

how adaptable these voracious herbivores are, especially in their ability to exploit agricultural ecosystems. The editors were careful to state that the objective of the book was not to provide a synthesis of the effects of hunting and agriculture on goose population dynamics. Nevertheless, some chapters contain a focus on protection of geese that brought to my attention an apparent difference in philosophy regarding desirable population sizes.

In North America, population control is being advocated for mid-continent populations of Lesser Snow Geese (*Chen c. caerulescens*) that nest in the arctic and for Giant Canada Geese (*Branta canadensis maxima*) that occur in certain urban areas. The primary motivation for such advocacy is concern for arctic ecosystems and secondarily the concerns of urban residents regarding perceived health risks, unsightly droppings, and even aggressive interactions between humans and Canada Geese. The effects of geese on tundra ecosystems in the Palearctic apparently are unstudied, and there appears to be no conflict between urban humans and geese at any time of the year. In North America, management plans originate from each of the four flyways in which each goose population is found and include population goals. Such goals are absent from this book, and the focus on protection conveys the implicit message "more is better." It makes me, even as one who enjoys and studies geese, wonder "how many geese are enough?" As most Palearctic goose and human populations continue to increase, it becomes interesting to anticipate when new conflicts will develop between geese and humans in shared environments. Perhaps the editors missed an opportunity to discuss such population objectives, as well as what may be the best way to manage habitats and goose harvest internationally.

Overall, a compilation such as *Goose Populations of the Western Palearctic* has great value. Such information (e.g. spatial-temporal summaries of harvest for each species over most of the continent) exists for Nearctic goose populations, but most of it remains dispersed in various management plans, government reports, and data files. A similar document for Nearctic populations is needed, which, in itself, represents a strong endorsement.

Many similarities exist between Nearctic and Palearctic goose populations, but there are also many differences. For those unfamiliar with Palearctic geese, this volume provides an opportunity to learn not only about their status, population dynamics, and ecology, but also about processes, both biological and political, that may influence geese on other continents. The editors state that the book is written for the international community of goose researchers, nature conservationists, and waterfowl managers. However, the text is not technical and is very easy to read, so that the book will appeal to a wider audience interested in geese. In my view, this is an

important addition to the exponentially growing body of ornithological literature. At the very least, this book is recommended for goose researchers (whether civil servant or academic) on both sides of the Atlantic.—RAY T. ALISAUSKAS, *Canadian Wildlife Service, Prairie and Northern Wildlife Research Centre, 115 Perimeter Road, Saskatoon, Saskatchewan S7N 0X4, Canada.*

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Helpers at Birds' Nests: A Worldwide Survey of Cooperative Breeding and Related Behavior.—Alexander F. Skutch. 1999. University of Iowa Press, Iowa City. xv + 298 pp., 62 drawings by Dana Gardner, foreword by Stephen T. Emlen. ISBN 0-87745-674-7. Paper, \$24.95.—This book is a very slightly modified version of one published in 1987. It has the same number of pages in the main text and the same number of chapters as the first edition. To me it looks identical for all practical purposes. Additions are a forward by Stephen Emlen and a new preface by Skutch. Emlen points out that this book is "delightfully readable in the relaxed, engaging style for which Skutch is well known." In my review of the first addition (Brown 1988), I recommended the book to bird watchers. Rereading my earlier review, which was very favorable in this respect, I am struck by how little my opinions about the book have changed. Unfortunately, however, the book is now severely out of date, and it appears that no new references have been added to the original text. This is not a book for scientists, but perhaps it will be appreciated by those who would rather have their natural history without the complications of science and scholarship and without knowledge of the many fascinating developments in the study of avian helping that occurred after Skutch published the first edition.

Although I can appreciate Skutch's love of the rambling naturalist's approach, I am reluctant to recommend this book to anyone who loves science or wants to know about the science behind the study of helping behavior in birds. I found no reference to W. D. Hamilton, without whose theory the study of helping would still be in the doldrums in which it reposed from 1935 to 1963. Nor is there a single reference to the numerous important papers of Rabenold on *Campylorhynchus* wrens (Rabenold 1984, 1985; Wiley and Rabenold 1984; Austad and Rabenold 1985, 1986; Rabenold et al. 1990, 1991). The most recent reference to Woolfenden and Fitzpatrick was in 1978, to Koenig and Mumme in 1983, to Emlen in 1984, and to myself in 1984. The exciting recent work on sex ratios in the Seychelles Warbler (*Acrocephalus*

sechellensis; Komdeur 1992, 1994; Komdeur et al. 1997) is, of course, not mentioned. Many other important omissions from the literature exist given that no references after 1984 are included in the first or second editions. Thus, an important niche remains unfilled.

We need a book for birders and other lay readers that conveys the excitement of the scientific study of bird behavior. A good model for such an approach is a recent treatment of natural selection in the Galapagos finches (Weiner 1994).

There is a sheep-like tendency among ornithologists to play follow-the-leader with regard to the terminology in this field, and I am as guilty as anyone. Consequently, the terms used in this book and elsewhere are not necessarily rational or usefully descriptive. Such terms as "cooperative," "communal breeding," and "helping," are misleading at best. Cooperative breeders are, in some sense, cooperative, but not in breeding. They are rivals with respect to breeding. It is only in the rearing of young (especially their feeding) where one sees "cooperation" or helping. Other species that are not officially "cooperative breeders" actually do cooperate in breeding by giving alarm calls at colonies. Thus, I favor the terms "cooperative rearing" or "helper systems" and have stopped using "cooperative breeding" or "communal breeding."

In summary, owners of the first edition do not need the second edition. Scientists do not need either edition, although the books are rich in references to the very early literature. Some birders and other lay readers may share my disappointment in the lack of coverage of the scientifically exciting aspects of the study of helping behavior.—JERRAM L. BROWN, *Department of Biological Sciences, State University of New York at Albany, Albany, New York 12222, USA.*

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Helpers at Birds' Nests: A Worldwide Survey of Cooperative Breeding and Related Behavior.—Alexander F. Skutch. 1999. University of Iowa Press, Iowa City. xv + 298 pp., 62 drawings by Dana Gardner, foreword by Stephen T. Emlen. ISBN 0-87745-674-7. Paper, \$24.95.—Although touted as "an expanded edition," this volume appears to be identical to that published in 1987, except for a new preface and the addition of Emlen's foreword. The latter, while providing a bit of interesting history, serves the useful, albeit unorthodox, purpose of warning readers against Skutch's treatment of evolutionary theory as it pertains to cooperative breeding. As for the main body of the book, it offers an overview of cooperative breeding that is organized systematically with more detailed summaries of in-depth studies performed on individual species within each group and is uncluttered by statistics, tables, or the usual complications of scientific progress. The bad news is that the book includes only studies available to Skutch when he wrote the first edition in the early 1980s. Consequently, the volume, which was already outdated in 1987 (Mumme, *Auk* 105:402–403, 1988),