For instance, on p 65, regarding horses in circuses: "...Other horses may wear clothes and 'dance' or do tricks. Some argue this is demeaning, but much of what the horses do is not that different physically from what is asked in various competitions. So, the question becomes more one of providing acceptable training techniques and respecting the physical abilities of the horse". The logic employed here to dismiss the questioning on whether the activity is demeaning is truncated. How can the fact that something is also seen elsewhere be a proof that it is not demeaning? Or on p 72: "When not properly performed, or not properly understood, rodeo activities can promote the idea of dominating other animal beings". The central idea here seems to be that if you feel rodeos give the idea of dominating animals, you either have never seen a properly performed rodeo or you do not understand it properly. Thus, the discussion shifts from rodeo to disqualification of the reader. Another cautionary piece from McKenna is on p 99: "...a superficial understanding of Pragmatism may lead one to believe it would support a kind of 'application of intelligence' to control and manage other animal beings for human beings' use". Unfortunately, the arguments presented in the book did not convince me that pragmatism is not about expediency, even though McKenna adds kindness to it.

The overall structure of the book could be improved with more care to format across chapters and a reduction in repetition of ideas. Additionally, there are minor inaccuracies, but also more complex inaccuracies. For example, the comparison between micro-chipping and branding should consider that the pain involved in branding is more intense with the latter, and the lesion area more extensive. So, the significant decrease in pain associated with microchipping provides a solid basis for the opposition to branding. Another problematic idea put forward, in the context of domestication, is that "Humans have been altered as much as they have done some altering of others" (p 19). While there is some truth in this statement and interesting examples are given, human manipulation of domestic animal reproduction, has had major impacts to dog and cat welfare as well as to the welfare of farm and laboratory animal species.

The arguments made to support conclusions sometimes seem truncated. For example, on p 73: "Since no organization can monitor every horse, the only way to effectively change the treatment of horses as they are prepared for competition is to get humans to rethink this relationship". This sounds equivalent to saying: as no organisation can monitor every driver for drink-driving, the only way to effectively change this is to get humans to rethink this attitude. It is true we need education, but we also need laws and bans.

The implications for animal welfare should animal pragmatism as described by McKenna be applied, seem negative. While enticing, the argument provides lots of room for justification of animal treatment that are convenient to human interests. We need philosophical frameworks that bring more profound changes in human behaviour than simply ameliorating our practices with animals. Before searching for ways to improve each procedure or interaction we have with animals, a conscious deliberation is necessary as to whether

that action should take place, whether it is benevolent, nonmalevolent, fair and considerate of the animal's interests. Most of the ameliorative measures suggested by the author are positive and welcome, however they require ethical deliberation to ensure that they are beneficial. We need philosophical structures that lead us to expand interactions within a context of compassionate proximity to animals and help us recognise unacceptable practices.

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Managing Pig Health: A Reference for the Farm, Second Edition

Edited by MR Muirhead, TJL Alexander and J Carr (2013). Published by 5mBooks.com, Benchmark House, 8 Smithy Wood Drive, Sheffield S35 IQN, UK. 683 pages Hardback (ISBN 978-0955501159). Price £115.00.

The first edition of this extensive manual was written originally by two swine veterinarians, Michael R Muirhead (BVM&S, FRCVS, DPM) and Thomas JL Alexander (PhD, MVSc, BSc, MRCVS, DPM). Due to the untimely passing of these two outstanding specialists, the third veterinarian John Carr (PhD, BVSC; DPM, DiplECPHM, MRCVS) has finalised the publishing of the second edition.

Managing Pig Health is a book intended to be used on farm level by pig producers and advisors. The objective of the book is stated clearly: The writers want to help the reader to understand, identify, manage and treat disease problems on farms with the help of the veterinarian. It is not meant to be a substitute for the herd veterinarian, but to increase the understanding between the farmer and the vet. Hopefully, the reader also takes in the advice given about how to get the best out of this book. It is meant also to be read in many different countries. However, the cultures in different countries as regards pig management and welfare, as well as the existing diseases, vary extensively. This presents an added challenge for the writers! On the whole, they have managed quite well in it, but sometimes the text includes pieces of advice on things that cannot be performed by farmers in many countries. Any farmers reading this book from outside the UK might get a bit confused.

This book is an excellent source of information for farm managers who have a bit more education behind them and are able to apply the information at farm level. The layout, especially the cross-referencing and purposeful duplication of some parts of the book enable easy access to certain problem areas. I think also that veterinary students and veterinarians will find very useful information contained therein, especially regarding herd management, health management in different age groups, pig production and pig reproduction.

This book is a massive piece of work consisting of 17 chapters in 683 pages. In the beginning the chapters on the anatomy and physiology of the pig as well as understanding and managing health and disease have gathered the main points into a very logical order. Also, the nicely presented

pictures and tables help in understanding the message. One just wishes that all readers would find the time to also go through these chapters, and not concentrate purely on chapters about specific symptoms and diseases.

The chapters 'Understanding health and disease' and 'Managing health and disease' are maybe the best part of the book. The writers have done an excellent job collecting the main knowledge needed to understand and manage diseases and production, on, for example: pathogens, biosecurity, herd health status, disinfection, immunity, vaccination, staff training and education and the importance of records and environment. Even though some important details could have been added (eg the importance of boosters in vaccination) the reader should gain considerable understanding after reading these pages.

This book has been written from the disease and production points' perspective, animal welfare has not been highlighted much. Particularly where the reader might wish for more information about appropriate environments for different types of pig. Some details are given at the end of the book in the chapter 'Welfare and health', but I think that the term environment should have been given its own chapter. The farmers and advisors are key persons to understand the management of the environment. In this book environment, in many cases, only appears at the level of the checklist. The temperature and its importance have been given due attention. Other environmental subjects are discussed only superficially, and minimum standards, for example for stocking densities, are given.

Medicines are always a very delicate matter to discuss for different professionals. Especially in a book intended for use by non-veterinarians in several different countries by nonveterinarians. In some countries, certain medicines are more widely used than in others. It is not beneficial for the animals and the production that after each disease there is a list of antimicrobials listed like in a cookbook. The reader with less basic information about resistance, pharmacokinetics and other pharmacological properties may think that the selection of antimicrobials is less important. However, the overall drug use in connection with the sampling results should have been discussed in detail. The cultural differences associated with medicine use vary considerably, and this has not been taken into consideration. The recommended medicines and even their dosages are not the same. In some countries there are very strict rules about using certain recommended active ingredients in certain indications, a fact not made clear in the book. Also, antimicrobial resistance has not been discussed at all, even though it has become a very important matter in animal production. Instead of medicines, vaccines and differing vaccination programmes could have been dealt with more thoroughly. Pain killers have been omitted almost totally from the book even though their usage has increased considerably during the last decade.

The chapters about fertility are excellent. They include theory, practice and useful checklists for herd level. The reader gets a good understanding about non-infectious and infectious infertility as well as basic reproductive physiology.

There are the excellent checklists here and throughout the rest of the book. You can see that they have been carefully planned and with a little thought are equally applicable to a number of different farms. I was also very impressed by the part where the writers discussed typical stockperson duties and training levels required. This type of reasoning surely helps the farm manager to plan everyday activities.

The book deals with different diseases according to their possible appearance in different departments of the piggeries: gestation/dry period, farrowing/sucking period and weaner/grower/finisher periods. This brings a degree of repetition, because some diseases crop up in different parts of the book. However, it makes it easier for the reader to use the book as a manual. Nowadays it might present a challenge to staff, suggesting they carry a heavy paper copy around and a tablet version of the text might be helpful. At the beginning of each chapter, the environmental effect is discussed briefly. This is very good when considering the animal welfare point of view. Most diseases are presented traditionally: basic information, clinical signs, diagnosis, treatment, management control and prevention. Sounds like an easy cookbook and hopefully the farmers understand that it is not always so easy to make diagnoses and select the appropriate medicine. Hopefully, farmers use this only in addition to veterinary consultation, in order to better understand the vet.

The chapter on OIE and other diseases explores the notion that not all diseases exist in the same countries and that there are differences. Perhaps this chapter could have been extended to also include information on the presence of serious disease other than those that are infectious. One interesting detail could have been information on the recent emergence of new diseases and possible problems we'll face in the future. The chapters concerned with poisons and nutrition represent excellent handbooks both for veterinarians and veterinary students alike.

The chapter about surgery and practical procedures will surely divide opinion. Many procedures here are suitable for this book, but there are many operations that need special skills, proper anaesthesia and analgesia before they can be performed. Which begins the question as to why they have been included here, since farmers have neither the ability to perform all these operations nor access to the medicines needed.

The welfare and health section is very small and concentrates mostly on the pig's general environment as opposed to the pig itself. The discussion on welfare would have been better served with a deeper explanation of mutilations. Only half a page of text is given over to different mutilations, such as tail docking, castration and noseringing. The reasons for performing these procedures are only discussed superficially and neither alternatives for these procedures nor information about public concerns connected with these mutilations are given.

The last chapter, health and safety, was very good. It included good information on matters highly relevant to farmers but often not taken care of properly. Pig farming is a very challenging field. The farmer should be an expert in

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different subjects or he/she should be able to consult the right people about many of the issues covered in this chapter: the cost/benefit calculations, safe systems of work, zoonoses, national regulations, risk assessment first aid and emergency procedures and many more!

Finally, I warmly recommend this book to all farmers, advisers, veterinary students and veterinarians, who want to have a deeper understanding of pig production and health.

The book should be considered a manual and treated accordingly. The key emphasis of this book is not animal welfare and the subject is only dealt with superficially. However, it is an interesting book and the deep wealth of experience is plainly in evidence.

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