

REVIEWS

EDITED BY M. ROSS LEIN AND BRUCE M. BEEHLER

The following reviews express the opinions of the individual reviewers regarding the strengths, weaknesses, and value of the books they review. As such, they are subjective evaluations and do not necessarily reflect the opinions of the editors or any official policy of the AOU.—Eds.

Bobwhites in the Rio Grande Plain of Texas.—Val W. Lehmann. 1984. College Station, Texas A&M University Press. xv + 371 pp., numerous drawings and a painting by Nancy McGowan. ISBN 0-89096-186-7. \$30.00.—This volume has three major sections: life history, management considerations, and management implications. Interestingly, the implications section is more extensive than the considerations section, and obviously is strongly influenced by the author's personal experiences and biases. Lehmann wrote this section more for the landowner than for the game manager. All three sections consist of series of short chapters that incorporate so much detail that many of them read almost like pages from a diary. The detailed text is accompanied by numerous tables, and by many fine photographs, taken over a 40-year span, that clearly illustrate points in the text.

Lehmann uses many sources for comparison, but none as much as the work of Stoddard (1931; *The bobwhite quail: its habits, preservation and increase*; New York, Chas. Scribner's Sons). Although Lehmann often finds his data in agreement with Stoddard's work, he is quick to point out areas of disagreement such as in the function of the "bob-white" call. Lehmann aptly demonstrates that this call must have a number of functions beyond that of mate advertisement as suggested by Stoddard.

Overall, I would assess this volume as "thorough" in covering the subject. Even though Lehmann emphasizes the Rio Grande plains region of Texas, he draws upon material from many other parts of the Lone Star state. Though the author's self-stated goal is management of the Northern Bobwhite (*Colinus virginianus*), this volume also is a good life history of the species.

Technically, the book is well-done, as I have come to expect from this university press. I found no typographical errors and the layout deserves commendation.

One could call this volume one man's account of his lifelong "love affair" with the Northern Bobwhite. That would not be inaccurate, for Lehmann does recount his nearly 50 years of experiences with the species over a relatively small portion of the entire distribution of this popular game bird. However, it certainly would be misleading because Lehmann also incorporates many data from other sources and relates his work to other published studies. Certainly, his personal viewpoint permeates the work, and one may not always agree with his interpretations. Nonethe-

less, someone interested in the biology and management of the Northern Bobwhite, especially in the more arid portions of its range, should become familiar with this volume. This book will become an invaluable source for the landowner in Texas who has an interest in management. This book also deserves a place on the bookshelf of the interested game manager or quail biologist; certainly it deserves to share a place with Stoddard's book in the university library.—KEITH A. ARNOLD.

Shorebirds: An Identification Guide to the Waders of the World.—Peter Hayman, John Marchant, and Tony Prater. 1986. Boston, Massachusetts, Houghton Mifflin Company. 412 pp., 88 color plates, more than 200 range maps, numerous text figures. ISBN 0-395-37903-2. \$34.00.—Shorebirds, as a group, are the most international of all birds. Some writers might nominate the seabirds instead; but true seabirds are no more than rumors in landlocked countries like Chad or Czechoslovakia, where migrant waders touch down regularly. Because so many shorebirds make major migrations over land and sea, they can produce major surprises. That little curlew in a California field could, in fact, be a Little Curlew—even though that species had never been found before in the New World. That odd sandpiper on a Massachusetts beach could, in fact, be a Cox's Sandpiper—whatever *that* is. Many of the species among the shorebirds could turn up practically anywhere on the planet.

Around the globe, shorebirds are drawing increased attention as indicators of environmental quality in littoral zones. Census efforts are being systematized in many areas. The fact that many species can be aged in the field is making it possible for census results to track important aspects of population dynamics. But such fieldwork requires detailed, accurate information on field identification. The ideal solution would be a well-done guide to the shorebirds of the world.

Fortunately, such a guide exists. The artist/author team of Hayman, Marchant, and Prater has done an extraordinary job of producing "Shorebirds: An Identification Guide to the Waders of the World." In my opinion, this is the most thorough and accurate bird identification guide ever published.

In many ways, it is a direct descendant of "Guide to the Identification and Ageing of Holarctic Waders"

by Prater, Marchant, and Vuorinen, published in 1977 by the British Trust for Ornithology. Even though that slim volume was aimed primarily at banders, it touched off a revolution among North American field observers: for most, it was the first serious information they had seen on plumage criteria for aging. As a result, over the last decade or so we have learned a tremendous amount about the timing of movement of different age groups. "Shorebirds," with its wider appeal, should extend this growth of knowledge.

Accuracy in illustration is essential in any identification guide, and here the book succeeds brilliantly. Peter Hayman's remarkable concern for accuracy is a world away from the slapdash Singer/Heinzel school of bird illustration. There was no guesswork in Hayman's approach: every figure was based on some 30 to 50 measurements of specimens. Every species in the book is illustrated to scale (although the great size range among shorebirds required two scales for flying birds and two for standing birds). The resulting comparability of sizes is admirable, but the high degree of accuracy in the shapes of the birds is more useful for field identification.

Not all aspects of shape can be revealed by measurements of dead birds, of course. For a few odd species (such as *Phegornis* and *Peltohyas*) I found that the illustrations did not match my impressions of the birds in the field. Also, for a few species, head-pattern details important to identification are not depicted with complete success. For example, some important facial differences for Long-toed Stint vs. Least Sandpiper, and for Western vs. Semipalmated sandpipers, are described in the text but not pictured. (As any bird illustrator knows, facial expression is exceedingly difficult to capture.) Generally, however, the birds look stunningly realistic in every detail.

The work of the authors is no less impressive. The text makes it clear that this is entirely an identification guide—other aspects of shorebird biology are noted only very briefly in a paragraph of "Habits" in each species account. But within its restricted aim, it is extremely thorough. Every detail that could be of use in fieldwork is included. Geographic variation, and criteria for aging and sexing, are given special prominence. The writing is clear and very concise. In a few cases, as in some of the voice descriptions, the writing is almost too concise: it would not have hurt for Marchant and Prater to be a little more expansive about tone quality and vocal variations. But in general, the text succeeds in presenting "the whole truth and nothing but the truth."

Despite the Houghton Mifflin imprint, this is very much a British publication, apparently not Americanized at all. After the standard Roger Peterson foreword, the word "shorebirds" is abandoned altogether in favor of the British term "waders," and the names and taxonomy are largely British. One transatlantic difference in approach is revealed by the section treating the discovery of rarities. Emphasizing the need

for documentation, the authors recommend taking notes and calling in other observers, but there is no mention of photography. Certainly in North America most rare shorebirds found today are photographed, and the photographs preserved in collections.

Bird identification maniacs reviewing bird guides today seem always to include long lists of errors they have noticed. I'm not sure what purpose this serves, besides giving the reviewer an ego boost. But those who wish to carry on that tradition with "Shorebirds" will face a challenge: actual errors in this volume are very few. I am not exaggerating when I say this is the most thorough and accurate bird identification guide ever published. It will be indispensable for serious field observers anywhere in the world, and a valuable reference for anyone involved in wetlands management or conservation.—KENN KAUFMAN.

Paleognathous Birds From the Early Tertiary of the Northern Hemisphere.—Peter W. Houde. 1988.

Cambridge, Massachusetts, Nuttall Ornithological Club Publ. No. 22. vii + 148 pp., 41 text figures. \$25.00.—This six-chapter work reviews the systematics of a primitive group of fossil birds from the Paleocene and Eocene of the northern hemisphere using the literature (more than 200 references cited) and a comprehensive review of original specimens. Specimens studied include some of the first avian fossils known to science (*Lithornis vulturinus* Owen, 1840) and important new material from western North America. Much of the new material is described first here, and was collected by Houde using a new collecting technique that involves acid-etching of discrete calcareous nodules. The work presents a concise review of the literature concerning paleognathous birds (including ratites), a group defined by more than palatal anatomy and for which the fossil record has been extended geographically in other recent papers by the author (Houde and Olson 1981, *Science* 214: 1236; Houde 1986, *Nature* 324: 563). The introductory review and subsequent discussion fail to note, however, that many early workers argued for the polyphyly of ratites based largely on a traditional, pre-drift view of static continents and the obvious flightlessness of the species concerned, rather than an objective assessment of morphology. Also, it is regrettable that the phylogenetic analysis of ratites by Bledsoe (1988, *Ann. Carnegie Mus.* 57: 73) appeared too late to be included.

The systematic review includes useful synonymies for each taxon, clarifications of included specimens and character diagnoses. The classification proposed includes one new genus, four new species, and two new combinations. The monograph contains 27 tables and 41 figures (all but nine of which are black-and-white photographs, including seven with stereo images), which together make up almost 45% of the total

length of the book. The few drafted figures are adequate, although the typed labelling in the cladograms reproduced poorly, with the labels in figure 39 being almost illegible. Anatomical nomenclature is said (p. 14) to "generally" follow the *Nomina Anatomica Avium* standards, but that for myology clearly does not.

Placement of often fragmentary specimens into species was "conservative," in which "... specimens are lumped as much as possible ... and many small individual differences are overlooked" (p. 15). These largely phenetic assignments were strengthened, however, by mensural comparisons preceded by an assessment of univariate morphometric variation within selected modern tinamous. Diagnoses seemed adequate despite the incomplete nature of most specimens, although I found the vague phenetic comparisons with a diversity of modern groups (e.g. p. 22, "... insertion ... in most species [of lithornithiforms] resembles that of kiwis and hoatzins") and the frequent criticisms of Harrison and Walker (1977, *Tertiary Res. Spec. Paper No. 5*) to be little more than distractions. A section on behavior of the group (p. 23) seems too speculative for inclusion under "systematic paleontology"; one species (*Lithornis promiscuus*) was even named for its presumed mating system!

More fundamental are problems of terminology and practice of phylogenetic analysis. Houde uses a non-conventional cladistic terminology, one originated by (but not credited to) the late P. D. Ashlock (1971, *Syst. Zool.* 20: 63), which restricts the usual concept of monophyly to "holophyly," and includes "holophyletic" and paraphyletic groups under broadened definitions of "monophyletic" and "natural" groups. Besides breaking with established usage, this terminology is based on mistaken claims of conceptual advantages (see Wiley 1981, *Phylogenetics: the theory and practice of phylogenetic systematics*, New York, J. Wiley), but was adopted by Houde "... to do away with the dichotomous treatment of extant and extinct organisms" (p. 15). Most cladistically oriented readers, however, will be put off by apparently contradictory references to "paraphyletic clades" or the vague definition of the seemingly redundant "monophyletic clade" as "a group of organisms of common ancestry" (p. 15).

The phylogenetic analysis, which Houde admits "... is the most speculative and weakest aspect of this paper" (p. 121), was disappointing for several reasons. The method(s) used to derive the three cladograms depicted (figs. 39, 40) are not described. No measures of character congruence are given, and the criterion of parsimony presumably was not used in construction of trees and is mentioned only in reference to "proponents of the vicariance biogeography hypothesis of ratite origins" (p. 131). Surely the analysis could have been improved using any of the widely available computer algorithms for generating trees, especially those with options for accommodating miss-

ing data, storing equally parsimonious topologies, and deriving consensus trees. Eight of the 56 characters analyzed include codes for "inapplicable" states, a worrisome situation perhaps related to the level at which some are phylogenetically relevant (e.g. character 54, overall size; defining, but not applicable within, Aves). This analysis is followed by a series of largely phenetic justifications for erecting the Order Lithornithiformes, a group depicted by the author as paraphyletic (fig. 39) or polyphyletic (fig. 40). These findings are then compared with the inferences of other morphological studies (particularly those of Cracraft and Bock), as well as with trees based on (often phenetic) biochemical comparisons. This confusing mixture of cladistic and phenetic reasoning produces a classificatory scheme characteristic of the "eclectic" school of systematics (see Raikow 1985, *Curr. Ornithol.* 2: 187), a result not likely to be satisfactory to either pheneticists or cladists.

I also was troubled by the inconsistent reverence Houde accords biochemical analyses. He states optimistically that Sibley and Ahlquist "establish" the monophyly of extant ratites (p. 9), but later cites his own critiques of DNA hybridization in a discussion (p. 128) of discrepancies between his trees and those of Sibley. Houde also states (p. 134) that DNA hybridization provides "information on the relative divergence times for tinamous and ratites," indicating that he may not appreciate that his own critiques and others (e.g. Cracraft 1987, *Evol. Biol.* 21: 47) raise issues which challenge the validity of inferring even relative divergence times using phenetic techniques like DNA hybridization.

Discussions of the feeding apparatus, appendicular morphology, and possible nesting behavior of lithornithiforms, as well as a speculative digression concerning the evolution of flightlessness in kiwis, are included. The discussion of locomotion includes possible variation in flight capacity and the function of the pelvic limb in relation to femoral anatomy. The text is remarkably free of typographic errors (I could not find one). In spite of its analytical shortcomings, the work should prove useful to avian systematists (particularly paleontologists) for its mensural compilations, synonymies, and descriptions of novel collecting procedures and histological techniques as applied to fossil birds.—BRADLEY C. LIVEZEY.

Current Ornithology, volume 6.—Dennis M. Power (Ed.). 1989. New York, Plenum Press. xii + 332 pp. ISBN 0-306-43056-8. \$59.50.—This volume of six chapters continues the tradition of the series by providing a collection of probing essay reviews on major topics in ornithological research. After summarizing evidence for an excess of males over females in numerous species of monogamous, biparental birds, Breitwisch considers possible sources of female mor-

tality and the potential effects of a shortage of females on parental investment by both sexes. Butcher and Rohwer tackle the interdisciplinary problems of the evolution of avian colorfulness for communication, including the influences of sexual selection, predation, and social status. Explanations for the prevalence of bird migration at night have long been rather tenuous; Kerlinger and Moore marshal substantial evidence indicating that atmospheric conditions are primary determinants for the daily timing and altitude of migration. Lóvei provides a multifaceted review of the major migration of passerines between the Palearctic and Africa, and considers related conservation issues.

In the longest chapter (92 pp.), the Snyders present an iconoclastic yet authoritative view of the biology of the California Condor and the history of its conservation. They point out the inadequacy of certain interpretations applied in past management efforts. For example, the unsubstantiated but well-publicized claims that the species is exceptionally vulnerable to human presence inhibited research that might otherwise have helped to stem the decline of the species. In the final chapter, Waldvogel reviews theoretical and experimental evidence showing that under appropriate conditions birds use olfaction as one means of orientation.

This well-produced book should be in all institutional libraries having extensive ornithological holdings and is also worthwhile for personal libraries.—
GEORGE A. CLARK JR.

The Common Loon: Spirit of Northern Lakes.—Judith W. McIntyre. 1988. Minneapolis, Minnesota, University of Minnesota Press. x + 200 pp., 10 color plates, 40 text figures, tables, and phonodisc recording. ISBN 0-1866-1651-5. \$25.00.—Speaking authoritatively and from the perspective of an observer who has spent more than 20 years watching loons be loons, Judy McIntyre presents a comprehensive account of the natural history of the Common Loon (*Gavia immer*) in this long-awaited book. The twelve chapters cover breeding behavior, migration, social behavior and communication, morphology, fossil history, and the nature of the relationship between humans and loons. McIntyre draws heavily on her own field observations, both published and unpublished, and cites nearly 200 additional sources. As a student of loon behavior, I find particular value in the book as a desk-top reference to the loon-related literature. Lay readers will find it a significant improvement over the many picture-book publications currently available, while those with scientific interest in avian biology will find that the book fills the gap between obsolete, anecdotal references and the technical literature on loons.

This is a handsome book. The pen-and-ink illus-

trations by Anne Olson are technically superb and aesthetically beautiful. Olson has managed to capture many of the subtleties and nuances of loon behavior that are so difficult to observe in the field and nearly impossible to document in photographs. Figures are done in bold lines and frequently are embellished with one of Olson's sketches. McIntyre's thoughtful inclusion of a phonodisc recording of loon calls rounds out the book's attractive presentation. The phonodisc includes samples of the four adult call types (wail, yodel, tremolo, and hoot) as well as the first published recordings of the calls of juvenile birds. Recording quality is fair to good, although most cuts begin and end rather abruptly. Unfortunately, no information is provided on recording dates, locations, or the circumstances under which the recordings were made.

The text is well-organized and McIntyre's discussion of each subject is thorough. For example, her review of current thought on the origins of the gaviids draws together what was previously an obscure and esoteric literature on a surprisingly controversial topic. This is not a book of loon trivia, however; McIntyre carefully structures each chapter as a series of research questions to which she provides as many answers as possible. She frequently stresses the need for further research, especially studies of migration patterns and methods for reliably marking individual birds.

Communication and social behavior are covered extensively, but are discussed rather unevenly; this is especially true of the section on acoustic communication. There is a heavy emphasis on McIntyre's unpublished work in this area as well as frequent reference to a recent graduate student's thesis research. William Barklow's doctoral dissertation (1979, Tufts University) and subsequent publications (e.g. 1979, *Condor* 81: 53-64), when they are cited, are cited improperly throughout this section. This is indeed unfortunate; Barklow's detailed descriptions of the Common Loon's vocal repertoire and his fine field recordings form the basis of "Voices of the Loon," a very popular recording produced by the National Audubon Society. Readers who are familiar with "Voices of the Loon"—and there are many of them—are apt to be confused by inconsistencies in McIntyre's terminology, such as her substitution of the term "3-noted-wail" for Barklow's "Type 3 wail." As Barklow makes clear in his dissertation, both Type 2 and Type 3 wails may contain 3 notes. Another flaw in McIntyre's discussion of loon vocal behavior, albeit a flaw less likely to be detected by the book's general readership, is a failure to recognize C. Edward Miller's systematic studies of individually distinct features of the male loon's yodel call. Miller's long-term study, as reported in the 1987 Proceedings of the 3rd North American Conference on Common Loon Research and Management (North American Loon Fund, Meredith, New Hampshire), should have been cited, or McIntyre's personal communication with Miller ac-

knowledge. Finally, careful readers will notice an apparent contradiction in McIntyre's discussion of the seasonal occurrence of yodels. Citing a graduate student's work, McIntyre suggests on page 108 that yodels occur primarily during nesting, but on page 115 states that yodels are used more than other calls before nesting begins. Based on my own research, I would suggest that the statement on page 115 is correct. Yodels occur much more frequently before nesting begins. Hopefully, future printings or editions of this book will incorporate the changes necessary to provide a more balanced treatment of loon communication.

The only other noticeable error is found in the brief discussion of Jared Verner's concept of superterritoriality in Chapter 2. Verner's article (1977, *Am. Nat.* 111: 769-775) is cited incorrectly in the text and is not included in the list of references. McIntyre's recapitulation of Verner's thoughts is more interesting, however. McIntyre writes: "... birds may initially defend a larger area than they really need . . . in order to prevent other loons from nesting. . . ." The error (a Freudian slip?) is forgivable, however, because it is almost certainly a reflection of McIntyre's closeness to her subjects. Anyone who reads this book will be touched by McIntyre's overwhelming respect for loons and her insatiable drive to know more about them. Above all, McIntyre's respect for her readers is evident in the care with which this book was prepared.

In light of the current public fascination with loons, this book is sure to grace the home bookshelves of loon admirers everywhere. I recommend its acquisition by public libraries, museums, and nature centers, especially those located within the loon's breeding range. A useful addition to university library holdings, "The Common Loon: Spirit of Northern Lakes" will provide ornithologists with the most current information available on this remarkable bird and will serve as a handy reference for those desiring more technical information.—LAUREN E. WENTZ.

The Birds of New South Wales: A Working List.—Ian A. W. McAllan and Murray D. Bruce. "1988" = 1989. Turramurra, New South Wales, Biocon Research Group. vii + 103 pp., 1 map. ISBN 0-958751609. Paper, no price indicated.—This seems to be essentially a privately produced publication, attractively printed in a large format, done "in association with the New South Wales Bird Atlasers," whose objective is "to monitor the birds of New South Wales." This "working list" is intended to form "the species base upon which information is recorded and collated." In reality, however, it is a forum for the authors to express their opinions on all sorts of matters pertaining to scientific nomenclature, common names, bibliography, distribution, and history. It extends to such subjects as the origin of the surname Linnaeus and

the etymology of names of colors. Although decidedly idiosyncratic, it is of more than just local concern to ornithologists.

Those interested in birds of Oceania will want to consult this work because it covers Lord Howe Island, which is politically part of the Australian State of New South Wales. Norfolk Island is not included, however, because, although "Norfolk Islanders vote federally as part of NSW, they do not vote in state elections"—a bizarre rationalization. The authors might more candidly have said they didn't include Norfolk Island because they didn't want to. Political boundaries do not constrain the authors when they care to digress, as in their description of a new subspecies of Sarus Crane (a species that does not occur in New South Wales), which they have chosen to place in their account of what they call the Green-necked Stork (*Ephippiorhynchus australis*).

The authors have delved into a lot of ancient and recondite sources, and they incorporate the results of a wealth of recent publications as well. An example is the useful summary of the so-called literature on the near-mythical Cox's Sandpiper (*Calidris parame-lanotis*). For now, any discussion of this "species" not based on specimens is less than worthless. There is a most dissatisfying propensity of the authors to cite newspaper articles, "pers. comm.," and the like, when something more substantial is called for. The nomenclature mostly reflects uncritical acceptance of all that is new as being good, although there is a very heavy bias towards generic splitting and elevating subspecies to the level of species. Numerous points of nomenclature and orthography are raised that deserve serious evaluation (e.g. Imber's subgenus *Proaestralata* [1985] being preoccupied by *Oestrelatella* Bianchi [1913]).

I was disappointed to find the same old apocryphal etymology of the color "isabella" or "isabelline," when such a standard reference as the "Oxford English Dictionary" has shown this to be a chronological impossibility, since Queen Elizabeth's wardrobe was described in 1600 as including "one rounde gowne of Isabella-colour satten," some five years before the archduchess Isabella is alleged to have shed her soiled underwear at the end of the siege of Ostend. Such pseudoerudition is unfortunately too characteristic of the work as a whole, so that this list is best used as a guide to further literature rather than as a definitive reference in itself.

McAllan and Bruce use this "working list" to introduce four new subspecies and one new subgenus of birds, in a less than rigorous manner. Inside the back cover of the book, the authors have placed a long "Important Notice" (dated 28 February 1989) in which publication delays are discussed and in which they accuse a well-known Australian ornithologist of having deliberately preempted their new subspecies' descriptions by rushing into print with them himself

in *Canberra Bird Notes*, "a local periodical . . . produced and instant printed in a type-written format, and arguably unsuitable for the publication of such taxonomic work." That their own list is hardly a proper vehicle for naming new taxa does not deter them, however.

The whole affair recalls the scandal surrounding the description of *Calidris paramelanotis* and the recent furor over certain systematic works in Australian herpetology (see 1987, *Bull. Zool. Nomencl.* 44: 116–121). Although McAllan and Bruce decry the spread of "the paranoia observed in some elements of the herpetological community" to ornithology, they seem equally paranoid themselves. In their discussion of *Cyanoramphus* (p. 45), where they erect a new subgenus for *C. cookii* (the only characters mentioned being "larger, darker green . . . with a different bill morphology"), they suggest that the "extinct southeast Polynesian forms may represent a third subgenus." Then, on an errata sheet dated 29 May 1989 (with reverse sequence of authorship), to correct "inadvertent omissions from the final proofing," they propose the name *Notopsittacus* as a new subgenus for these birds. Although they at least designate a type (*C. ulietensis*), absolutely no diagnosis or discussion of characters of this supposed taxon is provided. To make matters trebly horrific, *Notopsittacus* is preoccupied by *Notopsittacus* Roberts, 1922, proposed as a subgenus of the African parrot *Poicephalus*. This is not an elusive fact, either, as *Notopsittacus* Roberts is listed as a synonym of *Poicephalus* in Volume 3 of Peters' "Check-list of Birds of the World" and appears in the General Index of that work published in 1987 (sources certainly well-known to Bruce and McAllan). There is simply no excuse for such sloppiness, particularly by authors who have specialized in nomenclatural minutiae. *Notopsittacus* Bruce and McAllan, 1989, being a preoccupied name proposed with no diagnosis in an errata sheet, has my nomination as the worst "new" avian taxon published in the 20th century. It is a pity that it has so much close competition.

I am not sure just what is going on in systematic vertebrate zoology in Australia. Perhaps it is a case of too many amateurs trying to be professionals, and too many professionals acting like amateurs. Whatever it is, I wish it would stop, and that the parties involved would start to take the introduction of new taxa seriously and go about it in an acceptably scientific manner.—STORRS L. OLSON.

The Birds of South America: I. The Oscine Passerines.—Robert S. Ridgely and Guy Tudor. 1989. Austin, University of Texas Press. xvi + 516 pp., 31 color plates, 723 distribution maps. ISBN 0-292-70756-8. \$65.00.—The project, sponsored in part by the World Wildlife Fund, will eventually consist of four vol-

umes to cover more than 3,100 species of South American birds. Ridgely and Tudor begin here with the more than 700 songbirds. The proposed scope is enormous, and the quality of the effort promises great rewards.

The introductory material includes an extremely useful "plan of the book." This section places the volume in perspective relative to earlier volumes, guides the reader through the organization, and makes clear what the authors consider to be important. There is general information on habitat, biography, migration, and conservation. The latter focuses on approximately 50 species that have been reduced by human activity, are known from only a few specimens, or are rare or threatened for other reasons. Habitat change and distribution is an important cause in too many cases.

The color plates follow. They are, as all the pre-publication hoopla and other reviews indicate, extraordinary. Tudor gives great attention to details of posture, soft part colors, and plumage texture. For many readers the plates form a bridge between museum specimens which can be examined in detail but are static, and the furtive glimpse one gets so frequently in the field. Tudor's representations are masterful.

The bulk of the book is dedicated to species descriptions. In addition to identifying marks, the notes include information on similar species, habitat, behavior, and range. A considerable amount of natural history is included which makes this more than a simple aid to identification. The text is concise, informative, and well edited. Consequently, it is easy to read. A major task of a book of this scope is to deal with systematics. Oscine taxonomy has always been controversial and undergoes continual change. Throughout, Ridgely and Tudor point out where and how they differ from previous authors (especially Meyer de Schauensee). They try to reflect the current status of most taxa, but rather than following tradition slavishly, they introduce changes that are appropriate to our current understanding. In a few cases new English names are introduced. Overall, they reach a compromise that retains stability but indicates relationships as accurately as possible. At higher levels they make changes that are in accord with the 1983 AOU Check-list and many of the more recent suggestions derived from molecular studies. They deftly walk some narrow lines and then enter the valid disclaimer that the final sequences of family and lower levels "is not necessarily an indication of any relationship." Rather, "the association of various visually similar groups together took precedence." They are to be commended for their approach, which gives primary consideration to the users' requirements and encourages the use of the book.

Everyone, amateur or professional, interested in the birds of South America will need this book.—A.H.B.

OTHER ITEMS OF INTEREST

Birding in the San Juan Islands.—Mark G. Lewis and Fred A. Sharpe. 1987. Seattle, Washington, The Mountaineers. 220 pp., 94 text figures, 6 maps. ISBN 0-89886-133-0. Paper, \$9.95.—This volume is the first comprehensive treatment of the bird life of the San Juan Islands, a group of 350 rocks and islands nestled in the rain shadow of the Olympic Mountains in northwestern Washington State. The area, dotted with small villages and towns, has low human populations and a surprisingly diverse avifauna.

The book is mainly a compilation of Lewis and Sharpe's birding experiences on the islands over seven years in the early 1980s. However, some historical information (gleaned from *Audubon Field Notes/American Birds*, *Earthcare Northwest*, *Murrelet*, and *Western Birds*) has been incorporated into the text.

Information is presented in five main chapters. The introduction includes a brief discussion of the location, physiography, and climate of the San Juan Islands and the impact of human activities on bird populations. "Going Birding" is the practical chapter. Routes for seven tours, covering the 13 recognized bird habitats on the islands, are presented in detail. Each route includes a sample list of species to be seen throughout the year, historical facts, some cautions about scheduling trips, and accurate directions to get around. And it works! I took a day off and birded the largest island, Orcas Island. The highlight for me was visiting the marshes of the Frank Richardson Wildlife Sanctuary recently named after a friend and colleague, to whom the book is dedicated. For the other 200,000 people who visit the San Juan Islands each year, the experiences will be as rewarding.

Most of the book (64%) is taken up by the section on "Species Accounts." Unlike in other bird-finding guides, each order or family of birds has a preamble that introduces the novice bird-watcher to what follows. Species are then dealt with individually, one or two lines for rare and vagrant species, and several paragraphs for regular species. The latter contains a balanced blend of the authors' experiences, species' natural history and habitats, and current information on status and populations. Even the professional ornithologist has reason to refer to this book. Some species accounts contain previously unpublished information, which includes population counts for breeding seabirds, the current status of the introduced Eurasian Skylark (*Alauda arvensis*), and records of new vagrants.

The three appendices include a very useful checklist, presented as a bar graph, important addresses for environmental agencies in the San Juan Islands, and specific but complementary information, including dates and references, for 128 species. A bibliography contains complete citations for 60 more general references.

There are very few typographical errors (e.g. Com-

mon Barn-owl, p. 130). The authors state (p. 49) that the arrangement and names of birds follow the AOU Check-list (1983) and its supplements but in the species accounts they treat the Northwestern Crow (*Corvus caurinus*) as a subspecies of the American Crow (*C. brachyrhynchos*). No doubt this will be confusing to novice bird-watchers. In an attempt to put the avifauna of the San Juan Islands in perspective in the Pacific Northwest, Lewis and Sharpe have made a few incorrect statements, mostly when referring to species on adjacent Vancouver Island. For example, the authors mention that the Mute Swan (*Cygnus olor*) was introduced to southern Vancouver Island in the 1950s. Actually this Old World species was first introduced there about 1889, and again in the 1930s, and by the 1950s it was well established as a breeding species and had extended its range north to at least Duncan. The Rock Wren (*Salpinctes obsoletus*) is not found only in winter on Vancouver Island but has been recorded in every month from June through January. And the Western Meadowlark (*Sturnella neglecta*) still breeds on Vancouver Island.

This book will be of great value to anyone with an interest in birds in the Pacific Northwest. It is attractive, well written, reasonably priced, and is recommended for high school, college, community, and government libraries.—R. WAYNE CAMPBELL.

The Birds of Egypt.—Steven M. Goodman and Peter L. Meininger, Eds. 1989. New York, Oxford University Press. xxi + 551 pp. 6 color plates by S. M. Baha El Din. ISBN 0-19-857644-7. \$125.—Books like this are valuable. Whether it is for a small national park or an entire subcontinent, it is important to know what birds are there, when they occur, and in what numbers. An indication of their numbers and relative commonness gives visitors some idea of what to expect. More importantly, the data can provide an important summation of the resources, and a baseline for recording changes over time. The last major volume on Egypt was by Meinertzhagen in 1930. Much has changed since then.

This is not a field guide. There are only six color plates, organized by habitat. The images are small, and styled, but they give the reader an idea of some of the specialties of the birdlife. The book is divided into two major parts.

Egypt covers more than one million km², most of which is "hot desert." The rainfall, temperature, elevation, and human influences are discussed extensively in the first part. The information is organized by "Desert Environment" and "Marine Environment," and includes historical, geological, and ecological approaches which provide a broad understanding of the biological, social, and economic aspects of Egypt. The treatment is comprehensive and unusually thorough for a book on birds. These parts are

followed by a chapter on bird conservation and protection. The authors discuss everything from international conventions (on the Middle East) to Bedouin traps, bird hunting (it is extensive), the marketing of birds, and responses of bird populations to historical environmental change. Human settlement goes back over 7,000 years. The authors discuss the roles of extensive river damming and changed agricultural practices. Egypt is still a poor country with serious population problems.

The second and longest part of the book is devoted to species accounts. Each account includes a standard English name and the local name in Arabic with an English transliteration. The distribution is described and, where appropriate, breeding distribution is mapped. For some species, monthly abundance is presented in a histogram. Scattered banding data are reported. Dates of occurrence are given and are compared with the records reported in the 1930s.

There are two appendices. One summarizes all the species rejected from the species list. The second is a gazetteer of all the localities mentioned in the text. Each locality is referred to a county (Governorate) with full longitude and latitude.

This volume is a benchmark reference for this part of the world. A wide variety of readers will find it of value, and it appears to be accurate.—A.H.B.

Important Bird Areas in Europe.—R. F. A. Grimmett and T. A. Jones. 1989. Cambridge, United Kingdom, International Council for Bird Protection. Technical Publication No. 9. x + 888 pp. ISBN 0-946888-17-5, £19.50 (from ICBP, 32 Cambridge Road, Girton, Cambridge CB3 0PJ, U.K.).—This volume gives details on 2,444 areas in 32 countries. It covers Greenland, all of Western Europe, and the USSR west of the Urals. The data were gathered by "many hundreds" of "amateur and professional birdwatchers and scientists." Various components of the ICBP made major contributions and assisted in the compilation of the data.

Each area is located precisely, and its size and current usage (e.g. nature reserve, hunting, unprotected) indicated. The general nature of the area and permitted human activities follow. There is an inventory of the major breeding birds and unusual species with seasonal appearances. In some cases, information on migration activities is included. The book is organized by country and each account begins with geopolitical information on area, population, general land use, and ecology. The "Ornithological Importance" gives information on habitat and the associated species. There is also space dedicated to the conservation efforts and current attention to land protection. Each section has a map and acknowledges those who supplied information.

The book is intended for international agencies,

conservationists, land-use planners, and ornithologists. It cannot help but be useful as Europe approaches its new community structure.—A.H.B.

South American Birds: A Photographic Aid to Identification.—John S. Dunning. 1987. Newtown Square, Pennsylvania, Harrowood Books. xvi + 351 pp. ISBN 0-915180-25-1. Cloth, \$47.50; paper, \$35.00.—It is difficult to resist the temptation to compare this with the earlier (1982) version. On the surface they are similar. They have the same number of pages. They contain photographs and maps. The current version (which, by the way, is not called a new or revised edition) offers "over 1,400" color photographs; there were 1,112 in the first. If you know the first version you will immediately recognize some changes.

In this version, the photographs of the species and the distribution maps occur on the same page. This is a major change and an enormous convenience. There is more introductory material on general identification. The boldface code to indicate habitat (e.g. H-O: highlands, open country), and foliage-type preference is retained. The features in the species description that indicate distinctive marks and were set in italics are simply underlined here.

The pictures still suffer from the vexations of many collections. Some lack contrast, others appear washed out. One wonders how realistic the postures might be. In some cases, the lighting is poor and the distinguishing features are not visible. The photographs are small, but not much different in size from a field guide. There is no scale and images of very small birds (i.e. Hummingbirds) fill the same space as larger species. The acquisition and assembly of the photograph required a lifetime of work. Each species was captured and photographed on a perch in a tent. The published date reflects the delays in production. It is unfortunate that Dunning did not live to see the book in print.—A.H.B.

The Birds of Ohio.—Bruce G. Peterjohn. 1989. Bloomington, Indiana, Indiana University Press. xvii + 256 pp., 50 color plates. ISBN 0-253-3413-3. \$57.50.

The Birds of Illinois.—H. David Bohlen. 1989. Bloomington, Indiana, Indiana University Press. xvi + 279 pp., 49 color plates. ISBN 0-253-31560-3. \$57.50.—Together with the previously published "Birds of Indiana" (reviewed 1986, *Auk* 103: 253), these complete a triad of books on states from the heartland. Both claim to be "comprehensive" surveys of the states' birds. The bulk of both books is devoted to species accounts (390 in Ohio and 439 in Illinois). The accounts are relatively brief, none more than a single page, and they include distribution patterns, abundance, migratory dates, and nesting information.

The data are comprehensive and current. Both authors have been thorough and consider historical records and human influence on the states' birdlife.

The color plates by William Zimmerman are delicate and accurate. The plates, and the legends are exactly the same in both volumes. The additional figure in the Ohio volume is of the Passenger Pigeon (by John Ruthven). The dust jackets have full-size reproductions of text plates. Zimmerman presents his figures in unusual postures, the subjects often interacting with prey or other animals. The colors are fresh and the proportions of each plate appropriate to the subject. It is too bad that a different set of plates was not used in each book.

These volumes are not intended as field guides. The introductory material includes information on physiography, plant communities and climate. Bohlen adds some pages on conservation to discuss the loss of habitat, the effects of human overpopulation and use of technology. His points are well made.

A lot of observers contributed to both of these books, which should be in every school and public library in the area. The information here represents a tremendous resource and can answer most of the questions birders might have in regard to dates, places, numbers and status.—A.H.B.

DATE OF ISSUE (Vol. 107, No. 2): 26 April 1990