

## ORNITHOLOGICAL LITERATURE

**RAPTORS IN THE MODERN WORLD** (Proceedings of the III world conference on birds of prey and owls). Edited by B.-U. Meyburg and R. D. Chancellor, illus. by F. Weick. World Working Group on Birds of Prey, Berlin, West Germany. 1989:611 pp., 64 black-and-white drawings, 273 tables, figs. and maps. \$45.00. (Order from W. W. G. B. P., 15b Bolton Gardens, London SW5 0AL, England.)—Despite a title that indicates otherwise, this book represents the proceedings of an international conference attended by 400 participants from five continents, which was held in Eilat, Israel, in March of 1987. As is typical of works of the genre, the book is loosely edited and consists of a compilation of offerings ranging from sketchy abstracts to first-rate research papers. The work is divided into nine parts: Raptors on migration and wintering grounds (19 papers), Population biology and breeding (10 papers), Biology and conservation of rare raptors (14 papers), Biology and conservation of rare owls (10 papers), Raptors in polluted environments (11 papers), Habitat analysis and census techniques (four papers), Promotion of legislation (four papers), Education in raptor conservation (10 abstracts), and Resolutions (10 resolutions passed at the conference). Information concerning the biology and conservation of raptors on six continents is included. Although several of the reports detailing the biology and status of the many “exotic” species discussed were written by indigenous authors, English is the sole language of presentation. Several of the more lengthy papers present important information on the biology of little-known species, while others suggest new insights into the mechanisms affecting the populations of more well-studied raptors. There are a number of useful papers detailing recent conservation efforts. Senner and Brett, for example, offer a reasoned argument for the establishment of a registry of sites of international importance to raptors, and Krupa details the success of the Philippine Eagle (*Pithecophaga jefferyi*) “adopt-a-nest” program in which natives and logging-concession workers are paid to report and then protect occupied eagle nests. Some of the presentations, however, merely summarize already published work, and others would have been better presented in a journal. Indeed, as I read through the proceedings I kept wondering why this disparate collection had not been broken up into logical subunits and published in separate issues of *The Journal of Raptor Research*.

In sum, “Raptors in the modern world” consists of a number of useful papers, some of which when read together could provide a fair overview of the current status of raptor conservation worldwide. There are minor typographical errors throughout the work, but the titled drawings by Friedhelm Weick are exquisite, and the book has an exceptionally appealing layout for a conference proceedings. Because most of the work consists of a series of detailed journal-style papers and lacks a central theme—other than raptor biology in general—I do not recommend that anyone attempt to read the book from cover-to-cover. (I doubt the editors intended the proceedings to be used as such, as they provide no introductory or summary chapters, and no index.) Although individual papers in the proceedings will be of interest to a number of researchers in the field, given its high price, only the most devout raptorophiles will want to acquire the entire work.—KEITH L. BILDSTEIN.

**NO WOMAN TENDERFOOT.** By Harriet Kofalk. Texas A&M Univ. Press, College Station, Texas. 1989:225 pp., frontispiece, 44 unnumbered text photographs. \$19.95.—The subject of this biography, identified in the subtitle “Florence Merriam Bailey, Pioneer Naturalist,” was truly a remarkable ornithologist. The bibliography of her writings, included in the book, lists more than 130 articles, a major portion of which were based on her own field work in

what was then the wild and unsettled west. Among the titles are the acclaimed "Handbook of Birds of the Western United States," published in 1902, and the monumental "Birds of New Mexico," which appeared in 1928. Her contributions were recognized by her colleagues who elected her a "Fellow" of the American Ornithologists' Union in 1929 and three years later awarded her its prestigious Brewster Medal.

Although her accomplishments and these honors (she was the first woman to receive them) would be outstanding for anyone, they were particularly noteworthy because Ms. Bailey lived at a time when most believed that women should be educated "solely for womanly purposes, 'in order to be to the man all that he needs'" (p. 9). That Ms. Bailey was subject to discrimination (as defined by present day standards) is clear. She was cited in the 1900 edition of *Who's Who in America* as an author, "the sister of C. Hart Merriam," the noted naturalist and ecologist (p. 103). Whether she reacted to such slights is not clear. The author takes pains to point out that Ms. Bailey purposely took a back seat to her husband, Vernon Bailey, a well known mammalogist, and to her brother. Although she chose to remain quietly in the background, one is tantalized by the contradictory and, by modern standards, feminist remarks that surface in her writings. In perhaps the most revealing quotation in the book, she notes (p. 51), "Like other ladies, the little feathered brides have to bear their husbands' names, however inappropriate. What injustice! Here an innocent creature with an olive-green back and yellowish breast has to go about all her days known as the black-throated blue warbler, just because that happens to describe the dress of her spouse!"

Unfortunately, this issue is not resolved in the book, nor is the contradiction directly addressed. The book details events chronologically, flitting from topic to topic without cohesion. Many worthy subjects, such as Ms. Bailey's role in fighting the use of feathers in the millinery trade and her introduction of ornithology into the public schools of Washington, D.C., go undeveloped. I searched in vain for insights into her independence and her decision to pursue a career unusual for its time and for revelations about the impact of that career and of ornithology on her life. In their place, I found rather saccharine descriptions of birds and nature as inspirations for life. Although Ms. Bailey clearly had a spiritual relationship with nature, I got the impression that to a large degree the author of this book unconsciously had projected her own feelings onto her subject. This is particularly evident in the references to scientific collecting. Ms. Bailey obviously preferred observation to collecting, which she left to others. But she understood the need for the latter and regularly made use of study skins in her writing and her teaching.

Florence Merriam Bailey was a fascinating female ornithologist. Thus, I recommend this book to everyone as an enjoyable introduction to the events of her life and her accomplishments. For an understanding of forces that shaped that life and personality and led to those accomplishments, one will have to look elsewhere.—MERCEDES S. FOSTER.

**HELPING AND COMMUNAL BREEDING IN BIRDS.** By Jerram L. Brown. Princeton Univ. Press, Princeton, New Jersey. 1987: xv + 354 pp, 62 figs., 28 tables, appendix, annotated glossary, indices by author, species and subject. \$45 cloth, \$16.50 paper.—Dr. Brown tackles a range of issues in evolutionary biology under the rubric of avian cooperative breeding. This kind of social behavior particularly challenges our understanding of evolution because individuals appear to be delaying independent breeding, or allowing their own reproductive potential to be suppressed, to behave parentally toward the offspring of others. The complexity of the issues involved, the jumbled history of different approaches to the issues, and the daunting variety of partially answered empirical questions demand the careful synthetic approach offered by Dr. Brown. It is often tempting to throw up one's hands at evolutionary

issues and the range of approaches that they require, but this book offers hope that even a broad and fundamental issue like the evolution of cooperation can be better understood.

The book is not a text, but it is a lesson in scrupulously reasoned progress in understanding a complex issue. It also provides an education in how amazingly varied birds are in their social lives. Although it appears specialized, the breadth of conceptual issues and depth of empirical testing will excite students of birds, behavioral ecology, and evolution generally. Few other books in evolutionary biology attempt such a synthesis of empiricism and theory while focusing on a central problem. Other books in behavioral ecology that deal at least partly with sociality are either more narrowly focused (often on single species), are more broad reviews without such depth of hypothesis testing, or are collections that can be disconnected and uneven. This book can be used as a guide to basic concepts for students of behavior in general, as well as a thorough reference to empirical studies and interpretation for students of communal birds in particular. In the preface, Brown describes the utility of the book as for those who have not read the extensive original literature. However, the synthetic scope of the book makes it very useful as well for those who have been reading and working in the field; everyone needs to be reminded of the communal goal of synthesis and broad understanding—the development and testing of general principles.

In 18 chapters, Brown takes the reader from a synopsis of the conceptual problem, through a broad empirical and historical review of the study of cooperative breeding, a clear primer of the basic ideas, a breakdown of component issues and clear empirical and theoretical descriptions of them, a tour of the inevitably revealing kinks and variations on the expression of cooperation, to a synthesis of the state of our understanding and overheated disagreements. One chapter, "Elements of inclusive fitness theory for field studies," is a valuable guide for biologists thinking about fitness in societies. A chapter is devoted to the thorough empirical demonstration of the effectiveness of group action ("does helping really benefit the helped?"). A measure of Brown's seriousness about semantic problems is the lengthy justification of the term "communal" breeding in the very useful glossary. The overall structure of the book, and the conclusions sections of each chapter, communicate the author's aim to keep the issues clear and avoid the amorphousness of a summary of a large field that can be suffocating. Dr. Brown is well qualified to do this since he is one of the pioneers in synthesizing results of intensive field work and modern theory in the study of social behavior.

The development of a balanced historical perspective on both empirical and theoretical advances begins in the first chapter aptly titled "Why study helping behavior?" This beginning, including the skepticism about the conceptual importance of cooperative breeding by eminent biologists like David Lack and George Williams, encapsulates the aim of clearly setting out the goals of biologists studying cooperative breeding and identifying their conceptual roots. The lightning rod in this field, and so a focal contention in this book, is the validity of the indirect component of inclusive fitness as a guiding force in the evolution of cooperation. However fundamental this premise may be, and however important its testing, demonstrating the necessity of including indirect selection in an explanation of a system of cooperative breeding would not be itself an explanation. Brown shows that understanding the ecological and demographic forces impinging on individuals is obviously critical to understanding *how* natural selection could favor cooperative traits in an evolutionary game governed by ecological constraints and scored by the tally of genetic copies in future generations. While the heat of the arguments in the literature (and some contentiousness in the book) is generated by the "kin-selection" controversy, the book is an invigorating tour of the arsenal necessary, including especially old-fashioned, careful, determined field work, to resolve such fundamental evolutionary issues.

This book takes on a field that has grown explosively in the last decade. Many long-term studies of ecology and demography of avian populations focus on cooperatively breeding

species. The reason for this growth is that cooperative breeding highlights with particular clarity the potential benefits and drawbacks of sociality to biological fitness. Understanding the evolution of cooperation (quickly defined here as accomplishment facilitated by collaboration) is a fundamental challenge for evolutionary biology. Often only a few of the behavioral parents in communal groups appear to be the genetic parents of young being cared for, raising the question of why nonbreeding collaborators should accept a "helping" role in which reproduction is deferred rather than leave the group to attempt breeding. This kind of breeding arrangement is widespread among tropical birds, although that was not appreciated until the last few decades. Many of the apparently nonbreeding "helpers" (so named by Skutch) are offspring of the adults whose young they are helping to raise; this puts the issue of cooperative breeding in the larger context of understanding conditions under which delayed breeding and philopatry might be favored by natural selection.

One of the book's main accomplishments, really to be found nowhere else, is its broad portrayal of the diverse facts of cooperative breeding—the varied expressions among birds of cooperativeness (including polyandry, polygyny and joint nesting) theoretically united by the potential for indirect selection and delayed direct benefits through communal care of young. Brown develops a classification scheme for 222 species of cooperative birds (in one table!) and his survey of the geographic and taxonomic distribution of known cooperative breeding reveals mainly a trend for greater frequency where permanent residency on territories is common (reinforcing the link to the potential benefits of philopatry) and possibly a link to high survival among small birds in open tropical and subtropical habitats. Later chapters reveal important variation in fundamentals like the genetic constitution of social groups and the frequency of territorial inheritance. Although the details of social behavior, the number of studies presented, and undercurrents of internecine quarrels can weigh on the reader, it is important for students of social evolution to appreciate how varied a seemingly specific phenomenon like cooperative breeding can be; it becomes clear how vain the hope is for a single relatively simple explanation. As Brown says, ". . . when the different types of helper systems are recognized, some of the controversies that have arisen out of semantic confusion are dissipated and real progress on substantive issues is made possible." The book is a benchmark in this progress.—KERRY N. RABENOLD.

**SOUTH AMERICAN BIRDS—A PHOTOGRAPHIC AID TO IDENTIFICATION.** By John S. Dunning with collaboration of Robert S. Ridgely. Harrowood Books, Newton Square, Pennsylvania. 1987:351 pp., 1410 color photographs, 2700+ range maps, 4 endpaper maps. \$47.50 cloth, \$35.00 paper.—This book is a much expanded and improved version of Dunning's 1982 publication, "Land Birds of South America." The new book has approximately 40% more color photos. Although the pictures are smaller than formerly, each now accompanies the pertinent text rather than being grouped on a facing page. The range maps are shaded in color. Best among the editorial improvements is the fact that species accounts (which have been rewritten) are no longer divided into two sections, those with photos and those without. Now plumage descriptions and range maps for all covered species are in one list, whether or not illustrated by a photograph.

Families are mostly listed in accordance with accepted taxonomic practice, the first species being a rhea and the last a finch. However, consistent with Dunning's strong belief that bird identification could be eased for beginners by emphasizing factors other than taxonomy, species and genera are grouped by size and/or habitat. This frequently forces the more experienced birder to use the index to find something he might otherwise turn to directly. Curassows and guans, as "large land birds," come right after rheas, while crakes, dippers, and some sandpipers and plovers are grouped as "small water-edge birds."

Although this book does not deal with pelagic birds or those only likely to be found along ocean beaches, its coverage of more than 90% of South America's almost 3000 species makes it the closest thing to a South American field guide yet available. The descriptions are much easier to use than those in Meyer de Schauensee's "A Guide to the Birds of South America." While the greater detail of Meyer de Schauensee is important, Dunning's book is now an indispensable supplement or it can stand alone. This supremacy is likely to last for some time, for the concise format of Dunning's work will appeal to travelers birding throughout South America even after the massive four volume "The Birds of South America" by Robert Ridgely and Guy Tudor is complete. Just the already available first volume, on Oscines, of this remarkable, high quality set lacks the portability of Dunning's book, which also contains illustrations of a few species not portrayed in the Ridgely/Tudor work.

John Dunning's outstanding bird photography is on display here, although the reproductions, in the review copy at least, do not always do it justice. Some of the pictures are too dark to be really useful and were better in the earlier "South American Land Birds." From my own experience with Dunning's slides, I know that the high quality of his originals is not reflected in some of these illustrations. While this reduces the utility and beauty of the book, it does not seriously compromise its value to amateurs or professionals requiring identification aids for a wide range of species for which no other illustrations exist.

John Dunning devoted the last twenty-five years of his life to obtaining and making available to the public top quality photographs of as many of the bird species of South America as he could find. About 30,000 of his slides are now on deposit with Visual Resources for Ornithology (VIREO), a branch of the Academy of Natural Sciences of Philadelphia. This book contains the cream of the crop. Unfortunately, John did not survive to see the happy result, but the book is a proper tribute to the unlimited time, money, and effort he and his wife, Harriet, put into making it a reality.—WILLIAM BELTON.

**THE SPARROWS: A STUDY OF THE GENUS *PASSER*.** By J. Denis Summers-Smith, illus. by Robert Gillmor. T. & A. D. Poyser, Ltd., Staffordshire, England; distributed in U.S. by Buteo Books, P.O. Box 481, Vermillion, SD. 1988:342 pp., 8 color plates, 62 black-and-white drawings, 114 numbered maps, graphs, other black-and-white figs., 50 tables. \$57.50.— This admirable book is the culmination of a 40-year-long study of the House Sparrow (*Passer domesticus*) and related species. It is a meticulous evolutionary work and the author may justifiably be proud of it. The monograph also offers a wealth of ideas for further work on an interesting and convenient study subject.

The bulk of the book (252 pp.) treats in detail each of the 20 species that Summers-Smith includes in *Passer*. In the first chapter, the five Afrotropical gray-headed species are grouped together, but thereafter each species is discussed in a chapter of its own. These chapters begin with a nomenclature, followed by sections on plumages, biometrics, distribution, habitat, behavior, breeding biology, survival data, molt, voice, and food. These sections vary a good deal in length, depending on how much is known about each species. The author has had field experience with all except the Saxaul Sparrow (*P. ammodendri*) which is scattered in six disjunct populations across physically and politically remote parts of central Asia; his personal knowledge of the sparrows is apparent throughout the book, as is his thorough coverage of the literature (21 pages of references contain about 750 titles) and his wide correspondence with observers within the birds' ranges. The final three chapters discuss characteristics and relationships, origins and evolution, and systematics.

The book ends with two appendices (a seven-page synonymy of *Passer* species and sub-

species and a two-page gazeteer of place names not found in two standard atlases), the references, and a six-page index.

I found the last chapters to be especially interesting, with detailed discussions of why this is such an adaptable, successful, and dynamic group of birds. There is much to be admired in a species such as *P. domesticus*, the “street ragamuffin” that thrives in close associations with man to the degree that it can breed from the tropics to intensely cold climates (some sparrows spend their entire lives in cattle barns in northern Norway, others have survived winters in Churchill, Manitoba, by living in a grain elevator) and that can capitalize on unusual food sources (sparrows are resident in London’s Heathrow Airport, feeding on cafeteria scraps, and others have been seen feeding 80 stories up on the observation floor of New York City’s Empire State Building, *at night*). Perhaps the most famous story of the House Sparrow’s remarkable adaptability is based on the birds that lived in a coal mine, 640 m underground, for several years—feeding on miners’ handouts and even breeding successfully. Yet this is a species that was early shown to be strongly responsive to photoperiodism!

As the author points out, “divergence within the genus as a whole has been rather small” (p. 253), but perhaps because of this, the birds offer excellent, clear examples of finely tuned adaptation, competition, and interrelationships in their zones of overlap. Summers-Smith argues that *P. domesticus* evolved in the Palearctic and *P. montanus* (the [Eurasian] Tree Sparrow) in the Orient; then they spread into sympatry in the Old World as well as being introduced in recent history into both North America and Australia where their interactions in the zones of overlap are fascinatingly different. Other new sympatries are also discussed, as in southern Africa where *P. domesticus* has been successfully introduced into Cape Sparrow (*P. melanurus*) range but is largely unable to displace the Cape Sparrow in urban areas. The Willow (or Spanish) Sparrow (*P. hispaniolensis*) can live sympatrically with *P. domesticus* in Europe by being an opportunistic, nomadic breeder. In Mediterranean-type climates, *P. hispaniolensis* may breed in one area early in the short, lush spring, when resources are greater than resident *P. domesticus* can exploit. Then *P. hispaniolensis* moves (usually north) for later broods, leaving the long, drier summer to sedentary *P. domesticus*. Yet *P. hispaniolensis* is sedentary and even urban on those islands (e.g., Madeira, the Canaries) where *P. domesticus* and *P. montanus* do not occur.

Summers-Smith offers a well-reasoned and convincingly argued chapter on the sparrows’ origins and evolution. He believes that *Passer* originated in the Afrotropical region, and that it has probably attained much of its present distribution in close association with man and his livestock. The author presents a wealth of supporting evidence from paleontology, climatology, and archeology—an unusual addition to an evolutionary ornithology discussion, but possible here because of the sparrows’ close association with man.

The final chapter reviews the many morphological, chemical, behavioral, and other taxonomic characters that have been studied in *Passer* species and presents what I think is a reasonable classification for the group.

While reading this book, my only frowns came from the author’s use of English names, which I found confusing at times. I grant that the taxonomy and systematics of this genus are difficult, and perhaps Summers-Smith has done as good a job on them as possible, but I found his overreliance on English names jarring, and his emphasis (including vernacular names) on subspecies rather old-fashioned. If *P. motitensis* is the “Rufous Sparrow,” even though it has five discrete populations, and three are allopatric or parapatric (*P. m. rufocinctus*, *shelleyi*, and *cordofanicus*) and given separate names (“Kenya Rufous,” “White Nile Rufous,” and “Kordofan Rufous” sparrows), why do the ssp. *P. m. motitensis*, *benguellensis*, and *subsolanus*, which intergrade in southern Africa, all get lumped as “Great Sparrow”? The Cape Verde Rufous Sparrow (*P. tagoensis*) retains full species status and is called the

"Iago Sparrow." I also had a difficult time with "Willow" Sparrow instead of the widely accepted and natural "Spanish" Sparrow for *P. hispaniolensis*; if the English name is to be replaced because the bird is not as common in its type locality of Spain as it is elsewhere, why is *P. flaveolus* called the "Pegu Sparrow" after its type locality in Burma, when it has a broad range over Southeast Asia and might best retain the descriptive, if poetic, "Plain-backed" Sparrow?

My nomenclatorial quibblings aside, this is an *excellent* book. It is packed with authoritative and detailed information, is outstandingly well written, contains a minimum of jargon, and is almost impeccably literate. The author's style is a joy to read—a statement that few scientific book reviewers can make. This is also a particularly attractive book, neatly done, well designed, and superbly illustrated. Robert Gillmor's color plates are good, but his 62 black-and-white drawings of the birds in various postures and "behaviors," of typical and odd nest sites, and of habitat vignettes make turning the pages a pleasure. The care that went into the writing, illustrating, and production of this book is evidenced by my finding only a single minor error: the town of Modoc, Illinois, is incorrectly spelled on a range map of *P. montanus* but is given correctly in the text. By current market standards, the book is moderately priced. I hope that *The Sparrows* finds the wide readership it deserves.—MARY H. CLENCH.

AVIFAUNE DU NIGER: ÉTAT DES CONNAISSANCES EN 1986. By P. Giraudoux, R. Degauquier, P. J. Jones, J. Weigel, and P. Isenmann. *Malimbus*, Volume 10, Number 1, June 1988. The West African Ornithological Society. 140 pp., 2 maps, figs., 1 table, 2 appendices. £5 + £1 postage or £2 airmail (Bankers order payable to West African Ornithological Society.)—This work, in French, is a special issue of *Malimbus*. It consists of a review of the bird fauna of Niger which occupies nearly 1.2 million km<sup>2</sup> in West Africa. The northern part of the country, which comprises about 75% of the area, falls in the desert zone. The authors have recognized and described briefly nine ecological zones that are used throughout the book to define the distribution of each species. A very short history of ornithological work in Niger is provided and one is surprised at how little has appeared in print, as indicated by the short bibliography of 52 titles. Two of the references mentioned in the introduction are not listed in the bibliography. The annotated list makes up the major part of the book and the species sequence is that of W. Serle and G. J. Morel ("A Field Guide to the Birds of West Africa." Collins, London, 1977). For each species (473) the Latin, French, and English names are given along with the status of the species in Niger (Palearctic migrant, resident, African migrant). The main treatment deals with distribution, including migration dates where applicable. It is divided according to the nine ecological zones described in the introduction and often includes a general summary at the end of each species. In this part, the authors summarize and explain briefly the known changes in distribution and discuss the general status of the species, as well as population trends. The conclusion is interesting in that the authors give a table indicating the origin of the species arranged according to the nine ecological zones they have recognized. They conclude that little is known about birds in Niger and invite whoever travels in this part of Africa to submit their observations to improve the basic ornithological information of this rich but poorly known avifauna. The authors must be congratulated for having compiled the available information and having assembled it in a valuable publication. It is well done and I am sure that it will be useful to anyone travelling in Niger or to whoever needs information about the birds of that country. Such a book should encourage anyone watching birds in this part of Africa to record observations and submit them to the authors.—HENRI OUELLET.

**THE BIRDS OF GHANA, AN ANNOTATED CHECK-LIST.** By Llewellyn Grimes, British Ornithologists' Union, % British Museum (Natural History), sub-department of Ornithology, Tring, Herts HP23 6AP, England. 1987:276 pp., 11 tables, 12 figs., 9 appendices, and 16 habitat photographs. £16.00 UK, £18.00 overseas (add £3.00 for non-sterling payment).— This monograph is No. 9 in the important series of avifaunal check-lists published by the British Ornithologists' Union for various areas of the globe. The regions covered are distant places often in the former and/or present sphere of British influence, and one wonders if North America might be next? The present volume joins Gambia and Nigeria in West African coverage, and Sierra Leone will follow.

Lew Grimes has done splendidly in detailing the knowledge of Ghanaian ornithology and in analyzing and interpreting avifaunal trends and patterns there. This last aspect, presented in tables, appendices, and the Introduction, makes the publication more than an annotated check-list. Nevertheless, the bulk of the book is devoted to short species accounts giving relative abundance, status, habitat, and distribution for each of the 721 bird species found in Ghana. Breeding information is stated for resident birds if known (otherwise, breeding records from other countries in West Africa are presented). The distribution data are documented by literature citations and by names of observers when field notes are the sources of information.

The Introduction is well done and includes sections on political history, ornithological history, geology and topography, climate, vegetational zones, avian breeding patterns, and a comparison of Nigerian and Ghanaian avifaunas. The sections on ornithological history, climate, vegetation, avian breeding and migration are especially informative. The history of ornithology in Ghana starts with a Dutch citizen in 1705 and is traced through a parade of participants, all expatriates, into 1986. Not two or four, but six seasons mark the Ghanaian year, and except for the dry region along the southeastern coast, the coastal third of Ghana is moist forest, the interior is dry woodland and savanna. The various subdivisions of these vegetational zones are carefully described and also shown in photographs. However, I was disappointed not to find a vegetational map of the whole country comparable to the one shown for topography.

The intercontinental migrants wintering or passing through Ghana are called Palearctic species after the region where they nest. These same kinds of long distance migrants are usually named Neotropical migrants on our side of the Atlantic, thus emphasizing the over-wintering location. This difference in terminology probably should be resolved. Forty-six percent of the 229 migrants in Ghana show only intra-African as opposed to intercontinental movements.

Although I understand the reason for naming the observers responsible for bird records reported in the text, I question whether it is necessary. Unlike the literature citations for records included, the primary sources for the formerly unpublished sight records cannot be consulted into perpetuity. Therefore, the book itself should serve as the fundamental source of these bits of information, not the original observers who eventually will depart from our midst. (The only major mistake I noticed was that the legend for Figure 5 on page 24 should have named Table 4, not Table 3. It is stated correctly on page 7.)—DOUGLAS A. JAMES.

**BIRDS OF NORTH AMERICA, WESTERN REGION.** By John Bull and Edith Bull. Illustrations by James Coe. Macmillan Field Guides, Collier Books, Macmillan Publishing Company, New York, New York. 1989:144 pp., 54 color plates. \$12.95 (paperback).— This little book, subtitled "A Quick Identification Guide for All Bird-Watchers," clearly demonstrates the faith of publishing houses that books on birds will sell. Why another field guide? Actually



there is a niche for an inexpensive book that identifies the common birds for the person casually interested in them, and both the authors and the artist have done a competent job of filling that niche. Some 340 of the "most common and conspicuous" birds of the western United States are covered in standard field guide format.

The area covered lies from the eastern borders of the tier of states from North Dakota to Texas, but most of the southern Arizona and southern Texas specialities are omitted. In general I found the selection of species to be somewhat puzzling. Obviously some of the more difficult species have been omitted, but other omissions are less understandable.

For each species the text is a few lines emphasizing identification clues but with a brief statement about expected habitat and a brief outline of the range. The arrangement of species is by color for the passerines and by family group for the non-passerines. The identification comments are adequate for most species but are too brief for some. Unlike other guides of this genre the females of dimorphic species are discussed, but immature plumages usually are not. There is no mention of vocalizations or their use in identification.

On the whole the figures, which are nearer being portraits than simple identification sketches, are well done. For some species there are two figures, but most have only one. Many of the shorebirds do have both a summer and winter plumage figured, but most of the gulls have only the definitive plumage. The illustrations of such toughies as the flycatchers, spotted thrushes and vireos do not greatly help in identification, but the textual clues supplement these. In general the color reproduction leaves much to be desired. For example, the Northern Cardinal (*Cardinalis cardinalis*), Summer Tanager (*Piranga rubra*), Vermilion Flycatcher (*Pyrocephalus rubinus*), House Finch (*Carpodacus mexicanus*), and Purple Finch (*C. purpureus*) are all shown in the same color of red. The blues are somewhat better but subtleties of shade are lacking.

There is a supplemental text chapter which elaborates on the material given in the limited space opposite the figures. There is also a chapter on attracting birds with a list of food plants and hummingbird flowers, as well as standard directions for winter feeding. A brief appendix discusses optical equipment.

In summary this little book will do a fine job of introducing birds to the beginner, but most beginners will soon outgrow it. There is also a companion volume for eastern birds which was never submitted for review.—GEORGE A. HALL.

#### BRIEFLY NOTED

The following publications are available from the Publications Unit, U.S. Fish and Wildlife Service, Room 130, Arlington Square Building, Washington, D.C. 20240.

TECHNIQUES FOR SHIPBOARD SURVEYS OF MARINE BIRDS. By Patrick J. Gould and Douglas J. Forsell. U.S. Fish and Wildlife Service Technical Report 25, 1989:22 pp.—G.A.H.

PROGRAM CONTRAST. A GENERAL PROGRAM FOR THE ANALYSIS OF SEVERAL SURVIVAL OR RECOVERY RATE ESTIMATES. By James E. Hines and John R. Sauer. U.S. Fish and Wildlife Service Technical Report 24, 1989:7 pp.—G.A.H.