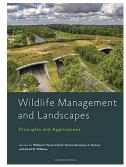
## ECOLOGY

## Wildlife Management and Landscapes: Principles and Applications

Edited by William F. Porter, Chad J. Parent, Rosemary A. Stewart, and David M. Williams. 2021. John Hopkins University Press (in association with The Wildlife Society). 360 pages, 74.95 USD, Cloth or E-book.

The landscape ecology concept, which became established in the 1990s, was a great idea, but suffered from a lack of evidence. The idea that species may require habitat beyond the size of their home range or territory, or that populations may actually be metapopulations, or some areas that look ideal were actu-



ally mortality sinks was compelling, but few studies had been conducted, typically because of limitations in project design and a too-narrow spatio-temporal scale. Thirty years later, enough evidence exists that managers readily apply larger-scale thinking into resource management, urban/rural planning, endangered species recovery plans, and protected areas. Parallel with this evidence has been the delivery of books promoting landscape ecology and advising on how to better incorporate the landscape into management.

Wildlife Management and Landscapes is a compilation of existing knowledge, followed by applications to real management problems. The first two of four parts, with three and six chapters, respectively, establish a link between traditional wildlife management (i.e., local or stand-scale and short-term demographics) and landscape-scale thinking. Well-used terms such as island biogeography, metapopulation, corridor, matrix, patch, and habitat fragmentation are covered. The term 'habitat', misused by nearly everyone, is explained because habitat is the foundation for all wildlife management. Other chapters cover metadata and geographic information systems, both obvious components when considering patterns over a

large and small spatial extent. Parts 3 and 4 are more interesting for advanced readers who already have a foundation in landscapes and wildlife. Because large areas typically involve more stakeholders, and sometimes competing land-use priorities, much of these chapters focus on cooperative ventures between disparate groups, the role of non-government organizations, and conservation incentives.

The authors, over 40, are mainly academics at American universities or government departments. Several well-established Canadian academics are involved but the examples and case studies are nearly all American. The ideas though would apply just as well to Canadian situations. Case studies include managing for Gunnison's Sage Grouse over four American states, prioritizing waterfowl habitat in the American section of the Great Lakes, mapping warbler habitat over the Appalachian Mountains range, and corridor and conservation planning in the Yellowstone to Yukon Initiative. I will note though that corridor planning is not a significant component of this book, even though corridors often are associated with landscape-scale conservation planning, and the book cover shows a wildlife overpass over a highway. Other books dwell more on corridors and connectivity planning. This book is well-suited to researchers and as an upper-level university textbook in wildlife management, although the first half of the book would be of interest to a wider audience because it does a nice summary of the evolution of the concepts over the last 30 or so years.

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