RECENT LITERATURE

Genetics of the Fowl.—F. B. HUTT. (McGraw-Hill Co., New York), pp. xi + 590, 140 figs., 72 tables, 1949. Price, $6.50.—Although primarily a technical book for the poultry geneticist, the book contains much to commend it to the ornithologist and general biologist. For the first time there is an up-to-date, complete, and authoritative compilation of the genetics of the domestic chicken with occasional references to other fowl. A valuable feature of the book for the non-geneticist is that it includes material concerning the fowl which is to a large extent scattered in periodicals which are not generally available.

Written in a rather engaging style, the book starts with an introduction to the phylogeny and classification of birds, particularly with respect to the origins of the domestic fowl. A short chapter on cytology and gametogenesis presents in a clear and selective manner the more important facets of what is known about these subjects in the fowl. The known genetic variations are treated in chapters headed: Variations in the Skeleton, Structural Variations in the Skin, Variations in the Plumage, Variations in the Color of the Skin, Variations in the Color of the Plumage, Lethal Genes and Miscellaneous Characters, Variations in Body Size, Egg Production, Variations in Eggs, Genetic Resistance to Disease, Genetic Aspects of Reproduction and Linkage. A final chapter, Genetics in Practice, contains technical information for the practical breeder.

Possibly the most important thing about the book from the standpoint of the ornithologist is the fact that a great deal of genetic information has been compiled relative to a single species of bird. The relative dearth of similar information about other species is at once apparent. It would be highly desirable to have such information for other species, although certainly this information is much easier to obtain in the domestic fowl than in, for example, the California Condor!

In view of some taxonomic difficulties with avian material, it is interesting to note the widespread effects upon the skeletal system of single genes such as "Creeper" or "Rumplessness," and the genetic basis for many color backgrounds and patterns.

Other highly commendable points are the thorough bibliographies at the end of each chapter, the careful organization of subject material, a welcome list of symbols of genes for the fowl, a good glossary, and subject and author indices. The format is up to the usual high standards of the McGraw-Hill Co., and the photographs and other illustrations are for the most part excellent.—JAMES B. KITZMILLER.

The Edge Effect of the Lesser Vegetation of Certain Adirondack Forest Types with Particular Reference to Deer and Grouse.—F. B. BARICK. Roosevelt Wildl. Bull., 9 (1): 1–146, 37 tables, 20 figs., 1 map, 1950.—This study is a graphical and mathematical analysis of wildlife habitat potentialities of ten forest types as compared with the edges between these types. The vegetation was analyzed in a series of plots (0.1 acre for trees, 0.001 acre for shrubs, 0.00025 acre for herbs) extending from the interior of one type, across its edge or ecotone, and into an adjacent different type. The relative density and area covered by each plant-species were recorded for each different type of forest-edge, and their values as food and cover for wildlife evaluated. In general, most of the tree-cover consisted of spruce, balsam, yellow birch, red maple, beech, and sugar maple; shrubs chiefly of witch hobble; and herbs of wood fern, wood sorrel, and dwarf dogwood. Edges were composed mainly of the constituents of the two adjacent vegetation types with the amount of tree-, shrub-, and herb-cover varying in a reciprocal relation to each other.

The average width of all edges could be easily traversed by animals of low cruising radius, such as the Ruffed Grouse. The edges most nearly fulfilling the requirements of Ruffed Grouse and white-tailed deer were those between spruce flat, mixed hardwood, and northern hardwood, but even these edges lacked substantial fall and winter fruits for grouse. However, both deer and grouse showed a greater preference for the center of the spruce flat type than for its edges towards either mixed hardwood or northern hardwood. The warning is given "that we have to some extent overplayed the entire concept of edge effect, often indiscriminately ascribing to it unlimited powers of increasing all forms of wildlife." A new concept is developed, *threshold of edge preference*, which is attained when it is possible to detect the smallest amount of preference for the edge between two types as opposed to the centers of these types, the edge being computed as one-fourth of the average width of the vegetation-type.—S. CHARLES KENDEIGH.

De Vliegkunst in Het Dierenrijk.—E. J. SLIJPER. (E. J. Brill, Leiden), pp. viii + 178, 144 figs., 11 pls., 1950.—This is a well-documented compilation of information on animal flight, particularly that of birds. There is a brief historical account of "bird machines," constructed during man's early attempts to fly, followed by an exposition of certain pertinent aeronautical principles—flow around various types of air foils, effects of streamlining, lift, drag, slotting, porosity, wing-loading, tip vortex, aspect ratio, camber, etc. These factors in flight are illustrated throughout the book by excellent line drawings and diagrams which emphasize the structures and mechanics involved.

Dr. J. M. Burgers has aided the author in the presentation of the aeronautical data. The principles are then applied to hovering, soaring, and flapping flight of animals, with a detailed analysis of the kinetics of the parts of the avian wing.

There is a good bibliography of 10 pages, but literature since 1946 is not included for, as is stated in the Introduction, the manuscript was virtually complete at that time. The indexing is sufficient. Compared to Storer ('The Flight of Birds,' 1948) the present book is less popular in style, more complete, and more detailed but, being in Dutch, it will be somewhat less usable to English-speaking students.—H. I. FISHER.

A Bibliography of the Published Writings of Charles Johnson Maynard (1845–1929).—CHARLES FOSTER BATCHELDER. Journ. Soc. for the Biblio. of Nat. Hist. (Care of British Museum, Natural History), 2, pt. 7: 227–260. Jan. 4, 1951. Price 15 s.—C. J. Maynard was not only a prolific writer and an important naturalist of his period but was also the editor, artist, engraver, typesetter, printer, and publisher for many of his own writings. Therefore, a full and carefully prepared analysis of his long and very complicated bibliography has been urgently needed. It is very fortunate for us that Charles F. Batchelder, America's senior practicing ornithologist, has been able to complete and publish this excellent bibliography on which he worked for so many years.

Maynard's nearly 300 publications (1868–1929) are of particular interest to the student of birds, but he wrote about many other classes of animals and during the latter part of his career he became increasingly interested in mollusca (especially *Strophia* and *Strophiops*, under which names he described some 241 new forms). He described many new birds from Florida, the Bahamas, and British Columbia, and one (the Ipswich Sparrow) from Massachusetts. He also proposed many new generic subdivisions for American warblers. All new names are indexed by Batchelder.—JOSSELYN VAN TYNE.

There's Always Adventure, the Story of a Naturalist's Wife.—GRACE E. BARSTOW MURPHY. (Harper and Brothers, New York), pp. xvi + 299, 45 photos.—As the wife of Robert Cushman Murphy of New York's American Museum of Natural History, Grace Murphy gives intimate sidelights into the lives, the joys, and the tribulations, of a naturalist's wife and children, not only when they are left alone to endure loneliness and added responsibilities, but also when colleagues join them to add zest and interest to the family group.

Mrs. Murphy is an ardent advocate, one might say crusader, for travel by the family with the naturalist husband and father. On page 48 we find "Sometimes at home in different groups of people I see untraveled families of the naturalists. It has often seemed to me that a gap exists. The effect of the man's wide experience is both written on his face and comes out in his talk . . . Those wives who rise above the gap, filling in with interests and accomplishments of their own, face the chance that each of the married pair may grow too far apart." She firmly believes, and states often, that field work together now and then brings the husband and wife closer to each other and gives the wife a clearer insight into her naturalist-husband's work. This may be said to be the continuing theme of this book.

The author takes us traveling by proxy to Peru, Chile, Venezuela, and Ecuador, giving us vivid word pictures, not by a casual tourist, but by one keenly interested in the lives and emotions of all living things surrounding her. Mrs. Murphy writes of visits to Europe and across the continental United States in a manner less spirited and imaginative, perhaps because they are familiar scenes revisited rather than new territory giving fresh impressions. However, she amply makes up for this by her later colorful description of a recent visit to the Snares Islands in the subantarctic waters south of New Zealand.

Throughout her life, Grace Murphy has integrated marriage, home responsibilities, love of travel, and interest in her husband's scientific career. This she has ably depicted in her book, and it is enjoyable; it should be read by all "ornithology families." It will give them a more hearty appreciation of the adventure of living.—MILDRED L. FISHER.

Birds from Nepal, 1947–1949. S. DILLON RIPLEY. Journ. Bombay Nat. Hist. Soc., 49 (3): 355–417, 1 col. pl., 2 black-and-white pls., 1 map, 1950.—An annotated list of 331 species and subspecies collected, and 50 positively observed, by the author in the course of two recent expeditions, during which western, central, and eastern Nepal were visited. In an introduction (pp. 355-363), it is shown that "67 % of the endemic Himalayan axis forms collected in which two subspecies occur in the country, have a division between the forms in the eastern half of Nepal." Correlated with this is the fact that nine of the species taken are presumably found only in extreme eastern Nepal. The break between eastern and western Himalayan subspecies appears in the vicinity of the Arun Kosi River valley, which runs nearly north and south slightly east of the 87th parallel. Since the river is apparently geologically too recent to act as a barrier, it is suggested that the isohyet at the 87th parallel is responsible; east of this isohyet the annual rainfall is about 75 inches, west of it only 50 inches.

Another climatic correlation with speciation is found at the 80th parallel, where there is a decided change in the annual temperature range, although the annual rainfall of 50 inches remains the same.

It is noted that climatic changes cannot be marked by straight north-south lines, but that the lines would run roughly in a northwest-southeast direction. In western Nepal, the distributions of races follow this general pattern accurately.

The author shows that the destruction of forests and intensive agriculture of a shifting nature is rapidly altering the face of the country and creating new artificial geographical barriers, and that jungle-haunting birds of the mid-montane zone seem doomed to extirpation over large areas.

He has in some cases been misled in nomenclature by Stuart Baker; an example is offered by his treatment of *Malacocincla abbotti* as conspecific with *M. sepiaria*, despite the fact that these two are sympatric in many races throughout Malaysia.

The colored plate by Walter A. Weber has earlier appeared in the 'National Geographic Magazine'; on it are figured *Acanthoptila nipalensis, Kitta f. flavirostris, Garrulax rufogularis grosvenori,* and *Carpodacus n. nipalensis.*—H. G. DEIGNAN.

Letters on the Ornithology of Buenos Ayres.—W. H. HUDSON. Edited by David R. Dewar. (Cornell University Press, Ithaca), xv + 93 pp., 1951. Price, $2.75.—These early letters bear the unmistakable imprint of Hudson's literary talents just as his later literary works show the insight of a keen naturalist. Yet paradoxically, the young scientist who wrote the letters and the mature author of "Green Mansions" and "Far Away and Long Ago" seem like two totally different people. Hudson's later life in England as a writer and ardent protector of bird-life is in sharp contrast with his earlier years as a hunter and collector of birds. Even in the books in which he described the pampas in vivid detail, he seemed loath to present the facts and details of his own life there.

Anyone who has visited Latin America can imagine the extent and force of the impact of Victorian England on a young man raised in the freedom of the pampas. That Hudson adopted a British way of life with its attendant ideals and viewpoints lends plausibility to his desire to forget some of the aspects of his earlier life; and it is only through early letters such as these that we can get a glimpse of Hudson in the days when his chief interest was ornithology. The glimpse is of an enthusiastic young collector, sitting down to write in a refined hand, though with very poor spelling, about the habits of the birds around his home and not afraid to lock horns with such an eminent scientist as Darwin on the habits of the Carpintero.

The 12 letters which comprise this volume were written between December, 1869, and September, 1870. They were edited by P. L. Sclater and published in a somewhat condensed form in the 'Proceedings of the Zoological Society of London' in 1870 and 1871. The originals of seven of the letters have been preserved in the library of the Zoological Society and are now published as written. The remaining five are presented as published in the "Proceedings." The introduction includes two short letters from Hudson to Sclater. These are largely concerned with Hudson's bird collections upon which Sclater reported in 1869, but one letter refers to Hudson's having collected for the Smithsonian Institution. Dewar fails to mention that the Smithsonian still has preserved six of Hudson's letters and a photograph of Hudson taken in Buenos Aires. [All of one letter and parts of others have been published in the 'Saturday Review of Literature' (30, No. 15: 15–17, April 12, 1947) by Edwin Way Teale and R. Gordon Wasson.] The 12 letters are carefully annotated and the changes and footnotes made by Sclater in the "Proceedings" are appended. There is also an index which includes natural history references. From a literary and biographical point of view, the letters appear to be well edited, but even ornithologists will have to refer to "Birds of La Plata" to learn the identity of the Terú-terú (= *Belonopterus*) and other birds for which only vernacular names are given, as well as for many birds listed by obsolete scientific names such as *Otus brachyotus* (= *Asio flammeus*).

Aside from their literary and biographical value, these letters are important in that they are perhaps Hudson's only available on-the-spot writing on the birds of the Argentine. For this reason it is interesting to compare them with the species accounts in his "Argentine Ornithology" and "Birds of La Plata" which were written years later in England.

The book is attractively printed and bound. In view of the marked difference between the careful hand in which these letters are written and the scrawl which Hudson used in his later years, this volume would have been considerably enhanced by a facsimile of at least part of one of the letters.—ROBERT W. STORER.

Where to Find Birds in Minnesota—A Guide to 62 Birding Areas, Parks, and Sanctuaries.—KENNETH D. MORRISON and JOSEPHINE D. HERZ. (Webb Publ. Co., St. Paul), 122 pp., maps, line cuts, 1950. Price, $1.50.—For each area, information is given on the best way to get there, terrain, best vantage points for observation, restrictions, hazards, and birds to be found. There is an index to localities, contributors, and common names of birds.—H. I. F.

Museum Pictorial.—Number 1 of this journal was published by the Denver Museum of Natural History on February 1, 1951. It is proposed to issue subsequent numbers from time to time, perhaps four each year.

Each number will have from 32 to 96 pages and will concern itself with a single subject. The present one contains a narrative account of Alfred M. Bailey's photographic experiences during 40 years in many lands, and is titled "Nature Photography with Miniature Cameras." It is illustrated with 35 photographs six by eight inches in size (many of birds), and they are excellent. Subjects tentatively scheduled for the next few numbers include: The Story of Pueblo Pottery; Nature Photography with the High Speed Flash; Fossil Mammals; and The Laysan and Black-footed Albatrosses.

Museum Pictorial is printed by offset in a most satisfactory manner. Each number will sell for $0.50, but the first five numbers may be obtained for $1.50 by writing to the Publications Department, Denver Museum of Natural History, City Park, Denver 6, Colorado.—H. I. F.

ABDULALI, HUMAYUN. 1950. Occurrence of the Chestnut-bellied Nuthatch (*Sitta castaneiventris castaneiventris*) in Sind—a correction. Journ. Bombay Nat. Hist. Soc., **49** (2): 303–304.—Should be removed from the list of the birds of Sind.

ABDULALI, HUMAYUN. 1950. On the Blue-tailed Bee-eater (*Merops superciliosus javanicus* Horsf.) in Bombay. Journ. Bombay Nat. Hist. Soc., **49** (2): 307.—First record of this bird for the Bombay area.

ACHARYA, HARI NARAYAN G. 1950. Occurrence of the Cinereous Vulture (*Aegypius monachus* Linnaeus) at Ahmedabad, North Gujarat. Journ. Bombay Nat. Hist. Soc., **49** (2): 307–309.

ALEXANDER, H. G. 1950. Kentish Plovers [*Leucopolius alexandrinus* (Linn.)] at Bombay. Journ. Bombay Nat. Hist. Soc., **49** (2): 311.

ALEXANDER, H. G. 1950. Large Grey Babbler attacking metal hub-cap of wheel of car. Journ. Bombay Nat. Hist. Soc., **49** (3): 550.—A note on *Argya malcolmi*.

ALI, SÁLIM, S. B. SETNA, AND H. SANTAPAU [Editors]. 1950. The Snow Goose (*Anser hyperboreus* Pallas) in Kashmir—an addition to the avifauna of India. Journ. Bombay Nat. Hist. Soc., **49** (2): 311–312.

AMADON, DEAN. 1950. Australian mud nest builders. Emu, **50** (2): 123–127.—Tentatively proposes to define the family Grallinidae to include *Grallina, Pomare-*

opsis, Corcorax, and *Struthidea;* remarks on the described races of *Grallina cyanoleuca, Struthidea cinerea,* and *Corcorax melanorhamphos.*

ASH, JOHN. 1951. The effect of a snow-storm on breeding birds. Brit. Birds, **44** (2): 57–59.

AUSTIN, OLIVER L. 1951. Group adherence in the Common Tern. Bird-Banding, **22** (1): 1–15.—From 1929 through 1948, 213,019 *Sterna hirundo* have been banded in Cape Cod colonies. There have been 31,867 returns on the breeding grounds and 292 recoveries in the winter quarters. These colonies "form a distinct, self-perpetuating group" on the breeding grounds. Group adherence also functions in winter quarters.

BARBOUR, ROGER W. 1950. Growth and feather development of Towhee nestlings. Amer. Midl. Nat., **44** (3): 742–749, 4 pls.—Day to day account of feather development and weight. Includes only the seven days in the nest for an average of about 10 birds.

BATES, R. S. P. 1950. The lower Sind Valley, and some further observations on bird photography. Journ. Bombay Nat. Hist. Soc., **49** (2): 178–187, 4 pls.—Miscellaneous notes, mainly on nesting and behavior of a variety of birds in the Vale of Kashmir, accompanied by excellent photographs of five species.

BELLROSE, FRANK C. 1950. Mississippi Flyway problems, projects, and prospects. Trans. 15th N. Amer. Wildl. Conf., 1950: 123–132.—Habitat of breeding, wintering, and refuge grounds; hunter management.

BENSON, C. W. 1951. Some breeding notes from Nyasaland. Bull. Brit. Orn. Club, **71** (1): 5–8.—Notes on 19 species.

BENTHALL, E. C., AND L. A. CRAVEN. 1950. Geese and duck on the Chilka Lake, Orissa. Journ. Bombay Nat. Hist. Soc., **49** (2): 312–313.

BENTON, MARJORIE AND ALLEN. 1950. Color choice in the food of the White-breasted Nuthatch. Feathers, **12** (12): 89–96.—Inconclusive, but shows that birds learn to use all colored food after a short time and that weight of individual is also an important factor.

BIAGGI, VIRGILIO, JR. 1950. Studies in the life history of the Puerto Rican Honey Creeper *Coereba flaveola portoricensis* (Bryant). Abstr. of Doctoral Diss. (Ohio State Univ. Press), No. **60**: 33–39, 3 tables.

BISWAS, BISWAMOY. 1950. On the shrike *Lanius tephronotus* (Vigors), with remarks on the *erythronotus* and *tricolor* groups of *Lanius schach* Linne, and their hybrids. Journ. Bombay Nat. Hist. Soc., **49** (3): 444–455, 1 map.—"Evidence is given of the fact that both *L. tephronotus* and *L. schach* breed in Kumaon and Garhwal, and that they do not intergrade. The question of type-locality of *L. tephronotus* is also discussed . . . An account of each subspecies of *L. tephronotus* and of the *erythronotus* and the *tricolor* groups of *L. schach* is given mainly in relation to distinctive characters, measurements, material examined, moult, breeding and range. It is shown with the help of a comprehensive hybrid index that *L. schach erythronotus* and *L. s. tricolor* hybridize in a vast area . . . , and that *Collurio nigriceps* Franklin is nothing but one such intermediate bird" [author's synopsis].—H. G. D.

BISWAS, BISWAMOY. 1951. Revisions of Indian birds. Amer. Mus. Novit., no. **1500**, 12 pp.—The Indian blossom-headed parakeets grouped under the name *Psittacula cyanocephala* prove to belong to two species. None of the earlier names applies to the second of these species which Biswas names *P. roseata* with type locality as Gunjong, n. Cachar, Assam. He also names a race *P. roseata juneae*—type locality, Arakan, Burma. Included also is a revision of the woodpecker,

Dendrocopos mahrattensis, with the new races *D. m. pallescens* from Lucknow, India, and *D. m. koelzi* from Aripo, n. w. Ceylon.—D. Amadon.

BOASE, HENRY. 1951. Sheld-Duck on the Tay Estuary. Brit. Birds, **44** (3): 73–83.—Counts of *Tadorna tadorna* from 1934 to 1950; data for brood size and fledging periods; dates for molt; and fluctuations in size of breeding populations. Sheld-ducks do not breed until their third summer.—M. M. N.

BÖSIGER, E. 1950. Vergleichende untersuchungen über die Brustmuskulature von Huhn, Wachtel und Star. Acad. Anat., **10** (4): 385–429.—The development and adult conditions of m. pectoralis thoracicus in the Domestic Hen, Quail, and Starling are compared. In the first two the development proceeds direct without a marked pre-juvenile phase which is, however, present in the Starling.

There are characteristic differences between the three species in rate of development, diameter of muscle fiber, distribution of nuclei, and blood supply of the flight muscles. The muscle fiber size was reduced by immobilization in a small series of Starlings. The pectoral muscle of the Quail, *Coturnix coturnix*, proved to be a specially suitable material for the study of red and white muscle fibers. English summary.—D. E. Davis.

BRAAKSMA, SJ., AND M. F. MORZER BRUYNS. 1950. Overzicht van de broedkolonies van de Blauwe Reiger, *Ardea cinerea* L., in Nederland in 1949. Ardea, **38** (3/4): 135–162, 1 pl., 12 tables, 2 maps.—Results of a census by questionnaires show a 44 % decrease in numbers in last 15 years, due primarily to inundations during war, deforestation in and near marshes, drainage, pollution, and persecution by man.

BROUN, MAURICE. 1951. Hawks and the weather. Atlantic Nat., **6** (3): 105–112, 15 maps.—Correlation of hawk flights along ridges with pressure areas, wind, and precipitation.

BROWN, A. GRAHAM. 1950. The birds of "Turkeith" Victoria. Emu, **50** (2): 114–122.

CHAPIN, JAMES P., AND DEAN AMADON. 1950. The Roseate Pelicans of Africa. Ostrich, **21**: 15–18.—The Roseate Pelican, *P. onocrotalus*, probably has no races. Recent usage of the name *roseus* for the species long called *Pelecanus philippensis* is unjustified.

CHISHOLM, A. H. 1950. Birds introduced into Australia. Emu, **50** (2): 97–100.—Chiefly additions and corrections to Tarr's "The distribution of foreign birds in Australia." Emu, **49** (3): 189–198.

CHITTLEBOROUGH, R. G., AND E. H. M. EALEY. 1950. Bird-ringing at Heard Island. Emu, **50** (2), 102–104.—List of the Procellariiform birds banded by the authors as members of the Australian National Antarctic Research Expedition.

CHRISTENSEN, GLEN C. 1950. A brief summary on the Chukar Partridge [*Alectoris graeca*] in Nevada, U. S. America. Journ. Bombay Nat. Hist. Soc., **49** (2): 309–310.

CLAY, THERESA. 1950. A preliminary survey of the distribution of the Mallophaga ('feather lice') on the class Aves (Birds). Journ. Bombay Nat. Hist. Soc., **49** (3): 430–443, 2 pls., 3 figs.—In addition to the subject matter suggested by title, the author shows where the distribution of the Mallophaga may throw light on the phylogenetic relationships of certain bird groups, at the same time pointing out certain pitfalls into which too great enthusiasm may lead the interpreter. The Mallophaga have a host-wise, not geographical, distribution, and an attempt is made for the first time to demonstrate such distribution graphically.—H. G. Deignan.

CONDON, H. T. 1951. Variation in the Brown Hawk. Emu, **50** (3): 152–174, pls. 15–18.—The question of the geographical races of *Falco berigora* Vigors and Horsfield is complicated by the existence of two color phases with all sorts of variations between the extremes. The views of recent authors have ranged from the radical ones of Mathews who recognized six races in Australia to those of Amadon who recognized but two. For the present revision the author has assembled a large series from the Australian Museum, Sydney, the South Australian Museum, the National Museum, Melbourne, and the Western Australian Museum, Perth, and is led to the conclusion that the most important character that is geographically variable is size. His studies have led him definitely to recognize five races from Australia (and tentatively a sixth race) whose ranges are outlined and characters given together with several tables of measurements.

For many years the hawks of this species have been universally placed in the monotypic genus *Ieracidea* Gould. Mr. Condon believes that there are no good reasons for continuing this usage since "osteologically it conforms to Falco," and throughout his paper consistently uses *Falco* for the generic name of the species.—J. L. Peters.

COWLES, RAYMOND B., AND WILLIAM R. DAWSON. 1951. A cooling mechanism of the Texas Nighthawk. Condor, **53** (1): 19–22, 2 figs.—Expansion and fluttering of the gular area to facilitate evaporation.

CREUTZ, GERHARD. 1950. Beringungsergebnisse an Lachmöven einiger sächsischer und benachbarter Brutkolonien. Orn. Abh., **8**: 3–8, 1 pl.

CUNNINGHAM, J. M. 1951. Bird ringing in New Zealand. Emu, **50** (3): 189–196.—A brief account of bird banding in New Zealand together with the "rules of the ringing scheme of the Ornithological Society of New Zealand" and samples of forms for keeping records.

CUTCLIFFE, A. S. 1951. Notes on the breeding habits of the Swift. Brit. Birds, **44** (2): 47–56.—In 29 nestings of *Apus apus* 58 eggs were laid, of which 36 (62%) hatched and 29 young (50%) were fledged. Seventeen eggs were ejected by the parents in inclement weather during the six years; only twice did the birds attempt a second brood. Five chicks died in bad weather. Fledging took 37–54 days.—M. M. N.

DARLING, F. FRASER. 1951. The ecological approach to the social sciences. Amer. Scientist, **39** (2): 244–254, 1 fig.—Concerns itself primarily with the ecology of human beings—the West Highland people—but in a very readable fashion illustrates the need for proper ecological studies as a basis for all other work.

DARNTON, IRIS. 1951. The Broadbilled Roller—*Eurystomus orientalis laetior* Sharp [*sic*], in Ceylon. Spolia Zeylanica, **26** (1): 19–20.—The collection of a breeding pair at Maha Oya represents the rediscovery of a form known from Ceylon by only about a dozen records, all made prior to 1879.

DAVIS, MALCOLM. 1951. Carrier pigeons in the polar regions. Nat. Hist., **60** (3): 141–142, 1 fig., 1 photo.

DE GRAAF, C. 1950. De nachtvluchten van de Gierzwaluw, *Apus a. apus* (L.). Ardea, **38** (3/4): 165–178, 1 table.—Crepuscular flights begin about the third week in May; bad weather halts these flights. Number of birds in flights increases when juveniles appear. Adults roost in nest from arrival in spring until juveniles leave; neither adults or juveniles return to the nest once the juveniles leave it. These swifts cannot enter the nest in the dark, and hence evening crepuscular flights involve night-long flights.—H. I. F.

DEIGNAN, H. G. 1951. A new race of the Hawk-owl, *Ninox scutulata*, from the Philippines. Proc. Biol. Soc. Wash., **64**: 41–42.—*Ninox scutulata randi* (Catagán, from the base of Mount Malindang, Misamis Province, Mindanao Island).

DELACOUR, JEAN, AND CHARLES VAURIE. 1950. Les Mésanges Charbonnières (Révision de l'espèce *Parus major*). Oiseau, **20** (2): 91–121, 1 fig.—Recognizes 33 forms in two "main groups."

DELACOUR, JEAN. 1951. The Lesser Graybirds (*Coracina*) of Asia and Malaysia. Amer. Mus. Novit., No. **1497**, 15 pp.—A taxonomic review of the difficult cuckoo-shrikes formerly placed in the genus *Volvocivora*. Most of the forms are illustrated by photographs of skins. *Coracina polioptera jabouillei* a new subspecies from Pleiku, Kontoum Prov., Annam.—D. Amadon.

DELACOUR, JEAN, AND DEAN AMADON. 1951. The systematic position of Picathartes. Ibis, **93** (1): 60–62.—The aberrant genus *Picathartes* currently placed in the Corvidae is transferred to the Timaliinae (as defined by Delacour—Oiseau, 16: 7–36, 1946) and a separate "tribe," Picathartinae, created for its reception.—J. L. P.

DHARMAKUMARSINHJI, K. S. 1950. The Lesser Florican [*Sypheotides indica* (Miller)]: Its courtship display, behavior, and habits. Journ. Bombay Nat. Hist. Soc., **49** (2): 201–216, 1 pl., 2 figs., 2 tables.—"This paper contains descriptions of the male florican's courtship display (as newly seen) in presence of the female, mating, the method of snaring florican with decoys, the male's aggressive behavior towards a male decoy, and some useful information as regards migration, and the influence of weather upon the species in its breeding habitat" [author's synopsis]. In addition, much other life history material is brought together from the author's observations and those of others on this species of bustard.—H. G. D.

ELDER, NELL B. 1951. Can the Nene [*Branta sandvicensis*] come back? Aud. Mag., **53** (1): 24–30, 4 photos.—Popular review of the story of this rare goose.

ENGLAND, M. D. 1951. Studies of some species rarely photographed. XXIX. The Brambling. Brit. Birds, **44** (1): 14.—Seven very fine plates of nesting *Fringilla montifringilla*.

ETCHÉCOPAR, R. -D. 1950. Notes sur le Coucou [*Cuculus canorus*] en Hollande. Oiseau, **20** (2): 148–152.—Egg coloration as an adaptation for the parasitic mode.

FISHER, HARVEY I. 1951. The avifauna of Niihau Island, Hawaiian Archipelago. Condor, **53** (1): 31–42, 5 figs. including map.—In the history of the island located 150 miles northwest of Honolulu all native birds were eliminated. Notes are given on relative abundance, dates of introduction, distribution on the island, ecologic niche occupied, and natural history of the 45 species representing the present avifauna.

FOSTER, JOHN, AND CHRISTINA GODFREY. 1950. A study of the British Willow-Tit [*Parus atricapillus kleinschmidti*]. Brit. Birds, **43** (11): 351–361, 1 map.—Behavior, territory, food, nesting, incubation, and development of young.

FOSTER, R. J., R. L. BAXTER, AND P. A. J. BALL. 1951. A visit to Grímsey (Iceland) July–August 1949. Ibis, **93** (1): 53–59.—The authors' special object in visiting Grímsey was for the purpose of investigating the differences in the breeding habits of Brünnich's and Common murres, but a general survey of the number of species and individuals of breeding birds was also conducted. The results of the survey are here summarized and compared with the reports of ornithologists who have previously visited Grímsey. Few of the species found breeding showed any change in status except that the small colony of Dovekies has decreased in

size and the site of the Gannet colony was destroyed by a rock fall in 1947. The Common Snipe was found breeding there for the first time.—J. L. P.

GABRIELSON, IRA N., AND FREDERICK C. LINCOLN. 1951. A new race of ptarmigan from Alaska. Proc. Biol. Soc. Wash., **64**: 63–64.—*Lagopus mutus yunaskensis* (Yunaska Island, Aleutian Islands).

GIBB, JOHN. 1951. The birds of the Maltese Islands. Ibis, **93** (1): 109–127, 1 fig. (map).—An account of the islands and their birds based on the author's observations from August, 1941, to July, 1945, together with comparisons between the present status of the various resident and migrant species compared with earlier published accounts.—J. L. P.

GOODGE, WILLIAM. 1951. Variation in skeletal measurements of the Common Murre [*Uria aalge*]. Condor, **53** (2): 99–100.—Measurements and statistical evaluation of large sample of bones recovered from Indian middens on southeast Farallon Island.

GRANT, C. H. B., AND C. W. MACKWORTH-PRAED. 1951. Notes on eastern African birds. Bull. Brit. Orn. Club, **70** (9): 61–62.—*Seicercus ruficapillus mbololo* Van Someren = *S. r. minulla* (Reichenow); *Eremomela scotops kikuyuensis* Van Someren = *E. s. occipitalis* Fischer and Reichenow; *Seicercus umbrovirens chyulu* Van Someren = *S. u. mackenziana* (Sharpe).—J. L. P.

HAGEN, YNGVAR. 1950. Hvorledes en på marken sittende rudge (*Scolopax rusticola* L.) gir seg til kjenne for artsfeller som trekker over skogen. Vår Fågelvärld, **9** (4): 195–199, 1 fig. English summary.—The Woodcock on the ground may attract a flying member of the opposite sex by fanning out the rectrices, ventral surface up. The bright spots thus exposed reflect a great deal of light.

HAMILTON, J. E. 1951. The breeding place of *Pachyptila belcheri* Mathews. Ibis, **93** (1): 139–140.—Supports Murphy's surmise that the birds breed among the Jason Islands in the northwestern part of the Falkland Group. The author found them in fair numbers on Grand Jason, although they are not known from other islands of that group. A second breeding site in the Falklands is New Island where they nest in "very great numbers."—J. L. P.

HARPER, HAROLD T., GEORGE METCALFE, AND JOHN F. DAVIS. 1949. Upland game cooperative hunting areas. Calif. Fish and Game, **36** (4): 404–432, 28 tables, 2 photos, 6 figs.—Hunting statistics on game-farm and wild pheasants.

HARTFORD BIRD STUDY CLUB. 1951. Check List of the Birds seen in the vicinity of Hartford, Connecticut. (Hartford Bird Study Club, Hartford, Conn.), 19 pp. Price, $0.50.

HAZELHOFF, E. H. 1951. Structure and function of the lungs of birds. Poultry Sci., **30** (1): 3–10.—Translation of articles published in 1943; critical review of theories of function of avian lung and air sacs; analysis of air flow through lung and air sacs.

HERVEY, A. C. C. 1951. Black-headed Gull dropping and catching object in bill. Brit. Birds, **44** (1): 69–70.—On Oct. 28 a *Larus ridibundus* was seen to drop and catch a bivalve mollusc about a dozen times, apparently in play.—M. M. N.

HINDWOOD, K. A. 1950. The Upland Plover, or Bartram's Sandpiper, in Australia. Emu, **50** (2): 91–96, 1 pl.—Concludes that specimen 8563 in the Australian Museum is the actual bird taken near Sydney in 1848, and figured by Gould in 1867, and to date constitutes the only valid record of *Bartramia longicauda* for Australia.

HINDWOOD, K. A. 1951. Bird/insect relationships: with particular reference to a beetle (*Platydema pascoei*) inhabiting the nests of finches. Emu, **50** (3): 179–183,

1 fig.—*Platydema pascoei* is found in large numbers in the nests of several species of Australian Ploceidae, favoring those nests where there is a deposit of feces, but will live also on feathers and vegetable matter.—J. L. P.

HINDWOOD, K. A. 1951. The White-throated Honey-eater. Emu, **50** (3): 183–188, 2 figs.—Two very similar species, *Melithreptus albogularis* Gould and *Melithreptus lunatus* (Vieillot), occur in eastern Australia. The two are so similar that they are usually regarded as conspecific, but the author shows that there is an area of more than 1000 miles in which their ranges overlap and in which they both occur in the same general area and at times in association. There seems to be little if any difference in the habitat preference between the two species.—J. L. P.

HITCHCOCK, W. B. 1950. Notes on the Grey-mantled Albatross [*Phoebetria palpebrata*]. Emu, **50** (2): 135–137.—Specimen picked up dead on the beach of Discovery Bay, east of the mouth of the Glenelg River, Victoria (see Emu, 50 (1): 15) now in the National Museum of Victoria.

H., O. D. 1951. Obituary of E. W. Hendy. Brit. Birds, **44** (3): 83–86.—Author of many charming books on birds and a zealous worker for their protection.—M. M. N.

JAMES, R. F., AND N. D. MARTIN. 1950. A study of Screech Owls in southern Ontario. Can. Field-Nat., **64** (5): 177–180, 1 fig.—Use of nail kegs to attract owls for study of food habits. Directions for making and placing.

JORDAN, JAMES S., AND FRANK C. BELLROSE. 1950. Shot alloys and lead poisoning in waterfowl. Trans. 15th N. Amer. Wildl. Conf., 1950: 155–170.—Diet is an important variable in effecting lead poisoning. Wild seed diet did not slow down or affect the poisoning, but green leafy foods reduced mortality in affected ducks. One shot pellet seems to be enough to cause death by poisoning in a mallard drake.

KABAT, CYRIL, DONALD R. THOMPSON, AND FRANK M. KOZLIK. 1950. A device for dating natural events in game animals. Tech. Wildl. Bull. No. 1, Wis. Cons. Dept., 4 pp., 1 fig.—By recalibrating a slide rule, mass field data on birds of known age can be quickly reduced to hatching dates and the like.—J. J. H.

KABAT, CYRIL, DONALD R. THOMPSON, AND FRANK M. KOZLIK. 1950. Pheasant weights and wing molt in relation to reproduction with survival implications. Tech. Wildl. Bull. No. 2, Wis. Cons. Dept., ii + 26 pp., 8 tables, 2 figs.—Adult hens lost weight during egg-laying and reached a low at Wisconsin game farm mostly about July 17; wing molt and weight increased until early December, after which a flat weight curve continued to February. Primary molt in wild adults was correlated with age of broods.—J. J. H.

KELSALL, JOHN P. 1949. A study of bird populations in the apple orchards of the Annapolis Valley, Nova Scotia, with particular reference to the effects of orchard sprays upon them. Canadian Wildl. Serv., Wildl. Manag. Bull., Ser. 2, **1**: 1–69.—Breeding bird-populations usually average about one per acre but will rise to 11 per acre during insect outbreaks. The Robin is the only species that regularly establishes territories within orchards; other species come in principally for food and nest elsewhere. Poisoned sprays appear to exert no direct effect on the bird populations.

KELSO, LEON. 1950. The post juvenal molt of the Northeastern Screech Owl [*Otus asio naevius*]. Biol. Leaf. No. **50**: 1–3, 1 pl.

KESSEL, BRINA. 1951. Criteria for sexing and aging European Starlings (*Sturnus vulgaris*). Bird-Banding, **22** (1): 16–23.—Based on examination of over 1000 birds, 350 of which were made into skins. Bill and eye color are the most reliable

indicators of sex; length, shape, and iridescence of hackle feathers the best criterion of age.—M. M. N.

KIRKPATRICK, K. M. 1950. Common Mynah (*Acridotheres tristis*) nesting in the nest of Pied Mynah (*Sturnopastor contra*). Journ. Bombay Nat. Hist. Soc., **49** (3): 550–551.

KIRKPATRICK, KENNETH M. 1950. Peculiar roosting site of the House Swift (*Micropus affinis*). Journ. Bombay Nat. Hist. Soc., **49** (3): 551–552.—The swifts used abandoned nests of *Ploceus philippinus* as dormitories during a rainy period.—H. G. D.

KLUIJVER, H. N. 1950. Daily routines of the Great Tit, *Parus m. major* L. Ardea, **38** (3/4): 99–135, 6 figs., 6 tables.—Seasonal active periods, effect of weather, egg-laying, attentive periods, feeding.

LABITTE, ANDRÉ, A. LANGUETIF, AND G. DEBU. 1950. La reproduction du Faucon Pèlerin *Falco peregrinus peregrinus*. Tunstall 1771 et Autres Oiseaux dans les Falaises des Côtes de la Manche en 1949. Oiseau, **20** (2): 122–136, 3 figs.

LACK, DAVID. 1951. Migration through the Pyrenees. Bull. Brit. Orn. Club, **70** (9): 59–61.—Results of observations conducted in late September and October 1949 and 1950, to ascertain whether migration occurs through the high mountains, and whether there is a concentration of migrants on the west coast between the mountains and the sea.—J. L. P.

LAIRD, MARSHALL. 1951. Notes on the birds observed during a trans-Pacific sea voyage. Emu, **50** (3): 175–178.—Notes on sea birds seen between March 16 and April 5, 1950, between Wellington, New Zealand, and Balboa, Canal Zone.

LAMM, DONALD W., AND J. H. CALABY. 1950. Seasonal variation in bird populations along the Murrumbidgee in the Australian Capital Territory. Emu, **50** (2): 114–122.

LEACH, E. P. 1951. British-bred swallow summering in Norway. Brit. Birds, **44** (3): 100.—A nestling *Hirundo rustica* ringed on the Isle of Man, Aug. 11, 1949, was killed June 20, 1950, at Driva, Norway, some 700 miles to the northeast.—M. M. N.

LEARMONTH, NOEL F. 1951. Powerful Owls [*Ninox strenua*] in southwestern Victoria. Emu, **50** (3): 178, pl. 19.

LITTLEJOHNS, R. T. 1950. Further notes on the Mistletoe Bird and the mistletoe parasite. Emu, **50** (2): 84–90.

LORD, E. A. R. 1950. Notes on the Blue-faced Honeyeater [*Entomyzon cyanotis*]. Emu, **50** (2): 100–101.

LUNDY, WILLIAM E. 1951. "Poor-me-One" (*Nyctibius griseus*). Nat. Hist., **60** (3): 111–113, 1 fig.—Call notes.

MACDONALD, A. ST. J. 1950. Scent of game-birds. Journ. Bombay Nat. Hist. Soc., **49** (3): 556.—A query, with a reply by the editors (pp. 556–557).

MACDONALD, J. D. 1951. An account of the British Museum South West Africa Expedition. Bull. Brit. Orn. Club, **71** (2): 11–13.—An informal account of a six-months' expedition covering 5000 miles by truck in southwest Africa, including itinerary, brief description of the more important physical features, and mention of the more noteworthy species of birds seen and collected.—J. L. P.

MACNAIR, V. J. 1951. Notes on behaviour of blackbird. Brit. Birds, **44** (3): 99–100.—A female *Turdus merula* that nested in the author's garden was often heard, in October and November, singing a sub-song similar to that of a male.—M. M. N.

MARIEN, DANIEL. 1950. Notes on some Asiatic Meropidae (Birds). [Notes from the Walter Koelz Collections, Number 5.] Journ. Bombay Nat. Hist. Soc., **49** (2): 151–164, 1 text-fig. (map), 3 tables.—A critical revision of the five species of *Merops* and one of *Nyctyornis* known from Ceylon, India, Pakistan, and Iran, with comments on certain extralimital races. *Merops leschenaulti andamanensis* (Port Blair, South Andaman Island) is described as new. *Merops superciliosus* and *M. philippinus* are shown to be allopatric species, rather than subspecies. *Nyctyornis athertoni brevicaudata* Koelz (Hainan) is considered a valid race.—H. G. D.

MARIEN, DANIEL. 1950. Notes on some Asiatic Sturnidae (Birds). [Notes from the Walter Koelz Collections, Number 9.] Journ. Bombay Nat. Hist. Soc., **49** (3): 471–487, 1 map.—"The status of the genera has already been reviewed by Amadon . . . [Amer. Mus. Nov. No. 1237, 1943]; in this paper it has been possible to reassess the status of some of the lesser taxonomic groups of the Indian subregion. Some suggestions are made for further investigation in the field, two forms recognized in the New Fauna [of British India] are found not to be valid, a recently described race [is] confirmed, and a hitherto unnoticed plumage in *Saroglossa spiloptera* [is] studied" [author's introduction]. Recognition has, apparently unjustly, been refused two recently named Indian races: *Sturnus contra sordidus* Ripley and *Acridotheres cristatellus fumidus* Ripley (both from northeastern Assam).—H. G. Deignan.

MARLER, PETER, AND DERRICK J. BOATMAN. 1951. Observations on the birds of Pico, Azores. Ibis, **93** (1): 90–99.—The principal object of a brief visit (March 31 to April 16) was to study the variations in the ecological niche which a species may occupy on different islands and with different competing species. Thus, on Pico the Grey Wagtail, *Motacilla cinerea*, occupies the niches filled in Britain by both the Pied Wagtail, *Motacilla alba*, and the Rock Pipit, *Anthus spinoletta*, as well as the habitat normally occupied by the species. Similar niche expansion was noted in the Goldcrest, *Regulus regulus*, the Blackcap, *Sylvia atricapilla*, and the Kentish Plover, *Charadrius alexandrinus*. The song of the Chaffinch, *Fringilla coelebs*, differed markedly from that of the British form.—J. L. P.

MAY, D. J., AND A. MANNING. 1951. The breeding cycle of a pair of Wood Warblers [*Phylloscopus sibilatrix*]. Brit. Birds, **44** (1): 5–10.

MCGILL, ARNOLD R. 1951. An Australian review of the Sanderling. Emu, **50** (3): 197–206.—Summarizes the records of *Crocethia alba* for Australia.

MEANLEY, BROOKE, AND GORMAN M. BOND. 1950. A new race of Swainson's Warbler from the Appalachian Mountains. Proc. Biol. Soc. Wash., **63**: 191–194.—*Limnothlypis swainsonii alta* (Walhalla, South Carolina).

MEIKLEJOHN, M. F. A. 1950. Field identification of birds: notes on the Hoodwink (*Dissimulatrix spuria*). Journ. Bombay Nat. Hist. Soc., **49** (3): 557–560.—Reprinted from a British ornithological journal, this is a long, involved satire on "the number of records of birds partially seen or indeterminately heard: . . . it seems evident that the majority of these records are attributable to a single species —the Hoodwink—which I propose to name *Dissimulatrix spuria*." The jest is carried so far as to include a type locality, details on voice, breeding, etc., etc., and a list of allied forms (subspecies), with further reference to an extinct genus, *Palaeodissimulatrix!* One could wish that articles of this nature be omitted from the pages of serious journals.—H. G. Deignan.

MEIKLEJOHN, LT. COL. R. F. [obituary of]. 1951. Ibis, **93** (1): 135.

MEINERTZHAGEN, R. 1951. The significance of a dark ventral surface in certain birds. Ibis, **93** (1): 140–141.—The author finds that neither Harrison's hypothesis nor Armstrong's suggestion about the significance of a dark ventral surface in the breeding plumage of certain birds is completely satisfactory. He cites many examples among different orders where some species are so marked; in some cases it may play a part in courtship display; in others it may be of cryptic significance; in others its function is not clear. Evidently no single solution fits all cases.—J. L. P.

MEISE, W. 1950. On the status of *Eurystomus orientalis laetior* Sharpe. Journ. Bombay Nat. Hist. Soc., **49** (2): 305–306.—This is shown to be a well-defined subspecies, restricted to southwestern India and Ceylon.

MICHENER, JOSEPHINE R., AND HAROLD MICHENER. 1951. Notes on banding records and plumages of the Black-headed Grosbeak. Condor, **53** (2): 93–96.—Covering a 25-year period (1921–1945) at Pasadena, California, during which 707 were banded.

MILLER, LOYE. 1951. A Miocene petrel from California. Condor, **53** (2): 78–80, 1 fig.—*Oceanodroma hubbsi* described from near Capistrano Beach in Orange County.

MONTGOMERY, G. H., JR., W. H. RAWLINGS, AND L. MCL. TERRILL. 1949. Annual Report [of Prov. of Quebec Soc. for Protection of Birds]. (Prov. Que. Soc. Protection Birds, Montreal), pp. 1–40.—Summary of Christmas census and migratory movements of birds. Species accounts include records of occurrence, nesting, and numbers of individuals.

MOREAU, R. E. 1951. Relationships in *Pseudoalcippe*. Ibis, **93** (1): 138–139.—The author concludes that *P. atriceps* (Sharpe), *P. stierlingi* (Reichenow), and *P. abyssinicus* (Rüppell), together with their subspecies, are best regarded as a single species.

MURPHY, ROBERT CUSHMAN. 1951. Rediscovery of the Cahow. Bull. Brit. Orn. Club, **71** (2): 9–10.—*Pterodroma cahow* Nichols and Mowbray, until 1945 believed to be extinct, was rediscovered by Dr. and Mrs. Murphy January 26, 1951, "breeding in the islands off Bermuda."—J. L. P.

N., E. M. AND J. D. W. 1951. Obituary of Bernard William Tucker (1901–1950). Brit. Birds, **44** (2): 41–46.—"One of the most talented and devoted ornithologists of his time," Tucker was editor of 'British Birds,' and largely responsible for the sections on Habitat, Field-Characters, General Habits, and Voice in the 'Handbook of British Birds,' as well as writing three excellent contributions for Bent's 'Life Histories of North American Thrushes.'—M. M. N.

OGILVIE, C. M. 1951. The building of a rookery. Brit. Birds, **44** (1): 1–5.—Observations on nest building of *Corvus frugilevus* with particular attention to thieving of sticks. While one member of the pair gathered material and arranged it, the other stood guard; later these rôles were exchanged.—M. M. N.

OLIVIER, GEORGES. 1950. Notes sur quelques Oiseaux Rencontrés au Cours de Traversées de l'Atlantique-Nord. Oiseau, **20** (2): 137–147.

OTTOW, B. 1950. Die erbbedingte Osteogenesis dysplastico-exostotica der ausgerotteten flugunfähigen Riesentaube *Pezophaps solitaria* der Mascareneninsel Rodriguez. Kungl. Svenska Vetenskapsakademiens Handlingar. Fjärde Ser., **1** (9): 1–37, 8 pls.—English summary. The Solitaire of Rodriguez, a relative of the Dodo, is known only from early accounts and from numerous excavated bones. Leguat wrote of this bird: "The bone of their wings grows greater towards the extremity, and forms a little round mass under the feathers as big as a musket ball.

That and its beak are the chief defences of this bird." The bones of this bird show frequent more or less healed fractures, earlier assumed to be the result of injuries sustained in fighting with the armored wings. Ottow has re-studied this material with different conclusions: "A macroscopical and X-ray examination revealed a characteristic bone disease, which appears in two forms . . . The latter form can lead to bone fractures . . . it is probable that we have in Pezophaps a bone disease . . . which should be interpreted as a hereditary disease of the mesenchyme tissues . . . originating from a mutation of pathological value which could spread due to narrow geographical isolation, inbreeding and lack of selection. The case of Pezophaps can be compared to a breeding experiment with harmful genes carried out in Nature . . . here for the first time the existence of a well defined hereditary disease—that is not only a overspecialization of harmful nature —has been demonstrated to occur in Nature."—D. Amadon.

PARKS, G. HAPGOOD. 1951. Plumage characters and age of Evening Grosbeaks. Bird-Banding, **22** (1): 23–32.—Color character combinations of 355 male and 387 female *Hesperiphona v. vespertina*. Older males had little black on the tertials and no white on the tail or primaries.—M. M. N.

PATEFF, PAWEL [obituary of]. 1951. Ibis, **93** (1): 135–137.

PHELPS, WILLIAM H., AND WILLIAM H. PHELPS, JR. 1950. Las Aves de Las Islas Los Roques y Las Aves y Descripción de un Nuevo Canario de Mangle. Bol. de Soc. Venezolana de Ciencias Nat., **13** (76): 7–24, 2 photos., 2 maps.—Nineteen birds new to these Venezuelan islands are recorded; about 275 specimens taken; species accounts of all forms found. *Dendroica petechia aurifrons*, new subspecies, from De Puerto de La Cruz, Anzoátequi.—H. I. F.

PHELPS, WILLIAM H., AND WILLIAM H. PHELPS, JR. 1950. Seven new subspecies of Venezuelan birds. Proc. Biol. Soc. Wash. ,**63**: 115–126, 1 fig. (map).—*Celeus elegans deltanus* (Jobure, Río Jobure, Territorio Delta Amacuro); *Celeus undatus amacurensis* (Misión San Francisco de Guayo, Territorio Delta Amacuro); *Dendrocincla fuliginosa deltana* (Misión Araguaimujo, Territorio Delta Amacuro); *Ochthoeca diadema meridana* (Cerro Mesa de Lino, 2600 meters, Santo Domingo, Mérida); *Euscarthmornis granadensis federalis* (No León, 2000 meters, Distrito Federal); *Mecocerculus leucophrys parui* (Cerro Parú, 1600 meters, Territorio Amazonas); *Oryzoborus crassirostris magnirostris* (Misión San Francisco de Guayo, Territorio Delta Amacuro), new subspecies.

PHILIPSON, W. R., AND C. C. DONCASTER. 1951. Birds seen in the North Atlantic. Brit. Birds, **44** (1): 11–13.

PHILLIPS, ALLAN R. 1951. Some observations of birds in southern Colorado. Condor, **53** (1): 50–51.—In San Luis Valley.

PHILLIPS, W. W. A. 1950. Wilson's Storm-petrels, shear-waters and other seabirds in the Gulf of Aden & Indian Ocean. Journ. Bombay Nat. Hist. Soc., **49** (3): 503–508.—Daily bird observations made on two recent voyages between Colombo and Aden.

PITELKA, FRANK A. 1951. Central American races of *Cyanolyca mitrata*. Condor, **53** (2): 97–98.—Two new subspecies of the Hooded Jay described, *C. m. guatemalae* (San José, 28 mi. ESE Comitán, Chiapas, Mex.) and *C. m. hondurensis* (Las Peinitas, 4 mi. W San Pedro Sula, Honduras).

PITELKA, FRANK A. 1951. Race names in the Central American jay, *Cyanolyca argentigula*. Journ. Wash. Acad. Sci., **41** (3): 113–115, 1 table.—A studious review of the species, in which *Cyanolyca blandita* Bangs is shown to be synonymous with *Cyanocitta argentigula* Lawrence. The type locality of the latter is restricted

to "near and more or less north of Pico Blanco, above Sipurio and probably in the drainage of the Río Lari," and *Cyanolyca argentigula albior* is described as new (type locality: Volcán Turrialba, 9,680 feet, Costa Rica).—H. G. D.

POPPER, DANIEL M. 1951. Notes on the birds of Mount Locke, Texas. Condor, **53** (1): 51–54.—Forty-two species seen in the Davis Mountains of Jeff Davis County, Texas. [See also Condor, 19: 161–165, 1917].

PRESTWICH, ARTHUR A. 1950. Records of parrots bred in captivity, part 1. (Lories and Lorikeets). (A. A. Prestwich, London), pp. 1–33. Price, 7/6 d.—Of special interest are the records of hybrids and the accompanying data on success or failure of certain cross-matings. These may give clues as to speciation in the wild.

PRESTWICH, ARTHUR A. 1950. Relevé des Psittacidés élevés en France. (A. A. Prestwich, London), pp. 1–47.—Records of the breeding of parrots in France—eggs laid, young hatched, young raised; common and scientific names.

PRICE, M. PHILIPS. 1950. Influences causing fluctuation of warbler population in cultivated lands and oak woods in the Severn Valley. Brit. Birds, **43** (11): 345–351, 8 tables.—A major factor is the change in vegetation associations which in turn have been affected by the activities of rabbits, and by man carrying on agricultural practices.

QUAINTANCE, CHARLES W. 1951. Pioneer Starling nesting in eastern Oregon. Condor, **53** (1): 50.—In May, 1950, near La Grande.

RANKIN, W. T. C. 1951. Trances of trapped Starlings [*Sturnus vulgaris*]. Brit. Birds, **44** (2): 59.

RASPET, AUGUST. 1950. Performance measurements of a soaring bird. Aeronautical Engr. Rev., **9** (12): 1–4, 6 figs.—A sail-plane was used in following soaring birds to make measurements of air speed, angles of banking, rate of sinking, and changes in shape and position of the birds' wings. The absence of a motor cut noise to a minimum and allowed approach to within about 15 feet of some flying birds. A camera mounted in the windshield permitted action photographs, and a radio made it possible for a running commentary by the pilot to be recorded by a ground crew. It was found that vultures, particularly *Coragyps*, the Black Vulture, had good speed ranges for gliding, as shown by plotted data, an extremely low sinking speed in soaring flight, and the possibility of very slow flight (8.5 meters per second). Study of the action of wing-tip slots (the spaces between the outspread primaries) shows they are closed to reduce drag. There is some indication that the wing-tips are used as diffusors to increase the effective aspect ratio of the wing. Further, the porosity of the feathers may be a factor in inducing laminar flow of air over the entire body; this may explain the low drag coefficients computed for certain birds.—H. I. Fisher.

REEDER, WILLIAM G. 1951. Stomach analysis of a group of shorebirds. Condor, **53** (1): 43–45.—Based on 27 birds of eight species taken in southern California, some from a sand or shore situation, others from mudflats, with differences in diet noted between the two groups.

RIPLEY, S. DILLON. 1951. Notes on Indian birds IV. Some recently collected birds from Assam. Postilla [Yale Peabody Mus. Nat. Hist.], No. **6**: 1–7.—*Arborophila torqueola interstincta* (Mt. Zephu, 93 miles east of Kohima, eastern Naga Hills); *Indicator xanthonotus fulvus* (Pfutsero, eastern Naga Hills); *Dendrocopos darjellensis fumidus* (Mt. Japvo, Naga Hills); *Spelaeornis chocolatinus nagaensis* (Mt. Japvo, Naga Hills); *Phylloscopus fuscatus mariae* (Moirang, Manipur); *Horeites flavolivaceous* [sic] *alexanderi* (Phek-Meluri Road, 60 miles east of Kohima, Naga Hills).

ROLLIN, NOBLE. 1951. Dawn chorus in March. Dawn Song and All Day, **1** (4): 33–41, 2 figs.

ROLLIN, NOBLE. 1951. All-day song totals I. Dawn Song and All Day, **1** (4): 42.

ROSEVEARE, W. L. 1950. Notes on birds of the irrigated area of Minbu District, Burma. Journ. Bombay Nat. Hist. Soc., **49** (2): 244–287, 2 maps.—Notes compiled from visual observations and considered supplementary to facts already recorded in Smythies's Birds of Burma. Particular attention was paid to the status of each species throughout the year and, in the case of migrants, earliest and latest dates are given. The nomenclature is binominal and taken without change from Stuart Baker's outmoded edition of The Fauna of British India, Birds.—H. G. D.

RUDEBECK, GUSTAF. 1950. Studies on bird migration. Based on field studies in southern Sweden. Vår Fågelvärld, Suppl. 1, pp. 1–148, 4 pls., many tables.—This field study was undertaken at Falsterbo in the southwest corner of the Swedish mainland in the late summer and early fall months of 1942 through 1949. Only daytime migrations were studied. It was early noted that the "broad front" of the pathways of birds migrating to the southwest in Sweden narrows or funnels into Falsterbo; thus many of the birds leave by way of this most extreme point of land.

In his attempt to determine the cause for such "funneling," Rudebeck has come to regard the "Leitlinie" or "guiding line" (of von Schweppenburg) as the primary factor. The line in this case is the coast; its effect is strengthened by the unwillingness of land birds to fly over a strange biotope, the sea. When the guide line deviates more than about 90 degrees from the line of migratory flight, the birds follow the migratory line—in this case, southwest over the sea. Weather plays an important rôle in timing the flight, although the migratory unrest eventually forces the birds to move. Rudebeck, incidentally, regards this restlessness as the same in migratory and non-migratory forms, and notes the influence of the weather even upon resident species.

The author emphasizes the similarity between the movements of migratory, irruption, and strictly resident birds. He finds all sorts of intermediates in migratory behavior and much individual or intraspecific variation; during certain years he found resident magpies attempting the ocean crossing, only to return "in full panic" (p. 51). Such manifestations of unrest usually follow a period of good weather, and the author regards the situation thus—the threshold for resident forms is high, and by the time they begin to show restlessness the good weather ends and further manifestations are not shown. Thus the line between migratory and resident birds is pretty fine.

It is pointed out that the length of the migratory flight increases for different populations of the same species as one goes eastward from Europe to Siberia. Along with this we find that more eastern than western forms are migratory, and that, whereas birds in the western part of the Palearctic migrate more or less north and south, the line of flight inclines eastward until it is east-northeast and west-southwest, or even east and west.

The last 60 pages are devoted to tables listing the daily number of migrants of certain species in the autumns of 1942, 1943, and 1944. There is a two-page bibliography, primarily of continental literature.—H. I. Fisher.

SCHILLER, EVERETT L. 1951. Hymenolepis hopkinsi, n. sp., a cestode from the Black Duck (*Anas rubripes*). Amer. Midl. Nat., **45** (1): 253–256, 5 figs.

SCHILLER, EVERETT L. 1951. Studies on the helminth fauna of Alaska. VI. The parasites of the Emperor Goose (*Philacte canagica* L.) with the description of *Hymenolepis philactes*, n. sp. Journ. Parasit., **37** (2): 217–220, 1 pl.

SCHWARTZ, CHARLES W., AND ELIZABETH R. SCHWARTZ. 1951. A survey of the Lace-necked Dove (*Streptopelia c. chinensis*) in Hawaii. Pacific Sci., **5** (1): 90–107, 8 figs., 3 tables.—These birds are resident on all islands from sea level to at least 4,000 feet. Population is estimated at 89,000 birds, with densities up to 200 per square mile. Food consists of 99.5 per cent vegetable matter, and water is a prerequisite. Roosting and feeding areas may be as far as five miles apart. Breeding may occur throughout the year, but the main season is February through September. Sex ratio of 79 birds was 119 males to 100 females. Measurements of 33 adult males and 26 adult females are given.—H. I. F.

SERVENTY, V. N., AND S. R. WHITE. 1951. The Roseate Tern: Notes on the nesting behavior. Emu, **50** (3): 145–151, pls. 12–13, 2 figs.—Notes based on the nesting behavior of *Sterna dougallii* on Pelsart Island in the Abrooho Group, Western Australia, December, 1940, to January, 1949.

SIBLEY, CHARLES G. 1951. Notes on the birds of New Georgia, central Solomon Islands. Condor, **53** (2): 81–92, 1 fig.—Notes on occurrence, ecology, life history, behavior, and relationship between molt and gonadal development of 57 species, 37 of which are represented by specimens.

SICK, HELMUT. 1950. Apontamentos sôbre a ecologia de "Chaetura andrei meridionalis" Hellmayr no estado do Rio de Janeiro (Micropodidae, Aves). Rev. Brasil. Biol., **10**: 425–436.

SICK, HELMUT. 1950. Una nova raça de Cardeal procedente do Brasil Central, "Paroaria baeri xinguensis" n. ssp. (Fringillidae, Aves). Rev. Brasil Biol., **10** (4): 465–468.—From Alto Xingu, Mato Grosso, 11° 25′ S, 53° 7′ W.

SICK, H. 1950. Der Regenruf des Buchfinken (*Fringilla coelebs*). Vogelwarte, **4**: 236–237.

SKUTCH, ALEXANDER F. 1951. Congeneric species of birds nesting together in Central America. Condor, **53** (1): 3–15, 1 table.—Comparisons and discussions of ecological factors or isolating mechanisms.

SMITH, T. E. H. 1950. Black Drongos [*Dicrurus macrocercus*] fostering a Koel [*Eudynamis scolopaceus*]. Journ. Bombay Nat. Hist. Soc., **49** (2): 304.

SMITHERS, REAY H. N. 1951. The question of *Larus n*[*ovaehollandiae*] *hartlaubi* in Northern Rhodesia. Ibis, **93** (1): 137.—Re-examination of the specimen previously recorded under this name proves it to be an immature of *Larus cirrhocephalus* Vieillot.—J. L. P.

SMITHERS, REAY H. N. 1951. *Agapornis lilianae* in Southern Rhodesia. Ibis, **93** (1): 138.—Specimen obtained and flocks seen; new for Southern Rhodesia.

SOUTHERN, H. N. 1951. Melanic Blackcaps in the Atlantic islands. Ibis, **93** (1): 100–108.—*Sylvia atricapilla* is resident on the Cape Verde and Canary islands and on Madeira and the Azores. A melanic variety occurs on nearly all of the Azores and on Madeira in a frequency of about two per cent; in the Canary Islands it has been found only in the Great Crater of La Plama where it now is uncommon if not extinct. There is no detailed information available about the population of the Cape Verde Islands. Data from the literature shows that the melanic variety interbreeds with normal birds and probably behaves as a single-factor recessive.—J. L. P.

SPRUNT, ALEXANDER, JR. 1950. Hawk predation at the Bat Caves of Texas.

Texas Journ. Sci., **2** (4): 463–470, 8 photos.—Sharp-shinned, Red-tailed, Duck, and Sparrow hawks catching Mexican free-tailed bats.

STEINBACHER, JOACHIM. 1950. Weitere Bemerkungen über die 'Hornschwalme' (*Batrachostomus*) des Senckenberg-Museums. Senckenbergiana, **31**: 297–298.

STRANDTMANN, R. W. 1951. The mesostigmatic nasal mites of birds. II. New and poorly known species of Rhinonyssidae. Journ. Parasit., **37** (2): 129–140, 5 pls.—New forms of these parasites described for shorebirds, ducks, and geese.

SUTTON, GEORGE MIKSCH. 1951. Birds and an ant army in southern Tamaulipas. Condor, **53** (1): 16–18.—Numerous birds in thick scrubby woodland feeding on insects fleeing from an advancing ant army.

TORDOFF, HARRISON B. 1951. Osteology of Colinus hibbardi, a Pliocene Quail. Condor, **53** (1): 23–30, 2 figs., 4 tables.—Identification of elements and measurements of much additional material from Meade County, Kansas.

TRAYLOR, MELVIN A., JR. 1950. A new subspecies of tanager from Brazil. Nat. Hist. Misc. No. **64**: 1–2.—*Tangara cyanicollis albotibialis* from Veadeiros, Goyaz, Brazil.

TRAYLOR, MELVIN A., JR. 1951. A review of the woodpeckers *Chrysoptilus melanochloros* and *C. melanolaimus*. Fieldiana Zool., **31** (41): 421–437, 1 fig.—Examination of 245 specimens. Recognizes two species and 10 subspecies.

TRISCHITTA, ANTONINO. 1950. Per una Nomenclatura Biologica Ternaria Plurinominale. Atti (Accad. Peloritana, Classe di Sci. Fis. Mat. e Nat.), **48** (3 of series 4): 1–40.—A rather complicated system of nomenclature is proposed. By using prefixes made up of the first two or three letters of the various taxonomic categories the author compounds a word to indicate the classification down to order. This word is followed by one compounded of family and generic names and one composed of species and subspecies. Thus, for *Sarothrura elegans languens* there would be *Zochoavegruides rallisarothrura elegantölanguens*. Theoretically then, anyone, with or without a knowledge of birds, could tell that this was an animal (*Zo*), chordate (*cho*), a bird (*ave*) of the Gruiformes (*gruides*) and the family Rallidae (*ralli*).

This system of designating animals has its advantages, as did others in the past, but it is cumbersome, would require extensive revision of method, and offers little that in a few words could not be better stated and more easily understood.—H. I. F.

TURCEK, F. J. 1950. The Great Spotted Woodpecker, *Dendrocopos major* (L.), as a carrier of the Monilia rot. Vär Fägelvärld, **9** (4): 210–212, 2 photos.—This fungus disease of fruits may be transmitted, by the feeding habits of this bird, from area to area.

VAN CLEAVE, HARLEY J., AND RALPH B. WILLIAMS. 1951. Acanthocephala from passerine birds in Alaska. Journ. Parasit., **37** (2): 151–159, 2 pls.—These parasitic worms recorded from Northwestern Robin, Varied Thrush, and the Fox Sparrow.

VAN SOMEREN, V. G. L., AND G. R. C. VAN SOMEREN. 1949. The birds of Bwamba. Suppl. to Vol. 13 of The Uganda Journal, 111 pp., map, 23 photos, paper. (The Uganda Soc., Kampala, Uganda, 7½ shillings).—Bwamba is an area in western Uganda along the Belgian Congo border. It includes part of the Ruwenzori region. It is much more forested than most of Uganda, and as a result the van Somerens, during four field trips there in recent years, were able to add almost 30 species, chiefly forest dwellers, to the avifauna of Uganda. Their annotated list of the birds of this interesting region contains many ecological and life history notes and occasional taxonomic comments. There is, for example, detailed

information on such little-known birds as *Columba albinucha*. The extensive data on breeding seasons is of especial interest since Bwamba lies on the equator. In general, it was found that many birds have a prolonged breeding season, with some individuals breeding at one time of the year and some at others. The photographs are all of the country, not of birds.—D. Amadon.

VAURIE, CHARLES. 1950. Notes on some Asiatic titmice. Amer. Mus. Novit., No. **1459**: 1–66, 3 figs.

VAURIE, CHARLES. 1950. Notes on some Asiatic nuthatches and creepers. Amer. Mus. Novit., No. **1472**: 1–39, 2 figs.—*Sitta europaea koelzi* (Patkai Hills, Assam-Burma border) new subspecies.

VAURIE, CHARLES. 1951. Notes on the wrens and dippers of western Asia and India. Amer. Mus. Novit., No. **1485**: 1–19.—The eighth in a series of taxonomic papers based chiefly upon the collections of Dr. Walter Koelz.

WADLEY, N. J. P. 1951. Notes on the birds of Central Anatolia. Ibis, **93** (1): 63–89, 1 text fig. (map).—Brief description of the Central Anatolian plateau followed by carefully annotated list of the species collected and observed during the author's residence from 1943 to 1946.—J. L. P.

WARREN, R. L. M. 1951. On the type of *Alauda Penicillata* Gould. Bull. Brit. Orn. Club, **71** (2): 13–14.—Shows that an error exists in vol. 13 of the 'Catalogue of Birds in the British Museum' where on p. 532 under *Otocorys penicillata* three specimens are listed as "types of the species" where it is clear from the original diagnosis that the description was based on a single specimen.—J. L. P.

WEBSTER, J. DAN. 1951. Systematic notes on North American Acoleidae (Cestoda). Journ. Parasit., **37** (2): 111–118, 9 figs., 1 table.—Several forms described as parasites in shorebirds.

WETMORE, ALEXANDER. 1950. Additional forms of birds from the republics of Panamá and Colombia. Proc. Biol. Soc. Wash., **63**: 171–174.—*Crypturellus saltuarius* (Ayacucho, 500 feet, 25 kilometers east of La Gloria, Magdalena, Colombia); *Geotrygon goldmani oreas* (1250 feet altitude, above Quebrada Cauchero, Cerro Chucantí, Serranía de Majé, eastern Provincia de Panamá, Panamá); *Cyclarhis gujanensis flavens* (Chimán (Punta Madroño), Province of Panamá, Panamá), new subspecies.

WILSON, HUGH. 1950. Visual perception among waders: a suggested explanation of the habit of "bobbing." Emu, **50** (2): 128–131, 1 fig.—Suggests that raising the head causes the horizontal lines of the foreground to move against the horizon, thus enabling the bird to judge the relative distance of objects.

WING, LEONARD W. 1950. Size of summer bird grouping, Texas to the Yukon. Can. Field-Nat., **64** (5): 163–169, 3 figs., 3 tables.

WOODBURY, A. M., AND HOWARD KNIGHT. 1951. Results of the Pacific gull color-banding project. Condor, **53** (2): 57–77, 11 figs. in text.—Final summary of the gull study undertaken by the Western Bird-Banding Association, 1937 to 1942, during which were banded 14,091 gulls of three species, *Larus glaucescens*, *L. occidentalis*, and *L. californicus*. Analysis of data on nesting, migration, longevity, mortality and population shifts.

YEATTER, RALPH E. 1950. Effects of different preincubation temperatures on the hatchability of Pheasant eggs. Science, **112** (2914): 529–530, 1 table.—Hatchability decreased nearly 50 per cent when temperature in the controlled experiments was raised from 62° F. to 88° for seven days prior to incubation.