

## Book Reviews

### Food and Animal Welfare

H Buller and E Roe (2018). Published by Bloomsbury Publishing, 50 Bedford Square, London WC1B 3DP, UK. 222 pages Hardback (ISBN: 978-0-8578-5578-7), Paperback (ISBN: 978-0-8578-5707-1), ePDF (ISBN: 978-0-8578-5737-8), ePub (ISBN: 978-0-8578-5694-4). Price £25.99.

Animal welfare is not just a scientific topic, it is a “multi-faceted issue including important scientific, ethical, economic and political dimensions” (Lund *et al* 2006; p 38). As such, “Natural scientists will continue to be central for achieving improvements in animal welfare, but it also is necessary to include social scientists for better understanding of the role of human behaviour and animals’ roles in society, as well as for implementing solutions in order to achieve animal welfare in practice” (Lund *et al* 2006; p 38).

So, this book is welcome, “written by two social scientists/geographers with a strong scientific and ethical commitment to bringing a social science understanding to farm animal care and welfare” (p 2). And, from the start, it offers ideas that are unfamiliar, interesting and important. I am aware of the complex and value-laden social context of animal welfare, yet as a scientist, when I am not concentrating on that context I perhaps tend to fall back on the conception that “Welfare is a characteristic of an animal” (Broom & Johnson 1993; p 75) and the assumption that it is a more-or-less objective variable that we can assess and attempt to improve more-or-less objectively. By contrast, in Chapter 1, ‘Food and the animal’, the authors: “bring together two, until now, relatively distinct areas of scholarship that are seldom conceptualized together other than in a singularly instrumentalist fashion, food studies and animal studies... Our argument... is that the welfare of farm animals... pervades the entire food chain offering the possibility for a more analytically coherent perspective on the hitherto distinctive worlds of production and those of consumption” (p 6).

Indeed, in Chapter 2, ‘Worthy lives,’ they suggest that: “Farm animal welfare science... has also had to come to terms with the problematic ethical charge that it has been unescapably complicit, by its very existence, in sanctioning forms of animal keeping and husbandry that many find abhorrent” (p 33).

So, while welfare science does identify solutions to problems and supports moves to improve welfare, the societal context is critical, including the language we use. In Chapter 3, ‘Food animal care’, Buller and Roe recognise the importance of stockpersonship (eg Farm Animal Welfare Council [FAWC] 2007) and that it has been improved by empirical studies. However, they suggest that the concept, including use of the word ‘stock,’ is based on treatment of animals mostly or solely as economic units, and argue for a change in terminology and emphasis towards ‘animal care’ and ‘carepersons’. The critique of economic approaches is extended in Chapter 4, ‘Selling welfare’, which points out that increased visibility of farm animal welfare is driven not

just by the need of producers and retailers to demonstrate conformity with regulations and expectations, but also by their desire to segment food markets, with different segments having different pricing structures. Again, I find the concepts challenging but valuable: “An important point here is that welfare is assembled within the agro-food network. Different actors assemble it and give it normative meaning in different ways. It is *assembled* scientifically, ethically, aesthetically, commercially, through practices of care, through anthropomorphic sensibility, through broader notions of food quality, through a sense of responsibility and so on” (p 85, emphasis in original).

With hindsight, I recognise that such ‘assembling’ was part of our discussions when Henry Buller and I were both members of FAWC, achieving consensus on complex issues in a multi-stakeholder forum.

Chapter 5 addresses ‘Globalization and farm animal welfare’, essential as livestock production in the UK, or any other country, is now unavoidably affected by international pressures. It discusses Hungary as a case study and is followed by Chapter 6 on ‘Emerging welfare concerns in China’. Both are fascinating stories and supported by Emma Roe’s fieldwork in those countries. I have some reservations here and throughout the book about the reliance on interviews with a small number of people: as a scientist, I believe a larger sample would be necessary to establish the generality of the findings and conclusions. Yet, there are intriguing insights here. For example, while I know that many people in some Asian countries put more emphasis on the ethics of killing animals than on their welfare, I was not aware that many see the Western concern for the welfare of an animal that will be killed for food as not only paradoxical but actually hypocritical.

My main criticism of this book is that I found much of it difficult to read. Some of the phraseology might be more familiar to social scientists. The blurb from the series editors says that it will be free of jargon, but I struggled with words like ‘distanciation’ and ‘alterity’, and with sentences like the following (not the most extreme: others were longer and more difficult): “Our argument is that consideration for the welfare of the animal, whether scientific, ethical or simply pecuniary, is a variable relational achievement, differentially constructed and differentially expressed but which nevertheless offers a crucial connectivity (whether explicit or concealed) between production and consumption” (p 4).

Also, summaries of arguments would have been helpful, eg at the end of sections or chapters, but few are provided.

Yet some parts of the book are more readable, and all of it is worth the effort. Addressing and improving farm animal welfare requires negotiation of the complex web of factors that affect it, and this book brings vision and perceptiveness to that process. It ends with Chapter 7 on ‘Future food animals, future protein’, and with three sections exploring connectivity between “the sentient animal, whether in living body or in final product, and the sentient human, whether

carer or consumer” (p 176). The first explains the idea of ‘sentient materialities,’ making animal sentience primary in the business of animal-based protein production, rather than secondary to productivity or economic value. The second discusses challenges and innovations in farm animal welfare science, particularly in the light of other priorities often seen as more important, notably sustainability. The third partly answers that by outlining the One World/One Health/One Welfare agenda, which promotes a policy framework built on commonality of interests between people, animals and the environment.

It remains true, though, that farm animal welfare has its own ethical mandate. The authors close (p 183) by emphasising that: “There is no meat or animal product for which there is no life behind... [M]aking connections with those lives and making something of those lives knowable seem, at the very least, an essential endeavour.”

### References

**Broom DM and Johnson KG** 1993 *Stress and Animal Welfare*. Chapman and Hall: London, UK. <https://doi.org/10.1007/978-94-024-0980-2>

**Farm Animal Welfare Council** 2007 *Report on stockmanship and farm animal welfare*. Farm Animal Welfare Council: London, UK

**Lund V, Coleman G, Gunnarsson S, Appleby MC and Karkinen K** 2006 Animal welfare science: working at the interface between the natural and social sciences. *Applied Animal Behaviour Science* 97: 37-49. <https://doi.org/10.1016/j.applanim.2005.11.017>

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### **Introduction to Laboratory Animal Science Technology and Welfare, Third Edition**

SW Barnett (2017). Published by Institute of Animal Technology, 5 South Parade, Summertown, Oxford OX2 7JL, UK. 232 pages Hardback (ISBN: 978-1-9999168-0-0). Price £20.00

This third edition of *Introduction to Laboratory Animal Science Technology and Welfare* is a compact introduction to laboratory animal science and welfare that, as suggested, should become required reading for those studying for first level IAT qualification.

This revised edition is very welcome having expanded the text, the species, illustrations, numerous informative tables and, additionally, the edition has been made available as an ebook.

There are sixteen chapters in all covering a whole gamut of topics ranging from ‘Animal health’ and ‘Modern caging and housing systems’ to chapters on hygiene, feeding and watering, breeding, substance administration and euthanasia.

The book’s final chapter is a new addition to previous editions, introducing ‘Ethics and animal welfare.’ I was particularly pleased to see this chapter included and using the theory of utilitarianism as an illustration is pitched at the perfect level for the proposed readership.

The glossary at the end of the book, again, is in keeping with the principle that the book has been written, primarily, for those people starting work in laboratory animal facilities and provides a wonderful addendum of technical terms relating to the subject of laboratory animal science welfare, which can be built upon as more experience is gained.

The structure and presentation of this edition is far superior to previous versions with notable improvements in tables and the introducing of summaries at the end of each chapter. Fish have been incorporated into a number of chapters and, for the most part, improved colour illustrations are an upgrade on the previous black and white.

If I have one small concern with the book it was with the use of some photographs taken for the second edition that have been used here, showing pieces of equipment of the day. Technological and engineering advances have seen vast improvements to the benefit of animal welfare but aren’t represented in the book. Similarly, photographs depicting what appears to be singly housed animals with little or no environmental enrichment could be updated to show cagemates and various examples of enrichment, unless of course it is explained that single-housing of these animals is essential for research purposes.

However, this minor gripe aside, The Institute of Animal Technology has produced a revised textbook which I am sure will go a long way to better inform those beginning a career in laboratory animal science of good practice which, in turn, will continue improving the welfare of animals in research.

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### **Rethinking the Three R’s in Animal Research: Replacement, Reduction, Refinement**

J Lauwereyns (2018). Published by Springer, Tiergartenstrasse 15-17, Heidelberg, Germany. 144 pages Hardback (ISBN: 978-3319892993). Price £44.99.

Jan Lauwereyns — psychologist, neurophysiologist, ethicist, and poet — describes his recently published book, *Rethinking the Three R’s in Animal Research*, as a scholarly work based on his experiences and feelings, and insights gained working in Belgium, New Zealand, and Japan where he is currently Professor of Psychology at Kyushu University. His stated intention in writing his book is, through “an integration of ethics and science without speciesism”, to further improve the ethical conduct of animal research by providing a critical review and consequential updating of the Three Rs and how they can be better applied. The book contains what he considers to be timely, novel, realistic proposals for policy-makers and others to achieve this objective.

Having trained as a cognitive psychologist, his interest in visual attention led him to further his research interests by undertaking animal-based, invasive neurophysiology experiments on Japanese macaques. After six years of working with these animals, he underwent a Damascene conversion,