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# Parasitic Diseases of Wild Birds

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**Parasitic Diseases of Wild Birds.** Edited by Carter T. Atkinson, Nancy J. Thomas, and D. Bruce Hunter, Wiley-Blackwell, 2121 State Avenue, Ames, Iowa 50014-8300, USA. 2008. 595 pp. ISBN 978-0-8138-2081-1. US $99.99 (hardback).

*Review by William M. Samuel*

My 1971 copy of *Infectious and Parasitic Diseases of Wild Birds* received a lot of use. It was a great reference document for me, a young parasitologist studying wildlife, and for my students. But in fact there were only eight chapters dealing with parasites in that volume. Things have changed, and rather than wait until the end to tell readers the butler did it, I will state at the outset that *Parasitic Disease of Wild Birds* is a great reference volume for anyone—wildlife and other biologists, naturalists, students, veterinarians and other health professionals, and others—interested in disease aspects of parasites of wild birds.

*Parasitic Diseases of Wild Birds* follows its companion volume, *Infectious Diseases of Wild Birds* (2007), both of which complement the third edition of *Infectious Diseases of Wild Mammals* (2000) and second edition of *Parasitic Diseases of Wild Mammals* (2001). The book opens with a great chapter (Parasitism: Costs and Effects) by Gary Wobeser and then covers disease aspects of parasitic protozoans (10 chapters), helminths (16 chapters), leeches (one chapter), and arthropods (four chapters). Chapters follow a standard outline that include history, distribution and host range, epizootiology, clinical signs, pathogenesis and pathology, diagnosis, immunity, public and domesticated animal health concerns, impacts to wildlife populations, treatment and control, and management implications. Most chapters are arrayed by parasite genus, whereas several in the helminth section (e.g., trematodes and cestodes) are more general in coverage.

A colleague of mine said, as we discussed this book, a reference book with many short chapters (lengths range from 3 pages to 53 pages; average, 16 pages) should provide an entry to the literature. Another chipped in regarding the need for a good index. The authors and editors, respectively, did good jobs regarding both points. Literature cited in most chapters is current, complete, and appropriate, and the index is accurately detailed and easy to use.

Protozoans are consistently and thoroughly reviewed. There is a lot of history to cover, as well as a wealth of current research. Nowhere is the state of flux in parasites of birds more relevant than that related to the influence of new molecular tools that are leading to discoveries in protozoan taxonomy. It was refreshing to be reminded that the classic studies and recommendations of great scientists such as Gordon Bennett, Murray Fallis, Carleton Herman, and Clayton Huff live on.

Helminths are reviewed in 16 chapters. Overall, writing, coverage, and presentation are excellent! If you live in an area where swimmer's itch is common, as I do, then you will appreciate the chapter on schistosomes. Also appreciated is the short but excellent review of classic experiments involving the well studied parasite *Trichostrongylus tenuis* and its effects on managed populations of Red Grouse in northern England and Scotland. And, where have I been to have missed the suggestion in the literature that parasitism by adult ascaridoids might be advantageous to avian hosts, at least when food is abundant, by entwining among food items in the alimentary tracts of birds, thus aiding the digestive process. There are several such gems throughout the book. And let's give a plug to Quarterly Mortality Reports published on the website of the United States Geological Survey's National Wildlife Health Center (www.nwhc.usgs.gov) and in the Wildlife Disease Association Newsletter (www.wildlifedisease.org), along with the newsletter of the Canadian Wildlife Health Centre (http://wildlife.usask.ca/), which provide up-to-date information on recent and ongoing outbreaks of at least three trematode genera (see Trematode chapter) involved in losses of Lesser Scaup, American Coot, and other avian hosts in a variety of North American locations.

Coverage of leeches and arthropods is, in a word, excellent.

The text is virtually error-free and mostly well written. It is supplemented in most chapters with an excellent array of tables, some quite lengthy (one table was 20 pages!), that summarize parasite information such as avian hosts of parasite, location in host, clinical signs, prevalence, locality, and references.

There are a few problems with presentation, one of which is a lack of colored plates. High cost probably precluded publishing in color. Although most black-and-white photographs and microphotographs are good quality, some did not reproduce well and are often too dark. Some hand-drawn diagrams presenting life cycles or microscopic structures are average to below average in quality. Mixing fonts for text (serif) and titles of figures and tables (sans-serif) achieves contrast, which some like

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(advise not going to this topic on the Internet because it might cost you the whole day!). But it was disconcerting, especially where titles were long and detailed, dealing with groupings of microphotographs. Serif font makes for easier reading and I will now quit writing letters in Arial.

This volume was long-awaited and much-anticipated—what a welcome addition to the series. Readers will quickly forget the long wait. Authors and editors, take a bow; you have earned it.

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