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## Book Reviews

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*Fasciolosis*. Ed. V. P. Dalton. ISBN 0 85199 260 9. CABI, 1999. Pp. 544. £85.

Fascioliasis is of course a major parasitic disease of livestock, causing large animal production losses worldwide. Its control is difficult and expensive and often necessitates the drug treatment of entire flocks/herds several times per year. The disease is thus of major interest to veterinary researchers in both public and private sector organizations. Its main relevance to readers of *Epidemiology and Infection* may however stem from the fact that increasingly, fascioliasis is becoming recognized as a major zoonosis, affecting several million people worldwide. But in addition helminthologists working on other trematode species of predominantly medical importance such as the schistosomes and *Clonorchis/Opisthorchis* liver flukes have much to learn, as always, from their veterinary helminthologist colleagues, whose work in areas such as chemotherapy is far ahead of their own.

This, the first textbook on fascioliasis to be published for 35 years, is a massive book in every sense of the word. It is 544 pages long, and contains 15 chapters, all of high quality and written by internationally-acknowledged experts, and between them covering every aspect of the parasites and the disease. The book is up-to-date, tightly edited by John Dalton, himself of course a foremost *Fasciola* researcher, and is beautifully produced, with fine illustrations and comprehensive bibliographies and a useful index and extensive cross-referencing between chapters. Indeed it reads more like a single-author work than the usual multi-author hotch-potch. The authors are from academia, from public sector research institutes and from the research-based pharmaceutical industry, in the 'Great Powers' of contemporary *Fasciola* research, namely Australia, Ireland, Spain, UK, and USA.

The book is naturally mainly concerned with the 'temperate' species *F. hepatica*, on which the lion's share of research and control efforts have so far concentrated, rather than with its poor relation the 'tropical' species *F. gigantica*, which is very widely distributed in the 'old world' tropics, but which until recently has been largely ignored by researchers.

Starting with the premise 'know thine enemy' the book opens with three chapters giving overviews of the parasites and their biology, which set the stage for two chapters on epidemiology and control, the second of which describes the innovative work on predicting outbreaks using first the classical Ollerenshaw climatic forecasting system and more

recently GIS. The well-studied areas of pathology and pathophysiology are then described and these are followed by a very strong series of chapters on *Fasciola* metabolism and neurobiology, immunology and vaccination, molecular biology, human fascioliasis, immunodiagnosis of the animal and the human forms of the disease, and a special chapter devoted to *F. gigantica*. There is a great deal of interest herein but in particular many readers will I think be surprised and impressed to learn that defined-antigen vaccines have now become a real prospect, that we have now realized that human fascioliasis is much more widespread than formerly recognized (for example it has been discovered that *F. hepatica* is highly endemic in man in the Bolivian Altiplano), and that there have recently been great advances in our knowledge of *F. gigantica*, particularly the immunology. Readers will not, however, be surprised to see that, as with so many other helminth parasites, there is a large variety of effective drugs for the animal disease but very much less (only a single, recently licensed drug) for the human infection. It is rare to find a textbook which will be of such real value to research workers in the area but this authoritative, up-to-date compilation really is a substantial contribution.

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*Medical Entomology for Students*, 2nd edn. Mike Service. Cambridge University Press, 2000. ISBN 0 521 66659 7. Pp. 000. £21.95.

Mike Service is an acknowledged expert in medical entomology and has the patience to explore the highways and byways of the literature of his subject and thus to ensure a very high standard of accuracy in his various textbooks.

This book consists of 20 chapters, 3 on mosquitoes (general, anopheline and culicine) and 17 others, each on one group of arthropods (insects, ticks or mites) of more or less medical importance. The diagrams are uniformly clear and helpful and the book contains all that an undergraduate or M.Sc. student would be expected to know about the anatomy and life cycles of all the vectors. The sections on medical importance are generally meticulously accurate, though the agent causing trachoma is wrongly grouped with the viruses. Recent research conclusively demonstrating that domestic fly control can have a significant impact on incidence of diarrhoeal diseases and trachoma is carefully reviewed.

Keeping up to date with advances in control methods requires constant revision and this has been attempted in this new edition, mostly accurately. However, in the short section on insecticide treated bednets, the main current hope for malaria vector control, this reviewer would contest Mike Service's judgements that the impact on child mortality has

been 'very variable and sometimes disappointing' and that the effect is only to provide personal protection with no mass-killing effect on the vector population when a whole community uses treated nets.

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