REVIEWS

Louisiana Birds.—By George H. Lowery, Jr. Baton Rouge, Louisiana State University Press. Xxix + [iii] + 556 pp., pls. I–XI. (by R. E. Tucker; 11 col.), 1 col. and 82 black and white photos. in text, text-figs. 1–135 (photos., line-drawings, maps, etc.), tables 1–3, endpaper photos. Price, \$5.00.

In this well-made and conservatively priced book George H. Lowery, Jr., has provided beginning and moderately advanced Louisiana bird students (and others) with an introduction and guide to the abundant bird life of Louisiana and to selected aspects of the larger subject of ornithology as well. Louisiana is well supplied with major works on its birds, "The birds of Louisiana" by S. C. Arthur having appeared in 1931, followed by H. C. Oberholser's more technical and ambitious "The bird life of Louisiana" in 1938. Although Lowery correctly indicates that these works are already out of date, he hastens to say that the present work "is not a state bird book in the traditional sense . . . assembling for convenient scientific reference the specific records and factual data upon which . . . generalizations concerning the various species are based."

After routine preliminaries, the book contains readable, up-to-date accounts of Louisiana as a place to see birds; The history of Louisiana ornithology (presenting material not readily available elsewhere); The Louisiana State University Museum of Zoology; How to identify birds; Feathers, plumage, and molt; The bird skeleton; Migration; Economic value of birds; Conservation and wildlife management; Attracting birds; and Ornithological societies and bird clubs. These sections should serve the beginner well; the author manages, unlike some who have attempted similar tasks, to retain appropriate scientific sophistication and dignity without becoming ponderous and remote. His explanations are lucid and sensible, and his skillful account of the function of a research museum should do much to promote understanding between professional and nonprofessional students.

There follow concise accounts of the 377 species of birds regarded by the author as properly accredited members of the Louisiana avifauna and 7 additional species recorded on grounds less than satisfactory (distinguished in text by square brackets). The author cannot be too highly praised for his progressiveness in restricting himself, in a work of this type, to binomial nomenclature and the treatment only of full species.

There is no formal organization in the species accounts; they include brief comments on status and habitat in Louisiana, habits, method of recognition, and fairly frequent mention of specific records. Every species seems to appear at least once in the illustrations, which are referenced in text. Near the end of the book is a helpful chart showing graphically the seasons of occurrence of Louisiana birds, and there is a useful, briefly annotated bibliography supplementing and bringing up to 1954 that of Oberholser's work. The index seems more than adequate.

It is difficult to find much to criticize in the text, which has been carefully executed and appears nearly free of technical and typographical error. An effort has clearly been made to get into a single work everything necessary for the beginning and potentially serious student in Louisiana, including the means of identifying all species occurring there. This, unfortunately, has resulted in a book a bit too large to be carried conveniently in the field, and it appears to this reviewer that, except for the exclusion of extralimital species, the work has no marked advantages as a recognition manual over the better standard guides already available.

The illustrations by Robert Tucker seem adequate for purposes of identification. It should not be serious discouragement to an energetic newcomer to ornithological illustration, however, to say that Tucker has a vast amount to learn about the use of line, the use of paint, and about birds, before his brush will be a match for Lowery's pen. Many of the photographs (largely contributed by Allan D. Cruickshank and Samuel A. Grimes) are excellent.

This work should be of value to all Louisiana bird students and useful in adjacent Gulf states.—ROBERT M. MENGEL

A Check List of The Birds of Southern Rhodesia with Data on Ecology and Breeding. Reay H. N. Smithers, Michael P. Stuart Irwin and Mary L. Paterson. Rhodesian Ornithological Society, University Press, Cambridge. ix + 175 pp., 2 colored plates, 8 text-maps, 1 folding map. 1957.-This welcome little volume presents for the first time a thoroughly authentic list of the birds of Southern Rhodesia and, along with White and Winterbottom: A Check List of the Birds of Northern Rhodesia, 1949, and Benson: A Check List of the Birds of Nyassaland, 1953, completes a trio of handy reference works on the three countries of the Central African Federation. After rejecting 32 species previously listed on the basis of vague or unsubstantiated evidence, the authors present an annotated list of 565 species which have been collected within the political boundaries of the country. A few additional species reported or strongly suspected of occurring but not yet collected are inserted parenthetically. A brief description of the topography and vegetation and a series of maps provide a good though sketchy introduction to the area. A gazeteer of about 115 place names is useful though incomplete. Nomenclature essentially follows that of J. Vincent (A Check List of the Birds of South Africa) but goes farther in lumping species within large generic units. The few lines allotted to each species and subspecies provide a thumbnail sketch of distribution, ecology, and season of occurrence. Data on breeding seasons as compiled by H. Miles from records submitted by cooperators of the Rhodesian Ornithological Society nest-card scheme are well presented and constitute an outstanding feature of the book. These records indicate nearly year-round breeding activity for many species of water birds, doves, louries, parrots, etc. The general organization is good but one wonders whether more information might not have been included without appreciably expanding the size of the volume. The reviewer also wonders if full data on type specimens need have been included in a book of this sort. The two color plates by H. Reid Henry are meaningful and attractive. The whole constitutes a reliable and handy reference work on a badly neglected section of the African continent.-John T. EMLEN. JR.

Birds of New Guinea. Tom Iredale, illustrated with thirty-five plates in color, figuring 347 birds by Lilian Medland. Two volumes. Georgian House, Melbourne, Australia. Vol. I, pp. xv + 230, Vol. II, pp. xv + 261. 1956. Price 58.16.—Iredale, in his 78th year and still Honorary Zoologist of the Australian Museum, Sydney, published his first paper in 1907 on a New Zealand bird. A recent bibliography (1956) credits him with 326 titles and 2542 new names, proposed alone or in collaboration with others. Iredale is perhaps better known as a bibliographer and nomenclaturist in the field of mollusks, with a penchant for elevating the rank of groups to higher status than most workers approve. But for twelve years he was G. M. Mathews' private secretary, when the twelve-volume *Birds of Australia* and the Australasian *Systema* were in progress; was a member of the B.O.U. Committee on Nomenclature; and in 1950 he brought out *Birds of Paradise and Bower Birds*, illustrated by his wife, better known as Lilian Medland.

Reviews

The present work covers the New Guinea avifauna, which is a rich one with about 570 resident species, many of them peculiar endemics. The most recent previous work with descriptions covering the field was Salvadori's (1880–1890). Since that time exploration and research has pushed ahead rapidly. In 1941 Mayr summarized this in his admirable "list," but identification of New Guinea birds outside of a big museum is very difficult.

Iredale's new volumes, describing some 650 species and 1500 subspecies is intended for the student interested in knowing even a little about New Guinea birds. The 35 plates, illustrating 347 birds in color, delineated by Mrs. Iredale (since deceased) are perhaps adequate to give an idea of some of the birds of this wondrous avifauna. The birds (averaging nearly 10 to a page on a plain background) are in conventional poses, apparently mostly drawn from skins, and we have such unhappy things as a ground pigeon that walks about on the forest floor like a bantam, perched instead like a typical tree pigeon; swifts (*Collocalia* and *Chaetura*) perched like sparrows, and a nightjar (*Caprimulgus*) sitting up like a frogmouth (*Podargus*).

The text is less fortunate. A generally worded description of each form is usually imbedded in a narrative style discussion of names, localities, nomenclatural history, and variation, all so discursive and without references as to be of little interest to a specialist, while quite beyond any general bird student. The lack of keys and the lack of stressed key characters makes identification in some groups quite hopeless.

Iredale's ideas on taxonomy will find little favor with most modern workers. One gets the impression that if named subspecies are difficult to distinguish without series for comparison they are of no importance; if they can be easily distinguished, they should be called species. Sometimes his views on polymorphic species are peculiar. In the goshawk (*Accipiter novaehollandiae*) of the Australia-New Guinea area which has a white and a gray phase, he recognizes at least four species, some of which can be sympatric and interbreeding (p. 125). He has no sympathy with the polytypic species. At the generic level, Iredale believes in lots of them and in this popular work proposes at least 16 more genera or subgenera (in a work like this without references it is not always easy to tell if a new name is introduced or an old one is resurrected). One of them is based on the fact that the type of the genus is smaller than its presumed nearest relatives. At higher levels, where scientific names are not used, we find cranes, rails, and grebes grouped together; the tropic birds are placed next to the terns; and the owls are back next to the hawks.

Reading these volumes one would think that the taxonomy and nomenclature of New Guinea birds was in confusion. Actually, E. Mayr's "List," published in 1941, gave us a sound framework of nomenclature, supported by a great many careful revisions. Iredale seems to have ignored this as well as some more recent revisions. The present volumes seem closer to Mathews' Systema Avium Austrasianarum (1927–1930).

Anyone who looks for much on habits in this volume will be disappointed. The introduction (p. 5) states that, "The habits have been noted only in a general way, as most bird habits are basically similar, and there is little of novelty to notice." This of an area where birds-of-paradise display, megapodes bury their eggs and leave them to hatch, a kingfisher digs in the ground for worms, and female hornbills are walled in their nest for the incubation period.

The two volumes are beautifully made, and despite the many shortcomings of the text, they are the only ones that cover this field.—A. L. RAND.

Reviews

Eagles.-Leslie Brown. London, Michael Joseph. 270 pp. 31 photo pls. 1955. Price 18 s .--- Eagles abound in Africa and possibly one could not find a better place to observe them than on the slopes of Mount Kenya where Leslie Brown, a colonial officer by trade and a naturalist of experience, began his studies in 1948. The Embu district is a region of rocky hills and thornbush where eleven species of eagles have nested. These birds, all observed over a number of years, included the trio of major eagles,-Martial, Verreaux's, and the Crowned Hawk Eagle, largest and finest of the lot, as well as odd species such as the Bateleur and snake eagles. Brown has also studied the Golden Eagle over many years when on home leave in Scotland. Life histories and the biology of eagles are discussed in regard to methods of hunting and killing, types of prey, powers of flight, territory and foraging range, courtship, display, the nest, eggs, incubation and rearing of the eaglet. This material represents original observations. Brown has presented his subject with an eye to broader generalizations as well as to specific details. One learns that eagles spend comparatively little time hunting and that where they were observed most often, on Eagle Hill, many species nested relatively close together without fighting, a finding which Brown could only explain on a supposition that these predators were interspecifically gregarious. Many of the eagles studied were more prevalent in the haunts of man than in uninhabited bush. Kenya eagles were tame. The native Wambere didn't persecute them, apparently feeling that while some were harmless or merely tiresome, others which killed rats, snakes, or cropeating game birds were obviously useful. Brown gives an interesting account of his native companions and helpers, one of whom, Njeru, came as close to being an African ornithologist as one is likely to find.

The book contains excellent photographs, taken by the author at close range from hides. Some of the pictures are fascinating, such as the one of the snake eaglet pulling a snake from its parent's gullet. Much of Brown's data have been published in scientific journals. The book, however, has enabled him to bring his experiences together in a comprehensive way. It is obvious that the author is a man well-adapted to studying these great birds of prey;—he is a hunter able to kill a black buffalo with one bullet and an individual ready to tackle anything from a trek over miles of uninhabited bush to climbing a tall tree in a gale of wind to reach his hide, even under attacks of the parent Crowned Hawk Eagles. Any student of bird behavior should find "Eagles" a noteworthy contribution. Those with more general interests will find it a readable, occasionally exciting book, written by a first rate naturalist who, while persistent in pursuing his special subject, was much alive to the fascinations of the African bush, whether of the natives, the scenery, or the interrelations of living things.—LAWRENCE KILHAM.

NOTICE

The National Science Foundation will award grants to defray partial travel expenses for a limited number of American scientists who wish to participate in the XIIth International Ornithological Congress which is scheduled to meet in Helsinki, Finland, June 5 to 12, 1958.

Application blanks may be obtained from the National Science Foundation, Washington 25, D. C. Completed application forms must be submitted to the Foundation by January 20, 1958.