RECENT LITERATURE

EDITED BY FRANK McKINNEY

ANATOMY AND EMBRYOLOGY

Clavert, J. 1960. Déterminisme de la symétrie bilatérale chez les Oiseaux IV. Existence d'une phase critique pour la symétrisation de l'oeuf son stade. Arch. d'anat. micro. morph. exper., **49:** 345–361.

Cobb, S. 1962. Notes on the brain of the hummingbird. Neurology, **6:** 43–48.—General discussion of the structure of the brain that is correlated with the development of sensory function. It is suggested from the structure of the olfactory sacs and the olfactory bulbs that the hummingbirds may have some olfactory sense.—W. J. B.

Cohen, J., and P. G. 'Espinasse. 1961. On the normal and abnormal development of the feather. J. Embry. Exper. Morph., **9:** 223–250.—A summary of earlier views of feather development is given. The collar is shown to be entirely transformed into the feather; it does not just produce the feather, and hence it is lost each time a feather is plucked. The collar is produced from the papillar ectoderm. Such abnormalities—longitudinal and transverse chimaerae, double feather, etc.—are considered and explained in terms of feather growth as outlined in this paper.—W. J. B.

Glutz von Blotzheim, U. 1960. Zur Morphologie und Ontogenese von Schultergürtel, Sternum und Becken von Struthio, Rhea und Dromiceius. Ein Beitrag zur Phylogenese der Ratiten. Proc. XII Int. Ornith. Congr., pp. 240–251.—Embryological study of the pelvic girdle, clavicle, and sternum of the Ratites suggests possible polyphyletic origin of these birds from coelurid coelurosauroids.—M. D. F. U.

Kuroda, N. 1961. Analysis of three adaptive body forms in the Steganopodes, with note on pectoral muscles. Misc. Reports Yamashina's Inst. for Ornith. and Zool., **3:** 54–66.—Analyses of adaptations in bodily proportions of *Nannopterum harrisi, Sula nebouxii,* and *Fregata magnificens.* In spite of striking adaptive differences, certain indices of proportion were found to be quite constant within an order. Presence of M. pect. major profundus is suggested as evidence of a soaring ancestor for cormorants. In Japanese; summary, captions, and tables in English.—K. C. P.

Lüdicke, M. 1960. Über den Schnabel der Ramphastidae. Zeits. Morph. Ök. Tiere, **48:** 650–670.—Discusses the shape and size of the bill in various toucans with particular emphasis on the structure of the horny teeth found on the biting edges of the rhamphotheca.—W. J. B.

Meunier, K. 1959. Die Grössenabhängigkeit der Köperform bei Vögeln. Zeits. wiss. Zool., **162:** 328–355.—Discusses the problem of comparing relative size between congeneric species of birds, including an excellent bibliography of papers on relative size and growth in birds, especially those published in German.—W. J. B.

Müller, H. J. 1961. Die Morphologie und Entwicklung des Craniums von *Rhea americana* Linné. I. Das knorpelige Neurocranium. Zeits. wiss. Zool., **165:** 221–319.—A detailed description of the adult structure and development of the chondrocranium of *Rhea americana.*—W. J. B.

Norris, R. A. 1961. Colors of stomach linings of certain passerines. Wils. Bull., **73:** 380–383.—Colors of stomach linings of 39 species classified and compared.—J. T. T.

Oehme, H. 1959. Untersuchungen über Flug and Flügelbau von Kleinvögeln. J. f. Ornith., **100:** 363–396.—A model for flapping flight is given along with its aerodynamical aspects. Using this model, Oehme studied the flight of several small

birds (*Apus apus, Hirundo rustica, Phoenicurus phoenicurus, P. ochruros, Parus major, Passer domesticus,* and *P. montanus*) using motion pictures of the birds in free flight. Round-winged birds are not endurance fliers, while pointed-winged birds are typically ones that catch their food on the wing or fly great distances every day. The type of flight was correlated with the structure of the wing feathers and especially with the fine structure. In the swifts and swallows, the primaries are tightly bound together by long hooks on the barbs of the feathers. These barbs have shorter hooks in weaker fliers and hence cannot hold the feathers together as well as in the swifts. The humerus is shortest, while the hand is longest relatively, in the swifts and swallows. Comparison of the pectoral muscles was complicated by the different manner of flight in the swift. These birds have a powerful upbeat of the wing, hence the ratio M. supracoracoideus : M. pectoralis (muscles that raise the wing : muscles that lower the wing) is less than 1 : 4, while in most songbirds the ratio is 1 : 6. In the swallow the ratio is 1 : 1.6, indicating that, among the passerine birds with the same type of flight, the stronger fliers have a more powerful downbeat than upbeat.—W. J. B.

Oehme, H. 1961. Vergleichend-histologische Untersuchungen an der Retine von Eulen. Zool. Jahrb. (Anat. Bd.), **79:** 439–478.—Describes and compares the histological structure of the retina in several owls and compares them with *Falco* and *Sturnus.* Owls have both rods and cones, which are not basically different from those in hawks; however, the rod cells predominate in owls, cones in hawks. It is concluded that the structure of the retina agrees with the results of sensory physiology and with the habits of the birds.—W. J. B.

Requate, H. 1959. Federhauben bei Vögel. Eine genetische und entwicklungsphysiologische Studie zum Problem der Parallelbildungen. Zeits. wiss. Zool., **162:** 191–313.—Describes the structure and ontogeny of the crest in chickens and domestic ducks. Whether crests in these groups are the result of parallel evolution is discussed.—W. J. B.

Rüggeberg, T. 1960. Zur funktionellen Anatomie der hintere Extremität einiger mitteleuropäischer Singvogelarten. Zeits. wiss. Zool., **164:** 1–106.—The bones, muscles, articulations, and ligaments of the hind limbs of a number of different passerine species are described and compared with the greatest emphasis placed on the structure and function of the toes. These structures are compared in the different walking, hopping, and climbing birds, and the author concludes that there are only minor morphological differences in the hind limb of passerine birds having different types of locomotion.—W. J. B.

Schwarz, L., and F. Fehse. 1960. Beobachtungen an Eischalen und Eiern VI. Über Unterschiede der Schalen unbebrüteter und ausgebrüteter Eier. II Fortsetzung. Zool. Anz., **165:** 167–184.—Discusses the difference in the shell of unincubated and of fully incubated eggs.—W. J. B.

Behavior

Andrew, R. J. 1961. The displays given by passerines in courtship and reproductive fighting: a review. Ibis, **103a:** 316-348, 549–579.—In Part 1, information is summarized on general problems in the analysis of displays, components of displays, bill raising, bill lowering, wing vibration, fluffing, head-forward threat, courtship feeding, lateral display, gait, female courtship display, and precopulatory display. Six figures illustrate displays and aid in comparison of different species or families. Part 2 discusses song under motivation, evolution, and mimicking. A comparison between passerine and other avian courtship displays includes discussion of the dis-

plays of columbiforms, psittaciforms, cuculiforms, strigiforms, caprimulgiforms, apodiforms, coraciiforms, piciforms, and sub-oscines. Systematic implications are made by comparison of sub-passeriform displays with typical passerine displays under corvids, estrildines, ploceines, carduelines, *Fringilla*, and other groups. The loss of display components during evolution is mentioned briefly. The distribution of the main passerine displays is tabulated in an appendix and fully documented with references to the literature.—J. W. H.

Brewer, R. 1961. Comparative notes on the life history of the Carolina Chickadee. Wils. Bull., **73:** 348–373.—*Parus carolinensis* was compared with the Black-capped Chickadee (*P. atricapillus*) on the basis of observations made largely in Illinois. Also studied was a population believed to be composed at least partly of hybrids between these two species. Winter flocking and movements, nesting, other behavior, and vocabulary are described: they are essentially similar in the two species. The hybrids had songs and call notes different from those of either species. The average hatching and fledging rate of the hybrids was low.—J. T. T.

Curio, E. 1959. Beobachtungen am Halbringschnäpper, *Ficedula semitorquata,* im mazedonischen Brutgebiet. Ein Beitrag zur Stammesgeschichte von Verhaltensweisen. J. f. Ornith., **100:** 176–209.—The behavior patterns of the Semi-collared Flycatcher were studied in Macedonia, and compared with those in the Pied and the Collared flycatchers. The patterns were found to be very similar, with the major differences being in the frequency and intensities of the movements and their time of occurrence during the breeding cycle. *F. semitorquata* is considered to be a full species as its social behavior differs conspicuously from that of *F. hypoleuca* and *F. albicollis*; however, morphologically it is intermediate between these species. —W. J. B.

Curio, E. 1960. Ontogenese und Phylogenese einiger Triebäusserungen von Fliegenschnäppern. J. f. Ornith., **101:** 291–309.—Shows that the "scraping-ceremony" in the males of the genus *Ficedula* is derived from a nest-building movement that has become sexually motivated. The *albicollis* male uses this movement as a precopulation ceremony and to threaten another male, the *semitorquata* male uses it during copulation and for threatening, the *hypoleuca* male uses it only for threatening. The ontogeny of this behavior pattern is described and discussed. It is interesting that Curio uses a subtle form of the "Ontogeny recapitulates phylogeny" law by stating (p. 307): "During development the young bird passes through the phylogenetically older state of motivation of scraping. Later the hostile motivation, observed in adults, comes into play as well. This supports the hypothesis, that the pre-copulatory ceremony of the adult *hypoleuca* male is secondarily impoverished." —W. J. B.

Frisch, O. v. 1959. Kiebitzbruten in Gefangenschaft mit Aufzucht von Rotschenkeln durch ein Kiebitzpaar. J. f. Ornith., **100:** 307–312.—The breeding behavior of handraised lapwings in a large cage is described. One pair raised its own chicks, the other raised three chicks of a Redshank. The Redshank chicks learned to understand the meaning of the different calls of their foster parents.—W. J. B.

Frisch, O. v. 1960. Zum Thema Balzflug. J. f. Ornith., **101:** 496–497.—Discusses the use of the term "courtship flight" in Thiede's work (*J. f. Ornith.,* **101:** 355–359), showing that since the flight in the Redshank serves to mark the limits of the territory, it cannot be called a "courtship flight."—W. J. B.

Geyr von Schweppenburg, H. F. 1959. Zum Verhalten der Stockente. J. f. Ornith., **100:** 397–403.—Discussion and comments on Weidmann's work on the behavior of

the Mallard: "Verhaltensstudien an der Stockente," *Zeits. f. Tierpsychol.*, 13.—W. J. B.

Grosskopf, G. 1959. Zur Biologie des Rotschenkels (*Tringa t. totanus*) II. J. f. Ornith., **100:** 210–236. (Part I, *J. f. Ornith.*, **99:** 1–17.)—The courtship behavior of the Redshank is described from the pre-pairing time through the nesting period. The significance of territory during courtship and nesting is discussed. The second part of the paper deals with the structure and dynamics of the population on the Island of Wangerooge in East Friesland. About 85 per cent of the eggs hatched; 70 per cent of the adult birds returned each year from the wintering grounds. The average age of the breeding birds was 4 years; the age at the first time of breeding averages 2.7 years, and for the second breeding the age averages 3.4 years.—W. J. B.

Hamerstrom, F., and F. Hamerstrom. 1960. Comparability of some social displays of grouse. Proc. XII Int. Ornith. Congr., pp. 274–293.—The displays of *Lyrurus tetrix* and *Tympanuchus cupido* are described and compared. On the basis of their displays, which are closely comparable, the Black Grouse and the Prairie Chicken are more closely related than is suggested by their present distribution or their morphology.—M. D. F. U.

Homann, P. 1960. Beitrag zur Verhaltensbiologie des Weidenlaubsängers (*Phylloscopus collybita*). J. f. Ornith., **101:** 195–223.—A thorough study of the breeding behavior of *Phylloscopus collybita,* based on observations made near Karlsruhe. The breeding cycle, song and calls, behavior of male and female, attitude of male and female to the nest, eggs, and young, behavior of the young and other species of birds are covered in detail. The behavior is compared with that of other species of *Phylloscopus.*—W. J. B.

Kikkawa, J. 1961. Social behaviour of the White-eye *Zosterops lateralis* in winter flocks. Ibis, **103a:** 428–442.—Banded birds were studied around a feeding station and in an aviary in New Zealand. The author distinguishes ritualized pecking, threat display, incipient attack, combat, and chasing, in aggressive behavior, the patterns varying according to the intensity of aggressive tendency. Aggressive components characteristic of the species include wing fluttering, presentation of white underwing coverts and color on the flanks, and beak clattering. Pecking order involves peck right with triangles of dominance. In natural flocks dominant birds engaged in aggressive encounters more than subordinate birds, dominants fight more with birds of higher rank, and subordinates avoid encounters. Ecological implications of flocking and aggression are discussed.—J. W. H.

Kikkawa, J. 1961. Flocking of the White-eye *Zosterops lateralis* in New Zealand. Tori, **16:** 317–327.—Analysis of flock size and structure, and food, of the White-eye in fall, winter, and spring. Frequent interchanges occurred among winter flocks, but mated pairs remained together. Flocks had definite "peck orders," with males, on the average, more aggressive. Three types of call notes were found to relate to flocking behavior: flight call, alarm call, and threat call. Pair formation among first-year birds took place during winter, and the flock diminished as these birds gradually left to establish territories. In breeding season principal food is insects, shifting to plant food in winter, casting doubt on the relationship postulated by Cunningham (1946. *Emu,* **45:** 212–223) between insect feeding and the origin of flocking. In Japanese; captions and summary in English.—K. C. P.

Lorenz, K., and W. von de Wall. 1960. Die Ausdrucksbewegungen der Sichelente, *Anas falcata* L. J. f. Ornith., **101:** 50–60.—The courtship displays of *Anas falcata* are described and compared with those in the most closely related species, especially *A. crecca, A. strepera,* and *A. penelope.* This comparison shows, as does the plum-

age and the bony syrinx, that the systematic position of *falcata* is between these other three species, but somewhat closer to *crecca* and *strepera*.—W. J. B.

Nakamura, T. 1961. Studies on the fluctuation of number of Long-tailed Tits along the slopes of the River Tenryu, Nagano (2). Misc. Reports Yamashina's Inst. for Ornith. and Zool., **3**: 33–46.—Variations in flock composition and daily movements of *Aegithalos caudatus trivirgatus* along a linear riverbank study area. Only 2 per cent of the total number of tits observed remained in the study area for breeding. In Japanese with English summary.—K. C. P.

Rettler, M. 1960. Untersuchungen zur Ontogenese des Lernvermögens beim Haushuhn. Zool. Jahrb. (Phys. Bd.), **69**: 193–222.—The development of learning ability in chickens from 7 days to 10 months was studied. Speed of learning for each test differed for each age group; no age group learned fastest for every test. In general, young birds made greater errors and could be more easily deconditioned from the learned pattern than older birds.—W. J. B.

Short, L. L., Jr. 1961. Interspecies flocking of birds of montane forest in Oaxaca, Mexico. Wils. Bull., **73**: 341–347.—Includes a discussion of the advantages to the individual of being a flock member.—J. T. T.

Sick, H. 1959. Die Balz der Schmuckvögel (Pipridae). J. f. Ornith., **100**: 269–302.—A comparative survey is given of the courtship of 25 species of manakins based mainly on observations made in Brazil since 1939. The different elements of the manakin's display are analyzed and compared with similar elements in the tyrant-flycatchers and cotingas. The generic relationships within the Pipridae are discussed on the basis of the behavioral evidence, and tentative conclusions are drawn. The limits between the manakins, tyrant-flycatchers, and cotingas are difficult to define; no formal taxonomic conclusions are drawn from this.—W. J. B.

Thiede, W. 1960. Über den Balzflug und das Revier des Rotschenkels. J. f. Ornith., **101**: 355–359.—Describes the display flight and the territory of the Redshank.—W. J. B.

Thielcke, G. 1960. Mischgesang der Baumläufer *Certhia brachydactyla* und *C. familiaris*. J. f. Ornith., **101**: 286–290.—Individuals of both species of European creepers, which are probably genetically pure, can imitate the song of the other sibling species. One *C. familiaris* combined parts of both songs into one verse. The songs of both species have most likely separated phylogenetically through complementary arrangements and variations in the pitch and partly through reorganization of the song. Sound spectrographs were used in the analysis.—W. J. B.

Diseases and Parasites

Beverley-Burton, M. 1961. Studies on the Trematoda of British freshwater birds. Proc. Zool. Soc. Lond., **137**: 13–39.

Carriker, M. A., Jr. 1961. Studies in neotropical mallophaga. XII (Part 5): Lice of the tinamous. Rev. Bras. Biol., **21**: 205–216.—New forms described; critical notes and corrections of earlier papers.—E. E.

Crispins, C. G., Jr. 1961. Chemical carcinogenesis in birds. A review. Poultry Sci., **40**: 745–761.—The literature on neoplasms in birds is reviewed with special attention to chemically induced avian tumors and their transmissibility.—P. H. B.

Distribution and Annotated Lists

Benson, C. W., and C. R. S. Pitman. 1962. Some breeding and other records from Madagascar. Bull. Brit. Ornith. Club, **82**: 30–33.

Dickerman, R. W., and D. W. Warner. 1961. Distribution records from Tecolutla,

Veracruz, with the first record of *Porzana flaviventer* for Mexico. Wils. Bull., **73:** 336–340.—About 15 species are noted, most of these inhabiting a fresh-water marsh. —J. T. T.

Flach, B. 1959. Einige Sommerbeobachtungen auf Korfu. J. f. Ornith., **100:** 303–306.—A list of the birds observed on the Island of Corfu during June 1953.—W. J. B.

Gauss, G. H. 1960. Zur Verbreitung der Türkentaube (*Streptopelia decaocto*) in den Ostalpen. J. f. Ornith., **101:** 346–354.—Traces the spread of the dove *Streptopelia decaocto* in the eastern reaches of the Alps of Germany and Austria.—W. J. B.

Géroudet, P. 1960. Une population fluviatile der Goélands argentés *Larus argentatus michahellis* sur le haut Rhône. Proc. XII Int. Ornith. Congr., pp. 230–233.—A small population of Herring Gulls nests on sand bars in the Rhône River between Geneva and Lyon.—M. D. F. U.

Hofstetter, F.-B. 1960. Mögliche Faktoren der Ausbreitung von *Streptopelia d. decaocto* Friv. Proc. XII Int. Ornith. Congr., pp. 299–309.—Many different factors possibly affecting the emigration and wanderings of the Collared Turtle Dove in Europe are considered. The Balkan area is thought to provide suboptimal habitat. From this area, chance emigration leads to colonization of better habitats that were mainly related to human settlements.—M. D. F. U.

Jany, E. 1960. An Brutplätzen des Lannerfalken (*Falco biarmicus erlangeri* Kleinschmidt) in einer Kieswüste der inneren Sahara (Nordrand des Serir Tibesti) zur Zeit des Frühjahrszugs. Proc. XII Int. Ornith. Congr., pp. 343–352.—Two nests were found in an ornithologically unknown part of the Sahara Desert. These falcons rely entirely on migratory birds as food for raising their young.—M. D. F. U.

Johansen, H. 1959. Die Vogelfauna Westsibiriens. III Teil (Non-Passeres). 7. Fortsetzung: Anseres II (*Anas–Mergus*). J. f. Ornith., **100:** 313–336.

Johansen, H. 1959. Die Vogelfauna Westsibiriens. III Teil (Non-Passeres). 8. Fortsetzung: *Tubinares–Pterocletes.* J. f. Ornith., **100:** 417–432.

Johansen, H. 1960. Die Vogelfauna Westsibiriens. III Teil (Non-Passeres). 9. Fortsetzung: Alcidae, Laridae. J. f. Ornith., **101:** 316–339.

Johansen, H. 1960. Die Vogelfauna Westsibiriens. III Teil (Non-Passeres). 10. Fortsetzung: Limicolae 1 (*Burhinus* bis *Limnodromus*). J. f. Ornith., **101:** 472–495.

Lawson, W. J. 1962. On the distribution of the races of the Paradise Flycatcher *Terpsiphone viridis* (Müller) in southern Africa. Bull. Brit. Ornith. Club, **82:** 26–30.

Løppenthin, B. 1960. Die Kolbenente, *Netta rufina* (Pall.), im Dänemark. J. f. Ornith., **101:** 126–128.—Discusses the occurrence of *Netta rufina* in Denmark.—W. J. B.

Mauersberger, G. 1960. Faunistische Notizen aus Nordost-Bulgarien (19. Mai 2. Juni 1959). J. f. Ornith., **101:** 113–125.—Faunistic notes on the avifauna of northeastern Bulgaria.—W. J. B.

Mountfort, G., and I. J. Ferguson-Lees. 1961. Observations on the birds of Bulgaria. Ibis, **103a:** 443–471.—A report on an expedition, organized by the senior author, to this inadequately studied area, bringing up to date our knowledge of Bulgarian ornithology. The paper includes information on status changes and migration. There is a detailed systematic list, with data on nesting, occurrence, and general habits.—J. W. H.

Pinto, O. M. de O., and E. A. de Camargo. 1961. Resultados ornitologicos de quatro recentes expediçoes do departamento de Zoologia ao nordeste do Brasil, com

a descriçao de seis novas subspecies. Arq. Zool. São Paulo, **11**(9): 193–284.—Results of expeditions to northeastern Brazil (states of Ceará, Paraiba, Alagoas, Bahia, Piaui), including descriptions of new subspecies: *Reinarda squamata orientalis,* Ceará; *Momotus momota marcgraviana,* Paraiba; *Selenidera gouldii baturitensis,* Ceará; *Picumnus limae saturatus,* Paraiba; *Picumnus pygmaeus distinctus,* Bahia (ilha de Madre-de-Deus); *Cyanocorax chrysops insperatus,* southern Pará. An important distributional paper, with taxonomic discussion, and other information on many species.—E. E.

Post, P. W. 1961. Range extensions of herons in the northeastern United States. Wils. Bull., **73:** 390–393.—Changes in the status of five species in the area from southern New Jersey to Massachusetts.—J. T. T.

Rolle, F. J. 1961. Notes and records of little-known species of birds from Puerto Rico. J. Agric. Univ. Puerto Rico, **45:** 333–341.—Includes some sight observations of birds not previously recorded from Puerto Rico, and summarizes scattered published records of little known birds.—E. E.

Rucner, D. 1960. Über die Verbreitung mediterraner Vogelarten im Gebiet der nördlichen Adria. J. f. Ornith., **101:** 310–315.—The distribution of some Mediterranean birds in the northern part of the Adriatic coast of Yugoslavia.—W. J. B.

Udvardy, M. D. F. 1961. The Harold J. Coolidge Expedition to Laysan Island, 1961. Elepaio, **22:** 43–47.—In September 1961 up to 45 Laysan Ducks were seen; the comeback of native vegetation was encouraging; the presence of a new military encampment was discouraging.—P. H. B.

Ecology and Population

Geyr von Schweppenburg, H. F. 1960. *Motacilla flava* wurde Feldvogel. J. f. Ornith., **101:** 282–285.—In the region between Cologne and Aachen, *M. flava* has become a characteristic bird of the fields. This change to the drier habitat began about 1933–1935, and it is suggested that this population expanded from individuals wandering into this region from the south where this species lives in a wetter habitat.—W. J. B.

Gladkow, N. A. 1960. Über die Vogelfauna der Kulturlandschaft. Proc. XII Int. Ornith. Congr., pp. 234–239.—The avifauna of cultivated habitats consists of (1) adventive species that follow the spread of a type of cultivation and crop, (2) incorporated species that were already in the area and begin to use new habitat created by cultivation. The different habitats of Eurasian cultivation are discussed.—M. D. F. U.

Gudmundsson, F. 1960. Some reflections on ptarmigan cycles in Iceland. Proc. XII Int. Ornith. Congr., pp. 259–265.—Analysis of the trade data shows a 10-year cycle, very suitable for further study. The causes of the marked cyclic fluctuations are not clear, but there are strong arguments against the hypothesis of Lack (1954) that rodent cycles are of primary importance and when rodents are scarce predators switch to gallinaceous birds. In Iceland ptarmigan predators are scarce and rodent numbers are insignificant.—M. D. F. U.

Hanzák, J. 1960. Zur Ökologie der Gebirgsvögel in der Tschechoslowakei. Proc. XII Int. Ornith. Congr., pp. 294–298.—A detailed analysis of the distributional ecology of subalpine and alpine birds in Czechoslovakia. Several of these species are much less stenoecious than previously thought, and they extend into lower elevation in suitable habitat.—M. D. F. U.

Hudec, K. 1960. Einige Gesichtspunkte zur neuzeitlichen Ausbreitung und Verstädterung der Saatkrähe (*Corvus frugilegus*) in der Tschechoslowakei. Proc. XII Int.

Ornith. Congr., pp. 327–331.—Describes the recent expansion and urbanization of the Rook. A distribution map shows the nesting colonies in Czechoslovakia.—M. D. F. U.

Jennings, A. R. 1960. The major causes of death in wild birds in Great Britain. Proc. XII Int. Ornith. Congr., pp. 353–357.—Eight hundred dead birds of 104 species showed trauma, infectious disease, poisons, and adverse climate factors as the chief causes of death. There is an interesting discussion of every death factor and its importance.—M. D. F. U.

Meunier, K. 1960. Grundsätzliches zur Populationsdynamik der Vögel. Zeits. wiss. Zool., **163:** 397–445.—The factors controlling population size in birds are (1) negative acting (predators, sickness, etc.), and (2) positive acting (availability of food, nesting places, etc.). Meunier concludes that the size of the population is not controlled directly by the extrinsic factors of the environment, and that the population size is not limited ultimately by those factors (rate of reproduction, death rate of the young) that control population cycles. An extensive bibliography of German papers dealing with population size in birds is included.—W. J. B.

Meunier, K. 1961. Die Populationsdynamik des Mäuserbussards (*Buteo buteo* L.) nach Ringfunden mit Anmerkungen zur Methodik. Zool. Anz., **166:** 229–242.—The population dynamics of the Common Buzzard based upon banding is discussed with special emphasis on the methods used. Intrinsic factors were considered to be the most important.—W. J. B.

Uramoto, M. 1961. Ecological study of the bird community of the broad-leaved deciduous forest of Japan. Misc. Reports Yamashina's Inst. for Ornith. and Zool., **3:** 1–32.—Detailed studies were made of food consumption of three species of captive birds to arrive at methods for estimating food consumption of wild birds. A breeding bird census was then carried out on a plot in Chichibu-Tama National Park; density of breeding pairs was similar to that in deciduous forests of eastern North America, but biomass (kg per 100 acres) was two to four times greater. Feeding niches for various species are described, and computations made of food consumption for birds of this area. In English.—K. C. P.

Wada, K. 1961. Swan's natural history. Tori, **16:** 348–354.—During the winter of 1959–1960 an unusually large flock of *Olor cygnus* wintered at Kominato, Aomori, Japan. Data on mortality and correlations of temperature with flock size and movements are given. Four other papers in this issue of *Tori* discuss that winter's invasion of swans in Japan. All in Japanese with English summaries.—K. C. P.

Evolution and Genetics

Bezzel, E. 1960. Beobachtungen an wildlebenden Bastarden Tafel × Reiherente (*Aythya ferina* × *A. fuligula*). J. f. Ornith., **101:** 276–281.—Discusses the factors favoring the production of hybrids between the Tufted Duck and the Pochard, and describes the behavior of the hybrid.—W. J. B.

Poole, H. K., and S. J. Marsden. 1961. An autosomal naked mutation and associated polydactylism in Beltsville Small White Turkeys. J. Hered., **52:** 183–185.—A new recessive mutation, involving almost complete lack of feather follicles except about 10 remiges on each side; scales of legs also absent. Twenty-nine of 43 individuals have extra toes; polydactyly may be controlled by a separate but closely linked gene.—K. C. P.

Stohl, G., and V. Gerencsér. 1961. Ergänzende Angaben zur Kenntnis der Gattungsbastards von Moskus- und Hausente. Zeits. wiss. Zool., **165:** 320–343.—The development, adult size, and function of many structures in the muscovy, peking, and

muscovy × peking hybrid ducks, with emphasis on the endocrine glands and protein synthesis. The sterility of this intergeneric hybrid seems to be due to the disturbance of the nucleic acid metabolism, which affects the entire endocrine system of the hybrid.—W. J. B.

Wilcox, F. H., and C. E. Clark. 1961. Chicken-quail hybrids. J. Hered., **52:** 167–170.—Chicken semen from three breeds inseminated into hens of *Coturnix c. japonica.* Ten hybrids hatched from 2,282 eggs; of these four lived from 4 to 11 months. Incubation period of hybrid eggs was intermediate between quail and chicken (19 days vs. 17 and 21), but no data are given on egg size. Body weight of hybrids nearer quail (350–384 g vs. 102 and 2,400–3,700, all for males). Description of plumage and structure of hybrids rather sketchy.—K. C. P.

General Biology

Behn, F., and G. Millie. 1959. Beitrag zur Kenntnis des Rüsselblässhuhns (*Fulica cornuta* Bonaparte). J. f. Ornith., **100:** 119–131.—The horn projecting from the forehead of this coot is composed of two ventral columns of smooth muscle and a dorsal ridge of fatty tissue. The brushlike tip is formed by a number of fine papillae having a connective tissue center and greatly cornified epithelium. The distribution, including analysis of the salt content of the water, and nesting, of the horned coot is described.—W. J. B.

Carvalho, C. T. de. 1961. Notas sôbre "Chaetura" em Belém, Pará (Aves, Apodidae). Rev. Bras. Biol., **21:** 175–178.—About Belém, Brazil (near the equator) the swifts, *Chaetura brachyura* and *C. spinicauda,* appear to breed at the end of the driest season: on 26 January 1958 individuals of the former were noted plucking nesting material (dry twigs); a female taken 14 January had the ovary moderately enlarged (1.8 mm). A nest-building *Reinarda* had a less enlarged ovary, barely 1.5 mm. Compared with *Reinarda* and *Panyptila,* whose food consisted chiefly of high-flying insects (such as winged ants and termites), the two *Chaetura* species fed mainly on insects of lower or slower flight, principally small coleoptera. In Portuguese; English summary.—E. E.

Crook, J. H. 1961. The fodies (*Ploceinae*) of the Seychelles Islands. Ibis, **103a:** 517–548.—A detailed comparative study of the biology of the endemic *Foudia sechellarum* (now restricted to three islands) and the introduced *F. madagascariensis* (which occurs widely in the archipelago). Distribution, coloration and measurements, general ecology and habitat, breeding seasons, food preferences, nest sites, eggs, clutch size, incubation and fledging periods, growth rate, survival and predation, social, territorial, epigamic, and other behavior, nest building, parental care, voice, and survival value of species characteristics are compared. In addition, there is a discussion of species relations within the genus, including degenerative effects of isolated island life and specialization in food exploitation. A proposed order of listing of the species of *Foudia* is included.—J. W. H.

Hoesch, W. 1959. Brutverhalten bei starker Sonneneinwirkung. J. f. Ornith., **100:** 173–175.—Shows that ground-nesting birds in very hot regions incubate only during cooler times of the day, and shade the eggs from the sun during hotter times of the day. Discusses the problem of water loss in the incubating bird during the day, mentioning that the adult Lapwing eats a great amount of fresh salad leaves.—W. J. B.

Hoesch, W. 1959. Zur Biologie des südafrikanischen Laufhühnchens *Turnix sylvatica lepurana.* J. f. Ornith., **100:** 341–349.—The behavior and nesting of a pair of Button-quail in captivity is described. The female is larger and more brightly

colored than the male and takes the active part in courtship. The male scrapes a hole in the sand that serves as the nest. Only the male incubates and cares for the young. The first clutch of four eggs was incubated for 13 days; only one chick hatched. The second clutch of three eggs was destroyed by the male only one day before the chicks should have hatched. The third clutch of three eggs produced two young. The young were fed insects by the male for seven days. After 10 days the young were self-sufficient, and after 13 days they acted like the adults. The young could fly spontaneously on the 15th day.—W. J. B.

Hoesch, W. 1960. Zum Brutverhalten des Laufhühnchens *Turnix sylvatica lepurana*. J. f. Ornith., **101:** 265–275.—Describes the social behavior, calls, pair formation, nest construction, egg-laying and incubation, behavior between the female and the incubating male and the newly hatched young, development of the young, and egg shape, based upon three captive pairs. The male begins to incubate during the night before the last egg is laid. The female must be removed before the eggs are hatched, as she not only bothers the male but attempts to kill the newly hatched chicks. Both sexes are able to reproduce at an age of five months.—W. J. B.

Horváth, L. 1960. The life of the Lesser Grey Shrike (*Lanius minor* Gm.) in the Great Plains between the villages Alsónemedi and Ócsa, near Budapest, Hungary. Proc. XII Int. Ornith. Congr., pp. 317–326.—A descriptive account of one season's observations dealing mainly with breeding biology.—M. D. F. U.

Hosono, T. 1961. Seasonal fluctuations of the Kestrel and other birds, near Jusangai-chiff [*sic*; = cliff], Nagano. Tori, **16:** 341–347.—Counts of adult and young *Falco tinnunculus* in what appears to be an exceptionally dense population for a predator; 11–12 nests along 70 meters of cliff. Kestrels arrived in late February. Young were seen at nest-hole entrances from late May. Young leave late August–early October, adults by early November. Number of wintering birds is dependent on depth of snow cover. In Japanese; captions, tables, and summary in English.—K. C. P.

Hostetter, R. 1961. Life history of the Carolina Junco *Junco hyemalis carolinensis* Brewster. The Raven, **33:** 170.—A condensed version of an unpublished Ph.D. thesis, based on a study made in the Blue Ridge Mountains of Virginia in 1936–1938.—E. E.

Ingram, C. 1960. Camouflage in nestling birds. Proc. XII Int. Ornith. Congr., pp. 332–342.—A study of many species reveals that the neossoptiles function as a kind of "smoke screen," obliterating the contour of the nestlings and so camouflaging them. Arctic sandpiper chicks have special "powder puff" structures resembling the spore cases of tundra lichens. Some young plovers have flashing alarm signals that are hidden while the bird crouches; when exposed they alert siblings and startle the predator.—M. D. F. U.

Kirchner, H. 1960. Beobachtungen an einer Brut des Bruchwasserläufers. J. f. Ornith., **101:** 340–345.—Observations on the nest and young of *Tringa glareola* in northern Germany, with photographs of the eggs and young.—W. J. B.

Leporati, L. 1961. Erckel's Francolin (*Francolinus erckeli erckeli* Rüppel). Ric. Zool. Appl. alla Caccia, **34:** 1–18. Univ. Bologna.—Discusses the rearing and behavior of an African game bird that has been introduced in Italy, Hawaii, and California. In Italian; summaries in English, French, and German.—E. E.

Löhrl, H. 1960. Vergleichende Studien über Brutbiologie und Verhalten der Kleiber *Sitta whiteheadi* Sharpe und *Sitta canadensis* L. J. f. Ornith., **101:** 245–264.—This is the first part of a comparative study of the breeding biology and behavior of the nuthatches *Sitta whiteheadi* of Corsica and *S. canadensis* of North America. This part covers *S. whiteheadi* and includes locomotion, social behavior, habitat

and occurrence, territory, food, nesting hole, nest construction, copulation, incubation, and care of the young.—W. J. B.

Mebs, T. 1960. Untersuchungen über den Rhythmus der Schwingen- und Schwanzmauser bei grossen Falken. J. f. Ornith., **101:** 175–194.—Describes the pattern of molt of the wing and tail feathers in the large falcons. The primaries always began with the fourth feather and the secondaries with the fifth, while the tail feathers began with the first (middle) feather. The sequence of molt was not exactly the same in all species.—W. J. B.

Nagata, Y. 1961. Observations of the breeding of Great Black Woodpecker. Tori, **16:** 360–361.—Observations at a nest of *Dryocopus martius* in Hokkaido, with emphasis on feeding of the young. Well illustrated with photographs. In Japanese with English captions and summary.—K. C. P.

Novaes, F. C. 1961. Distribução e differenciação geográfica de "Automolus leucophthalmus" (Wied) e "Automolus infuscatus" (Sclater) (Furnariidae, Aves). Rev. Bras. Biol., **21:** 179–192.—Geographic distribution and variation in Brazil of two allied and apparently allopatric species of foliage-gleaners. Data on ecology and nesting. In Portuguese; English summary.—E. E.

Pitman, C. R. S. 1962. More snake and lizard predators of birds. Bull. Brit. Ornith. Club, **82:** 33–40.—Adds data from all over the world (but chiefly Africa) to material in previous papers in the same journal (1958).—E. E.

Pontius, H. 1960. Beobachtungen zur Brutbiologie von Winter- und Sommergoldhähnchen. J. f. Ornith., **101:** 129–140.—Observations on the breeding biology of kinglets based on one nest of *Regulus regulus* and four nests of *R. ignicapillus*. Most of the paper concerns the latter species in which behavior before nest construction, nest construction, position of the nest, incubation, care of the young, and behavior when the nest is disturbed are included.—W. J. B.

Portenko, L. A. 1959. Studien an einigen seltenen Limicolen aus dem nördlichen und östlichen Sibirien. II. Der Sichelstrandläufer—*Erolia ferruginea* (Pontopp.). J. f. Ornith., **100:** 141–172.—Covers the distribution, migration, nesting, courtship, care of the young, feeding, plumages, and molting of the Curlew Sandpiper.—W. J. B.

Williamson, K. 1961. Sequence of post-nuptial moult in the Starling. Bird Migration, **2:** 43–45.—Based on *Sturnus vulgaris* trapped on Fair Isle, Shetlands, between early July and late October. Molt of primaries occupies about three weeks; head and throat are the last to change. Fledglings just out of the nest appear to be polymorphic.—E. E.

Yuasa, S. 1961. A seasonal observation of the Bull-headed Shrike's "larders." Tori, **16:** 328–340.—Larders of *Lanius bucephalus* were examined in March and May. Analyzes plants used as larders, size and seasonal abundance of victims. Shrikes may even impale their own pellets or chick's droppings. In Japanese with English summary.—K. C. P.

Management and Conservation

Geyr von Schweppenburg, H. F. 1959. Rettet *Larus audouini*! J. f. Ornith., **100:** 237–239.—A discussion of the problems in the protection of the Audouin's Gull and a plea for action.—W. J. B.

Hickey, J. J. 1961. Some effects of insecticides on terrestrial birdlife in the Middle West. Wils. Bull., **73:** 398–424.—The effect on birds of several different kinds of insecticide programs is evaluated. The effect cannot always be clearly determined. Needed are certain research programs, more emphasis on the biological control of

pests, and the development of policies regarding the use of insecticides. There is a long bibliography.—J. T. T.

Migration and Orientation

Bateson, P. P. G., and I. C. T. Nisbet. 1961. Autumn migration in Greece. Ibis, **103a:** 503–516.—This report is based on studies conducted in August and September 1960, in several parts of Greece. Moon watching revealed some movements not previously documented. Visible migration and survey of resting night migrants formed additional bases for discussion of movements of individual species, habitat preferences of resting migrants, autumn changes in habitat, and migration dates of passerines.—J. W. H.

Haartman, L. v. 1960. The Orstreue of the Pied Flycatcher. Proc. XII Int. Ornith. Congr., pp. 266–273.—Data from 10 studies in different parts of Europe confirm the author's theory, proposed in 1949, that females are less faithful to the home range in northern areas. The author suggests that this results from rarity of "vagrant" individuals in the southern populations.—M. D. F. U.

Holgersen, H. 1960. Wanderungen und Winterquartiere der Spitzbergen Kurzschnabelgänse. Proc. XII Int. Ornith. Congr., pp. 310–316.—Analysis of banding recoveries outlines the migration routes of Pinkfooted Geese that breed in Spitzbergen and winter on the coasts of N. Germany and Holland. This population is quite distinct from that breeding in Greenland-Iceland, which winters in the British Isles. Possibly different migration routes are followed in spring and fall.—M. D. F. U.

Holgersen, H. 1961. Über die Wanderungen der norwegischen Dreizehenmöwen. *Rissa tridactyla* (L.). Vogelwarte, **21:** 118–122.—Norwegian ringed Kittiwakes recovered chiefly in western Greenland and Newfoundland.—E. E.

Ishizawa, J. 1961. On the migration of *Erithacus sibilans*. Tori, **16:** 362–366.—Analysis of status of Swinhoe's Red-tailed Robin in Japan, where it is a rare spring transient. In Japanese with English summary.—K. C. P.

Kuroda, N. 1961. The over-sea crossings of land birds in the western Pacific. Misc. Reports Yamashina's Inst. for Ornith. and Zool., **3:** 47–53.—Of land bird and heron species normally migrating to and through Japan, stragglers frequently reach the Bonin and Volcano islands, with the Marianas being the known southern limit for such stragglers. Those migrating south through the Philippines may straggle east to Palau. A few Asian ducks may reach both the Western and Eastern Carolines, while a few American ducks reach the Marshalls. Although straggling land birds may survive the winter on these outlying islands, there is no evidence for a return spring flight. In English.—K. C. P.

Löhrl, H. 1959. Zur Frage des Zeitpunktes einer Prägung auf die Heimatregion beim Halsbandschnäpper (*Ficedula albicollis*). J. f. Ornith., **100:** 132–140.—The question of whether young birds are true to the region where they are born when they return the next year from their wintering grounds is investigated. Young flycatchers were reared in captivity, and released at varying times before the normal fall migration at a point 90 km south. The birds were taken from nests in one place (Schorndorf), reared in another place (Ludwigsburg), and released in a third spot (Sigmaringen). A significant number returned the next spring to the area where they were released (19 per cent in each of two trials; another trial failed completely, possibly because of the unfavorable habitat of the release area). It is postulated that the important factor may be the bearings taken by the young bird

just as it starts southward in the fall migration; these bearings are used when the bird returns the next spring.—W. J. B.

McLean, I., and K. Williamson. 1961. Migrants at ocean weather-ships, autumn 1960. Bird Migration, **1**: 245–249.

Moreau, R. E. 1961. Problems of Mediterranean–Saharan migration. Ibis, **103a**: 373–427, 580–623.—A large proportion of the insect-eating birds breeding in the Palaearctic Region must cross or circumvent the Mediterranean Sea and cross the Sahara to reach their wintering grounds. The combination of sea and desert makes such a migration an exacting physiological one—perhaps the most arduous performed by a mass of land birds anywhere. The paper deals with the number of birds involved, limits of observational data, geography and ecology, winds (and desert crossing hypotheses), weather, time of day and movements, physiological considerations, individual routes, annual variation in abundance, migration in various geographic sectors, the southern edge of the Sahara, and evidences from bird catching. An annotated section is devoted to the migration of individual species.—J. W. H.

Nisbet, I. C. T. 1961. Studying migration by moon-watching. Bird Migration, **1**: 38–42.

Nisbet, I. C. T., P. R. Evans, and P. P. Feeny. 1961. Migration from Morocco into southwest Spain in relation to weather. Ibis, **103a**: 349–372.—Although Moreau has recently shown that there is a broad front migration north across the Atlas Mountains and the Sahara desert into Europe in the spring, the present authors demonstrate that large numbers of passerine birds often migrate west of the desert. Along the coast of Morocco winds often blow from the east, resulting in heavy migration west of the Straits of Gibraltar (over a wide stretch of open sea). In the absence of east winds, migration was heavy in the Straits area.—J. W. H.

Payne, R. B. 1961. Age variation and time of migration of Swainson's and Gray-cheeked thrushes. Wils. Bull., **73**: 384–386.—Many individuals of *Hylocichla ustulata* and *H. minima,* killed at a television tower while migrating at night, were examined for age characteristics: skull ossification and juvenile plumage. Some first-year birds lacked signs of the juvenile plumage.—J. T. T.

Steinbacher, J. 1961. Zur Frage: Landvögel auf Schiffen. Vogelwarte, **21**: 90–93.—Gives instances of many North American birds carried aboard ship a long distance toward Europe.—E. E.

Ulfstrand, S. 1960. Studies in visible migration at Falsterbo Bird Station. Bird Migration, **1**: 183–187.—A brief review of the studies that have been carried out at this famous station in southern Sweden. A list of publications from the station is appended.—F. M.

Wallace, D. I. M. 1961. The case for inland bird observatories. Bird Migration, **1**: 240–244.

Williamson, K. 1961. The concept of "cyclonic approach." Bird Migration, **1**: 235–240.—Birds from Greenland reach the northern British Isles on a circular downwind track on the periphery of a low pressure area. In mid-September 1960 Greenland Wheatears (*Oenanthe oe. leucorrhoa*), Lapland Buntings [Longspurs] (*Calcarius lapponicus subcalcaratus*), and a few Greater Redpolls (*Carduelis flammea rostrata*) reached Fair Isle, Shetland Islands, and farther south. On the basis of weather maps a circular "cyclonic approach" of 1,500 air miles in about 30 hours is inferred, with an air speed of about 30 mph plus a wind speed of half that amount—a total ground speed of about 45 mph.—E. E.

Williamson, K., and R. Spencer. 1960. Ringing recoveries and the interpretation of bird-movements. Bird Migration, **1**: 176–181.—When certain species are banded in large numbers, analysis of direct recoveries can give information on migratory movements within a season. Recoveries of *Carduelis cannabina, C. carduelis, C. flammea, Chloris chloris, Passer domesticus,* and *Erithacus rubecula* are analyzed in this paper, showing migrations between Britain and the Continent.—F. M.

Physiology

Ishizawa, J. 1961. Measurements of the testes and ovaries of birds, collected in Japan Alps range in summer. Tori, **16**: 355–359.—"The measurements of the testes and ovaries of 21 species, 56 individuals of birds, collected in Japan Alps range during breeding season, are given. The incubation patch was present only in the females in *Prunella rubida* and *P. collaris.*" In Japanese. (Author's summary.)

Koskimies, J. 1961. Fakultative Kältelethargie beim Mauersegler (*Apus apus*) im Späterherbst. Vogelwarte, **21**: 161–166.—The Common Swift showed functional torpidity during cold nights in November in Finland, as indicated by body temperature.—E. E.

Schwartzkopff, J. 1960. Physiologie der höheren Sinne bei Säugern und Vögeln. J. f. Ornith., **101**: 61–91.—An excellent review article on seeing and hearing in both birds and mammals. Covers energy requirements, means of registering light waves and sound vibrations, pattern of stimulation of the retinal cells (hair cells), and compares the different conditions in birds and mammals. An extensive bibliography of eight pages is included.—W. J. B.

Taxonomy and Palaeontology

Blair, C. M. G. 1961. Hybridization of *Corvus albus* and *Corvus edithae* in Ethiopia. Ibis, **103a**: 499–502.—These two corvids seem to hybridize in southeastern Ethiopia where their ranges meet. *C. edithae* and *ruficollis* may be African representatives of the Carrion Crow (*C. corone*) rather than of the Raven (*C. corax*). —J. W. H.

Dickerman, R. W. 1961. A new subspecies of the Pinnated Bittern. Wils. Bull., **73**: 333–335.—*Botaurus pinnatus caribaeus,* new subspecies from Cantemo, Tabasco, Mexico.—J. T. T.

Heller, F. 1960. Der dritte *Archaeopteryx*-Fund aus den Solnhofener Plattenkalken des oberen Malm Frankens. J. f. Ornith., **101**: 7–28.—A short summary of the original description of this third skeleton of *Archaeopteryx.* See *Auk* (1960), **77**: 231–233.—W. J. B.

Johansen, H. 1961. Die Superspecies *Larus canus.* Vogelwarte, **21**: 152–156.—*Larus kamchatkensis* of eastern Siberia and Kamchatka is closer to the Ring-billed Gull, *L. delawarensis,* morphologically, than it is to the Mew Gull, *L. canus.* Most breeding *L. delawarensis* from Alberta and Saskatchewan examined in the Ottawa museum lacked a distinct ring on the bill, and thus show an approach towards *L. canus brachyrhynchus* of western North America. Some interbreeding may possibly occur. —E. E.

Jouanin, C. 1960. Nouvelles recherches sur l'Emeu noir, *Dromaeus Peroni* Rothschild. Proc. XII Int. Ornith. Congr., pp. 363–367.—An historical account of the type specimen of the species.—M. D. F. U.

Kuroda, N. 1961. Avian systematics and problems of species and subspecies (continued: Bibliography). Misc. Reports Yamashina's Inst. for Ornith. and Zool., **3**:

67–82.—A rather miscellaneous bibliography of ca. 435 titles designed to accompany and supplement an earlier survey paper under this title. Many misquotations and misspellings.—K. C. P.

Kuroda, N. 1961. A supposed new form of *Aratinga weddellii* (Deville). Tori, **16:** 366–369.—A pair of paroquets purchased alive in Tokyo in 1959 seem to belong to an undescribed form of *Aratinga weddellii,* differing in color of head, bill, and upperparts. No source other than "South America" is known for these birds. In English with Japanese summary.—K. C. P.

Medway, Lord. 1961. The identity of *Collocalia fuciphaga* (Thunberg). Ibis, **103a:** 625–626.—*"C. fuciphaga fuciphaga"* of current usage (Peters, 1940) is correctly known as *C. salangana salangana,* while *"C. fuciphaga natunae"* Stresemann is correctly known as *C. salangana natunae. C. francica* (Stresemann, 1925) becomes *C. francica fuciphaga.* Characteristics of nests of these forms bear on their correct identification, while their confusion has in part resulted from workers ignoring these characteristics.—J. W. H.

Moreau, R. E. 1960. The Ploceine weavers of the Indian Ocean islands. J. f. Ornith., **101:** 29–49.—Shows that there are two species of both *Ploceus* and *Foudia* on Madagascar, one member of each pair belonging to evergreen forest and the other to drier country. An endemic species of *Foudia* is or was found on most of the islands, and the present establishment of *F. madagascariensis* on many of these islands presents some interesting ecological problems discussed in detail.—W. J. B.

Parkes, K. C. 1961. Taxonomic relationships among the American Redstarts. Wils. Bull., **73:** 374–379.—Evidence is presented indicating that the American Redstart (*Setophaga ruticilla*) should be in a monotypic genus, *Setophaga,* allied to *Dendroica,* while the Painted Redstart (now *S. picta*) should be placed in *Myioborus.*—J. T. T.

Sick, H. 1959. Zur Entdeckung von *Pipra vilasboasi.* J. f. Ornith., **100:** 404–412.—A new species of manakin from the Amazon is described. This species is apparently the only one in which the yellow coloring is glossy. The cap is a glistening golden color. A color plate of this form and several others is included.—W. J. B.

Sick, H. 1959. Ein neuer Sittich aus Brasilien: *Aratinga cactorum paraënsis,* subsp. nova. J. f. Ornith., **100:** 413–416.—A new subspecies of parrot of the genus *Aratinga* is described from Brazil.—W. J. B.

Sick, H. 1960. Zur Systematik und Biologie der Bürzelstelzer (Rhinocryptidae), speziell Brasiliens. J. f. Ornith., **101:** 141–174.—In the first part of the paper, a summary on the morphology, behavior, ecology, and external features of the Tapaculos is presented, with the conclusion that this is a relatively well-defined group separate from the Antbirds (Formicariidae). In the second part, all species of this group found in Brazil are discussed with special reference to material examined, range in Brazil, ecology, and behavior. A new species *Merulaxis stresemanni* is described, and a form of *Scytalopus* discovered in 1957 and tentatively included in *S. indigoticus* is now redefined as a separate species, *S. novacapitalis.*—W. J. B.

Steiner, H. 1960. Klassifikation der Prachtfinken, Spermestidae, auf Grund der Rachenzeichnungen ihrer Nestlinge. J. f. Ornith., **101:** 92–112.—The estrildid finches are classified according to the arrangement of the markings in the mouth of the nestling birds. The group is divided into nine tribes and 33 genera. Steiner clearly indicates the genera and species that belong to each tribe and illustrates the pattern of mouth marking for each group, taking care to include the variation

present within each group. He offers some observations on the position of the Viduinae, which he considers to be a subfamily of the Ploceidae, not related to the estrildids.—W. J. B.

Stresemann, E. 1959. *Buteo albigula,* ein in Südamerika weit verbreiteter Bussard. J. f. Ornith., **100:** 337–340.—Discusses the characteristics and distribution of *B. albigula* and how this species differs from the very similar *B. brachyurus.*—W. J. B.

Stresemann, E. 1960. Über "Vorkolumbische Truthähne" in Ungarn und über das Perlhuhn in der Kulturgeschichte. Zool. Jahrb. (Syst. Ök. and Geog.), **88:** 31–56.—The problem of pre-Columbian turkeys in Hungary is discussed, with the conclusion that the reported remains are probably those of *Numida,* not *Meleagris.* The Guinea fowl (*Numida*) in the culture of Europe from prehistoric times to the present is covered in detail with emphasis on domestication.—W. J. B.

Traylor, M. A. 1962. A new name for *Estrilda astrild angolensis* Reichenow. Bull. Brit. Ornith. Club, **82:** 22.—If *Uraeginthus* is merged in *Estrilda,* the name *angolensis* is preoccupied; *E. a. malanje* is proposed.

Vaurie, C. 1961. Systematic notes on Palearctic birds. No. 44. Falconidae: the genus *Falco* (Part 1, *Falco peregrinus* and *Falco pelegrinoides*). Am. Mus. Novitates, **2035**: 19 pp.—These two falcons are considered conspecific by many authors. Their breeding ranges, however, apparently overlap in several places, and there are morphological and ecological differences between them, so they are here considered two species. Eight palearctic races of *peregrinus* are recognized; Manning's concept of a pale circumpolar race *leucogenys* is rejected. Two races of *pelegrinoides* are accepted.—K. C. P.

Vaurie, C. 1961. Systematic notes on Palearctic birds. No. 45. Falconidae: the genus *Falco* (Part 2). Am. Mus. Novitates, **2038:** 24 pp.—*Falco cherrug,* of which three to six races are recognized by recent authors, has two well-marked races upon which clinal variation is superimposed. Geographic variation in the Gyrfalcon, *F. rusticolus,* cannot adequately be expressed with trinomials, and the large series studied shows a continuous spectrum of colors rather than well-defined "color phases." Vaurie mentions the "somewhat smaller" size of North American birds; it should be placed on record that the apparently smaller Labrador measurements are quoted from Todd and Friedmann (1947. *Wils. Bull.,* **59:** 139–150), who used the chord rather than flattened wing measurement. *F. altaicus* combines certain attributes of *F. cherrug* and *F. rusticolus* but is sympatric with the former, and the three are best considered as separate species. As many as eight races of *F. subbuteo* are accepted by some authors, but only two rather poorly differentiated subspecies seem valid. Six palearctic races of the Merlin, *F. columbarius,* and seven of the Kestrel, *F. tinnunculus,* are admitted.—K. C. P.

Vaurie, C. 1961. Systematic notes on Palearctic birds. No. 46. Accipitridae: the genus *Accipiter.* Am. Mus. Novitates, **2039:** 10 pp.—*A. badius* and *A. brevipes,* considered conspecific by some authors, are morphologically quite distinct and have overlapping breeding ranges without known hybridization. They are therefore considered good species. Six races of *A. nisus* are recognized; one of the most distinctive of these, *melaschistos,* may possibly have reached the species level, as there is inconclusive evidence that it may be sympatric with the race *nisosimilis* in one area. —K. C. P.

Vaurie, C. 1961. Systematic notes on Palearctic birds. No. 47. Accipitridae: the genus *Buteo.* Am. Mus. Novitates, **2042:** 14 pp.—*Buteo buteo* is not considered conspecific with *B. oreophilus* of Africa or *B. brachypterus* of Madagascar (which Vaurie consistently miscalls "*Brachyurus,*" which is the Short-tailed Hawk of the

Americas). *B. vulpinus* and *B. japonicus,* considered separate species by some authors, are well-marked subspecies of *B. buteo,* although intergradation with *japonicus* is not yet established. Two additional races of *B. buteo* are admitted. There are three Old World and one New World subspecies of *B. lagopus*; the situation in Alaska needs clarification, but *kamtschatkensis* may well extend eastward across the Bering Sea via the Aleutians.—K. C. P.

Vaurie, C. 1961. Systematic notes on Palearctic birds. No. 48. Columbidae: the genus *Columba.* Am. Mus. Novitates, **2043:** 12 pp.—Geographic variation in *C. palumbus* is reviewed, and five races admitted. *C. rupestris* and *C. livia* differ in voice and tail pattern, and are sympatric; they are thus good species. The 11 palearctic races of *C. livia* recognized by Peters are reduced to seven; the highly variable, predominantly melanistic populations of the Azores and Cape Verde islands are believed to be descended from introduced birds.—K. C. P.

Vaurie, C. 1961. Systematic notes on Palearctic birds. No. 49. Columbidae: the genus *Streptopelia.* Am. Mus. Novitates, **2058:** 25 pp.—The domestic Ring Dove is believed to be derived from *S. roseogrisea,* not *S. decaocto*; the latter two, although allopatric, are considered full species, with two valid races each. Another species pair whose distinctness is confirmed is *S. turtur* (five races) and *S. orientalis* (also five races). Seven races of *S. senegalensis* are admitted.—K. C. P.

White, C. M. N. 1962. Notes on the taxonomy of the Indigo Birds. Bull. Brit. Ornith. Club, **82:** 22–26.—African weavers of the genus or subgenus *Hypochera,* often included in *Vidua.*

Williamson, K. 1960. Moult as a study in field taxonomy. Bird Migration, **1:** 171–175.—Banders can contribute greatly to the study of molt, and much of the information available on the subject, derived from the study of museum specimens, requires further investigation in live birds. An enquiry is being launched by the British Trust for Ornithology.—F. M.

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