

RECENT LITERATURE

EDITED BY GLEN E. WOOLFENDEN

ANATOMY AND EMBRYOLOGY

- ANICETE, B. Z. 1964. A study of the sclerotic ring in birds. *Science Studies* (St. Bonaventure Univ.), **22**: 5-31.—Variation in diameter of the sclerotic ring is correlated with the ecology and behavior of the passeriform species studied; the diameter is large in woodland species and smaller in related grassland types. Within the order the percentage of sclerotic rings with interlocking plates increases from more primitive to specialized families. In Robins the structure increases in diameter with age through the first six months.—C.F.S.
- COLLINS, C. T. 1965. The down-like nestling plumage of the Palm Swift *Cypsiurus parvus* (Lichtenstein). *Ostrich*, **36**: 201-202.—By the sixth day, nestling Palm Swifts are covered with a gray post-natal "down" composed of semi-plumes. It is similar in many respects to that of the Neotropical *Cypseloides*.—M.A.T.
- HARGRAVE, L. L. 1965. Identification of feather fragments by microstudies. *Amer. Antiquity*, **31** (no. 2, pt. 2): 202-205.—Describes the accuracy of specific identifications of feather fragments; introductory to Messinger (1965), *q.v.*—M.A.J.
- KRUSCHINSKI, L. W., W. M. SWETUCHINA, I. N. MOLODKIVA, N. P. PAPOVA AND W. N. MAZ. 1963. Vergleichende physiologisch-morphologische Erforschung Komplizierter Verhaltensformen von Vögeln. *Zeit. f. Tierpsychol.*, **20**: 474-486.—A central nervous mechanism permits birds to comprehend elementary cause and effect relationships of environmental events. The hyperstriatum accessorium is probably the site of this.—M.S.F.
- MESSINGER, N. G. 1965. Methods used for identification of feather remains from Wetherill Mesa. *Amer. Antiquity*, **31** (no. 2, pt. 2): 206-215.—Gives methods (primarily microscopic), glossary of terms (Chandler's, 1916), and identifications of feathers from an archaeological site. See also Hargrave (1965).—M.A.J.

BEHAVIOR

- BERGER, A. J. 1966. Behavior of a captive Mockingbird. Jack-pine Warbler, **44**: 8-13.—Observations over four years in indoor and outdoor aviary, beginning with young just out of nest. Wing-flashing is due to an "uneasy state." There was song from end of January to first of July, silence during molt, a resurgence of whisper song about mid-October, and a little singing until January. The bird was extremely aggressive, killing captive Purple Finches, Cedar Waxwings, and a Kirtland's Warbler.—R.B.
- BRINDLEY, L. D. 1965. Taste discrimination in Bobwhite and Japanese quail. *Animal Behav.*, **13**: 507-512.—Most ten-day and six-week birds showed preference for sweet and slightly acid solutions, and rejected bitter and salt solutions.—A.S.G.
- BROCKWAY, B. F. 1965. Stimulation of ovarian development and egg laying by male courtship vocalization in Budgerigars (*Melopsittacus undulatus*). *Animal Behav.*, **13**: 575-578.—Various male calls taped and played to females isolated in total darkness. Soft Warble, a vocalization accompanying male precopulatory behavior and performed in intimate relation to the female, stimulated ovarian activity and egg laying. Upper and lower pitch ranges of the call seemed equally effective. Six hours presentation was more effective than three.—A.S.G.
- DAWSON, B. V., AND B. M. FOSS. 1965. Observational learning in Budgerigars. Ani-

- mal Behav., **13**: 470-474.—Although showing no reduction in learning time, five observer birds solved a problem by the same method as their respective demonstrators. Tamed birds learned more rapidly than untamed.—A.S.G.
- DEBENEDICTIS, P. A. 1966. The bill-brace feeding behavior of the Galapagos Finch *Geospiza conirostris*. Condor, **68**: 206-208.
- DÜCKER, G. 1963. Spontane Bevorzugung art eigener Farben bei Vögeln. Zeit. f. Tierpsychol., **20**: 43-65. For 11 species of birds of different families, tested as to whether or not they preferred colors like their own plumage, those in which sexes were alike preferred their own colors and those in which sexes differed showed sexual differences in color preference.—M.S.F.
- DUNHAM, D. W. 1966. Maintenance activities of the Rose-breasted Grosbeak. Wilson Bull., **78**: 68-78.
- ELIS, C. R., JR., AND A. W. STOKES. 1966. Vocalization and behavior in captive Gambel Quail. Condor, **68**: 72-80.
- FICKEN, R. W. 1966. Comparison of the sexual responses of Common Grackles to normal females and to mounts of soliciting females. Wilson Bull., **78**: 125-126.
- GRIMES, L. G. 1966. Antiphonal singing and call notes of *Laniarius barbarus barbarus*. Ibis, **108**: 122-126.—Spectrographic analysis of calls of this African bush shrike recorded near Accra reveals that mated pairs have several distinctive duet sequences differing in frequency and duration from those of other pairs. Pair-bond duration in the species is not known but pairs may learn to recognize complex sound patterns and "forget" formerly significant patterns annually.—W.B.R.
- HARRISON, C. J. O. 1966. Inactivity as an attack-inhibitor. Ibis, **108**: 117-118.—When two Dunnocks (*Prunella*) of different species were put in a small cage, one, a female, habituated to aviary life, hopped toward the other, a newly imported male, but didn't attack it beyond "gentle movements like a series of slight pecks but without real contact," as long as it stood still. When it moved, attack became more vigorous. Behavior elicited by the immobile bird resembled "some of the less effective forms of allopreening."—W.B.R.
- HOLCOMB, L. C. 1966. The development of grasping and balancing coordination in nestlings of seven species of altricial birds. Wilson Bull., **78**: 57-63.
- KEAR, J. (MRS. G. V. T. MATTHEWS). 1966. The pecking response of young Coots *Fulica atra* and Moorhens *Gallinula chloropus*. Ibis, **108**: 118-122.—A total of 2,220 pecks by newly-hatched young of each species were analyzed. Of six colors in combinations of two, both species preferred red and orange and avoided blue. Coots also avoided yellow; Moorhens, blue-green and green. Both tended to select lighter over darker intensity of the same color. Both chose lighter reds over lighter yellows; tests of darker reds vs. lighter yellows gave equivocal results. With red at different heights, both pecked most 6.25 cm above the floor. Pecking preference of young Moorhens may be adapted to feeding from the yellow-tipped red beak of adults. However, dull-beaked juveniles of both help feed second-brood young and preference for red and orange may help direct the response of feeders to the bright colored heads of chicks.—W.B.R.
- KING, M. G. 1965. Disruptions in the pecking order of cockerels concomitant with degrees of accessibility to feed. Animal Behav., **13**: 504-506.—Peck frequency increased in three flocks with diminishing accessibility of food. Peck order remained constant in two flocks until introduction of a point source, in which case temporary disruptions occurred in all flocks.—A.S.G.
- KONISHI, M. 1963. The role of auditory feedback in the vocal behavior of the domestic fowl. Zeit. f. Tierpsychol., **20**: 349-367.—Chickens deafened at an early

- age develop the normal form and repertoire of vocalizations. Information aspects of song are discussed and a new technique for deafening day-old chicks is described.—M.S.F.
- LASKEY, A. R. 1966. The manner of feeding fledgling woodpeckers. *Wilson Bull.*, **78**: 64-67.
- LEFFLER, S. R. 1966. Observations on a captive Northern Phalarope. *Wilson Bull.*, **78**: 124-125.
- McFARLAND, D. J. 1965. Hunger, thirst, and displacement pecking in the Barbary Dove. *Animal Behav.*, **13**: 293-300.—The displacement pecking of thirsty birds frustrated in their drinking behavior is attributable to a disinhibition of feeding behavior. The hypothesis is unable to account for displacement pecking in situations of no thirst. Only some displacement pecking must represent feeding.—A.S.G.
- NICKELL, W. P. 1966. Behavior of Barrow's Goldeneye in Wyoming. *Wilson Bull.*, **78**: 121-122.
- POULSEN, H. 1963. On the behaviour of the South American Condor (*Vultur gryphus* L.). *Zeit. f. Tierpsychol.*, **20**: 468-473.—Comfort and sexual behavior studied in two pairs in captivity are similar to that of the California Condor (*Gymnogyys californianus*). It is concluded that these species should be congeneric.—M.S.F.
- RATNER, S. C. 1965. Comparisons between behaviour development of normal and isolated domestic fowl. *Animal Behav.*, **13**: 497-503.—Isolation produces a delay in the development of certain social behavioral patterns, but does not prevent later social organization.—A.S.G.
- REISKIND, J. 1965. Behaviour of an avian predator in an experiment simulating Batesian mimicry. *Animal Behav.*, **13**: 466-469.—*Parus atricapillus* learned to discriminate, by external color, both ill-flavored seeds (models) and similarly colored mimics from tasteful seeds (non-mimics) of another color. Discrimination involved refusing models and mimics, refusing to eat accepted mimics, and hesitancy and other abnormal activities before accepting mimics. Such abnormal behavior would increase the mimic's chances of escape.—A.S.G.
- RICKLEFS, R. E. 1966. Behavior of young Cactus Wrens and Curve-billed Thrashers. *Wilson Bull.*, **78**: 47-56.
- SCHN, M. 1963. On the irreversibility of imprinting. *Zeit. f. Tierpsychol.*, **20**: 462-473.—Studies of Turkeys support Lorenz' view of the irreversibility of imprinting.—M.S.F.
- TIGGES, M. 1963. Muster-und Farbbevorzugung bei Fischen und Vögeln. *Zeit. f. Tierpsychol.*, **20**: 129-142.—Fish prefer irregular patterns, whereas the Jackdaw prefers regular ones and pure colors to mixed ones.—M.S.F.
- TINBERGEN, N. 1963. On aims and methods of ethology. *Zeit. f. Tierpsychol.*, **20**: 410-433.—Reviews the ethological view of causation, ontogeny, survival value, and evolution of behavior using many avian examples and stressing Lorenz's contributions.—M.S.F.
- TOLMAN, C. W. 1965. Emotional behaviour and social facilitation of feeding in domestic chicks. *Animal Behav.*, **13**: 493-496.—For short tests in unfamiliar surroundings, social facilitation of feeding can be accounted for by emotion reduction. A physical contact-behavioral interaction appears to be more pertinent to situations permitting adaptation.—A.S.G.
- WILLIS, E. O. 1966. A prey capture by the Zone-tailed Hawk. *Condor*, **68**: 104-105.
- WÜNSCHMANN, A. 1963. Quantitative Untersuchungen zum Neugierverhalten von Wirbeltieren. *Zeit. f. Tierpsychol.*, **20**: 90-109.—Spontaneous reactions of chickens,

quail (*Coturnix coturnix*) and Jackdaws (*Coloeus monedula*) to simultaneously presented known and unknown visual patterns indicated a preference for the unknown patterns. Dominant chickens were more curious than subordinate ones.—M.S.F.

ZEIGLER, H. P., AND S. SCHMERLER. 1965. Visual discrimination of orientation by pigeons. *Animal Behav.*, **13**: 475-477.—Pigeons readily discriminate between vertical, horizontal, and oblique rectangles and show immediate transfer from simultaneous to successive discrimination situation.—A.S.G.

DISEASES AND PARASITES

BELOPOLSKAYA, M. M. 1963. [Survey of the parasite fauna of birds in the Sudzukhinsk reserve (Primore).] *Parasitol. Sbor.*, **21**: 221-244.—Examination of 720 birds of 140 species from Russian Far East revealed 77 trematodes, 86 cestodes, 50 nematodes, and 17 acanthocephalans; tables showing rates of infection are given. (In Russian; English summary; from *Helminthol. Abstr.*, **34**: no. 2445, 1965.)—J.S.M.

BUSCHER, H. N. 1965. Ectoparasites from anseriform birds in Manitoba. *Canadian J. Zool.*, **43**: 219-221.—Eight species of ectoparasites were found on 11 species of birds. Of 107 birds examined, 78 were positive. Parasites were Siphonoptera, Acarina, and two families of Mallophaga.—H.W.K.

DYMOWSKA, Z., AND K. ZUKOWSKI. 1965. [Parasitic protozoa of the birds in the Kampinos Forest found at autopsy.] *Wiad. Parasitol.*, **11**: 477-481.—Of 330 birds (chiefly passerines) of 29 species, 11 species were infected with *Haemoproteus*, 2 with *Leucocytozoon*, and 4 with *Plasmodium*; *Toxoplasma* was not found in the brain, pancreas, liver, and blood smears. (In Polish; English summary.)—J.S.M.

GERASIMOVA, G. N. 1964. [Helminthological and topographical characterization of foci of disease in ducks in the Omsk region.] *Trudi Omskogo Vet. Inst.*, **22**: 111-121.—Listed under their hosts and zones, are 146 helminths found in 764 wild and domestic ducks from three topographically different zones in the Omsk region. The ecology of the helminths is discussed. (In Russian; from *Helminthol. Abstr.*, **34**: no. 2448, 1965.)—J.S.M.

HARRIS, M. P. 1965. Puffinosis among Manx Shearwaters on Skokholm. *Brit. Birds*, **58**: 426-433.

KHOTENOVSKI, I. A. 1963. [Trematode fauna of birds in the Leningrad region.] *Parasitol. Sbor.*, **21**: 203-208.—From 36.4 per cent of 143 birds (chiefly passerines) 15 species were collected. (In Russian; English summary; from *Helminthol. Abstr.*, **34**: no. 2449, 1965.)—J.S.M.

KINGSTON, N. 1965. On the life cycle of *Brachylecithum orfi* Kingston and Freeman, 1959 (Trematoda: Dicrocoelidae), from the liver of the Ruffed Grouse: Infections in the vertebrate and invertebrate hosts. *Canadian J. Zool.*, **43**: 745-764.—Presents the distribution and life cycle of this parasite from the biliary ducts of the Ruffed Grouse.—H.W.K.

KINGSTON, N. 1965. On the morphology and life cycle of the trematode *Tanaisia zaruduyi* (Skyobin, 1924) Byrd and Denton, 1950, from the Ruffed Grouse, *Bonasa umbellus* L. *Canadian J. Zool.*, **43**: 953-969.—This parasite occurs in the ureters and kidney tubules of Ruffed Grouse from Ontario and Michigan. Eggs must be ingested by some mollusk. Host and age resistance to infection by this parasite is evident. (From author's abstract.)

MONNEROT-DUMAINE. 1966. Kyasanur forest disease. *La Presse Medicale*, **74**: 31-32.—Ticks that carry this virus disease parasitize 82 species of Indian birds, in-

- cluding *Anthus trivialis* and other migrants. Only a few of the avian host species are specified. (In French.)—W.G.G.
- OSHMARIN, P. G., AND A. M. PARUKHIN. 1963. [Trematodes and nematodes of birds and mammals of the Sikhote-Alinsk preserve.] Trudi Sikhote-Alinskogo Gosudarst. Zapovednika, No. 3; 121-181.—An annotated list of 121 species of nematodes and 84 species of trematodes found from 347 birds and 186 mammals in the Primore region of Russia. New genera and species are described. (In Russian; from Helminthol. Abstr., **34**: no. 2970, 1965.)—J.S.M.
- SPASSKAYA, L. P. 1964. [Cestodes of birds of Tuva. VII. Hymenolepididae.] Acta Vet. Budapest, **14**: 19-34.—An annotated list of the 10 hymenolepid species (brief descriptions of 8) found in 91 of 1,760 charadriiform, lariform, piciform, and passeriform birds. (In Russian; German summary; from Helminthol. Abstr., **34**: no. 2451, 1965.)—J.S.M.
- SPASSKAYA, L. P. 1964. [The cestode fauna of birds of Tuva.] Acta Vet. Budapest, **14**: 35-49.—Annotated list of 14 species of cestodes representing five families; from Tuva region of Russia. (In Russian; English summary; from Helminthol. Abstr., **34**: no. 2452, 1965.)—J.S.M.
- SPASSKAYA, L. P. 1964. [Cestodes of birds of Tuva. VI.] Věstník Československé společnosti Zool., **28**: 105-116.—Annotated list of 26 dilepidids from 987 birds of 90 species from Tuva region of Russia. (In Russian; English summary; from Helminthol. Abstr., **34**: no. 2453, 1965.)—J.S.M.
- STABLER, R. M., AND P. A. HOLT. 1965. Hematozoa from Colorado Birds. II. Falconiformes and Strigiformes. J. Parasitol., **51**: 927-928.—For Falconiformes 90 of 186 birds (14 species) and for Strigiformes 25 of 36 birds (9 species) were infected; 25 cases are thought to represent new host records.—J.S.M.

DISTRIBUTION AND ANNOTATED LISTS

- ABBOTT, W. G. 1966. Little Blue Heron at Santa Barbara, California. Condor, **68**: 103.
- ANDRLE, R. F. 1966. North American migrants in the Sierra de Tuxtla of southern Veracruz, Mexico. Condor, **68**: 177-184.
- ARNOLD, J. R., R. FAILING, J. GUGGOLZ, AND B. D. PARMETER. 1966. Adult Little Blue Heron on San Pablo Bay, California. Condor, **68**: 103.
- BENSON, C. W., AND M. P. STUART IRWIN. 1965. Some intra-African migratory birds, II. Puku, **3**: 45-55.—*Gallinula angulata* and *Glareola nuchalis* are shown to be summer residents in southern Africa, wintering in the equatorial regions.—M.A.T.
- BÓ, N. A. 1965. Notas preliminares sobre la avifauna del nordeste de San Luis. Hornero, **10**: 251-268.—Distributional and taxonomic notes on certain birds of northeastern San Luis province, Argentina. Included is a record of a male Black-winged Teal (*Anas discors*), taken on 27 November 1960 in breeding plumage. (In Spanish; English summary.)—E.E.
- BREWER, R., AND A. RAIM. "1965" [1966]. Summer observations of Nashville and Black-throated Green warblers in Kalamazoo County, Michigan. Jack-pine Warbler, **43**: 169.
- BROOKE, R. K. 1965. Ornithological notes on the Furancungo District of Mozambique. Arnoldia, Nat'l Mus. S. Rhod., (10): 13 pp.—List and biological notes on a collection of birds from the northwest pedicle of Mozambique.—M.A.T.
- CHANOT, G. E., JR. 1966. Another California specimen of *Pluvialis dominica fulva*. Condor, **68**: 212.
- CHENG TSO-HSIN, TAN YAO-KUANG, AND LI YUNG-HSIN. 1965. [On the avifauna

- of northwestern Szechwan.] *Acta Zool. Sinica*, **17**: 435-450.—About 302 species are recorded from the area. The region is divided into a cold-plateau meadow and scrub zone characterized by predominance of Palaearctic species (more than 95 per cent); a cold-plateau subalpine coniferous forest zone characterized by an increase in Oriental elements; and a mixed forest zone with a still greater preponderance of Oriental species (about 35 per cent). The southern borderline of the first zone may be taken as the northern limit of the Oriental realm in this area. (In Chinese; English summary.)—R.B.
- CHILDS, H. E., JR. 1966. Probable nesting of the Starling on San Clemente Island, California. *Condor*, **68**: 104.
- CLANCEY, P. A. 1965. A catalogue of birds of the South African sub-region. (Part II: Families Glareolidae-Pittidae). *Durban Mus. Novit.*, **7**: 305-388.—A continuation of Clancey's meticulous check list of the birds south of the Cunene and Zambesi Rivers. One new subspecies is described, *Caprimulgus tristigma granosus* from Bulawayo, Rhodesia.—M.A.T.
- CONTINO, F. 1965. Una nueva gallareta para la avifauna Argentina. *Hornero*, **10**: 282-283.—Definite record of *Fulica gigantea* in northern Jujuy, Argentina, at 3800 m.—E.E.
- DANIELSON, B. 1964. [First Swedish record of Stilt sandpiper (*Micropalama himantopus*).] *Vår Fågelvärld*, **23**: 193-199.—An adult in breeding plumage was seen at the Baltic island of Öland on 13 July 1963. One day later, at the same locality two other observers reported a somewhat differently colored individual. Two individuals also were seen in England the same summer. (In Swedish; English summary.)—M.D.F.U.
- EASTERLA, D. A. 1966. First specimen of the Summer Tanager in Utah. *Condor*, **68**: 210.
- FENNEL, C. M. 1966. Occurrence of the Lesser Frigate-bird and Pale-footed Shearwater in Korea. *Condor*, **68**: 210-211.
- FFRENCH, R. P., AND M. FFRENCH. 1966. Recent records of birds in Trinidad and Tobago. *Wilson Bull.*, **78**: 5-11.
- FROST, H. H. 1966. Dickcissel in Utah. *Wilson Bull.*, **78**: 126.
- GERZENSTEIN, E. 1965. Aves de la costa marítima y orilla fluvial del Uruguay. *Hornero*, **10**: 225-234.—A list, indicating status and often field-marks, of the "water birds" of the coast of Uruguay, from the Brazilian border to the mouth of the Paraná and Uruguay rivers.—(In Spanish; English summary.)—E.E.
- GERZENSTEIN, E. 1965. Aves nuevas para el Uruguay. *Hornero*, **10**: 280-282.—New birds for Uruguay, including *Actitis macularia*. (In Spanish.)—E.E.
- HUBBARD, J. P. 1966. The Cattle Egret on the Pacific coast of Chiapas, Mexico. *Wilson Bull.*, **78**: 121.
- JOHNSTON, R. F. 1965. A directory to the birds of Kansas. *Univ. Kansas Mus. Nat. Hist. Misc. Publ.*, **41**: 1-67.—A brief version of the author's 1960 directory to bird-life, adding four species.—R.B.
- JONES, H. L. 1966. The Fulvous Tree Duck in the East: its past and present status. *Chat*, **30**: 4-7.
- KESSEL, B., AND H. K. SPRINGER. 1966. Recent data on status of some interior Alaska birds. *Condor*, **68**: 185-195.
- LJUNGBAHL, P. S. 1964. The first record of Radde's Bush-warbler (*Phylloscopus schwartzi*) in Sweden. *Vår Fågelvärld*, **23**: 223-227.
- McLACHLAN, G. R. 1965. Eleventh ringing report. *Ostrich*, **36**: 214-223.—Report covering South African ringing activities 1960-1961. Of particular interest were

- the Cape Vultures, *Gyps coprotheres*, one of which wandered 600 miles to Rhodesia, and three others that wandered over 300 miles.—M.A.T.
- MIDDLEMISS, E. 1965. Rare sandpiper at Rondevlei Bird Sanctuary. *Ostrich*, **36**: 147.—A specimen of the Pectoral Sandpiper, *Calidris melanotos*, from Rondevlei, Cape Province, South Africa on 25 March 1965.—M.A.T.
- NILES, D. M. 1966. Additional distributional records from New Mexico. *Condor*, **68**: 213–215.
- OLIVARES, A. 1965. Avifauna Colombiense Notulae. No. I. Dos aves nuevas para Colombia. *Hornero*, **10**: 273–275.—First records of *Columbina picui* and *Icterus c. cayanensis* for Colombia. (In Spanish.)—E.E.
- OLROG, C. C. 1965. El anillado de aves en la Argentina. 1961–1964. Cuarto Informe. *Hornero*, **10**: 202–208.—Report on birds banded in Argentina 1961–1964. Of 384 nestling cormorants (*Phalacrocorax brasilianus*) banded in June, 1963, 10 were recovered in the following six months, one as far as 1,400 km in southeastern Brazil, where *Netta peposaca* was also recovered.—E.E.
- PATTIE, D. L., AND N. A. M. VERBEEK. 1966. Alpine birds of the Beartooth Mountains. *Condor*, **68**: 167–176.
- PEREYRA, J. A. 1965. *Leucochloris albicollis* en la provincia de Buenos Aires. *Hornero*, **10**: 279.—In late November a pair of this subtropical hummingbird appeared in the province of Buenos Aires, Argentina, and was observed for some time. The female acted as if there was a nest nearby. (In Spanish.)—E.E.
- RICE, O. O. 1965. Louisiana Waterthrush nest in Riley County, Kansas. *Kansas Ornith. Soc. Bull.*, **16**: 28.—Description of the nest site.—A.S.G.
- RISING, J. D. 1965. A summer specimen of the Wright Flycatcher (*Empidonax oberholseri*) from western Kansas. *Kansas Ornith. Soc. Bull.*, **16**: 24–25. A female taken in Trego County on 22 June 1965, appeared to have bred in the state.—A.S.G.
- RISING, J. D. 1965. Distributional notes from western Kansas. *Kansas Ornith. Soc. Bull.*, **16**: 25–27.—Range extensions of 11 species recorded in the summer of 1965.—A.S.G.
- ROYALL, W. C., JR. 1966. Breeding of the Starling in Central America. *Condor*, **68**: 196–205.
- RUSSELL, S. M. 1966. Status of the Black Rail and the Gray-breasted Crake in British Honduras. *Condor*, **68**: 105–107.
- SEGFRIED, W. R. 1965. The status of the Cattle Egret in the Cape Province. *Ostrich*, **36**: 109–115.—A survey of the distribution and spread of the Cattle Egret, *Ardeola ibis*, in the Province of the Cape of Good Hope. Data on breeding and occurrence are presented on a regional basis. Population increase and spread are discussed, briefly, in relation to changing land conditions.—M.A.T.
- TORDOFF, H. B. 1966. Additions to the birds of Michigan. Jack-pine Warbler, **44**: 2–7.—Adds 18 species in the 6 years since the last compilation.—R.B.
- TSUKAMOTO, G. K. 1966. Some notes on birds of Elko County, Nevada. *Condor*, **68**: 103–104.
- WAUER, R. H. 1966. Flammulated Owl records following May storms in Zion Canyon, Utah. *Condor*, **68**: 211.
- WINTERBOTTOM, J. M. 1965. Avifaunal relationships between the Neotropical and Ethiopian regions. *Hornero*, **10**: 209–214.—Discusses species found in both Africa and South America. Aside from those of cosmopolitan distribution and some sea birds, they consist essentially of ducks and herons.—E.E.

ECOLOGY AND POPULATION

- ARMSTRONG, J. T. 1965. Breeding home range in the nighthawk and other birds; its evolutionary and ecological significance. *Ecology*, **46**: 619-629.—A thorough study of size, contents, and distribution of 13 neighboring breeding home ranges of the Common Nighthawk in the center of Detroit, Michigan. The sizes of territories varied with population density and availability of flat roofs. Aggressive interaction was important in determining home range size and, thus, the number of breeding individuals. Reviews and discusses the role of territoriality and factors influencing territory size. Breeding home ranges, or territories, tend to be larger than necessary for food gathering, and the author suggests that population density is regulated by social processes.—H.W.K.
- BORRERO H., J. I. 1965. Notas sobre el comportamiento del colibrí coli-rojo (*Amazilia tzacatl*) y el mielero (*Coereba flaveola*), en Colombia. *Hornero*, **10**: 247-250.—Near Medellín, Colombia, the Rufous-tailed Hummingbird appears to rear two broods a year, with two eggs per clutch. The species uses a hole pierced by *Coereba* at the base of the corolla of *Thumbergia grandiflora* to reach the nectar in these flowers. Another hummingbird, *Haplophaedia aureliae*, also used these perforations. (In Spanish; English summary.)—E.E.
- BREWER, R. 1966. Notes on vegetation and birds of a maple forest in southwestern Michigan. Jack-pine Warbler, **44**: 48-49.
- CALDWELL, L. D. 1964. Dove production and nest site selection in southern Michigan. *J. Wildl. Mgmt.*, **28**: 732-738.—Doves preferred conifer and medium shrub habitat types for nesting, but the type did not affect nesting success. Production was lower than recorded in the literature, and could only replace annual losses below 53 per cent.—J.P.R.
- DICK, J. A., AND J. D. RISING. 1965. A comparison of foods eaten by Eastern Kingbirds and Western Kingbirds in Kansas. *Kansas Ornith. Soc. Bull.*, **16**: 23-24.—Stomach contents suggest that the two species forage in different parts of the available habitat.—A.S.G.
- DOBROWOLSKI, K. A., AND E. NOWAK. 1965. [On the distribution of the Penduline Tit, *Remiz pendulinus* (L.), in Poland.] *Acta Ornith.*, **9**: 77-119.—An analysis of present and past breeding distributions (over one thousand breeding records mapped for the years 1951-1962). The species is specialized for living in floodplain thickets and, although common in Poland is local in distribution. It shows periodic extensions and retractions of its breeding area which may last several decades. It decreased and disappeared from northern Poland in the 1870's and 1880's, but returned beginning with the 1920's. Presently the species is increasing locally. (In Polish; English summary.)—M.D.F.U.
- EATON, S. W. 1965. Juncos of the high plateaus. *Kingbird*, **15**: 141-146.—The breeding cycle of this form, probably intermediate between *Junco h. carolinensis* and *J. h. hyemalis*, resembles that of juncos breeding in the Great Smoky Mountains. Like the latter population, the clutch consists of 4 eggs; 4 or 5 are recorded for Newfoundland. Subspecific variability, clutch size, and migratory habits seem more malleable from the Great Smoky Mountains to Newfoundland than timing of the reproductive cycle.—C.F.S.
- HAAPANEN, A. 1965. Bird fauna of the Finnish forests in relation to forest succession I. *Ann. Zool. Fenn.*, **2**: 153-196.—A four-year study of the effect of forest succession on the breeding avifauna. The fauna was grouped according to feeding niches, major habitat types, and forest tree species, and the successional changes

- in density and species composition were discussed. The results probably are comparable in other Holarctic forest habitats.—M.D.F.U.
- HAMERSTROM, F., D. D. BERGER, AND F. N. HAMERSTROM, JR. 1965. The effect of mammals on Prairie Chickens on booming grounds. *J. Wildl. Mgmt.*, **29**: 536-542.—Mammals, except man, disturbed Prairie Chickens very little. Introduced, domestic species caused significantly more disturbance than native species.—J.P.R.
- HOLMES, R. T. 1966. Breeding ecology and annual cycle adaptations of the Red-backed Sandpiper (*Calidris alpina*) in northern Alaska. *Condor*, **68**: 3-46.
- JOVETIĆ, R. 1963. [Vom Leben des Weissstorchs, *Ciconia ciconia*, in Macedonien.] *Larus*, **15**: 28-99.—A detailed life history of the White Stork. The field work seems to have been done during the nesting seasons of 1954-1958. Approximately eight nests were studied in detail. Nesting statistics are based on nearly 1,500 nests. When spring is delayed the number of storks breeding locally reaches a peak, probably because migration terminates early for many storks originally from more northern populations. Delayed birds are in a great hurry and often select inferior nest sites wherein breeding is mainly unsuccessful. An extended breeding cycle (incubation 31-32 days, dependency 80-90 days) forces storks to nest early; when arrival is late, pair formation and nest building or repair are hurried. The male brings most of the nest material while the female builds; he shares in incubation and brooding. Clutch size varies between 1 and 5 (62 per cent of 268 clutches had 3 or 4 eggs). Later nests seem to have larger clutches, but often the smallest young becomes stunted, sickly and/or parasitized and is removed or killed by the parents. In one late brood of five the young hatched during a ten-day period, and three of them were killed by the parents. The eggs are jealously guarded, yet in several cases removal of eggs from large clutches was observed. In three clutches of seven the parents reduced one to five, and two to four shortly after laying. The author thinks this is a purposeful action rather than "plundering inclination." Young are sheltered from the extreme heat and are regularly given water (a graph shows body temperatures in excess of 40° C!). The water is regurgitated directly into the beak of the young while food is deposited onto the bottom of the nest for the young to pick up. Weight increase of the young is summarized in tables. Captive young continued to gain weight throughout 20 months of study. Nesting success is only sketchily summarized. The fledging process and communal departure in mid-August are described in detail. Many additional details are in the nine-page summary. (In Serbocroatian; German summary.)—M.D.F.U.
- KALE, H. M., II. 1965. Ecology and bioenergetics of the Long-billed Marsh Wren in Georgia salt marshes. *Publs. Nuttall Orn. Club No. 5*. Cambridge, Mass., 142 pp.—A five-year study of *Telmatodytes palustris griseus* in the *Spartina alterniflora* marshes of Sapelo Island, Georgia. One or two, rarely three, broods per season were reared. Mortality from predation, chiefly mammalian, was relatively high resulting in low nesting success; breeding population density varied little from year to year. Mean daily energy requirements per bird were 8.8 Kcal. Mean population energy flow was 246 gcal/m² × day, of which 242 gcal comprised respiratory energy. Daily mean gross energy intake was estimated to be 351 gcal/m². Territorial and colonial behavior limits the wren's breeding area to about half the potential breeding habitat. Mean territory size was 100 sq. m. Wrens are able to maintain themselves on relatively small territories because of a regular immigration of insects. Their diet consisted of approximately 58 per cent (by volume) herbivores, 30 per cent predators, and 12 per cent detritus feeders. Thus, the wren is a secondary and tertiary consumer in the ecosystem.—H.W.K.,II.

- MEANLEY, B., AND J. S. WEBB. 1965. Nationwide population estimates of blackbirds and Starlings. *Atlantic Nat.*, **20**: 189-191.—An estimate of half a billion blackbirds and Starlings in the continental United States is based on winter roost surveys in the last five years by personnel of the Patuxent and Denver Wildlife Research Centers. Three-fourths of the blackbirds are found in the east. Winter concentrations of blackbirds and Starlings in the lower Mississippi Valley are the largest for any season because of the incursion of northern birds attracted by rice production. Starlings have increased and extended their range; blackbird populations appear stable. Reports of blackbird population explosions probably result from increased observers, greater concern by agricultural interests, and shifting of local populations.—C.F.S.
- NICKELL, W. P. 1966. Common Terns nest on Muskrat lodges and floating cat-tail mats. *Wilson Bull.*, **78**: 123-124.
- NORBERG, A. 1964. [Studies on the ecology and ethology of Tengmalm's Owl (*Aegolius funereus*).] *Vår Fågelvärld*, **23**: 228-224.—Breeding biology (based on daily inspection of five nests) and food. Contents of nearly 500 pellets taken from various nests and storage sites during five years: voles (*Microtus* and *Clethrionomys*) about 50 per cent, shrews (*Sorex* spp.) about 33 per cent, mice, and passerines. Title misleading. (In Swedish; English summary.)—M.D.F.U.
- NYHOLM, E. 1965. Ecological observations on the geese of Spitsbergen. *Ann. Zool. Fenn.*, **2**: 197-207.—Observation of 4 nests of *Branta leucopsis*, 9 of *Branta bernicla*, and 48 of *Anser fabalis brachyrhynchos*. Includes measurements and description of nest and clutch size. Predation averting reactions are discussed.—M.D.F.U.
- OLROG, C. C. 1965. Diferencias en el ciclo sexual de algunas aves. *Hornero*, **10**: 269-272.—In a flooded area in Santiago del Estero, northwestern Argentina, a number of water birds breed in the southern hemisphere autumn, although elsewhere in the country these species breed in spring and summer. This unusual breeding cycle is thought to reflect an extremely abundant food supply of fish and batrachians concentrated as flood waters dry, when the birds have nestlings. The population which breeds into the winter appears to spend the summer in the same region where the populations which breed in spring and summer regularly spend the winter. (In Spanish; English summary.)—E.E.
- OLSSON, V. 1964. [Some changes in the bird fauna of the Swedish east coast.] *Vår Fågelvärld*, **23**: 352-362.—Two types of coastline are inhabited by different sea and shore birds. Difficulties encountered in the spreading of species into a new kind of habitat are documented by the northward movement of *Sterna sandwicensis*, the southward movement of *Stercorarius parasiticus* and *Clangula hyemalis*, and by the seaward movement of a few freshwater birds. Unseasonally early and late springs seem to stimulate colonization north and southward just as has been found previously in Scandinavia. (In Swedish; English summary.)—M.D.F.U.
- PERRINS, C. M. 1966. Survival of young Manx Shearwaters *Puffinus puffinus* in relation to their presumed date of hatching. *Ibis*, **108**: 132-135.—Of 17,794 young banded just before they fledged (Skokholm, 1947-61), 1,076 are known to have been alive a year later. Recovery data for the entire 15-year period show highly significant correlation between date of banding and likelihood of survival to the following year, although for not all years individually considered was this true. Known survival declines from about 13 per cent for young banded in mid-August to about 1 per cent for those banded in early October. Reasons for poor

- survival of later young are not known. Selection must strongly favor earlier nesting and weigh against replacement laying.—W.B.R.
- PINTO, O. 1965. [The fruit of the palm *Elaeis guineensis* in the diet of *Cathartes aura ruficollis*.] *Hornero*, **10**: 276-277.—In eastern Brazil the Turkey Vulture was observed regularly eating the ripe fruit of the introduced African oil palm, the same fruit on which the African Palm-nut Vulture (*Gypohierax*) mainly feeds. The Black Vulture (*Coragyps ater*) was reported by farmers also to eat this fruit. (In Portuguese.)—E.E.
- ROBEL, R. J. 1965. Differential winter mortality of Bobwhites in Kansas. *J. Wildl. Mgmt.*, **29**: 261-266.—A change in age ratios from September to April showed that juvenile mortality was nearly four times that of adults. Females were slightly more numerous than males but no differential mortality between sexes was found.—J.P.R.
- SAMARDZIC, D. 1963. Beitrag zur Erforschung der Biologie des Eichelhäher, *Garrulus glandarius*, in der Umgebung von Banja Luka in Bosnien. *Larus*, **15**: 202-209.—Weekly transect censuses during 1959 established absolute and relative frequencies of the European Jay in four different forest communities. The seasonality of habitat occupancy and the effect of certain environmental factors are discussed. (In Serbocroatian; German summary.)—M.D.F.U.
- SZABÓ, L. V. 1965. [The examination of nesting bird association on the alkali (szik) soils of Kunmadaras.] *Állattani Közlemények* (Budapest), **52**: 111-134.—Detailed description of a 30 hectare alkali prairie and marsh in eastern Hungary. Included are habitat analyses and descriptions of nest sites of the breeding avifauna, emphasizing the plant microassociations which form a mosaic depending on depth, water permeability, and salinity of the soil. The prairie sloughs, oxbows, and remnants of ancient loess fields harbor an avifauna which is replaced mostly elsewhere by birds adapted to agriculture; the area would make a good preserve. (In Hungarian; English summary.)—M.D.F.U.
- SZLIVKA, L. 1963. Beitrag zur Ornithofauna der Obedska Bara und ihrer Umgebung. *Larus*, **15**: 100-126.—Sloughs of the Sava River maintained the mixed heronry in an area which used to be the richest bird marsh of the southern Carpathian basin. A faunistic list that describes breeding habitats and other environmental factors. (In Serbocroatian; German summary.)—M.D.F.U.
- WILLIS, E. O. 1966. Ecology and behavior of the Crested Ant-Tanager. *Condor*, **68**: 56-71.

EVOLUTION AND GENETICS

- BARLOW, J. C., AND J. D. RISING. 1965. The summer status of Wood Pewees in southwestern Kansas. *Kansas Ornith. Soc. Bull.*, **16**: 14-16.—Specimens from Morton and Grand counties seem to constitute a population intermediate in wing length and spectral reflectance between *Contopus virens* and *C. sordidus*. The two species appear to interbreed in the area.—A.S.G.
- HAMILTON, T. H., R. H. BARTH, JR., AND I. RUBINOFF. 1964. The environmental control of insular variation in bird species abundance. *Proc. Nat. Acad. Sci.*, **52**: 132-140.—The numbers of species of birds found on isolated islands in the East Indies, east-central Pacific, and West Indies, were compared through a computer analysis for multiple regression and variation in the environmental correlates of area, elevation, and degree of isolation. For each of the three regions "area is the major predictor of insular variation in species numbers."
- LIND, H., AND H. POULSEN. 1963. On the morphology and behavior of a hybrid be-

- tween Goosander and Shelduck (*Mergus merganser* L. \times *Tadorna tadorna* L.) Zeit. f. Tierpsychol., **20**: 558-569.—Morphological and behavioral characters which are similar in both species are unchanged in hybrids, those occurring in only one parent species are either unchanged, absent, or changed in form in the hybrid. Some characters of the hybrid are intermediate, and some are different from those of the parental species and may indicate an ancestral condition.—M.S.F.
- SELANDER, R. K. 1966. Sexual dimorphism and differential niche utilization in birds. Condor, **68**: 113-151.
- SHORT, L. L., JR. 1965. Hybridization in the flickers (*Colaptes*) of North America. Bull. Amer. Mus. Nat. Hist., **129**: 307-428.—An outstanding paper discussing the relationships, ecology, and behavior of members of the genus *Colaptes*. The populations distinguished as *auratus*, *cafer*, *chrysoides*, *chrysocaulosus*, and *mexicanoides* should be considered subspecies of *C. auratus*. The hybrid zone between *auratus* and *cafer* is a broad band extending from British Columbia east to Alberta and south and east to Texas. Introgression, with diminishing effects towards the two oceans, is evident. Localized hybridization occurs between the *cafer* and *chrysoides* groups, most of the hybrid individuals occurring in hybrid swarms. Genes from the eastern *auratus* have entered the *chrysoides* population through *cafer*. Hybridization between *chrysoides* and *cafer* is a relatively recent event compared with that between *auratus* and *cafer*. Introgression was probably of major importance for survival of some animals during glaciation and human environmental modifications.—G.E.W.
- RUCNER, D. 1963. Beitrag zur Kenntnis der bastarde aus der Familie Anatidae welche in Jugoslawien gefunden wurden. Larus, **15**: 183-197.—Three hybrids involving *Anas platyrhynchos* (with *Aythya fuligula*, *Anas strepera*, and *Anas acuta*) are described and discussed. (In Serbocroatian; German summary.)—M.D.F.U.
- WINTERBOTTOM, J. M. 1965. Note on the Purple Widow-bird. Ostrich, **36**: 140-142.—Descriptions and photographs of a hybrid *Vidua amauropteryx* δ \times *V. regia* ϕ . Differences between this bird and the hybrid "*Prosteganura haagneri*" show that one parent of the latter was probably *V. paradisaea* as generally surmised.—M.A.T.

GENERAL BIOLOGY

- ANDERSSON, S. 1964. [A study of *Larus argentatus* from the Archipelago of Västervik.] Vår Fågelvärld, **23**: 337-347.—Statistical study of approximately 100 individuals showed that 95 per cent of the Herring Gulls can be sexed by the ratio of beak length/tarsus length. Bill length of males from the Atlantic coast differs from those bred on the Baltic coast although the two populations winter and presumably mix in Denmark. Appearance of yellow-legged, long beaked individuals of the eastern *L. a. cachinnans* explains this variation but the puzzle remains that only the male exhibits the variable bill length. (In Swedish; English summary.)—M.D.F.U.
- BAILEY, E. P. 1966. Abundance and activity of Starlings in winter in northern Utah. Condor, **68**: 152-162.
- BERGMAN, G. 1965. Der sexuelle Grössendimorphismus der Anatiden als Anpassung an das Höhlenbrüten. Commentationes Biol., **28**(1):10 pp.—Sexual dimorphism in 129 species of waterfowl based on length of the relatively unvariable wing. In the ground nesting species the sexes have a small and relatively uniform size dimorphism, whereas in the obligate and facultative hole nesters sexual dimorphism in size is large. The scarcity of large nesting cavities and the protection afforded

- by small holes may be the selective factors, and that these would affect only the female. An exception is ground nesting waterfowl in which the drake defends the nest. Here too the males are relatively larger. Hole nesters tend to have white down, whereas in ground nesters it tends to be gray. (In German.)—M.D.F.U.
- BÓ, N. A. 1965. Un ejemplar interesante de carpintero del genero *Phloeocastes*. Hornero, **10**: 275-276.—Plumage of juvenal male *P. mellanoleucus albistrois*, from Corrientes, Argentina. (In Spanish.)—E.E.
- BOAG, D. A. 1965. Indicators of sex, age, and breeding phenology in Blue Grouse. *J. Wildl. Mgmt.*, **29**: 103-108.—Sex can be told by the color of the neck feathers, and age by the shape of the primaries. Molt of flight feathers can be used in determining breeding phenology.—J.P.R.
- COOKINGHAM, R. A., AND T. H. RIPLEY. 1964. Vital characteristics of an insular Bobwhite population. *J. Wildl. Mgmt.*, **28**: 855-857.—In two breeding seasons 13 wild Bobwhites increased to 94. Summer gains were inversely related to population levels, possibly through the mechanism of post-nesting survival of juveniles.—J.P.R.
- DAHLGREN, R. B., C. M. TWEDT, AND F. R. HENDERSON. 1964. Lens weights of Sharp-tailed Grouse. *J. Wildl. Mgmt.*, **28**: 853-854.—Lens weights were of little use for age determination in this species.—J.P.R.
- DELIUS, J. D. 1963. Das Verhalten der Fieldlerche. *Zeit. f. Tierpsychol.*, **20**: 297-348.—A discussion of territory, homing, song (three types), call notes, agonistic displays, courtship, mobbing, and parental care in *Alauda arvensis* based on four seasons of observation in England.—M.S.F.
- DONNELLY, B. G. 1965. Longevity in the Yellow-backed Bishop, *Euplectes capensis*, in captivity. *Ostrich*, **36**: 145.—One bird, raised from a nestling, lived 18 years, 10 months, in captivity.—M.A.T.
- DUEBBERT, H. F. 1966. Island nesting of the Gadwall in North Dakota. *Wilson Bull.*, **78**: 12-25.
- ESCALANTE, R. 1965. Notes sobre el águila pescadora y el atí o gaviotín de pico grande en el Uruguay. Hornero, **10**: 277-278.—Notes on the Osprey and Large-billed Tern in Uruguay. An example of *Phaetusa simplex* in winter or immature plumage was extensively tinged with yellow below. (In Spanish.)—E.E.
- GOFORTH, W. R., AND T. S. BASKETT. 1965. Effects of experimental color marking on pairing of captive Mourning Doves. *J. Wildl. Mgmt.*, **29**: 543-553.—Yellow head marks on females disrupted recently formed pair bonds and prevented re-establishments of well developed pair bonds when mates had been separated. Marks in other locations and of colors had no such effects nor did yellow head marks on males.—J.P.R.
- GROSS, A. O. 1966. Erythristic eggs. *Wilson Bull.*, **78**: 127-128.
- HANEDA, K., AND M. KOZUMI. 1965. [Life history of the Black-eared Kite (*Milvus migrans lineatus*). I. Breeding season.] *Japanese J. Ecol.*, **15**: 199-208, 221-228.—Most activities were shared by both sexes, the male taking the greater share in nest-building, feeding young (85 per cent), and territorial defense, and the female in incubation and brooding. Clutch size was 2.2 (nine nests, northern Nagano). Incubation began with the first egg, which hatched two days before the second. In nests not "injured by human influence," 70 per cent of the eggs hatched and all the young fledged. (In Japanese; English summary.)—R.B.
- HEMMING, J. E. 1966. Notes on the status of some birds in south-central Alaska. *Condor*, **68**: 163-166.
- HOLLIDAY, C. S. 1965. A note on the Teita Falcon. *Puku*, **3**: 71-73.—Description

- of a population of the rare *Falco fasciinucha* nesting below Victoria Falls, and notes on a captive specimen.—M.A.T.
- JANSSON, E. 1964. [Notes on a breeding pair of Pygmy Owls (*Glaucidium passerinum*) in Central Sweden.] *Vår Fågelvärld*, **23**: 209–222. Details of courtship and copulation, breeding biology, and behavior at the nest, including list of food items. (In Swedish; English summary.)—M.D.F.U.
- LANCASTER, D. A. 1964. Biology of the Brushland Tinamou, *Nothoprocta cinerascens*. *Bull. Amer. Mus. Nat. Hist.*, **127**: 269–314.—Breeding biology and general non-breeding behavior, based on three months of study of wild and aviary birds in Argentina. Several females mate with a single male and use one nest for their eggs, which the male alone incubates. The females mate with different individuals and the males may nest two or more times in one season. The males have a home range and a variety of calls, including one to advertise their location. Copulatory behavior is depicted and described. Incubation is 19.5 days. A male feigned injury when the observer approached the chicks.—G.E.W.
- LASIEWSKI, R. C., AND H. J. THOMPSON. 1966. Field observation of torpidity in the Violet-green Swallow. *Condor*, **68**: 102–103.
- LONG, C. A., AND D. H. MATULIONIS. 1966. Nesting of Grasshopper Sparrow in Wyoming. *Condor*, **68**: 103.
- LUDLOW, A. R. 1966. Body-weight changes and moult of some Palaearctic migrants in southern Nigeria. *Ibis*, **108**: 129–132.—Body weight/wing length ratios for 57 individuals of four species mist-netted in 1962–63 increased in March–April, indicating pre-migratory fat deposition. Molt in three species occurred mainly in February. Dates of capture of Blackcaps (*Sylvia atricapilla*) suggest it is a passage migrant in the area.—W.B.R.
- NAVAS, J. R. 1965. Notas sobre *Aimophila strigiceps* y su distribución geográfica. *Hornero*, **10**: 215–224.—Data on new localities greatly extending the known range in Argentina. Includes description of the juvenal plumage of *A. s. strigiceps*; more detailed description of *A. s. dabbenei* (Hellmayr); weights and soft-part colors, and a comparison of both forms. (In Spanish; English summary.)—E.E.
- OLSON, S. L. 1966. A partly chestnut specimen of Variable Seedeater. *Wilson Bull.*, **78**: 127.
- PAYNE, R. B. 1966. Absence of brood patch in Cassin Auklets. *Condor*, **68**: 209–210.
- PROZESKY, O. P. M. 1965. Development and behaviour of a Yellow-billed Hornbill (*Lophoceros flavirostris leucomelas*) chick. *Koedoe*, **8**: 109–128.—Detailed description of growth and development of chick from three days old to fledging.—M.A.T.
- PULLIAINEN, E. 1965. Cannibalism in the pheasant (*Phasianus colchicus* L.) during the egg-laying period. *Ann. Zool. Fenn.*, **2**: 208–214.—Birds deprived of oats and receiving only wheat and pheasant starter pecked at each others feathers, skin, and often even the flesh.—M.D.F.U.
- REID, D., AND B. REID. 1965. The Sulphur Point (Lake Rotura) gull colony. *Notornis*, **12**: 138–157.—Aspects of the breeding biology of *Larus bulleri* and *L. novaehollandiae* on North Island, New Zealand, where they have become established through man's activities.—G.E.W.
- SIEGFRIED, W. R. 1965. The Cape Shoveller *Anas smithii* (Hartert) in southern Africa. *Ostrich*, **36**: 155–198.—Information pertaining to systematics, habitat preference, distribution and movements, breeding biology, hybrids, sex-ratio, wing molt, banding, and food habits.—M.A.T.
- SMART, G. 1965. Development and maturation of primary feathers of Redhead

- ducklings. J. Wildl. Mgmt., **29**: 533-536.—Primaries of late-hatched birds matured more rapidly than those of early-hatched birds and permitted a more rapid attainment of flight.—J.P.R.
- SMITH, V. W., P. J. WOODS, AND D. P. EBBUTT. 1966. Breeding notes on the White-crowned Cliff-chat *Thamnolaea coronata* in central Nigeria. Ibis, **108**: 137-138.—Observations on the Jos Plateau in 1964-65 include the first description of the eggs, a clutch of three "light blue with pale brown blotches." The species breeds early in the rainy season (April-June) in crevices of cliffs or house walls, or in old nests of swifts and swallows.—W.B.R.
- STEYN, P. 1965. Some observations on the Bateleur *Terathopius ecaudatus* (Daudin). Ostrich, **36**: 203-213.—Flight, display, breeding biology, and food habits described.—M.A.T.
- SULLIVAN, J. O. 1966. A Dipper nest away from water. Condor, **68**: 107.
- TATE, J., JR., AND D. K. WEAVER. 1966. Nest analysis of the Tree Swallow. Jack-pine Warbler, **44**: 14-22.—Contents of 27 nest boxes indicate that nesting materials are gathered from the ground and are largely determined by availability. Light-colored feathers were in nearly every nest. Fleas and blowflies, as parasites, and snail shells from food were present.—R.B.
- TICKELL, N. L. N., AND R. PINDER. 1966. Two-egg clutches in albatrosses. Ibis, **108**: 126-129.—Observations of individually marked Black-browed (*Diomedea melanophris*) and Gray-headed (*D. chrysostoma*) albatrosses on Bird Island, South Georgia, show that in three instances each of two-egg clutches, the eggs were laid by different females. The authors suggest this is probably true also of the two-egg clutches reported for other procellariiform birds.—W.B.R.
- VEN CHUNG-MING, BAO KUE-LING, LIE KEI-ZHEN, HUI BAI-YAEI, AND KAU KUE-JU. 1965. [Preliminary studies on the breeding behaviour of the Marsh Tit.] Acta Zool. Sinica., **17**: 364-372.—*Parus palustris brevirostris* studied in Laoning Province. Nest-building, by the female alone, required eight days. Clutch size was 8-10 eggs. Incubation lasted about 13 days; the incubating female was fed by the male. Body weight increased from 1.2 gm hatching to 10.8 on the day 16 when the young left the nest. (In Chinese; English summary.)—R.B.
- WALKINSHAW, L. H. 1966. Summer biology of Traill's Flycatcher. Wilson Bull., **78**: 31-46.
- WALLACE, G. J. 1965. Studies on neotropical thrushes in Colombia. Michigan State Univ. Mus. Publ., Biol. Ser., **3**: 1-47.—Observations, mainly on breeding season activities, of *Turdus ignobilis goodfellowi*, which is shyer and less social than *T. migratorius* but apparently similar in breeding biology, and of *Catharus auranti-rostris phaeopleurus* and *Myadestes ralloides plumbeiceps*. The advisability of merging *Catharus* and *Hylocichla* is doubtful.—R.B..
- WIGHT, H. M., R. G. HEATH, AND A. D. GEIS. 1965. A method for estimating fall adult sex ratios from production and survival data. J. Wildl. Mgmt., **29**: 185-192.—Presents formulae which can be used to calculate a basic fall adult sex ratio for birds; gives an average value about which ratios will fluctuate annually as production and survival varies.—J.P.R.
- WOOD, J. S. 1965. Some associations of behavior to reproductive development in Canada Geese. J. Wildl. Mgmt., **29**: 237-244.—Precopulatory displays, pairing, and territorial defense in semi-domesticated geese were not necessarily coincident with and cannot be used as indices to reproductive maturity.—J.P.R.
- ZAPATA, A. R. P. 1965. Hallazgo de un nido de *Syrigma sibilatrix*. Hornero, **10**: 279-280.—Reports a nest of the Whistling Heron and describes the nestling, which was kept alive in captivity for some time. (In Spanish.)—E.E.

MANAGEMENT AND CONSERVATION

- ANDERSON, J., AND A. EGDELL. 1963. Pheasant nesting 35 feet above ground in same tree as Sparrowhawk. *British Birds*, **56**: 419.
- BALLOU, R. M. 1964. Rigid plastic collars for marking geese. *J. Wildl. Mgmt.*, **28**: 846-847.—Plexiglas collars made of different colored strips bonded together are useful for identifying individual Canada Geese.—J.P.R.
- BELLROSE, F. C., K. L. JOHNSON, AND T. V. MEYERS. 1964. Relative value of natural cavities and nesting houses for Wood Ducks. *J. Wildl. Mgmt.*, **28**: 661-676.—Wood Duck nesting and factors affecting it in the Illinois River valley. Predator-proof nest houses increased the number of nesting Wood Ducks even where natural cavities were abundant. In one area the nesting population increased from 10-15 pairs to over 90 pairs when nest boxes were supplied. Increased box use followed high nesting success in protected houses as homing adults and yearlings swelled the population. Nest houses should be erected in groups to take advantage of homing by females.—J.P.R.
- BURGER, G. V. 1964. Survival of Ring-necked Pheasants released on a Wisconsin shooting preserve. *J. Wildl. Mgmt.*, **28**: 711-721.—Of released pheasants 8 per cent survived on the preserve or within two miles of it; 51 per cent were harvested by hunters and most of the remainder died from gunshot wounds, shock, accidents, and predation.—J.P.R.
- BURGESS, H. H., H. H. PRINCE, AND D. L. TRAUGER. 1965. Blue-winged Teal nesting success as related to land use. *J. Wildl. Mgmt.*, **29**: 89-95.—Hayfields in which mowing was delayed until 1 July provided valuable nesting cover on a refuge in Iowa. Moderately grazed grasslands were equally valuable and more attractive to nesting teal than ungrazed areas.—J.P.R.
- CHUPP, N. R., AND P. D. DALKE. 1964. Waterfowl mortality in the Coeur d'Alene River Valley, Idaho. *J. Wildl. Mgmt.*, **28**: 692-702.—Mortality of ducks, geese, and swans is due to poisoning from metallic mine wastes which have accumulated in the soils and plants over many years. Recommendations are made for alleviating the problem.—J.P.R.
- CONDY, J. B. 1965. A technique for capturing Abdim's Storks *Sphenorhynchus abdimii* (Lichtenstein). *Ostrich*, **36**: 121-122.—The storks were captured by inserting capsules of the narcotic alpha-choralose in beetle larvae on which the birds were feeding.—M.A.T.
- FINLEY, R. B., JR. 1965. Adverse effects on birds of phosphamidon applied to a Montana forest. *J. Wildl. Mgmt.*, **29**: 580-591.—At a rate of 1 lb/acre some birds were killed, others became sick, and bird activity dropped to one-quarter the prespray level. Cholinesterase activity was inhibited in sick Blue Grouse but returned to normal after recovery.—J.P.R.
- FUNK, H. D., AND J. R. GRIEB. 1965. Baited cannon-net sampling as an indicator of Canada Goose population characteristics. *J. Wildl. Mgmt.*, **29**: 253-260.—Comparison of geese trapped on baited and unbaited sites indicated that baited samples yielded reliable information about sex and age ratios and the incidence of lead shot.—J.P.R.
- GATES, J. M. 1965. Duck nesting and production on Wisconsin farmlands. *J. Wildl. Mgmt.*, **29**: 515-523.—In east-central Wisconsin temporary water is often present in spring to attract breeding pairs but summer water appears too undependable for adequate brood survival in most years.—J.P.R.
- GIBAN, J. 1962. Colloque sur les moyens de protection contre les espèces d'oiseaux commettant des dégâts en agriculture. *Annales de Épiphyties*, **13**: 1-254.—

- Papers by various authors on protection against passerine depredations on agriculture, methods of controlling Starlings, acoustical experiments with crows, and various control methods used near airports. Presented in October, 1961, on the occasion of the General Assembly meeting of the International Union of Applied Ornithology, held in Versailles.—M.D.A.
- GULLION, G. W. 1965. Improvements in methods for trapping and marking Ruffed Grouse. *J. Wildl. Mgmt.*, **29**: 109-116.—Various improvements in baited lily-pod traps and mirror traps, and a color-marking scheme using eight colors of anodized aluminum butt-end bands are described.—J.P.R.
- HAMERSTROM, F. N., JR., AND O. E. MATTSON. 1964. A numbered, metal color-band for game birds. *J. Wildl. Mgmt.*, **28**: 850-852.—Permanently numbered aluminum color-bands were used as an aid to identifying individual Prairie Chickens.—J.P.R.
- HARPER, J. A., AND R. F. LABISKY. 1964. The influence of calcium on the distribution of pheasants in Illinois. *J. Wildl. Mgmt.*, **28**: 722-731.—Availability of calcium was not a factor limiting pheasant abundance on an area of old glacial till where the population was low.—J.P.R.
- KOPISCHKE, E. D. 1964. Unusual mortality for diving ducks. *J. Wildl. Mgmt.*, **28**: 848-849.—Nearly 90 ducks, mostly Canvasbacks and Lesser Scaup, were drowned when sucked into a vertical intake drainage tile.—J.P.R.
- MARTIN, F. W., A. D. GEIS, AND W. H. STICKEL. 1965. Results of Woodcock wing collections, 1959 to 1962. *J. Wildl. Mgmt.*, **29**: 121-131.—Wings collected from hunters indicated no change in annual productivity, an even sex ratio for juveniles, and a higher kill of females than males among adults. Non-hunting mortality may be higher among males than females but because Woodcocks are promiscuous this probably does not reduce productivity.—J.P.R.
- MATHESON, C. 1963. The Pheasant in Wales. *Brit. Birds*, **56**: 452-456.—Data on *Phasianus colchicus*, chiefly from gamebooks.—H.B.
- MCAALUM, H. J. F. 1965. The adaptation and increase in the Paradise Shelduck (*Tadorna variegata*) within a man-modified environment. *Trans. Roy. Soc. New Zealand, Zoology*, **6**: 115-125.—Reduction of forest and increase in pastureland and stock ponds has favored colonization by released birds. Data on feeding, breeding, and molting are included.—G.E.W.
- MCKINLEY, D. 1966. The gay life and sad end of America's parakeet. *Explorer*, **8**: 20-23.—Lists many pioneer records of the Carolina Parakeet which was once numerous in the Mississippi and associated river valleys and in southeastern United States. The birds roosted in flocks and fed on cocklebur seeds, fruit, and grain crops. Their extinction, which has been attributed to shooting, disease, honey bees, the cage-bird and plume trade, and museum collecting, was allowed by disinterest in preservation and lack of understanding of ecologic principles.—C.F.S.
- MCMILLAN, I. I. 1964. Annual population changes in California Quail. *J. Wildl. Mgmt.*, **28**: 702-711.—Reproductive effort was independent of environmental conditions during the actual nesting season, but was related to weather conditions early in the season controlling plant growth and production of quail food.—J.P.R.
- RIPLEY, T. H., AND C. J. PERKINS. 1965. Estimating ground supplies of seed available to Bob-whites. *J. Wildl. Mgmt.*, **29**: 117-121.—Describes sampling techniques which yield estimates of kinds and amounts of seeds available with an accuracy of 50 per cent.—J.P.R.
- ROSENE, W., JR. 1965. Effects of field applications of heptachlor on Bobwhite quail and other wild animals. *J. Wildl. Mgmt.*, **29**: 554-580.—Applications of 2 lbs/acre for control of fire ants significantly reduced quail; lesser reductions oc-

- curred after $\frac{1}{2}$ lb applications. Populations were still low after three years. Resident song birds declined 37 per cent and some species disappeared. On a four-acre study plot no live animals were seen or heard 47 days after treatment.—J.P.R.
- STICKEL, W. H., W. E. DODGE, W. G. SHELDON, J. B. DEWITT, AND L. F. STICKEL. 1965. Body condition and response to pesticides in Woodcocks. *J. Wildl. Mgmt.*, **29**: 147-155.—Underweight Woodcocks died when fed heptachlor at levels below those at which normal-weight birds lived. Dieldrin was more toxic than heptachlor and both were more toxic than DDT. Susceptibility to pesticides may be increased among wild birds when they lose weight during periods of inclement weather.—J.P.R.
- STICKEL, W. H., D. W. HAYNE, AND L. F. STICKEL. 1965. Effects of heptachlor-contaminated earthworms on Woodcocks. *J. Wildl. Mgmt.*, **29**: 132-146.—Earthworms containing approximately 3 ppm of heptachlor killed 50 per cent of treated Woodcocks in 35 days. An equal or greater contamination is often found in worms from Woodcock wintering areas treated with two pounds per acre of heptachlor. Because of long persistence in the soil, heptachlor may affect Woodcocks for many years after treatment ceases.—J.P.R.
- STICKEL, W. H., W. G. SHELDON, AND L. F. STICKEL. 1965. Care of captive Woodcocks. *J. Wildl. Mgmt.*, **29**: 161-172.—Feeding, sanitation, and protection from injury were the chief problems in keeping Woodcocks. Live earthworms were the best food. Steel cages with removable floors partly solved sanitation problems. Protection from injury was provided by wing clipping, opaque cage walls, and false ceilings of fabric.—J.P.R.
- STODDARD, H. L., SR. 1963. Maintenance and increase of the eastern wild Turkey on private lands of the coastal plain of the deep southeast. *Bull. Tall Timbers Res. Sta.*, No. 3: 1-49.—The craft of managing *Meleagris gallopavo*, with diversions on tactics and esthetics in hunting and on the early ecology of pines on old fields. Management to provide a shootable surplus involves prevention of poaching and provision of suitable cover and food for the entire population throughout the year. In such provision controlled burning is a useful tool. Turkey management is compatible with agriculture, livestock grazing, and long-rotation forestry; however, planting of supplementary foods (especially *Cyperus esculentus*, *Panicum adspersum*, and oats) may sometimes be necessary.—R.B.
- TRAINER, D. O., AND R. A. HUNT. 1965. Lead poisoning of waterfowl in Wisconsin. *J. Wildl. Mgmt.*, **29**: 95-103.—Lead poisoning accounted for greater losses of Canada Geese than previously reported but was not considered important among swans and ducks. Ecological factors affecting incidence of lead poisoning are discussed.—J.P.R.
- WRIGHT, B. S. 1965. Some effects of heptachlor and DDT on New Brunswick Woodcocks. *J. Wildl. Mgmt.*, **29**: 172-185.—Woodcocks are exposed to heptachlor on breeding and wintering ranges and DDT on the breeding range. Breeding success varies inversely with amount of DDT used and the area sprayed. Effect of heptachlor on breeding is unknown but its continued accumulation in Woodcocks may be a threat to public health and may curtail use of the resource.—J.P.R.

MIGRATION AND ORIENTATION

- BERGMAN, G. 1965. Über die Schwankungen der Herbstzugzeit des Kranichs, *Grus grus* (L.), in Südfinnland. *Mem. Soc. Fauna and Flora Fennica*, **41**: 12 pp.—The southward movement of Cranes through southern Finland has shifted from late August-early September in the 1920's and 1930's to September-early October

- in the 1950's and especially in the 1960's. During the 1930's springs were warm and the harvest was early, and at migration time no food supply was available to delay the cranes. Furthermore the Cranes had had an early breeding season. More recently springs have been later, and harvest time has been delayed so that it often coincides with the onset of rains. Thus many fields remain unharvested providing good feeding opportunities. Furthermore, the rainy weather itself does not stimulate migration as does clear, cold weather with northerly winds. (In German.)—M.D.F.U.
- HAUGH, J. R., AND T. J. CADE. 1966. The spring hawk migration around the southeastern shore of Lake Ontario. *Wilson Bull.*, **78**: 88-110.
- HOFSLUND, P. B. 1966. Hawk migration over the western tip of Lake Superior. *Wilson Bull.*, **78**: 79-87.
- HUBBARD, J. P. "1965" [1966]. Migration of the Black-throated Blue Warbler in southern Michigan. Jack-pine Warbler, **43**: 162-163.—Based on museum specimens, adult males migrate earlier than first-year males or females in spring, but perhaps by-pass the region in fall (1 adult male out of 60 birds).—R.B.
- KEMPER, C. A., D. G. RAVELING, AND D. W. WARNER. 1966. A comparison of the species composition of two TV tower killed samples from the same night of migration. *Wilson Bull.*, **78**: 26-30.
- KLEINMAN, J. P. 1966. Migration of Rough-legged Hawks over Lake Erie. *Wilson Bull.*, **78**: 122.
- LEVEQUE, R., R. I. BOWMAN, AND S. L. BILLEB. 1966. Migrants in the Galapagos area. *Condor*, **68**: 81-101.
- METCALF, W. G. 1966. Observations of migrating Greater Shearwaters *Puffinus gravis* off the Brazilian coast. *Ibis*, **108**: 138-140.—"Many thousands" moving north individually (not in close flocks) off northeastern Brazil, 14-24 May 1965, probably were post-breeding migrants from Tristan da Cunha.—W.B.R.
- MURRAY, B. G., JR. 1966. Blackpoll Warbler migration in Michigan. Jack-pine Warbler, **44**: 14-22.—Only 5 of 87 autumn specimens were adult. Migration route for birds from western part of breeding range is southeast to the coastal plain, southwest to Georgia and Florida, thence southeast to South America.—R.B.
- SCOTT, R. E. 1965. Weights and measurements of migrant passerines September 1962. *Vår Fågelvärld*, **24**: 156-171.—Analysis of data on 825 individuals of 32 species. Sexual and age differences of several species are noted. Birds (e.g., *Edithacus rubecula*) arriving with strong eastern winds were considerably underweight compared with arrivals under other wind conditions.—M.D.F.U.
- STROMBERG, G. 1964. [Passage of the Black Tern (*Chlidonias niger*) in the Baltic Sea region in 1960.] *Vår Fågelvärld*, **23**: 256-265.—Summarization of the reports of Swedish observers and of the literature for northwest and central Europe about the unusually strong Black Tern migration in the Baltic Sea. The flocks may have come from the interior of Eurasia. The number of migrants fluctuates from year to year at all Swedish migratory observatories. (In Swedish; English summary.)—M.D.F.U.
- TREE, A. J. 1965. Return of Palaearctic birds to place of banding in Zambia. *Ostrich*, **36**: 144-145.—Individuals of four species, two waders and two warblers, returned to their wintering grounds in Zambia the subsequent year.—M.A.T.
- VAUGHT, R. W., AND G. C. ARTHUR. 1965. Migration routes and mortality rates of Canada geese banded in the Hudson Bay lowlands. *J. Wildl. Mgmt.*, **29**: 244-252.—Band returns show separate nesting grounds and migration routes of eastern prairie and Mississippi Valley populations. Hunting mortality appeared to be similar for both populations.—J.P.R.

MISCELLANEOUS

- BARTONEK, J. C., AND C. W. DANE. 1964. Numbered nasal discs for waterfowl. *J. Wildl. Mgmt.*, **28**: 688-692.—Describes a method for numbering plastic discs and attaching them through the nares with nylon monofilament. The method was useful for identifying individuals up to 80 yards away.—J.P.R.
- ÖSTERLÖF, S. 1964. Annual report for 1960 of the Swedish Bird-ringing Office. *Vår Fågelvärld*, **23**: 266-320.
- ROOS, G. 1965. Notes from Falsterbo Bird Station, summer and autumn 1961. *Vår Fågelvärld*, **24**: 133-143.
- SAVER, H. J. 1965. The determination of flight performance by insects and birds and associated wind structure of the atmosphere. *Animal Behav.*, **13**: 337-341.—Description of a photographic technique in which flying animals are used as indicators of the speed and direction of the wind in the immediate air space.—A.S.G.
- STROMER, L. 1963. [Bird-banding in 1960: 1. Results of the bird-banding carried out by the Ornithological Department of the Biological Institute of the University in Zagreb. XIVth Report. 2. Foreign recoveries made in Yugoslavia. IXth report.] *Larus*, **15**: 7-26. (In Serbocroatian; English summary.)
- SZCZEPSKI, J. B. 1965. [Report of the Ornithological Station for 1954.] *Acta Ornith.*, **9**: 187-226.—Reports the banding in Poland of 17,409 individuals of 117 species and recovery of 333 plus some foreign bands. (In Polish; English summary.)—M.D.F.U.
- TOLSTOY, A. 1965. The activities of the Ottenby Bird Station in 1962. *Vår Fågelvärld*, **24**: 144-155.
- TOMIALOJC, L. 1965. [Polish Ornithological Bibliography 1945-1960.] *Acta Ornith.*, **9**: 1-76.—A listing, with English and French titles, of the important ornithological works published in the Polish language, with a subject and species index. Plans are to continue this work farther back in time. (In Polish; English summary.)—M.D.F.U.

PHYSIOLOGY

- BRENNER, F. J. 1966. Energy and nutrient requirements of the Red-winged Black-bird. *Wilson Bull.*, **78**: 111-120.
- CADE, T. J. 1965. Survival of the Scaly-feathered Finch *Sporopipes squamifrons* without drinking water. *Ostrich*, **36**: 131-132.—Five individuals survived and maintained normal weight for 62 days without water.—M.A.T.
- GILBERT, A. B., AND D. G. M. WOOD-GUSH. 1965. The control of the nesting behaviour of the domestic hen. III. The effect of cocaine in the post-ovulatory follicle. *Animal Behav.*, **13**: 284-285.—Results indicate that a neural component is operative in the effect of the post-ovulatory follicle on nesting, but do not exclude the possibility of an endocrine mechanism.—A.S.G.
- HÖHN, E. O., A. K. SARKER, AND A. DZUBIN. 1965. Adrenal weight in wild Mallard and domestic ducks and seasonal adrenal weight changes in the Mallard. *Canadian J. Zool.*, **43**: 475-487.—Adrenal weights of immature and female Mallards are higher than those of domestic ducks. A seasonal adrenal weight cycle is apparent in both sexes of the Mallard with a weight increase related to the breeding season and another increase during autumn and winter. The higher relative weights of Mallard adrenals are attributed to greater exposure to stress. (From authors' abstract.)
- KEAR, J. 1965. The internal food reserves of hatching Mallard ducklings. *J. Wildl.*

- Mgmt., **29**: 523-528.—Yolk was used up mostly during and just after hatching and was unimportant as food after ducklings left the nest. Birds were in good condition after 48 hours without food and apparently existed on body fat reserves.—J.P.R.
- MALONE, C. R. 1965. Dispersal of plankton: rate of food passage in Mallard ducks. *J. Wildl. Mgmt.*, **29**: 529-533.—Rate of passage of brine shrimp eggs depended on the kind of food with which the eggs were ingested. Those entering the caeca were retained longer than those bypassing it. A direct relationship existed between rate of passage and amount of physical damage to the eggs.—J.P.R.
- McFARLAND, D. J. 1965. The effect of hunger on thirst motivated behaviour in the Barbary Dove. *Animal Behav.*, **13**: 286-292.—Reciprocal inhibition between feeding and drinking systems is asymmetrical; hungry animals are not thirsty but thirsty animals are slightly hungry.—A.S.G.
- McFARLAND, D. J. 1965. Control theory applied to the control of drinking by the Barbary Dove. *Animal Behav.*, **13**: 478-492.—A model derived from behavioral data shows close parallels with known physiological facts and permits predictions of daily evaporative water loss and toleration for water rationing. Techniques for erecting such models are described in detail.—A.S.G.
- McNAB, B. K. 1966. An analysis of the body temperatures of birds. *Condor*, **68**: 47-55.
- MEIR, A. H., D. S. FARNER, AND J. R. KING. 1965. A possible endocrine basis for migratory behaviour in the White-crowned Sparrow, *Zonotrichia leucophrys gambelii*. *Animal Behav.*, **13**: 453-465.—Injected prolactin increases nocturnal restlessness in photosensitive birds prior to spring migration and initiates nocturnal locomotor activity in photorefractory birds. The effects are augmented by adrenocortical hormones, which are ineffective when administered alone. Metaprione, which inhibits adrenocortical synthesis, suppresses nocturnal activity; its effects are eliminated by simultaneous injection of corticosterone. Assays of pituitary prolactin taken at intervals during the annual cycle appear to support a hypothesis involving prolactin in the development and maintenance of migratory behavior.—A.S.G.
- MORTON, M. L. 1965. An apparatus for continuous recording of food intake in caged birds. *Ecology*, **46**: 888-890.—A description of the apparatus, useful for small caged birds. Accuracy is greater than 99 per cent; a linear record of weight versus strain is obtained. Sample data are presented. (From author's abstract.)
- ODUM, E. P., S. G. MARSHALL, AND T. G. MARPLES. 1965. The caloric content of migrating birds. *Ecology*, **46**: 901-904.—Determinations of kilocalories per ash-free g dry weight of 32 individuals of 20 species ranging from exceedingly fat migrants to lean non-migrants.—H.W.K.
- PACKARD, G. C. 1965. Physiologic homeostasis of birds. *Kansas Ornith. Soc. Bull.*, **16**: 21-23.—Several avian physiological mechanisms appear to be tolerant rather than regulative over a relatively large range. Homeostasis should be interpreted as maintenance of the internal environment within survival limits.—A.S.G.

TAXONOMY AND PALEONTOLOGY

- BENSON, C. W., AND M. P. STUART IRWIN. 1966. The Common Quail *Coturnix coturnix* in the Ethiopian and Malagasy regions. *Arnoldia, Natl. Mus. S. Rhod.*, **2** (13): 14 pp.—The east African highlands, from Abyssinia to Rhodesia, are occupied by the sedentary race *erlangeri*; south of Limpopo the migratory race *africana* is found, and the populations of Malagasy are nearest *africana*. The Palearctic *coturnix* does not winter south of the equator.—M.A.T.

- CLANCEY, P. A. 1965. The South African races of the Quail Finch. *Arnoldia*, Natl. Mus. S. Rhod., **2**(7): 6 pp.—Four races of *Ortygospiza atricollis* are recognized in southern Africa.—M.A.T.
- CLANCEY, P. A. 1965. Systematic notes on *Emberiza cabanisi* in the South African subregion. *Ostrich*, **36**: 199–200.—Two races are recognized, and the type locality of *cognominata* Grote is restricted to Tala Mugongo, Malange, Angola.—M.A.T.
- DEMENTIEV, G. P. 1965. Quelques réflexions sur le faucon pèlerin de Kleinschmidt, *Falco kreyenborgi*. *Hornero*, **10**: 197–201.—Discusses the taxonomic position of this extremely rare South American falcon, and questions whether the two immature individuals from Argentina (see Stresemann and Amadon, *Ibis*, **105**: 400–402, 1965) are really *kreyenborgi*. (In French; Spanish summary.)—E.E.
- DICKERMAN, R. W. 1966. A new subspecies of the Virginia Rail from Mexico. *Condor*, **68**: 215–216.
- DICKERMAN, R. W., AND A. R. PHILLIPS. 1966. A new subspecies of the Boat-tailed Grackle from Mexico. *Wilson Bull.*, **78**: 129–131.
- EISENMANN, E. 1965. The tiger-herons (*Tigrisoma*) of Argentina. *Hornero*, **10**: 225–233.—The very rare *T. fasciatum* of southeastern Brazil is deemed conspecific with the mainly Andean *T. salmoni* complex, and not a subspecies of *T. lineatum* (as treated in the *Catalogue of birds of the Americas*); *fasciatum* and *salmonii* agree in plumage pattern and structural features as well as habitat niche. Three races of *T. fasciatum* are recognized: *fasciatum*, *salmonii*, and *pallescens*. Diagnostic features and distribution of the Argentine forms are given.—E.E.
- EISENMANN, E. 1966. *Falco rufigularis*—The correct name of the Bat Falcon. *Condor*, **68**: 208–209.
- NAVAS, J. R. 1965. Nuevos aportes para *Oreotrochilus leucopleurus*. *Hornero*, **10**: 283–285.—Notes on the distribution of the hummingbird *O. leucopleurus* and its relationship with *O. estella*. Contrary to Olrog (1963), *leucopleurus* occupies the lower elevations between 1,200–3,500 m in the Chacoandean province and much lower in Patagonia, and *estella* occurs higher, between 3,000–4,500 m and even to the Puna zone. In winter *estella* probably descends into the range of *leucopleurus*. Whether the two are conspecific remains to be determined. (In Spanish.)—E.E.
- PERGOLANI DE COSTA, M. J. 1965. Los pícidos argentinos. 7a Parte. Generos *Campephilus*, *Veniliornis* y *Dendrocopos*. *Hornero*, **10**: 183–196.—Review of the Argentine woodpeckers of the genera mentioned, with descriptions, keys, distribution, and taxonomic discussion. Also summarizes a previous article on *Celeus*, *Dryocopus*, and *Phloeocastus*. (In Spanish; English summary.)—E.E.
- RIPLEY, S. D. 1966. A notable owlet from Kenya. *Ibis*, **108**: 136–137 (color frontis.).—*Otus ireneae* sp. nov. (Kiliffi, Sokoke Forest, eastern Kenya) most resembles *O. icterorhynchus* of the West Africa-Congo rain forest, and may be relict from a pre-Pleistocene extension of evergreen forest across Africa.—W.B.R.