

BOOK REVIEWS

Birds in the Bushes: A Story About Margaret Morse Nice.—Julie Dunlap. Illustrated by Ralph L. Ramstad. 1996. Carolrhoda Books, Inc., Minneapolis, MN. +63 pp. ISBN 0-57505-006-4. \$19.93 (hardback).

Biographies for elementary school children have come a long way from the orange-bound, silhouette-figured, volumes of my childhood. It has been a while since I thought about those afternoons spent head-and-knees over the arms of a chair until I consumed all of the biographies for children in the local library. Back then, most biographies of women were about wives and mothers of important men. They focused on romance and marriage in an historical milieu. A few women were portrayed for their own accomplishments: Clara Barton, Florence Nightingale, Helen Keller, and a handful of western or Native American women, Annie Oakley, Pocahontas, Sacagawea, and the last Hawaiian Queen, Liliuokalani. This probably explains why I found myself reading about Jim Thorpe and Knute Rockne when no one in my household had the slightest interest in football. It also explains why I was so delighted to see this children's biography of Margaret Morse Nice.

Birds in the Bushes celebrates the life of a woman whose achievements were her own and were not predicated on a series of unlikely circumstances. Her lifestyle is accessible—any child can become a naturalist. Nice was bright, educated, energetic, productive, and she ran for many years on her own steam with little in the way of external rewards. She was utterly absorbed with birds and, after a very long time, she won the modest recognition that signifies success in the ornithological world.

As the story unfolds, we see Margaret Morse Nice grow from an independent, nature-centered child to a passionate, careful scientist whose path to acceptance and recognition from the ornithological community was long and occasionally painful. Even today she is often described in conversation as a housewife who had an irrepressible urge to publish. A woman so driven that she wrote scientific papers on her own growing children, she disliked the implication that her contributions were surprising—after all, she had a Master's Degree in Zoology. The fact that she was married and had children must be regarded as unusual in an historical context, because only 2 of 20 pioneering women naturalists portrayed by Marcia Myers Bonta (1991) had families. But the truly amazing thing about Margaret Morse Nice is that she became a major figure in Ornithology without any of the traditional academic support systems most of us depend upon. She conducted a pioneering study of color-banded Song Sparrows, *Melospiza melodia*, in her own backyard and set the standard for a plethora of long-term studies that were to follow. How many of the young swarm of color-banders know that Nice was the first to use colored leg bands in a significant way and that she fashioned them in boiling water from celluloid dolls and baby rattles?

Margaret Morse Nice was not without superhuman tendencies, for she managed to publish 18 papers on child development, raise five daughters, contribute actively to her community, write numerous papers on birds, conduct a landmark field study of Song Sparrows, and publish several books, including two Song Sparrow monographs and two popular books.

Dunlap describes one moment—an epiphany—when Margaret decided that she had to practice Ornithology to have a satisfying life. I wondered though—didn't she occasionally waffle under the weight of what must have been a precarious balancing act? After digging for evidence of this waffling and finding her comments on the misfortunes of gifted women who "have to be cooks, cleaning women, and nursemaids" (Trautman 1977), I decided that waffling is a distinctly modern self-indulgence and that Nice was steadfastly driven, which probably explains her remarkable productivity and her prominence among a rare breed of women who were naturalists in the early part of this century. I also decided that oversimplification of the tradeoffs of adult life is probably appropriate for the age group the book is targeting, which seems to be 8 to 10 year-olds.

Dunlap's biography of Nice is more narrative than story, so it may miss youngsters who like to be drawn into the world of a biography. It prompted me to read more, to search for a degree of depth more appropriate for adults, but this may reflect my own preference for a biography written in the introspective style of Anne Lamott, replete with neurotic humor, evocative detail, and consumption of large quantities of alcohol. So I put *Birds in the Bushes* to the test with two nonrandomly selected children, ages 4 and 7. We read half the book one evening and the next day they both had questions. "What happened to Margaret's quail?" the youngest asked. Both children used Margaret's first name, so I think they felt they had gotten to know her. And they wanted to continue, even though there are few pictures—eight in all—done in black ink wash, old-fashioned in appearance. Although the children liked the book, I am left with the nagging feeling that Dunlap missed something, for I did not get a sense of what life was like in the Nice household. How the children would have enjoyed descriptions of the wild birds that flew about Margaret's house and landed on her guests' dinner plates (Trautman 1977). These missing vignettes are important, because the small details of life often provide the greatest insight into what is uniquely inspirational about a person. I cannot imagine having written this book without exploring the courage it took to be the only woman presenting at the 38th meeting of the American Ornithologists' Union (1930).

As children's biographies go, this one is light on suspense and romance, factors that figure prominently in literature for elementary school children. The tragic loss of Margaret's daughter is played down, but this seems a good idea given Nice's own dignified and brief description of this tragedy in her own writings (Nice

1979, p. 91). The one overt sign of romance is brief and surrounds Margaret's courtship with her husband, Blaine. But a deeper sort of romance is visible throughout the book—that of the long married who take time out from their own goals to support the goals of their partners. Blaine's taking time off from his academic career to travel through Oklahoma censusing birds must have been unusual at the time—and still would be. What child wouldn't like to imagine a family that goes camping for weeks on end? Although I think a richer, more personified biography could be written about this remarkable woman, this is a sweet book portraying the life of one who was considered by many, including Konrad Lorenz, to be the foundress of avian ethology (Bonta 1991). Disney Studios probably won't pick up on this story, but Margaret Morse Nice's biography provides a lofty model of dedication to nature, to humanity, to family, and to leading a passionate life.—JANIS L. DICKINSON, Hastings Natural History Reservation, 38601 E. Carmel Valley Road, Carmel Valley, CA 93924, e-mail: sialia@uclink2.berkeley.edu

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Raptors in Human Landscapes: Adaptations to Built and Cultivated Environments.—David M. Bird, Daniel E. Varland, and Juan J. Negro [eds]. 1996. Academic Press, London. xx + 396 pp., numerous black-and-white figures and tables. ISBN 0-12-100130-X. \$72.00 (cloth).

Because there are numerous examples of raptor population declines from human-induced environmental perturbations, this group of birds is commonly depicted as a sensitive barometer of human impacts. The papers presented in this volume provide encouraging evidence that not all raptors are wilderness species that disappear in human-altered landscapes. In fact, this book provides data suggesting that at least 30 raptor species worldwide are resilient to human alterations, and a subset of this group may actually benefit from those altered environments.

This volume is the proceedings of a symposium held at the 1993 Raptor Research Foundation meeting in Charlotte, North Carolina. All papers submitted for publication were peer-reviewed, resulting in 34 papers by 75 contributors (including the editors). It was clearly an international symposium, with 28% of the contributors residing outside of the U.S.A., and 13 of the 34 (38.2%) chapters focusing on non-U.S. raptor populations in human-altered landscapes. However, only 6.7% of the contributors were female, which is surprisingly low given the large number of female raptor biologists.

The book is organized into five sections: (1) Raptors in Urban Landscapes (9 chapters), (2) Raptors and Artificial Nests (8 chapters), (3) Raptors in Cultivated

Landscapes (9 chapters), (4) Raptors in Industrial Landscapes (4 chapters), and (5) a miscellaneous section titled Raptors at Large (4 chapters). The Preface contains excellent, short summaries of each chapter and introductory material about the justification for the symposium and book. To condense a lot of material into less than 400 pages and thus reduce costs, the editors employed some excellent space-saving tools including restricting author addresses to a List of Contributors and listing scientific names in an appendix. I assume they also encouraged contributors to be brief because the chapters are short. Twenty-one (61.7%) of the chapters are 9 pages or less in length and none of the papers exceed 19 pages.

As indicated by the Section titles, chapters summarize responses of raptors to a wide variety of human disturbances. The focus of most papers is a description of patterns of adaptability observed by the contributors in their region of interest. The strongest evidence for adaptation by some species was: (1) increased reproductive success in human-altered environments as compared to populations in less altered environments (e.g., Chapters 5 and 20 by Rosenfield et al. and Newton, respectively), and (2) nesting population increases associated with man-made environments (e.g., Chapters 12, 13, and 27 by Henny and Kaiser, Ewins, and Bryan et al., respectively). Several papers evaluate the landscape factors influencing raptor use of altered environments (e.g., Chapters 19 and 34 by Smallwood et al. and Preston and Beane, respectively), and many papers just document current use by raptors of altered environments (e.g., Chapters 1, 2, and 30 by Cade et al., Bell et al., and Satheesan, respectively) which is the weakest evidence of adaptation, particularly in the absence of historical data for the same area or comparisons with use patterns in less altered environments.

What causes some species to apparently benefit from human-altered environments? This is poorly understood but several authors speculate it results from greater climatic stability, more permanent sources of water, more nest sites, fewer predators and competitors, and/or increased prey populations in those landscapes (see Chapters 4, 6, and 9 by Bloom and McCrary, Parker, and Gehlbach, respectively, for good summaries of this topic). However, studies by several contributors including Tella et al. (Chapter 7), Thiollay (Chapter 24), and Erichsen et al. (Chapter 18) remind us that not all species respond positively to altered environments. Tella et al. looked at the costs and benefits of urbanization on the Lesser Kestrel (*Falco naumanni*) in southern Spain. This study is one of the few in this volume that compared demographics and causes of mortality between altered and non-altered environments. They found that although nestling predation rates were lower in urban areas, reproductive success also was lower because of higher nestling starvation rates. Their results, combined with the speculations of other contributors, suggest that only species that can efficiently exploit resources in altered environments for food, nest sites, and/or roost sites will tolerate or benefit from altered environments.

All studies in this volume are observational or review other observational studies with an exception of an excellent quasi-experiment (there are treatments and

controls but their application is not under the control of the investigator) done by Mooney and Taylor on effects of nest site buffer zones at ameliorating effects of forestry operations on nesting Wedge-tailed Eagles (*Aquila audax*) in Tasmania. In addition, although study objectives are clearly presented in most studies, I was disappointed that none of the contributors presenting new empirical data describe hypotheses they were testing about raptor adaptations to altered environments. This is probably a reflection of the paucity of information on this topic; a new field of science usually starts with a description of observations and uses these observations to develop testable hypotheses. However, lack of experimentation and hypothesis testing also is unfortunately a common trait of studies in raptor biology. Hopefully the information in this book will become the basis for developing testable predictions about life history characteristics and environmental factors influencing the ability of raptor species to adapt to human-altered landscapes (see Gehlbach's conceptual model in Chapter 9 as an example). Future research in this area should then focus on testing those predictions with a combination of well-designed, observational and experimental studies rather than continuing to describe patterns.

In summary, this book is an excellent synthesis of our current knowledge on the ability of raptors to adjust to the numerous human modifications of our global landscape. I agree with the editors that it is the first book of its kind on this subject. It belongs in the library of anyone interested in the field of urban wildlife ecology and management.—PATRICIA L. KENNEDY, Department of Fishery and Wildlife Biology and Graduate Degree Program in Ecology, Colorado State University, Ft. Collins, Colorado 80523, e-mail: patk@cnr.colostate.edu

The Snow Geese of La Perouse Bay: Natural Selection in the Wild.—Fred Cooke, Robert F. Rockwell, and David B. Lank. 1995. Oxford University Press, New York. xv + 297 pp., 33 tables, 9 black and white plates, 58 text figures. ISBN 0-19-854064-7. \$65.00 (cloth).

It will be hard for anyone with an eclectic book collection to file this one. True to its billing on the jacket, it's all at once descriptive natural history, genetics, behavior, evolution, and ecology. I detected a not-too-light wash of wildlife management, as well.

There probably are few ornithologists, evolutionary ecologists, and wildlife managers who do not know about the long-term studies of Snow Geese (*Anser caerulescens caerulescens*) at La Perouse Bay (LPB)—begun by Cooke to study the genetics of plumage color variation, but in no small way influenced by Graham Cooch and Hugh Boyd. Their foresight and perseverance, together with the help of many undergraduate and graduate students, postdoctoral fellows, and others (the acknowledgments in the preface would choke a horse) has resulted in one of the most important studies of the genetics and demography of any single species.

The book reports on analyses of natural selection and, where possible, microevolutionary change on a variety of fitness components of Snow Geese: timing of breeding, egg size, clutch size, body size, and sur-

vival. It is important because it adds to the scant number of long-term field studies that attempt to examine whether and how selection affects change in demographic and phenotypic attributes of populations of a particular species. Those who might think that they have kept well enough abreast of the "Snow Goose story" in the primary literature over the years, like myself, will be pleasantly surprised by the amount of new data, reanalyses, new analyses, and insights that only a synthesis that really pulls it all together in one place can produce.

Sure, some will quibble that it is unreasonable to draw inferences about the relative importance of different types of evolutionary change in populations from an unreplicated, uncontrolled study of an iteroparous species with reasonably low fecundity, but in responding ("prepondering"?) to such criticism, I found the authors' tone almost too apologetic. Others will quibble that the conclusions should be restricted to geese at LPB because the environment there may be different in important ways from Snow Goose colonies elsewhere. But the authors make a strong case that there is at least as much danger in drawing inferences from studies of short-lived, fecund organisms that may turn over a few generations during the average tenure of graduate students, and that until we take theory to the field to evaluate, we can not claim to have a general theory of evolutionary change in the wild. At any rate, with few exceptions (for example, Alisauskas [1997] grouched that a favorite hypothesis of his was overlooked), the text is laced with appropriate caveats and careful discussion of the nature of the data, assumptions, limitations, and difficulties of analyses and cautions about cause-and-effect inferences. Such balance no doubt results from the refreshing emphasis on evaluation of predictions of competing hypotheses throughout. It also provides a lot of grist for the mill of future research.

This book will help further dispel notions about the two solitudes of research and management. The authors begin by listing the advantages of studying a species about which there has been long-term interest from a wildlife management perspective, and conclude with some implications about what they have found for population management. For Snow Geese and others, this has become particularly thorny of late (Ankney 1996, Batt 1997, Brodie 1997), underscoring the need for long-term data and careful analysis of them to make informed decisions about the expected response of a population to management intervention. However, beginning with the dramatic plate in Chapter 2 to show the extent of vegetation removed by geese at LPB, readers might feel cajoled by repeated insinuations that Snow Geese are "overabundant." There is a tone of creeping advocacy in the book on that point, evident as much in what was not written as was. Short shrift is given to the notion that, if populations have increased more as a result of changed conditions in nonbreeding areas than from reductions in harvest or events on breeding areas, then a large increase in harvest would be an unlikely long-term solution. Like other kinds of "pest management," it will only address a symptom of a larger problem and not the cause of it.

The book is well-written and a reasonably easy read except in the first half, where there seems to be a particular concentration of bothersome typesetting errors (almost as if the front and back halves of the book were divided between different readers for proofing, and the front half didn't get done). There are lots of details here, so the summaries of the main points at the end of each chapter are very helpful.

Serious students (in the broad sense) of ornithology, genetics, evolution, and ecology should all read this book and, if they can afford it, put it on their shelf where they wish. I put mine with other "single-species classics" about prairie warblers (*Dendroica discolor*) and the like. I think history will record that it earned its place there.—THOMAS D. NUDDS, Department of Zoology, University of Guelph, Guelph, ON N1G 2W1, Canada.

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