

## Book Review

*Parasitic Diseases of Wild Mammals*. 2nd Edition.  
(ed. Samuel, W. M., Pybus, M. J. and Kocan,  
A. A.) pp. 560. Manson Publishing, London,  
UK, 2001. ISBN 1-84076-009-5. £75.00

It is 30 years since the first edition of this book was published – a time when wildlife parasitology was in its infancy. The second edition illustrates the wealth of information that has been obtained during this time and how the field of wildlife parasitology has changed. Historically, wildlife diseases have been considered important only when agriculture or human health have been threatened (Daszak *et al.* 2000), but today the threat such diseases can have on conservation and particularly endangered species (Woodroffe, 1999) is widely recognised. The role of wildlife as reservoirs of emerging and exotic diseases is also of increasing concern, especially their role as hosts of novel zoonotic diseases (Thompson, 2001). In the future, there will be much more interaction between domestic animals and wildlife as a result of human encroachment on wildlife habitats. This will increase the frequency of spill-over situations between parasite life cycles, resulting in their potential transmission from domesticated animals populations to sympatric wildlife. There will also be increasing translocation of wildlife in many countries for conservation, agriculture and hunting (Daszak *et al.* 2000) and we are already seeing the consequences of this with a number of important parasitic diseases (Thompson, 2001). There is also growing awareness of the role of wildlife in the food-borne transmission of parasites such as *Toxoplasma* (Tenter *et al.* 2000).

The publication of this book is therefore very timely, and its 18 chapters clearly demonstrate that wildlife parasitology is no longer purely compiling host survey data. It is an integrative and developing discipline comprising ecology and epidemiology, pathology, taxonomy and population genetics, as well as providing predictive data on the potential impact of parasites in wildlife on conservation, agriculture and public health.

The book is essential reading for anyone interested in wildlife parasitology and represents an excellent effort by the editors. The 18 chapters cover arthropods (5), helminths (9) and protozoa (4). A considerable amount of valuable data is presented on ecology, epidemiology and transmission, clinical effects and pathogenesis, diagnosis, control, prevalence and distribution. In addition, there are many up-to-date and detailed tables that list host occurrences. The content of each chapter is variable in terms of approach and structure, which is often

the case in multi-authored texts. Some chapters are more comprehensive than others which largely reflects the greater amount of information available for some groups of parasites than others. The arthropod and helminth chapters are in general more detailed than those on protozoa emphasising to some extent, the limited information on protozoan infections in wildlife. However, the treatment of the protozoa of wildlife is 'underdone' compared to metazoan parasites; for example only two pages are devoted to trypanosomes, and *Trypanosoma evansi* is not even discussed. In contrast, one entire chapter is devoted to *Baylisascaris* and another to *Dioctophyme*, whereas *Taenia* and *Echinococcus* are dealt with together in one chapter. In addition to problems with the balance of the book, there are some important omissions; for example *Angiostrongylus* and *Toxocara pteropodis* are not even mentioned. This may reflect the largely North American focus of the book which I consider to be the main limitation of it as a reference work. For example, there is little attention given to parasitic diseases of wildlife in Asia and Australia. Although data on parasites of wildlife in Asia may be limited, there have been valuable studies on parasites of wildlife in Australia during the last 30 years.

One cannot have everything in a book like this that covers such a huge area. The well written, valuable and comprehensive series of chapters that are produced in this 560 page volume represent a significant contribution to a field that has become much more important in recent years in terms of conservation, biodiversity and public health.

### REFERENCES

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