

## RECENT LITERATURE

EDITED BY GLEN E. WOOLFENDEN

### ANATOMY AND EMBRYOLOGY

- DANILOV, N. N. 1964. [The use of pneumatization of the cranium in age determination of some passeriform birds.] Pp. 175-181 in *Prirodnye resursi Volzhske-Kamskogo kraya* [Natural resources of the Volga-Kama area]. Nauka-Press, An SSSR, Moscow.—Progressive pneumatization of the skull studied in over 1,000 House and Tree sparrows, and Great and Willow tits. The proportions of adults and immatures in certain populations are calculated on the basis of this character. (In Russian.)—F.J.T.
- FRIEDMANN, H. 1963. Morphological data on two sibling species of small honeyguides. *Los Angeles Co. Mus. Sci. Ser.*, no. 79: 1-5.—Skeletal differences between *Indicator exilis* and *I. pumilio* uphold the distinctness of the two, but seem unlikely to serve as isolating mechanisms.—H.F.
- GRABER, R. R., AND J. W. GRABER. 1965. Variation in avian brain weights with special reference to age. *Condor*, **67**: 300-318.
- MARKUS, M. B. 1965. Mandible of the Cape Sparrow. *S. African J. Sci.*, **61**: 207.—Description of lower jaw of *Passer melanurus*.—M.A.T.
- NEKRASEV, B. V. 1964. [Functional and morphological outline of the jaws of some Fringillidae. Part II.] Pp. 134-170 in *Prirodnye resursi Volzhske-Kamskogo kraya* [Natural resources of the Volga-Kama area]. Nauka-Press, An SSSR, Moscow.—Part I published in 1958 in *Izvestiya Kazan. Fil. An SSSR, Zool.*, vol. 6. Part II deals with the functional morphology of the jaws of species of *Carduelis*, *Chloris*, *Coccothraustes*, *Pyrrhula*, *Erythrina*, *Pinicola*, and *Loxia*. Illustrated. (In Russian.)—F.J.T.
- ROSEBERRY, J. L., AND W. D. KLIMSTRA. 1965. A guide to age determination of Bobwhite quail embryos. *Illinois Nat. Hist. Surv. Biol. Note*, no. 55: 1-4.—Daily photographs and descriptions.—R.B.
- SUTHERLAND, C. A., AND D. S. MCCHESENEY. 1965. Sound production in two species of geese. *The Living Bird*, **4**: 99-106.—Frequencies produced by tympaniform membranes vary with tension, thickness, and width. The rate of vibration is essentially independent of length or volume of the trachea. Length, diameter, and tissue hardness of trachea contribute to resonant frequencies. The syringeo-tracheal system functions like an open (trumpet) pipe. (From authors' conclusions.)—G.E.W.

### BEHAVIOR

- BOYD, H., AND E. FABRICIUS. 1965. Observations on the incidence of following of visual and auditory stimuli in naive Mallard ducklings (*Anas platyrhynchos*). *Behaviour*, **25**: 1-15.—The first 10 days of life compose a sensitive period in which the first "following" response can be elicited. If ducklings are given only silent moving models, "following" decreases from 58 per cent at 10-20 hours to 17 per cent at 240 hours, while avoidance increases accordingly. "Following" response to auditory stimulus showed a steep initial rise to 85 per cent at 40-50 hours, followed by a final but not severe decrease. Ducklings which had not initially followed silent models could be induced to do so by addition of auditory stimuli. Some ducklings displayed aggression or pumping head movements (like pre-copulatory display) toward moving models. Adaptive value of long responsiveness to stimuli past the

- critical period is discussed. In older ducklings escape tendencies depress "following" response to silent moving models; thus, the curve of response to auditory stimuli is perhaps a more reliable indication of following tendency. Sources of error in previous work are discussed.—J.W.H.
- DIXON, K. L. 1965. Dominance-subordination relationships in Mountain Chickadees. *Condor*, **67**: 291-299.
- ELLIOTT, B. G., AND J. DAVIS. 1965. Allopreening in the Gray-barred Wren. *Condor*, **67**: 352.
- HARRISON, C. J. O. 1965. Allopreening as agonistic behaviour. *Behaviour*, **24**: 161-209.—The term allopreening avoids the ambiguity of the term mutual preening. Information is presented for 41 families of birds. Allopreening is closely allied to aggressive behavior. In many species, attack may give way to allopreening. Allopreening does not seem to be functional preening.—J.W.H.
- HOGAN, J. A. 1965. An experimental study of conflict and fear: an analysis of behavior of young chicks toward a mealworm. Part I. The behavior of chicks which do not eat the mealworm. *Behaviour*, **25**: 45-97.—Examines the hypothesis that the behavior a young chick shows toward a mealworm results from the simultaneous arousal of tendencies to approach the mealworm to peck it and to withdraw because of fear. "Escape" as used by some ethologists and "fear" as used by some American psychologists may not constitute unitary drive systems.—J.W.H.
- HOLCOMB, L. C. 1965. Long nest attentiveness for a Cardinal. *Condor*, **67**: 359.
- HORWICH, R. H. 1965. An ontogeny of wing-flashing in the Mockingbird with reference to other behaviors. *Wilson Bull.*, **77**: 264-281.
- KRAUSE, H. 1965. Nesting of a pair of Canada Warblers. *The Living Bird*, **4**: 5-11.—Observations at one nest of *Wilsonia canadensis* in Michigan. Incubation was by the female. The male sang without "let-up" from nearby and visited the nest nine times where he offered food to the eggs.—G.E.W.
- LILL, A., AND D. G. M. WOOD-GUSH. 1965. Potential ethological isolating mechanisms and assortative mating in the domestic fowl. *Behaviour*, **25**: 16-44.—In several strains of domestic fowl, choices of mates seemed to be based upon visual clues of plumage rather than behavioral stimuli.—J.W.H.
- McKINNEY, F. 1965. The comfort movements of Anatidae. *Behaviour*, **25**: 120-220.—The work is based on observations of 114 species, representing all tribes except the torrent ducks. An exhaustive report which should settle the problem of comfort movements in ducks.—J.W.H.
- McKINNEY, F. 1965. The spring behavior of wild Steller Eiders. *Condor*, **67**: 273-290.
- NICE, M. M. 1965. Displays and songs of a hand-raised Eastern Meadowlark. *The Living Bird*, **4**: 161-172.—A male *Sturnella magna* hand-raised from the age of about 10 days, and imprinted on humans, exhibited various territorial and courtship displays. Song is learned and the repertoire increased for up to five years.—G.E.W.
- RISING, J. D. 1965. Notes on behavioral responses of the Blue-throated Hummingbird. *Condor*, **67**: 352-354.
- TURNER, E. R. A. 1964. Social feeding in birds. *Behaviour*, **24**: 1-46.—In a study of the roles of sociality in feeding behavior in captive Chaffinches and House Sparrows, feeding birds were more attractive than non-feeding ones to others of their own species. House Sparrows and Chaffinches attracted each other. Feeding birds attracted others which fed (social facilitation), especially when the actor's and reactor's foods were close together (local enhancement). Juveniles were less

wary and more exploratory. Social facilitation and local enhancement have been derived from an innate response to moving objects. Predator-prey relationships, impact on cryptic and aposomatic prey, and selection and location of a balanced diet may be affected by social feeding.—J.W.H.

VERNER, J. 1965. Flight behavior of the Red-footed Booby. *Wilson Bull.*, **77**: 229-234.

#### DISEASES AND PARASITES

ABLASOV, N. A., AND N. T. CHIBCHENKO. 1962. [Helminth fauna of otidiform birds in the Kirgiz S.S.R.] *Izvestiya Akad. Nauk Kirgizskoi SSR. Ser. Biol. Nauk*, **4**(5): 115-116.—Five nematode, four cestode, and one trematode species are recorded from *Otis tetrax* and *O. tarda*. (In Russian; from *Helminthol. Abstr.*, **34**: no. 776, 1965.)—J.S.M.

ABLASOV, N. A., AND N. T. CHIBCHENKO. 1962. [Nematode fauna of wild birds in the Kirgiz S.S.R.] *Izvestiya Akad. Nauk Kirgizskoi SSR. Ser. Biol. Nauk*, **4**: 113-130.—Reports 70 nematode species from 1,292 birds of 156 species. (German summary; from *Helminthol. Abstr.*, **34**: no. 1446, 1965.)—J.S.M.

BEVERLEY-BURTON, M. 1964. Studies on the cestoda of British freshwater birds. *Proc. Zool. Soc. London*, **142**: 307-346.—Redescriptions are given for 25 cestode species (12 genera) from 209 birds of 13 species. (From *Helminthol. Abstr.*, **34**: no. 1408, 1965.)—J.S.M.

BROCK, E. VAN DEN, AND J. JANSEN, JR. 1964. Parasites of animals in the Netherlands. Supplement I: Parasites of wild birds. *Ardea. Wageningen*, **52**: 111-116.—Helminths of 32 species and ectoparasites of 20 species of birds are listed. Helminths include 19 trematode, 12 cestode, 10 nematode, and 4 acanthocephalan species. (From *Helminthol. Abstr.*, **34**: no. 779, 1965.)—J.S.M.

FEIZULLAEV, N. A. 1962. [Fauna and ecology of trematodes of wading birds in the Lenkoran area and the Kura-Araks lowlands of the Azerbaidzhan S.S.R.] *Izvestiya Akad. Nauk Azerb. SSR. Ser. Biol. i Medic. Nauk*, no. **2**: 45-58.—Of 327 birds (14 species), 181 were infected with 33 species of trematodes. "The trematode fauna's seasonal variation, zoogeographical character and dependence on the diet and migration of the host are discussed." (In Russian; from *Helminthol. Abstr.*, **34**: no. 780, 1965.)—J.S.M.

GERSHMAN, M., J. F. WITTER, H. E. SPENCER, JR., AND A. KALVAITIS. 1964. Case report: epizootic of fowl cholera in the Common Eider duck. *J. Wildl. Mgmt.*, **28**: 587-589.—More than 200 eiders died on the Maine coast in this first recorded epizootic of fowl cholera among wild waterfowl in eastern United States.—J.P.R.

GILBERTSON, D. E., AND E. J. HUGHINS. 1964. Helminth infections in pheasants from Brown County, South Dakota. *J. Wildl. Mgmt.*, **28**: 543-546.—The cecal worm *Heterakis gallinarum* occurred in 35 per cent of 262 wild pheasants. It was most common in adults and occurred throughout the year. Tapeworms were found in 15 birds and intestinal nematodes in one.—J.P.R.

HOLMES, J. C., AND D. A. BOAG. 1965. Parasites of the mountain grouse of Alberta, Canada. *Wiad. Parasitol.*, **XI**, Suppl.: 255-256.—Helminths and haemoparasites are reported from 85 *Dendragapus obscurus*, 56 *Bonasa umbellus*, and 20 *Canachites canadensis*. Peak helminth infections in adults were in May or June and in juveniles, in July or August.—J.S.M.

IKSANOV, K. I., AND L. K. DIKAMBAEVA. 1962. [Nematode infections of fish-eating birds in the Kirgiz S.S.R.] *Izvestiya Akad. Nauk Kirgizskoi SSR. Ser. Biol. Nauk*,

- 4(4): 131-137.—Reports 15 nematode species from 113 birds of 12 species including 33 *Larus ridibundus*, 9 *Sterna hirundo*, 38 *Podiceps cristatus*, and 18 *P. caspicus*. (In Russian; from Helminthol. Abstr., **34**: no. 784, 1965.)—J.S.M.
- LOCKE, L. N. 1965. Additional records of aspergillosis among passerine birds in Maryland and the Washington, D. C. metropolitan area. Chesapeake Sci., **6**: 120-121.—Four cowbirds, two House Sparrows.—H.B.
- RYŠAVÝ, B. 1961. Tasemnice vodního ptactva z rybniční oblasti jižních Čech. I. Hymenolepididae Fuhrmann 1907. Česk. Parasitol., **8**: 325-363.—Reports 33 species of hymenolepids from 342 aquatic birds of 20 species, from southern Bohemia. (German summary; from Helminthol. Abstr., **34**: no. 1424, 1965.)—J.S.M.
- RYŠAVÝ, B. 1962. Tasemnice vodního ptactva z rybniční oblasti jižních Čech. II. Diphyllbothriidae Lühe 1910, Dilepididae Fuhrmann 1907, Amabiliidae Fuhrmann 1908 a Tetrabothriidae Linton 1891. Česk. Parasitol., **9**: 365-374.—Reports 13 species of cestodes of four families from 359 water birds of 21 species, from southern Bohemia. (German summary; from Helminthol. Abstr., **34**: no. 1425, 1965.)—J.S.M.
- SALLOV, C. I. 1962. [Helminths of fish-eating birds in the Kyzyl-Agach Preserve and their ecology.] Trudi Azerbaidzhan. Gos. Ped. Inst., **21**: 149-163. (In Russian.)—J.S.M.

## DISTRIBUTION AND ANNOTATED LISTS

- AIKMAN, E. F. 1965. Some observations of land birds—the Black Sea, 1964. Sea Swallow, **17**(1964): 83-84.—Total of 24 species identified, Istanbul to Odessa and return, 15-17 May.—W.B.R.
- AUSTIN, G. T., AND W. G. BRADLEY. 1965. Bird records from southern Nevada. Condor, **67**: 445-446.
- BAILEY, R. S. 1965. Cruise of R.R.S. Discovery in the Indian Ocean. Sea Swallow, **17**(1964): 52-56.—Brief narrative (to be reported in more detail) of sea birds encountered on three oceanographic cruises in the western Indian Ocean in 1964. The effect of seasonal shifts of areas of upwelling on sea bird distribution is emphasized.—W.B.R.
- BAIRD, J. 1965. Oregon Juncos collected in Massachusetts. Condor, **67**: 358-359.
- BENSON, C. W., AND M. P. STUART IRWIN. 1965. Some east-west distributional gaps in birds of evergreen forest in south-central Africa. Proc. Central African Sci. Med. Congr.: 309-320.—“Some birds of a close common origin, associated with evergreen forest . . . show a marked distributional gap. In some cases the populations . . . are so distinct as to be usually regarded as representing distinct species. It is postulated that in each case the gap originated in a drier epoch.” (Authors’ summary.)—M.A.T.
- BOURNE, W. R. P. 1965. Observations of sea birds. Sea Swallow, **17**(1964): 10-39.—Combines a summary of 1963 reports by members of the Royal Naval Bird Watching Society with a useful review of current literature on sea birds.—W.B.R.
- BUSSE, P. 1963. [*Junco hyemalis* L., a new bird on the Polish list.] Notatki Ornitologiczne, **4**: 37-38.—A female Slate-colored Junco collected on Hel peninsula on the southeastern shore of the Baltic (54° 46' N, 18° 28' E) on 4 May 1963 may be the first authentic specimen of *Junco* from Europe. (In Polish; English summary.)—M.D.F.U.
- CARDIFF, E. A. 1965. A southern extension of the breeding range of the Vesper Sparrow in California. Condor, **67**: 445.

- CLANCEY, P. A. 1965. A catalogue of birds of the South African sub-region. (Part I: Families Spheniscidae—Burhinidae). Durban Mus. Novit., **7**: 201–304.—Part I of a careful, detailed, and much-needed checklist of African birds from south of the Cunene and Zambesi rivers.—M.A.T.
- DONAGHO, W. R. 1965. The Starling in Guanajuato, México. Condor, **67**: 447.
- EASTERLA, D. A. 1965. The Pine Warbler in Kansas. Condor, **67**: 444–445.
- EASTERLA, D. A. 1965. Range extension of the Fish Crow in Missouri. Wilson Bull., **77**: 297–298.
- FISHER, H. I. 1965. Bird records from Midway Atoll, Pacific Ocean. Condor, **67**: 355–357.
- FRIEDMANN, H., AND K. E. STAGER. 1964. Results of the 1964 Cheney Tanganyikan Expedition, Ornithology. Los Angeles Co. Mus. Sci. Ser., no. **84**: 1–50.—Records 43 species of birds from the Ukaguru Mts. (only 7 species previously collected there by one itinerant naturalist) and adds 9 to the known avifauna of the Ukaguru Mts.—H.F.
- HALL, G. A. 1965. Additional records for the Stolid Flycatcher on St. John, Virgin Islands. Condor, **67**: 444.
- HALLMAN, R. C. 1965. Crane reports from Bay County. Florida Nat., **38**: 106.—Observations of Sandhill Cranes at Mexico Beach in Florida in 1953 and 1954.—E.E.
- HARRISON, P. P. O. 1965. Twenty-six thousand square miles of birdwatching. Sea Swallow, **17**(1964): 73–75.—Sea birds seen from a tanker, Kuwait to New Zealand and return, May–July, 1964. The area is calculated from 8,700 miles sailed by day times an effective observation width of 3 miles.—W.B.R.
- HUBBARD, J. P. 1965. The summer birds of the forests of the Mogollon Mountains, New Mexico. Condor, **67**: 404–415.
- JONES, M. E. 1965. Birds seen during a voyage from Balboa to Japan and the east coast of Malaya. Sea Swallow, **17**(1964): 66–72.—Daily log of observations with extended comment by W. R. P. Bourne.—W.B.R.
- LANYON, W. E. 1965. Correction of erroneous records of the Ash-throated Flycatcher for northern Guatemala and Yucatán, México. Condor, **67**: 354.
- LONG, P., AND F. E. POYSER. 1965. A record of the Groove-billed Ani in southern Nevada. Condor, **67**: 357–358.
- MCCASKIE, G., AND R. E. PRATHER. 1965. The Curve-billed Thrasher in California. Condor, **67**: 443–444.
- MENZIES, R. G. 1965. Bird notes from a submarine at the Arctic ice edge. Sea Swallow, **17**(1964): 80.—Birds seen, mainly north of Jan Mayen in February–March, 1964, included one (probably a Dovekie) swimming underwater beneath 10 feet of pack ice observed through the periscope.—W.B.R.
- MUNYER, E. A. 1965. Inland wanderings of the Ancient Murrelet. Wilson Bull., **77**: 235–242.
- NORTHERN, J. R. 1965. Notes on the owls of the Tres Mariás Islands, Nayarit, México. Condor, **67**: 358.
- NOWAK, J. H., AND G. MONSON. 1965. Black Brant summering at Salton Sea. Condor, **67**: 357.
- OLROG, C. C. 1963. Notas sobre aves Bolivianas. Acta Zool. Lilloana, **19**: 407–478.—Notes on birds collected in three areas (Cochabamba, Santa Cruz, and El Beni) in Bolivia in 1959 and 1960; 15 forms are added to the recorded Bolivian avifauna. Measurements, gonadal information, and habitat data, are added to the taxonomic notes. (In Spanish; brief English summary.)—E.E.
- OLSON, M. A. 1965. Ruff (*Philomachus pugnax*) found in Bay County. Florida Nat.,

- 38:** 106.—Observed 8–12 March 1965 at Panama City, Florida, in association with Lesser Yellowlegs.—E.E.
- PEAKALL, D. B. 1965. The status of the Ruff in North America. *Wilson Bull.*, **77**: 294–296.
- SALES, V. A. D. 1965. Terns on Khubbar Island, Persian Gulf—1958/59. *Sea Swallow*, **17**(1964): 81–82.—On 11 July 1958, about 2,000 Bridled Terns (*Sterna anaethetus*), 1,000 White-cheeked Terns (*S. repressa*), and 300 Caspian Terns (*Hydroprogne caspia*) were breeding on this island 16 miles east of Kuwait. Seasonal occurrence of 12 species of gulls and terns at Kuwait is noted briefly.—W.B.R.
- SUDILOVSKAYA, A. M. 1964. [On some interesting ornithological gains of last year to the Dept. of Ornith. of the Zool. Mus. of Moscow Univ.] Pp. 203–213 in *Investig. in the fauna of USSR, Birds. Arch. du Mus. Zool. de l'Univ. de Moscou*, **IX**.—Zoogeographical information on 48 birds mainly from the far east in U.S.S.R.—F.J.T.
- WAUER, R. H. 1965. Wintering Rufous-crowned Sparrows found in Utah. *Condor*, **67**: 447.
- WEIGLEY, I. 1965. 101 Fulvous Tree Ducks (*Dendrocygna bicolor*). *Florida Nat.*, **38:** 105.—Noted 25 April 1965 on Merritt Island, Florida; a high count for this western species that seems to be extending its range eastward.—E.E.

## ECOLOGY AND POPULATION

- HAVLIN, J. 1962. Zur Kenntnis der Neststandansprüche der Stockente (*Anas platyrhynchos*). *Vorträge der II. Konf. der Tschechosl. Ornith. Gesellsch. in Prag*, **1962**: 89–95.—An analysis of the habitat and site of 482 Mallard nests in Czechoslovakia. The majority of nests were on lakes, with some in habitats created by spring floods along the rivers. Dry nest sites and, secondly, tree sites were preferred. Total mortality in the observed nests during incubation amounted to 34 per cent of the clutches, caused mainly by predators and human disturbance. (In Czech and German.)—M.D.F.U.
- HILLBRICHT-ILKOWSKA, A., E. PROT, AND I. SPODNIEWSKA. 1964. Polish ecological bibliography for 1961. *Inst. Ecol. Polish Acad. Sci. Warsaw*, 383 pp.—A 365 page issue covering 1962 was published in 1965. In 1961, 32 papers containing information on birds were published; in 1962 there were 29.—M.D.F.U.
- HISSA, R. 1964. [Censuses of the nesting birds of the island Lappören in Björkö, W. Finland.] *Ornis Fennica*, **41**: 69–81.—Densities of birds on an 8.5 sq. km forested Baltic island were figured for 1957, 1959, and 1961. The number of pairs per sq. km in birch-dominated mixed forests fluctuated between 202 and 306; in spruce-dominated forests between 194 and 259; in groves between 645 and 850; and in pure spruce stands between 124 and 186. This shows a gradient in productivity from uniform and closed conifer stands (poorest) to mixed groves and copses, with marked edge effect. High densities of raptors and certain southern elements of the avifauna are also discussed. (In English; Finnish summary.)—M.D.F.U.
- KALE, H. W., II, G. W. SCIPLE, AND I. R. TOMKINS. 1965. The Royal Tern colony of Little Egg Island, Georgia. *Bird-Banding*, **36**: 21–27.—The only nesting place for Royal Terns in Georgia and the southernmost colony on the Atlantic coast portion of the species' range. Breeding is sporadic and success is low.—G.E.W.
- LEINONEN, M. 1964. Über die quantitativen Verhältnisse der Vogelfauna in einigen oligo- und eutrophen Seen in der Gegend von Mänttä. *Ornis Fennica*, **41**: 49–56.—Census results of the three waters for two summers are tabulated, and the differ-

- ences in waterfowl numbers of the two lake types are discussed. (In Finnish; German summary.)—M.D.F.U.
- SCHMIDT, E. 1963. Vogelzöologische Untersuchungen in den Bergen um Buda (I. Budakeszi). *Acta Zoologica*, **9**: 373-390.—A discussion of the habitat and feeding relationships of land birds of the grassland, shrubbery, and coppice patches which grow in and on the side of drainage dykes in central Hungary. This mosaic of edge habitats has a particularly rich avifauna; many species that do not nest there utilize the water. (In German.)—M.D.F.U.
- SCHMIDT, E. 1964. Vogelzöologische Untersuchungen in den Bergen um Buda (II. Solymar). *Ekologia Polska*, **7**: 597-614.—This two-year study on land birds of a drainage dyke in central Hungary included biweekly censuses. Peak values of abundance were found in the fall. Average abundances differed markedly for the two years. (In German; Polish summary.)—M.D.F.U.
- SCHMIDT, E. 1964. Untersuchungen an einigen Holunder fressenden Singvögeln in Ungarn. *Zool. Abhandl. Staatl. Mus. Tierkunde Dresden*, **27**: 1-28.—Comparisons of weight conditions of thrushes and sylviids and amount of berries ripening and consumed. Elderberries fatten insectivorous birds prior to or in migration. A surplus of berries usually remains after the birds depart, although Starlings occasionally deplete the supply in late fall. (In German.)—M.D.F.U.
- SHORT, L. L., JR., AND R. C. BANKS. 1965. Notes on birds of northwestern Baja California. *Trans. San Diego Soc. Nat. Hist.*, **14**: 41-52.—Species observed and specimens taken in upland desert east of San Quintin, Baja California. Breeding avifauna consisted of riparian and desert species. Presence of desert birds and plants indicates Sonoran Desert extends farther north than usually mapped.—C.F.S.
- SIVONEN, L. 1963. Die Schneemenge als überwinterungsökologischer Faktor. *Proc. Finnish Acad. Sci. and Lett.*, **1962**: 111-125.—The Hungarian Partridge lays smaller clutches and has higher egg and chick mortality after the vicissitudes of a snowy winter. If snow covers the ground before grouse can renew their partially worn stomach grit, they starve amidst sufficient food. Snow cover in early spring is detrimental to grouse reproduction since energy for egg production is needed then. (In German.)—M.D.F.U.
- SUKACHEV, V. N., AND N. B. DYLLIS. 1964. [Fundamentals of forest biocenology.] Nauka Publ. House, Moscow, 574 pp.—An important work in forest biocenology. The role of animals in the ecosystem is treated by Dinesman. Price Rup. 3.—79 Kop.—F.J.T.
- TURČEK, F. J. 1965. [The role of animals in baring and soil erosion on karst-land.] *Acta. Zool. Acad. Sci. Hungary*, **XI**: 203-215.—Birds perform mainly anti-erosional activities, such as distributing plants and feeding on certain fossorial mammals and herbivorous insects.—F.J.T.

## EVOLUTION AND GENETICS

- HAMILTON, W. J., III, AND G. H. ORIANI. 1965. Evolution of brood parasitism in altricial birds. *Condor*, **67**: 361-382.
- HARDY, J. W., AND R. W. DICKERMAN. 1965. Relationships between two forms of the Red-winged Blackbird in Mexico. *The Living Bird*, **4**: 107-129.—*Agelaius phoeniceus grandis* and *A. p. gubernator* are in secondary contact in two areas in Mexico. Apparently *grandis* recently invaded *gubernator* range in the Valley of Toluca and here the two forms are nesting in separate portions of the marsh with a hiatus, formed perhaps by competitive exclusion. The same two forms also breed

- in the area from Laguna Rosario to Apizaco-Tlaxcala where they form a hybrid swarm. Here, as opposed to other areas, the songs are intermediate and intermediate plumage types are represented.—G.E.W.
- KURODA, N. 1964. Description of a colour mutation appearing in an adult *Agapornis roseicollis* in captivity. *Zool. Mag.*, **73**: 215–216.
- PARKES, K. C. 1956. Character displacement in some Philippine cuckoos. *The Living Bird*, **4**: 88–98.—*Centropus viridis*, an endemic species, arose from an early invasion of *C. sinensis*. *C. bengalensis* arrived later and evolved the subspecies *C. b. molkenboeri* which is unlike *viridis*. The plumage differences may be associated with courtship displays. A hybrid between the two species from northern Luzon is described.—G.E.W.
- SHORT, L. L., JR., AND T. D. BURLEIGH. 1965. An intergeneric hybrid flycatcher (*Contopus* × *Empidonax*) from Idaho. *Proc. Biol. Soc. Wash.*, **78**: 33–37.
- SHORT, L. L., JR., AND S. W. SIMON. 1965. Additional hybrids of the Slate-colored Junco and the White-throated Sparrow. *Condor*, **67**: 438–442.
- STORER, R. W. 1965. The color phases of the Western Grebe. *The Living Bird*, **4**: 59–63.—*Aechmophorus occidentalis* has two adult color phases, mainly differing in the amount of white on the face and the color of the bill. Individuals show a strong tendency to mate with birds of like phase. Suggested research includes study of downys to see if color phases exist and study of relationships between color phases of adults and their young. The proportions between the color phases of different breeding demes vary, and could be used to study sources of wintering birds.—G.E.W.

## GENERAL BIOLOGY

- ALLSOPP, E., AND K. ALLSOPP. 1965. Night Herons swimming. *Brit. Birds*, **58**: 297.
- ALVAREZ DEL TORO, M. 1965. The nesting of the Belted Flycatcher. *Condor*, **67**: 339–343.
- ANDERSON, A. H., AND A. ANDERSON. 1965. The Cactus Wrens on the Santa Rita Experimental Range, Arizona. *Condor*, **67**: 344–351.
- BALDA, R. P. 1965. Loggerhead Shrike kills Mourning Dove. *Condor*, **67**: 359.
- BOLANDER, G. L., AND J. R. ARNOLD. 1965. An abundance of White-tailed Kites in Sonoma County, California. *Condor*, **67**: 446.
- BOWMAN, R. I., AND S. L. BILLEB. 1965. Blood-eating in a Galápagos finch. *The Living Bird*, **4**: 29–44.—*Geospiza difficilis* of Wenman Island, Galápagos Archipelago, bites the skin of *Sula dactylatra* and *S. sula*, usually near the base of the secondaries at the elbow, causing bleeding. The finch uses the blood as a primary food source. This parasitism may have arisen from a mutualistic relationship where the finch fed on the abundant hippoboscids. Profusely illustrated.—G.E.W.
- CHAMBERLAIN, D. R. 1965. Common Crow catching European Chafer on the wing. *Wilson Bull.*, **77**: 296.
- GARANIN, V. I. 1964. [On the role of amphibians in the life of birds.] Pp. 112–126 in *Prirodnye resursi Volzhskoe-Kamskogo kraya* [Natural resources of the Volga-Kaura area]. Nauka-Press, AN SSSR, Moscow.—Surveys the literature and reports personal research on amphibians as food items for birds. (In Russian.)—F.J.T.
- HATCH, J. J. 1965. Only one species of Galápagos mockingbird feeds on eggs. *Condor*, **67**: 354–355.
- HELMINEN, M. 1963. Composition of the Finnish populations of Capercaillie, *Tetrao*



- urogallus*, and Black Grouse, *Lyrurus tetrrix*, in the autumns of 1952-1961, as revealed by a study of wings. Pap. on Game Res., **23**: 1-124.—Methods of ageing tetraonids by primary feathers are reviewed and innovations are suggested. Geographical variation exists in the length of the primaries of the Capercaillie. Determination of species, sex, and age by wings and bag check are compared. Production can be accurately determined from bag checks. The mean annual adult mortality of Capercaillie and Black Grouse was between 40 and 60 per cent. Variations in production are caused mainly by the varying mortality of chicks in the summer.—J.F.B.
- HILDÉN, O. 1965. Zur Brutbiologie des Temmincksträndläufers, *Calidris temminckii* (Leisl.). *Ornis Fennica*, **42**: 1-5.—Banding studies of female Temminck's Stints in central Finland show that two clutches of four eggs are laid at 2-4 day intervals. The first clutch is incubated by the male; the second, by the female. The female's clutch hatches in 21-22 days, but the displaying behavior of the male may interfere with incubation and cause his clutch to hatch several days later. Occasional failure of the male to incubate indicates incomplete development of incubation behavior. Each parent cares for the brood it hatches until fledging. (In German; Finnish summary.)—M.D.F.U.
- HOLCOMB, L. C. 1965. Factors affecting nesting success of Ring-necked Pheasants. *Wilson Bull.*, **77**: 290-293.
- HOWEY, D. H. 1965. Great Spotted Woodpecker attacking galls. *Brit. Birds*, **58**: 299-300.
- HUSSELL, D. J. T., AND J. K. WOODFORD. 1965. Piping Plover's nest containing eight eggs. *Wilson Bull.*, **77**: 294.
- JACKSON, G. L., AND T. S. BASKETT. 1964. Perch-cooing and other aspects of breeding behavior of Mourning Doves. *J. Wildl. Mgmt.*, **28**: 293-307.—In free-living doves unmated males differed from mated males by perch-cooing much more frequently and for a longer period each morning, by displaying the flapping-gliding flight more often, and failing to defend discrete territories. Courtship, copulation, nest-building, and three-bird chases are discussed.—J.P.R.
- KIVIVUORI, O., L. VELMALA, E. JOUTSAMO, AND J. HAKALA. 1965. [The operation of the bird station in Jurmo and some bird observations by the end of 1964.] *Ornis Fennica*, **42**: 5-18.—The heather moors of this open sea island at the southwestern corner of Finland attract many late spring arctic shorebirds. (In Finnish; English summary.)—M.D.F.U.
- LAWTON, J. H. 1965. Lesser Spotted Woodpeckers attacking galls. *Brit. Birds*, **58**: 302.
- LONG, C. A., C. F. LONG, J. KNOPS, AND D. H. MATULIONIS. 1965. Reproduction in the Dickcissel. *Wilson Bull.*, **77**: 251-256.
- MARTIN, F. W. 1964. Woodcock age and sex determination from wings. *J. Wildl. Mgmt.*, **28**: 287-293.—Age can be determined by differences in pattern, color, and wear of secondaries; sex by width of the outer three primaries, which are narrower in males.—J.P.R.
- MATHIASSEN, S. 1964. [Molt aggregations of *Cygnus olor* in Sweden.] *Göteborgs Naturhist. Mus. Årstryck*, **1964**: 15-19.—Study in August, 1963, showed that most Mute Swans formed social groups in shallow bays when molting. Approximately 13,000 swans were seen in groups of from 5 to 5,600 birds. Few swans molted on freshwater lakes. (In Swedish; English summary.)—M.D.F.U.
- MAYFIELD, H. 1965. The Brown-headed Cowbird with old and new hosts. *The Living Bird*, **4**: 13-28.—*Molothrus ater*, originally a bird of the short-grass plains

- of central North America, spread eastward with man's opening of the forests and plowing of the tall-grass prairies. The host species in the original range of the cowbird are least tolerant of its eggs and young; those of the tall-grass prairie are intermediate. The small passerines of the eastern forests are frequently victimized and are the most tolerant. Increasing numbers and expanding range of the cowbird are probably the result of greater success with these new hosts.—G.E.W.
- MEANLEY, B. 1965. The roosting behavior of the Red-winged Blackbird in the southern United States. *Wilson Bull.*, **77**: 217-228.
- MOSELEY, L. H. 1965. Atypical and night feeding. *Florida Nat.*, **38**: 105.—A variety of wood warblers feeding on berries in Florida, and a Parula Warbler feeding at night on insects attracted by light.—E.E.
- NAGEL, J. 1965. Field feeding of Whistling Swans in northern Utah. *Condor*, **67**: 446-447.
- NAGELL, B., AND I. FRYCKLUND. 1965. [The irruption of the Snowy Owl (*Nyctea scandiaca*) in Scandinavia in the winters of 1960-1963, with notes on behavior.] *Vår Fågelvärld*, **24**: 26-55.—Three winter invasions were documented by 105 reports of Snowy Owls from Denmark, Norway, and especially Sweden. The owls bred in the Scandinavian fells and tundra in 1959 and 1960, but not in 1961 or 1962. The bulk of the invaders in January, 1962, must have come from Russia and Siberia, both of which had good lemming and owl years. Habitat, food, and behavior are discussed. (In Swedish; English summary.)—M.D.F.U.
- NORDSTRÖM, G. 1964. Die Vogelberingung in Finnland im Jahre 1962. *Memoranda Soc. Fauna Flora Fenn.*, **40**: 5-176.—Nearly 400 contributors banded 117,793 birds in 1962. Long-distance recoveries and an invasion of the Great Spotted Woodpecker are discussed. (In German.)—M.D.F.U.
- PERRY, A. E. 1965. The nesting of the Pine Siskin in Nebraska. *Wilson Bull.*, **77**: 243-250.
- PETTINGILL, O. S., JR. 1965. Kelp Geese and Flightless Steamer Ducks in the Falkland Islands. *The Living Bird*, **4**: 65-78.—*Chloephaga hybrida* and *Tachyeres brachypterus* are common, sedentary, strongly territorial waterfowl of the Falkland Islands. The pairs do not appear to separate and remain near the shore year round. Both species engage in vigorous intra- and inter-specific fighting. Males remain near the incubating females and help care for the young.—G.E.W.
- PINTO, A. A. DA R. 1960. O problema *Quelea* e a agricultura em Angola. *Melhoramento*, **13**: 79-113.—Notes on the morphology, distribution, ecology, and behavior of *Quelea*. The effects of these birds and other destructive species on agriculture in Angola are discussed and methods for control are reviewed. (In Italian; brief French and English summaries.)—C.F.S.
- RAITASUO, K. 1964. Ein Fall von Mischehe zwischen *Anas crecca carolinensis* und *A. p. platyrhynchos*. *Ornis Fennica*, **41**: 56-59.—First record of the Green-winged Teal from Finland (near Helsinki); a male, which followed a hen Mallard and defended her from other Mallards. (In Finnish; German summary.)—M.D.F.U.
- ROLLE, F. J. 1965. An observation of heavy predation by Pearly-eyed Thrasher. *Wilson Bull.*, **77**: 296-297.
- SCHNELL, G. D. 1965. Recording the flight-speed of birds by Doppler radar. *The Living Bird*, **4**: 79-87.—A description of the unit used to record 1,628 speeds of 17 species. Eight species, four larids and four swallows, are analyzed in detail. Wind velocity, and particularly tail winds, affected flight.—G.E.W.
- SEISKARI, P. 1962. On the winter ecology of the Capercaillie, *Tetrao urogallus*, and the Black Grouse, *Lyrurus tetrix*, in Finland. *Pap. on Game Res.*, **22**: 1-119.—Capercaillie feed mostly on pine, Black Grouse mostly on catkins of birch and

- alder. The food provided by these trees and the structure of the trees affect the distribution of grouse. The diet and feeding habits of grouse are correlated with temperature, snow, day length, and barometric pressure. Food habits are related to population dynamics, forest succession, adaptation to niche, and the abundance and distribution of grouse.—J.F.B.
- SOUTHERN, W. E. 1965. Biotelemetry: a new technique for wildlife research. The Living Bird, **4**: 45–58.—Description of tracking systems and a review of the accomplishments.—G.E.W.
- STENSRUDE, C. 1965. Observations on a pair of Gray Hawks in southern Arizona. Condor, **67**: 319–321.
- STRAUCH, J. G., JR., AND W. THACKABERRY. 1965. A Western Gull with symmetrical white wing patches. Condor, **67**: 443.
- SZULC-OLECHOWA, B. 1964. [Studies on the postembryonic development of *Larus ridibundus* L. and *Sterna hirundo* L.] Acta Ornithol., **8**: 415–442.—Gulls grow more slowly than terns but are feathered earlier, presumably because they stay on the water until an older age. Mortality rate of juveniles of both species was near 74 per cent. (In Polish; English and Russian summaries.)—M.D.F.U.
- TEAL, J. M. 1965. Nesting success of egrets and herons in Georgia. Wilson Bull., **77**: 257–263.
- TOMKINS, I. R. 1965. Swallow-tailed Kite and snake: an unusual encounter. Wilson Bull., **77**: 294.
- WINTERBOTTOM, J. M. 1964. Results of the Percy Fitzpatrick Institute-Windhoek State Museum joint ornithological expeditions: Report on the birds of Game Reserve No. 2. Cimbebasia, no. 9, 75 pp.—Report of birds collected around Etosha Pan, Ovamboland, an area only lightly covered by Hoesch and Niethammer (1940). The ecology of the region is described and a section is devoted to the drinking habits of various species. *Pterocles burchelli delabati* subsp. nov., Onguma; *Prinia pectoralis etoshae* subsp. nov., Etosha Pan; and *Fringillaria tahapisi nivenorum* subsp. nov., southern Kaokoveld, are described.—M.A.T.

## MANAGEMENT AND CONSERVATION

- ANDERSON, W. L. 1964. Survival and reproduction of pheasants released in southern Illinois. J. Wildl. Mgmt., **28**: 254–264.—Study of the fate of two different strains of *Phasianus colchicus* indicates that southward extension of self-maintaining populations is limited by low survival of hens rather than by failure to reproduce.—J.P.R.
- BEARD, E. B. 1964. Duck brood behavior at the Seney National Wildlife Refuge. J. Wildl. Mgmt., **28**: 492–521.—Broods of seven species, but chiefly widgeons and Ring-necked Ducks, were observed daily for two seasons. Feeding, resting, mobility, escape behavior, hen-duckling relations, and relations with other broods are described. The importance of loafing sites and the mobility of broods is emphasized. Overcrowding of rearing marshes may be detrimental to duckling survival.—J.P.R.
- BJÄRVALL, A. 1965. [An investigation of the influence of pesticides on the breeding results of birds at Järvafältet, N. Stockholm.] Vår Fågelvärld, **24**: 1–11.—A comparison of nesting success between birds of an agricultural area where insecticides and herbicides were used and an adjacent control area. For Starlings on the experimental area the clutch size at hatching was significantly smaller than on the control area. Fledging success did not differ. (In Swedish; English summary.)—M.D.F.U.

- CHESNESS, R. A. 1964. Illegal kill of hen pheasants in Minnesota. *J. Wildl. Mgmt.*, **28**: 249-253.—Hunter interviews indicate a kill of 3-6 per cent of the hen population but incidence of lead shot, revealed by X-ray of birds found dead on highways, indicates a kill of 11 per cent. The X-ray method is probably a more accurate measure of illegal kill.—J.P.R.
- CUMMINGS, G. E., AND O. H. HEWITT. 1964. Capturing waterfowl and marsh birds at night with light and sound. *J. Wildl. Mgmt.*, **28**: 120-126.—An outboard motor boat equipped with floodlights, powered by a portable gasoline generator, was used to catch 1,146 waterbirds, mostly ducks. The method is useful for catching species difficult to trap by other means.—J.P.R.
- DENSON, E. P. 1964. Comparison of waterfowl hunting techniques at Humboldt Bay, California. *J. Wildl. Mgmt.*, **28**: 103-120.—Efficiency, success, and effect on ducks and brant of open-water versus land-based hunting are analysed. Minor changes in hunting regulations are suggested.—J.P.R.
- ELDER, W. H. 1964. Chemical inhibitors of ovulation in the pigeon. *J. Wildl. Mgmt.*, **28**: 556-575.—Results of a four-year search for a practical oral contraceptive for nuisance birds. Most compounds inhibiting ovulation in other animals had little effect on pigeons, even in nearly lethal doses. The anticholesterol compound SC-12937 (22, 25-diazacholesterol dihydrochloride) was most promising. At 0.1 per cent of the diet in spring, ovulation was almost completely inhibited for three months, and after six months remained 75 per cent inhibited.—J.P.R.
- FERGUSON, D. E. 1964. Some ecological effects of heptachlor on birds. *J. Wildl. Mgmt.*, **28**: 158-163.—Damage to wildlife may be reduced by restricting treatment for fire ants to small plots, by treating during the non-nesting season, or by using baits. Individual mound treatment and more selective insecticides are other possibilities.—J.P.R.
- GLAZENER, W. C., A. S. JACKSON, AND M. L. COX. 1964. The Texas drop-net Turkey trap. *J. Wildl. Mgmt.*, **28**: 280-287.—Description of a highly successful trap for capturing wild Rio Grande Turkeys.—J.P.R.
- HARPER, J. A. 1964. Calcium in grit consumed by hen pheasants in east-central Illinois. *J. Wildl. Mgmt.*, **28**: 264-270.—Wild hens select calcareous from non-calcareous grit and also select that which is richest in calcium. This selectivity could enable hens to obtain enough calcium for their physiological needs even in calcium deficient areas.—J.P.R.
- JOSELYN, G. B., AND J. E. WARNOCK. 1964. Value of federal feed grain program to production of pheasants in Illinois. *J. Wildl. Mgmt.*, **28**: 547-551.—The amount of high quality nesting cover, in the form of forage crops and oats, was increased by the program and pheasant production improved. Changes are suggested which would make the program more beneficial to pheasants.—J.P.R.
- LONGCORE, J. R., AND G. W. CORNWELL. 1964. The consumption of natural foods by captive Canvasbacks and Lesser Scaups. *J. Wildl. Mgmt.*, **28**: 527-531.—The ducks were maintained in good health on a diet chiefly of *Vallisneria americana* and *Elodea canadensis*, plus about 13 per cent invertebrate animals. Daily food intake was measured and its increase with a decline in air temperature was noted.—J.P.R.
- MILLER, A. H., I. I. McMILLAN, AND E. McMILLAN. 1964. The current status and welfare of the California Condor. *Sierra Club Bull.*, December, pp. 13-16.—Decline of the California Condor to about 40 birds in spite of reproductive success and adequate food is due to shooting and perhaps poisoning. Preservation requires enforcement of protective laws and education of the public.—C.F.S.
- NASS, R. D. 1964. Sex- and age-ratio bias of cannon-netted geese. *J. Wildl. Mgmt.*,

- 28**: 522-527.—Examination of 2,879 Canada Geese in 46 timed catches showed that the proportion of adults increased with length of time on bait.—J.P.R.
- NEWLON, C. F., T. S. BASKETT, R. P. BREITENBACH, AND J. A. STANFORD. 1964. Sustaining values of emergency foods for Bobwhites. *J. Wildl. Mgmt.*, **28**: 532-542.—Pearl millet (*Pennisetum glaucum*), sassafras (*Sassafras albidum*), foxtail millet (*Setaria italica*), and milo (*Sorghum vulgare*) have the highest sustaining values of the foods tested, exceeding those of such well-known winter staples as corn and Korean lespedeza.—J.P.R.
- OTTERLIND, G. 1964. Pesticides, avifauna and legislation—a general survey of the use of toxic chemicals and its effects on the bird fauna in Sweden. *Vår Fågelvärld*, **23**: 26-42.—Uncontrolled application of pesticides has already done a great deal of damage. Many species, previously common in the southern and central parts of the country, have become much rarer. Two species have disappeared entirely due to seed dressing. Among others, the White-tailed Eagle (*Haliaeetus albicilla*) is seriously threatened with extirpation from southern and central Sweden. Aldrin and mercury are serious poisons, which effect both birds and honey bees. Official recognition and legislative steps lag behind in Sweden; improvement is expected as new regulations on sale of pesticides become effective in 1964. Stricter laws are suggested in the paper. (In Swedish; English summary.)—M.D.F.U.
- OTTERLIND, G., AND I. LENNERSTEDT. 1964. [Avifauna and pesticides in Sweden.] *Vår Fågelvärld*, **23**: 363-415.—This study was initiated by the Swedish Ornithological Society to document the detrimental effect on bird populations of indiscriminate use of pesticides; results are summarized in the form of species accounts. In some cases chemical analysis showed the presence of toxic material in birds found dead or dying. Certain buntings, the Rook, and almost all birds of prey, particularly the falcons such as the Peregrine and Kestrel, showed drastic local decline; game birds were also affected. The detrimental effect of dressing seed with mercury derivatives, a common practice in Sweden, is demonstrated. (In Swedish; English summary.)—M.D.F.U.
- SCOTT, T. G. (ed.). 1963. Grouse management symposium. *J. Wildl. Mgmt.*, **27**: 525-887.—The regular October issue (separate copies available at \$3.00) is devoted entirely to papers on the biology and management of North American Tetraonidae. The symposium constitutes a review of modern knowledge useful in managing these important game birds. The 39 papers, by 50 different authors, deal with every North American species and include 11 on Ruffed Grouse, 7 on prairie chickens, 5 on Blue Grouse, 4 on Spruce Grouse, 3 each on Sage Grouse and ptarmigan, and 2 on Sharp-tailed Grouse. The subject matter includes species distribution, study techniques, aspects of life history, diseases, the impact of land-use changes and hunting on populations, and applied management measures such as regulations and habitat management. The final paper by the Hamerstoms, assistant editors for this issue, is a critical review of the other papers. They point out areas where additional research is needed and make a plea for wider understanding and application of already existing knowledge. This is especially important in view of the increasing demands on grouse habitat which may be expected from new programs of multiple use and outdoor recreation.—J.P.R.
- THOMAS, J. W., AND R. G. MARBURGER. 1964. Colored leg markers for wild Turkeys. *J. Wildl. Mgmt.*, **28**: 552-555.—Strips of nylon, impregnated with fluorescent-colored vinyl, were attached to butt-end leg bands. Of the marked Turkeys, 74 per cent retained bands for about one year and 50 per cent for about two years.—J.P.R.

WALLACE, G. J., AND E. A. BOYKINS. 1965. The continued die-off of robins on a DDT-methoxychlor area. Jack-pine Warbler, **43**: 13-19.—Mortality of *Turdus migratorius* was high on a methoxychlor-treated area which had been sprayed with DDT in earlier years. Mortality was probably due to residual DDT, found especially in earthworms which still had 64 ppm DDT one and a half years after the last application.—R.B.

## MIGRATION AND ORIENTATION

- BARLOW, J. S. 1964. Inertial navigation as a basis for animal navigation. J. Theoret. Biol., **6**: 76-117.—The principles of inertial navigation suggest the existence of a physiological inertial system with receptors in the vestibular organs of vertebrates. Experiments described are inconclusive and suggestions are made for future study.—C.F.S.
- BERGMAN, G. 1964. Zur Frage der Abtriftskompensation des Vogelzuges. Ornithologica Fennica, **41**: 106-110.—Contrary to observations of transoceanic and night migrants, diurnal land migrants appear to compensate for wind drift. Spring migration of cranes in Finland showed at most 10 degrees drift in heavy wind. Flying against the wind requires less compensation.—M.D.F.U.
- EHRNROTH, B. 1965. [Bird migration at Skagen's Lighthouse in the northern part of Lake Vänern (59° 15' N lat., 13° 30' E long.) in 1962-1963.] Vår Fågelvärld, **24**: 12-25.—(In Swedish; English summary.)—
- JOHNSON, N. K. 1965. Differential timing and routes of the spring migration in the Hammond Flycatcher. Condor, **67**: 423-437.
- OLROG, C. C. 1963. El anillado de aves en la Argentina. 1961-1963. Tercer informe. Suppl. Neotropica, **9**: i-viii.—A report of birds banded in Argentina between 1961-1963 and of recoveries. Recoveries of ducks include *Netta peposaca*, 8.5 per cent, and *Heteronetta atricapilla*, 8.9 per cent. The banding data shed light on the migration of several Argentine species. (In Spanish; English summary.)—E.E.
- MÖRZER BRUYN, W. F. J. 1965. Birds seen during west to east trans-Pacific crossing along equatorial counter-current around latitude 7° N in the autumn of 1960. Sea Swallow, **17**(1964): 57-66.—On a voyage from East Indies to Panama by a route near the Pacific tropical convergence, 41 species were seen. An estimated 400,000 Short-tailed Shearwaters were seen in the daylight hours of 3 November between 176° and 173° W, thus a calculated 2,000,000 pass through the sector 178° E-166° W daily in the period of their southward migration. Ring-necked Ducks were observed twice more than 1,000 miles at sea, 10 November at 123° W and 12 November at 109° W.—W.B.R.
- NOLAN, V., JR., AND R. E. MUMFORD. 1965. An analysis of Prairie Warblers killed in Florida during nocturnal migration. Condor, **67**: 322-338.
- PENNY, R. L. 1965. Some practical aspects of penguin navigation-orientation studies. BioScience, **15**: 268-270.—Displacement of breeding Adélie Penguins indicates the species uses sun azimuth orientation coupled with a biological clock for navigation.—C.F.S.
- TUCK, G. S. 1965. Reports of land birds at sea. Sea Swallow, **17**(1964): 40-51.—A tabular summary of about 100 reports to RNBWS in 1963-1964 includes some 50 species seen at sea in the North Atlantic. Notable are: a probable Cattle Egret, 400 miles WSW of Lands End, 17 May 1964, and an American Redstart caught aboard ship in mid-Atlantic (30° N, 42° W), 26 September 1964.—W.B.R.

## MISCELLANEOUS

- ECKELBERRY, D. R. 1965. Techniques in bird illustration. *The Living Bird*, **4**: 131-160.—Possibly America's most productive and articulate bird painter in the last decade, the author here proceeds from philosophy (*ibid.*, **3**: 69-82, 1963) to practical consideration of methods, problems, and objectives in bird painting. A readable account, well illustrated (there are some delightful studies and working drawings), and as instructive to beginners as it is interesting to the more advanced.—R.M.M.
- MCATEE, W. L., AND F. HARPER. 1965. Published writings of Edward Alexander Preble (1871-1957). *Univ. Kansas Mus. Nat. Hist. Misc. Publ.*, no. 40: 16 pp.—Copies available gratis from Mus. Nat. Hist., Kansas, or Francis Harper.—F.H.
- MILLER, A. H. 1964. Joseph Grinnell. *Syst. Zool.*, **13**: 235-242.
- ROKITSKY, P. F. (ed.). 1965. English-Russian biological dictionary. Second edit. *Publ. House Sovetskaya Encyclopedia, Moscow*. 680 pp.—A dictionary useful to all biologists; zoology by Dr. Nasimovich. Price Rub. 2.—22 Kop.—F.J.T.
- SLADEN, W. J. L. 1965. Ornithological research in Antarctica. *BioScience*, **15**: 264-268.—A review of ornithological research in Antarctica with brief sketches of some breeding species. Current research by various organizations is described and suggestions for future studies are presented.—C.F.S.
- TOMIALOJĆ, L. 1965. [Polish ornithological bibliography 1945-1960.] *Acta Ornithol.*, **9**: 1-76.—References to Polish ornithological works. (In Polish; Russian and English summaries.)—F.J.T.

## PHYSIOLOGY

- BRENNER, F. J., AND W. F. MALIN. 1965. Metabolism and survival time of the Red-winged Blackbird. *Wilson Bull.*, **77**: 282-289.
- BRUSH, A. H. 1965. Energetics, temperature regulation and circulation in resting, active and defeathered California Quail, *Lophortyx californicus*. *Comp. Biochem. Physiol.*, **15**: 399-421.—Dissipation of heat through unfeathered extremities and evaporation from the respiratory system enable California Quail to maintain body temperatures over a wide range of ambient temperature. Defeathered birds show less regulatory ability. Metabolism can be estimated from conductivity values obtained from unfeathered extremities.—C.F.S.
- EDWARDS, W. R., P. J. MIKOLAJ, AND E. A. LEITE. 1964. Implications from winter-spring weights of pheasants. *J. Wildl. Mgmt.*, **28**: 270-279.—Hen weights normally increase from 31 to 37 oz., winter to spring. Failure to attain a normal spring weight is associated with severe winter weather and may be followed by increased mortality and lowered productivity.—J.P.R.
- GIFFORD, C. E., AND E. P. ODUM. 1965. Bioenergetics of lipid deposition in the Bobolink, a trans-equatorial migrant. *Condor*, **67**: 383-403.
- MILLER, A. H. 1965. Capacity for photoperiodic response and endogenous factors in the reproductive cycles of an equatorial sparrow. *Proc. Nat'l. Acad. Sci.*, **54**: 97-101.—Observations of captive Andean Sparrows (*Zonotrichia capensis*) at latitude 38° for five and one-half years showed the species possesses no mechanism for preventing autumnal breeding. Shortened day lengths do not affect the male's innate cycle; 10-11 hour day lengths repress ovulation in females. Prolonged exposure to long days does not cause regression seen in temperate zone relatives, but extends the breeding period and cancels effects of the dry season, which in the Andean environment inhibits nesting by inducing molt.—C.F.S.

- PEIPONEN, V. A., AND A. BOSLEY. 1964. Torpidity in a captive European Nightjar (*Caprimulgus europaeus* L.). *Ornis Fennica*, **41**: 40-42.—At +10° C a Nightjar became torpid but recovered quickly in a heated room. Without becoming torpid the bird's cloacal temperature dropped from 39.2 to 35.5° C when the environmental temperature was reduced from +17 to +6.4° C. (In English; Finnish summary).—M.D.F.U.
- TORDOFF, H. B., AND W. R. DAWSON. 1965. The influence of daylength on reproductive timing in the Red Crossbill. *Condor*, **67**: 416-422.

## TAXONOMY AND PALEONTOLOGY

- BENSON, C. W., AND M. P. STUART IRWIN. 1965. The Grey-backed Sparrow Lark, *Eremopterix verticalis* (Smith). *Arnoldia* (Rhodesia), **1**, no. 36: 9 pp.—Three races are recognized; *E. v. harti* subsp. nov. is described from southern Barotseland. The massive irruption of southern populations into Zambia in the severe winter of 1964 is documented.—M.A.T.
- BENSON, C. W., AND M. P. STUART IRWIN. 1965. A new subspecies of Clapper Lark, *Mirafra apiata* from Barotseland. *Arnoldia* (Rhodesia), **1**, no. 37: 3 pp.—*M. a. reynoldsi* subsp. nov. from Senanga district, Barotseland.—M.A.T.
- BERNSTEIN, L. 1965. Fossil birds from the Dominican Republic. *Quart. J. Florida Acad. Sci.*, **28**: 271-284.—Pre-Columbian and late Pleistocene strata from a cave contained 26 species (224 bones) and 32 species (539 bones) respectively. All of the total of 42 species are extant.—G.E.W.
- CLANCEY, P. A. 1965. Variation in the White-crowned Shrike *Eurocephalus anguitemens* Smith, 1836. *Arnoldia* (Rhodesia), **1**, no. 23: 3 pp.—Two races recognized, including *E. a. niveus* subsp. nov. from Newington, eastern Transvaal.—M.A.T.
- DEMENTIEV, G. P., AND A. SHAKDARSURYEN. 1964. [On Mongolian Saker Falcons and on the taxonomic status of the Altay Falcon.] Pp. 3-37 in *Investig. in the fauna of USSR, Birds*. Arch. du Mus. Zool. de l'Univ. de Moscou, **IX**.—Ecology, distribution, and taxonomy of the Mongolian falcons.—F.J.T.
- FRIEDMANN, H. 1964. A new swift from Mt. Moroto, Uganda. *Los Angeles Co. Mus. Contrib. Sci.*, no. 83: 1-4.—*Apus pallidus kapnodes*; type in Los Angeles County Museum.—H.F.
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