

Reviews



EDITED BY CARL D. MARTI

The following critiques express the opinions of the individual evaluators regarding the strengths, weaknesses, and value of the books they review. As such, the appraisals are subjective assessments and do not necessarily reflect the opinions of the editors or any official policy of the American Ornithologists' Union.

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The Ecology of Migrant Birds. A Neotropical Perspective.—John H. Rappole. 1995. Smithsonian Institution Press, Washington, D.C. xvii + 269 pp., 18 figures, 27 tables, 5 appendices. ISBN 1-56098-514-3. Cloth, \$35.00.—Originally published by the U.S. Fish and Wildlife Service in 1983 as *Nearctic Avian Migrants in the Neotropics* with coauthors Gene Morton, Tom Lovejoy, and Jim Ruos, the initial work has been considerably expanded, updated, and revised by John Rappole. Indeed, the revision warranted publication in Spanish in 1993 followed by further revision that resulted in this volume in English. This is a welcome addition to the burgeoning literature on Neotropical migratory birds, in part because the original book was out-of-print, not readily accessible in libraries, identified as gray literature, yet frequently cited for its “Neotropical perspective.” Consequently, many of us hoped to see it republished so we could add it to our collection of necessary literature on Neotropical migrants. Also, it seemed like a good idea to know exactly what we were citing given that it had to be cited, but no one had a copy! One wonders, though, what happened to the original coauthors in the latest version.

The book is divided into nine chapters and five appendices. The Introduction, or first chapter, defines the scope of the book as a “summary of information and ideas on the biology and conservation of migratory birds, mainly from a Neotropical perspective.” A Neotropical perspective was deemed necessary because despite conservation efforts in the United States and Canada, “most Nearctic migrants spend one-half to two-thirds of their life cycle hundreds or even thousands of kilometers away from these good intentions, in Neotropical stopover and wintering areas.” The author focuses on Nearctic migrants whose populations breed north of the tropic of Cancer and winter south of that line. This definition of Neotropical migrant may be more technically accurate than some of the definitions presented by government-funded conservation programs such as Partners in

Flight, but may be harder to manage across political boundaries.

The author says “I confess that there is an undeniable bias toward passerines” in the book. Well, that would be fine if all Neotropical migratory passerines were given similar coverage, but even within this taxonomic group an undeniable bias toward eastern migrants exists. Furthering this trend, the Introduction acknowledges the conservation value of symposia proceedings on Neotropical migrants published by the Smithsonian Institution, but fails to discuss other valuable sources of information such as those produced by Partners in Flight and its coalition of international, federal, state, and nongovernmental organizations. Was it an oversight that the most important conservation program for nongame birds in this century was not even mentioned?

Chapter 2 focuses on habitat use by Neotropical migrants. This chapter evaluates use of surveys for detecting habitat use in the Neotropics, determining that most survey techniques are inadequate for addressing wintering migrants. cursory treatments of migrant use of tropical forests, second growth, shrubsteppe, open, and aquatic habitats are provided. The author notes that “little ecological work has been done on aquatic or shrub-steppe species” and that “less than one-third of all migrants use forests during the nonbreeding seasons, yet most of the debate concerning displacement of migrants by residents has centered on these forest-using species.” More time is spent discussing hypotheses of habitat use, rather than describing actual use. Sexual differences in habitat use comprise the bulk of the chapter, although why the topic is more important than other aspects of habitat use is not entirely clear. In general, this chapter was heavy on speculation and light on organizing and presenting data and patterns.

The third chapter discusses food preferences and resource use in relation to survival, social behavior, flocking, and roost sites. The author documents which species are known to be intraspecifically territorial during the nonbreeding season, which is use-

ful information for developing conservation strategies in the Neotropics. A description of the behavior of nuclear and attendant species in mixed-species flocks leaves one with more questions than answers. The idea that roost sites may be critical to survival of some migrants, but that little really is known about the topic, is reason enough to conduct research to find out where and what resources are used by which species.

In Chapter 4, the author addresses the role of migrants in tropical communities and compares it with that of resident species. Six ideas that lead to the conclusion that migrants are able to survive by quick and flexible occupancy of new or ephemeral habitats are presented and thoroughly reviewed. The author points out that many Neotropical migrants do not fit this general model, and that relationships within and among species are too complex to generalize. Given that nearly half of all Nearctic migrant species have resident populations in the tropics, it is clear that there are no easy answers for explaining their roles and behaviors as a group.

Migration is the topic of Chapter 5. A strong effort is made to describe various kinds, routes, and hypotheses of migration. Although migration is poorly studied, the chapter makes it clear that behavior, movements, and habitat use during this time can vary by age, sex, and species. Timing of migration and migration pathways seem to be programmed by genetics and natural selection. Considerable research is needed to determine the importance of stopover habitats for survival and conservation of migrants.

Eight explanations for the evolution of migration are presented in Chapter 6: ancient environmental changes; availability of resources elsewhere; proximate factors such as photoperiod and temperature changes; and climatic changes; seasonal tracking of fruit or nectar; seasonality and interspecific competition; seasonal change and intraspecific dominance interactions; and Baker's migration threshold hypothesis. Rappole concludes that none of these ideas when taken separately provides a complete explanation for evolution of northward migration into the Nearctic by tropical nonfrugivores, a common group of long-distance migrants. Another hypothesis based on taxonomic evidence is proposed in which migration results from intraspecific competition for breeding sites.

Chapter 7 is a relatively short chapter that compares Old World migration systems with those in the New World. The Palearctic-African system is the best-studied avian migration system in the world. However, lack of forested environments and a lack of environmental diversity in the subtropical region of Africa relative to Asian, austral, and Nearctic-Neotropical systems may invalidate its use as a model for understanding other systems. Rappole views migration as a filtering process, with the tropical bird community being the filtering material. One filter is the

material available to evolve from, a second filter is the variety of subtropical habitats available, a third is the variety of available temperate habitats, and a fourth may be the presence of isolated sites that could foster rapid speciation.

Population changes detected by the Breeding Bird Survey and other methods are described in Chapter 8. Discussion is biased toward declining populations, whereas populations showing increases are hardly addressed. Potential threats to Neotropical migrants include breeding habitat loss, habitat degradation caused by herbivores, contaminant poisoning, normal population fluctuation, procedural biases, and stopover and wintering ground habitat loss. Given the large quantity of technical papers being published on the issue of migrant population declines, this chapter's brevity, neglect of western migrants, and lack of balance was somewhat disappointing.

The ideas in Chapter 9 should be valuable in pursuing a conservation strategy for the Neotropics. Humans residing in the Neotropics, however, may not view migrant conservation as a high priority relative to other species or resources. Funding educational programs about the value of conserving habitats and species in Latin America may be the most productive approach that North Americans can take. This chapter highlights useful ideas that need to be expanded elsewhere. Fortunately, this book was published in Spanish, which represents a start in the right direction. Clearly, Rappole understood who his audience was.

In summary, I highly recommend this book because it is one of the few that address the ecology and conservation of Neotropical migrants on the migration and wintering grounds. Although some biases were identified, one's library on the topic of Neotropical migrants is incomplete without this volume.—DEBORAH M. FINCH, *USDA Forest Service, Rocky Mountain Research Station, 2205 Columbia SE, Albuquerque, New Mexico 87106, USA.*

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Partnerships in Birds: The Study of Monogamy.—Jeffrey M. Black (Ed.). 1996. Oxford University Press, New York. xi + 420 pp., numerous text figures. ISBN 0-19-854861-3. Cloth, \$105.00.—Over the last decade or so, ornithologists' perceptions of the nature of monogamy have undergone radical changes, especially in light of molecular evidence of the frequency of extrapaternal (and maternal) fertilizations. This book seeks to assess our current knowledge about the partnerships involved in social monogamy