

REVIEWS

EDITED BY JOHN WILLIAM HARDY

The Sunbirds of Southern Africa. [subtitle] Also the Sugarbirds, the White-eyes and the Spotted Creeper.—C. J. Skead. 1967. Published for the Trustees of the South African Bird Book Fund by A. A. Balkema, Cape Town. 352 pp., illus., 8½ × 6 in. R8.50 (about \$12.00). Sunbirds are known as Old World counterparts of the hummingbirds. Both groups are of long-billed nectar feeders, and both contain many species marked with bright colors and bold plumage patterns. This book offers a series of natural history accounts of sunbirds and their allies in southern Africa based on years of birdwatching by Skead, on published studies, and on anecdotes contributed by many correspondents. The field characters and available information on distribution, habitat, food, voice, display, nesting, breeding season, and development of the young are presented for each species. The sunbird accounts range in length from 15 pages for *Nectarinia chalybeata* (a summary of previous publications) to 3 pages for the lesser-known species that Skead has not seen in the field.

Of the 20 species of sunbirds considered 17 are members of the genus *Nectarinia* (*sensu* Delacour), one of the largest of bird genera with 66 species, 60 of them in Africa. Observations on their feeding behavior confirm that these comprise a single adaptive group. All feed on nectar by probing into the opening of the flower corolla, not by slitting the base as do the shorter-billed *Anthreptes collaris* or the white-eyes. Bill and tongue morphology is considered similar in all. Little is known about any differences in food preferences, but insects are suggested to be more important than nectar.

Skead regards the role of sunbirds as pollinators to be incidental. He reasons that since both flowers and insects are more numerous than sunbirds, no flowers are dependent on sunbirds for pollination, although a few individual flowers may be pollinated by these birds. Even the large flowers of bird-of-paradise (*Strelitzia*), long thought to be dependent on bird pollination, are regarded as insect pollinated. Molroth (*Flora of South Africa*, 1915) reported that sunbirds feeding on *Strelitzia* nectar perch on the two lateral petals, which give way like trap doors and release the bound stamens; the stamens extend and deposit pollen on the bird. Skead reports that sunbirds do not feed in this manner, but instead they cling to the side of the lateral petals or hang from the upright petals and avoid with success any contact with the sticky stigma. Flower-watchers find few birds at *Strelitzia* flowers.

Sugarbirds of the south (*cafer*) and the north (*gurneyi*) are usually regarded as forms of one species, *Promerops cafer*. Skead found the two kinds together in one area. The two shared the same habitat and had similar behavior and vocalizations. A flight display involving audible wing snapping, tail jerking, and considerable lateral movement was seen in *cafer*, while the few observed flight displays of *gurneyi* lacked these features. The other behavioral difference was in nest construction, but the identifications of the two "gurneyi" nests were not based on finding the bird at the nest. No specimens were collected or photographed in the reported area of sympatry. A supposed hybrid collected in 1931 resembled *gurneyi* in color but had a longer tail than any other specimen of *gurneyi* examined in the local museum; this bird and its specimen label had been "crossed" with others. Skead regards *gurneyi* as specifically distinct from *cafer*.

A statement (p. 316), "recent fieldwork has shown that . . ." the different forms of *Zosterops* are specifically distinct is supported only by a subjective interpretation of tone of voice of the different forms in allopatry.

Superficially the book is attractive. It is written in a readable, nontechnical style. It is "profusely illustrated" with each species represented at life size in attractive color. Displays are portrayed in pen-and-ink sketches. Photographs of birds, nests, habitats, flowers, and feeding techniques of the birds are included. A 45-rpm phonograph record in the book gives one or more representative vocalizations of 13 sunbirds and 1 white-eye. The two least brightly colored sunbirds, *N. olivacea* and *N. veroxii*, are forest birds and have an apparently greater frequency range and variety in phrasing of the song than do the brighter, open country birds.

The book avoids text references. A terminal bibliography indicates the sources of most of the text verbiage, but the reader will have to consult all of the cited works to determine the source of any observation. The omission of text references contributes to the status of the book as a curious mixture of serious field research and garden folklore.—ROBERT B. PAYNE.

Atlas der Verbreitung palaearktischer Vögel.—Erwin Stresemann, L. A. Portenko, and G. Mauersberger. 1967. Second installment (16 maps, consisting of 19 breeding ranges, and 1 map of migration). Berlin, Akademie Verlag, 32.50 German Marks.—The first installment was reviewed by Mayr (*Auk*, 78: 103, 1961) who praised and described this work, mentioning that the ranges mapped are documented by numbers along their peripheries which refer to a bibliography in the text. I want to add that symbols in the text indicate also the status and nature of the record at the locality indicated, whether the species is rare, common, or abundant, and whether it is based on adults, young associated with adults, or on birds that were nesting. The literature, which was searched very thoroughly, includes many Russian publications, and the bibliography is extensive, consisting, for instance, of 151 titles in the case of a flycatcher, *Ficedula parva*, that was mapped. In addition, the maps are also based on unpublished records obtained from a long list of correspondents, or on specimens in collections.

All atlases are helpful, but this one is in a class by itself as a valuable research tool because of its full documentation. Nineteen species are included in the present installment, chiefly Sylviinae; 21 were included in the first installment, and the complete work is expected to deal with a total of about 200, mostly songbirds and woodpeckers. The authors, who were ably assisted by Frau E. von Vietinghoff-Scheel and Dr. B. Stephan, deserve our gratitude.—CHARLES VAURIE.

Gamebirds of Southern Africa.—P. A. Clancey. 1967. 224 pp. 12 col. pls., 35 line drawings, 10 maps. New York, American Elsevier Publ. Co. Inc., 8½ × 6 in. \$15.75.—This volume includes as game birds all the anatids (19 species), francolins (12 species), quail (3 species), guineafowl (2 species), sandgrouse (4 species), hemipodes (1 species), and bustards (10 species) found in Africa south of the Cunene, Okavango, and Zambezi Rivers, and also a single species of painted snipe, two of ordinary snipe, and one pigeon, the Green Pigeon, *Treron australis*. It does not include all the rest of the shorebird assemblage or any of the other pigeons, as these apparently are not considered game birds. As its title suggests, the book is intended for sportsmen, game conservators, and game bird propagators, as a guide for better exploitation and conservation of these birds. To this end it attempts to convey in a readily accessible form all that is known of their plumages, their distribution and

occurrence, their general habits, and their breeding, either in southern Africa or, in the case of Eurasian migrants, in the north.

The account of each of the 53 species discussed includes detailed descriptions of all the plumages, the distribution and occurrence in southern Africa with a brief mention of extra-limital range, "general biology" which includes ecological habitat preference, vocalizations, and feeding habits, and a detailed description of the breeding habits, season, nest and eggs (number, size, coloration, and even incubation period where known).

The information presented is accurate, and its coverage appears to be up to date. The colored plates, all from the brush of the versatile author, show the plumages to good effect, but vary considerably in their overall pictorial effect, and also in the naturalness of some of the poses, a few being somewhat stiff, such as the Spurwinged Goose on plate 6. Many of the species are given unnaturally heavy legs, and the relative sizes of some species depicted on the same plate are misleading in some instances. The high price of the volume may be a deterrent to getting the book into the hands of many South African bird students, although it will affect the sportsmen less in this respect.—HERBERT FRIEDMANN.

Voices of birds in nature.—Recorded by B. Veprintsev, Biological and Soil Faculty of the Moscow State University. 1961 and 1963 Moscow. All Union Studio of Disk Recording. Two (series no. 2 and 3) 10-inch 33 $\frac{1}{3}$ RPM monophonic recordings. Available in United States through Victor Kamkin, Inc., 1410 Columbia Rd., N. W., Washington, D. C. 20009. \$2.50 each.—These recordings (plus the first in the three volume set) have, so far as I can discover, never been reviewed in this country and are not generally known to be available from a domestic source. They were listed without annotation by Boswall (*Bio-acoustics Bull.*, 4: 10, 1964) in his "Further amendments and additions to a world catalogue of gramophone records of bird voices and a geographical index." According to Kamkin, Inc., only the second and third volumes are currently in stock. Each is narrated by V. Gertzik in Russian; thus their main value to most American scientists is that they add to the world collection of vocal specimens available for research analysis and are from a huge geographic area largely inaccessible to ornithologists of the western world. Volume 2 contains recordings of 19 species, mostly passeriform, as follows: Song Thrush, *Turdus ericetorum*; Blackbird, *T. merula*; Mistle Thrush, *T. viscivorus*; Redwing, *T. musicus*; Robin, *Erithacus rubecula*; Tree Pipit, *Anthus trivialis*; Redstart, *P. phoenicurus*; Great Tit, *Parus major*; Black Woodpecker, *Dryocopus martius*; Nightjar, *Caprimulgus europaeus*; Capercaillie, *Tetrao urogallus*; Black Grouse, *Lyrurus tetrix*; Sedge Warbler, *Acrocephalus schoenobaenus*; Marsh Warbler, *A. palustris*; Icterine Warbler, *Hippolais icterina*; Garden Warbler, *Sylvia borin*; Quail, *C. coturnix*; Skylark, *Alauda arvensis*. Volume 3 contains 20 species, as follows: Crane, *Grus grus*; Snipe, *Capella gallinago*; Black-headed Gull, *Larus ridibundus*; Common Sandpiper (*Tringa nypolenca*, sic, = *hypoleuca*), Terek Sandpiper, *Xenus cinerea*; Wood Sandpiper, *Tringa glareola*; Black-tailed Godwit, *Limosa limosa*; White-fronted Goose, *Anser albifrons*; Great Snipe, *Capella media*; Hoopoe, *Upupa epops*; Whinchat, *Saxicola rubetra*; Ortolan Bunting, *Emberiza hortulana*; Greenfinch, *Chloris chloris*; Nuthatch, *Sitta europaea*; Goldcrest, *Regulus regulus*; Wryneck, *Jynx torquilla*; Stock Dove, *Columba oenas*; Woodcock, *Scolopax rusticola*; Tawny Owl, *Strix aluco*; Blyth's Reed Warbler, *Acrocephalus dumetorum*.

There is no strict order or theme to the recordings, or at least none discernible without an ability to understand the Russian narration, and certainly no clear ecological or taxonomic scheme. The narrator introduces each species with brief nontechnical

commentary and, even if the language is unintelligible, it does not interfere with enjoyment of and attention to the bird sounds. In general, I think the sound quality is comparable to that on American bird song recordings, although some specimens here lack presence or too much resonance. The discs are high quality pressings on nearly noiseless vinyl surfaces.—JOHN WILLIAM HARDY.

ALSO RECEIVED

Water and marsh birds of the world. Song birds of the world.—Oliver L. Austin, Jr. 1967. New York, Golden Press, Inc. Two vols., paper, 223 and 318 pp., respectively, color illus. $5\frac{1}{2} \times 8$ in. \$2.45 and \$2.95 respectively. These two attractively produced volumes have been assembled from material in Austin's "Birds of the world" (Golden Press, 1961), and according to the author incorporate most of the essential art of the original, as well as revisions of the text to include new material based on recent changes or developments in the fields of avian biology and taxonomy. Many of Singer's original illustrations, or fragments thereof, are nicely reproduced, and numerous errors, both factual and typographical, in the text have been corrected. Loons, grebes, penguins, tube-nosed swimmers, pelicans and allies, herons and allies, waterfowl, gruiforms, and shorebirds are treated in the first volume; the order Passeriformes comprise the second volume.—J. W. H.

Bird songs in literature.—Joseph Wood Krutch and Cornell Laboratory of Ornithology. Houghton Mifflin Co., United States, and Federation of Ontario Naturalists, Canada. 1967. 12-inch $33\frac{1}{3}$ rpm monophonic recording. Available from the publishers and from Cornell Univ. Laboratory of Ornithology, 159 Sapsucker Woods, Ithaca, New York 14850. Price \$7.95.—Described on the jacket as a ". . . record of bird songs and the poems they have inspired, from Chaucer to Eliot . . ." this production is a thoroughly delightful idea and a qualified success. Produced by P. P. Kellogg, Library of Natural Sounds, Cornell, and narrated by Frederick G. Marcham, also of Cornell, it more than satisfactorily displays the immense influence that nature's feathered, "wing-ed" creatures, have had on poets and people. Unfortunately it is rather dryly and at times dully narrated and recited in the conservative manner of, for example, a Robert Lowell rather than with the dynamic style of a Dylan Thomas or the raw warmth of a Robert Burns. The recording has little scientific interest, as most of the bird species are to be heard in more formal setting on other available recordings. Therefore, why the scholarly 3:00 PM lecture atmosphere? The record is beautifully pressed, the sound excellent (how did they get that close to a singing skylark?), and the disc attractively packaged, with a cover painting of yellow birds by Paul Klee.—J. W. H.

Structure and habit in vertebrate evolution.—G. S. Carter. 1967. Seattle, Univ. Washington Press. Pp. xiv + 520, illus. $6 \times 8\frac{3}{4}$ in. \$9.50.—According to the author (on the dust jacket), this is an account of the changes in the structure, physiology, and habits of vertebrates that made it possible for them to spread over the environments of the world and become dominant almost everywhere. Chapters 14 and 15, pp. 312–366, are devoted to birds (origin and skeleton; biology). The writing is succinct and generally cognizant of recent advances in knowledge. *Ichthyornis*, however, in spite of now rather widely known indications to the contrary, is still considered by Carter to be a toothed bird.—J. W. H.