appendix on health problems of domestic ducks is a very useful summary of common ailments and their prevention and treatment.

The only disappointment for those concerned with the welfare of ducks is that the book contains little reference to the management of large commercial flocks of ducks, where factors such as high stocking-density and limited access to water may compromise duck welfare. Early in the book, it is claimed that, at the start of the 20th century, domestic ducks had as great a potential as domestic hens for food production. As this potential is now being realised, particularly in table bird production, it would have been interesting for the authors to extend their advice to management of larger flocks of ducks. In particular, the authors note that certain breeds of duck, such as India Runners, appear to have little need for open water and they do not consider it obligatory to provide ducks at pasture with constant access to swimming water. These recommendations are relevant to commercial production, as large-scale producers face a compromise between unrestricted access to open water and health and hygiene in large flocks when designing drinkers.

In conclusion, *The Domestic Duck* is firmly aimed at the small-scale duck farmer, small-holder, breeder or duck fancier. The authors adopt a practical approach to duck management and welfare instead of blinding the reader with the fundamentals of welfare science as they apply to the duck. It is not aimed at large-scale intensive duck producers or welfare scientists, though both would gain from the sound practical advice and the wealth of knowledge that the two authors bring to the book.

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Animal Welfare

C Spedding (2000). Published by Earthscan Publications Ltd, 120 Pentonville Road, London N1 9JN, UK. E-mail: earthinfo@earthscan.co.uk. 188 pp. Paperback (ISBN 185383 672 9). Price £12.95.

In recent years, the literature on animal welfare has grown to such an extent that anyone coming fresh to the subject can easily feel overwhelmed with the numerous books, reviews and reports on original work which might (or might not, of course) be relevant to their immediate needs. It may be difficult for newcomers to see the overall picture and thus be in a position to select and wisely use the available printed material. Experienced workers can sometimes also become lost in the animal welfare jungle. They can be so engrossed in the details (and detailed literature) of their current task that they may be in danger of not appreciating its place in the general animal welfare scene. This new book could help both these groups.

The author, Sir Colin Spedding, is well known, amongst other things, for his pioneering work on the ecological systems approach to the management of agricultural enterprises and for his Chairmanship of the UK Government's Farm Animal Welfare Council. He is thus well acquainted with the interaction of the various biological, social, ethical and economic factors that underlie most animal welfare problems and their possible solutions. This broad approach is the one he adopts in the book. He believes that one should understand as much as possible about the background to a welfare situation before one rushes in to set all to right!

This is an animal welfare book; in other words, it is mainly concerned with improving the health and well-being of the animals that man uses. It is not an animal rights treatise. Rights

are mentioned, but mainly in relation to man's rights and responsibilities. Emphasis is placed on the responsibility of citizens to the animals that their society uses.

The broad scope of the book is, perhaps, best suggested by listing the titles of the 10 chapters: Introduction; What is animal welfare and why does it matter?; All animals — or only some?; The nature and scale of the welfare problem; The need for standards; Organisations concerned with animal welfare; Achieving improvements; Action needed; Future welfare issues; Reflections, unifying themes and conclusions. There is a short useful list of acronyms and abbreviations, a glossary, a four-page index, an appendix on the major animal welfare organisations, some 70 references and a short bibliography that includes a list of nine publications that give access to the legislation.

Farm animal material is widely used to support many of the general arguments. This is both understandable and sound — the author's main expertise, when all is said and done, is in the agricultural field. This is not to say that the background to the welfare problems of wild animals, companion animals, animals used in biomedical research and those used for sport, recreation and entertainment is not reasonably well covered — it is, but perhaps not quite as fully as for the farm species.

Of course, in the opinion of the reviewer, there are a few errors and regrettable omissions — but these are all fully redeemed in the many novel points made and by the skilful bringing together, in new ways, of old facts and figures. The book preaches moderation and the need to keep things in perspective, but the author also clearly states that "keeping things in perspective must not obscure the need for action whenever cruelty occurs or welfare can be improved".

This well written and clearly argued book can be most strongly recommended to those wanting a short, balanced and up-to-date overview of the main themes in the current animal welfare debate.

R Ewbank Ealing London, UK

AATA Manual for the Transportation of Live Animals, 2nd Edition

Tim Harris SDA, European Secretary of the Animal Transportation Association (2000). Published by Harris Associates Limited, P O Box 251, Redhill, Surrey RH1 5FU, UK; http://www.tim-harris.co.uk. 156 pp. Paperback (ISBN 0 9529861 2 4; ISSN 1366 2066). Price £45.00.

This book will be especially useful to people who are involved in transporting animals internationally or within the European Union, all of whom should possess a copy. It covers many species, ranging from livestock to fish. The book is published by the Animal Transportation Association (AATA), an association that was formed in 1976 in response to the concerns of industry leaders, government officials and human organisation representatives. The official policy of AATA begins:

"The Animal Transportation Association, Inc. (AATA) believes that all animals, birds, fish and other living creatures, domestic and wild, including biological materials, are a vital part of our world environment, to be preserved, humanely treated and utilised for the long run well-being and benefit of the human race. The AATA understands the need for research, education and some public interest regulation of animal health and transportation and it is the