Unfortunately, this book suffers from the problem of trying to achieve two objectives which is very difficult within the space available: it tries to provide an academic overview and, it tries to be a guide to practical husbandry. However, it is very gratifying that so much emphasis has been placed on the behaviour, social organization and psychological well-being of the animals considered. Although it could have been better referenced, *The Experimental Animal in Biomedical Research Volume II* is a useful addition to knowledge of laboratory animal welfare and husbandry. It has, however, one real problem, namely the very high price for a 546-page book, which may be out of reach of the pocket of all but the most enthusiastic readers.

Reference

Chamove S, Anderson J R, Morgan-Jones S C and Jones S P 1982 Deep woodchip litter: hygiene, feeding and behavioural enhancement in eight primate species. *International Journal for the Study of Animal Problems 3:* 308-318

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Parasites and Skin Diseases

Peter Gray (1995). J A Allen & Company Ltd: London. 207pp. Paperback. Obtainable from the publishers, 1 Lower Grosvenor Place, London SW1W 0EL, UK (ISBN 0 85131 624 7). Price £14.95.

It was not the author's intention to produce a text for the veterinary parasitologist, pathologist or dermatologist but rather to enhance the lay reader's appreciation and understanding of both equine parasitology and skin disorders.

This is an eminently readable book which, with minor alterations, could have been divided and published separately in two parts without detriment; the first four chapters having been devoted primarily to equine internal parasites and the remainder to equine skin disorders.

The initial chapter gives an overview of equine endoparasites and the methods by which they may cause tissue damage, pain, debility and disease. Chapter two describes methodically the life cycles, identifying features, clinical signs, diagnosis and control of each individual equine endoparasite. The value of this chapter is enhanced by photographs, diagrams and summary charts. An extremely useful chapter follows, outlining the methods of worm control and pasture management that are available, together with data on those anthelmintics and insecticides which were available at the time of publication. This section is completed by a short chapter giving a very short and superficial insight into certain laboratory methods used during parasitological investigations.

The remainder of the book is devoted to equine skin diseases, with chapters on the anatomy, physiology and laboratory investigations of the skin, the classification, healing and treatment of skin wounds and damage, external parasites, bacterial and fungal skin diseases, allergies and poisons, tumours and other miscellaneous skin conditions.

The chapter devoted to skin wounds and associated complications is clear and concise and gives details of the principles of wound treatment and what this may entail. However, the text is such that, in some cases, the horse owner may remain uncertain or unaware when immediate veterinary advice should be sought to prevent unnecessary pain and debility.

The subject of external parasites has been approached logically, data being proffered on each parasite. The author has included a limited amount of information on some external parasites found in other parts of the world, such as the tsetse fly and certain species of tick, but coverage of such 'foreign' ectoparasites is very incomplete and of questionable value.

Practical, but superficial information has been included on both bacterial and fungal skin diseases.

The difficult and complex topic of equine allergies has been confronted, but to illustrate this subject the author has included comments on equine respiratory disease and discussions on a number of respiratory allergens, such as *Dermatophagoides*, which have little importance in equine allergic skin disease and the inclusion of which might only serve to confuse the lay reader.

The final chapter is devoted to skin tumours and to a variety of other skin conditions seen in the horse. They have been dealt with in alphabetical order; a varying amount of information being given on each.

At the back of the book there is an index and a glossary of scientific terms; both of which will prove to be invaluable to any lay reader.

The general text is clear and concise and easily understood, as are all diagrams and charts, however, the quality of the black and white skin photographs throughout is variable and the reproduction of some of them must be a disappointment to the author and publisher. Despite these adverse comments, this publication will be of great interest to all horse owners as it contains a wealth of information and practical advice. This serves to highlight the potential threat that many parasitic and other diseases can pose to the health and well-being of their animals.

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Ethics on the Ark: Zoos, Animal Welfare and Wildlife Conservation

Edited by Bryan G Norton, Michael Hutchins, Elizabeth F Stevens and Terry L Maple (1995). Smithsonian Institution Press: Washington and London. 330pp. Hardback. Obtainable from University Press Marketing, The Old Mill, Mill Street, Wantage, Oxfordshire OX12 9AB, UK; or the publishers, 470 L'Enfant Plaza, Suite 7100, Washington, DC 20560, USA (ISBN 1 56098 515 1). Price £25.25.

This is a collection of 26 essays and a concluding Appendix, resulting from a workshop held in Atlanta in 1992. The essays are grouped into five sections: a scene setter, followed by sections on the role of zoos in conservation and in human society, the target areas in the effort to save environments and the animals they contain, the relationship between in situ and ex situ programmes, and on the care demanded when keeping animals in ex situ programmes. The Appendix draws the areas of consensus together to provide guidelines for future action.

This is a very good book, in that it brings together arguments from the many and varied standpoints of thinkers who are concerned with the preservation and continuation of the variety of wildlife with which our own species shares the planet. The arguments are well presented and are not aggressively adversarial. The reason I say it is a good book is that I

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