

boars head-on. Instead it is cursorily dealt with under the heading of 'Close confinement of sows during pregnancy and farrowing' (pages 194–196) and yet many animal welfare researchers now agree that food restriction is a major factor in the development of abnormal (stereotyped) behaviour.

The editors I feel have attempted to produce an accessible book in the field of pig health; this is to be commended, given the opaqueness of many of the research papers published. However, I feel that a better way of doing this would have been to have Chapter 5 co-authored by leading scientists and pig specialists, for example, imagine the brilliance and practicality of a Chapter on 'Nutrition and Health' by Ilias Kyriazakis and John Gadd!

The book is spoiled by the inconsistent use of referencing, for example Moss cited papers fairly frequently, whereas a number of the authors do not cite papers at all. Given the target audience of this book, I expected extensive citing of papers throughout. I also noted a number of missing references (eg Duncan & Dawkins 1983, page 187), a number of references with the wrong year (Bure & Koosman 1980 or 1981?, see pages 198 and 367), a number of authors names misspelt (Helmus or Helms 1981? see pages 200 and 368); I could go on.

The Health of Pigs was an ambitious project, which I think has failed somewhat to deliver the goods. For those looking to find out the basic facts about health and pigs, this book is a good starting point. However, I would recommend that it is consulted in a library given its price tag of £58.

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The Covenant of the Wild: Why Animals Chose Domestication

Stephen Budiansky (1992, published in UK 1994). Weidenfeld & Nicolson: London. 192pp. Hardback. Obtainable from Orion Publishing Group, Orion House, 5 Upper St Martin's Lane, London WC2H 9EA (ISBN 0 460 86189 1). Price £16.99.

Of course what we actually do is important, but policies are houses built on the shifting sands of circumstance. What matters most is attitude. Budiansky wrote this book in reaction to one attitude, which gives rise to 'the simplistic stereotypes of man and nature that are being purveyed by an ever more confrontational animal rights movement to an ever more urban audience'. He decries the common idea that domestication was simply imposed by humans on other animals as a folk-tale with no scientific evidence. A folk-tale emerging from Victorian triumphalism in human inventiveness and giving rise to a myth – that the relationship between humans and animals is wholly dominated by humans and solely for human advantage.

Budiansky's intriguing thesis is summed up by his subtitle: the ancestors of our domestic species played an active part in forming relationships with humans which then became, and still remain, symbiotic. This has quite a lot in common with the familiar idea that certain species were pre-adapted to domestication, but he takes it further by using the cooperative behaviour of honey-guides (birds which lead humans to honey) and reindeer (which also gain advantage from humans) as indicators, and taking the dog as his main example. There is archaeological and contemporary evidence that dogs approached humans, for example, to scavenge rather than humans capturing dogs. Budiansky also suggests that his thesis is

supported by the changes which took place after domestication; this argument places a very interesting emphasis on neoteny, the retention of juvenile characteristics, as mutually advantageous to animals and humans. Unfortunately other aspects of the story which he tells are just as lacking in support as the one he criticizes, so he overstates his case. He implies that sheep, goats and cattle also 'chose' domestication but never explains how, and in fact says in passing that people who left optimal areas [where food was abundant] were perhaps 'forced to plant grains and husband livestock'.

The pot denigrates other kettles as well. Budiansky ridicules those who look back to a mythical time when noble savages lived in a balance of nature with wild animals – and who apparently hope to return to such a balance in the future. Yet he idealizes the relationship between farmer and farm animals to almost the same extent. Certainly there are many farmers – perhaps especially part-time farmers like himself – who do empathize with their animals and treat them well. However, he goes too far in implying that criticism of intensive farming is unfounded: he dismisses criticism of battery cages by saying that he has seen his barnyard hens peck each other too.

And yet, and yet . . . what matters most is attitude. The attitude of cooperation which Budiansky extols may not be as prevalent as he claims, but it is surely the attitude which needs to be encouraged. I do not believe in the extreme animal rights position of 'No use of animals'. I do believe that it is possible for domestic animals to have a gentle life and a quiet death, and that it is better for them to have such a life – with all the interactions with humans that are involved – than to have no life at all. This book, by challenging our preconceptions about domestication, encourages such a positive attitude. And this may then affect how people actually treat animals: the Covenant, in Budiansky's words, 'implies an obligation on our part to live up to our side of the bargain.'

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Alternatives to Animal Testing: New Ways in the Biomedical Sciences, Trends and Progress

Edited by C A Reinhardt (1994). VCH: Weinham, New York, Basel, Cambridge and Tokyo. 180pp. Paperback. Obtainable from the publishers, 8 Wellington Court, Cambridge CB1 1HZ, UK; or 220 East 23rd Street, New York, NY 10010-4606, USA (ISBN 3 527 30043 0). Price DM148.

This book is an account of a meeting held in Zurich in December 1992. When one saw the announcement of the meeting one's reaction was – not *another* conference on 'alternatives'. However, reading the list of participants showed a mixture of well-known names in the field together with 'new' names, indicating that the former would probably give worthwhile presentations stemming from their experience, and that the latter might produce new ideas, methods and techniques. In the event, the conference did fulfil this promise and was extremely useful. The editor, Dr Reinhardt, would have had an easier task had a book been the primary objective of the exercise rather than it being just the proceedings of a conference. He would then have had more control over the contributors. However, he is to be congratulated on assembling and editing an assortment of disparate papers into a coherent volume.