

Animal Welfare Aspects of Good Agricultural Practice: Pig Production

D Arey and P Brooke (2006). Published by Compassion in World Farming (CIWF) Trust, 5a Charles Street, Petersfield, Hampshire GU32 3EH, UK. 182 pp Paperback (ISBN 1 900156 38 5). Obtainable free, from CIWF. www.ciwf.org

This most interesting, well-informed and well-written volume covers, in some detail, the scientific and technical background to pig welfare. The emphasis is on the advantages (and sometimes the disadvantages) of the less intensive production methods. This is no bad thing as it is now thought that well over 30% of pig production in the UK is based on outdoor and/or organic piglet rearing enterprises with the weaned piglets usually (but not always) being move-on to more intensive indoor, yarded, growing/fattening systems.

The book is divided into two parts: there is, firstly, 18 short chapters (75 pages in total) based largely on the technical and scientific literature but also using some material from the later-presented case studies. There is then a 3 page list of literature references and further reading. This first part covers such matters as animal welfare in general, the development of intensive systems, the main stages of pig production, stress and disease, stockmanship and the legal, environmental and socio-economic aspects of pig husbandry.

There is then an Appendix (99 pages) of some 25 pig production case studies - 10 from Northern/Western/Eastern Europe; 3 from Australia; 2 from the USA; 6 from Brazil and 1 from the Ivory Coast. These essentially descriptive studies vary somewhat in length but each finishes with a standardised 21-24 point summary table

listing such things as date of visit, number of animals, breed, growth rate, mortality, number of stockpersons, economic returns on the unit, health and welfare problems. These most useful tables enable ready comparisons to be made between systems.

The short chapters use a number of clear and appropriate figures and tables, and each chapter ends with a precise 'highlighted' summary. Both parts of the book are amply illustrated by numerous - usually 2 or 3 to the page - small, high quality, colour photos. Most are pertinent to the material being presented in the adjacent text - only a few are more decorative than informative!

The main purpose of the publication is to ask the question: do non-intensive pig production methods give us more humane and sustainable farming than intensive

systems? Humane and sustainable farming is based on the concept of Good Agricultural Practice as put forward by the Food and Agriculture Organisation (FAO) of the United Nations. Humane and sustainable farming (and here I quote from the authors' summary to chapter 18) "aims to ensure that the welfare of people, animals and the environment are protected while providing ample, quality food for all". The

answers of the authors seems to be: yes - but there are some, probably solvable, problems yet to be overcome. This, I might state, is also the opinion largely held by the reviewer.

This is an extremely well-produced and carefully written book which does not evade the many problems associated with non-intensive production systems - even if it does underplay some of them a little. The main deficit, I think, is the absence of an index. There is much excellent material hidden in many parts of the volume - an index would have assisted its ready location.

The authors and CIWF are to be congratulated on producing a fine and important piece of technical literature - it deserves to be widely read, thought-about and acted on. It can be obtained (free) from CIWF - although, apparently, this charitable organisation would appreciate some modest financial contribution towards the cost of what must be an expensive publication.

Roger Ewbank
Ealing,
London, UK

Wildlife Contraception: Issues, Methods and Applications

Edited by CS Asa and IJ Porton (2005). Published by The Johns Hopkins University Press, Baltimore, Maryland, USA. 256 pp Hardback (ISBN 0 8018 8304 0). Price £43.50.

Wildlife contraception is increasingly considered to be a valuable tool for reproduction and population management of wildlife. The book presents a well-organised overview on needs, ethical concerns and methods of contraception applied in a variety of species, based on the experiences and results collected through the American Zoo and Aquarium Association (AZA) Contraception Database. The AZA contraception data base summarises information on all contraceptive methods used by accredited zoos in North America and some zoos from other continents. Thus, the book presents the most comprehensive summary of experience and knowledge in this field currently available. It can be confidently recommended not only to students, veterinarians and zoo biologists who work with exotic species but also to a broader public interested in the state of the art of contraception as a humane control of animal populations.

Contraception might be more humane and ethical than the euthanasia of surplus animals that cannot be placed in appropriate facilities. Nevertheless, contraception touches upon key aspects of animal welfare for the individual concerned since contraception excludes animals, usually females, from a fundamental and enriching part of their life: (the social aspects of) mating and the rearing of their offspring. Furthermore, not being pregnant for a long time may also have considerable physiological or pathological consequences such as severe reproductive disorders, especially in long-lived species commonly subjected to measures to control reproduction (eg big cats, bears, hoofed

stock, elephants). Other concerns discussed in the book are the risk of drug-induced side-effects of contraception drugs and their consequences in terms of social behaviour.

All contraceptives used in captive and free-ranging wild animals can be viewed as part of an ongoing global clinical trial to assess health risks for treated wildlife. Recommendations for choosing the most appropriate contraceptive are made on the basis of accumulated experience that includes factors such as reversibility, efficacy and observed adverse effects. The currently available data on contraceptive applications in carnivores, non-human primates and ungulates are summarised and discussed in detail with specific emphasis on steroid hormones, peptide hormones and immunocontraception in both males and females.

The need for contraceptives continues to expand across taxonomic groups, as more species are included in the management of successful captive breeding programmes and as rates of reproduction and survival increase with the steady improvement in husbandry practices. As the number of species for which contraception is required grows, so species differences will become more prominent; presenting challenges to the provision of safe and effective contraceptive drugs. Despite the large body of literature reflecting research on captive animals, there are only a few published reports on contraception trials and even fewer that demonstrate successful attempts. These are summarised in the present volume.

Contraception in free-ranging wildlife species introduces a variety of additional problems and challenges, yet the successful application of contraceptive tools to free-ranging populations depends inevitably on the knowledge gathered from research and application within zoos. The major challenge for free-ranging wildlife remains efficient and efficacious delivery and species specificity. As knowledge collected from captive animals increases, attempts to apply contraception methods in free-ranging populations are likely to be made more frequently. For such attempts, this book will provide a valuable foundation. Contraception of wildlife populations as a field of scientific and practical endeavour, however, is a topic associated with a whole range of dimensions, including ethical, environmental, political, social, cultural and economic aspects. It cannot and should not be limited to the discussion and improvement of technical aspects such as efficacious delivery. This also implies that the ethical discussion on the application of contraception in wildlife should also be conducted within the context of the perceptions and definitions of animal welfare and well-being. The book addresses this dimension in a critical and appropriate manner.

Katarina Jewgenow/Heribert Hofer

Leibniz Institute of Zoo and Wildlife Research

Berlin

Germany

Review of *Animal and Human Health and Welfare: A Comparative Philosophical Analysis*

L Nordenfelt (2006). Published by CABI, Wallingford, Oxfordshire OX10 8DE, UK. 208 pp Paperback (ISBN 1 84593 059 2). Price £27.50, \$US50.00.

The best way to understand what it is like to read Lennart Nordenfelt's book *Animal and Human Health and Welfare* is to imagine yourself as a beaver who is proud of his newly constructed dam. The dam represents your personal view of animal welfare concepts (eg definitions and theoretical constructs of welfare, well-being, quality of life, and happiness), and Nordenfelt is upstream controlling the water flowing toward your dam. As you read his book Nordenfelt keeps releasing more and more water, which starts to wash away bits of your dam. As the force of the current keeps growing, you find yourself scampering around the river bank to find bigger and stronger sticks and branches to fortify your dam against the growing torrent. Eventually the rushing waters abate as you reach the end of his book and you take a good look at what's left of your dam. It's probably still there, and it might even look the same. But it will have taken a lot of work on your part and it will undoubtedly contain a lot of new sticks.

Lennart Nordenfelt is professor of philosophy of medicine and health care at Linköping University, Sweden. He earned his PhD in theoretical philosophy in 1974, and over the past three decades has published dozens of papers and numerous books on the philosophy of human health care and quality of life.

Nordenfelt came to notice that his area of study was receiving a growing level of attention in animals; however, as he notes, "It is striking, given the intensity and complexity of these (scientific and ethical animal welfare) discussions, that there has been little (indeed virtually no) communication between the human and animal science approaches to the concepts of health, quality of life and welfare" (p x). Nordenfelt sets for himself the goals of filling this void by offering a comparative analysis of the two areas of research, adapting the conceptual framework used in the human field to animal science, "sketch(ing) a holistic, action-theoretic, analysis of health and disease also for the animal area" (p 143), and proposing his own preference-based theory of animal welfare.

Quite an undertaking, considering the ambiguities, confusion, and intangibility of welfare and all its variant concepts. This book, subtitled *A Comparative Philosophical Analysis*, is the result of Nordenfelt's formidable task.

The book is divided into three parts. The first part is a presentation of the influential theories of human health and welfare, comparing and contrasting the bio-statistical theory, classical theories such as Aristotle and Bentham, and objectivist and subjectivist contemporary theories. In Part 2 Nordenfelt discusses the variety of theories on animal welfare and health, which include biological functioning,