RECENT LITERATURE

Jackson and Sclater's 'Birds of Kenya Colony and the Uganda Protectorate.'1—Notwithstanding the fact that East Africa has long been a favorite resort for hunters and ornithologists, a comprehensive account of its bird life has been lacking until the appearance of the splendid work of Jackson and Sclater which is now before us. It is peculiarly fitting that this work should have been conceived and carried well on to completion by Sir Frederick Jackson since he did so much to elucidate the natural history of the region and spent many years there as explorer, organizer, Lieutenant-Governor (of Kenya) and Governor (of Uganda). While he did not live to see the completion of his work, Lady Jackson has seen to it that it was finished and published and in this accomplishment she has been fortunate in securing the services of Dr. W. L. Sclater, the well-known authority on the birds of Africa.

It is a great satisfaction to all who have had occasion to work on African collections to have available Sir Frederick's extended observations covering over thirty years of field work. He regarded himself as a field naturalist rather than a scientist and his hope was that his work might help others to carry on in the same line. As Dr. Sclater has said, the systematic side of East African bird study has been practically completed and there are but few species or subspecies to be described but "in the matter of nesting habits, migration and distribution there is a vast opening for the field naturalists of the future to increase our knowledge of Kenya bird life," and the present work will be a great aid and stimulus to this end.

The work appears in three sumptuous royal-octavo volumes. There are brief introductory chapters, a sketch of the origin and distribution of the avifauna of Kenya and Uganda, a gazetteer of localities and a bibliography. The main text treats of 1393 species and subspecies (if our count becorrect) 987 of which are Passeres. Under each form there are paragraphs on description, distribution, recorded localities, and notes. The last, comprising the author's observations and field notes, are by far the most extensive and important. Dr. Selater has prepared a number of the descriptions as well as the diagnoses of genera and families and the keys, while he has brought the entire manuscript up to date. The classification and nomenclature follow the 'Systema Avium Aethiopicarum' with the addition of certain forms described since its appearance. The synonymy is very brief and the references are selected for their importance with no thought of making them complete. The illustrations comprise twenty-four colored plates from paintings by George Lodge which possess high artistic merit, a portrait of Sir Frederick Jackson and 241 text-figures in line or half-tone by H. Grönvold.

Jackson has the happy faculty of combining his accounts of the birds with sketches of their environment which often present vivid pictures. Speaking of his visit to Lake Hannington in 1900, where at least a million Flamingoes were assembled, he writes, "It certainly was a sight that baffles description. It was in the early morning before the wind rose and the water was like glass. The foreshore was deceptive, as a smooth, firm-looking, sun-baked crust hid a most offensive mixture of mud, sand, guano, and rotting vegetable matter several inches in depth and an attempt to

¹The Birds of Kenya Colony and the Uganda Protectorate. By Sir Frederick John Jackson, K. C. M. G., C. B. Completed and edited by W. L. Sclater, M. A. Vol. I (Struthionidae to Psittacidae, pp. i-lxviii + 1-544, pls. 1-10, 115 text-figures); Vol. II (Coraciidae to Sylviidae, pp. 545-1136, pls. 11-18, 65 text-figures); Vol. III (Hirundinidae to Emberizidae, pp. 1137-1558, pls. 19-24, 61 text-figures and a map). Gurney and Jackson, 98 Great Russell St., London W. C. 1; Tweeddale Court, Edinburgh, 1938. Price £4, 10s. net,

approach nearer to the birds was completely defeated. From the higher ground we enjoyed a much better view, and Sir Clement Hill correctly described it as 'a mirror set in a pink frame!'; and that was just what it was like. On our side to the right and left of us, the frame varied in depth according to the extent of the shoals, from six feet to a hundred yards or more. At the north where the area of shallow water was greatest, the frame widened to at least half a mile in depth—all birds."

Of the short-tailed Bateleur Eagle he says, "It is one of the most striking of the land birds, its shape, its coloring and its flight all combining to attract attention; but the last is the most remarkable. It is little less than albatross-like in its power of sustained motion without any visible movements of the wings. Momentum is apparently maintained by canting one side or another, and at the same moment either slightly dipping or turning right or left—the wings, except the tips, being apparently as rigid as an aeroplane's."

The work is an attractive piece of book making and credit is due to all concerned in its production.—W. S.

Halle's 'Birds against Men.'—Although the author of this book makes no pretense of being a technical ornithologist, one has but to read a few pages of his latest work¹ to realize that the writer entertains a deep interest in the life histories, activities and environment of the birds with which he has come in intimate contact. Also, one quickly is impressed with the keenness of the author's power of observation, with the patience exhibited in his field work, and with his very marked ability in selecting words to give the exact shade of meaning he desires to express.

This book will entertain discriminating readers, regardless of whether or not they care particularly about birds. Mr. Halle's accounts of his observations of the behavior of birds easily carry the reader onward from page to page. His sanely emotional comments on a merganser in his bath-tub, the courtship and fortunes of a family of Red-tailed Hawks, the daily life of a Kingbird, the behavior of a dignified parrot, glimpses of the birds that throng the jungles about the Mayan ruins of Guatemala,—all arouse the hope that this gifted young man will long continue to write such books.

Evidently he seeks to acquaint himself with authoritative literature on the subjects he discusses, and has been careful to use the approved vernacular names for his birds,—the one oversight noticed is where he mentions the Blue Jay as "bluejay."

The book consists of some 217 pages of actual text, divided into seven chapters, each in itself a complete essay. There are seven full-page illustrations and two or three tail-pieces. All are very sketchy and ineffective line drawings. "Birds against Men" is a vague and inapt title for this very commendable volume.—T. GILBERT PEARSON.

John Muir's Journals.—The appearance of hitherto unpublished subject matter on birds from the pen of John Muir will be welcomed with pleasure everywhere by a steadily growing multitude of readers who in the past have been charmed by his delightful word pictures of the various phases of bird activity observed by him in his explorations; and, as would be expected, these newly published daily journals² contain some additional data on this—one of his favorite topics. It appears that no original manuscript journals survive from his boyhood nor from his four years' study at the University of Wisconsin, if, indeed Muir wrote any. Likewise, none has been

¹Birds | against Men | By Louis J. Halle, Jr., with drawings by Lynd Ward. 8vo, 228 pages, 7 plates; The Viking Press, New York. Price \$2.50.

² John of the Mountains: the unpublished journals of John Muir. Edited by Linnie Marsh Wolfe. 8vo, 459 pp., illus., Boston, Houghton Mifflin Company, 1938. **\$3**.75.

found which records his early botanical ramblings in Canada. It was, however, about the period 1864–66 that he began the well-known and remarkable series of letters to a friend, Mrs. Jeanne C. Carr, wife of Dr. Ezra Slocum Carr of the University faculty, herself a botanist, who had persuaded him to write her of his findings. Having this preliminary practice in the art of self-expression, he wrote his first journals in 1867, recording what he saw as he made his now famous "Thousand mile walk to the Gulf," journals which were edited and published under that title shortly after his death. His first California journals, written in 1869, form the first chapter of the present book, and the succeeding chapters contain most of the important journals which followed, with the exception of his foreign-travel journals which, regretfully, had to be omitted from this book. The journals as here published, therefore, cover nearly the whole of his career as a naturalist, narrating his wanderings, describing what he saw, and recording his scientific researches. In all, there are sixty manuscript volumes extant of Muir's journals, and, closely allied with them, there is a mass of notes scribbled upon loose sheets and bits of paper of all shapes and sizes.

These notes, mostly written in pencil, having shared the hardships of many of his wanderings, are not easy to read after the lapse of years. Many doubtless were scribbled by flickering camp-fire light when his fingers were numb with cold or fatigue; or, perhaps, in the dark lee of some boulder or tree while storm raged about; or, while tramping over some vast glacier, his eyes fairly blinded by snow glare. Often before these notes could be brought in to camp or hut, they were smudged by ferns and flowers pressed between their pages, or, perchance, water-soaked in bogs that had to be waded through. Rich in diction and flowing abundantly out of his sheer undimmed joy in living, these contemporary entries and fragments are largely devoted to an expression of his inmost thought upon Nature and her transcendental meanings. Even in some of the earlier of these he reveals a surprising mastery of poetic prose, and throughout he shows an exquisite sensitiveness to the beauty of rhythmic language. Perhaps, as measured by present-day standards of excellence in technical writing, some of his bird notes might be lacking somewhat in scientific exactness, but he had a vocabulary saturated with the poetry of Burns and Milton and the King James version of the Bible much of which he had learned by heart when a child, and all of these lent an unconscious music to his own written words. So, in these journal entries, we read with increasing pleasure his successive notes, often fragmentary but always interesting, concerning his good friends the albatross, the bluebird, the bobolink and the snow bunting, and, along with them, perhaps in the same paragraph, of his equally good friends the boulders, the waterfalls, the caves, the cataracts and the avalanches. With notes on the chickadee, the crane, the finch, the grouse and the flicker, perhaps, may be interspersed a paragraph or two of meditation on Beauty as a synonym of God, or on the glories of Indian summer. Along with that on the eagle, the egret, the heron, the killdeer, and the linnet, there may be discussion of Nature's use of smoke, or of the fragrance of the primitive forest, or, perhaps, on the unpoetical character of sheepherding or on the purity and spirituality of the great out-of-doors. The meadowlark, the mockingbird, the plover and the sage hen may share honors in his records with his mental reactions to the rainbow colors of waterfalls or the action of earthquakes on slate. An actual count made by this reviewer revealed that sixty-eight species of birds are mentioned or discussed with varying degree of fullness. The temptation is great to make copious quotations from some of these entries, but, regretfully, limitations of space forbid more than one brief, highly characteristic excerpt from record of a solitary tramp in 1870 through Merced Canyon in the Sierras: " . . . feelings of isolation soon caught me again among these hushed sounds, but one of the Lord's smallest birds came out to me from some bushes at the side of a moss-clad rock. It had a wonderfully expressive eye, and in one moment that cheerful, confiding bird preached me the most effective sermon on heavenly trust that I had ever heard . . . and I went on not half so heart-sick nor half so weary."

The book is a delightful one and its reading is heartily commended.—J. S. WADE.

Bird enemies of forest insects.—In a recent English text,¹ seven pages (259–266) are devoted to birds as enemies of forest insects. German opinion is cited that the cuckoo, starling, tits, and finches, especially the Chaffinch, in the order named, are the most useful species in controlling forest insect pests. The Jay, Wood-pigeon, and Greater Spotted Woodpecker also are mentioned and instances of the good work of each are noted. A great deal has been done in Germany to encourage birds in forests and nest boxes and feeding places have become a regular feature in most parts of the country. "Woods thus supplied have, in certain cases, shown remarkable immunity from pests such as the nun moth, and oak-roller moth, while neighboring woods, unprotected have suffered severe damage." The material on British birds is largely from St. Clair Thompson's book, 'The Protection of Woodlands,' 1928 (reviewed in 'The Auk,' 46(1): 143–145, Jan. 1929).

The author remarks, on his own account, however that, "the encouragement of bird-life in our forests . . . should receive more detailed study from the practical point of view than it has received hitherto" and "the study of the question as to the best means of encouraging the bird-life in our coniferous areas is one which demands immediate attention." Experience in Czechoslovakia indicates that this requires maintenance of clearings, where bird-attracting facilities may be effectively installed. Those already in use appear to have remarkable value as rallying places for bird life.—W. L. M.

Darling's 'Bird flocks and the breeding cycle.'—In this very readable little book,² which one may finish in an evening's leisure, the writer briefly presents some of the results of his intensive study of the seabird colonies at lonely little Priest Island off the northwest Highlands of Scotland. Here, quite undisturbed, it was possible for two whole seasons, to follow the normal activities of various species.

A preliminary chapter discusses the recent developments in our knowledge of the part played by ultra-violet light and by visual stimulation on the ripening of the reproductive glands, in which it is now known that the gonad-stimulating hormone of the pituitary body is the important factor. It is further evident that a necessary psychical factor is provided by the presence of another individual and by the attitudes of this companion. The important point which the author endeavors to bring out is that if the posturing of a companion bird (whether of the opposite sex or of a similar species) may induce the initiation of responses leading to coition and reproduction, it is quite conceivable that in colonial birds the presence and actions of others of the group as a whole may likewise become essential to the completion of the cycle. The body of the book is devoted to further elucidation of this point, from a study of the four species of gulls that breed at Priest Island, namely, the Herring Gull, Common Gull, the Lesser and the Greater Black-backed Gulls. The requirements of each of these differ, and are given in most detail for the Herring Gull and the Lesser Blackback in which the general aspects of the cycle are traced.

¹ Chrystal, R. Neil. Insects of the British Woodlands. 338 pp., 32 pls., 1937; F. Warne & Co., London, England. 7s. 6d.

² Darling, F. Fraser. Bird flocks | and the | breeding cycle | a contribution to the | study of avian sociality. Small 8vo, x + 124 pp., frontispiece; The University Press, Cambridge, England, and The Macmillan Company, 60 Fifth Ave., New York City, 1938. \$1.75.

An important point brought out is that the various groups of each species may begin nesting at slightly different times, that the larger groups of colonies of nesting birds are the earlier and the more successful, partly because the members of the flock by their common courtship activities tend to show a greater synchronization in nesting with the result that young, which in the downy stage are especially open to attack, are thus exposed to a less extended period of persecution. Small colonies may even prove altogether unsuccessful in rearing young to the fledged stage.

The latter part of the book is devoted to a condensed account of courtship, particularly of a communal type, among seabirds of the island and concludes with new light on the significance of numbers in relation to social behavior. Numerous instances are adduced of the budding-off of new colonies from larger parent groups. As a single example, three pairs of Razor-billed Auks in 1936 visited the west coast of the island and took up positions on a cliff, but did not breed. In the following year nine birds at first arrived and later the group increased to fourteen and then commenced to display an interesting type of communal courtship. This was followed by nesting. The author believes that in this and in similar instances, the number of birds was at first too small a company to arouse an efficient stimulus to breeding. Thus it may be that there is a more or less definite threshold of numbers necessary to provide the requisite social atmosphere, without which communal courtship and nesting may not take place. In this may perhaps be found the reason for the failure of a social species to maintain itself by reproduction when reduced to small groups numerically below the social threshold.

The book concludes with a list of references and an index. There is an interesting frontispiece of a Fulmar 'visiting' another member of the colony, a common social act. Here is a very interesting and suggestive book, with much new matter that forms a valuable contribution to our knowledge of the social life of these seabirds.—G. M. A.

Priestley's 'Book of Birds.'—Reading this book¹ brings clearly to view the fact that the appreciation of birds is quite as legitimate an aspect of the field of ornithology as are systematics or physiology; for the appeal of birds to the human mind manifests itself in many different ways. Their activity, familiarity, beauty and variety stimulate us to manifold reactions often of an unsuspected nature, giving to some a desire for closer understanding of their ways, to others a zeal for collecting or comparison, to others again an urge to poetic expression, all of which are but differing effects that these fellow creatures exert upon our own consciousness. From an aesthetic aspect birds may cause us to consider abstract things and intangible qualities with which they become associated in our minds. The compiler of this anthology, therefore, needs no excuse for bringing together as a "companionable book" this collection of extracts about birds culled from many sources in the course of interested reading. First attracted to birds by the appeal of the bright colors of a flock of goldfinches, she began to read the writings of various authors on birds and made a scrapbook of extracts on the subject. These finally amounted to such an interesting whole that it seemed worth while to pass them on for the pleasure of others.

Naturally the greater part of these extracts come from English writers and poets, old and new—Gilbert White, Hudson, Alfred Russel Wallace, Julian Huxley, Edgar Chance, Robert Lynd, Shakespeare and Keats—to mention but a few; now and then, however, an American author, whose literary charm or descriptive art seems worthy, is included—Audubon, Thoreau, Sutton, Peattie. One wonders why Shelley's

¹ Priestley, Mary. A book of birds. With 82 wood engravings by C. F. Tunnicliffe. sm. 8vo, 384 pp., illus.; Macmillan Co., New York City. \$2.50.

verses on the Skylark were omitted, but perhaps these are sufficiently familiar. There is no attempt at anything more than variety or the selection of well-written and interesting bits in the choice, hence there is no obvious structure or plan to the book owl, pelican, redwing and rook follow in sequence—but the selections are good though apparently limited to the compiler's browsing range. Over ninety different authors appear, some of them many times, while the quotations cover a wide field of geography from the British Isles to Antarctica.

The numerous illustrations are from modern wood engravings showing different familiar birds, but although the modern style of 'woodcut' is by many regarded as a high development of the illustrator's art, to the reviewer's taste the heavy lines, dark shadings and blacks are inappropriate to the illustration of most birds except crows and ravens. There are good indexes to the authors and species found in the text.

Here is an unusual type of popular bird book which should have much appeal to the general reader.—G. M. A.

Brooks's Bibliography of West Virginian Ornithology.-With the everincreasing output of ornithological literature, any bibliographical summary covering some aspect of the field is welcome and worth while. The compiler of this list¹ hasfor many years kept close track of the publications on West Virginian ornithology and has himself contributed many valuable notes and more extended articles on the birds of the State, so that he is in an excellent position to prepare the present thorough catalogue of pertinent literature. The references are arranged chronologically, year by year, beginning with 1831 and carrying the subject to the early part of 1938. Instead of the more usual method of citing first the title of the article or book, followed by the volume, and pages, the procedure is here reversed, citing first the name of the journal, then volume and page, followed by the quotation of the title with brief comment on the value and scope of each article. There is often a lack of consistency in the method, some titles are omitted or the reference is incomplete, although the essentials are there. The use of Roman numerals for volume numbers might have been avoided since they not only take up more room but involve a mental translation with consequent liability to error. Of especial value are the comments following the titles, for the author's familiarity with the birds of the State enables him to make helpful appraisal of the many contributions; while the inclusion of articles from various minor journals, some long defunct, makes available many notes that might otherwise easily be overlooked. The chronological arrangement has the advantage that it permits the student to follow the development of the ornithological history of the State. The list of references is 'lithoprinted' in double column, a method which simulates clear typewriting and is adapted to the use of good paper the size of a typewriter sheet. The title page and cover are type-set and the whole is neatly bound in stiff buff covers. It should be helpful to all who are interested in the ornithology of the region it covers.-G. M. A.

Gladstone on 'Thomas Watling, limner of Dumfries.'—As the personalities of the earlier naturalists recede into the past, it becomes a matter of increasing interest as well as of difficulty to retrieve what at this distance may still be found out concerning them. This attractive little book² presents the results of a five-year search for particulars of Thomas Watling, one of the first artists to portray the fauna

¹Brooks, Earle Amos. A descriptive bibliography of West Virginia ornithology. Large 8vo, 28 pp., published by the author at 166 Plymouth Road, Newton Highlands, Mass., April, 1938. Price \$1.00.

² Gladstone, Hugh S. Thomas Watling | Limner of Dumfries. 8vo, 75 pp., 7 pls., reprinted for private circulation, from the Trans. Dumfriesshire and Galloway Nat. Hist. and Antiquarian Soc., Dumfries, 1938.

of New South Wales at first hand. It appears that he was a limner or painter of Dumfries, Scotland, who in 1789 was arrested on the charge of having forged notes of the Bank of Scotland. Although he seems to have protested his innocence, nevertheless, believing that the notoriety of the affair would be damaging to his career at home, he accepted a penalty of fourteen years' 'transportation,' to Port Jackson, New South Wales, then a penal colony. Little record of him exists; even the date of his birth is uncertain, though an entry of his baptism in 1762 was unearthed. On his way out to the Antipodes in the ship 'Daedalus' he managed to escape when the vessel touched at Cape Town, where, however, he was later recaptured, and forced to continue the journey in another ship. Two letters which he wrote to his aunt in Dumfries, were afterwards published anonymously as a small book, entitled 'Letters' from an exile at Botany-Bay, to his aunt in Dumfries.' Subsequent petitions from this lady, Marion (or May) Kirkpatrick, failed to secure his release. But while in New South Wales he was employed by 'J. W.'-doubtless John White, author of the 'Journal of a Voyage to New South Wales,' 1790-to paint "the non-descript productions of the country." He even conceived the idea of himself publishing a book on the new country, to be illustrated by his paintings, but apparently his employer made use of these latter for his own purposes. There is evidence that Latham, in the Second Supplement to his 'Synopsis' and in his Supplement to the 'Index Ornithologicus,' made use of a number of Watling's drawings for the description of new species. Mr. Gladstone shows, however, that there are in existence three portfolios of water color drawings ascribed to Watling: two in the British Museum and one in the Mitchell Library at Sydney. One of those in the British Museum alone contains signed drawings by this artist, while the other in that institution apparently has none of his work; the Sydney set is probably the work of several artists none of whom is certainly identifiable. The first of these sets is the one used by Latham, and is mentioned as 'Mr. Lambert's drawings,' but it includes the work of two or three other artists as well. As to the origin of its Watling's drawings, the author demonstrates that John White was in correspondence with Lambert and he believes that many of the paintings sent to Lambert by White were the work of Watling, annotated by his superiors, but with a complete disregard of the artist.

The new facts here brought to light by this painstaking investigation thus clear up a number of points in regard to Thomas Watling and his work, but raise additional and perhaps insoluble questions concerning the actual source of work previously ascribed to him. The involved nature of the whole matter is reflected in the general presentation and discussion, from which the reader finds difficulty in arriving at the final conclusions, a difficulty which the author might perhaps have obviated by adding a clear summary of his findings.—G. M. A.

'Native Bird Songs.'—This is one of the latest records of bird songs to come from the Cornell Ornithological Laboratory where Mr. Brand has made such noteworthy contributions to the methods of recording wild bird songs. This record¹ is far superior to any of the older recordings which have been on the market. The following birds are included, each with a representative variety of songs and call notes: Hermit Thrush, Wood Thrush, Brown Thrasher, Whip-poor-will, Field Sparrow, Phoebe, Black-capped Chickadee and Loon. Between the various songs are inserted vocal explanations and descriptions; and, as is natural in a commercial record, these comments are designed for the average layman rather than for those already familiar with the birds' songs.

¹Native Bird Songs. Recorded from Nature by A. R. Brand and the Laboratory of Ornithology, Cornell University. Victor record No. 25765.

At some points, the records are startlingly realistic. Sitting in an easy-chair, one almost sees the sunset reflected in the quiet waters as the Loon sends his echoes rolling back and forth across the mountain lake; and when the Whip-poor-will breaks the stillness of the evening one can fairly feel the dew on the grass—and the bites of the mosquitoes. Background noise has been reduced to a minimum in this record, presumably by a painstaking selection of the best songs from a vast number of recordings. In fact the mechanical noise from any but the very best of phonographs is louder than any extraneous noises originating in the record itself. A more serious limitation on recordings of bird notes is imposed by the fact that very few commercial pick-ups will reproduce notes of higher pitch than about 3000 vibrations per second. For after the record has been played a few times with steel needles, the weight of the head has marred the delicate contours of the groove which reproduce the higher frequencies. Since many bird songs have a considerable component of higher frequency that 3000 cycles, this causes some distortion, even though the records may originally have been almost perfect. This, however, is a defect of our phonographs, and has nothing to do with the most excellent recording which Mr. Brand and his associates have accomplished. No ornithologist can consider himself up to date in his knowledge of bird-song recordings who is not familiar with these records.—D. R. GRIFFIN.

Menegaux's 'Oiseaux de France' is the thirty-first of a series of small popular handbooks of natural history, issued by Paul Lechavalier of Paris. Of this work, projected to form four volumes, the present¹ is the third, and covers the "Ordre de Coraciiformes" (in which the author chooses to include the rollers, kingfishers, beeeaters, hoopoe, nightjars and swifts) and part of the "Ordre de Passeriformes," taking in the swallows, Old World warblers, wrens, waxwing, grass warblers, shrikes and thrushes. The fourth volume will include the remaining passerine species. The volume here noticed, consists of two parts. In the first, paged in Roman numerals, are the diagnoses of orders, families and genera, followed in each case, where there is more than one species in France, by a key. The second part, paged in Arabic numerals, consists of an atlas of sixty-four colored plates, and additional plates in black and white from drawings or from photographs. In the first part many of the species are listed by name only, with a reference to the plate in the atlas, where, on a facing page, is found the particular account, giving French and Latin name, names in other languages, brief description of plumages, measurements and biology. In the case of the unfigured species, this matter is usually placed in the first part following the name. There is thus a confused arrangement, making it at first difficult to find the desired account, while a supplement to the text of the plates at the back of the book, further aggravates the trouble. However, there is a table of contents and an index. The colored plates are by Eudes and in most cases show the male and female and as an inset in one corner, the egg, of each bird. Although some of the subjects look as if drawn from poorly mounted specimens and most of the poses are stiff, yet the delicacy of coloring and composition and the indications of the habitat of each have a certain charm such as only a French artist could give, and this goes far to make up for any shortcomings. As a popular and inexpensive handbook of the birds of France this rather attractive little set should prove useful to amateur field ornithologists in identifying their native species.-G. M. A.

¹Menegaux, A. Les Oiseaux de France. Volume III Passereaux (tome II). Encyclopédie Pratique du Naturaliste XXXI. Sm. 8vo, pp. dix-dcxiii; atlas, pp. 144-267, 1937, Paul Lechavalier, ed., 12 rue de Tournon, Paris 6e. Price 60 fcs.

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- BOASE, HENRY. Further notes on the habits of the Sheld-duck. British Birds, 31: 367-371, May 1, 1938.
- BOND, JAMES. Nesting of the White-winged Crossbill. Canadian Field-Nat., 52: 3-5, figs., Jan. 1938.—In the Magdalen Islands.
- BOYD, A. W. Notes from reservoirs and sewage farms. British Birds, **31:** 376–379, May 1, 1938.—Ducks, shorebirds, crows and wagtails frequenting these places.
- BRANDON, T. Notes on the hawks observed in the upper North of South Australia during 1937. So. Australian Ornithologist, 14: 153-160, pl. 7, Apl. 1, 1938.—
 Among others, the nesting of a pair of Peregrine Falcons is described, in the Flinders Range. Remains of a parrot (*Melopsittacus*) were found at the nest.
- BRANT, IRVING. "Sportsmen's" heaven is hell for ducks. Emergency Conservation Comm., New York, publ. no. 71, 14 pp., June 1938.
- BROWN, R. H. Breeding-habits of the Dunlin. British Birds, **31**: 362–366, May 2, 1938.—On Solway Firth.
- BROWN, R. H. Notes on the Land Rail. British Birds, **32**: 13–16, June 1, 1938.— Breeding habits.
- BRYANT, C. E. A note on the Black Honeyeater. Emu, 37: 176-178, pls. 29-30, Jan. 1, 1938.
- BURLEIGH, THOMAS D. The birds of Athens, Clarke County, Georgia. Occasional Paper, no. 1, Georgia Ornith. Soc., 35 pp., Feb. 1938.—A carefully annotated list of birds, with nesting and migration dates.
- CASSIDY, JAMES. A chat about the Tui of New Zealand. Avicult. Mag., (5) 3: 126– 129, May 1938.—*Prosthemadera novaeseelandiae* of New Zealand. It was domesticated by the Maoris and taught to talk.
- CASSIDY, JAMES. Australian bird-beauties. Avicult. Mag., (5) **3**: 130–136, May 1938.
- CLELAND, J. B. Birds noted in the North Flinders Ranges in May, 1937. So. Australian Ornithologist, 14: 115-117, Jan. 1, 1938.
- CLELAND, J. B. Notes on birds seen between Alice Springs and the Granites in August, 1936. So. Australian Ornithologist, 14: 126–128, Jan. 1, 1938.
- CLELAND, J. B. [On the coincidence of nesting with the irregularity of rains in Central Australia.] Bull. British Ornith. Club, **58**: 88–90, May 12, 1938.
- COMPTON, LAWRENCE V. The pterylosis of the Falconiformes with special attention to the taxonomic position of the Osprey. Univ. of California Publ. Zool., 42: 173-212, 17 text-figs., 1938.—It is concluded that the Osprey represents a distinct family, Pandionidae, of the suborder Cathartae.
- CONDON, H. T. Some birds of the south and central Australian border. So. Australian Ornithologist, 14: 146–151, Apl. 1, 1938.
- COTTAM, CLARENCE, AND HANSON, HAROLD C. Food habits of some arctic birds and mammals. Zool. Ser. Field Mus. Nat. Hist., **20**: 405–426, June 14, 1938.— Among others, the Dovekie was found to feed chiefly on small crustaceans, with a small amount of fish.
- Cowan, Ian McTaggart. Distribution of the races of the Williamson Sapsucker in British Columbia. Condor, 40: 128–129, fig. 36, May 17, 1938.
- CRUICKSHANK, ALLAN D. The ornithological year 1935 in the New York region. Proc. Linn. Soc. New York, for 1936: 66-95, Oct. 31, 1937.—A review of the bird life for the year with an annotated list of species.
- CUSHING, JOHN E., JR. The status of the Fox Sparrow of southwestern Oregon.

Condor, 40: 73-76, figs. 27-28, Mar. 15, 1938.—The breeding race is not megarhynchus as supposed, but an intergrade of mariposae type.

- DANFORTH, STUART T. A revision of the West Indian races of Loxigilla noctis (Linnaeus). Journ. Agric., Univ. of Puerto Rico, 21: 225–232, Apl. 1937.—Eight races of this bird are recognized in addition to one new race, L. n. desiradensis from the Island of Desirade.
- DANFORTH, STUART T. Ornithological investigations in Vieques Island, Puerto Rico, during December, 1935. Journ. Agric., Univ. of Puerto Rico, 21: 539-550, Oct. 1937.
- DANFORTH, STUART T. The races of Oreopeleia mystacea (Temminck). Proc. Biol. Soc. Washington, **51**: 73-74, May 19, 1938.—The Bridled Quail Dove of St. Croix is described as a new race, beattyi.
- DEIGNAN, H. G. A review of the southern (melanostigma) group of the Red-headed Laughing-thrush, Garrulax erythrocephalus (Vigors), with descriptions of two new races from Siam. Proc. Biol. Soc. Washington, 51: 87-92, May 19, 1938.—New: G. e. schistaceus from Doi Chiengdao, Chiengmai province; G. a. subconnectens from Phu Kha, Nan province.
- DEIGNAN, H. G. A new flower-pecker from the Malay Peninsula. Proc. Biol. Soc. Washington, **51**: 97–98, May 19, 1938.—*Dicaeum ignipectus dolichorhynchum* from summit of Khao Nom Plu, peninsular Siam.
- DELACOUR, J. The Velvet Scoter in captivity. Avicult. Mag., (5) 3: 129–130, May 1938.—Not yet bred in captivity.
- DICKERSON, L. M. The western frontier of the European Starling in the United States as of February, 1937. Condor, 40: 118-123, fig. 34, May 17, 1938.— Breeding range now probably to eastern Texas and winter range to western Texas.
- DUNCAN, A. B. The Magpie in Scotland. The Scottish Naturalist, no. 231: 65-79, 1938.
- ELIOT, SAMUEL A., JR. Spring in the [Connecticut] Valley. Bull. Massachusetts Audubon Soc., 22: 4-6, June 1938.
- ENDRIGKEIT, A. Fressen Haubentaucher Frösche oder Froschlarven? Journ. f. Ornith., 86: 251-254, fig. 1-2, Apl. 1938.—The Crested Grebe is shown to be the host of a parasitic trematode, *Tylodelphys clavata*, which is smaller than the allied *excavata*, a parasite of the Stork. The intermediate hosts of both are fish, rather than frogs.
- ERICKSON, MARY M. Territory, annual cycle, and numbers in a population of Wren-tits (*Chamaea fasciata*). Univ. of California Publ. Zool., **42**: 247–334, 16 figs., pls. 9–14, 1938.
- ERRINGTON, PAUL L., AND HAMESTROM, F. N., JR. Observations on the effect of a spring drought on reproduction in the Hungarian Partridge. Condor, 40: 71-73, Mar. 15, 1938.—Retardation and decrease in productivity resulted.
- EVANS, CHARLES. A Bittern uses its coloration. Flicker, Minneapolis, 10:5, May 1938.
- FABRICIUS, ERIC. Några iakttagelser rörande viggens, Nyroca fuligula (L.), beroende av måsfäglarna såsom häckfågel i skärgarden. Ornis Fennica, 14: 115–125, 1937 (with German abstract).—This duck in southwestern Finland was found to nest usually on islands where colonies of terns were breeding, because, as the author suggests, the latter afford a certain protection in driving off marauding crows and other nest-robbers. A similar habit was noted in the case of eiders and scoters.
- FALLA, R. A. Crested Penguins in Western Australia. Emu, 37: 197-200, 1 fig., Jan. 1, 1938.

- FINLAYSON, H. H. Notes on some birds seen on Flinders and other islands off the Eyre Peninsula coasts, February-March, 1937. So. Australian Ornithologist, 14: 141-146, Apl. 1, 1938.
- GARLING, MAX. Einige Bemerkungen über die Brutvögel der Berliner Rieselfelder. Beitr. z. Fortpflanzungsbiol. d. Vögel, 14: 13–20, Jan. 1938.
- GLADKOV, N. A. Die adaptive Bedeutung der Alula bei den Vogeln. Bull. Soc. des Naturalistes, Moscou, sect. biol., new ser., **46**: no. 5, 272–279, 8 figs., 1937.—In Russian with German resumé. The function of the alula is to increase the lifting power in flying up, and in alighting, and is analogous in effect to the aileron at the front edge of the wing of an airplane.
- GORDON, SETON. Incubation-period of the Peregrine. British Birds, **32**: 18, June 1, 1938.—A set of four eggs completed April 15 showed on May 18 two newly hatched young and one egg. The hatching took place five weeks after the laying of the first egg.
- GRANT, C. H. B., AND MACKWORTH-PRAED, C. W. [On the status of Viridibucco simplex and V. leucomystax.] Bull. British Ornith. Club, 58: 77-78, Mar. 4, 1938.— Additional specimens from Tanganyika Territory and Kenya Colony confirm the specific distinctness of these birds.
- GRANT C. H. B., AND MACKWORTH-PRAED, C. W. [On the status of six African birds.] Bull. British Ornith. Club, 58: 82-84, Apl. 4, 1938.—Barbatula kandti is a synonym of B. b. jacksoni; Barbatula leucolaima urungensis is a synonym of B. b. nyansae; Lybius guifsobalito ugandae and Lybius melanopterus didymus are untenable; Buccanodon belcheri is a race of B. olivaceum; the type locality of Trachyphonus erythrocephalus shelleyi is Goolis Mountains, British Somaliland.
- GRANT, C. H. B., AND MACWORTH-PRAED, C. W. [On African birds.] Bull. British Ornith. Club, 58: 116-119, May 27, 1938.—Pogoniulus bilineatus conciliator becomes a synonym of the typical race; three races of Trachyphonus erythrocephalus are recognized; on the type localities of Indicator variegatus and I. minor, of the latter of which I. m. teitensis is made a synonym.
- GREEN, WILLIAM E., AND HENDRICKSON, GEORGE O. The European Partridge in north-central Iowa. Iowa Bird Life, 8: 18–22, fig., June 1938.—Increase in recent years.
- GRINNELL, JOSEPH, AND BEHLE, WILLIAM H. A new race of titmouse, from the Kern Basin of California. Condor, **39**: 225–226, 1937.—*Baeolophus inornatus* zaleptus subsp. nov.
- GRISCOM, LUDLOW. A phenomenal spring migration. Bull. Massachusetts Audubon Soc., 22: 1-3, June 1938.—In eastern New England, 1938.
- GROTE, H. Die Vögel von Franz-Joseph-Land. Beitr. z. Fortpflanzungsbiol. d. Vögel, 14: 1-8, Jan. 1938.—List of the twenty-six species recorded from the island, of which fourteen are known to breed there.
- GUIMARAES, L. R., AND LANE, FREDERICO. Contribuições para o conhecimento das Mallophagas das aves do Brasil. VI.—Novas especies parasitas de Tinamiformes. Revista do Museu Paulista, 23: 1–21, pls. 1–4, Aug. 30, 1937.—Describes four new species and two new races of Mallophaga from South American tinamus.
- HAARTMAN, LARS VON. Till kännedomen om viggens, Nyroca fuligula (L.), häckningspsykologi i skärgården. Ornis Fennica, 14: 125–134, 5 figs., 1937 (with German abstract).—On the breeding psychology of this duck in associating with terns and gulls for protection from egg-robbing species.
- HACHISUKA, THE MARQUESS. [A new Kaleege Pheasant, Gennaeus moffitti.] Bull. British Ornith. Club, **58**: 91–93, May 12, 1938.—Described from aviary specimens believed to have come from southern Tibet.

- HARVEY, W. O. The East African Pitta (*Pitta longipennis* Reichenow). Ibis, (14) **2:** 335-337, Apl. 1938.—Distribution, status and habits.
- HAVERSCHMIDT, FR. Einige Beobachtungen über das Brutgeschäft des Kleinen und Grossen Buntspechts. Beitr. z. Fortpflanzungsbiol. d. Vögel, 14: 9–13, Jan. 1938. —Breeding habits of these woodpeckers.
- HERRICK, EARL H., AND TORSTVEIT, OLAF. Some effects of adrenalectomy in fowls. Endocrinology, **22**: 469–473, 4 figs., Apl. 1938.—Conclude that the adrenal glands have an important effect in maintaining the testes.
- HICKEY, JOSEPH J., AND WILCOX, LEROY. On the nesting of the Black Skimmer in New York State. Proc. Linn. Soc. New York, for 1936: 98-99, Oct. 31, 1937.— The discovery of a nesting pair off Fisher's Island with a single egg on August 11, 1919, is now confirmed. On July 31, 1936, a group of five pairs was nesting at Moriches Inlet.
- HITCHCOCK, W. B. Late nesting notes, etc. So. Australian Ornithologist, 14: 151-153, Apl. 1, 1938.
- HOESCH, W. Ornithologische Beobachtungen auf einer Fahrt ins Etoscha-Gebiet (SW. Afrika). Journ. f. Ornith., 86: 222–233, 7 figs., Apl. 1938.—Brief notes on birds of the desert region of Southwest Africa.
- HOWARD, HILDEGARDE. The Rancho La Brea Caracara: a new species. Carnegie Inst. Washington, Publ. no. 487: 217-240, 3 pls., July 7, 1938.—Numerous remains now indicate the distinctness of the Rancho la Brea bird, here named Polyborus prelutosus.
- HUDSON, GEORGE E., AND OTHERS. Some recent range extensions of the European Starling in Nebraska. Nebraska Bird Review, 6: 4–7, Apl. 20, 1938.—Brief notes by various contributors on recent extension of range in Nebraska.
- HUEY, LAURENCE M. A species [Puffinus tenuirostris] new to the known avifauna of Lower California. Condor, 40: 128, May 17, 1938.
- HUEY, LAURENCE M. Frank Stephens, pioneer. Condor, 40: 101-110, fig. 31-32, May 17, 1938.
- INONE, M. On the breeding of Sitta europaea clara Stejneger. Tori, Bull. Ornith. Soc. Japan, 9: 473–477, fig. 152–155, Dec. 1937 (Japanese text).
- IREDALE, TOM. The question of species. Emu, 37: 179–181, Jan. 1, 1938.
- JAMES, RICHARD. Breeding British birds. Avicult. Mag., (5) 3: 141–143, May 1938.—Redpoll steals nest material; Bramble Finch would swallow canary chicks whole.
- JOURDAIN, F. C. R. Share of sexes in incubation of the Dipper. British Birds, 31: 380-381, May 1, 1938.—Female normally alone incubates.
- KAZANO, T. Two new records of birds from Formosa. Tori, Bull. Ornith. Soc. Japan, 10: 10-13, fig. 1-4, June 1938 (Japanese text).
- KEY, HILTON J. A Little Falcon (*Falco longipennis*) kills a bat. So. Australian Ornithologist, **14**: 122, Jan. 1, 1938.—One of a colony of bats flushed from their retreat was caught in midair; other diet.
- KINNEAR, N. B. [A new race of babbler from southeastern Tibet.] Bull. British Ornith. Club, 58: 76-77, March 4, 1938.—Babax lanceolatus lumsdeni, Charme district.
- KINNEAR, N. B. [A new name, Stachyris guttata tonkinensis, proposed for Thringorhina guttata diluta Kinnear.] Bull. British Ornith. Club, 58: 82, Apl. 4, 1938.
- KOZLOVA, E. V. Field observations on the breeding of the Herring-Gull (*Larus argentatus ponticus*) on the Caspian Sea. Ibis, (14) **2**: 245-254, pls. 3-4, Apl. 1938. —Habits of adults and young.

- KURODA, N. Notes on the Java Sparrow. Tori, Bull. Ornith. Soc. Japan, 9: 478-483, pl. 9, Dec. 1937.—Plate in color illustrating seasonal changes.
- KURODA, N. On a melanistic example of *Tribura luteoventris* from Formosa. Tori, Bull. Ornith. Soc. Japan, **10**: 3–9, pl. 1, June 1938.—With English resumé; the colored plate shows normal plumages of young and adult, and a dark-breasted individual.
- KUROPA, N. Ducks of Lake Ashi, Hakone, Hondo. Tori, Bull. Ornith. Soc. Japan, 10: 37-40, fig. 6, 7, June 1938.
- LINSDALE, JEAN M. Observations on waterbirds in California. California Fish and Game, 24: 1-43, 8 figs., Jan. 1938.—The State can no longer carry the same number of waterfowl as when it was first settled. Suggestions for improvement of present conditions.
- Low, CARMICHAEL. [Pheasants and a partridge showing perversion of plumage.] Bull. British Ornith. Club, 58: 86-88, May 12, 1938.—In females showing male plumage, degenerative or pathological changes were found in the ovary. It is believed that when the ovarian hormone disappears a testicular one, due to development of testicular tissue, takes its place. The reverse, a male taking on female plumage, may be the result of a partially hermaphroditic condition.
- LOWE, PERCY R. Some anatomical and other notes on the systematic position of the genus *Picathartes*, together with some remarks on the families Sturnidae and Eulabetidae. Ibis, (14) **2:** 254–269, pls. 5–6, figs. 2–3, Apl. 1938.—This baldheaded bird of the forests of the Gold Coast and Cameroons, West Africa, proves to be a starling rather than a crow. The author divides the Sturnidae into four subfamilies, of which this bird constitutes a member of the Picathartinae. To this subfamily belong *Sarcops* of the Philippines, *Mino* of New Guinea, and *Creatophora* of East Africa and Arabia. Here is another case of affinity between a West African and a far-Eastern species.
- LOWERY, G. H., JR. A new grackle of the Cassidix mexicanus group. Occas. Papers Mus. Zool., Louisiana State Univ., no. 1, 11 pp., May 4, 1938.—Describes as new the Mesquite Grackle, Cassidix mexicanus prosopidicola of the Gulf Coast of southeastern Texas and northeastern Mexico.
- MACDONALD, J. D. Systematic notes on some African barbets. Ibis, (14) 2: 346– 349, Apl. 1938.—Lists the races and distribution of races of Pogoniulus chrysocomus and Lybius undatus.
- MACKWORTH-PRAED, C. W., AND GRANT, C. H. B. Systematic notes on East African birds.—Part XVIII. Ibis, (14) 2: 333–335, Apl. 1938.—On the races of *Strix* woodfordii and on the distribution of the Orange Thrushes.
- MACPHERSON, A. HOLTE. Birds of inner London. British Birds, 31: 372-375, May 1, 1938.
- MARSHALL, A. J. On the occurrence of *Larus marinus* in Spitsbergen. Ibis, (14) 2: 341-342, Apl. 1938.—A lone bird taken in late July at Klass Billen Bay.
- MANGELS, FREDERICK P. Colored bands. Methods for using bands and arranging data. Bird-banding, 9: 94-97, 6 figs., Apl. 1938.
- MATHEWS, GREGORY M. Overlooked names of European birds from the 'Analyst' and from the 'Ornithological Guide.' Ibis, (14) 2: 321-331, Apl. 1938.—In these two rare works many new names were proposed, some of which prove to be valid.
- MAUVE, LUTZ. Der Zug der Grossvögel über den Bosporus. Journ. f. Ornith., 86: 261-301, 9 figs., Apl. 1938.—The region of the Bosporus is traversed in migration only by those raptorial birds and storks that naturally avoid crossing large bodies of water (as the Mediterranean Sea), and in this the peculiar conformation of the

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land causing favorable upward currents makes it of especial attraction to soaring species. The various factors involved are discussed and illustrated by maps and diagrams. Noted by Belonius nearly four hundred years ago.

- MAXWELL, P. H. Bernstein's Ground-cuckoo (*Centropus bernsteini*). Avicult. Mag.,
 (5) 3: 125, pl., May 1938.—Photograph of a live bird from New Guinea in the London Zoo.
- MAYAUD, NOËL. Some notes on shearwaters. Ibis, (14) 2: 343-345, Apl. 1938.— No *P. yelkouan* has yet been recorded from the Atlantic.
- MAYR, ERNST. The birds of the Vernay-Hopwood Chindwin Expedition. Ibis, (14) 2: 277-320, Apl. 1938.—Lists the birds secured in Upper Burma. New forms described are: *Rhopodytes tristis saliens* (Chapa, Tonkin) and *Caprimulgus macrurus hainanus* from Cheteriang, Island of Hainan.
- MEINERTZHAGEN, R. [Four new birds from Asia.] Bull. British Ornith. Club, 58: 94-96, May 12, 1938.—New are: Aegypius monachus danielli from Changai, Mongolia; Parus rufonuchalis blanchardi from Gardez forest, Afghanistan; Erythrina synoica salimalii from Akrobat, Afghanistan; and Sitta neumayer subcaeruleus from Haibak, Afghan Turkestan.
- MILLER, ALDEN H. Hybridization of Juncos in captivity. Condor, 40: 92-93, 1938.—A male Red-backed Junco (*J. caniceps dorsalis*) mated with a Point Pinos Junco (*J. oreganus pinosus*) and in two seasons nested three times. The young in no instance were raised to maturity, a result probably of improper conditions due to captivity.
- MILLER, LOYE. A study of the skull of the Pleistocene stork, Ciconia maltha Miller. Trans. San Diego Soc. Nat. Hist., 8: 455-462, pl. 37, May 31, 1938.— Confirms its assignment to the genus Ciconia.
- MILLER, LOYE, AND HOWARD, HILDEGARDE. The status of the extinct condor-like birds of the Rancho La Brea Pleistocene. Publ. Univ. California at Los Angeles, 1: 169–176, pl. 2, 2 figs., 1938.—*Cathartornis gracilis* is referred to Teratornithidae, and all specimens previously referred to it, except two tarsometatarsi are otherwise assigned. A new genus, *Breagyps*, is erected for *Vultur clarki* (Miller).
- MIRANDA-RIBEIRO, ALIPIO DE. A Seriema—notas ornithologicas XII. Revista do Museu Paulista, 23: 35–90, pl. 1–30, Sept. 30, 1937.—A monograph on this aberrant type. Four races are recognized including the typical form. The anatomy, pterylosis, young and adult are illustrated. Its relationships are concluded to be with the cranes on the one hand, the raptorial birds and the Stereornithes on the other. Its long legs are an adaptation to living in open plains.
- MIRANDA-RIBEIRO, ALIPIO DE. Notas ornithologicas (XIII) Tinamidae (Inhambús, Jaós, Taós, Macucos, Codomas, "Perdizes," etc.). Revista do Museu Paulista, 23: 667–788, pl. 1–18, 1938.—In this monograph the anatomy and systematic status of seven genera of Brazil are considered, among which the following are named as new: Nothura schreineri, N. spixi, Orthocrypturus (new genus, type species Crypturus variegatus), O. variegatus superciliosus, Crypturornis obsoleta hynochracea, C. soui lyardi.
- MOFFITT, JAMES. Environmental factors affecting waterfowl in the Suisun area, California. Condor, 40: 76-84, Mar. 15, 1938.
- MONCRIEFF, PERRINE. Birds of Nelson Province, New Zealand. Emu, 37: 207–234, pls. 31–32, Jan. 1, 1938.
- MOORE, ROBERT T. New races in the genera of Vireo and Buarremon from Sinaloa. Proc. Biol. Soc. Washington, **51**: 69–72, May 19, 1938.—New are: Vireo pallens paluster and Buarremon virenticeps verecundus.

MOREAU, R. E. [Survival of injury by a young bulbul.] Bull. British Ornith. Club, 58: 113-114, May 27, 1938.

- MOUSLEY, HENRY. A study of the home life of the Eastern Belted Kingfisher. Wilson Bull., 50: 3-12, Mar. 1938.
- MURPHEY, EUGENE EDMUND. Observations on the bird life of the middle Savannah Valley 1890–1937. Contrib. Charleston Mus., no. 9, 61 pp., frontispiece, map, 1937.—A briefly annotated list of the birds seen in forty years of observation in this region on the 'fall line' between South Carolina and Georgia. Under Passenger Pigeon, the last record is of a young male of the year killed September 12, 1893.
- MURPHY, ROBERT CUSHMAN. Birds collected during the Whitney South Sea Expedition. XXXVII. On pan-Antarctic terns. Amer. Mus. Novitates, no. 977, 17 pp., fig., May 4, 1938.—The Arctic Tern regularly migrates as far south as the pack-ice belt of the southern oceans; the immature plumage in this and the Antarctic Tern is discussed and figured.
- MURR, FRANZ. Gedanken über künstlerische und wissenschaftliche Tierdarstellung. Journ. f. Ornith., 86: 255-260, 4 figs., Apl. 1938.—Thoughts on depiction of natural subjects from the scientific and the artistic points of view.
- PAKENHAM, R. H. W. [A new race of turaco.] Bull. British Ornith. Club, 58: 111-112, May 27, 1938.—The bird of Zanzibar Island, Jozani Forest, is named *Turacus* fischeri zanzibaricus.
- PALMGREN, P., AHLQVIST, H., LANGENSKIÖLD, MÄRTA, AND LUTHER, F. Zur experimentellen Prüfung der Ameisenmimikry. Ornis Fennica, 14: 96–108, 1937.— Experiments using ants and ant-mimicking spiders offered as food to birds of five species, showed that while ants were usually refused, so also were their mimics, either completely or preponderatingly.
- PENNELL, F. W. An English obituary account of Thomas Nuttall. Bartonia, (Proc. Philadelphia Bot. Club), no. 19: 51–54, Mar. 8, 1938.—A newly discovered article on Thomas Nuttall has come to light in the files of biographical separates at Kew Gardens, in the shape of a sketch of his life prepared for the local newspaper by his nephew, T. J. Booth. The article supplies some previously unavailable data as to his early life, of his being apprenticed at the age of fourteen for a term of seven years to his uncle, Jonas Nuttall, as a printer, and of his early botanical interest. It appears that it was from this same uncle, not from his father, that he inherited his estate at Nut-grove Hall.
- PINTO, OLIVERIO. Nova contribuição á ornithologia Amazonica. Estudo critico de uma colleccão de aves do baixo Solimões e do alto Rio Negro. Revista do Museu Paulista, 23: 493-604, Jan. 14, 1938.—An account of collections recently made on the lower Amazon and the upper Rio Negro, Brazil. Of the many species listed, the following are described as new: Odontophorus gujanensis snethlagei, no type mentioned, lower Amazon; Cranioleuca solimonensis, from Manacapuru; and Thryothorus leucotis affinis from Manacapuru.
- QUAINTANCE, CHARLES W. Content, meaning, and possible origin of male song in the Brown Towhee. Condor, 40: 97-101, May 17, 1938.—The function of song is concluded to be the attraction of a female, after which it ceases.
- RABELER, WERNER. Die nordwestdeutsche Verbreitungsgrenze des Schwarzkehlchens und ihre ökologische Deutung. Journ. f. Ornith., 86: 234–243, Apl. 1938.— Limiting factors in distribution of Saxicola torquata rubicola.
- RAND, A. L. Results of the Archbold Expeditions. No. 19. On some non-passerine New Guinea birds. Amer. Mus. Novitates, no. 990, 15 pp., May 27, 1938.—New races are: Anhinga rufa papua, Megacrex inepta pallida, Ptilinopus iozonus pseudo-

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humeralis, Geopelia striata papua, Syma torotoro brevirostris, and Sauromarptis tyro archboldi, with notes on various rarer species.

- RAND, A. L. Results of the Archbold Expeditions. No. 20. On some passerine New Guinea birds. Amer. Mus. Novitates, no. 991, 20 pp., June 2, 1938.—New races: are Crateroscelis murina pallida, Megalurus timoriensis muscalis, Rhipidura rufidorsa kubuna, Myiolestes megarhynchus palmeri.
 - RAND, A. L. Results of the Archbold Expeditions. No. 21. On some New Guinea birds. Amer. Mus. Novitates, no. 992, 3 pp., June 2, 1938.—Evidence that Dicrurus bracteatus of Australia migrates to southern New Guinea to winter.
 - RAND, A. L. Results of the Archbold Expeditions. No. 22. On the breeding habits of some Birds of Paradise in the wild. Amer. Mus. Novitates, no. 993, 8 pp., June 2, 1938.—Manucodia ater may pair monogamously and both sexes share in nest duties.
 - REEB, ANDRÉ. Oiseaux rares ou peu connus en Alsace. Observations ornithologiques. Bull. Soc. d'Hist. Nat. de Colmar, new ser., 25: 195–199, 1937.
 - REIF, CHARLES. The birds of Frenchman's Bay [, Maine]. Flicker, Minneapolis, 10: 7–9, May 1938.
 - RIX, C. E. A trip to Eastern Kangaroo Island. So. Australian Ornithologist, 14: 165-169, Apl. 1, 1938.
 - ROBERTS, N. L. Some ecological aspects of bird life. Part III. Emu, 37: 186-196, Jan. 1, 1938.
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