

RECENT LITERATURE

EDITED BY FRANK MCKINNEY

ANATOMY AND EMBRYOLOGY

- LAHRMAN, F. W. 1958. Surf Scoter records. Blue Jay, **16**(1): 18.—Records from Saskatchewan, including a bird whose breast bone had been shattered, apparently by shot, but had healed completely in an odd shape, and whose gizzard also indicated a healed gun shot wound with an encisted pellet.
- EMING, A. F. 1958. Goshawk trapping in Alberta. Blue Jay, **16**(1): 8–10.—Gives the weights of 54 *Accipiter (Astur) gentilis atricapillus* trapped in Alberta between 1952–1957, with dates, sex and whether in immature or adult plumage. Of the birds trapped 27 were males (6 adults, 21 immature) and 27 were females (12 adults, 15 immature). Males averaged 1 lb. 14.3 oz., females 2 lb. 8.7 oz.
- WALLMO, O. C. 1956. Determination of sex and age of scaled quail. Journ. Wildl. Mgt., **20**: 154–158.—Sexes are best distinguished by examination of plumage about face and throat. Males characterized by uniform pearl grey plumage about face, and white to buffy plumage on throat; females show grey to greyish-white plumage, with longitudinal dark streaks about both face and throat. Age determination of juveniles is based on replacement and growth of primary feathers during post-juvenile molt. Juveniles retain outer two primaries in post-juvenile molt; these feathers are distinguishable from comparable adult-primaries. Juveniles show mottled primary wing coverts (with exception of outer two) until first post-nuptial molt; adults have uniformly grey wing coverts.—R. F. L.
- WILLIAMSON, K. 1957. Post-breeding Moults of Crossbills. Scot. Nat., **69**(3): 190–192. Molt of *Loxia c. curvirostra* trapped at Fair Isle, Scotland.

BEHAVIOR

- DARNTON, I. 1958. The display of the manakin *M. manacus*. Ibis, **100**: 52–58.—These observations on the Black-and-white Manakin were made on Trinidad from February 11 to March 16, in which time manakins were breeding. The display arenas (constructed by ♂♂), behavior and displays of both ♂♂ and ♀♀ there, vocalizations and other sounds made, and the chronology of daily activities are described.—R. F. J.
- FLINCHBAUGH, J. K. 1958. An unusual bird roost. Jack-Pine Warbler, **36**(1): 21.—Black-capped Chickadee roosting in a cup nest.
- FRINGS, H., M. FRINGS, J. JUMBER, R.-G. BUSNEL, J. GUIBAN and P. GRAMET. 1958.—Reactions of American and French species of *Corvus* and *Larus* to recorded communication signals tested reciprocally. Ecol., **39**: 126–131. Individuals exposed only to communication signals of their own species or regional group become quite specific in reaction and do not respond to signals from other groups. Where individuals mingle with other groups of their own or other species they may learn to respond to signals of these.—S. C. K.
- GORDON, S. 1957. Coition of Golden Eagles in Skye. Scot. Nat., **69**(3): 183–184.
- KURODA, N. 1957. Anting by the Gray Starling *Sturnus cineraceus* Temminck. Tori, **14**(69): 28.—Anting with *Formica fusca japonica*. (In Japanese; English summary).—E. E.
- LAHRMAN, F. W. 1958. Western Grebe. Blue Jay, **16**(1): 16–17. Photos of nesting and behavior, including the "water dance."

- SOUTHERN, W. E. 1958. Myrtle Warbler feigns injury. Jack-Pine Warbler, **36**(1) : 27.—Injury feigning by female Myrtle Warbler described, and similar behavior in Kirtland's and Yellow Warblers mentioned.—E. E.
- WATSON, A. 1957. Golden Eagle display in late June. Scot. Nat., **69**(3) : 184.

DISEASES AND PARASITES

- DÖRING, E. 1958. Plagen durch verwilderte Haustauben. Orn. Mitteil., **10**(3) : 41-46.—Diseases carried by feral Domestic Pigeons.
- WARD, R. A. 1957. A study of the host distribution and some relationships of biting lice (Mallophaga) parasitic on birds of the order Tinamiformes. Parts 1 and 2. Am. Entomol. Soc. America, **50**: 335-353, 452-459.—Part 1 deals largely with the taxonomy of the mallophaga and their tinamou hosts. Von Boettischer's classification of tinamous is in general supported, except that on the basis of their mallophaga *Nothocercus* is closer to *Crypturellus* than to *Tinamus*. Part 2 deals with the microgeographic distribution of mallophaga. Small tinamous harbor about the same number of mallophaga species as larger tinamous, but the mallophaga are smaller kinds. The restriction of some mallophaga to particular feather tracts and the frequent presence of certain genera together in the same tract are discussed.—E. E.

DISTRIBUTION AND ANNOTATED LISTS

- AVELEDO H., RAMÓN. 1957. Aves de la Región del Río Guasare. Bol. Soc. Venez. Cien. Nat., 18, no. **88**: 73-100.—Annotated list of a collection in Venezuela; *Ortalis r. ruficrissa* and *Myrmeciza longipes panamensis* added. (In Spanish.)
- BAXTER, E. V. 1957. Review of ornithological changes in Scotland in 1956. Scot. Nat. **69**(3) : 170-177.—Least Sandpiper taken in Shetland, Aug. 14, 1955.
- BEE, J. W. 1958. Birds found on the Arctic slope of northern Alaska. Univ. Kansas Publ., Mus. Nat. Hist., **10**(5) : 163-211, 2 pls., 1 text fig.—Distributional and life-history data on 73 species collected or observed in the summers of 1951 and 1952.
- BINDING, W., H. DUCHROW, J. GROTE and G. VAUK. 1948.—Fang eines Rotaugen-Vireo (*Vireo olivaceus* L.) auf Helgoland. Erster Nachweis für Deutschland. J. f. Orn., **99**: 100-101.—First Red-eyed Vireo taken in Germany at Helgoland on Oct. 4, 1957.
- BOND, J. 1958. Third supplement to the Check-list of Birds of the West Indies (1956). 11 pp. Acad. Nat. Sci. Phila. Distributional and taxonomic notes, additions and corrections.
- BURNS, R. D. 1958. A history of the entry of the Cardinal into Michigan. Jack-Pine Warbler, **36**(1) : 19-21.
- CHENG, T.-H., T.-H. PAN and J.-CH. TANG. 1957. New records of Chinese birds from southern Yunnan. Acta Zoologica Sinica, **9**(3) : 34-45; 2 color pls. (In Chinese; full English summary.)
- DEKEYSER, P. L. 1956. Le Parc National du Niokolo-Koba: Oiseaux. Mem. de l'Institut Français d'Afrique Noire, **48**(1) : 79-141.—Birds observed or recorded in Niokolo-Koba Park, Senegal, comprising 154 species. The number is small enough to suggest that the list is hardly more than a first, preliminary one. Detailed measurements are given for all the specimens collected, even where no questions of variation are raised or implied. Because of the limited literature

- on Senegambian birds, the list has a usefulness, although none of the records are surprising.—H. F.
- GARDEN, E. A., G. F. RAEBURN, A. TEWNION, V. M. THOM. 1957. Baldpate (American Wigeon) in Aberdeenshire. *Scot. Nat.*, **69**(3): 196.—A male *Anas (Mareca) americana* observed May 4–5, 1957 in Scotland with ten European Wigeon.
- HARDY, J. W. and N. L. FORD. 1957. A second specimen of the Golden-winged Warbler from Kansas. *Kansas Orn. Soc. Bull.*, **8**(1): 8.
- HARDY, J. H. 1957. First specimen from Kansas of Swainson's Warbler. *Kansas Orn. Soc. Bull.*, **8**(2): 10.
- HASHIMOTO, T. 1957. On a specimen of *Calidris bairdii* collected in Ise, Mie Prefecture. *Tori*, **14**(69): 25–28.—The first record for Baird's Sandpiper from Japan proper, Sept. 1, 1956. There is a previous record from the North Kuriles. (In Japanese; English summary.)—E. E.
- HAYS, H. E., JR. 1956. Nesting record of the Song Sparrow in Kansas. *Kansas Orn. Soc. Bull.*, **7**(4): 20.
- HOUSTON, S. 1958. An evaluation of the distribution records for Saskatchewan birds in the revised edition of the A.O.U. Check-list. *Blue Jay*, **16**(1): 44–47.—Points out errors in records relating to Saskatchewan, as well as range extensions.
- LIGAS, F. J. 1958. Cattle Egret (*Bubulcus ibis*). *Florida Nat.* **31**: 25.—A nestling Cattle Egret, banded at Lake Okeechobee, Florida on June 10, 1956 (No. 576–49149) was shot in Mexico, at Laguna Om, near Chetumal, Quintana Roo on December 16, 1956. Apparently the first Mexican record.—E. E.
- MACDONALD, J. D. Contribution to the ornithology of western South Africa. Results of the British Museum (Natural History) South West Africa Expedition, 1949–50. *Brit. Mus.*, London, England. £ 1, 15 s. 1–174. 7 photo. pls., maps, figs.—A list of 235 species, mainly taken in the desert or semi-desert regions, with elaborate notes on taxonomy and behavior. The preliminary discussion of the effect of climate on breeding season and of soil color on the appearance of desert birds is especially interesting. New subspecies described: *Streptopelia capicola onguati*, *Bradornis infuscata namaquensis*, *Fringilla (sic = Fringillaria) impetuani sloggetti*.—E. E.
- MORIOKA, H. 1957. *Emberiza pallasi* (Cabanis) from Japan. *Tori*, **14**(69): 23–25.—First records of *E. p. pallasi* and *E. p. polaris*. (In Japanese; English summary.)
- NELSON, T. 1956. The history of ornithology at the University of Michigan Biological Station, 1909–1955. 106 pp. Burgess Publishing Co., Minneapolis, Minn.—An account of the activities at the station, including a list of papers written and an annotated check-list of birds observed in the vicinity (the northern part of the Lower Peninsula of Michigan).
- NOVAES, F. C. 1957. Contribuição à ornitologia do noroeste do Acre. *Bol. Mus. Paraense Emilio Goeldi. Zool.* no. **9**: 1–30.—Annotated list of birds collected on an expedition to northwestern territory of Acre, Brazil. (In Portuguese.)—E. E.
- ORLANS, G. and E. ORLANS. 1957. A contribution to the ornithology of the Vesterolen Islands. *Sterna*, **2**(4): 131–135.—Nesting data from Andya, a Norwegian arctic island.
- PETTINGILL, O. S., JR. 1958. Notes on the birds of the Straits Region, Michigan.

- Jack-Pine Warbler, **36**(1): 7-11.—Additions to the list published in 1956 by T. Nelson, including some birds from north of the Straits of Mackinac.
- PHELPS, W. H. and W. H. PHELPS, JR. 1957. Las aves de Isla de Aves, Venezuela. Bol. Venez. Cien. Nat., 18, no. **88**: 63-72.—Birds of a tiny islet in the Caribbean; Sooty Terns and Brown Noddies were nesting. (In Spanish.)
- ROOR, O. M. 1957-58. The birds of the Andover region. Bull. Mass. Aud. Soc., **41**: 459-467, **42**: 5-15, 79-87, 119-125.—Distributional list for region about Andover, Essex County, Massachusetts, with useful data on numbers and changes of status.—E. E.
- RUSCHI, A. 1951. Trochilídeos do Museu Nacional. Bol. Museu de Biologia Prof. Mello-Leitão, **10**: 1-111. Santa Tereza, Espirito Santo, Brazil.—A list of the hummingbirds in the National Museum of Brazil, giving the locality of each specimen, the distribution, and the literature relating to each form. The last twenty-five pages provide general biologic information as to the family, and behavior and breeding data as to a number of species studied in life by the author. The author is a hummingbird specialist, interested especially in the natural history of these birds, and has published as bulletins of the Mus. de Biologia Prof. Mello-Leitão, maintained by him, a number of earlier and more detailed studies containing much otherwise unknown life history data. Most of these earlier papers are cited in this paper under the name of the hummingbird involved.—E. E.
- RUSCHI, A. 1953. Lista das Aves do Espirito Santo. Bol. Museu de Biologia Prof. Mello-Leitão, **11**: 1-21. Santa Tereza, Espirito Santo, Brazil.—List of the birds of the Brazilian state of Espirito Santo.
- SICK, H. 1957. Vom Hausspatzen (*Passer domesticus*) in Brasilien. Vogelwelt, **78**(1): 1-18. The House Sparrow, introduced into Argentina in 1872, now ranges in Brazil north to Mato Grosso and Goias, but has so far been unable to maintain itself in the humid areas of Amazonia. Its general biology in Brazil is discussed. In southeastern Brazil, birds carrying nesting material have been noted throughout the year; the clutch seems most often to be two (smaller than in Europe.) (In German.)—E. E.
- SMYTHIES, B. E. 1957. An annotated Check-list of the birds of Borneo. Sarawak Mus. Jour., **7** (9 n.s.): viii-xv + 523-818.—The first detailed, modern list for the great Malaysian island. 552 full species are included. English names are provided for species. Ecological as well as distributional data are supplied and some information as to status. Good bibliography, locality index and map.—E. E.
- THOMPSON, M. 1957. Additional records of birds from south-central Kansas. Kansas Orn. Soc. Bull., **8**(3): 1957.
- URBAN, E. K. 1957. Birds observed at Resolute Bay, Cornwallis Island, Northwest Territories. Passenger Pigeon, **1957**: 73-75.
- WATSON, A. 1957. Notes on birds in Arctic Norway. Sterna, **2**(3): 65-99.—Observations, chiefly in Lofoten and Lyngen peninsula, during the summers 1950-1952 and 1955. (In English.)
- WILLIAMSON, K. and H. G. ALEXANDER. 1957. Semipalmated Sandpiper at Fair Isle: a bird new to Scotland. Scot. Nat., **69**(3): 145-147.—*Calidris (Ereunetes) pusillus* present May 28-June 3, 1956, captured with a mist-net for identification, and then released; the third British record. Another American bird, the Olive-backed Thrush, was found dead in County Mayo, Eire on May 26. Both may have been carried by a westerly air stream that covered the North Atlantic for several days previously.

- WILSON, D. R. 1958. Leach's Petrels in Shetland. *Brit. Birds*, **51**: 77.—Possibly breeding.

ECOLOGY AND POPULATION

- BARD, F. G. 1958. Whooping Cranes, 1958. *Blue Jay*, **16**(1): 11-14.—The status of this species, especially in Saskatchewan, with photos. of four observed on Oct. 13, 1957. The touristic value of birds is indicated by the statement that in 1957 these cranes drew 33,000 visitors to the Aransas Refuge in Texas.
- BLACKITH, R. E. 1958. Nearest-neighbour distance measurements for the estimation of animal populations. *Ecol.*, **39**: 147-150.
- BOND, R. R. 1957. Ecological distribution of breeding birds in the upland forests of southern Wisconsin. *Ecol. Mon.*, **27**: 351-384.—Analysis of microhabitat and niche distribution of birds in the deciduous forest biociation, especially in relation to the gradient from xeric to mesic forests.—S. C. K.
- BRAAKSMA, S. 1957. Pleisterplaatsen van Kraanvogels, *Grus grus* L., in Nederland. *Ardea*, **45**: 143-167.—The status and character of the roosting and feeding areas in the Netherlands of the Eurasian Crane. (In Dutch; English summary.)
- EYGENRAAM, J. A. 1957. The sex-ratio and the production of the Mallard (*Anas platyrhynchos* L.). *Ardea*, **45**: 117-143.—In the Netherlands the sex ratio is not static but for every 100 females fluctuates from 106 males just before the breeding season, to some figure exceeding 114 males prior to the hunting season.—E. E.
- KOZICKY, E. L., R. J. JESSEN, and G. O. HENDRICKSON. 1956. Estimation of fall quail populations in Iowa. *Journ. Wildl. Mgt.*, **20**: 97-104.—Fall census data for 32 Iowa counties from 1939 through 1953 indicated the peak occupancy of quail ranges in 1939; the low in 1953. Forty-acre, random sample plots are suggested as a means of estimating annual, statewide population changes. Based on the probability of quail occupancy in October, quail ranges were classified into three types of strata or 40-acre plots; aerial photos were effective in classifying strata. Sampling methods were investigated: (1) simple random, (2) stratified random with proportional allocation of 40-acre plots, and (3) stratified random with optimum allocation of 40-acre plots; these sampling schemes were also tested with matched and unmatched 40-acre plots to determine efficiency in sampling the same plots each year. Incomplete matching with stratified optimum allocation is indicated as the most efficient scheme for estimating annual changes in quail occupancy of 40-acre plots.—R. F. L.
- MACARTHUR, R. H. 1958. A note on stationary age distributions in single-species populations and stationary species populations in a community. *Ecol.*, **39**: 146-147.—Mathematical.—S. C. K.
- ROBINSON, T. S. 1957. Climate and Bobwhites in Kansas in 1956. *Trans. Kansas Acad. Sci.*, **60**(3): 283-287.
- ROOTH, J. 1957. Over het voedsel, de terreinkeus en de achteruitgang van de Ooievaar, *Ciconia ciconia* L., in Nederland. *Ardea*, **45**: 93-116. On the food, habitat, and population decline of the White Stork in the Netherlands. (In Dutch; full English summary.)
- SANDEMAN, P. A. 1957. The breeding success of Golden Eagles in the southern Grampians. *Scot. Nat.*, **69**(3): 148-152.—Data from Scotland.
- WATSON, A. 1957. The breeding success of Golden Eagles in the north-east Highlands. *Scot. Nat.*, **69**(3): 153-169.—Much data, including hunting territory, population density, from Scotland.

EVOLUTION AND GENETICS

- VAN BRINK, J. M., and G. A. UBBEL. 1956. La question des hétérochromosomes chez les Sauropsidés. Oiseaux. *Experientia*, **12**: 162-164.—It is concluded that a determination of the exact number of chromosomes in the domestic fowl is "beyond the possibilities of cytology." The fifth largest chromosomal element in the domestic fowl is the sex chromosome, and the digamety might be either of the Z-O or Z-W type.—P. H. B.
- UDAGAWA, T. 1957. Karyogram studies in birds. IX. The chromosomes of five species of thrushes (Turdidae). *Jour. Fac. Sci., Hokkaido Univ., Ser. VI, Zool.*, **13**(1-4): 338-343.—The diploid chromosomal number is reported as 84 for spermatogonia of *Turdus a. aureus* (83 oog.), *T. sibiricus davisoni* (83 oog.), *T. o. obscurus*, and *T. n. naumanni* and as 78 for spermatogonia of *Luscinia k. komadori*.—P. H. B.
- UDAGAWA, T. 1956. Karyogram studies in birds. VII. The chromosomes of five species of the Limicolae. *Annot. Zool. Jap.*, **29**: 219-224.—Chromosomal numbers are presented from germ cells of *Tringa incana brevipes* (86 spg.), *Calidris r. ruficollis* (86 spg.), *Scolopax r. rusticola* (84 spg.), *Charadrius dominicus fulvus* (78 spg.), *C. alexandrinus dealbatus* (78 spg., 77 oog.).—P. H. B.
- UDAGAWA, T. 1956. Karyogram studies in birds. VIII. The chromosomes of some species of the Turdidae and Troglodytidae. *Jap. Jour. Zool.*, **12**(1): 105-111.—Chromosome counts from germ cells are given for *Turdus cardis* (84 spg., 83 oog.), *Luscinia a. akihige* (78 spg.), *L. a. tanensis* (78 spg.), *Troglodytes t. fumigatus* (86 spg., 85 oog.), *Cinclus pallasi hondoensis* (80 spg.).—P. H. B.

GENERAL BIOLOGY

- BELLARD PIETRI, E. DE. 1957. El Guácharo. *Bol. Soc. Venez. Cienc. Nat.*, **18**: 3-41.—A general account of *Steatornis caripensis*, with detailed distributional information as to the caves known to be occupied by this rare species. (In Spanish; English summary.)
- CHENG, T.-H., H.-K. CHIA, SH.-S. FU, and I.-CH. WANG. 1957. Food analysis of the Tree-Sparrow (*Passer montanus saturatus*). *Acta Zoologica Sinica*, **9**(3): 256-266.—(In Chinese; English summary.)
- CHENG, T.H., Y.-W. CHEN, SH.-S. FU, and I.-CH. WANG. 1958. Studies on the more important insect-eating birds found to occur in the fruit-producing district of Chang-Le, Hopei province. 135 pp., 5 photo pls., 2 color pls., 47 line engravings. Zoological Institute, Academia Sinica, Peking, China. (In Chinese; English summary.)
- COULSON, J. C., and E. WHITE. 1958. The effect of age on the breeding biology of the Kittiwake *Rissa tridactyla*. *Ibis*, **100**: 40-51.—Older birds (those having bred at least once before) returned to the colony site earlier and began breeding earlier, showed greater nest-site tenacity, laid larger clutches, had higher nesting success, and were more successful in feeding their young, all as compared with younger birds (those never having bred before).—R. F. J.
- DAVIS, T. A. W. 1958. The displays and nests of three forest hummingbirds of British Guiana. *Ibis*, **100**: 31-39.—Notes are given on habitat preference, field characters used in identification, displays, nests, and nesting of *Phaethornis superciliosus*, *P. ruber*, and *Topaza pella*. Each of these species has communal display of males.—R. F. J.

- DE CARVALHO, C. T. 1957. Relações Biológicas entre *Columbigallina passerina* e *C. talpacoti* (Aves, Columbidae). Bol. Mus. Paraense Emilio Goeldi, Zool., no. 7: 1-15. A comparison of the ecology and behavior in Belém, Brazil of the Common and Ruddy Ground-Doves. (Portuguese; English summary).—E. E.
- DRINNAN, R. E. 1957. The winter feeding of the oystercatcher (*Haematopus ostralegus*) on the edible cockle (*Cardium edule*). Jour. Animal Ecol., **26**(2): 441-469. 315 cockles 20-30 mm. in length or 214 cockles 25-35 mm. in length may be eaten by a bird in a day's time. Of the total mortality in the cockle population of 73.8 per cent, 21.9 per cent was due to predation by the oystercatchers.—S. C. K.
- EIPPER, A. W. 1956. Differences in vulnerability of the prey of nesting kingfishers. Journ. Wildl. Mgt., **20**: 177-183.—Discusses the food of nesting kingfishers in relation to existing proportions of stream fauna; the food consumed by kingfishers was determined by counts of identifiable bones from the debris of two evacuated nests. The food intake was divided almost equally between fish and crayfish; no other animals were represented. Kingfishers did not take all prey species in proportion to their abundance in the stream; the differences in the vulnerability of prey may be reflected by the size of prey species and/or the breeding or spawning habits of certain species.—R. F. L.
- FREER, M. F. 1958. Observations on a nesting of the Black-throated Blue Warbler. Jack-Pine Warbler, **36**(1): 12-16.—Attentive periods. After losing two eggs in a storm, female incubated the remaining (infertile) egg for 20 days, bringing food to the nest twice on the twelfth day, when hatching would have normally occurred.—E. E.
- GROSS, A. O. 1958. The Bananaquit. Florida Nat., **31**(1): 3-8.—An account of the enormous abundance and tameness of *Coereba flaveola* on Tobago, B.W.I., with data on nests, incubation and nestling periods, song, and feeding behavior.—E. E.
- HAGA, R. 1957. A record of nesting of White-tailed Sea-eagle at Nemuro Peninsula, Hokkaido. Tori, **14**(69): 18-22. Description (with photos.) of two nests of *Haliaeetus albicilla* in Japan, one at the top of a fir, the other, used for two successive years, on a birch 14 meters up. Young in both nests were fed on fish and crows (*Corvus leuillantii* and *Corvus corone*). (In Japanese with English summary).—E. E.
- HAVERSCHMIDT, F. 1957. Notes on the Cattle Egret in Surinam. Ardea, **45**: 168-176.—At a roost at Nieuw Nickerie the population increased from 1,825 in 1953 to 5,576 in 1956. In 1957, nests were found in this roost during May and June. In British Guiana the birds breed in the Botanic Garden of Georgetown. Data on food and behavior.—E. E.
- HOYT, S. F. 1957. The ecology of the Pileated Woodpecker. Ecol., **38**: 246-256.—Summary of doctorate studies of her late husband on life-history, abundance and food-relations of this species.—S. C. K.
- INGRAM, C. 1958. Notes on the habits and structure of the Guacharo *Steatornis caripensis*. Ibis, **100**: 113-119.—The notes concern the rictal bristles, and the tarsometatarsus and hallux.—R. F. J.
- KESSEL, B. 1957. A study of the breeding biology of the European Starling (*Sturnus vulgaris* L.) in North America. Amer. Mid. Nat., **58**(2): 257-331.—The most elaborate study made on this continent of this adaptable species.
- LAESSLE, A. M., and O. E. FRYE, JR. 1956. A food study of the Florida bobwhite, *Colinus virginianus floridanus* (Coues). Journ. Wildl. Mgt., **20**: 125-131.—

- The air-dried, gravimetric percentage of 23 major food items consumed by the Florida bobwhite are presented; these data were based on the examination of 375 crops collected at monthly intervals during a 3-year period. The two principal foods were the fruits of slough-grass, *Scleria muhlenbergii* (26.6 per cent), and wax-myrtle, *Myrica* spp. (15.7 per cent); findings on the nutritional values and consumption preferences of these foods are discussed.—R. F. L.
- LAGLER, K. F. 1956. The pike, *Esox lucius* Linnaeus, in relation to waterfowl on the Seney National Wildlife Refuge, Michigan. Journ. Wildl. Mgt., **20**: 114–124.—Ducklings occurred in only 3 (0.2 per cent) of 1,218 pike, 14 inches or more in length, collected during the 90-day waterfowl brooding season. Predation was not observed when tethered ducklings were placed in natural waters, or when free-swimming ducklings were placed in experimental water enclosures containing pike. Author does not exclude the possibility of considerable duckling mortality through pike predation in waters containing large numbers of pike per unit area.—R. F. L.
- MULLER-USING, D. 1958. Einige Beobachtungen und Feststellungen beim Alpenschneehuhn. (*Lagopus mutus helveticus* Thienemann). Orn. Mitteil., **10**(3): 46–50.—Observations on the Alpine Rock Ptarmigan, regarding weights, food, calls, courtship.
- ROBINSON, T. S. 1957. Notes on the development of a brood of Mississippi Kites in Barber County, Kansas. Trans. Kansas Acad. Sci., **60**(2): 174–180.
- SAKANE, M. 1957. Notes on the Gray-headed Lapwing. Tori, **14**(69): 13–17.—Breeding biology of *Microsarcops cinereus* in Japan. (In Japanese; English summary.)
- SCHÄFER, E. 1957. Les Conotos. Etude comparative de *Psarocolius angustifrons* et *Psarocolius decumanus*. Bonner Zool. Beitr., **8**: 1–147. 2 color pls., 49 photos., many drawings.—An elaborate comparative study of two Venezuelan species of large colonial oropendolas. Though one is a subtropical and the other a tropical species, they sometimes were nesting in the same tree. The author studied *P. angustifrons* in greater detail. One female was observed building for five successive years; in the last three years the nest was placed on the same branch, within one meter of its previous location. There is interesting data on the parasitic Giant Cowbird (*Psomocolax oryzivorus*), which the author reports once seeing feed a juvenile of its own species that had doubtless been reared by *P. decumanus*.—E. E.
- SCHEMINTZ, S. D. 1956. Wild turkey food habits in Florida. Journ. Wildl. Mgt., **20**: 132–137.—Thirty-two turkey crops collected on the Florida peninsula between October 1952 and January 1953 were examined; plant materials constituted 97.1 (by weight) of all food eaten. Live oak acorns constituted 48.5 per cent of the total food; grass seeds, *Paspalum* spp., were second in importance (10.3 per cent). Tabulated data from an analysis of 2,775 turkey droppings, representing every month of the year, indicates that plant items constituted 97.0 per cent (by volume) of all food consumed annually; grass leaves were of major importance (21 per cent).—R. F. L.
- SCHWARTZ, P. 1957. Observaciones sobre *Grallaricula ferrugineiceps*. Bol. Soc. Venez. Cienc. Nat., no. **88**: 42–62.—An excellent life history account of a hitherto almost unknown Formicariid, the Rusty-breasted Antpitta, with a color photograph of adult feeding nestlings in Venezuela. The author makes the point that at three nests studied, the reaction of adults to human disturbance varied considerably. (In Spanish; English summary.)—E. E.

- SEMONES, V. D., and C. G. CRISPENS, JR. 1956. Three records of male mongolian pheasants incubating clutches. *Journ. Wildl. Mgt.*, **20**: 200-201.—Three male mongolian pheasants (*Phasianus colchicus mongolicus*) were observed incubating small egg clutches in enclosed production units; the number of birds per acre was unusually high. "Broodiness" among the three cocks varied; none completed incubation, nor did any of the incubated eggs show signs of embryonic development.—R. F. L.
- SICK, H. 1957. Rosshaarpilze als Nestbau-Material brasilianischer Vögel. *J. f. O.* **98**(4): 421-431. Horse-hair fungi as nesting material of Brazilian birds. The thread-like mycelia of certain fungi, chiefly *Marasmius*, much resembling horse-hair, are used in nest-building by many neotropical species, of which the author has identified 18 in Brazil. (In German.)—E. E.
- SNOW, D. W. 1958. The breeding of the Blackbird *Turdus merula* at Oxford. *Ibis*, **100**: 1-30.—This report is based on study of 59 pairs nesting in four years at the Oxford Botanic Garden. The breeding season lasts from early March to late June. Clutch-size was 3.81 eggs for old ♀♀, 3.38 for young ♀♀; birds of rural, woodland areas have larger clutches than those of the study population in urban parkland. One to four clutches were laid per season, older birds averaging more than younger. Hatching success was more than 90 per cent and was not related to clutch-size. Productivity up to the fledgling stage was 4.1 young per pair per year, and each pair contributed about 1.7 birds to the next year's breeding population. Timing of breeding and clutch-size did not seem to be related to peaks in the abundance of food for the birds.—R. F. J.

MANAGEMENT AND CONSERVATION

- GRIEB, J. R., and M. G. SHELDON. 1956. Radio-controlled firing device for the cannon-net trap. *Journ. Wildl. Mgt.*, **20**: 203-205.—Describes equipment necessary for modeling a radio-controlled firing device for the cannon-net trap. Also presents photographs and a schematic drawing of the radio firing device.—R. F. L.
- KLONGLAN, E. D., I. A. COLEMAN, and E. L. KOZICKY. 1956. A pheasant nest activity recording instrument. *Journ. Wildl. Mgt.*, **20**: 173-177.—Describes modification of a temperature recorder into an automatic instrument for recording pheasant nest activity. Resulting data (Iowa) showed that nearly all egg laying occurred between 10:00 A.M. and 3:00 P.M.; incubating hens generally left their nests between 3:00 and 6:00 P.M., with an average absence of about 1 hour. Instances of nest predation were also recorded. Knowledge of the daily periods when most hens are absent from their nest might provide for reduction of mortality among hens nesting in hayfields by selecting timing of mowing operations.—R. F. L.
- ROSENE, W., JR. 1956. An appraisal of bicolor lespedeza in quail management. *Journ. Wildl. Mgt.*, **20**: 104-110.—Data collected in Alabama and South Carolina during a 7-year period showed that, where native bobwhite quail foods were abundant, *Lespedeza bicolor* plantings failed to increase quail populations. Examination of 822 quail crops showed that quail preferred bicolor seeds more than seeds of native plants when both food types were available.—R. F. L.
- TURNER, L. B. 1956. Improved technique in goose trapping with cannon-type net traps. *Journ. Wildl. Mgt.*, **20**: 201-203.—Discusses improvements in techniques of selecting trap sites, placement of traps, baiting, and operation of cannon-type net traps.—R. F. L.

- WELLER, M. W. 1956. A simple field candler for waterfowl eggs. *Journ. Wildl. Mgt.*, **20**: 111-113.—Describes use of field candler for determining incubation stages of waterfowl eggs. Discusses and depicts criteria used for age identification of redhead embryos; these criteria are satisfactory for other species with a similar incubation period.—R. F. L.

MIGRATION AND ORIENTATION

- DOUAUD, J. 1957. Les migrations au Togo (Afrique Occidentale). *Alauda*, **25**(4): 241-266.—In Togo on the Gulf of Guinea, 6° N. Lat., there is a definite influx not only from the Palearctic but also from the tropical areas to the north and south. The migration is chiefly during the dry season, which occurs during the Northern Hemisphere winter. The tropical migrants from the north are rainy season nesters from a more arid region; the tropical migrants from the south (fewer) are mainly transients from a more humid region.—E. E.
- EGGELING, W. J. 1957. Isle of May Bird Observatory and Field Station report for 1956. *Scot. Nat.*, **69**(3): 130-144.—Data on migration, banding recoveries, and other activities.
- HARRISON, C. J. O. 1957. Ornithological observations from Lista 1955. *Sterna*, **2**(4): 101-130.—Autumnal migration studies in southern Norway.
- HAVERSCHMIDT, F. 1957. The bill color of summering immature Common Terns. *Ardea*, **45**: 176-178.—Five birds taken in Surinam in June and July, 1953 and 1954, with wholly black bills, proved to be immature Common Terns; one of them, taken July 22, 1953, banded as juvenile on June 28, 1951 in Massachusetts, thus confirming that many Common Terns remain south and do not breed until three years old.—E. E.
- SCHREIBER, B., T. GUALTIEROTTI and D. MAINARDI. 1956. Risposte differenziali del picicone viaggiatore e normale alla sollecitazione rotatoria. *Boll. di Zool.*, **23**(1): 17-31.—Different responses were noted in the electrical activity of the cerebellum as between homing and ordinary domestic pigeons when subjected to rotation. (In Italian; English summary.)—E. E.
- SCHREIBER, B., T. GUALTIEROTTI and D. MAINARDI. 1957. Risposte elettriche cerebellari differenziali a sollecitazioni rotatorie in tortore migrante (*Streptopelia turtur*) e stazionarie (*Streptopelia risoria*). *Istituto Lombardo di Scienze e Lettere, Rend. Sc.*, **91**: 664-671. Milan.—After subjection to rotation the Turtle Dove, a migratory bird, showed characteristic electrical "after discharges" of the cerebellum which were not shown by the Ring Dove, a sedentary bird. The same differences appeared between homing and non-homing domestic pigeons. (In Italian; English summary.)—E. E.
- SERVENTY, D. L. 1957. Recovery of a South Australian *Puffinus tenuirostris* in the Bering Sea. *South Austr. Orn.*, **22**(4): 56.—A Short-tailed (Slender-billed) Shearwater, banded as a fledgling in South Australia on March 14, 1957, in its burrow, was taken on May 6, 1957 in the Bering Sea, north of the Aleutians, lat. 50° 40' N., long. 171° 50' E.—a distance of 6,250 miles. As fledglings do not usually leave their burrows until late April, this and two other northern recoveries suggest that the young embark at once on their northward migration.—E. E.

PHYSIOLOGY

- FRIEDMANN, H., J. KERN and J. H. RUST. 1957. The domestic chick: a substitute for the honey-guide as a symbiont with cerolytic microorganisms. *Amer. Nat.*,

91: 321-325.—Domestic chicks given a diet of finely crushed beeswax mixed with an equal quantity of either *Micrococcus cerolyticus*, *Candida albicans*, or both (cerolytic microorganisms found in the intestine of the Lesser Honey-guide, *Indicator minor*), survived up to 7 or 8 days and actually metabolized the wax, which control chicks without the microorganisms were unable to do.—E. E.

TAXONOMY AND PALEONTOLOGY

- KEAST, A. 1957. Variation in the Australian Whitefaces (Aves, genus *Apheloccephala* Oberholser, 1899). Proc. Roy. Zool. Soc. N.S.W., 1955-56: 38-42.
- KEAST, A. 1957. Variation in the Bristle-birds (*Dasyornis*) and variation in the Australian Emu-wrens (*Stipiturus*). Proc. Roy. Zool. Soc. N.S.W., 1955-56: 43-52.
- KEAST, A. 1957. Variation and speciation in the genus *Climacteris* Temminck (aves: Sittidae). Austral. Journ. Zool., **5**(4): 474-495.—Recognizes six species in three species groups.
- KEAST, A. 1957. Variation in the Australian Kingfishers (Aves: Alcedinidae). Rec. Austral. Mus., **24**(7): 61-72.
- KEAST, A. 1958. Variation and speciation in the Australian Flycatchers (Aves: Muscicapidae). Rec. Austral. Mus., **24**(8): 73-108.—The various factors leading to speciation and infraspecific variation in Australia.
- LORDELLO, L. G. E. 1957. Duas aves híbridas da fauna do Brasil. Rev. Bras. Biol., **17**(1): 139-142.—Reports two fringillid hybrids from São Paulo, Brazil, *Sporophila collaris ochrascens* x *S. leucoptera leucoptera* and *Oryzoborus angolensis angolensis* x *O. crassirostris maximiliani*. *S. l. leucoptera* was not previously reported from the state of São Paulo. The author says that males of the two species of *Oryzoborus* court females of the opposite species like their own females. (In Portuguese; English summary.)—E. E.
- MAINARDI, D. 1956. Affinitá sierologica tra il Cardellino (*Carduelis carduelis carduelis* L.), il Lucarino (*Carduelis spinus* L.) e il Fanello (*Carduelis cannabina cannabina* L.). Istituto Lombardo di Scienze e Lettere, Rend. Sc., **90**: 122-130. Milan.—Sera prepared against the red cells of the European Goldfinch, Siskin and Linnet indicate that these birds are well differentiated and that the Goldfinch and Linnet show greater serological affinity than the Goldfinch and Siskin. (In Italian; English summary.)—E. E.
- MAINARDI, D. 1957. Affinitá sierologiche e filogenesi nei Fringillidi. Rapporti sierologici tra il Verdone (*Chloris chloris*), il Fringuello (*Fringilla coelebs*) e il Cardellino (*Carduelis carduelis*). Archivio Zoologico Italiano, **42**: 151-159.—In serological affinity the European Goldfinch seems intermediate between Greenfinch and Chaffinch. Each species has specific antigens, antigens common to all three, and antigens shared with one of the others. (In Italian; summaries in English, French and German.)—E. E.
- MAINARDI, D. 1957. Sulla possibilitá di ricavare una serie filetica da dati sull'affinitá sierologica ricerche sui fringillidi. Istituto Lombardo di Scienze e Lettere, Rend. Sc., **91**: 565-569.—A method is described for indicating diagrammatically serological affinities among species of the same family. Certain serological tests indicate that among four European Fringillidae relationships run in the linear order, Siskin, Linnet, Goldfinch, Chaffinch. (In Italian; English summary.)—E. E.
- MAINARDI, D. 1957. L'evoluzione nei fringillidi. Concordanza fra una "mappa sierologica" e i dati dell'analisi elettroforetica delle emoglobine. Istituto Lom-

- bardo di Scienze e Lettere, Rend. Sc., **92**: 180-186.—Three species of European *Carduelis* and *Fringilla coelebs*, for which a serological chart of relationships was calculated by immunological analyses of the antigens of the red cells, were found to fall into the same order when paper electrophoresis was used to separate two haemoglobins. *Fringilla* is distinguished from the three species of *Carduelis* and four other Carduelines studied by having the electrophoretic trace bands close together instead of separated. It is suggested that *Fringilla* is derived from an early offshoot of the Carduelinae. (In Italian; English summary.)—E. E.
- MILLER, L. and R. I. BOWMAN. 1958. Further bird remains from the San Diego Pliocene. Contrib. in Sci., no. **20**: 1-15.
- NOVAES, F. C. 1957. Notas de ornitologia Amazônica. 1. Gêneros *Formicarius* e *Phlegopsis*. Bol. Mus. Paraense Emilio Goeldi. Zool., no. **8**: 1-9.—The Amazonian forms of *Formicarius* and *Phlegopsis* discussed and a new subspecies, *Formicarius analis paraensis*, described from Pará, Brazil. (In Portuguese.)—E. E.
- PARKES, K. C. 1958. A new race of the Blue-headed Fantail (*Rhipidura cyaniceps*) from northern Luzon, Philippine Islands. Amer. Mus. Novitates, **1891**: 5 pp.—The type locality of *R. c. cyaniceps* is restricted to Mt. Makiling, S. Luzon, and *R. c. pinicola* from N. Luzon is described as new (type from Mt. Benguet). Brief notes on two other races.—K. C. P.
- RAND, A. L. 1958. The races of the bush shrike *Dryoscopus cubla*. Fieldiana Zool., **39**, no. **12**: 87-89.—*Dryoscopus cubla nairobiensis* subsp. nov., from Nairobi, Kenya.—M. A. T.
- RAND, A. L. and D. S. RABOR. 1958. The races of the shrike *Lanius validirostris*. Fieldiana Zool., **39**, no. **11**: 85-86.—*Lanius validirostris quartus* subsp. nov., from Mt. Malindang, Zamboanga, Mindanao.—M. A. T.
- TIMMERMANN, G. 1957. Studien zu einer vergleichenden Parasitologie der Charadriiformes oder Regenpfeifervögel. Teil **1**: Mallophaga. Parasitologische Schriftenreihe, **8**: 1-204; 95 text figs. VEB Gustav Fischer Verlag, Jena, Germany.—A study of the mallophaga found on Charadriiformes. The mallophaga known to parasitize this group are first treated by genera, indicating the various birds on which they have been found; then there is a discussion of the phylogenetic implications in each major group of the Charadriiformes, and the affinities of most genera, separately considered. Among the many interesting conclusions drawn from the presence or absence of related mallophaga are: the gull and shorebird groups are so much closer to each other than either is to the auks that two suborders, rather than three, best represent relationships; the turnstones, Arenariinae, belong in Scolopacidae, not in Charadriidae; the dowitchers, *Limnodromus*, and the godwits, *Limosa*, are allies, and belong in the Erolinae, not in Scolopacinae or Tringinae; in the Phalaropodidae *Lobipes* and *Steganopus* are nearly related; the Pomarine Jaeger, *Stercorarius pomarinus*, is closer to the Great Skua, *Catharacta skua*, than it is to the smaller species of *Stercorarius*; the skimmers, *Rhynchops*, belong with the Sterninae. (In German.)—E. E.
- VAURIE, C. 1958. Systematic notes on Palearctic birds. No. 32. Oriolidae, Dicruridae, Bombycillidae, Pycnonotidae, Nectariniidae, and Zosteropidae. Amer. Mus. Novitates, **1869**: 28 pp.—Notes on 12 species in these families which are only peripherally palearctic. Detailed reviews of *Oriolus oriolus*, *Hypocolius ampelinus*, *Microscelis amaurotis*, *Pycnonotus leucotis*, and *Zosterops japonica*. Vaurie "sinks" many poorly-defined races (including one of his own),

of which no less than seven were described by Koelz. Recent European literature, including Russian, has been incorporated by the author.—K. C. P.

MISCELLANEOUS

- BALEARICA, 1: 1–104. 1957. Boletín del Centro de Estudios Ornitológicos Baleares (Colegio Ramiro de Maeztu). Palma de Mallorca. 60 ptas. This is a new journal, to be published annually, dealing primarily with the birds of the Balearic Islands. The first issue contains a number of articles on Balearic birds, including banded birds captured in the Balearics. Articles are in Spanish with English summaries, or in English.
- CONDON, H. T. 1957. Of what value are sight records. *South Austr. Orn.*, **22**(4): 42–44. As in America, Australian faunistics are complicated by reports of “bird-sporters.” “So long as it is not confused with scientific bird recognition, bird-spotting can be considered a harmless sort of ‘game’ or sport whose essence is the rapid ‘naming’ of any bird likely to be met with on a day’s outing. The observations are of no value except on those rare occasions when they can be investigated at a later date.”
- KURODA, N. 1956–1957. Miscellaneous notes on Anatidae published since 1938. *Tori*, **14**(67): 1–14, **14**(68): 1–14, **14**(69): 1–12.—A useful annotated bibliography of papers on the Anatidae published between 1939–1956. In Japanese, but literature references are given in the original languages; technical names of species treated and localities are also in Latin type.
- MCATEE, W. L. 1957. Folk-names of Canadian birds. *Natl. Mus. Canada Bull.* no. **149**: 1–74.—Names (chiefly English or French) used by Canadians of European ancestry are given, with their derivations.—E. E.
- MENDEL, R. M. A catalogue of an exhibition of landmarks in the development of ornithology. From the Ralph N. Ellis Collection of Ornithology in the University of Kansas Libraries. Univ. Kansas Libraries, Lawrence, Kansas. 33 pp.—A useful historical summary of major works from Aristotle to recent writers on the “New Systematics.”
- TICEHURST, N. F. 1957. *The Mute Swan in England. Its history and the ancient custom of swan-keeping.* xiii + 133 pp., 31 pls. Cleaver-Hume Press Ltd., 31 Wright’s Lane, Kensington, London W. 8. Cloth 35s.