



EDITED BY BRUCE M. BEEHLER

The Auk 109(1):208–209, 1992

The Complete Book of Southern African Birds.—P. J. Ginn, W. G. McIlhenny, and P. le S. Milstein (Compilers). 1989. Struik Winchester, Cape Town (P.O. Box 3755, Cape Town, South Africa). 760 pp., color photographs, paintings, diagrams and distribution maps throughout. ISBN 0-947430-11-3. R225.00.—Few regions in the Southern Hemisphere can boast an array of popular bird books as diverse and glossily produced as that of southern Africa. Despite (or perhaps because of) political upheaval in several of the countries in that region, there has been a strong surge of popular interest in ornithology, and a mushrooming of research activity by both amateurs and professionals. While dozens of books on birds of the region have been published in the last decade, this lavish tome (weighing 4 kg!) clearly was produced with the hope that it will be the definitive reference on the subject for many years to come. As a publishing event, its history is epic, and its immediate impact is certainly impressive.

The book is aimed at both professionals and laymen, although its bulk and large format relegate it to the (sturdy) coffee table rather than the rucksack or office bookshelf. As a compilation of photographs, paintings, and information on the 914 species recorded in the region, its value is high—there is certainly no other collection of this scale and visual quality. Most of the photographs (by 150 photographers) are outstanding, and these alone could justify the price for enthusiasts. Some photos show curious behaviors (e.g. a young Black-headed Heron, *Ardea melanocephala*, eating a smaller chick on a neighboring nest), and most others are superb portraits that quite adequately show identifying marks, in contrast to early photographic field guides. Clear, uncluttered paintings by Graeme Arnott show 55 species (mainly swifts and warblers) for which good photos were not available.

Preceding the species accounts is a forward by the late Eric Hosking, and a nicely written and illustrated general introduction to the evolutionary history, classification, and adaptations of birds. This section, by Peter Milstein, will be of interest to the lay reader, but is also sufficiently detailed to supplement undergraduate ornithology courses in the region. There also are essays by Milstein on the biogeography of African birds in relation to rainfall, altitude and geological history, with valuable and attractive photographs and maps of biomes in southern Africa. These will be of particular value to readers unfamiliar with the region. Nonetheless, an interesting biome map

contains some curious elements: the Okavango Delta, Lake St. Lucia, and the ephemeral Etosha and Makgadikgadi pans are all grouped as Azonal Habitats, while areas of dry acacia savanna and moist broadleaved woodland (e.g. central Namibia and the Caprivi Strip) are grouped as Mixed Woodland, separate from categories of Arid Woodland and Moist Woodland. A map called “Wetland Zones” implies that vegetation, rainfall, and temperature zones are clearly delimited (Arid Zone and Highveld Zone are separated by a somewhat arbitrary north-south wiggly line), and I doubt the value of such a crudely categorical approach. However, these points do not detract from the value and readability of Milstein’s text, which treats the diversity and vulnerability of the southern African landscape with the sophistication they deserve.

In the brief species accounts that form the bulk of the book, a general description is often enriched by personal observations. Nearly one-half of the 36 contributors are amateur ornithologists, which reflects the input that committed “weekend watchers” have made to the ornithology of the region over the years. In some accounts the personal notes are excessively anecdotal, but in general they convey an interesting richness of experience that the standard reference works cannot. Following the general descriptions of each species, brief notes are included on distribution and occurrence (usually with maps), appearance, voice, behavior, food and feeding methods, and breeding biology.

Completing the book are a short bibliography, a glossary, acknowledgments, lists of contributors and subscribers, and a diagram of bird anatomy. The anatomy diagram should have appeared at the beginning, with the section on anatomical adaptations. Indices of English, scientific, and Afrikaans bird names will help readers unfamiliar with phylogeny to find species accounts.

These are the book’s stronger points. Two aspects disappointed me, and detract from an otherwise impressive compilation. The first is a lack of specific citations, which limits the book’s value as a reference. The brief bibliography, largely a list of previous popular books on southern African birds, is adequate only as a starting point for the layman. The curious reader who wants to verify a statement has to write to the specific contributor. Unfortunately, the contributors are listed only by their titles and affiliations or towns of residence, and not by postal addresses.

Related to this, and more unfortunate, is the “datedness” of some of the species accounts and the bib-

liography. The book was eight years in planning and production, and I have the impression that the contributors and compilers were reluctant to update their species accounts during that time. While the list of contributors includes many people who have made significant contributions to southern African ornithology, and species accounts were usually written by those who knew the birds best, I was disappointed to see that younger researchers were generally overlooked. As a few examples, Richard Watson's study of Bateleurs (*Terathopius ecaudatus*), Morne du Plessis' of Red-billed Woodhoopoes (*Phoeniculus purpureus*), Chris Brown's of Bearded Vultures (*Gypaetus barbatus*), Rob Simmons' of African Marsh Harriers (*Circus rani-vorus*) and other raptors, Dave Ward's of *Vanellus* plovers, and Dawid de Swardt's of Gurney's Sugarbirds (*Promerops gurneyi*) could have enhanced the book immeasurably. While the authors of accounts for these species mainly did a good job, it simply is not true to say, for example (as did Tony Tree), that no one knows about the ecological relationships of *Vanellus* plovers. Even if Tree was unaware of Ward's studies, the compilers should have been familiar with his work. Carl Vernon's needlessly anthropomorphic account of the whydahs (*Vidua*) also overlooks existing information on their mating system and breeding biology, and incorporates a poor, previously published photo of feeding Paradise Whydahs that wrongly suggests lek behavior.

Others have noted these weaknesses. Miles Stevens (1990. *Birding in Southern Africa* 42[1]:28) lamented that this book, as others before it, ignored data published in avicultural journals. The datedness is further reflected in the bibliography of the book; only 5 of the 74 items are dated 1983 or later, and most are from the 1960s and 1970s. This perhaps reflects the compilers' own peaks of ornithological activity, but in a book calling itself "complete," such datedness and selectivity are a bit shameful.

This book, therefore, is not a state-of-the-art compendium, nor is it of great reference value to professionals. It is, however, an impressive and very worthwhile book for community and specialist libraries, and for anyone interested in the region's birds. Its price puts it beyond the reach of many individuals in southern Africa, but the exchange rate for most other currencies makes it more affordable elsewhere. If you have the time and money, this book will certainly provide you with many hours of absorbing, informative, and visually satisfying reading.—PHOEBE Barnard, *University of Namibia, Private Bag 13301, Windhoek, Namibia.*

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Food Hoarding in Animals.—Stephen B. Vander Wall. 1990. University of Chicago Press, Chicago. xii + 445 pp. ISBN 0-226-84735-7. Paper, \$29.95; cloth,

\$75.00.—Many animals experience cycles of food abundance and scarcity. These cycles vary considerably in duration. For the animal dependent on tidal food, the cycles come relatively rapidly. For the animal dependent on food that is available only during one season of the year, periods of low food supply may last months. Animals have many ways of adapting to variation in food supplies. One way to deal with this problem is to store (or cache) the food for future use. In this well-written and comprehensive book, Vander Wall systematically reviews the scientific literature on food hoarding in animals. This review clearly demonstrates that food hoarding, which Vander Wall defines very broadly as "the handling of food to conserve it for future use," is found in many arthropods, birds, and mammals. Food hoarding represents an important part of the strategies that animals use to adapt to vicissitudes of food supply.

The book has eight chapters organized around basic scientific questions about food hoarding and three chapters that constitute a taxonomically organized review of food hoarding. The first chapter defines food hoarding and specifies different types of food storing. Vander Wall then takes up the question of how animals use stored food. Stored food is available for consumption during long- or short-term periods and, thus, can contribute to increased survival during times of food scarcity. But there are other potential benefits. For example, hoarded food can promote early breeding, as it appears to do in the Pinyon Jay and Boreal Owl. Vander Wall then reviews ideas about the evolutionary advantages of food hoarding, as well as different evolutionary paths that can lead to hoarding. He also discusses the evolution of specialized behaviors related to food hoarding and coevolution between hoarders and plant propagules. This discussion concludes with the presentation of a very general, descriptive model of the evolution of hoarding.

The next issue reviewed is that of the loss of cached food, and the behaviors that hoarders use to reduce loss. There are several potential sources of loss, including decomposition, loss to other animals, and "escape" by cached food. Hoarders have a variety of behaviors to reduce these losses. Vander Wall then reviews the internal and external factors that affect hoarding behavior, including such factors as genetics, ontogeny, hunger and photoperiod.

The next issue addressed is how hoarders that create inconspicuous caches relocate their stored food. Spatial memory and olfactory cues play important roles in finding hidden caches for different species. Vander Wall's discussion of the use of memory by food-hoarding corvids and parids is particularly well done. The next chapter concentrates on the role of food hoarders as dispersers of plant seeds and nuts. Not only can hoarders have obvious effects by dispersing seeds, but they can have more subtle effects, resulting in selective pressures on the characteristics of plant propagules.

Vander Wall presents three chapters that review food hoarding in mammals, birds, and arthropods. These chapters are quite extensive, and serve as an excellent bibliographic resource for the scientist interested in food hoarding. The final chapter is a brief discussion of how food hoarding can affect community structure by affecting community diversity and organization. It is a brief discussion, because these effects have received little attention in the literature.

This is a book that thoroughly and carefully reviews the literature on food hoarding. It is well written, combining considerations of ecology and natural history with sophisticated discussions of behavior and behavioral mechanisms. It will be of value to any scientist interested in food hoarding, whether that interest is focussed on natural history, ecology, evolutionary function, evolutionary history, or behavior. Because many bird species store food (100 avian food hoarders are mentioned), this book will be of interest to ornithologists. The book is particularly valuable because it emphasizes gaps in our knowledge that should guide future research. The areas that deserve attention in the future include the need for more basic natural history, more evolutionary modelling, and more work on the effects of food hoarding on community structure.—ALAN C. KAMIL, *School of Biological Sciences, Manter Hall, University of Nebraska, Lincoln, Nebraska 68588, USA.*

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Utah Birds: Historical Perspectives and Bibliography.—William H. Behle. 1990. Utah Museum of Natural History Occasional Publication No. 9. University of Utah, Salt Lake City. xv + 355 pp. ISBN 0-940378-11-6. \$25.00 + \$3.50 shipping.—The first recorded observations of birdlife in the region now known as Utah were incidental notes in journals written by the Spanish padres of the Dominguez-Escalante party which entered in 1776. One-half century later, fur-trappers, mountain men, and explorers began to add their casual records. It was not until the mid-19th century that naturalists attached to federal survey parties collected and observed birds in many sections of Utah Territory and, by the 1870s, the general features of the avifauna were known. A quiescent phase ensued for the next half-century, until the 1930s, when resident educators and naturalists began the serious study of Utah birds. One of these individuals, William Behle (a Utah native who in 1937 completed his doctorate with Joseph Grinnell at the University of California, Berkeley) returned to Salt Lake City to take a post at the University of Utah. For over 50 years and continuing to the present, Utah ornithology has been his all-consuming passion. A skilled and meticulous compiler, Behle has prepared a book that is the

most detailed ornithological history of any extensive region of North America, and a storehouse of information with application and interest beyond the borders of the state.

Both the early government explorations and the modern period are thoroughly treated. Every individual with any conceivable connection to Utah birds is biographed, from the earliest explorers to presently active researchers at institutions of higher learning and in government agencies. The many serious amateurs who have observed, banded, photographed, raised, or painted birds in Utah also are reviewed. The biographies vary in length, roughly in proportion to the relative influence of the particular person on ornithology in the state, and brim with the kind of detail that historians covet. Accounts include some of the most familiar names in American ornithology (V. Bailey, A. K. Fisher, C. Hart Merriam, H. C. Oberholser, Robert Ridgway, and Alexander Wetmore, among many others). Behle also includes synopses of lesser-known figures where information could be exhumed.

Biographies of college and university faculty contain comprehensive analyses of academic careers and graduate student sponsorship. Dates and titles of these comprise a valuable feature. Some faculty guided incomprehensible numbers of graduate students over several decades, enabling one to search for trends in research. For example, from 1948–1977, Jessop B. Low (for many years leader of the Cooperative Wildlife Research Unit at Utah State University) directed the graduate research of approximately 140 students, 26 of whom worked on upland game birds, 45 on waterfowl, and 6 on miscellaneous wildlife problems that involved birds.

The book is not entirely biographical. Major sections discuss federal and state agencies concerned with birds, ornithological societies, bird banding, artisans in Utah who have worked on birds, aviaries, and museums. Distinctive aspects of Utah ornithology receive emphasis. In the early years, vast colonies of marsh species nesting in the vicinity of Great Salt Lake served as a focal point for much ornithological activity. More recently, researchers at several colleges and universities have concentrated their efforts on the large populations of raptors to be found in the state.

Portraits of people relevant to the history of Utah ornithology represent a majority of the 129 figures. A photo from the early 1870s depicts an austere Guglielmo Sangiovanni, the first caretaker of the Salt Lake Museum and Menagerie, the forerunner of the Desert Museum. Page 206 presents a full-length snapshot of the author in 1932, a lanky, bespectacled, pipe-inspired 23-year-old aboard an Antelope Island cattle scow. Raymond J. Quigley, through the Western Foundation of Vertebrate Zoology, and James M. Mullen supplied charming portraits of the early egg collectors. Among many priceless old photos are the

scenes that depict the famous Treganza family on egg-gathering ventures in their ancient field car, complete with a cabinet for provisions on the running board, a fold-down door that served as a table, and a baby creeping on the seat.

The volume ends with a 31-page bibliography of Utah ornithology in which Behle's 87 contributions figure prominently. This list alone would make this book a valuable reference. William Behle's compilation stands as a tribute to his enduring scholarship and is a major addition to the history of American ornithology.—NED K. JOHNSON, *Museum of Vertebrate Zoology, Life Sciences Building, University of California, Berkeley, California 94720, USA.*

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Women in the Field.—Marcia Myers Bonta. 1991. Texas A&M University Press, College Station. 299 pp., 30 black-and-white figures. ISBN 0-89096-489-0. \$13.95.—Bonta takes her place among that small set of women writing on, especially biographies of, women in science. The general set includes Keeler (1983) on Nobel Laureate Barbara McClintock, but becomes specific with Kofalk (1989) on Florence Merriam Bailey or McCracken (1986) on Connie Hager, "a Texas birdwatcher." As a group, the women Bonta covers were extraordinarily dedicated. They are interesting because of the difficulties they had to overcome and the contributions they made. Despite the many and varied stereotypes that exist, all 19th-century women were not "delicate, parlor-bound creatures."

Bonta describes the lives and times of 25 women. Some are well known, others less so. She divides them into The Pioneers, The Naturalists and then The Botanists, Entomologists, Ornithologists, and Ecologists. Others are mentioned. Most of the very earliest came to natural history as gardeners or as illustrators. Often they grew up in sparsely settled parts of the country. Others began, like many men, with supportive parents, teachers and professors. All are North Americans, but some worked further afield.

The ornithologists include Florence Merriam Bailey, Althea Rosina Sherman, Cordelia Stanwood, Margaret Morse Nice, and Amelia Laskey. Each contributed significantly, mostly through work in the field. It was most pleasing to read how they learned from one another. For example, Nice used Bailey's *Handbook* to learn the local birds. There is evidence that they probably corresponded and met at AOU meetings.

The photographs are as delightful as the text. Beginning with an 1876 studio shot (Martha Maxwell) through much less formal outdoor scenes taken in the 1960s (probably, they are not all dated), the costumes are wonderful. They range from flowered hats and

collecting guns, to hipboots, long summer dresses, and riding gear. But the intent is serious. The subjects carry hammers, plant presses, artist supplies, collecting nets, and cameras. They went afoot, on mules, by horse, in canoes, and in cars. They lived in tents, thatched huts, or shacks; some worked in their backyards. Through it all, a few still managed to smile for the camera.

This book deals with an important part of our collective history. Bonta writes well and presents material of great worth. It is a delight to read, even though many of these women led difficult lives, struggled for their independence, or were thought to be slightly offbeat. Several attained international recognition. They all are to be admired.—ALAN H. BRUSH, *Department of Physiology and Neurobiology, University of Connecticut, Storrs, Connecticut 06268, USA.*

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Wisconsin Birdlife. Population & Distribution. Past & Present.—Samuel D. Robbins, Jr. 1991. University of Wisconsin Press, Madison. xvii + 702 pp., 1 color plate, numerous black-and-white photographs and maps. ISBN 0-299-10260-2. \$75.00.—This large volume represents the cumulation of a 30-year project to present distributional and population information on all 394 confirmed and 13 hypothetical species. The species accounts provide for the bulk of the work and feature clear, readable maps. The accounts include status, habitat, migration and breeding data. Each account includes several narrative paragraphs. The organization is traditional, and the information easily accessible.

This is a large-format volume, but not a picture book. Rather than include color plates, the reader is referred to the "portrait" of each species in O. J. Gromme's *Birds of Wisconsin* (University of Wisconsin Press, 1963). In keeping with the attitudes of the author and presumably the citizens, considerable space is given to two contributions of merit.

As is an emerging trend in state "bird books," there is a section dedicated to the historical development of an awareness of the value of birds. Wisconsin has been fortunate in being home to a series of wildlife ecologists, birders and naturalists who have contributed extensively. One result of this interest has been an extensive documentation of the occurrence of birds, their breeding records and long-term population trends. A second element of note is the contribution of J. H. Zimmerman. Wisconsin's populist political past is reflected in the material gathered and presented here. Zimmerman writes first about "the landscape and the birds," where he details the environmental setting of the state. Its recent glacial history makes the soils and topography complex, but Zim-

merman discusses them lucidly. He then moves to an historical discussion of the habitat, which allows him to include the affects of settlement and the benefits, both good and bad, that humans have had. In another chapter, Zimmerman presents a discussion of "Habitat Preference." His analysis is keen, and there are two extensive tables. In one, each breeding species is matched with the preferred habitat. The second encompasses wintering birds. Because the habitats are so finely specified, the compilation is valuable.

The bibliography, assembled by W. E. and G. M. Scott, is comprehensive and of potential value to the entire region. It is rare to find as extensive a listing in a book of this type. It represents an abridgement of an even larger ("over 4,700" entries) version and was updated for this book by Robbins.

Wisconsin Birdlife is an important book for both the state and the immediate region. It should be available in all libraries serving readers with interests in bird populations, distribution and the relationships among birds, people, and the environment.—ALAN H. BRUSH,

Department of Physiology and Neurobiology, University of Connecticut, Storrs, Connecticut 06268, USA.

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BirdLexi.—1991. Santa Barbara Software Products, Santa Barbara, California. A spell checker for the Latin and English names of the birds of the world. Names from fourth edition of Clements' *Birds of the world* (Ibis Publishing Co., 1991). \$49.95.—Because of the continual need for both accuracy and consistency in the spelling of bird names, this is a welcome contribution. While some taxonomists may argue about Clements' choices, all this product does is provide a spell checker; it does not settle nomenclature disputes. Handy for many writers. The material is available on both 3.5- and 5.25-inch floppies formatted for either IBM or Macintosh machines.—ALAN H. BRUSH, *Department of Physiology and Neurobiology, University of Connecticut, Storrs, Connecticut 06268, USA.*

Also Received



Wyoming Birds.—J. L. Dorn and R. D. Dorn. 1990. Mountain West Publishing, Cheyenne, Wyoming. 139 pp., 35 black-and-white sketches. \$9.95 (pb).—Information on local occurrence and identification problems specific to the area.

Peacemaking Among Primates.—F. De Waal. 1990. Harvard Univ. Press, Cambridge. 294 pp. ISBN 0-674-65921-X. \$12.95 (pb).

Island Africa. The Evolution of Africa's Rare Animals and Plants.—J. Kingdom. 1990. Princeton Univ. Press, Princeton, New Jersey. 287 pp. Color plates and sketches by author. ISBN 0-691-08560-9. \$39.50.

Birding Cape Cod.—Cape Cod Bird Club and Massachusetts Audubon Society. 1990. Arey's Pond Press, Wellfleet, Massachusetts. ISBN 0-9619485-5. \$12.95 (pb).

Protecting Internationally Important Bird Sites.—D. A. Stroud, G. P. Mudge, and M. W. Pienkowski. 1990. Sterling Publishing Co., New York. 334 pp., 96 United Kingdom. 230 pp. ICBN 0-86139-633-2. \$26.00.—A review of the EEC Special Protection Area network in Great Britain.

Wading Birds of the World.—E. and R. Soothill. 1990. Sterling Publishing Co., New York. 334 pp., 96 color photos, 70 black-and-white images. ISBN 0-7137-2130-8. \$17.95 (paperback reissue of 1982 volume).

Oceans of Birds.—T. Soper. 1990. Sterling Publishers, New York. 208 pp., color photos, and black-and-white line drawings. ISBN 0-7153-9119-2. \$19.95.

Connecticut Birds.—J. D. Zeranski and T. R. Baptist. 1990. Univ. Press of New England, Hanover, New Hampshire. 328 pp. ISBN 0-87451-513. \$35.00.

The Audubon Society Guide to Nature Photography.—T. Fitzharris. 1990. Little, Brown and Co., New York. 168 pp., 143 color photographs, numerous black-and-white drawings. ISBN 0-316-28449-1. \$29.95.

The Birds of the Beaufort Sea.—S. R. Johnson and D. R. Herter. 1989. BP Exploration (Alaska) Inc., Anchorage, Alaska. xxiv + 372 pp. Available from publisher (no price given). Library of Congress number 89-61461.—Revision of a first edition published by Canadian Department of Environment, Canadian Wildlife Service (1975).

Swans.—T. Saga. 1990. Rizzoli International Publications, New York. 80 pp., 80 color photographs. Introduction by J. Kear. ISBN 0-8478-1293-6. \$40.00.

Into the Heart: One Man's Pursuit of Love and Knowledge Among the Yanomama.—K. Good with D. Chanoff. 1991. Simon and Schuster, New York. 349 pp. ISBN 0-671-72874-1. \$22.95.

On the Spine of Time.—H. Middleton. 1991. Simon and Schuster, New York. 237 pp. ISBN 0-671-69141-1. \$18.95.

Ornithologie.—E. Bezzel and R. Prinzing. 1990. Verlag Eugen Ulmer, Stuttgart. 552 pp., 311 photos and figures, 110 tables. ISBN 3-8001-2597-8. DM 88.00 (in German).

Birds of Prey.—J. Bailey. 1988. Facts on File, New

York. 62 pp. The Nature Watch Series. ISBN 0-8160-1655-0. No price given.

Phylogeny, Ecology, and Behavior. A Research Program in Comparative Biology.—D. R. Brooks and D. A. McLennan. 1991. Univ. Chicago Press, Chicago. 434 pp. ISBN 0-226-07572-9. \$45.00 (cloth), \$21.00 (pb).

Elton's Ecologists. A History of the Bureau of Animal Population.—P. Crowcroft. 1991. Univ. Chicago Press, Chicago. 177 pp., unnumbered black-and-white photos. ISBN 0-226-121488-8. \$14.95 (pb).

The Birders Miscellany. A Fascinating Collection of Facts, Figures, and Folklore from the World of Birds.—S. Weidensaul. 1991. Fireside Books, Simon and Schuster, New York. 135 pp. \$9.95 (pb).

Field Guide to the Birds of Britain and Europe.—J. Flegg. 1990. Cornell Univ. Press, Ithaca, New York. 256 pp. All species represented by at least one photograph, mostly by E. and D. Hosking. ISBN 0-8014-9742-6. \$19.95 (pb).

The Audubon Ark. A History of the National Audubon Society.—F. Graham, Jr. A.A. Knopf, New York. 336 pp. ISBN 0-394-58164-4. \$24.95.

Fishing Bass-Ackwards.—J. Ohman. 1991. Fireside Books, Simon and Schuster, New York. 142 pp. Cartoons. ISBN 0-671-68624-0. \$7.95.

Guide to the Papers of Alexander Wetmore, circa 1848-1979 and updated.—V. Cooper and W. E. Cox. Smithsonian Archives, Guides to Collections, No 11. Gratis from Smithsonian Institution Archives.

Bird Flight. An Illustrated Study of Birds' Aerial Mastery.—R. Burton. 1990. Facts on File, New York. 160 pp. ISBN 0-8160-2410-3. \$24.95.

After the Ice Age. The Return of Life to Glaciated North America.—E. C. Pielou. 1991. Univ. Chicago Press, Chicago. 366 pp. ISBN 0-226-66811-8. \$24.95.

The Scarlet Ibis (*Eudocimus ruber*): Status, Conservation and Recent Research.—P. C. Frederick, L. G. Morales, A. L. Spans, and C. S. Luthin, Eds. 1990. International Waterfowl and Wetlands Research Bureau (IWRB), Slimbridge, United Kingdom. IWRB Special Publication No. 11. 194 pp. No price given.

Handbook for Atlasing American Breeding Birds.—C. R. Smith, Ed. 1990. Vermont Institute of Natural Science, Woodstock, Vermont. 64 pp. Prepared by North American Ornithological Atlas Committee. \$8.00 (including postage).

Hummingbirds.—C. H. Greenewalt. 1990. Dover Publications, Mineola, New York. 176 pp., 67 color and 18 black-and-white photographs, numerous drawings. ISBN 0-486-26431-9. \$15.95.—An unabridged, slightly rearranged republication of the 1960 original.

A Comunicação Sonora do Anu Branch.—J. H. Fandiño-Mariño. 1989. Unicamp, Campinas, Brasil. 302 pp. Numerous sonograms and site maps. ISBN 85-268-0150-3. No price given.

Structural Materials.—J. Vincent. 1990. Princeton Univ. Press, Princeton, New Jersey. 244 pp. ISBN 0-691-02513-4. \$17.95 (pb). Revised edition (original 1982).

The Birds of Sumatra and Kalimantan.—D. Holmes and S. Nash. 1991. Oxford Univ. Press, New York. xii + 83 pp., 24 color plates. ISBN 0-19-588971-1. \$24.95.

The Dynamics of Dinosaurs.—R. McN. Alexander. 1991. Columbia Univ. Press, New York. 170 pp. ISBN 0-231-06667-8. \$12.95 (paperback version of 1989 volume).

A Field Guide to Reptiles and Amphibians: Eastern/Central North America.—R. Conant and J. T. Collins. 1991. Third edition. Houghton Mifflin, New York. 450 pp., 48 color plates, 120 black-and-white figures, 333 range maps. ISBN 0-395-58389-6. \$15.95 (pb).

Backyard Bird Song.—R. K. Walton and R. W. Lawson. 1991. Houghton Mifflin, New York. Cassette in vinyl case with 32-page booklet. ISBN 0-35-58416-7. \$19.95.

The Wilderness Collection.—1990. Narada Productions, Milwaukee, Wisconsin. Audio tape cassette.—Nature-inspired instrumental music by 17 artists. No price given.

Ornithology for Africa.—G. L. Maclean. 1990. Univ. Natal Press, Pietermaritzburg. (Available from International Specialized Book Services, 5602 NE Hassalo St., Portland, Oregon.) 296 pp., 16 color plates and numerous black-and-white text figures. ISBN 086980-737-4. R 54.95 (pb).—An introductory text of ornithology in the Southern Hemisphere with African examples.

The Fragile South Pacific. An Ecological Odyssey.—A. Mitchell. 1991. Univ. Texas Press, Austin. 256 pp., 39 color plates, maps. ISBN 0-292-72466-7. \$24.95.

Birds of Jamaica.—A. Downer and R. Sutton. 1990. Cambridge Univ. Press, New York. 152 pp., 74 color photographs by Y.-J. Rey-Millet, maps. ISBN 0-521-38309-9. \$29.95.—Emphasis on 25 endemic species.

Pocket Guide to Wilderness Medicine.—P. G. Gill, Jr. 1991. Fireside Books, Simon and Schuster, New York. 204 pp. ISBN 0-671-70615-2. \$9.95.

A Naturalist in New Guinea.—B. Beehler. 1991. Univ. Texas Press, Austin. 251 pp., 26 color photos and 30 line drawings by J. Anderton. ISBN 0-292-75541-4. \$26.95.—Personal account of Beehler's "scientific adventures in one of Earth's most forbidding and beautiful places."

Man and Waterfowl.—J. Kear. 1990. T. & A. D. Poyser, London. (Available in U.S. from Academic Press.) 281 pp. ISBN 0-85661-055-0. \$35.00.

Wings for My Flight.—M. C. Houle. 1991. Addison-Wesley, Reading, Massachusetts. 187 pp. ISBN 0-201-57706-2. \$17.95.

Life of the Pigeon.—A. F. Skutch. 1991. Cornell Univ. Press, Ithaca, New York. 130 pp., 24 color plates and numerous drawings by D. Gardner. ISBN 0-8014-2528-X. \$49.95.

Fauna Sinica. Aves Vol. 6.—T. H. Cheng, Y. Xian, and G. Guan. 1991. Science Press (National Natural Science Foundation and Academia Sinica), Beijing.

240 pp., 5 color plates, black-and-white drawings, 49 maps. ISBN 7-03-001983-0. No price given.—Includes the Columbiformes, Psittaciformes, Cuculiformes, and Strigiformes; covers 83 species found in China.

Tiny Game Hunting. Environmentally Healthy Ways to Trap and Kill the Pests in Your House and Garden.—H. D. Klein and A. M. Wenner. 1991. Ban-

tam Books, New York. 278 pp. ISBN 0-553-35331-4. \$8.50.

Bird Life of Mountain and Upland.—D. Ratcliffe. 1991. Cambridge Univ. Press, New York. 256 pp., numerous line drawings by C. Rose. ISBN 0-521-33123-4. \$44.50.

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