REVIEWS

EDITED BY KENNETH C. PARKES

The birds of Canada.—W. Earl Godfrey. 1966. Ottawa, Ontario, National Museum of Canada, Bull. 203, Biol. Ser. no. 73; pp. 1–428, 69 col. pls., 71 text figs., 2 endpaper maps, text maps throughout. Cloth. \$12.50—The Dominion of Canada encompasses a large section of the Holarctic biogeographical region of the world. Its avifauna, therefore, assumes considerable significance in any consideration of that region. W. Earl Godfrey has now brought our knowledge of the bird life of this vast northern country up to date in a single, authoritative, and attractive volume.

Godfrey grew up among the birds in Canada's eastern province of Nova Scotia and has been active in field work in many parts of the Dominion since then, filling gaps in the collection of birds in the National Museum of Canada. Several of the more important recent collections have been studied by Godfrey in detail and his distributional and taxonomic discoveries have already been published.

The birds of Canada is organized in a brief introduction, a main section dealing with accounts of species, a glossary of technical terms that would be useful to the beginner, and a list of selected references classified by geographical area and subject. Endpapers in the front of the book provide a map of the Dominion of Canada with localities of special interest in Canadian ornithology and, in the back, a map showing a "Forest Classification of Canada" drawn from a publication by the Forestry Branch of Canada. Every effort has been made to reduce the amount of type in the book and with notable success. The reviewer does not recall any other regional ornithological publication with so much pertinent information stated in a more orderly and concise manner.

The introduction is designed to orient the most elementary class of readers, introducing them to the nature of birds, their classification, relation to man, and method of treatment in the present book of the 518 species authentically recorded for Canada. This treatment is strictly from the individual species standpoint wih a suggestion of faunal relationships confined to an occasional mention under the heading of "range." It is very effective in giving a clear, succinct picture of each species and its distinctive characteristics without encumbrance by emotional nostalgia and long-winded anecdotes.

In view of the fact that the Dominion of Canada includes a very large portion of the North American continent, one might wish a statement about the avifaunal characteristics of the region as a whole. There is no mention of these and the relationship of birds to the biogeographical and ecological subdivisions of Canada is mentioned only in a general way in some of the species accounts.

General characteristics are given in simple, non-technical description of the families. The treatment of each species includes the English and French vernacular names, the scientific name, plumages, measurements, field marks, habitat, nesting, total range, range in Canada, subspecies, and remarks.

Although conservative in matters of classification and following the A.O.U. Check-list of North American birds as a standard for both English and scientific names, the author, a leading student of the systematics of Canadian birds, does not hesitate to deviate from this standard when he believes this to be justified.

The descriptions of species are simple, clear, and quite practical for identification, particularly in the field. These are enhanced by the excellent color plates by John A. Crosby, which combine effectively the naturalistic habitat type with the field guide approach. The likenesses are quite accurate in anatomy and color and give the reader

a feeling for the species as well as practical help in identifying it in the field. The three plates of gulls are particularly effective in showing wing patterns and color of soft parts so diagnostic in this taxonomically confusing group. Skillfully executed line drawings by S. D. MacDonald supply supplementary descriptive details of value.

Description of subspecies is accomplished with a minimum of verbiage and ambiguity. Each form is numbered consecutively and each is compared with other similar subspecies by number rather than repeating the name.

The sections on habitat are short and to the point and quite adequate for giving a clear picture of the localized environments. Additional ecological information of a broader nature such as that for the Great Gray Owl ("Northern coniferous belt across North America and Eurasia") is sometimes given in the section on "Range" and imparts much more meaning to both the geographical range and descriptions of local habitat. A more general use of this practice would have given greater substance to the accounts of distribution. For example, the Snowy Owl coincides with the Tundra shown on the "Forest Classification" map, whereas, the Hawk Owl agrees quite closely with the two more northern Boreal Forest belts. The Great Gray Owl also occupies the boreal zones as well as sub-alpine areas in the west, but there is no evidence that it ranges into the boreal forest east of Hudson's and James bays. One would expect it to occur there and, as the author indicated, it may have merely escaped observation. This situation should stimulate further ornithological exploration.

The sections on range, both total and Canadian, are precise and employ the use of terms such as north-central, central northern, northwest-central, etc., which are somewhat different from those in common usage but more exact and effective. Illustration of their meaning by a diagram appears in a publication for the first time as far as I know, although the terms have been used in the more recent publications and unpublished manuscript of the late Harry C. Oberholser.

About 280 text maps showing the breeding distribution in red are an effective aid in visualizing the place of each species in Canada. They offer an excellent opportunity to the ecologically oriented student of biogeography to compare the breeding distribution of bird species with distribution of the major vegetative types outlined on the forest classification map. An inescapable difficulty, inherent in all politically oriented range maps, is that one's concept of the distribution of the species as a whole is distorted by the abrupt termination of the red areas at the Canadian-United States border.

In a work of this scope, boiled down to the modest size of *The birds of Canada*, much interesting detail and discussion must be left out. However, the National Museum of Canada and the author, head of its Vertebrate Zoology Section, have performed a fine service to American Ornithology in making available this book, well rounded and designed for a diversified audience.—John W. Aldrich.

The birds of Guyana.—Dorothy E. Snyder. 1966. Salem, Massachusetts, The Peabody Museum. Pp. 308, map end-pages, 5½ × 7¾ in. \$6.00.—This little book on the birds of the country formerly called British Guiana is a strange hybrid. The author calls it an "Annotated Check List" (p. 40), but goes on to say that it was "planned as a check list and guide, and has been condensed as much as possible for use in the field." There are no illustrations—the author refers the reader to de Schauensee's Birds of Colombia (which illustrates few species) and to Haverschmidt's "forthcoming book on The Birds of Surinam" (which has not yet been published at this writing, June, 1967). The Peabody Museum (not to be confused with its homo-

nym at Yale University) has printed and bound the book in a manner highly reminiscent of the Peterson "Field Guide" series. I do not think Miss Snyder's book could be used as a field guide by anyone who was not already rather well acquainted with the Neotropical avifauna, even by following the author's suggestion and lugging one or two additional books into the field to provide illustrations. The descriptions of family characteristics are therefore superfluous. For the observer who already knows enough to narrow a bird down to a few possibilities, the book will probably be very useful. Voice descriptions (often, unfortunately and unavoidably, based on populations far from Guyana) are given for as many species as possible. In some cases (viz. Myiarchus, Elaenia, tyrannulets), general discussions are given for very difficult groups, pointing out important characteristics for species identification. For each species, the information presented includes a description, distribution

For each species, the information presented includes a description, distribution (both ecological and geographical) within Guyana, distribution elsewhere, and voice descriptions for some but not all species. References to specimens or literature are often given for uncommon species.

The introductory material (topography, climate, ecology, and history of ornithology in Guyana) is brief but seems adequate for a small book of this type. The "Hypothetical List" is given an unfortunately prominent place near the beginning of the book, and employs abbreviations not explained until several pages beyond. There appear to be inconsistencies in allocating species to this list. It is supposed to include, among others, "species found in surrounding countries which should occur" and "birds mistakenly recorded from British Guiana." However, several species for which Miss Snyder knows of no Guyana record, in spite of inclusion of that country in range statements in the literature, are included in the main text, although in brackets (viz. Crotophaga sulcirostris, Sporophila schistacea). Abbreviations of names of persons and museums are listed on pp. 40-41 and are used throughout, but I found at least one abbreviation, "(v.o.)," under the voice of Piranga rubra, that does not seem to have been explained anywhere. A parenthetical figure follows each family account; this is easily deduced to be the number of Guyana species, but is nowhere explained. Several typographical errors are corrected and changes of English names effected in a separate corrigenda sheet issued after the original publication of the book.

In summary, The birds of Guyana should be of great usefulness to a limited group of ornithologists and "old Neotropical hands" among birdwatchers, but of limited usefulness to others. There is a grave danger that, in this age of increasing tourism, such well-meaning books as Miss Snyder's may induce the bird-watcher to believe that identification of Neotropical birds is easier than is, in fact, the case. The fruits of such misunderstanding may be seen in a number of recent lists of birds seen on trips to Mexico and Central America, published in various state bird magazines, containing obvious misidentifications.—Kenneth C. Parkes.

Records of the American-Australian Scientific Expedition to Arnhem Land.—C. P. Mountford, general editor. Vol. 4, Zoology, ed. by R. L. Specht. 1965. Melbourne University Press, Melbourne, Australia, and Cambridge University Press, New York. Pp. xviii + 533, illus., 10 × 7¾ in. \$19.50.—In an age of specialization, one wonders who, other than libraries, buys such a volume. It includes a 7-page history (2 pp. are bibliography) of zoological collecting in Arnhem Land (Northern Territory, Australia) followed by: 35 pp. on molluscs, 263 pp. on fishes, 35 pp. on herpetofauna, 81 pp. on birds, 89 pp. on mammals, and an index. A few specialists in Australian zoogeography may wish to pay for the whole volume, but most workers will consult only one or two chapters.

A serious shortcoming of these compendia is the time lag. The expedition took place in 1948, and the volume apparently went to press late in 1963 (the preface dated August, 1963). Fortunately, each chapter is dated. Unfortunately, publication of all apparently had to await completion of the longest, that on the fishes, submitted in August, 1961. The chapter on birds, by Herbert G. Deignan, was submitted in February, 1953! Thus, far from being the latest information on the taxonomy and distribution of Arnhem Land birds, Deignan's contribution necessarily omits any references to the literature of the 12 years between submission and publication. Although combining the several contributions results in an attractive volume, Australian zoology would have been better served had they been published as completed.

Deignan presents notes on the 191 species and subspecies collected by the "Commonwealth of Australia-National Geographic Society-Smithsonian Institution Expedition to Arnhem Land," plus sight records of 31 additional species. Valuable information is presented on molt, color of unfeathered parts, breeding seasons, and habits. Much of the taxonomic discussion centers on the work of the late Gregory Mathews. Deignan's patience obviously wore a little thin after having to reevaluate Mathews' myriad "subspecies." For example: "Mathews has named a bird from the Kimberly Division Plegadis falcinellus rogersi, but since he carefully refrained from indicating how it was thought to differ from other races, it would be a waste of time to pay further attention to it." Such writing adds a bit of spice to a relatively routine report.—Kenneth C. Parkes.

Birds of prey of the world.—Mary Louise Grossman and John Hamlet. Photographs by Shelley Grossman. 1964. New York, Clarkson N. Potter. Pp. 1-496, 70 color and 283 monochrome photographs, numerous line drawings, 646 flight silhouettes and 425 range maps. $9\frac{1}{2} \times 12\frac{1}{2}$ in. \$25.00.—This large and handsome volume treats all of the birds of prey, the owls as well as the falcons, eagles, and vultures, osprey, condors, and their allies, all over the world.

It is a monumental achievement, particularly since those responsible are a writer, a falconer, and a photographer rather than professional zoologists. To produce such a comprehensive monograph, ranging from general and cultural aspects to an extended species-by-species account, the authors made extensive observations of live hawks in zoological parks, of falcons and eagles trained for falconry, and of collections in both natural history and art museums. In particular, the authors made a painstaking years-long study of the extensive skin collections in the American Museum of Natural History. The general accuracy of the text may be attributed not only to this but to the freely acknowledged long discussions with museum staff members as well as authorities at other institutions.

This book is addressed not to the professional but to the serious amateur, and to that ever-growing group of people in all walks of life with particular interest in birds of prey. It is in two parts. Part 1, consisting of 191 pages of text, drawings, and monochrome prints, together with 52 plates of color photographs, includes an introduction and chapters entitled Prehistory, Birds of Prey and Men, Ecology and Habits, Designs for Survival, and Conservation. It is so lavishly illustrated that the text often seems lost amidst full page spreads of flying eagles and hawks attacking prey. Since the book was designed as essentially visual in concept and, in the first part at least, is built around the collection of plates, some comment about them is called for. Many are magnificent, for example the portrait studies of the Pondicherry and White-headed vultures, the Bateleur Eagle, King Vulture, and Barn Owl. But

there are also photographs of birds poorly posed, or with plumage in disarray, such as the Lesser Kestrel and Barred Owl. If these are partly unavoidable in captive birds, less excusable are photographs of hawks whose talons have been allowed to overgrow so far as to be unsightly and actually misleading. This is particularly true of the Red-tailed Hawk, which appears many times in different sequences (see p. 148), and also of the foot of *Busarellus* (p. 167). The beak of a Peregrine Falcon is similarly "uncoped" (p. 113). These seen unnecessary in a book which has otherwise so many excellent illustrations.

Besides some excellent color plates, the monochrome plates of flying hawks and eagles are sometimes superb, as for example the series of a descending King Vulture. However, as others have noted, some of the photographs of contrived predation, though spectacular, are disappointing and misleading.

Although the illustrations exceed the text in bulk, I find the latter well written, informative, and one of the best general accounts of the biology of the birds of prey which I have read. The chapter on the cultural aspects of falcons and eagles in art, religion, and falconry is a very interesting section. It is well illustrated by photographs from the Metropolitan Museum of Art, the ethnologic collections of the American Museum of Natural History, and other sources. The chapter on ecology and habits is rather elementary, although generally well written. A more extensive and perhaps more technical account of the ecology would have been warranted in this book.

The chapter on conservation includes a short history of legislation, reflecting changing points of view since the day when "the only good hawk was a dead hawk." The statistics showing the old-time bounty killing of our national emblem—the Bald Eagle—may seem unreal to us now, but the Golden Eagle shoot-off by sheep ranchers in the southwest continues in spite of a ban on the use of airplanes. The authors' account of this is generally revealing, but it is hard to take seriously the account of Casparis who believed he was attacked by eagles in his early shoot-off trips! Further if the ranchers were losing all their lambs and kids in the 1930's, it seems unlikely they would have stayed in business. The campaign to exterminate this eagle began when a means was found to accomplish it. Contrary to the authors, there was probably no increase in eagle populations during the 1940's; rather, the high shoot-offs reflected the increase in the number and efficiency of pilots.

The authors also consider the problems now facing hawks and eagles by the accumulation of persistent residues of chlorinated hydrocarbons, cited in regard to the decline in the Bald Eagle, Golden Eagle, and Osprey. They quote Roger Tory Peterson on the threat to all of our predators high up in food chains. Oddly, the Peregrine Falcon is not discussed.

The chapter on Prehistory concerns the fossil evidence bearing on the evolutionary history of the birds of prey, a subject both little known and difficult to present. The authors have combined, I think unjustifiably, the habits and food of modern hawks with those of fossil forms that lived so long ago that comparison is suspect. In the large two-page chart of the Cenozoic era, photographs of modern species are given as examples of fossil birds in a kind of evolutionary sequence, a procedure of dubious value and in some cases certainly misleading.

In Part 1, most of the descriptions of habits and portrayal of predation and flight are confined to North American species and offer little support for claims of worldwide treatment. Part 2 is of more interest to zoologists and this part is more worldwide in scope. It presents a species list in systematic fashion of about 290 species of Falconiforms and over 130 species of Strigiformes. There is a brief account of each

genus, followed by species descriptions, sections on habits, and range maps. There is also a color key and a chart of bird topography (in which a Peregrine Falcon is shown with a scutellate tarsus and with its forearm grossly overloaded with secondaries). Illustrations include drawings, monochrome photographs, and the flight silhouettes of each species. The species accounts are often in groups. A type is described and then a list of similar forms is given more briefly, each with silhouette and range map. The species descriptions are short and seem generally accurate. The authors use vernacular trinomials for both B. lagopus and B. regalis apparently under the impression that they are closely related. In Poliohierax the wing is not "kestrel-like" but more rounded. In Microhierax the wings are stated to be rounded but are shown pointed. The authors appear to follow J. L. Peters (Check-list of birds of the world, Vol. 1, 1931) in the order of families, subfamilies, genera, and in some cases species, but in the last case they adopt many of the more recently published revisions (without citation).

The bibliography, however, is quite up to date; for example, the treatment of *Helicolestes* follows Amadon's "Taxonomic Notes" published just months earlier in the same year. In general, errors are not conspicuous. There is no glossary, and text descriptions are sometimes cumbersome.

My greatest criticism of this book is that there is no text citation of pertinent literature. It requires much effort to determine the authority for many statements. The bibliography, largely arranged according to chapters for the first part of the book and by genera in the second is of small help when trying to find justification for statements. This is particularly true for Part 2 where many well known birds have disappeared into synonymy. The book is a serious work, and it was a grave mistake to omit text citations.—Walter R. Spofford.

Mechanisms of animal behavior.—Peter Marler and William J. Hamilton, III. 1966. New York, John Wiley and Sons, 771 pages, numerous illustrations. \$14.95.—There has been a great need for a text encompassing the proliferation of behavior studies of birds and other animals. Although several books have appeared that cover portions of this field (e.g., A. Roe and G. G. Simpson, 1958, Behavior and evolution; W. H. Thorpe, 1963, Learning and instinct in animals; R. A. Hinde, 1966, Animal behaviour) a comprehensive college text was still lacking. Marler and Hamilton's book, intended for use as a text for senior undergraduate or graduate students largely fills this gap. There are chapters on locomotion, navigation and homing, circadian rhythms, ontogeny of behavior, and the senses and their behavioral correlates stressing communication. Several chapters have sections dealing with social behavior, emphasizing the underlying mechanisms. The main theme of the book is the interaction of endogenous and exogenous factors in behavior.

Until recently there had been two main schools of animal behavior, with little intercommunication. Ethology, initiated by European zoologists, stressed instinctive behavior of a variety of species, usually studied in wild or semi-wild conditions. American comparative psychologists, on the other hand, were primarily concerned with learning, sensory processes, and motivation. Most of their work was done with white rats. This book achieves a sound synthesis of the findings of both the ethologists and psychologists.

Several chapters are of special interest to ornithologists. Marler has provided an excellent review of the functions of bird song with a particularly good discussion of the relationship between the structure of a vocalization and its function. The chapter on the development of motor patterns draws much material from recent studies of the ontogeny of bird vocalizations, reviewing recent studies of the importance of auditory feedback. Hamilton, in a chapter on navigation and homing, reviews the evidence for the sun-arc hypothesis, star orientation, and the perception of the earth's magnetic field. He also discusses the role of experience in navigation and the problem of how the migrating bird identifies its wintering area. He concludes that it is a mistake to search for the mechanism of navigation and suggests that various and different stimuli are involved in orientation.

The only real weakness of this book as a text is the limited coverage given to ecological and evolutionary aspects of behavior, an omission that was realized by the authors. In other respects this book is ideal as a text for the advanced student and is a "must" for all with a serious interest in animal behavior. It is lucidly written and covers the extensive literature of behavior very well.—Millicent S. Ficken.

The birds of Tikal.—Frank B. Smithe. 1966. New York, The Natural History Press (Doubleday and Co., Inc.). Pp. xxix + 350, 31 color plates, 8 photos, 2 maps, \$7.50.—Many will welcome the fact that we now have the *first* (and first class it is) true field guide to a region of Central America.

Mr. Smithe first visited Tikal because of its great archaeological ruins, some of the most imposing of the Mayan region. Local authorities encouraged his interest in the avifauna and urged him to write a comprehensive report which culminated in the production of this field guide. The avifauna of Tikal is not especially rich, being a mixture of the depauperate avifauna of the northern Yucatan peninsula and the more diverse avifauna of the moister southern Peten lowlands. Still, because the area is protected from deforestation, is accessible, and has good housing facilities, Tikal offers a unique opportunity for the study of tropical birds. Ten species were nesting on the hotel grounds when I visited there briefly in March, 1966.

The book covers a much wider area than the archaeological park by including species not yet recorded from Tikal but known from nearby localities. It is exemplary in its arrangement, with the introduction, brief and adequate, covering location, climate, vegetation, human history, and history of biological work; and it includes dates of the author's work and a summary of other Peten studies. All abbreviations used are defined. Ranges for species and notes on songs, calls, and nests and eggs are briefly and conveniently summarized, providing a handy reference source to a considerable literature. Especially valuable to prospective visitors are three years of weather records presented in an appendix, with daily rainfall and temperatures. Minimum annual temperature for the period covered was 50°, maximum 96°. The rainy season is from May to October and the cold season is from December to March, with considerable variation in monthly and annual rainfall.

Descriptions are presented of 280 species, with "over 100" illustrated in color. Wisely, birds illustrated in widely available field guides are seldom figured except, for example, the Rose-throated Becard, in which there are dramatic subspecific differences. Pertinent literature references are provided to colored or black-and-white illustrations.

The colored plates by H. Wayne Trimm are the most outstanding contribution of the book, at least to the field ornithologist. These range from good (orioles and woodpeckers) to less successful (plate 25, mixed small greenish birds). Inclusion of many immature plumages (hawks, tiger herons, etc.) enhances the value of the plates. Each plate is size-keyed with a measurement bar in inches and centimeters. The plates

are well reproduced, although an occasional minor fault could be found (male Blue-black Grosbeaks are too blue, male Blue Buntings are too dark on crown and rump, and female ant tanagers are better separated by text description than colored illustrations). Most plates lack backgrounds, in typical field guide style; however, occasionally a background is included and gives an enjoyable change. The double page center spread of an artist's reconstruction of the Great Plaza at Tikal adds to the flavor of the book.

Personally, I would have preferred another plate of hummingbirds or flycatchers to the plate of the Ocellated Turkey (a bird hardly to be confused with any other local species). The plate of a Blue-crowned Motmot with a background mound that only a Tikalite would recognize as a ruined pyramid, might more profitably have illustrated the several motmots or other species. The photographs are clear and well chosen. The aerial view in plate 33 is now mostly of historical interest, as virtually half of the area of the picture has been stripped of forest, revealing the great citadel complex now being reconstructed.

One could quibble over small points, such as the use of *Egretta* for Common and Snowy egrets and *Hydranassa* for Little Blue and Reddish egrets—yet separating the last two species by the Cattle Egret. However, wisely, the A.O.U. Check-list names are always presented in brackets, when present usage differs from Check-list usage.

I can only conclude by expressing the hope that Mr. Smithe will become attached to another avifaunally rich area in Central America or South America and produce another equally fine guide book.—ROBERT W. DICKERMAN.

Animal ecology in tropical Africa.—D. F. Owen. 1966. San Francisco, W. H. Freeman & Co., viii + 122 pp., 13 half-tone plates, 25 figures, 14 tables. \$5.00.—Although purported to be an essay or series of essays on problems of tropical ecology, this little book is essentially a text written at a rather elementary level, presenting in a systematic manner a series of popular ecological concepts as they relate to the east African scene. Illustrative materials are drawn from many animal taxa, but particularly from insects and fishes; birds receive considerable but less attention. The title is somewhat misleading in that tropical west Africa and central Africa are given short shrift. Only one foreign language reference is cited, and this concerns a study made in Tanzania.

The organization is appropriate for the African secondary school students to whom the book is primarily addressed. After a brief and rather superficial introductory chapter on the characteristics of the African fauna and its recent geological history, the author presents data to illustrate the richness and diversity of animal life in east Africa as compared with Europe. Statements comparing animal numbers in tropical and temperate regions are distressingly, though perhaps necessarily, vague and contain certain rather surprising suggestions, such as one: "that grazing birds are in Kenya to some extent replaced by grazing mammals, and woodpeckers by predatory insects."

The third, fourth, and fifth chapters, on populations, seasons and other periodic events, and ecological genetics, respectively, are sketchy, but well organized and informative. The illustrations of principles and concepts are well selected though often treated too superficially to permit complete comprehension, or critical evaluation by the reader. Certain well known ecological phenomena and situations, such as the role of malaria in perpetuating sickle-cell anemia in man, irruptions of the desert locust, mimicry and polymorphism in the swallow-tail butterflies, fish species swarms in lakes Nyasa and Tanganyika, and polymorphism in land snails are, however, neatly and concisely presented.

A brief chapter on the "Ecology of Man in Tropical Africa" sketchily deals with problems of disease and nutrition and with the effects of grazing, plant introductions, fires, and other man-created disturbances. This is followed by a still briefer final chapter on "Ecological Research in Tropical Africa." The book ends with a three-page glossary of simplified definitions for student edification, a five-page list of references and a seven-page index.

Considerable material is brought together in this little book, although in no sense can it be considered a compendium. It will serve a useful purpose in introducing young Africans to some fascinating phenomena of their environment and to some of the modern concepts used in interpreting them. Unfortunately it contains little of special interest or value to ornithologists.—John T. Emlen.

Australian bird songs.—Carl Weismann and Allen Keast. 1964. Brisbane, Australia, Jacaranda Press Pty., Ltd., 73 Elisabeth St. (U.S. agents are Tri-Ocean Books, 44 Brannan St., San Francisco 7.) Record (45 r.p.m.) and accompanying text (20 pp.). 27s 6d.—The songs and calls presented on this record represent 19 common species of Australian birds, including both kookaburras (Dacelo novaeguineae and D. leachii), the White-backed Magpie (Gymnorhina hypoleuca), the Grey Thrush (Colluricincla harmonica), the Willy-wagtail (Rhipidura leucophrys), the Magpielark (Grallina cyanoleuca), and others. They were recorded by Carl and Lise Weismann in 1957 and 1958. The accompanying short text by Keast contains a brief popular account of the life history of each species and when and where the recording was made. There are also four pages of black-and-white photographs, some of mounted museum specimens, depicting all 19 species.

The recordings themselves are very good and should be of interest to anyone desiring such material; I consider the recording of the two kookaburras alone well worth the investment. I regret that more species are not included but my only criticism is that there is no narrative on the record, not even a mention of the species name as each song is presented.—BURT L. MONROE, JR.

The parrots of Australia.—William R. Eastman, Jr., and Alexander C. Hunt. 1966. Narberth, Pennsylvania, Livingston Publishing Company. Pp. xiv + 194, 16 color plates (paintings), other color and black-and-white photographs, \$12.50.—The parrots of Australia, designed as a "guide to field identification and habits," treats all Australian members of the Psittacidae. All species (distinct subspecies are treated as species, as admitted by the authors) are depicted in paintings by Eastman which, although not up to the quality of those in the better U.S. and European guides, are better than in other Australian guides I have seen. As with other Australian "field" manuals, the present one is too large for easy carrying on one's person.

The first part of the book consists of 3 pages of summary and 10 pages of photographs dealing with Australian habitats and the second deals with the parrot species themselves. For convenience, the authors arbitrarily divide the parrots into 11 groups (mostly natural taxonomic categories), the last containing five "difficult" species that cannot be placed elsewhere. Characteristics of each group (as well as a page of silhouettes) are given, and each species is then treated in detail, with attention to status, size, characteristics of female and juvenile, confusing species, voice, flight, remarks, nesting, and habitat; range is indicated on outline maps. I find the sections on "confusing species" and "remarks" (with considerable information on habits) and the range maps to be extremely useful.

In addition, there are several black-and-white photographs of parrots scattered in the text and a group of seven pages of color photographs at the end. Although the color reproduction of the paintings is very good, the register on the color photographs (at least in my copy) is extremely poor.

The book is quite attractive and well worth having for those with an interest in Australian ornithology.—BURT L. MONROE, JR.

ALSO RECEIVED

The birds of north Africa from the Canary Islands to the Red Sea.—R. D. Etchécopar and François Hüe. English translation by P. A. D. Hollom. 1967. Edinburgh and London, Oliver and Boyd. Pp. xx + 612, maps, line-drawings, 27 color and half-tone plates. $9\frac{1}{4} \times 6\frac{1}{4}$ in. 168 shillings.—The rapid appearance of this English translation of Les oiseaux du nord de l'Afrique de la Mer Rouge aux Canaries (reviewed, Auk, 82: 293–294, 1965) is most welcome. The authors have redrawn some maps and included some additional information. The present volume is printed on good paper, is well bound, and has the same, well reproduced plates as the earlier version.—M.A.J.

Birds of Australia.—Plates by John Gould, text by Abram Rutgers. 1967. London, Methuen & Co. Ltd. (distributed in the United States by Barnes & Noble, Inc., New York). Pp. [i-x] + 1-321. $9\frac{5}{8} \times 7$ in. \$15.00.—Greatly reduced reproductions, weak in color, of 160 plates which originally appeared in Gould's *The birds of Australia*. The text, two or three short paragraphs facing each plate, "incorporates all new findings that have come to light since Gould's day."!—M.A.J.

The birds of Cape Cod, Massachusetts.—Norman P. Hill. 1965. New York, William Morrow & Co. Pp. xviii + 364, illus. $8^{1}/_{4} \times 5^{1}/_{2}$ in. \$6.00.—Primarily gives local distribution (with comments on habitat) and seasonal status, as based on specimens, field notes (notably those of Ludlow Griscom), banding records, etc., of the birds of this area. A section on the rich ornithological history of Cape Cod is included and a responsible statement about any historical change in abundance is given for most species.—M.A.J.

An English-Classical dictionary for the use of taxonomists.—Robert S. Woods. 1966. Covina, California, Pomona College. Pp. xiii + 331. $9\frac{1}{4} \times 6$ in. \$5.50.—Classical Latin and Greek equivalents of English terms thought most likely to be used in scientific nomenclature. There are only about 20 entries per page.—M.A.J.