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Review of Wildlife Damage Management: Prevention, Problem Solving and Conflict Resolution

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Book Reviews

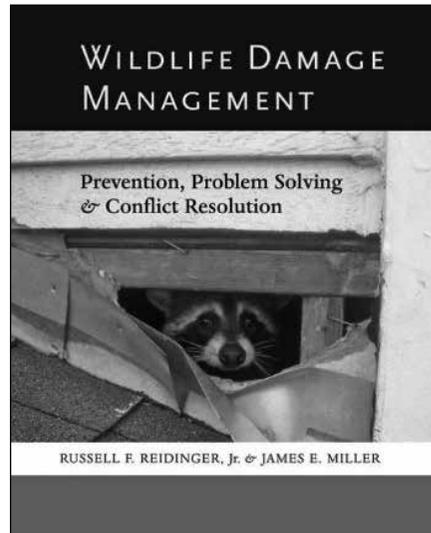
Wildlife Damage Management: Prevention, Problem Solving and Conflict Resolution

by R. F. Reidinger and J. E. Miller
Johns Hopkins University Press, Baltimore,
Maryland, USA
2013, 243 pp.

Review by Travis L. DeVault

WILDLIFE DAMAGE MANAGEMENT (WDM) is more challenging than it might seem to the uninitiated. As any reader of *Human–Wildlife Interactions* knows, there is much more to WDM than trapping nuisance raccoons from attics and applying chemicals to ward off deer from ornamental plants. Although these issues are important (especially if it is your attic or landscaping), WDM also encompasses global problems, such as invasive species, wildlife diseases and zoonoses, wildlife–vehicle collisions, and conservation of rare species in human-dominated landscapes. Further, WDM rests on principles from ecology, physiology, animal behavior, human psychology, and economics, all of which must be understood and integrated to maximize potential for resolution of human–wildlife conflicts. Given the complex nature of WDM, the task of writing and organizing a textbook that adequately covers the necessary techniques, applications, and human dimensions is a difficult one. Fortunately, authors Russell F. Reidinger Jr. and James E. Miller have done a commendable job with *Wildlife Damage Management: Prevention, Problem Solving and Conflict Resolution*. This textbook is a welcome addition to the WDM literature, a subject that increases in importance every year as many human and wildlife populations around the world increase and interact more frequently.

The book is organized into 6 parts, each with 3 chapters. In Part 1, Reidinger and Miller provide an overview of WDM, including an introduction, the history of WDM, and a short chapter on resources available to students and practitioners. This last chapter



in Part 1 is especially valuable and unique, as it explains the differences between the many types of scientific literature available on WDM, including peer-reviewed journal articles, conference proceedings, extension publications, and Internet resources.

The second part covers biological and ecological concepts, from individual organisms to communities and ecosystems. I commend the authors for emphasizing these fundamental principles and providing a solid foundation for the more applied information presented later in the book. The authors cover many topics in a short amount of space in this section, and, mostly, they do it well, except for a few small technical errors. For example, sympatry is defined as a situation where 2 species occupy the same niche at the same time and place; the most widely accepted definition requires only that the ranges of 2 species overlap. Additionally, a figure depicting survivorship curves (Type I, II, and III) fails to note that the y-axis should be on a log scale—information that is critical to make sense of the shape of the curves. Even so, these are relatively minor criticisms; in general, Part 2 of the book covers the most essential material effectively and should be understandable by a wide audience.

Part 3 is a survey of damage and damaging species, including invasive species worldwide, damaging species in North America, and

wildlife diseases. A vast amount of information is presented in these 3 chapters, and although breadth is emphasized over depth, it seems to be a good tradeoff, especially in a textbook geared toward students. The many examples presented in the chapter on invasive species are especially helpful, guiding the reader through contemporary damage situations involving invasive plants, arthropods, fish, amphibians, reptiles, birds, and mammals.

Part 4 covers methods of WDM. As in Part 3, breadth is emphasized over depth. This is especially evident in the chapter on “physical methods,” which covers the use of a wide range of devices and techniques, including many types of traps, cable restraints (i.e., snares), nets, fences, frightening devices (e.g., propane cannons, lasers, effigies), egg addling, and pond levelers. The chapter on pesticides is one of the best in the book; the authors clearly have a great deal of expertise on the many types of pesticides used in WDM, and they provide an excellent introduction to the topic. The chapter on “biological methods” is also very good, although I would like to have seen more extensive coverage of biocontrol (using interactions between organisms to prevent or limit damage), including more examples of successes and failures.

In Part 5, Reidinger and Miller discuss the human dimensions of WDM, including economic issues, human perceptions and responses, and politics. These chapters clearly and convincingly explain the importance of human dimensions in wildlife damage issues and should be considered required reading for all wildlife damage management students and practitioners, especially those of us who tend to emphasize the wildlife side of human-wildlife conflicts.

The last part of the book covers operational procedures and strategies (an excellent resource for practitioners), future directions for WDM, and wildlife conservation. The chapter on future directions emphasizes worldwide population growth in humans, technological advances, and information management. Although I agree that these topics will be important for WDM in the coming decades (especially human demographics), I feel that the authors missed an opportunity by providing

only 1 short paragraph on climate change and the likely effects of a warming climate on wildlife communities and interactions with human societies. Wildlife conservation (including both game and nongame species) was an excellent choice for the final chapter. In this insightful chapter the authors discuss eradication of damaging species from islands, conservation of charismatic megafauna, and they highlight the North American Model of Wildlife Conservation.

I noted few shortcomings in this book other than the minor issues identified above. In a few instances, there seems to be an over-reliance on proceedings literature, especially when more recent, peer-reviewed studies are available on the chosen topics. Also, at times, the book’s organization seems somewhat haphazard, especially in Part 2. Even so, these issues do not detract from the overall quality of the book. In total, this textbook is well-written and carefully researched, and it includes many helpful diagrams, tables, and illustrations throughout. Further, the summaries and discussion questions included at the end of each chapter are thoughtfully written and will be extremely useful when this book is used in the classroom.

I believe that the authors accomplished their goals with this book. *Wildlife Damage Management: Prevention, Problem Solving and Conflict Resolution* should become a well-used and standard text for WDM students and practitioners. I learned a great deal by reading it, and I suspect even those who have been in the business for many decades will be able to say the same.

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