

Book Reviews

Welfare of Pigs: From Birth to Slaughter

Edited by L Faucitano and AL Schaefer (2008). Published by Wageningen Academic Publishers, PO Box 220, 6700 AE Wageningen, The Netherlands. 316 pp Hardback (ISBN 978-90-8686-066-1). Price €85, US\$127.

The stated objective of this book is “to provide a science-based reference text covering all aspects of swine production”. Furthermore, it aims to provide an understanding of how management decisions impact on animals and how a balance between welfare conflicts can be struck within farmed environments. In these objectives it succeeds admirably, giving a valuable reference work with comprehensive coverage of the subject.

The book comprises 11 chapters, each written by an individual or team currently active in research in the subject area they review. The authors have wide international representation, being drawn from different countries in Europe, North America and Australasia, and thus give a broadly-based perspective on the science and issues. The chapters range from those covering general concepts relating to welfare science, through overarching disciplines affecting swine welfare at all stages, to detailed consideration of the welfare issues in individual production stages. All chapters are up-to-date, give good coverage of their subject and provide a useful listing of key scientific references for those wishing to pursue more detailed study.

The opening chapter introduces general welfare concepts and terminology, discussing the inter-relationships between welfare, affective state and biological function, and emphasising positive as well as negative welfare considerations. This is followed by a chapter on general assessment methodologies, including stress physiology, behaviour and their interactions with production and pathology. It contains a particularly useful discussion of physiological measures of acute and chronic stress, and the way in which these may be confounded by normal metabolic homeostasis. The next three chapters deal with specific production stages of the sow, the piglet and the fattening pig. The first two of these use the structure of the ‘Five Freedoms’ to discuss welfare challenges. This works well for the sow, where the major issues of chronic hunger, confinement and social competition in the pregnant sow fit well within this framework. However, it gives more organisational difficulties for discussing welfare issues of the piglet, where the freedoms intermesh in topics such as neonatal survival and weaning. The splitting of the chapters in this way also makes it more difficult to deal in an integrated way with issues which overlap different production stages. These include subjects such as the farrowing crate, where sow and piglet welfare conflicts arise, and developmental issues such as effects of prenatal stress of sows on their progeny, or effects of pre-weaning experience of piglets on post-weaning outcomes. Whilst, in general, the chapters complement rather than duplicate each other, this has

provided some difficulties. The chapter on fattening pigs, whilst reading well as a stand-alone chapter, contains significant duplication with other chapters in the book regarding weaning stress, genetics, human/animal interactions and meat quality. In contrast, other important areas such as space requirement, social grouping, and injurious behaviours receive relatively scant mention.

Emphasising the need to encompass the whole lifetime experience of the pig when discussing its welfare, the next three chapters deal with the post-farm issues of transport, pre-slaughter management and the slaughter process. It is good to see a comprehensive coverage of issues not often mentioned. For example, the transport chapter includes information on weaned piglets and cull breeding stock as well as slaughter pigs, and the chapter on pre-slaughter management makes the important link between issues on-farm with those in lairage in the determination of pre-slaughter stress. The slaughter chapter, whilst dealing with the major issues of electric, gas and percussive stunning, and briefly mentioning mass killing in disease outbreaks, could have usefully also addressed the neglected issue of humane euthanasia, on-farm.

The next two chapters deal with the generic issues of breeding and human/animal interactions. The chapter on breeding gives a particularly good synthesis, covering both the traditional and newer genetic approaches. Explanation of the application of basic genetic principles and technologies in pig production is combined with review of the current state of knowledge in the rapidly developing field of genetic approaches to improving health and behavioural traits affecting welfare. The chapter on human/animal interactions discusses both the impact of human behaviour on the animal, and also the methods of personnel management which can be adopted to optimise this by appropriate selection, management and training of staff. The final chapter rounds off the book nicely by standing back from the detailed debate on individual issues to consider the societal and ethical context within which scientific and practical results must be placed.

Overall, this book provides both a readable overview of welfare issues in pig production for the generalist, and a valuable reference work for the specialist. As such, it can be recommended to academics, students, and those working for either animal welfare or industry organisations.

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Guilty Robots, Happy Dogs: The Question of Alien Minds

D McFarland (2008). Published by Oxford University Press, Great Clarendon Street, Oxford OX2 6DP, UK. 256 pp Hardback (ISBN: 978-0-19-921929-2). Price £16.99.

In the preface to this book, David McFarland sets the scene starkly; “To understand the mind of an animal, if it has one