REVIEWS

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Saving Migrant Birds. Developing Strategies for the Future.—John Faaborg. 2002. University of Texas Press, Austin, Texas. 226 pp. $50.00 hardcover. ISBN 0-292-72544-2. $22.95 paper. ISBN 0-292-72548-5.—An old saying warns us not to judge books by their covers. The admonition is certainly advisable in the realm of pulp fiction and biographies, but one might consider it to be less of a concern when dealing with scientific literature, an arena where accuracy and precision are deemed fundamental.

Based on the cover of John Faaborg's new book *Saving Migrant Birds*, it might appear easy to judge the path down which the book will head. The picture of a colorful Cape May Warbler (*Dendroica tigrina*) and accompanying title suggest another treatise on the "how" and "why" of saving the scores of migratory species that breed in North America and spend their winters at southern latitudes. After all, for years now we have heard that migratory birds were in serious decline; their plight served to launch the large-scale conservation initiative known as the *Partners in Flight* (PIF) program, a program that Faaborg discusses at length in this volume.

Faaborg received a PIF Investigations Award in 1996 and has been at the forefront of much of the research on the effects of habitat fragmentation and loss on Neotropical migrants. At the inception of PIF, he was one of those who, in his words, ". . . got pretty depressed. . . ." when looking towards the future.

Once inside the cover, however, the reader finds the problems and issues are much more complex than can be captured in glossy headlines. Yes, there are big questions facing migratory birds—from domestic cats to communication towers to habitat fragmentation—and population losses are certainly occurring. However, the tone of this book is far from alarmist. Instead, the book provides a critical, well-balanced review of recent efforts to conserve migratory birds, and Faaborg's conclusions seem refreshingly at odds with the cover of the book.

Chapters 1-3 address important background questions such as "What are neotropical migrants?" As Faaborg warns and Floridians, who live at a cross-roads between temperate and tropical realms, well know, there are no simple answers to this and many other fundamental questions. For example, PIF lists the Grasshopper Sparrow (*Ammodramus savannarum*) as a neotropical migrant even though Florida's endemic subspecies does not migrate; PIF also lists the Painted Bunting (*Passerina ciris*) as a neotropical migrant though many populations that breed along the Atlantic seaboard winter in central and south Florida. These are examples geared towards Florida readers, but Faaborg provides a wealth of similar examples that show how difficult it can be to fit several hundred diverse highly mobile species under a single umbrella.

Another simple question addressed in initial chapters concerns "How do we know they are declining?" Here, Faaborg notes that much of the concern over neotropical migrants arose following analyses of population trends suggested by Breeding Bird Surveys (BBS). The BBS represents one of the best avian monitoring programs available, but analytical tools applied to BBS data vary considerably and can influence interpretations. The time period of the data set analyzed also is critical as it appears that some migratory species shown to be declining in the late 1980s are now increasing. Faaborg concludes that we "must remember that many trends unveiled by BBS must be evaluated within the context of the strengths and weaknesses of this technique." The presentation of the strengths and weaknesses of such analytical approaches is a good review for both amateur and professional ornithologists.

One potentially important problem not discussed is traffic noise associated with BBS. Traffic noise has doubtlessly increased dramatically since the BBS was established in the mid 1960s, and it likely influences detection rates during these road-side counts.

From this uncertain look at population declines, Faaborg moves in Chapters 4-6 toward a discussion of breeding season habitat and the influences that habitat fragmentation has on breeding productivity and population dynamics. These chapters provide a concise overview of recent research on minimum area requirements, brood parasitism, predation, and food supply as well as numerous examples for how these factors change as habitat fragmentation increases. The range of research on these topics expanded greatly beginning in the mid 1980s, and Faaborg's review of these studies provides a wealth of information, although few studies from Florida or the southeastern U.S. were included (studies that might have helped to demonstrate the geographic variation found in such studies). These chapters include a straightforward presentation of source-sink population dynamics models and their relation to population stability. These models of population dynamics have not been adequately tested, but several studies suggest that reproduction in and dispersal from "source" landscapes enable populations in less productive "sink" landscapes to persist.

In Chapter 7 the author attempts to develop modern habitat management guidelines for migrants based on the recent research mentioned above. This chapter is perhaps the weakest in the book because, in my view, it provides guidelines that would seem vague and inconclusive to most land managers. When Faaborg states that, "Another reason to protect sink populations is that we scientists may be wrong," I can see a confused look arising in the eyes of many land managers. I certainly agree with Faaborg when he recommends that habitat quality, quantity, and context need to be considered, but the management generalities he provides are only a little better than platitudes. In some senses Faaborg is committing the sin of over-generalizing that he is critical of elsewhere. I believe a stronger approach might have been to provide these same general guidelines, but then to call for more specific regional research projects to provide detail concerning minimum area requirements, sink habitats, and landscape composition. These issues will vary depending on the complex of species and habitats in question.

The subheadings used in Chapter 7 also seemed disjointed. For example, a subheading entitled "We Must Consider What Old-growth Vegetation Really Was" followed a subheading entitled "Fragments Might Make Good Stopover Habitat." The progression could have been better organized, though I hasten to add that Chapter 7 also has some valuable tidbits to offer, including enlightening discussions of the role that post-breeding habitats may play as well as the value of "sink" habitats.

Following the discussion of breeding season issues, the author shifts to look at habitat requirements and population dynamics during migration and over-wintering. Chapters 8-10 provide reviews of recent research in the areas of stop-over ecology, winter site-fidelity, and impacts of wintering habitat on breeding season productivity. Conclusions reached generally stress the need for additional research before we can determine if migrants face dire problems on their wintering grounds or during migration. Although the recent tragedies befalling populations of Dickcissels (*Spiza americana*) and Swainson's Hawks (*Buteo swainsoni*) on their wintering grounds are clear exceptions, Faaborg contends that, while it is evident that problems on the wintering grounds or during migration might affect populations of neotropical migrants, it is less clear how influential changes in the tropics have been for most species. We need to look carefully at impacts throughout the lives of these species before we place blame on changes in wintering or stop-over habitats as the causes of their population declines.

The concluding two chapters reiterate the cautionary tone established at the outset. Phrases such as ". . . most Neotropical migrants are not in the group that requires immediate concern. . . ." provide the clearest contrast with my initial impression of this book. In these chapters Faaborg presents a critical discussion of whether the establishment and direction of PIF have been appropriate and justified given what we now know about neotropical migrants. He offers support for the PIF program because (1) the PIF initiative was proactive; (2) PIF got land managers and research biologists talking; (3)

PIF was inexpensive because it involved people who work for different agencies in a wide a variety of capacities; and (4) PIF helped to shift the perspectives of agencies traditionally concerned with game species management.

I agree that PIF has been an important program because of its popularity and its knack for getting some wildlife agencies to look beyond their traditional scopes, but I also believe Faaborg has under-estimated the expenses of this program in some situations. The time that agency personnel spend on PIF issues is time not spent on other species or habitats of concern. Florida contains enough endemic and threatened species to keep a thousand researchers occupied for a thousand years, so how we direct our limited time and resources is not insignificant. This is especially true given the trying budgetary times that most agencies must now contend with.

I highly recommend this book to amateur and professional ornithologists and especially to the readers of *Florida Field Naturalist*. The book is well suited as a supplement for college classes in ornithology, but the text and format work well for serious amateur birders who are interested in catching up on recent research in such areas as wintering and stop-over ecology, habitat fragmentation, and brood parasitism. The text is lively and generally well written throughout and graphs are generally clear and well presented. Although the book is short on pictures (and most pictures in the paper back version were reproduced poorly), the non-alarmist viewpoint that Faaborg offers is refreshing. We need to continue to invest in monitoring and studying these colorful birds that travel thousands of miles each year, but, as this potentially controversial book suggests, we should not believe the sky is falling.—James Cox, Tall Timbers Research Station, 13093 Henry Beadel Drive, Tallahassee, Florida 32312.