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Neotropical Migratory Birds

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NEOTROPICAL MIGRATORY BIRDS

Ecology and Management of Neotropical Migratory Birds: a Synthesis and Review of Critical Issues. Thomas E. Martin and Deborah M. Finch, editors. 1995. Oxford University Press, New York. 489 pages. \$65.00 (cloth), \$35.00 (paper).

This book is a follow-up synthesis to a meeting held in Estes Park, Colorado, in 1992, by *Partners in Flight-Aves de Americas*. An earlier volume, edited by Finch and P. W. Stangel (USDA Forest Service General Technical Report RM-229, 1993) included most of the papers presented at that meeting. This book is a carefully edited synthesis of some of the issues that arose from an increased interest in neotropical migratory birds. As with most compilations, it is a little uneven in coverage and quality, but generally it is an excellent overview of the issues and a guide to particular concerns of the specialist. Overall, the organization is excellent and the papers are well-researched and presented.

After an Introduction by the editors, the book is divided into five sections. The first, "Population Trends," provides an overview of the population trends and status of these birds. The first paper presents results from the Breeding Bird Survey; the second critically reviews the analytic methods and assumptions used in the first paper. These papers present both the evidence and impetus for the current increased interest in these birds, along with some important counter-arguments. These papers should give the reader the background to understand the current concerns.

The second section, "Temporal Perspectives on Population Limitation and Habitat Use," consists of four papers that provide an overview of habitats and potential causes of population limitations. The first chapter covers the role of natural disturbances, such as fire, in structuring avian communities. This paper is an excellent review of the literature, covering many ecosystems and providing a valuable discussion of the management and conservation issues and potential actions. The second paper focuses on breeding- and wintering-ground issues, discussing the evidence for when during their annual cycle populations of neotropical migratory birds may be limited. The third chapter discusses the issues and information available about migration. The last paper in this section provides a comprehensive overview of the information available on habitat requirements in the neotropics, and is an excellent introduction to a complex issue.

The third section, "Forest Management," has three papers on modern forestry practices. One is an overview of the common practices: what is done and what is known about their effects, with some recommendations. The next two papers focus on forestry in two geographic regions, the Rocky Mountain

coniferous forests and central and southeastern oak-pine forests. This emphasis on forests ecosystems in a general synthesis was somewhat disappointing, since all other vegetation types were omitted from general consideration, although many were covered in discussions of specific actions.

The fourth section, "General Human Effects," covers the effects of certain human disturbances. The first paper discusses agriculture and farming structures; the second treats the effects of pesticides and contaminants. One of the major benefits of this book is as a reference to unfamiliar subjects, and usually enough background information and references are included to assist in further research. The third chapter is an excellent overview of the effects of livestock grazing in the west, a complex and regionally variable issue.

The fifth section, "Scale Perspective," includes papers covering a range of issues. The first chapter covers habitat fragmentation, the second, the effects of the larger landscape; both are very informative and readable. The third paper is an interesting discussion of the impacts of cowbirds, with an introduction to their history and ecology. The fourth chapter discusses the potential uses (and misuses) of single- or multiple-species groups to guide management actions. The final paper is a summary of the book and goals.

Since no book of this size can cover all aspects of management and conservation completely, priorities must be set. However, I think that this book has some limitations. For instance, there are three chapters devoted to forest management and silviculture, with other chapters also focusing on forest ecosystems. I would have preferred to see one paper dealing with forest ecosystems and silviculture, and other papers devoted to other ecosystems, such as grasslands, shrub associations, and wetlands. Many chapters do cover some of these topics, however, so they are not completely missing.

One of the goals stated in the Introduction is to present the scientific basis underlying recommended management guidelines. This has been accomplished in many papers, but management and conservation guidelines in some chapters are lacking, vague, or trivial. Some authors use this section to restate their thesis, some use it to suggest research needs, and some use it to recommend larger general objectives. However, the management and conservation guidelines offered by several papers are very valuable.

Overall, this book is very satisfying, with much information presented in a very readable and assessable manner. This is its main virtue; the editors present a general synthesis and review of the critical issues facing the conservation of neotropical migrants in a concise and informative publication.--
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