points out which training methods are useful by using scientific findings. He then describes the development of puppies and emphasises the importance of the sensitive period. In the sixth chapter, Bradshaw raises the question of whether 'your dog loves you' and points out how difficult it is to answer this question, using scientific methods. He describes the unique bond between humans and dogs and also mentions the potential problems that arise from this relationship. For example, he describes what is called 'separation distress', the difficulty of the highly social species (the dog) being alone.

In the following chapter, Bradshaw writes about the cognitive abilities of dogs, describing some of the latest studies. For example, he presents the study about the Border Collie, Rico who had been trained to retrieve toys based on their names. Rico was able to learn the names of the objects by fast mapping. Here, Bradshaw argues that Rico's abilities can be explained by categorising toys as 'mine' and 'not mine', ignoring an important control condition which had ruled out that possibility(Kaminski *et al* 2004).

Bradshaw then writes about emotion of dogs and their excellent olfactory sense. To imagine how dogs perceive the world mainly through their nose is important to understand them. Bradshaw presents some interesting studies to shed light on this. Finally, he talks about the different breeds. He claims that "selective breeding might be the greatest threat to dog welfare". He illustrates that with the example of how frustrating it must be for a collie to be unable to work and chase something. Bradshaw concludes that focused selection "for the specific qualities that make dogs rewarding companions" is needed. In the last chapter of the book he expresses the hope that dogs remain a significant part of human life.

In conclusion, Bradshaw, in his book, succeeds in making domestic dogs better understood. What makes this book valuable are the entertaining style and the exciting new findings about dogs. Those who prefer pure scientific knowledge without anecdotes might prefer *Dog Behavior, Evolution and Cognition* by Adam Miklosi (Miklosi 2007). Those impressed by Konrad Lorenz's book *Man Meets Dog* will also enjoy Bradshaw's book, gaining an understanding of the science surrounding man's best friend in an entertaining way.

References

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Colour Atlas of Diseases and Disorders of Cattle, Third Edition

The third edition of this book opens with the foreword to the first edition of 1991 by Professor Douglas Blood which is as relevant now as it was then. The publication of good quality photographic illustrations in cattle textbooks has always been a challenge because, as Professor Blood argues, amateur photography often "lacks the quality an atlas demands"; for educational benefit they should "contain explicit details of specific signs" and "need to be models of photographic artistry, well lit, well composed, with good contrast". The first edition by the same two authors achieved this in spades, and by expanding the number of illustrations from some 730 to almost 850 in this third edition these principles and the value of such a collection have both been enhanced. The approach of the original has also been maintained in that it has a global perspective with illustrations from over 100 contributors around the world, with American spelling again being adopted throughout (eg *A Color Atlas…*).

The chapters are well grouped to avoid duplication of similar clinical signs with short textual descriptions of the conditions, differential diagnoses (with cross reference) and potential management options. The book has been brought up to date by the inclusion of novel diseases such as bovine neonatal pancytopenia (bleeding calf syndrome) and major revisions of foot-and-mouth disease, bluetongue virus and bovine spongiform encephalopathy have been undertaken to reflect developing knowledge.

From a welfare perspective the book has value as an adjunct to other welfare texts by providing illustrative examples of conditions that may have welfare implications. The introduction to the comprehensive chapter on locomotor disorders of cattle states that "In addition to significant welfare implications, lameness is a major cause of economic loss, as affected animals lose weight rapidly, yields fall and, in protracted cases, fertility is affected". This is the only referenced use of the word 'welfare', and also contextualises the approach to animal welfare of the whole book. It is a light touch with regard to wider discussion and puts the reader, or possibly the 'viewer', in a position where they may be aided in the identification of a condition with sufficient text to stimulate further investigation elsewhere.

That being said, and although they are not presented in this context, the book contains graphic examples of conditions that could be the result of compromised welfare and should be considered when evaluating the welfare status of cattle farms. The major production diseases of lameness, mastitis and metabolic conditions are dealt with well, and given the increasing identification and acceptance of specific cattle-based measures for good and bad welfare, this is a good reference point to aid identification. There are excellent sections on skin diseases of cattle (a source of chronic debilitation and welfare compromise) and traumatic and physical conditions, often indicative of unsuitable environments.

This book is not a welfare text for cattle, nor is in designed to be. It is a tool for recognition and identification of signs. It is *A Color Atlas of Diseases and Disorders of Cattle*; it does what it says on the tin, and it does it well.

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