

RECENT LITERATURE

EDITED BY JOHN WILLIAM HARDY

ANATOMY AND EMBRYOLOGY

- ASH, W. J. 1962. Studies of reproduction in ducks. 1. The duration of fertility and hatchability of white Pekin duck eggs. *Poultry Science*, **41**: 1123-1126.
- COWAN, W. M., AND T. P. S. POWELL. 1962. Centrifugal fibres in the retina of the pigeon. *Nature*, **194**: 487.
- KANWAR, K. C. 1961. Morphological and histological studies on the uropygial glands of pigeon and domestic fowl. *Cytologia*, **26**: 124-136.
- WILSON, W. O., H. ABPLANALP, AND L. ARRINGTON. 1962. Sexual development in *Coturnix* as affected by changes in photoperiods. *Poultry Science*, **41**: 17-22.

BEHAVIOR

- ALBERTS, S. 1960. Distraction display by Western Meadowlark. *Blue Jay*, **18**: 9.
- ALBERTS, S. 1960. Further observations of distraction display of the Western Meadowlark. *Blue Jay*, **18**: 157.
- BAMBRIDGE, R. 1962. Early experience and sexual behavior in the domestic chicken. *Science*, **136**: 259-260.—“Newly hatched chickens were imprinted to one of two moving objects. From the fifth day of life on, the chickens were injected with male sex hormone. When later presented with a choice between the two objects, they addressed induced sexual responses to the object to which they were imprinted.” (Author’s abstract.)
- BRERETON, J. LE G., AND K. IMMELMANN. 1962. Head-scratching in the Psittaciformes. *Ibis*, **104**: 169-175.—Head-scratching is concluded to be a valid taxonomic character, supporting divisions within the order. Psittacinae may be composed of a number of groups. It is still uncertain which scratching method is the more primitive.—J. W. H.
- COOPER, R. P. 1962. Crested Bellbird. *Australian Bird Watcher*, **1**: 181-184.—*Oreoica gutturalis*, usually placed in Muscipidae, collects caterpillars, which it places (after paralyzing them by squeezing their backs) along the inner edge of the nest, before the young hatch. Other behavior data are given.—E. E.
- CULLEN, J. M. 1962. The pecking response of young Wideawake Terns *Sterna fuscata*. *Ibis*, **103b**: 162-173.—Pecking was tested toward models of beaks colored red, black, gray, white, and silver, and toward a stuffed adult head with the normal black beak of the species. Red and black received the most pecks. Pecking at black is highly adaptive; response to red is a relict from the time when *S. fuscata* ancestors had red beaks. Color of beak may have evolved because of a “preexisting predisposition” of chicks to peck more at certain colors. Since beak is important in other social situations, its total pattern and color may be a compromise between those with high valence in the two critical situations.—J. W. H.
- DAVIES, S. J. J. F. 1962. The nest-building behaviour of the magpie goose *Anseranas semipalmata*. *Ibis*, **104**: 147-157.—Observations were made in Australia and correlated with experiments on captive birds. Nests are begun about two months before egg-laying, and many stages and preliminary nests are built before the true nest. Males apparently initiate and carry out a large share of building which is intensified in wet weather. Characters of the vegetation are deemed important in establishing the behavioral tendency in the birds to use swamps and only specific growth types of these.—J. W. H.

- DORWARD, D. F. 1962. Behaviour of boobies *Sula* spp. *Ibis*, **103b**: 221-234.—Twelve behavior patterns are described in *Sula dactylatra* and *S. leucogaster*, of Ascension Island. These patterns include advertisement display (like the Gannet's "taking-off" behavior), a turn-away display (comparable to "head-flagging" in gulls), bill-hiding (seen in attacked chicks and similar to the turn-away behavior of the adults), food-begging of chicks (like combative "head-wagging" in white boobies), and an unusual sun-bathing posture. Differences in these displays between the two species are possibly related to differences in nesting habits.—J. W. H.
- DRURY, W. H., JR. 1961. Observations on some breeding water birds on Bylot Island. *Canadian Field-Nat.*, **75**: 84-101.—Detailed notes and illustrations of the behavior of the Red-throated Loon, greater Snow Goose, King Eider, and Oldsquaw.—R. W. N.
- HAUSER, DORIS C. 1961. Sun-bathing in birds. *Blue Jay*, **19**: 81-82.
- JACKSON, J. R. 1962. Do Keas attack sheep? *Notornis*, **10**: 33-38.—Reviews the evidence and concludes that Keas (*Nestor notabilis*) may occasionally attack sheep trapped in snow, injured by falls, or sick or mistaken as dead. On sudden movement they take flight. Such attacks are so rare as not to justify general destruction.—E. E.
- LANE, J. 1960. Distraction display by Bobolink. *Blue Jay*, **18**: 78.
- LUMSDEN, H. G. 1961. Displays of the Spruce Grouse. *Canadian Field-Nat.*, **75**: 152-160.
- NERO, R. W. 1961. Apparent escape behaviour of a Red-breasted Nuthatch. *Blue Jay*, **19**: 16-17.
- NERO, R. W. 1961. Kingfisher escape tactics. *Blue Jay*, **19**: 17.
- SPIERS, J. M. 1961. Courtship of Great Horned Owls. *Canadian Field-Nat.*, **75**: 52.
- THORPE, W. H., AND D. R. GRIFFIN. 1962. Ultrasonic frequencies in bird song. *Ibis*, **104**: 220-227.—Although many small songbirds possess ultrasonic frequencies in their vocalizations, these are always associated with, and at a much lower amplitude than, sonic frequencies. Ultrasonic frequencies may be providing an important component of tonal quality, but because of their low amplitude and resulting restricted carrying power, it is concluded that they ordinarily could not be significant except in intraspecific communication at very close range.—J. W. H.
- THORPE, W. H., AND D. R. GRIFFIN. 1962. The lack of ultrasonic components in the flight noise of owls compared with other birds. *Ibis*, **104**: 256-257.—Five small species of owls (genera *Otus*, *Athene*, *Strix*, *Tyto*, and *Asio*) have eliminated ultrasonic noise of their flight; two species of hawks (*Falco* and *Accipiter*) and five species of doves (*Columba*, *Streptopelia*, and *Spilopelia*), of similar size, have not. Three species of medium-sized owls (*Strix* and *Bubo*) are ultrasonically silent, but two large owls (*Bubo*) reveal some noise at takeoff. Fishing owls (*Scotopelia*) appear to have lost the special adaptations of plumage that allow silent flight.—J. W. H.
- WADE, D. E., AND D. R. WADE. 1961. Mallards do dive. *Blue Jay*, **19**: 16.—Brief observations of Mallards diving for food.—R. W. N.

DISEASES AND PARASITES

- LOCKE, L. N., AND C. M. HERMAN. 1961. Trichomonad infection in Mourning Doves, *Zenaidura macroura*, in Maryland. *Chesapeake Science*, **2**: 45-48.—From 1950 to 1960 incidence of *Trichomonas gallinae* varied from 0.0 to 12.5 per cent.—H. B.
- LOCKE, L. N., J. E. SCANLON, R. J. BYRNE, AND J. O. KNISLEY, JR. 1962. Occurrence of eastern encephalitis virus in House Sparrows. *Wilson Bull.*, **74**: 263-266.—The

virus of eastern equine encephalomyelitis was isolated from seven apparently normal *Passer domesticus*. This virus may have been the cause of a House Sparrow die-off in eastern Maryland.—J. T. T.

DISTRIBUTION AND ANNOTATED LISTS

- BARD, F. G. 1961. First Poor-will specimen for Saskatchewan taken. *Blue Jay*, **19**: 172.
- BELCHER, MARGARET. 1961. Recent records of the Greater Prairie Chicken in Saskatchewan. *Blue Jay*, **19**: 76-77.
- BOWLES, J. 1962. The Guam edible nest swiftlet. *Elepaio*, **23**: 14-15.—On 15 May 1962, 175 *Collocalia inexpectata bartschi* were released in Niu Valley, Hawaiian Islands.—P. H. B.
- FOX, E. 1961. First Cardinal specimen for Saskatchewan. *Blue Jay*, **19**: 77-79.
- FRITH, R. 1961. A probable first-record nesting of the Common Raven in the Ottawa district. *Canadian Field-Nat.*, **75**: 168-169.
- GÉROUDET, P. 1962. L'expansion récente du Choucas dans le Pays de Genève et en Haute-Savoie. *Nos Oiseaux*, **26**: 231-238.—During the period 1950-61, over 15 colonies of Jackdaws (*Corvus monedula*) became newly established in certain areas of Switzerland.—M. D. A.
- GODFREY, W. E. 1961. First Canadian record of the Black-throated Sparrow. *Canadian Field-Nat.*, **75**: 162.
- GODFREY, W. E. 1962. A Saskatchewan specimen of the Greater Scaup. *Canadian Field-Nat.*, **76**: 125.
- HOUSTON, S. 1961. First Saskatchewan nest of Barred Owl. *Blue Jay*, **19**: 114-115.
- HUGHES, W. M. 1961. Green Heron in southwestern British Columbia. *Canadian Field-Nat.*, **75**: 169-170.
- LAHRMAN, F. W. 1961. A second pair of Trumpeter Swans nesting in Saskatchewan. *Blue Jay*, **19**: 18-19.
- LAHRMAN, F. W., AND R. W. NERO. 1961. A Common Redpoll nest record for southern Saskatchewan. *Blue Jay*, **19**: 113-114.—An extralimital nesting observed in 1945.—R. W. N.
- LAND, H. C. 1962. A collection of birds from the Sierra de las Minas, Guatemala. *Wilson Bull.*, **74**: 267-283.—An annotated list of 160 species with a brief description of the area.—J. T. T.
- NELSON, MARY H. 1960. The Cattle Egret comes to Wisconsin. *Passenger Pigeon*, **22**: 185-188.
- NERO, R. W. 1961. The Arctic Tern in Saskatchewan. *Blue Jay*, **19**: 60-67.
- PETERSON, R. T. 1960. A prairie chicken at Old Wives Lake. *Blue Jay*, **18**: 13.—Sight record of this rare species in southern Saskatchewan.—R. W. N.
- PLEWS, D. 1961. A Manitoba record of the Cattle Egret. *Blue Jay*, **19**: 112.
- RANDALL, T. E. 1962. Birds of the Kazan Lake region, Saskatchewan. *Blue Jay*, **20**: 60-72.—A report of 191 species observed in the summer of 1942 in the Boreal Forest of west-central Saskatchewan.—R. W. N.
- RUSCH, A. J. 1961. Ross' Goose discovered in Wisconsin. *Passenger Pigeon*, **23**: 49-51.
- SCOTTER, G. W. 1961. Summer observations of birds in northern Saskatchewan, 1960. *Blue Jay*, **19**: 70-74.
- SQUIRES, W. A. 1962. First New Brunswick record for the Cattle Egret. *Canadian Field-Nat.*, **76**: 120.
- TENER, J. S. 1961. Breeding range extensions of two Ellesmere Island birds. *Canadian Field-Nat.*, **75**: 51.

- TOMICH, P. Q. 1962. Notes on the Barn Owl in Hawaii. *Elepaio*, **23**: 16-17.—Records of introduction of *Tyto alba* in Hawaii since 1958 and its subsequent occurrences. Evidence is not available that the species is established anywhere in the islands as a breeding bird.—P. H. B.
- WALKINSHAW, L. H. 1960. Summer records of the Sandhill Crane in Saskatchewan. *Blue Jay*, **18**: 20-23.
- YOUNG, H. 1961. The Downy and Hairy woodpeckers in Wisconsin. *Passenger Pigeon*, **23**: 3-6.—A distribution survey.—R. W. N.

ECOLOGY AND POPULATION

- ANWELLER, G. 1960. The Boreal Owl influx. *Blue Jay*, **18**: 61-63.—Observations in Saskatchewan in the winter of 1959-60.—R. W. N.
- BROOKS, W. S. 1960. Songbird communities of two marsh habitats. *Passenger Pigeon*, **22**: 111-125.
- CHURCHER, C. S. 1962. Yellow-headed Blackbirds breeding at Rainy River, Ontario. *Canadian Field-Nat.*, **76**: 122.
- GREELEY, F., R. F. LABISKY, AND S. H. MANN. 1962. Distribution and abundance of pheasants in Illinois. *Illinois Nat. Hist. Surv. Biol. Note no.* **47**: 1-16.—Greatest abundance in east-central counties. Detailed maps (especially for 1957-58) using several methods of determining abundance.—R. B.
- HINCKLEY, A. D. 1962. Ecological notes on common birds in Fiji. *Elepaio*, **23**: 18-20.
- HOUSTON, C. S. 1962. Hazards faced by colonial birds. *Blue Jay*, **20**: 74-77.—A brief report of the recent change in status of some White Pelican colonies, etc., in Saskatchewan.—R. W. N.
- NERO, R. W. 1960. Mass mortality of Western Grebes. *Blue Jay*, **18**: 110-112.—About 1,000 grebes perished in a sudden freeze-up in southern Alberta.—R. W. N.
- NERO, R. W. 1961. Dry land gull colony. *Blue Jay*, **19**: 166-168.—Ring-billed Gulls nested on a former island in a dry slough in Saskatchewan.—R. W. N.
- ORD, W. M. 1962. Dwindling numbers of Hawaiian Stilt on Oahu 1962. *Elepaio*, **23**: 3-4.
- PRESTON, F. W. 1962. A nesting of Amazonian terns and skimmers. *Wilson Bull.*, **74**: 286-287.—*Phaetusa simplex* and *Rynchops nigra* began nesting on a sand bar uncovered by abnormally low water. Perhaps because they were disturbed by egg hunters, three terns and a skimmer laid eggs on the deck of a small ship.—J. T. T.
- TAYLOR, R. B. 1962. Fall Saw-whet Owl concentrations in Ontario. *Blue Jay*, **20**: 118-119.

EVOLUTION AND GENETICS

- Creutz, G. 1961. Kreuzungen zwischen Hohltaube und Ringeltaube. *J. f. Orn.*, **102**: 80-87.—Reports upon the hybridization between a male *Columba oenas* and a female *Columba palumbus* which resulted in 16 eggs and 4 young (2 males, 2 females). The hybrids are intermediate in size, weight, and coloration. The courtship call of the one male hybrid which lived past the young stage was different from that of both parental species, as were the courtship displays. This male paired with its sister, which resulted in an infertile egg.—W. J. B.
- Hollander, W. F., and P. L. Walther. 1962. Recessive "lavender" in the Muscovy Duck. *J. Hered.*, **53**: 81-83.—The genetics of color in domestic *Cairina moschata* is reviewed, and an apparently new mutant, recessive "lavender," described. Breeding tests showed that "lavender" is not allelic to the previously known mutants "dusky" and "barred." A photograph compares "lavender" and wild-type downy young.—K. C. P.

- Rand, A. L. 1961. The tongue and nest of certain flowerpeckers (Aves: Dicaeidae). *Fieldiana: Zool.*, **39**: 581-587.—Studies of tongues and nests of some flowerpeckers suggest relationships to the honeyeaters (Meliphagidae).—M. A. T.
- Wickler, W. 1961. Über die Stammesgeschichte und den taxonomischen Wert einiger Verhaltensweisen der Vögel. *Zeits. f. Tierpsychol.*, **18**: 320-342.—Pairs of motor patterns each of which perform the same function, such as running and hopping and scratching over and under the wing, are studied in regard to their relative phylogenetic age. (English summary.)—S. E. W.

GENERAL BIOLOGY

- Diesselhorst, G. 1961. Ascendente Handschwinger-Mauser bei *Muscicapa striata*. *J. f. Orn.*, **102**: 360-366.—Although all other Passeriformes studied show a descending primary molt, *Muscicapa striata* has an ascending pattern (starting with the outermost primary). The molt pattern of the secondaries and the tail feathers also seems to be different from the normal passerine condition, but more material is needed to verify these findings. A superficial examination of other species of *Muscicapa*, including *M. gambagae*, and some other genera revealed the typical descending primary molt.—W. J. B.
- Edgar, A. T. 1962. A visit to the Mercury Islands. *Notornis*, **10**: 1-15.—Summary of bird life on an archipelago off New Zealand. Of special interest is information on nesting of Procellariiformes; six species are recorded as breeders, *Puffinus assimilis* and *Pelecanooides urinatrix* for the first time.—E. E.
- Gwinner, E. 1961. Beobachtungen über die Aufzucht und Jugendentwicklung des Weidenlaubsängers (*Phylloscopus collybita*). *J. f. Orn.*, **102**: 1-23.—The development of young Chiffchaffs from hatching to post-fledging is described on the basis of observations of free-living birds and a total of 14 hand-raised birds. The behavior of the adults is included. An excellent chart, together with photographs, summarizes the development of the plumage, eyes, bill, and feet.—W. J. B.
- Haverschmidt, F. 1961. Der Kuckuck *Tapera naevia* und seine Wirte in Surinam. *J. f. Orn.*, **102**: 353-359.—The eggs of *Tapera naevia* have been found in the nests of *Certhiaxis cinnamomea* and *Synallaxis gujanensis*. Of the 12 nests of *Certhiaxis* found, 8 contained eggs or young of *Tapera*. One nest contained two eggs, the rest had only one. One nest of *Synallaxis* in the author's garden was observed closely. It contained two *Tapera* eggs and two *Synallaxis* eggs. One cuckoo egg hatched after 15 days of incubation, the other never hatched and was removed. The *Synallaxis* eggs hatched on the 18th day of incubation. The next day, the two *Synallaxis* young disappeared but apparently were not thrown out of the nest by the young cuckoo. Probably they died of starvation and were removed by the parents. The cuckoo was feathered at 14 days of age and left the nest when 18 days old, although it could not fly well.—W. J. B.
- Huxley, J. 1961. The Openbill Stork *Anastomus oscitans*. *Ibis*, **104**: 112.—The gap between the mandibles in the species must form late in development, since half-grown young in the nest do not possess it. Notes are presented on food regurgitation, excretion, greeting ceremony (typical of storks), and associated vocalizations.—J. W. H.
- Immelmann, K. 1961. Beiträge zur Biologie und Ethologie australischer Honigfresser (Meliphagidae). *J. f. Orn.*, **102**: 164-207.—A comprehensive coverage of the life history and behavior of the honeyeaters observed in an 11 months' stay in Australia; 29 species were observed, of which 9 were breeding. All species hop

with both feet. Flight is well developed and undulating; the smaller species are also capable of a whizzing flight with sharp turns. The food is nectar and small insects taken at the flower—the tongues being specialized. Some have become adapted for a more nearly pure insect diet, the prey being taken from the ground, from the air, or from beneath the bark of trees. Most species are pugnacious, controversies being settled by real fights. Threat postures and submissive gestures are feebly developed and found only in a few species. Courtship and nesting are described. The nest is an open cup-shaped structure suspended from a branch; in most species, only the female builds the nest. Usually two eggs are laid, but the clutches vary from one to four. The male does not incubate or feed the female on the nest. Incubation takes 13–16 days. Both parents feed the young, which fledge in 10 to 16 days. After leaving the nest, they are dependent upon the parents for food for a long time.—W. J. B.

International Union of Game Biologists. 1962. Transactions of the Vth Congress. Bologna 4–10 September 1961. Suppl. Ric. Zool. Appl. Caccia, **6**: 1–312.—Papers delivered at Congress; eight relate to birds, and concern not only game management problems, but also subjects of more general interest such as the sexual organization on the display ground of the Black Cock (*Lyrurus tetrix*) by H. Brüll, and the effect of increased illumination on the laying of pheasants (*Phasianus colchicus*) by B. Pekic and L. Leporati. (Most bird papers in English; all others with English summaries.)—E. E.

Johst, G., and E. Johst. 1961. Über Verhalten und Brutpflege gekäfigter Kron-
tauben (*Goura cristata*). J. f. Orn., **102**: 88–95.—A pair of Crowned Pigeons in the Berlin Zoo paired and nested in the years 1957–1959. An egg was laid about every three months, but only one hatched. The chick, a female, was raised by the parents and reached sexual maturity. Courtship occurs on the ground and the female takes part. The wings are raised and stretched over the back, but the unique crown of this bird does not seem to be used in courtship.—W. J. B.

Kanai, I. 1961. An oological note on *Hirundo rustica*. Misc. Reports Yamashina's Inst. for Orn. and Zool., **3**: 113–122.—Study of variations in Barn Swallow eggs: date and time of day of laying; clutch size; egg size, shape, weight, and volume. Variability is less within than between clutches. Variability is greater in first than in second clutches. (In Japanese; English captions and summary.)—K. C. P.

Kilham, L. 1962. Nest sanitation of Yellow-bellied Sapsucker [*Sphyrapicus varius*]. Wilson Bull., **74**: 96–97.

Kuroda, N. 1961. An albino of *Calonectris leucomelas*. Misc. Reports Yamashina's Inst. for Orn. and Zool., **3**: 134.—Photographs of a young female Streaked Shearwater, complete albino, taken on the breeding ground on Mikura Island, Seven Islands of Izu, Japan.—K. C. P.

Kuz'yakin, A., and W. Leonowitsch. 1961. Zur Biologie von *Eophona personata magnirostris*. J. f. Orn., **102**: 149–151.—Describes the nesting biology of the finch *Eophona* including photographs of the nest and eggs. One nest contained the egg of a cuckoo (*Cuculus* sp.?).—W. J. B.

Larionov-Gladkov-Dementiev, et al. (Editors). 1962. (Ornithology, tom. 4.) Moscow Univ. Press, Moscow. 475 pp. (In Russian.)—This large volume contains 59 papers and 1 review. Subjects are: birds of the Arctic (6 papers), birds of the forest-belts (14), birds of steppe and deserts (5), mountain birds (4), birds of water environments (5), birds of cultivated land (6), migration, invasions, winter-

- ings (5), birds of foreign countries (1: an excellent zoogeographical sketch on birds of the Gobi Desert, Mongolia, by G. P. Dementiev), methods of ornithology (3), general ornithology (9), and chronicle (2 papers).—F. J. T.
- Lohmann, M., and A. Suchantke. 1961. Feldornithologische Kennzeichen junger Rotfussfalken. *J. f. Orn.*, **102**: 154–157.—Describes with the aid of a figure the field characteristics of the Red-footed Falcon and how it is distinguished from the Hobby.—W. J. B.
- Moment, G. B. 1962. Reflexive selection: a possible answer to an old puzzle. *Science*, **136**: 262–263.—Massive polymorphism in which “virtually no two individuals look alike” has long presented an evolutionary puzzle; the individual variants have usually been assumed to have neutral selective value. The author coins the term “reflexive selection” for a suggested evolutionary process in which the variability *per se* is adaptive. An example pertinent to birds is the familiar little coquina clam, *Donax variabilis*, in which “the virtually endless variation makes it impossible for a sandpiper to learn that all ‘pebbles’ of any particular appearance are probably clams for the very good reason that no two clams have the same appearance.”—K. C. P.
- Stegmann, B. 1961. Zur Brutbiologie des Bartgeiers (*Gypaëtus barbatus*) im Tjanschan. *J. f. Orn.*, **102**: 68–74.—General observations on nesting of the Lammergeyer in Tjanschan.—W. J. B.
- Tyler, M. J. 1961. Food of *Halcyon sancta* in New Guinea. *Ibis*, **103a**: 625.
- Wobus, U. 1961. Normal zweibruten beim Rothalstaucher (*Podiceps griseigena*). *J. f. Orn.*, **102**: 484–485.—Reports on normal second nesting (first nest not destroyed) for the Red-necked Grebe; previously, only one nesting per year was reported for this species.—W. J. B.

MANAGEMENT AND CONSERVATION

- BARRY, T. W. 1961. Sea-bird colonies of Prince Leopold Island and vicinity. *Canadian Field-Nat.*, **75**: 72–73.
- BOYER, G. F., AND O. E. DEVITT. 1961. A significant increase in the birds of Luther Marsh, Ontario, following fresh-water impoundment. *Canadian Field-Nat.*, **75**: 225–237.
- GREEN, D. 1961. Whooping Crane monument. *Blue Jay*, **19**: 75.
- HOCHBAUM, H. A. 1960. Wetlands and waterfowl. *Blue Jay*, **18**: 164–168.
- HURD, E. A. 1962. Prevention of crop damage caused by blackbirds. *Blue Jay*, **20**: 110–111.—Lure feeding strips were found to be a successful method of control at an experimental farm.—R. W. N.
- HYSHKA, W. B. 1960. Combating an outbreak of botulism at Old Wives Lake (1959). *Blue Jay*, **18**: 24–25.
- LEDINGHAM, G. F. 1960. The Sandhill Crane problem. *Blue Jay*, **18**: 152–155.
- MOISAN, G. 1962. Eighth census of non-passerine birds in the bird sanctuaries of the north shore of the Gulf of St. Lawrence. *Canadian Field-Nat.*, **76**: 78–82.
- STEPHEN, W. J. D. 1960. The use of exploders in protecting crops against Sandhill Crane depredations. *Blue Jay*, **18**: 23–24.
- WALKINSHAW, L. H. 1961. The problem of the lesser Sandhill Crane. *Blue Jay*, **19**: 8–13, 14.
- WALLACE, G. J. 1962. The seventh spring die-off of Robins at East Lansing, Michigan. Jack-pine Warbler, **40**: 26–32.—From DDT.—R. B.
- ZIMMERMAN, F. R. 1961. Spring sex ratios of Wisconsin ducks, 1941–43, 1947. Passenger Pigeon, **23**: 88–91.

MIGRATION AND ORIENTATION

- Adams, D. W. H. 1962. Radar observations of bird migration in Cyprus. *Ibis*, **104**: 133-146.—Observations were made of migration, which seemed to occur almost daily in October and November (1958) and March to May (1959). Movements usually began 45 minutes after sunset; in October direction of migration varied from S to SSE, but in November, in addition, there were movements toward SSW and SW. Spring migrants typically flew between NNE and NE, but about 10 per cent flew NW, including the largest single movement of birds recorded. Some bird tracks apparently avoided high ground (there was coasting at high altitudes).—J. W. H.
- Elliott, H. F. I. 1962. Migration on the Bosphorus and near the eastern Pyrenees. *Ibis*, **104**: 248-249.
- Fromme, H. G. 1961. Untersuchungen über das Orientierungsvermögen nächtlich ziehender Kleinvögel (*Erithacus rubecula*, *Sylvia communis*). *Zeits. f. Tierpsychol.*, **18**: 205-220.—An electrical-mechanical method was developed which records migratory direction of nocturnally migrating birds. Climate, light duration, sunset, and magnetic field variables were tested as to their effect on direction of migration. (English summary).—S. E. W.
- Graber, R. R., and J. W. Graber. 1962. Weight characteristics of birds killed in nocturnal migration. *Wilson Bull.*, **74**: 74-88.—Gross weights and the weights of five organs were obtained from 21 species of birds killed at night by a television tower in Illinois. Weight loss per hour of night migration was estimated for *Hyalocichla ustulata* at 2.6 to 4.4 per cent of gross weight.—J. T. T.
- Lack, D. 1961. Migration across the southern North Sea studied by radar. Part 3. Movements in June and July. *Ibis*, **104**: 74-85.—In June and July only Lapwings are common migrants; they move westward. This migration was most prominent with northeast and southeast winds and under anticyclonic weather conditions. Migration was equally frequent in morning and evening hours.—J. W. H.
- Mascher, J. W., B. Stolt, and L. Wallin. 1962. Migration in spring recorded by radar and field observations in Sweden. *Ibis*, **104**: 205-215.—Observations were made in April, 1960, at an inland locality (Uppland). Correlation between visible and radar-detected movements was poor. Visible migrants were too low for detection by radar, radar-detected migrants too high to be visible. High-flying visible migrants were mainly water birds, which probably formed part of the radar-detected migration also.—J. W. H.
- Mester, H. 1961. Über den Kranichzug im mittleren Westfalen. *J. f. Orn.*, **102**: 476-483.—Summarizes 13 years' observations of the crane migration in Westphalia. The peak of the spring migration is in March, while the peak of the fall migration is in November.—W. J. B.
- Sánchez, F. B. 1959. Comunidades y campos de vida de Acolla y sus alrededores. *Mem. Mus. Hist. Nat. "Javier Prado," Lima*, **7**: 160 pp.—"The study of the topographic surface of the ground of the town of Acolla (Prov. Jauja, Dept. Junín: lat. 11° 46' S and long. 75° 33' W) and its surroundings has permitted to differentiate several biologic environments, communities and vital areas. . . . Several species of *Ciconiiformes*, *Anseriformes*, *Lariiformes*, and *Charadriiformes* are found in aquatic or terrestrial environment in accordance with their vital activities. . . . The different types of feeding, locomotion, reproduction, nesting, singing, and noises of a great number of vertebrates that inhabit the zone, have been studied too." (English summary, p. 4).—M. A. T.

- Schmidt-Koenig, K. 1961. Die Sonne als Kompass im Heim-Orientierungssystem der Brieftauben. *Zeits. f. Tierpsychol.*, **18**: 221-244.—Continued work concerning effects of phase shifts in the day-night cycle of homing pigeons; the sun azimuth compass is one basic constituent of initial orientation. (English summary.)—S. E. W.
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- Wallraff, H. G. 1960. Können Grasmücken mit Hilfe des sternenhimmels navigieren? *Zeits. f. Tierpsychol.*, **17**: 165-176.—Disagreement is found with Sauer's results, which indicate that a bird may navigate by the stars alone. The article is followed by some comments by Sauer. (English summary.)—S. E. W.
- Yapp, W. B. 1961. Some physical limitations on migration. *Ibis*, **104**: 86-89.—A critique, in part, of Odum's calculations on fuel reserves of migrant birds. The latter's explanations may be misleading because they are based on Pearson's (1950) figures which are here termed imprecise. The author believes fuel reserves of small birds are probably adequate for flights undertaken, but that water loss is possibly a limiting factor in flight duration.—J. W. H.

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- HERRICK, R. B., W. H. MCGIBBON, AND W. H. MCSHAN. 1962. Gonadotropic activity of chicken pituitary gland. *Endocrin.*, **71**: 487-491.
- MIKAMI, S., AND K. ONO. 1962. Glucagon deficiency induced by extirpation of alpha islets of the fowl pancreas. *Endocrin.*, **71**: 464-473.—It is shown that glucagon is an indispensable hormone for carbohydrate metabolism, and that it originates from alpha cells.—H. C. S.
- PAPERMASTER, B. W., AND R. A. GOOD. 1962. Relative contributions of the thymus and the bursa of Fabricius to the maturation of the lymphoreticular system and immunological potential in the chicken. *Nature*, **196**: 838-840.—Experimental evidence indicates that the functions of the thymus and the bursa in the chicken may be similar.—H. C. S.

TAXONOMY AND PALEONTOLOGY

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- DICKERMAN, R. W., AND K. C. PARKES. 1960. The Savannah Sparrows of Minnesota. *Flicker*, **32**: 110-113.—Three subspecies of *Passerculus sandwichensis* probably breed in Minnesota: *oblitus* in the northeast, *mediogriseus* in the southeast, and *nevadensis* in the west. *P. s. labradorius* is an occasional migrant. Most Minnesota specimens are variably intermediate among the first three forms. *P. s. oblitus* is recorded from South Dakota, *labradorius* and *nevadensis* from Wisconsin.—R. W. D.
- DOWNES, T., H. HOWARD, T. CLEMENTS, AND G. A. SMITH. 1959. Quaternary animals from Schulling Cave in the Mojave Desert, California. *Los Angeles County Mus. Contrib. Sci.*, **29**: 1-21.—The first complete account of a southern California Pleistocene cave faunal deposit. The fauna includes 3 species of reptiles, 10 mammals (of which 6 are extinct), and 15 birds, 2 of which appear to be extinct ancestral forms. Water birds suggest close proximity to lakes or ponds. The mammals, too, suggest climatic conditions different from those of today.—H. H.
- HOWARD, H. 1962. Fossil birds. With especial reference to the birds of Rancho La Brea. *Los Angeles County Mus. Sci. Ser. 17, Paleon. Pub. no. 10*, 44 pp., 23 illus.—Second printing of the revised edition of 1955, with two-page addendum including additions to the California record, 1955-61.—H. H.
- HOWARD, H., AND J. A. WHITE. 1962. A second record of *Osteodontornis*, Miocene "toothed" bird. *Los Angeles County Mus. Contrib. Sci.*, **52**: 1-12.—Skull fragments (including "teeth"), agreeing closely with the type of *Osteodontornis orri*, were found in Miocene shales in the San Fernando Valley, Los Angeles County, California. An associated lower half of an atlas bears similarities to certain peleciform birds.—H. H.
- KEMSIES, E. 1961. Subspeciation in the Smith's Longspur, *Calcarius pictus*. *Canadian Field-Nat.*, **75**: 143-149.
- MILLER, L. 1960. Notes on the Pleistocene flightless goose, *Chendytes*. *Bull. Southern California Acad. Sci.*, **59**: 57-61.—A partial tarsometatarsus of *Chendytes*, with phalanges of digits 2, 3, and 4 in place, was retrieved from a block of Pleistocene coquina collected on San Nicolas Island, California. Comparison with the White-winged Scoter emphasizes relationship of the gigantic fossil to the diving ducks, although slightly different relative toe lengths suggest possibly stronger ambulatory power.—H. H.
- MILLER, L. 1960. On the history of the Cathartidae in North America. *Novedades Colombianas*, **1**: 232-234.—The fossil record reveals no intermediate form suggestive of the ancestry of the cathartine vultures from a more active predator; Eocene *Neocathartes* was distinctly cathartiform. The group occurred in Europe as well as America in the early Tertiary, but was later restricted to the New World. It reached its numerical climax in the Pleistocene when several species of true Cathartidae were present and a second, closely related family, the Teratornithidae, appeared.—H. H.
- MILLER, L. 1961. Bird remains from Indian middens in the Dakota area. *Bull. Southern California Acad. Sci.*, **60**: 122-126.—Three midden sites along the Missouri River, North Dakota, ranging in age from 1250 A.D. to 1650 A.D., yielded bird remains. Representation is small, only 15 species being noted.—H. H.
- MILLER, L., E. D. MITCHELL, AND J. H. LIPPS. 1961. New light on the flightless goose, *Chendytes lawi*. *Los Angeles County Mus. Contrib. Sci.*, **43**: 1-11.—This fossil bird

is unusually well represented in a new Pleistocene locality on Anacapa Island, Ventura County, California. Fragments of sternum, an almost complete pelvis, a coracoid, humerus, and cranial portion of a skull, with associated neck vertebrae, are described. The better known leg bones are also present.—H. H.

- PHILLIPS, A. R. 1958. (stated date of publ. 31 March, actual date 19 June 1959). Las subespecies de la Codorniz de Gambel y el problema de los cambios climaticos en Sonora. *Anales del Inst. de Biol., Univ. Nac. Aut. de México*, **29**: 361-374.—Taxonomic revision of *Lophortyx gambelii*, discussing and evaluating types of character variation. Four subspecies recognized: *gambelii* (including *sanus* and *pember-toni*), *ignoscens*, *fulvipectus* (including *friedmanni*) and *stephensi*, a new subspecies from the Sinaloa-Sonora border. Van Rossem's discussion of climatic changes in Sonora, based on recognition of several dubious Tiburon Island subspecies, is without foundation.—R. W. D.
- PHILLIPS, A. R. 1959. (stated date of publ. 31 March, actual date 20 June 1960). La acrecencia de errores acerca de la ornitología de México, con notas sobre *Myiarchus*. *Anales del Inst. de Biol., Univ. Nac. Aut. de México*, **30**: 349-368.—Critical review of four major publications on Mexican ornithology in last decade, in which many old errors were corrected but many new ones added, allegedly due to work on defective material and authors' bias. Examples are cited to back statements. Many errors are corrected, especially in flycatcher genera *Myiarchus*, *Contopus*, and *Empidonax*, and in concepts on the migration of several species. *Myiarchus nuttingi vanrossemi*, a new race for the A. O. U. Check-list area, is described. A previously undescribed hybrid, *Dendroica occidentalis* × *D. townsendi* is cited. (In Spanish; English summary.)—R. W. D.
- PIERCE, W. D. 1962. The significance of petroliferous nodules of our desert mountains. *Bull. Southern California Acad. Sci.*, **61**: 7-14.—Miocene nodules containing "Aves, crystallized feathers, and also feather impressions" have been collected in the Calico and Frazier mountains, California.—H. H.