
*Wildlife Science* is composed of 20 chapters in 5 sections (Birds, Mammals, Habitat, Animal health and genetics, and Economic and social issues affecting wildlife science). A great portion of *Wildlife Science* has been developed by researchers in southern Texas, where large, contiguous tracts of land with high fencing along boundaries are probably the rule. Such tracts have allowed large-scale habitat manipulation experiments as they relate to wildlife science and management. However, much of the information provided in this book may not be specifically applicable or particularly relevant outside of Texas where controlling wildlife movement behind fencing and on large ranches may not be available.

*Global biodiversity conservation* (Chapter 3) in Part I (Birds) is one of the better examples in *Wildlife Science* where an in-depth discussion of ecological theory and management applications have been successfully linked. An *Ecological basis for management of wetland birds* (Chapter 5) is another example where theory and management have been tied together in a clear, easily understood manner, allowing the reader to view the connections and implications of the 2.

Part II (Mammals) is made up of 6 chapters discussing predators, specifically cougars (*Puma concolor*), bobcats (*Lynx rufus*), and ocelots (*Leopardus pardalis*), focusing on management models and ecological theory supporting specific management applications. The cougar management model provides a discussion of the theory of large carnivore conservation using the cougar as a model species, discussion of historic and current problems faced by cats, and an overview of conservation and management practices being implemented to attain long-term conservation and management goals. The discussion of drought
effects on bobcats and ocelots in southern Texas includes an overview of classic ecological studies of prey and habitat selection for Canada lynx (Lynx canadensis) and how theories developed based on these classic studies have been applied to ecological modeling for bobcats. Prey switching during drought is discussed conceptually and backed by field studies on bobcat populations in southern Texas. The authors then modify the bobcat model for application to ocelots by narrowing model parameters to better predict suitable ocelot habitat, and identify core areas used by ocelots and potential habitat linkages to support long-term ocelot conservation practices.

The 2nd set of chapters in Part II discusses American black bears (Ursus americanus) in Minnesota, northern Mexico, and western Texas. Each chapter provides an overview of relevant black bear life history, area-specific management practices, and metapopulation dynamics. With respect to linking theory and management, neither chapter provides a satisfactory account. Like many portions of Wildlife Science these chapters fall short of the promised goal of “linking ecological theory and management applications.”

The final portions of Part II (Mammals) are 2 chapters discussing ungulates. The 1st of the 2 chapters discusses density dependence and density independence, survival parameters, and how management applications can affect each. The authors use sustained yield models that estimate carrying capacity and equilibrium density to indicate how specific management applications (e.g., hunting and habitat management) affect the carrying capacity of deer (Odocoileus) in specific environments ranging from Montana to southern Texas. The basic message from this chapter could be summarized as deer do not consistently exhibit density dependence or density independence, with individual deer populations showing mixed density dependence and independence contingent on seasonal and temporal variations. The 2nd chapter could have been included in Part III (Habitat), and is a good transitional chapter discussing ecological theory pertaining to habitat manipulation, as well as the implications of habitat seral stage for deer species. With respect to the chapters dedicated to mammalian species in Wildlife Science, this chapter provides the best example of linking ecological theories to management applications.

Part III (Habitat) is probably the most valuable section of the book and the section where I think the overall goal of linking ecological theory and management application has been best accomplished. Applying ecological theory to habitat management (Chapter 14) does the most complete linkage of theory to application, with examples provided to give context to the discussion. Management practices such as burning, manipulation of brush, and grazing that push an ecosystem toward a desired seral stage also are discussed.

Part IV (Animal health and genetics) provides an overview of emerging wildlife diseases and disease management with a heavy emphasis on the direct management of diseases and little integration of ecological theory into the management of the discussed diseases.

Part V (Economic and social issues affecting wildlife science) is the weakest section of Wildlife Science, although it is the most ambitious, with respect to linking theory to management. Linking the theories of economics and social issues to the management of wildlife is difficult at best. Part V provides a basic starting point for those interested in how economics and social issues affect wildlife.

Overall, I was disappointed with Wildlife Science in terms of linking ecological theory and management applications. Many chapters failed completely to provide a clear explanation of how ecological theory was related to the discussed management practice and appear to be more appropriate for publication in a journal than as a book chapter.—Charles J. Randel, Sapphos Environmental, Inc., Pasadena, CA 91107, USA; e-mail: crandel@sapphosenvironmental.com.