, UK. 184 pp Paperback (ISBN 978-1-4411-5753-9). Price £12.99, US\$19.95.

This is a book about how vegetarianism is far from morally perfect and how that's no excuse for most of us to consume most of the meat we eat. It's worthwhile reading whatever dietary practice you subscribe to. If you prefer a short version of the review, you can stop reading here. But then, read the book (or at least its first five chapters).

Tom Milligan is an Honorary Research Fellow in Philosophy at the University of Aberdeen, UK, and his thoughts about meat-eating are published in Continuum's

Think Now series “of stimulating and accessible books examining key contemporary social issues from a philosophical perspective”. Indeed, that description fits Milligan’s book well: his clear and well-argued writing makes for enjoyable and thoughtful reading.

The animal issue occupies a central position, but it’s not the only perspective considered. Milligan himself is a vegan, but he clearly doesn’t consider the standard animal rights’ view the only relevant reasoning for morally guided diet decisions. His conception of eating as presented in the first chapter reflects the width of his analysis: “it involves things of the following sort: enjoyment in and through food, nutritional appropriateness given the condition that we are in; a degree of honesty about what we are eating; some rudimentary knowledge about how our food was produced; eating in a way that enriches our relations with other humans (eg it should not involve habitual solitary consumption); eating in a way that is consistent with our values and/or expresses those values; having values that are themselves of a reasonable and defensible sort; eating in a way that involves a practical awareness of the importance of other humans, other creatures and our shared environment” (p 20).

Of the five chapters that address meat-eating as such, the first, ‘The depth of meat-eating’ gives an overview and introduction to the topic. Chapter 2, ‘An unwritten contract’ explores the idea that farming and meat-eating is a good deal for the animals as a group as it has allowed them to flourish and increase in numbers. On the one hand, the bargain is rather poor for the animals which have to pay for protection and food by an early death, sometimes preceded by a life not necessarily worth living. On the other hand, under conditions when that life is really made worth living, the argument that otherwise these animals would not have existed is powerful. This leaves us with “a situation in which rival considerations can be balanced up against each other but no single consideration obviously trumps the others. On the one hand, the opportunity of life argument does real work (...) to give some justification for ethically informed meat-eating. It is the means by which animals come into existence and enjoy some approximation to a good, if short, life. (...) Ethical vegetarianism, on the other hand, might better save the interests of already existing creatures” (p 40).

‘Vegetarianism and puritanism’ (Chapter 3) analyses the possibility that refusal to eat meat is motivated by puritanism of some kind. This includes both the perspective of leaving out something potentially pleasant (this does not seem to be the case for most vegetarians and vegans), of not ingesting something ‘unclean’ or otherwise harmful to the body (historically true; to some extent present also in

contemporary motivations; potentially nutritionally true for vegans) and of keeping one’s hands clean from the bloodstains of slaughter and killing (partly true, although “there will always be a blood price to pay for a harvest. The numbers of animals inadvertently killed through harvesting can be reduced with caution (...) but the taking of animal lives cannot be avoided. Recognition of this is a matter of acknowledging that the presence of we humans as part of our planetary eco-system is always, to some extent, at the expense of other creatures. And this is one of the many things that vegetarians, vegans and carnivores have in common” (pp 62-63).

Chapter 4, ‘Diet and sustainability’, focuses on the environmental aspects of different dietary practices. Milligan considers that present meat production leaves an unacceptably large ecological footprint, but also that there are types of land from which food can only be obtained through the conversion into meat or milk by grazing animals. All things taken together (as far as this is at all possible given the complexity of the issue), Milligan admits that a diet containing small amounts of locally sourced meat, produced in environmentally friendly ways, may be just as sustainable or even more so than a vegetarian diet. But, he hastens to add, this is not the typical meat-eaters’ diet, and “(t)here is just as much danger that the sheer possibility of an eco-friendly carnivorous diet may be used as a stalking horse to provide dubious justification for widespread carnivorous practices that are not nearly as eco-friendly as their practitioners may assume” (p 84). The ecological value of some, limited, meat-eating is the reason why universal veganism may be ‘The impossible scenario’ (Chapter 5), but universal vegetarianism which allows for the keeping of some livestock may very well be feasible according to Milligan.

Although the cover shows the sorting of (wild-caught?) salmon in Vancouver, the book is really about feeding humans from land-based farming. Milligan does an excellent job in analysing this activity taking a wide range of facts into account. Unfortunately, Chapters 6 and 7 (on pet-keeping and animal experimentation, respectively) are not up to the standard of the rest of the book and given that these topics are only indirectly related to the main theme it’s not entirely clear why they were included at all. Leaving them out in a future edition would make for a small but brilliant discussion of meat-eating that could be mandatory reading for all university students in animal production-related courses.

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