

## BOOK REVIEW

Review of *Medical Management of Wildlife Species: A Guide for Practitioners*, edited by Sonia M. Hernandez, Heather W. Barron, Erica A. Miller, Roberto F. Aguilar, and Michael J. Yabsley. John Wiley & Sons, Inc. 2020. 482 pp. ISBN 9781119036586. US \$140.00.

*Medical Management of Wildlife Species: A Guide for Practitioners* is a long-awaited, comprehensive textbook for veterinarians who might be faced with treating wildlife in their practice. However, this text covers much more than just wildlife medicine and surgery. The field of wildlife rehabilitation medicine encompasses a broad range of interconnected information that is needed to ensure health and safety of both humans and animals. In addition to acquiring a broad understanding of the medical and surgical aspects of treating free-ranging wildlife, there is a need to learn about the natural history of wild species that may be presented to practitioners; this can shape how one approaches a wild patient and designs nutrition plans, housing and enrichment requirements, considerations for release and other related facets.

The book is organized into two main sections: firstly, general information that can be applied to all species encompasses 13 chapters, including regulatory and legal considerations, zoonoses and human safety, specialized equipment necessary for the treatment of wildlife, principles of emergency care, wound management, analgesia and anaesthesia, oiled wildlife, orphan care, vaccination of wildlife species, pre-release conditioning, post-rehabilitation release monitoring and disease surveillance. In the second section, 16 chapters are clearly laid out in an organized and consistent format; these chapters focus on the natural history and medical management of specific animals and cover diverse groups of birds, mammals, reptiles and amphibians. Here, the authors focus on the more common species that might be presented to a veterinary practitioner.

Contributions from a talented group of veterinarians and rehabilitators are included in this guide. The preface, written by Dr Mark Pokras, sums up the field of wildlife rehabilitation medicine very well. This includes acknowledgement that academic training alone does not make an ideal rehabilitator (and hands-on experience is critical!), as well as defining wildlife rehabilitation, its origins and core values that are shared

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among those in the field. He goes on to say that these values “may help us feel as though we’re making up for the immense damage that our species continues to do to the natural world.” Furthermore, we need to ensure that we continue to provide environmental education as part of wildlife rehabilitation goals. This book is an excellent step forward for disseminating knowledge to veterinary practitioners, who, in turn, can help educate the public about sick, injured and orphaned wildlife—many of which suffer directly or indirectly from human activities.

One area of attention that is growing in this field is the role of wildlife welfare, which raises multiple questions. For example, how do we reduce stress on these animals while they are held in captivity? How can we ensure the overall health and welfare of the animals in our care? How can we avoid transmission of disease and prevent the development of antibiotic-resistant microbes? These are important and timely issues as many students enter the field of wildlife medicine or rehabilitation, in which veterinarians play an integral role in the conceptualization of One Health. This text addresses multiple concepts of wildlife welfare throughout several chapters, integrating species-specific examples throughout.

In addition, the book does a wonderful job of providing a road map for private practitioners: how to stabilize sick, injured or orphaned patients in a timely fashion; how to protect oneself, staff and volunteers from zoonotic diseases; how to treat a variety of wounds; and how to make the critical decision to release an animal—either by restoring it back to health within its natural environment or by humanely euthanizing the patient to eliminate suffering that cannot be easily or practically resolved.

Various “tips and tricks” from experienced wildlife rehabilitators and veterinarians have been provided amply throughout the text. Often when treating wildlife, it is a balance of the scientific knowledge to provide medical and surgical care melded with the arts-and-crafts skills to design the correct splint, bandage or anaesthesia mask for the many unique species that come through the clinic door. The authors also discuss potential pitfalls and common iatrogenic issues that arise from caring for sick, injured and orphaned wildlife, and offer suggestions for how to best mitigate potentially negative outcomes. From knowing how to treat ectotherms, to anticipating how to approach the emaciated patient, to what species might have bifurcated tracheas, this book captures hundreds of person-years of experience from a highly qualified group of wildlife veterinarians and

rehabilitators who share their knowledge with veterinary practitioners.

Several chapters have excellent photographs in addition to text, whereas others are primarily “text heavy.” Access to illustrations is one of the useful ways to help synthesize information. For example, the placement of an intraosseous catheter in a bird illustrated in one chapter is quite valuable because it often is a necessary procedure in debilitated birds. In another chapter, identification of many common neonate waterfowl species is provided. Species identification is invaluable information when determining how to approach, handle, temporarily house, feed, treat and hopefully release a wild patient.

This book also has terrific appendices ranging from the clinical pathology of several groups of animals to a formula that is clearly laid out for quick and easy reference.

The information contained throughout this guide is highly relevant, timely and helpful to a practitioner who is faced with sick or injured wildlife presented at their practice. Practitioners will appreciate the readable, easy-to-use tables throughout the text. This book is an excellent reference for private practitioners, veterinary students, newly graduated veterinarians interested in wildlife medicine and wildlife rehabilitators across the globe. Its breadth encompasses medical information, as well as wildlife rehabilitation and natural history information, to provide an overview of medical management of wildlife species.

We have long awaited this reference; it will inevitably provide better care for free-ranging wildlife. Congratulations to the editors and authors for this excellent and comprehensive text. I look forward to the next edition!