Human Diseases from Wildlife: A Review

by Michael R. Conover and Rosanna M. Vail
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527 pages

Review by Joe N. Caudell

Identifying and understanding diseases that can be transmitted between humans and wildlife has always been important for those who routinely work with wildlife. People who work in a direct, hands-on capacity with wildlife have a heightened chance of coming into contact with a causative agent that could result in a disease. However, for many wildlife biologists, the basic training they receive as an undergraduate may not include a course in wildlife diseases. Also, many professionals working in the private sector of the wildlife damage-control industry are just as likely not to have had any significant training or experience with wildlife diseases. This information is especially important to protect themselves, family, and even their domestic animals from potential diseases. The recent publication of the text Human Diseases from Wildlife by Michael R. Conover and Rosanna M. Vail fills the knowledge gap of many public and private sector professionals.

The book describes 29 diseases that can be transmitted between humans and wildlife. Diseases are grouped into 7 categories, with each category a section of the book. The categories are based on the nature of the causative agent: bacterial diseases, spirochetal disease, rickettsial diseases, viral diseases, fungal diseases, prions, and parasites. This organization provide the reader a useful framework for grouping the diseases.

Each of the 30 chapters covers a disease or a group of diseases and contains the history of the disease, symptoms in humans, medical treatment, transmission of the pathogen to humans, the role of wildlife as vectors, and methods to minimize the risk of transmission to humans. Readers who work directly with wildlife will find the section on methods to minimize risk especially useful.

The authors did an excellent job of pulling together a collection of diseases that can affect humans. Much of the information on wildlife diseases is scattered a wide range of other sources that may or may not affect humans, including veterinary textbooks, books on human diseases, and other references on wildlife diseases. Though Human Diseases from Wildlife is not an exhaustive treatment of this subject, it does cover the most common diseases that can aid those who routinely work with wildlife may encounter. The main body of the book includes a minimum of specialized medical terminology; however, a useful glossary of terms appears in the appendix.

The stated target audience is people who are
uninformed about zoonotic diseases. With this in mind, the reader would have benefited from some basic information on the transmission of zoonotic diseases. For example, the preface states that “lack of information causes some people to have a heightened fear of zoonotic diseases (page xix).” However, a discussion of each of the groups of causative agents also would have been useful to help alleviate such fear. While most readers would be familiar with bacteria and viruses, they may be less familiar with prions, spirochetal, and rickettsial causative agents. This information could have been addressed in an expanded introduction or in an introductory chapter for each section.

For the reader unfamiliar with disease transmission or general causative agents and who is interested in fully understanding and integrating the information presented here into their knowledge of wildlife, I suggest reading Essentials of Disease in Wild Animals by G. A. Wobeser (2006) as a companion to this text.

Overall, however, the authors Human Diseases from Wildlife have done an excellent job culling a broad range of technical material and presenting it in an easy-to-read, conveniently thematic format for a wide audience. I believe this text will serve as a valuable reference for wildlife biologists, private nuisance wildlife control operators, rehabilitators, or anyone who routinely comes into intimate contact with wildlife.

Literature cited

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