

ORNITHOLOGICAL LITERATURE

BIRDS OF NORTH AMERICA. Expanded, revised edition. By Chandler S. Robbins, Bertel Bruun, and Herbert S. Zim. Golden Press, New York, New York, 1983:360 pp., many colored paintings and range maps. \$10.95 (hardbound), \$7.95 (limpbound).—The “Robbins” guide hardly needs any introduction for the present-day birdwatcher. Since its first publication in 1966 it has earned a well-merited popularity with most birders. A revised edition, now at hand, is most welcome. It made its appearance three years after the revised edition of its major competitor and at a time when two new guides also became available.

Veteran users of the guide will find little change in the present edition. The new book is printed on a different grade of paper that results in greater clarity and more faithful reproduction of the figures. Most of the paintings have not been redone, but from the excellence of the reproduction I suspect that new plates were made from them. In some cases individual bird figures have been rearranged and some new species have been inserted into the old plates. There are 10 totally new plates that figure the exotic parrots now established in Florida and California, several of the Eurasian pipits that are almost regular along the West Coast, and a number of other Eurasian species that now occur in Alaska. I have not attempted to count the new species added in this edition, but I note that two—Thick-billed Parrot (*Rhynchopsitta pachyrhyncha*) and Blue-gray Tanager (*Thraupis episcopus*)—have been eliminated. The former has not appeared in Arizona for many years, and indeed, may be extinct, while the introduced Florida population of the tanager has apparently died out.

The textual material has had only minor changes, a testimony to the accuracy of the earlier edition. A few corrections and additions have been made to the identification clues. Nomenclature follows the 6th edition of the A.O.U. Check-list (1983), but the arrangement of species in the book is essentially as it was in the older edition. However, the Table of Contents is arranged according to the 1983 classification.

A distinct improvement from the earlier edition is that the range maps are not only clearer and easier to read, but they are not all drawn on the same basic map. Species with limited distribution have somewhat larger maps. No political boundaries are shown on these maps, which makes for some difficulty in interpretation. All of the maps have been redrawn to represent current knowledge of the ranges.

Vocalizations are again mostly illustrated by sonagrams, which are helpful to some people but not to others. The description of the songs in the text are usually not very useful.

In the review copy, the color reproduction seems to be better than in my copies of the original edition, and only two plates seem to be out of register. The only fault I find with the color is that the shade of green used gives the wrong impression of the true colors of the *Empidonax* flycatchers and the fall warblers. In fact, I do not care for Arthur Singer’s plates of the fall warblers at all. Not many people unfamiliar with the species could identify the fall Blackpoll from his figure. Of the guides currently available the National Geographic Society Guide has the best, albeit flawed, portraits of the fall warblers. Is there a market for a specialized guide for the fall warblers, and if so, are there an author and an artist willing to do it?

In summary, this edition continues the fine precedent set by the original, and those people who have “grown up” using “Robbins,” as well as newcomers to the birding fraternity, will enjoy the book and will profit from its use.—GEORGE A. HALL.

FIELD GUIDE TO THE BIRDS OF NORTH AMERICA. By Shirley L. Scott (ed.). National Geographic Society, Washington, D.C., 1983:464 pp., many color plates. \$15.95.

GUIDE TO BIRD SOUNDS. Produced by James L. Gullede. National Geographic Society, Washington, D.C., 1983. Four 9 in. 33.3 records. (No price given.)

THE WONDER OF BIRDS. By Robert M. Poole (ed.). National Geographic Society, Washington, D.C., 1983:280 pp., many color photos. (No price given.) \$29.95 for the package of three items plus a poster-sized migration map. (Obtainable only from The Society.)

We are currently suffering from a plentitude of good field guides. The two old-timers in this area each have had new editions recently (see review in the *Bulletin*, 93:425–427, 1981, and above; and more recently a three-volume “advanced” guide has appeared (reviewed in the *Bulletin*, 96:322–326, 1984). Now we have before us, as a part of a general package on birds, a new field guide from the venerable National Geographic Society. This review will dwell mostly on that guide which, despite the difficulty of obtaining it, is likely to be of great interest to most birders.

The guide is sturdily bound with a paper cover, and should be capable of standing up under heavy use. It is, however, too large to fit into most pockets; but my observations of many birders equipped with an assortment of pouches and carrying cases would make this seem to be of no great disadvantage. The scope of the guide is all of North America, as defined prior to the 1983 A.O.U. Check-list. The format consists of a colored drawing (sometimes several) of each species on the page opposite the textual material that includes a small distribution map. A total of 13 artists made the drawings, and for once it is easily possible to allocate a given portrait to the proper artist. The text was apparently compiled by a committee and it is never possible to pin down the attribution of any particular statement. Four persons are listed as “consultants” for this book, including two well-known ornithologists and two well-known experts on field identification.

The book opens with the usual preliminary matter, including the obligatory figures defining the names of bird parts and comments for beginners in the study of birds. The species accounts then follow in approximately the order of the 1983 A.O.U. Check-list, and the nomenclature of that list is followed. The index serves also as a place for the birder to check off his “Life List.”

Let us examine the poorest aspect of the book first—the range maps. The summer and winter ranges are plotted on small maps measuring 2.5 × 2.1 cm. There is no indication of migration routes, which, in many cases, leads to confusion. For example, the Pectoral Sandpiper (*Calidris melanotos*) is shown as breeding on the shores of Hudson Bay, and on the Arctic Ocean in the Northwest. No winter range is shown, and the novice (or even a more experienced) birder has no way of knowing that this species may occur almost any place in the United States during migration. He might assume that this species was as localized as is the Buff-breasted Sandpiper (*Tryngites subruficollis*) which has a similar breeding range given on the same page. The small size of the maps, showing most of North America, leads to considerable exaggeration of the ranges of those species that extend south along the highlands of the Appalachians, the Rockies, or the Sierra Nevada. Thus some species found only on the highest mountains of the Appalachians are represented as occurring throughout the small state of West Virginia. Elsewhere the ranges are a little less misleading, but the maps are of minimal utility. For a few highly localized species, as for example Florida specialties, larger scale and more informative maps are used.

The descriptions of vocalizations leave much to be desired. While some use the standard phonetic syllabifications, others are less informative. Thus the song of the Canada Warbler (*Wilsonia canadensis*) is said to begin with one or more short chips that continues as a rich and highly variable warble. In copies of the guide that are part of the three-item package,

species that can be heard on the records of "Guide to Bird Sounds" are so indicated, but this indication is omitted from copies of the guide sold alone. Those species that are on the recordings have the poorest textual descriptions, a disservice to those who buy only the "Field Guide."

Finally, let us consider the pictures and the accompanying text as identification guides. More plumages are illustrated in this guide than in most. For many groups, such as the shorebirds, a clear distinction is made between the fall plumage of adults and that of first year birds, something that has been badly confused in earlier guides. The gulls are very well illustrated, as for example six different plumages being shown for the Herring Gull (*Larus argentatus*). There are also flight pictures of waterfowl, shorebirds, and raptors (oddly of only the female hawks). I would judge that the latter would not be as useful for identification as are the more stylized drawings in the original Peterson guides. A special feature is the large number of Eurasian species figured on the basis of occasional records in Alaska. As the inevitable consequence of bringing these species to the attention of bird watchers, I predict a rash of "sight records" of these species in the eastern United States.

In general, the reproduction of the paintings is excellent, and none seems to be out of register. Some species, which in the field usually appear to be all black, show too much color, such as a "blue" California Condor (*Gymnogyps californianus*) and "green" cormorants. The yellow on some of the flycatchers is too bright. To my eye, a great many of the pictures are displeasing. All the pertinent field marks are correctly given in most cases, and the birds can be identified, but somehow, most of the small passerines appear to be misshapen. Most of the artists seem to have trouble correctly drawing the face and "chin" of a small bird. The *Catharus* thrushes are shown in a peculiar "hunchbacked," neckless posture; the swallows and swifts (shown flying) are quite misshapen, and the Black-and-White Warbler (*Mniotilta varia*) is simply grotesque. There was no attempt to draw all the species on a given plate to the same scale, and so the beginner may become confused by such things as an American Woodcock (*Scolopax minor*) half again as large as a Common Snipe (*Gallinago gallinago*). There are, in fact, a good number of outright errors in detail but space here prevents a detailed listing of them.

As in the case of all field guides now available, some of the fall warblers are very poorly done: Blackpoll (*Dendroica striata*) (the same old confusion about the color of the legs), Bay-breasted (*D. castanea*), western Palm (*D. palmarum*) (these are often quite yellow), and Tennessee (*Vermivora peregrina*) (poorly done in all plumages). But, overall, the treatment here is the best yet. Fall warblers are not "confusing" to many people, and we can hope that someday a guide will make use of this expertise.

I would rate the text as superior to the portraits in most cases. Frequently I found something in a figure that was not quite correct, only to note that the text had things right.

Despite my negative remarks given here, I do feel that this guide rates very highly in comparison with its competition. It is the first field guide to recognize great variability in many species. With careful study of both text and figures, a birder should be able to identify any species unfamiliar to him. He will have trouble identifying songs and he may get fooled on distribution, but on balance he will find the guide helpful and useful.

The "Guide to Birds Sounds" consists of four "floppy" records containing noises (not all are vocalizations) of 179 species. The recordings are from the Cornell Library of Natural Sounds and are very well done. I can see no obvious rationale behind the selection of species. There are songs of only six wood warblers (including the possibly extinct Bachman's [*V. bachmani*]) and none for the common eastern sparrows. Eighty-two of the species are nonpasserines, including 20 shorebirds, but no ducks and only three hawks are represented. One of the shorebirds is the accidental Temminck's Stint (*Calidris temminckii*). The selection

of species, however, is nicely balanced between eastern and western species. One wonders about the permanence of these flimsy plastic records.

"The Wonder of Birds" is an attractive "coffee-table" book suitable as an introduction to birds for the beginner. There are seven chapters written by Louis J. Halle, Roger F. Pasquier, Paul A. Johnsgard, Anne LaBastille, Frank Graham, Jr., Franklin Russell, and George Laycock. These cover such topics as the migration seasons, the breeding season, the diversity of birds, and two chapters oriented towards conservation. This material is well written and should be informative to the tyro. The style is several cuts above the usual National Geographic style. Even experienced birders and ornithologists, however, will find much of interest in this magnificent collection of color photographs.—GEORGE A. HALL.

THE BIRDS OF THE REPUBLIC OF PANAMA. By Alexander Wetmore, Roger Pasquier, and Storrs L. Olson. Passeriformes: Hirundinidae (Swallows) to Fringillidae (Finches). *Smithson. Misc. Collect.* Vol. 150, Part 4, Smithsonian Press, Washington, D.C., 1984:670 pp., 1 color plate. 49 figs., 16 × 23 cm. \$29.95.—Alexander Wetmore died in 1978 having finished but a small part of this last volume of his major work. He began field work for these volumes in 1946, and the first volume, covering up to the gulls, was published in 1965 (now \$25.00). The second volume, pigeons to woodpeckers, was published in 1968 (now \$25.00), and the third volume, published in 1972, entered the passerines up to the Oxyruncidae (sharpbills) (now \$25.00).

With the encouragement of S. D. Ripley, Roger Pasquier took on the job of writing the rest of the species accounts. Storrs Olson became responsible for the systematics portion, which included the analysis of several thousand specimens. By using "I" for Wetmore and his own literary skill, Pasquier has very successfully mimicked Wetmore's gentle and scholarly style. This fourth volume, like the others, centers on the taxonomy and distribution of species whose ranges often greatly exceed the political boundaries of Panama. The families follow the Wetmore sequence, an arrangement also followed by R. Ridgely's "A Field Guide to the Birds of Panama" (Princeton Univ. Press, 1981). Pasquier and Olson sensibly follow this and not the system of the A.O.U. Check-list of North American Birds (6th edition, 1983), which extended its coverage to the Panamanian-Colombian border.

Each family is briefly described and, for those with several species in Panama, a traditional key follows. This is by no means a jet-setter's field guide; but for identifying difficult species in the hand, as from a mistnet, it is often superior to the color plates and broad descriptions of the guides. The black-and-white drawings by Guy Tudor and the late Walter Weber are often attractive and thus appropriate, but they offer little aid in identification. The color frontispiece is of *Dacnis viguieri*, a little known endemic coerebid from the Panamanian-Colombian border. The reproduction in my copy is too yellow.

Each species account covers the scientific, English, and Spanish names, citing the literature on the nomenclature, taxonomy, distribution, breeding status, and aspects of the natural history both within and outside of Panama. For polytypic species like the Yellow Warbler (*Dendroica petechia*) with seven races recorded from Panama, the authors follow Wetmore's apparently "old-fashioned" style of discussing each subspecies separately and at the same level of the nominate form. Sounds dull, but it isn't. I was fascinated by the differences that the keen-eyed Wetmore found not just in the color and size of museum specimens but also in behavior, voice, and habitat selection among the various races. Such information is almost unique and is fodder for students of avian evolution. Pasquier and Olson, following Wetmore's wide knowledge of the literature, have included references and discussion of the findings of other workers ranging from the latest DNA taxonomic interpretations to the fat

condition and possible flight range of migrants about to visit the Temperate Zone. With the appearance of Ridgely's guide in 1981, a torrent of new records and range extensions has occurred. Much of this information went to Eugene Eisenmann, who was always in close correspondence with Wetmore, and to Ridgely. Practically all of this information has found its way into Volume 4. The authors have included a 15-page appendix of the species (beginning with penguins) recorded or collected since the publication of the previous volumes.

In the first volume Wetmore declared his intent to include a bibliography of the avifauna, an overview of all the species, and a gazetteer. This has not, and possibly never will, come about. Pasquier and Olson forthrightly point out that to have attempted those goals might have resulted in no publication whatsoever. I am sympathetic with this view, but the lack of even a simple map showing the locations of the major localities and provinces is most unfortunate. One needs only to open the cover of Ridgely (1981) to alleviate partly this omission.

There are relatively few significant typographical errors. The Spanish names are mainly translations of sometimes awkward English names and mean nothing to the local people of Panama. The classical North Temperate ornithological anachronism of "wintering" in the tropics is unfortunately retained throughout. Most such migrants live most of their lives under selective pressure peculiar to the tropics where winter does not occur. Why some exploit the annual protein bloom of the Temperate Zones and others do not is, of course, an interesting topic. The authors have not ignored the natural history of migrants in Panama.

The total cost of each volume purchased separately is \$104.95; however, the Smithsonian Press offers the four volumes together for \$85.00. For the wealth of information contained, that is a bargain. I am learning much from reading it.—NEAL G. SMITH.

SEABIRDS OF EASTERN NORTH PACIFIC AND ARCTIC WATERS. By Delphine Haley (ed.), Pacific Search Press, Seattle, Washington, 1984:214 pp., 90 color photographs, 101 maps, numerous drawings. \$39.95.—In this book the editor and authors have attempted to produce a work combining the esthetic qualities and readability of a "coffee-table book" and the usefulness of an up-to-date review of the biology of northeastern Pacific seabirds. With certain qualifying remarks, I feel that they have fulfilled their objectives.

The format is straightforward. An introduction by the editor covers oceanography as it relates to seabirds and an overview of the classification of seabird orders and families. The interaction of seabird populations and humans, from native cultures to modern commercial fishing and pollution, is also discussed. Ms. Haley has a pleasant, easily understood writing style that is filled with evocative descriptions of the wonderful and varied lifestyles of marine birds. Although mostly accurate, her text includes outrageous generalizations such as, "Few seabirds can afford to care for their young for very long." Confusing statements such as, "Nor can the sexes be distinguished by their behaviour, unless the actions are specifically attributable to male or female" also are not helpful. In the "Making of a seabird" chapter, the young of Kittlitz's (*Brachyramphus brevirostris*) and Xantus' (*Synthliboramphus hypoleucus*) murrelets are stated to be precocial: "(the young) only two to four days after hatching, flutter and fall to the sea." In reality only the latter's young are precocial. Kittlitz's Murrelet young are semiprecocial and remain at the nest site for many days before departing to sea. Another muddling of the facts concerns the lobed toes of phalaropes (*Phalaropus* spp.), which are stated to have evolved through the reduction of webbing, "an adaptation which presumably makes it easy for the birds to twirl about rapidly."

Fortunately, the chapters on each seabird family, prepared by selected authorities, are well written and factually accurate. I found the chapters on the Procellariidae and Phae-

thontidae to be among the most interesting and informative in the book. The authors of these and the other chapters share with us their knowledge of and enthusiasm for their study species. The use of only English measures (weights are given in pounds and ounces throughout the text) may be annoying to those who use metric measures, now standard in scientific literature. In the section on the Alcidae the author states that there are about 5.7 million Common Murres (*Uria aalge*) in North America. Totals for each West Coast state and province add up to approximately this figure. No explanation is given for the omission of the 1.3 million Common Murres breeding in eastern Canada.

The range maps are the most disappointing aspect of this book. Aside from suffering from lack of detail and clarity due to the small scale and poor methods of indicating range (crude hatching and bloblike stars), most illustrated ranges have errors, and many are grossly inaccurate. A few of the more conspicuous examples of this problem deserve mention. The sea ranges of Townsend's (*Puffinus auricularis*) and Wedge-tailed (*P. pacificus*) shearwaters are shown to include coastal southern and central California, where they would occur only as accidentals. The sea ranges of Wilson's Storm-Petrels (*Oceanites oceanicus*) and Magnificent Frigatebirds (*Fregata magnificens*) are similarly dubious. The range maps of the alcids are particularly poor. Major breeding areas of Ancient Murrelets (*Synthliboramphus antiquus*) are shown to include the mainland coast of British Columbia, Vancouver Island, and northern Washington. In reality, this species breeds nowhere south or east of the Queen Charlotte Islands. Queen Charlotte Strait in British Columbia is indicated as a major breeding area for Horned Puffins (*Fratercula corniculata*), when, in fact, their southernmost colony is at Forrester Island, Alaska, 800 km to the north. Even allowing for the fact that the ranges of many seabirds are inadequately known, the inaccuracies of these maps are inexcusable as they ignore information on distribution readily available in the literature. The maps, contrary to what is said on the back cover of the book, do not set a new standard.

The photographs appear to have been chosen carefully and are generally excellent and appropriate to the accompanying text. Two have inaccurate captions. An adult winter-plumaged Thayer's Gull (*Larus thayeri*) is the most conspicuous gull in a photograph labeled as showing Herring Gulls (*L. argentatus*) and Northern Fulmars (*Fulmarus glacialis*). A photograph of a Red Phalarope (*Phalaropus fulicaria*), indicated as being a bird in winter plumage, appears to be a juvenile.

A number of excellent drawings, which complement sections of text, are included. With one exception, these illustrations are flawless. A drawing, intended to be of a phalarope inspecting parasitic crustacea on a whale's back, pictures some other type of shorebird (*Calidris* or perhaps *Heteroscelus?*).

Despite some rather conspicuous errors, a number of minor flaws, and the unfortunate quality of the range maps, this is an esthetically pleasing and very informative book. Seabird lovers, birders, and naturalists would do well to consider purchasing this book.—IAN L. JONES.

THE BIRDS OF INDIANA. By Russell E. Mumford and Charles E. Keller, illus. by William Zimmerman. Indiana Univ. Press, Bloomington, Indiana, 1984:376 pp., 183 color plates, 2 state maps, 1 chart. \$75.00.—This very handsome book presents information on habitat, seasonal occurrence, breeding biology, and Indiana distribution of 170 species of birds breeding within the state. Useful data on clutch size, characteristic vocalizations, food, unusual concentrations, and historical occurrence in Indiana are given. There are also species accounts for nonbreeding birds, but they are not illustrated, and the text is in smaller print than for the breeding species. The two maps show the counties and physiographic regions of Indiana. Unfortunately, state distribution maps for each species are not presented.

The illustrations of the breeding birds, their nests, and eggs are very pleasing, and some of the bird portraits are exceptional works of art. Those of the nests, however, are often poorly characterized. The settings for nests showcase state flowers, and the effect is lovely, although somewhat dubious ecologically. For example, it seems unlikely that the early spring flowers of the wild plum (*Prunus* sp.) would still be present when Orchard Orioles (*Icterus spurius*) nest. One wonders at garden phlox (*Phlox* sp.) towering above the nest of a Yellow-billed Cuckoo (*Coccyzus americanus*), whose nest is usually placed at heights much above that of this flower. And what a rare coincidence it must be to find the nest of a Yellow-crowned Night-Heron (*Nycticorax violaceus*) in an umbrella magnolia (*Magnolia tripetala*), or that of a Scarlet Tanager (*Piranga olivacea*) in a yellowwood (*Cladrastis lutea*).

There are a few typographical errors (e.g., p. 182, "next" for "nest"). On p. 191, the statement is made that only the nest of the Least Flycatcher (*Empidonax minimus*) is shown, when actually nests of three species are depicted. On p. 226, the text states that a nest contained three eggs "and two naked pairs of birds," obviously an error. In the introduction (p. xviii), the authors claim that Indiana has more breeding species than Illinois or Kentucky. This was not true in 1963 (according to R. T. Peterson in "The Birds," Life Natural History, Time, New York, New York), nor is it true for Illinois at present. The boldface type in the Index scarcely distinguishes the page numbers of illustrations. These minor flaws do not really detract from the book.

In general, the style of writing is anecdotal and more interesting to read than a listing of data would be. On the other hand, the birders of Indiana have published reams of good data on birds in the state. If the authors had presented this information in some comprehensive form, "The Birds of Indiana" would have been a great book (though it might have taken years to write). For example, Keller's (1957-1958) papers in The Indiana Audubon Quarterly present much additional quantitative data on shorebirds. Lastly, the book is often unclear about the source of material; one assumes that much of it was previously unpublished, but it would be nice to know if this is true.

Though intended for a wide audience, this plush book is too expensive for students and too general to serve as a technical reference. It is attractive and should appeal to affluent bird watchers and to those who enjoy bird art.—JEAN W. GRABER.

SPECIES OF SPECIAL CONCERN IN PENNSYLVANIA. By Hugh H. Genoways and Fred J. Brenner (eds.). Carnegie Museum of Natural History, Special Publication Number 11, Pittsburgh, Pennsylvania 1985:vi + 429 pp., 6 color plates, black-and-white photos of over 100 species, 350 maps. \$30.00 plus \$3.00 shipping and handling.—This is the latest, and certainly the most sumptuous, statewide listing of species of special concern. Individual species are classified as: Endangered, Threatened, Vulnerable, Status Undetermined, Extirpated, and Recently Extinct. The format of these accounts seems constant for all the states so far represented, with sections on Description (very brief), Range, Habitat, Life History and Ecology, Basis for Classification, Recommendations, and Selected References. For each species a map of the continental range and a Pennsylvania map showing specific records, usually only by county, is given.

There are informative introductory chapters on Aquatic and Terrestrial Habitats, Physiographic Provinces, Drainage Patterns, and Definitions of Species Categories. These are followed by chapters covering 21 endangered plants, 62 invertebrates (mostly Lepidoptera and Odonata), 62 fishes, 18 reptiles and amphibians, 39 birds, and 34 mammals. The individual accounts are written by many people, and each chapter is prepared by a specialist editor.

The chapter on birds is edited by Frank B. Gill, and the accounts were prepared by Frank

Haas, Barbara Haas, and John A. Ginaven. The species included as Endangered are the Bald Eagle (*Haliaeetus leucocephalus*), King Rail (*Rallus elegans*), Short-eared Owl (*Asio flammeus*), and Bewick's Wren (*Thryomanes bewickii*). The Least Bittern, (*Ixobrychus exilis*), American Bittern (*Botaurus lentiginosus*), Upland Sandpiper (*Bartramia longicauda*), Black Tern (*Chlidonias niger*), Sedge Wren (*Cistothorus platensis*), and Henslow's Sparrow (*Ammodramus henslowii*) are considered Threatened. The Extirpated list includes Osprey (*Pandion haliaetus*), Peregrine Falcon (*Falco peregrinus*), Greater Prairie Chicken (*Tympanuchus cupido*), Piping Plover (*Charadrius melodus*), Common Tern (*Sterna hirundo*), Loggerhead Shrike (*Lanius ludovicianus*), Dickcissel (*Spiza americana*), Bachman's Sparrow (*Aimophila aestivalis*), and Lark Sparrow (*Chondestes grammacus*); and the Passenger Pigeon (*Ectopistes migratorius*) is Extinct. Twelve species are considered as Vulnerable and seven as Status Undetermined. One might quarrel with the inclusion of some of these species, but the recommendations of a large group of bird students were available to the writers.

In many cases the species accounts honestly admit that real knowledge of the species is lacking, and most of the recommendations advocate additional research. Despite this limitation, this is a valuable compilation of current knowledge.

In some cases the picture is quite gloomy, but in others puzzling and challenging elements of mystery enter. Why, for example, should the Henslow's Sparrow suddenly have changed from a widespread, and often common nesting bird, to a threatened species? This has occurred in other states besides Pennsylvania. Although Pennsylvania was always on the edge of the breeding range of Bachman's Sparrow, the species has disappeared from other places, such as central West Virginia, where it was common 40–50 years ago. Such mysteries abound, but we can only guess as to the answers.

While the material in this book is valuable from a historical aspect, much of it will be obsolete in a few years. The status of many species will no doubt change rapidly, and much new information will come to light. One can wonder at the wisdom of publishing the book in such a handsome and expensive way.—GEORGE A. HALL.

THE BIRDS OF SAN DIEGO COUNTY. By Philip Unitt. Illustrated by Allan Brooks. Memoir 13, San Diego Society of Natural History, 1984:xxiii–276 pp., 12 habitat photos, 129 maps, 12 colored plates. \$20.00 (\$14.00 paperbound; \$500.00 patrons' edition) plus \$2.00 postage and handling in U.S. (foreign extra); California residents add 6% sales tax. (Order from San Diego Natural History Museum, P.O. Box 1390, San Diego, California 92112.)—This large, handsome book, with 12 previously unpublished paintings by the famous Allan Brooks, updates the avifauna of a well-known yet poorly understood microcosm.

Why, of all our thousands of counties, does San Diego alone seem to warrant regular reviews of its avifauna (1919, 1959, 1984, besides the reviews of southwestern California in 1912 and 1933)? Partly this is because San Diego County is more diverse and complex, ecologically and faunally, than most states or provinces. Though islands lie just outside its borders, it still ranges from open ocean, rocky and foggy seacoast, and salt marsh, up through diverse plant associations, to cool pine-oak forests (with firs), from which it drops through junipers and scrub to arid, sun-baked desert whose arroyos and mountains have their own special associations. A well-illustrated chapter discusses geography and vegetation. Several associations, and their attendant birds, are already decimated. These include marsh, coastal sage scrub, and the vital riparian strands; the original fauna of the native coastal grasslands will never be known. Biocides, parasitic cowbirds, "development," and other threats contribute to declining bird numbers. As Unitt observes, "Short-term planning by government agencies is the most serious enemy that the Least Tern [among others?] faces in the long run."

Against this, as elsewhere, additional species, subspecies, and rarities arrive, or even breed in new or overlooked localities (as detailed for 1982 and 1983 in an appendix). Few regions, of course, are immune to human degradation today (islands are usually in the worst condition); and some other California counties are also diverse and complex. So why is San Diego so special?

The preeminence of San Diego County stems from the tradition of perceptive, detailed analysis, and publication maintained by the San Diego Society of Natural History and its capable co-workers. Interest seldom ends at the species or "resident" level. The quite different status and breeding seasons of species like Costa's Hummingbird (*Calypte costae*) and *Phainopepla nitens* in different parts of the county are duly detailed. Fox Sparrows (*Passerella iliaca*) are now present all year, but collecting and careful study show that the county is a winter meeting place for Fox Sparrows from much of the continent to the north. Though Unitt tentatively synonymizes six A.O.U. races of *P. iliaca*, he still credits the county with seven races—all collected except *stephensi*, the one now presumably breeding. Despite the supposed adequacy of present museum collections—loudly proclaimed by those with no idea of their importance and uses—the main wintering grounds of this distinctive swollen-billed race remain unknown in 1985!

Pipits (*Anthus* spp.) converge on San Diego County from even beyond North America. Yet the continent-wide Common Nighthawk (*Chordeiles minor*) is at best casual, with no known county specimen. Among other points shown by subspecies is that the only lowland specimen of Pygmy Nuthatch (*Sitta pygmaea*) is also a migrant, not an altitudinal wanderer.

Subspecies groups are discussed separately in some cases, such as "Black-tailed" Gnatcatchers (*Poliophtila "melanura"*). (The *lucida* race shows vocal differences and possible sympatry with *californica*, which has seriously decreased.) Unitt makes original contributions (often based on limited material) to our knowledge of the distribution or characteristics of some subspecies (*Nycticorax violaceus*, *Empidonax difficilis*, *E. traillii*, *Progne subis*, *Hirundo pyrrhonota*). In extending the range of *E. traillii extimus* (ignored by A.O.U., but see Wetmore, Part 3:478, 1972), Unitt also raises another conservation problem for California: we can preserve biological diversity only through *knowledge* (study and judgment), not through ignorant, sentimental protection of menaces (gulls, starlings, cowbirds) or willful, prejudiced biopolitics.

Unitt's manuscript evidently antedated the 1983 A.O.U. Check-list. Still, his "Emberizidae" agrees with the check-list at the subfamily level—avoiding, however, some of the A.O.U.'s inexplicable anomalies, such as inserting *Sturnella* between *Agelaius* and *Xanthocephalus*, and various unrelated genera between *Aimophila* and *Amphispiza* (which Unitt unites). Otherwise he essentially follows the classic Wetmore-A.O.U. 1931-1957 classification. Procellariiformes precede loons (*Gavia*) and Podicipedidae; Anseriformes follow Falconiformes, bringing Cathartidae next to the related Ciconiiformes; Laniidae and vireos follow Corvidae; Carduelinae precede Emberizidae; Recurvirostridae precede both Charadriidae and Scolopacidae (with no other less-related groups separating them as in the 1983 A.O.U. Check-list); Bombycillidae include A.O.U.'s Ptilonotidae; etc. In part, this follows anatomical researches by Rea ("Once A River," Univ. Arizona Press, Tucson, 1983). By "this unorthodox approach," including departures from A.O.U. names, Unitt hopes to spark "increased interest in the wondrous complexities of bird evolution." Fortunately these books are well indexed, with tables of contents—a necessity since the uncalled-for "Basel Committee" (which was supposed to "end confusion") unleashed the rash of inexplicable departures from the classic Gadow-Ridgway-Wetmore sequence. (Among Unitt's minor inconsistencies, the species list, pp. 245-258, occasionally disagrees with the text in order or nomenclature; cf. *Mergus* spp., *Catoptrophorus*, "*Tringa hypoleucos*".)

The weakest point, scientifically, is Unitt's apparently excessive reliance on sight reports

in "Audubon Field Notes" and "American Birds." In most places this would be ruinous. In southern California it is much less so because of the critical attitude, influence, and editing of Guy McCaskie. Still, no one can identify, with scientific certainty, photographs in critical genera—much less birds not photographed or collected before they flew out to die at sea. The most perfect of photographs simply cannot give us measurements, etc., nor evidence of tell-tale feather damage or lengthened claws of escaped individuals. Unitt recognizes this uncertainty at times (*Calidris ruficollis*), yet includes the species in his list of 445 native species (plus at least 89 subspecies) recorded. More careful researchers elsewhere have shown that well-known species "recorded" widely and regularly, or even abundantly in winter, are not actually present (Devillers, *Auk* 94:417–429, 1977, [*Catharacta skua*]; Phillips, *Am. Birds* 29:799–806, 1975 [*Calidris pusilla*]). Though Unitt is usually careful to specify important specimen records in his text, one must turn to the list of species to find that *Dendroica caerulescens* has been taken but *D. dominica* has not.

Still, Unitt lists two races of *D. dominica*, as well as *Vermivora celata celata* (one dubious specimen, not reexamined, plus sight reports). Deficient collecting is obvious again and again, not only in warblers but in many critical groups—even the notorious *Empidonax* flycatchers, *Catharus* thrushes, the endlessly variable *Eremophila* larks, and the Song Sparrow (*Melospiza melodia*) on which one might expect ornithologists to have concentrated. No one in San Diego cares to skin one of the still-common *Cathartes* vultures, nor are skeletons with measurements cited; yet vultures are often found dead. Even dead accidentals are often not preserved in any form (two of the three *Cyclorhynchus* auklets, both *Bombycilla garrulus* waxwings); nor is the migrant Flammulated Owl (*Otus flammeolus*), which was caught on a ship and used in an experiment, now to be found. Occasionally, critical specimens are still mounted (one of the two *Regulus satrapa* kinglets). No matter how customary this lack of specimen collection is or was, it is *not* good, permanent science, and our successors will not be grateful.

The subspecies discussions would occasionally be more meaningful if the localities represented were specified (e.g., *Auriparus flaviceps*). Perhaps in the future, bar graphs of seasonal occurrence will help visualize migrations of some distinctive subspecies, or at least of species. We have much to learn, as Unitt points out in the case of the occasional summering Summer Tanagers (*Piranga rubra* subsp.?). Yet so much has been accomplished in this border county that one is again (or still) impressed by how neatly concentrations of migrants and "ranges" of rare winter visitors "end" exactly at the Mexican border!

Though the major eastern museums were not consulted, Unitt still gives many historic data. Terms (common, rare, etc.) are numerically defined (p. 3). He gives many counts and egg dates. The 126 maps of breeding distributions (of 129 species) carefully distinguish present and former, definite and probable, and published and unpublished breeding locations.

This first expanded summary is an original, worthwhile, up-to-date digest of a vast amount of data. In many ways it can serve as a model for other regional reports. San Diego County and its museum are to be congratulated. But there is still much to do even here—both in specimen collection and in habitat protection.—ALLAN R. PHILLIPS.

PERSPECTIVES IN ORNITHOLOGY. ESSAYS PRESENTED FOR THE CENTENNIAL OF THE AMERICAN ORNITHOLOGISTS' UNION. By A. H. Brush and G. A. Clark, Jr. (eds.). Cambridge University Press, New York, New York, 1983:x + 560 pp., 36 text figs., 11 tables. \$29.95.—This book, devoted to reviewing important "frontier" areas of ornithological interest and research, consists of 13 chapters and an Introduction by Professor Ernst Mayr. Dr. Mayr sets the stage by documenting the leading role that ornithology has played in the development of

modern biological thought. Ornithology, evolutionary biology, and biogeography have been associated closely for a hundred years. Much of our knowledge of geographic speciation was developed from birds. Pioneer studies in animal behavior were carried out on birds, and birds remain a core group for work in this area. Modern knowledge of biogeography, geographic variation, animal navigation, and community ecology stems largely from avian studies. Dr. Mayr's introduction makes one feel proud to be an ornithologist.

The first two chapters are general in nature. They deal, respectively, with the conservation of rare birds in captivity (William Conway) and the role of museum collections (Jon C. Barlow and Nancy J. Flood). Four chapters are devoted to aspects of behavior: "Avian mating systems" (Douglas W. Mock); "Cooperative breeding strategies among birds" (Stephen T. Emlen and Sandra L. Vehrencamp); "Bird song learning, theme and variations" (P. J. B. Slater); and "Bird navigation" (Charles Walcott and Anthony J. Lednor). Two major areas of contemporary ecological research are reviewed: "Ecological energetics: what are the questions" (Glenn E. Walsberg) and "Perspectives in optimal foraging" (John R. Krebs, David W. Stephens, and William J. Sutherland). A noteworthy new review of Mesozoic and early Tertiary avian fossils is provided by Larry D. Martin ("The origin and early radiation of birds"). Current thinking and controversies in avian community ecology and biogeography are reviewed by John A. Wiens ("Avian community ecology: an iconoclastic view") and Daniel Simberloff ("Biogeography: the unification and maturation of a science"), respectively.

All of the chapters are comprehensive. Additional breadth is given by the addition of discussants, who commonly were chosen because their views contrasted with those of the major contributor. The chapters are supported by extensive bibliographies. Wiens' chapter has a magnificent 207 titles; Simberloff's has 199.

It is impossible to comment on the highlights of individual chapters and the wealth of material contained therein. Most chapters are structured to include a brief history of the subject, provide a summary of major theories and concepts, and then treat current data in detail. Often a final statement suggests where the author thinks the subject is going; this is helpful. The reader thus comes away with a nicely balanced account. This reviewer found the chapters of Wiens and Simberloff highly rewarding. In both, complex and controversial subject matter is explored thoroughly, and a balanced overview is presented.

This book is a credit to the American Ornithologists' Union. It will be a basic reference for years to come.—ALLEN KEAST.

THE HERON HANDBOOK. By James Hancock and James Kushlan. Harper and Row, New York, New York, 1984:188 pp., 66 color plates, 18 line drawings, 61 maps. \$24.95.—Recently, considerable research has been conducted on the members of the Ardeidae. This book on herons and bitterns is an authoritative survey of current knowledge about the worldwide family of wading birds, incorporating recent research on the behavior and ecology of the group. The plumages, feeding and breeding behavior, and ecology of each of the recognized 60 species are discussed, and every species is illustrated with paintings by Robert Gillmor and Peter Hayman. Particularly useful are the four color plates illustrating every color phase of every race of the white herons and egrets. The small size of the book (9 × 6 in.) makes it easy to carry on travels abroad, although it is not field guide size.

The book is based on "The Herons of the World" by James Hancock and Hugh Elliott, first published in 1978. It has been updated and revised, includes new range maps for all species, and contains all the original plates plus the four new identification plates. From my perspective the organization and design are far superior to the original. It contains more up-to-date information and is smaller and easier to read. The new version contains much more information useful to scientists, yet is no less enjoyable reading.

The book begins with introductory chapters on classification, courtship, feeding, and identification of herons and egrets. These sections are brief, but provide an excellent overview of the topics with adequate references. The section on courtship even describes displays, giving the display names in boldface for easy location. The feeding section is superior, giving an overview of postures and movements, as well as a discussion of feeding strategies. Many of the examples therein are the North American herons that Kushlan has worked with. The line drawings in this and other sections clarify the displays.

The remainder of the book consists of species descriptions, including nomenclature, identification, distribution and population, habitat, migration behavior, and nest, eggs, and young. Each account gives a general overview of what is known about the species. The migration sections are usually brief, indicating our lack of knowledge about this subject. Habitat information is general, and I would have liked to see an overview table showing diversity of both feeding and nesting habitat preferences for all herons (or groups of herons).

The book would be more useful if the sections on breeding were expanded to provide more details and references for the serious student. The species accounts are informative and, in some cases, thought-provoking. They are necessarily brief, but adequate references are given to further research results on specific topics. The brevity of some of the accounts indicates where future contributions can be made.

I would have liked to see a concluding chapter comparing the behavior and ecology of the heron species. The authors clearly can provide a synthesis of the comparative behavioral adaptations of herons, including evolutionary implications; perhaps this is outside the scope of the volume.

I found the book to be an improvement over the original version not only because it has been updated, but because of the additional information on foraging and other behavior. The color plates are of better quality than the original, and the size makes it easier to carry, store, and use. The line drawings and range maps are particularly helpful, and make the book more attractive. Overall, I believe the volume is essential for any serious student of herons and for anyone traveling to parts of the world where they are unfamiliar with the resident species. It will be extremely valuable for graduate students interested in working with herons, and to nonspecialists wanting an overview of herons in general and of individual species in particular. I recommend it highly.—JOANNA BURGER.

THE CATTLE EGRET: A TEXAS FOCUS AND WORLD VIEW. By Raymond Clark Telfair II. Texas Agricultural Experiment Station, Texas A&M University, College Station, Texas, 1983:114 pp., many tables, figures, and maps. \$16.95 (cloth), \$10.95 (paper).—As a result of its spectacular range expansion in the New World, the Cattle Egret (*Bubulcus ibis*) has been the subject of much study. Telfair's monograph attempts to provide a comprehensive review of this research, while at the same time emphasizing work done on the species in Texas. All aspects of Cattle Egret biology are covered, beginning with an introduction that discusses the taxonomic status and world-wide range expansion of the species. Chapter 2 provides an historical perspective of changes in the range of the species within Texas. Chapter 3 discusses seasonal distribution and migration, while Chapters 4–7 deal with nesting habits, food habits, reproduction, and population dynamics, respectively. Where appropriate, Cattle Egrets are compared to the other ardeid species breeding in Texas with which they may, or do, come into contact. The last two sections discuss the role of the Cattle Egret in the ecosystem: the problems it faces as a result of environmental contamination and expanding human populations, as well as its economic importance.

The amount of available literature on this species makes any literature survey a gargantuan task. Even summarizing the Texas data, much of which were collected by the author, is a large undertaking. Occasionally the amount of material available proves to be too much,

and the temptation to squeeze in everything gives rise to crowded and confusing figures and maps. In some places, long lists of citations break up the text, making it difficult to follow. In other places, however, there is insufficient support for some of the statements made. For example, when discussing his own data, the author makes claims that are based on small sample sizes or that are unsubstantiated by statistical testing.

There are a number of minor instances in which poor writing style results in confusion about what is really meant. There are also some rather contradictory passages. A section starting on p. 76, for example, discusses sibling competition. Although it begins with the statement, "during extensive observations, sibling competition seemed to be minimal in Texas heronries," it goes on to discuss such competition in detail and to describe chick feeding behavior in a way that implies that sibling aggression is common. The statement, "Beak-grab feeding develops at 4-8 days after hatching, and the siblings become strongly competitive," for example, would seem to contradict the earlier remark. In addition, "starvation or cannibalism of the youngest chick" is listed as a cause of nestling mortality among Cattle Egrets.

Overall, the effort put into producing the book was well worthwhile. As an exhaustive survey of the literature and as a comprehensive summary of Cattle Egret biology, this monograph should prove invaluable not only to those interested in this species, but also to those working on other ardeids.—NANCY J. FLOOD.

THE BIRDS OF THE WETLANDS. By James Hancock. Facts on File, New York, New York, 1984:152 pp., over 120 color photos. \$22.95.—The title of this attractive book is somewhat misleading. Mr. Hancock is a well-known authority on herons, and one might expect a detailed discussion of the biology of this and similar groups. However, the book turns out to be an extended travelog; in nine chapters the author takes us to single locations in North America (Everglades National Park), South America, Africa, India, China, Japan, Indonesia, Australia, and Europe (Coto Doñana). For each locality Hancock describes the area and tells of his visits there to photograph birds. Most of each chapter consists of describing the species seen. In the back of the book, complete checklists of the birds of the areas visited are given, as well as some travel hints about visiting those areas.

But as pedestrian as is most of the text, the photographs are a different story. Mr. Hancock demonstrates that he is an outstanding bird photographer, and even includes a section of photographic advice. The 120 photographs are a marvellous collection of portraits of herons, storks, ibises, waders, and other wetland species, with a few raptors thrown in. Unfortunately, the publishers adopted the abominable technique of printing a beautiful picture across the centerfold of the book. Thus a fine picture of a White-naped Crane (*Grus vipio*) has the body and most of the neck on page 71 with the head barely visible on page 70.

Throughout most of the text there is a strong conservation theme. In chapter after chapter, it is mentioned that these wild wetlands are under some kind or other of adverse pressure.

The price of the book is high for the vicarious enjoyment of the birding outings described, but the collection of pictures is well-worth having.—GEORGE A. HALL.

ECOLOGICAL VARIATION IN SIZE AND PROPORTIONS OF SONG SPARROWS (*MELOSPIZA MELODIA*). By John W. Aldrich. Ornithological Monographs No. 35, American Ornithologists' Union, Washington, D.C., 1984:134 pp. \$10.50.—The appearance of a new treatment by one of American's respected taxonomists on the preeminent North American example of a polytypic species, indeed, one of the best examples of a polytypic species anywhere, is a major event. The time is right for a new look at the Song Sparrow (*Melospiza melodia*). Unfortunately, this study does not live up to its promise or to my own expectations.

"In the present study I have correlated measurements and proportions of Song Sparrows with 'Life Areas' (Aldrich 1963, 1966 [the latter reference is a published poster]), 'Ecoregion Provinces,' 'Ecoregion Sections' (Bailey 1976), and combinations of Life Areas and Ecoregion Sections, in an attempt to determine the probable adaptive value of morphological [size] variation" (p. 1; the brackets are mine). Measurements, to the nearest 0.1 mm, were made of wing chord, wing tip (tip of longest secondary to tip of longest primary), tail, culmen (total), maximum culmen depth and width, tarsus, and middle toe. A total of 826 males and 406 females collected May through August were used to avoid inclusion of migrants. Data are presented for each measured element as number of specimens, mean, and standard deviation. Data were divided by sex into 17 Life Areas (Tables 1 and 2), 23 Ecoregion Provinces (Tables 3 and 4), and 79 Ecoregion Section/Life Areas (Tables 5 and 6). In Table 5, the number of males per region ranged from 0 to 69, with 46 divisions having 10 or fewer specimens. Maps are presented summarizing each element, with an L (longer or larger), M (median one-third of group), or S (shorter or smaller) in each Ecoregion Section. Graphs present north-south and east-west transects for each element; correlation coefficients and differences between areas and their statistical significance as indicated by Student's *t*-tests are discussed.

Song Sparrows use moist edge habitats for nesting. In the East where moisture abounds, succession is rapid; thus, suitable edges are widespread but ephemeral (away from the salt marshes), and color-based subspecies are poorly developed. (There are only four races east of the Rockies.) There is essentially no variation in size. In the West moist substrates are mainly riparian, aquatic, or littoral edge habitats. Waterways are more permanent and isolated through time; subspecies based on color and size are well developed. The species occurs in relatively small patches of relatively permanent habitat, isolated from one another by largely unsuitable habitat. Thus, the fracturing of the species range into Life Areas, without regard to the local habitat and ecology, prejudices the data. Alternately, the use of phytoecologic subunits in the face of years of taxonomic experience showing relative morphologically homogeneous populations appears to be of little value. For example, on the southern edge of the Mexican Plateau size variation is important, but the diverse populations are combined within a single phyto-region. A map of collecting localities would have revealed that the species does not occur in central or northern Labrador, nor in Alaska away from the coastal areas. The maps, however, give the impression that the relative culmen lengths are shorter in those regions than in coastal Alaska where the species does occur!

Geographic variation in Song Sparrows primarily involves color; even in the East the subspecies are characterized by color differences. This most important character was omitted from the study.

The mensural study should have been done on specimens showing genetically, not edaphically, controlled plumage characters; i.e., on specimens in new, unworn plumage. I cannot believe that a taxonomist of Dr. Aldrich's acumen could not distinguish migrant specimens when such distinction was critical. To prove to myself the validity of my long avoidance of worn nesting-season specimens whenever possible, I measured to the nearest mm, without regard to age, the wing tip of male Song Sparrows from the Northeast from four time periods. The number of specimens measured and their means were November and December 19 (10.6), June 25 (9.2), July 24 (8.8), and August (7.9)! The difference between worn and unworn specimens is equivalent to that between males from "Arctic-Alpine (Aleutian)" (9.9), where fading would be less severe and wear is probably reduced in the less abrasive vegetation, and "Mesquite-Grassland" (7.2), i.e., Arizona where wear and fading are extreme. The mean value presented for "Eastern Deciduous Forest" was 9.1. Tail measurements are even more affected by wear (of course, this criticism is not valid for the culmen, tarsal, and toe measurements). Further, I believe that by examining feather shape and wear, most specimens could have been aged relatively reliably. There would appear to be no reason not

to use better material for resident populations. Unnumbered tables summarize all measurements by Life Areas and Ecoregion Provinces. On each table, areas are arranged in order of decreasing size of the element and, consequently, arrangements vary on every table. These tables are interesting; unfortunately, they may be accepted at face value and referred to by future textbook writers and armchair biogeographers who are unaware of the problems mentioned above.

A study of size variation in 1984 should not have attempted to do less than the now classic studies of size variation by James (*Ecology* 51:365–390, 1970) for a single character in relation to climate in several species, or by Power (*Univ. Kans. Publ. Mus. Nat. Hist.* 19:1–83, 1970) for multiple characters in a single species.

The overall conclusions of this monograph are (1) that northern, more migrant populations of Song Sparrows are larger and have longer wings with longer wing tips (southern birds are smaller) and (2) that western populations, which are more restricted to aquatic habitats, are more insectivorous and have relatively finer, more pointed bills. A competent ornithologist would have predicted this when presented with the distribution of the species and the habitat restrictions.

Four appendixes discuss or list breeding habitats (I), migration [based on banding data] (II), recoveries of winter-banded birds (III), and food (IV). The appendixes were worth publishing, but as for the text, I can only ask, why was it published? In my opinion, the study was performed using the wrong materials, did not gather the most important data, and utilized only basic (if not primitive by 1984 standards) statistical tests.—ROBERT W. DICKERMAN.

THE JOY OF BIRDING: A GUIDE TO BETTER BIRDWATCHING. By Chuck Bernstein. Capra Press, Santa Barbara, California, 1984:201 pp., line drawings. \$8.95 (paper).—Mr. Bernstein likes birds, rare and common (but mostly rare), and he writes about them with great zest. If you enjoy the sport of birding, you may enjoy these numerous anecdotes of birds sought and often found.

It is Mr. Bernstein's hope that this will be an informative book. About half of the chapters are strictly anecdotal, but embedded in these are many birding tips, including clues to finding and identifying birds. In this context, faults in current North American field guides are discussed, with the National Geographic Society's recent (1983) entry emerging as least culpable.

The ornithological content of this book has to be considered "soft." The chapters that do not deal with bird trips are devoted to topics: migration, subspecies, distribution, etc. These mostly point out, with examples, that close observation of individual birds will pay off in knowledge and enjoyment. I certainly find no fault with that. But not enough is done to put such activity into a broader context of current ornithological or biological views. Such understanding would add to the enjoyment of an intelligent viewer.

There is no secret that this is a book for birders, and not for ornithologists. It may succeed in edging birders with no ornithological experience closer to being "field biologists." Individuals who occasionally or regularly slug their way through articles in *The Wilson Bulletin* or other ornithological journals will find nothing of scientific interest in Mr. Bernstein's book; but, on the other hand, they may find relief in the unconstrained enthusiasm that Bernstein manages to express. This book is very much "the sort of thing that people who like this sort of thing like."—PETER F. CANNELL.

BIRD BANDING. By H. E. McClure. Boxwood Press, Pacific Grove, California, 1984:x + 341 pp., numerous figs., few tables. \$15.00 (paper).—This book is intended as a manual of

practices and procedures, directed primarily at the beginning bander. Much of it was compiled in 1963, but two subsequent revisions have brought in up-to-date information from a variety of sources. The size is little larger than a field guide, making it easy to carry in the field.

The book begins with a brief history of the origins of banding around the world, comments on geological changes that may have contributed to migratory movements, and discusses the variety of types of bird movements that have been elucidated through banding and other studies.

The fourth chapter, of almost 60 pages, considers the different types of birds found around the world, the methods used to catch each type, how they may react, problems and dangers to be aware of with each, the age at which they can be banded, how they should be handled, and various other helpful hints. This would seem a most useful chapter to the beginner or to the experienced person about to extend his or her field of banding activity.

Two chapters are devoted to various types of traps and snares used to catch birds. Most of these are illustrated, and dimensions frequently are given. Regardless of the species or situation, there is a method here that would be useful. An entire chapter is devoted to the use of nets and the special problems associated with them, as well as to the simple to very elaborate ways to set nets for specific situations.

Cautions and advice about the banding of nestlings is the subject of one chapter. Nets that are set or left up at night are likely to catch bats as well as the birds for which the nets were intended. Advice and encouragement about the handling of bats is included.

Detailed lists of equipment for small banding kits or more elaborate, permanent stations are provided. An outline of the intricacies of record keeping that is essential to banding also is presented. First aid for birds, the collection of ectoparasites or blood samples, and the preservation of birds that die are considered as well.

Illustrations are numerous and very helpful. A bibliography and an index contribute to the usefulness of this volume. My criticisms are relatively minor. There are a few typographical errors; several of the illustrations printed through badly, making a few pages difficult to read; several species of owls are credited with *building* large bulky nests; and the maps in Chapter 2 seem rather obscurely related to the discussion of developing migratory pathways.

The book opens with a code of ethics for banders. Throughout the text, care in catching and handling to minimize stress on birds is emphasized. The information provided should result in the humane treatment of birds. To me the book seems a very useful guide, and a bargain at the price.—ROSS JAMES.

JOHN ABBOT IN GEORGIA; THE VISION OF A NATURALIST ARTIST (1751—CA. 1840). By Vivian Rogers-Price. Madison-Morgan Cultural Center, Madison, Georgia, 1983:149 pp., 1 color plate, 126 black-and-white plates. \$15.00 (plus \$2.00 postage and handling—available from the Madison-Morgan Cultural Center, 434 S. Main St., Madison, Georgia 30650.)—In conjunction with the celebration of the Georgia Semiquincentenary in 1983, the Madison-Morgan Cultural Center assembled an exhibition of the work of John Abbot. This publication is the informative catalog of that exhibition. There are black-and-white reproductions of 116 of Abbot's paintings. John Abbot is more widely known as an entomologist than an ornithologist, but it is probable that he showed Alexander Wilson several species of southern birds for which Wilson later provided the first scientific description. Several of Abbot's specimens became the types of species described by European ornithologists. Forty-five of the paintings illustrate 39 bird species. The other pictures are divided between plants and insects (primarily beetles and butterflies). The bird portraits are crude, but identifiable, being similar to those of Wilson, but the plants and insects are very good.

The catalog also includes an informative biography of Abbot and a chronology of his career as an artist and naturalist.—GEORGE A. HALL.

THE DICTIONARY OF AMERICAN BIRD NAMES, Revised Edition. By Ernest A. Choate, revised by Raymond A. Paynter, Jr. The Harvard Common Press, Boston, Massachusetts, 1985:xiv + 226 pp., several black-and-white drawings. \$17.95 (cloth), \$9.95 (paper).—The original edition (1973) of this book by the late Ernest Choate was reviewed in the *Bulletin* (87:129–130, 1975) and a more detailed review appeared in *Bird-Banding* (45:284–287, 1974). Both of these reviews pointed to certain flaws and errors in the lists of bird names and their meanings. This new edition incorporates numerous revisions by Raymond Paynter. Principally the changes are to incorporate the nomenclature of the 6th Edition of the A.O.U. Check-list, although the older names are still included. Paynter also has corrected the many errors that had been pointed out in the reviews. In his revisions Paynter has been successful in his attempt to keep the flavor of Choate's original style. The original edition was plagued with so many typographical errors that it left a very negative impression of the standards of the publisher. I noted a few typos in the revised edition, but in general this matter has been corrected. This edition can be recommended to anyone who wants a lexicon of bird names, but the definitive treatment still remains to be done.—GEORGE A. HALL.

JUST A LARK. By Jim Flegg, Norman Arlott, Eric and David Hosking. Croom Helm, Dover, New Hampshire 03820. 1984:160 pp., 141 black-and-white photographs, 141 cartoons. \$15.00.—It's a little expensive for the purpose, but this little book is certainly an amusing read for anyone. One hundred forty-one species or groups of species are discussed. There is an informative discussion of each species (by Flegg), a good photograph (by Hosking *pere et fils*), and an amusing cartoon by Arlott. The species selected are worldwide in distribution. The text is of some value and the photos are good, but small and heavily cropped. The cartoons are excellent. A Hobby (*Falco subbuteo*) equipped with binoculars and field guides, meadowlark (*Sturnella* sp.)—a boy and girl bird in cozy embrace in grassy field—well, you get the idea.—GEORGE A. HALL.