

RECENT LITERATURE

EDITED BY GLEN E. WOOLFENDEN

ANATOMY AND EMBRYOLOGY

- HENDRICKX, A. G., AND R. HANZLIK. 1965. Developmental stages of the Bob-white Quail embryo. *Biol. Bull.*, **129**: 523-531.—Developmental rates of quail and chick embryos compared.—H.W.K.
- MILLER, A. H. 1965. The syringeal structure of the Asiatic Owl *Phodilus*. *Condor*, **67**: 536-538.

BEHAVIOR

- BREITENBACH, R. P., C. L. NAGRA, AND R. K. MEYER. 1965. Studies of incubation and broody behaviour in the pheasant (*Phasianus colchicus*). *Animal Behav.*, **13**: 143-148.—In hens and broody males, intensity and variety of behavior increases as incubation progresses, probably in conjunction with increased prolactin secretion.—A.S.G.
- CRAIG, J. V., AND R. A. GARUTH. 1964. Inbreeding and social dominance ability in chickens. *Animal Behav.*, **13**: 109-113.—Inbreeding decreases dominance ability in both sexes.—A.S.G.
- CRAIG, J. V., L. L. ORTMAN, AND A. M. GUHL. 1965. Genetic selection for social dominance ability in chickens. *Animal Behav.*, **13**: 114-131.—Bidirectional selection for five generations produced large average strain differences. A polygenetic mode of inheritance, large initial reservoir of genetic variation, and lack of age or sex specificity are indicated.—A.S.G.
- DIMOND, S. J. 1965. Restriction of movement and a negative effect during imprinting. *Animal Behav.*, **13**: 101-103.—Chicks that avoid a stationary model are attracted to it when it is in motion, supporting the view that imprinting is a dual process.—A.S.G.
- FICKEN, M. S., AND R. W. FICKEN. 1965. Comparative ethology of the Chestnut-sided Warbler, Yellow Warbler, and American Redstart. *Wilson Bull.*, **77**: 363-375.
- HEATWOLE, H. 1965. Some aspects of the association of Cattle Egrets with cattle. *Animal Behav.*, **13**: 79-83.—Egrets which tend to associate with cattle grazing in the sun obtain more food per unit time with less energy expenditure.—A.S.G.
- JOHNSTON, R. F. 1965. Nestsite sitting by breeding House Sparrows. *Kansas Orn. Soc. Bull.*, **16**: 17-18.—When eggs are present, males increase the amount of time spent sitting near the nest entrance.—A.S.G.
- KENDALL, M. 1965. Goldeneye diving into water from air. *Brit. Birds*, **58**: 341-342.
- KING, M. G. 1965. The effect of social context on dominance capacity of domestic hens. *Animal Behav.*, **13**: 132-133.—Little correlation exists between peck order established in initial pairings and later social order in flocks, but the order established within the flock shows high correlation with later repeat pairings.—A.S.G.
- KLOPPER, P. H. 1965. Behavioral aspects of habitat selection: a preliminary report on stereotypy in foliage preferences of birds. *Wilson Bull.*, **77**: 376-381.
- LEMON, R. E. 1965. The song repertoires of Cardinals at London, Ontario. *Can. J. Zool.* **43**: 559-569.—In 25 cardinals at London, Ontario, 14 types of sounds, or syllables, were found but only 10 song types were commonly used.—(From author's abstract.)

- LIVERSIDGE, R. 1965. Egg covering in *Charadrius marginatus*. Ostrich, **36**: 59-61.—*Charadrius marginatus* covers its eggs very early in the morning and broods uncovered eggs at night. The increase in grade of cover after the initial five days of incubation is statistically highly significant.—M.A.T.
- LUDWIG, J. P. 1965. Ring-billed Gull nesting within Caspian Tern colony. Jack-pine Warbler, **43**: 61.—Near edge of colony on gravel-limestone ridge, Gull Island, Ontario.—R.B.
- MACLEAN, G. L. 1965. Nest transfer in the Three-banded Sandplover *Charadrius tricollaris* Vieillot. Ostrich, **36**: 62-63.—The plover removed a broken egg from its nest and, two days later, transferred the remaining egg to a new nest about a foot from the original site.—M.A.T.
- MACLEAN, G. L., AND V. C. MORAN. 1965. The choice of nest site in the White-fronted Sandplover *Charadrius marginatus* Vieillot. Ostrich, **36**: 63-72, 7 pls.—Placing nests near conspicuous objects is advantageous since the latter provide disruptive patterns for concealment, rather than aids to orientation.—M.A.T.
- NELSON, J. B. 1965. The behaviour of the Gannet. Brit. Birds, **58**: 233-288, 313-336.—Extensive data and detailed analyses from a four-year study of color-banded birds in Scotland, of sex differences, voice, nest-site establishment (site usually maintained for all or part of season prior to first breeding) and retention (the rule), aggression, displays, pair formation and relationship (mating for life is usual), copulation, and incubation.—H.B.
- NICKELL, W. P. 1965. Adaptive behavior under handicaps of several species of Michigan birds. Wilson Bull., **77**: 396-400.
- OFFUTT, G. C. 1965. Behavior of the Tufted Titmouse before and during the nesting season. Wilson Bull., **77**: 382-387.
- REYNOLDS, J. 1965. 'Feeding hygiene' among wading birds. Brit. Birds, **58**: 384-385.—A number of species left the water to defecate.—H.B.
- SELWAY, C., AND M. KENDALL. 1965. Turnstone feeding on dead sheep. Brit. Birds, **58**: 438.
- SHEIDER, F. C. 1965. Chimney Swifts bathing. Kingbird, **15**: 223.
- SHULER, J. B. 1965. Duet singing in the Carolina Wren. Wilson Bull., **77**: 405.
- THOMPSON, W. L. 1965. A comparative study of bird behavior. Jack-pine Warbler, **43**: 110-117.—Comments on the song and territorial defense of six species of *Passerina*.—R.B.
- THORPE, W. H. 1965. The ontogeny of behavior. Pp. 483-518 in Ideas in modern biology (J. A. Moore, ed.). Proc. XVI Intern. Congr. Zool., Vol. 6. Garden City, New York Natural History Press.—Modifications by learning of genetically determined behavior patterns. Habituation conditioning, expectancy and reward, and sensitive periods and imprinting are discussed, with examples of avian behavior, including some from the author's research on *Fringilla coelebs*.—D.M.P.
- TINBERGEN, N. 1965. Behavior and natural selection. Pp. 519-539 in Ideas in modern biology (J. A. Moore, ed.). Proc. XVI Intern. Congr. Zool., Vol. 6. Garden City, New York, Natural History Press.—Behavior patterns, in the natural environment, are intricately interwoven with animal survival and reproduction. Examples deal mostly with anti-predator defense systems and are not restricted to bird behavior.—D.M.P.
- TOLMAN, C. W., AND G. F. WILSON. 1965. Social feeding in domestic chicks. Animal Behav., **13**: 134-142.—Social facilitation depends on unrestricted social interaction. Facilitation varied with the amount of deprivation of both subject and companion,

- but was not influenced by "emotionality" of subject or number of companions.—A.S.G.
- WAYRE, P. 1965. Somersaulting during bathing by geese and swans. *Brit. Birds*, **58**: 383-384.
- WRIGHT, J. K. 1965. Observations of behavior of the Andean Torrent Duck. *Condor*, **67**: 535.

DISEASES AND PARASITES

- BIROVA-VOLOSINOVIČOVÁ, V. 1964. Predbežná zpráva o výskyte syngamid u volne zijúceho vtáctva. *Biológia*. Bratislava, **19**: 112-114.—Of 73 species of wild birds from the mountainous areas of Slovakia *Syngamus trachea* was found only in *Corvus corone*, *C. frugilegus*, and *Pica pica*. (English summary; from *Helminthol. Abstr.*, **34**: no. 1687, 1965.)—J.S.M.
- BUSCHER, H. N. 1965. Ectoparasites from anseriform birds in Manitoba. *Canadian J. Zool.*, **43**: 219-221.—Eight species were identified from 78 of 107 birds; 11 bird species were infected. Host-specificity was low. (From *Wildlife Rev.*, No. 117: 58, 1965.)—J.S.M.
- LOCKE, L. N. 1965. Additional records of aspergillosis among passerine birds in Maryland and the Washington, D. C. metropolitan area. *Chesapeake Sci.*, **6**: 120-121.—Reviews four cases of aspergillosis involving cowbirds and House Sparrows in the nesting season. The disease may be more widespread among passerines than has been recognized.—H.W.K.
- LOCKE, L. N., W. H. STICKEL, AND S. A. GEIS. 1965. Some diseases and parasites of captive woodcocks. *J. Wildl. Mgmt.*, **29**: 156-161.—*Micrococcus*, an undetermined species of a renal coccidium, *Tetrameres* (Nematoda), and *Sarcocystis* are reported from *Philohela minor*. (From *Wildlife Rev.*, No. 117: 62, 1965.)—J.S.M.
- MACDONALD, J. W. 1965. Chaffinches with papillomas. *Brit. Birds*, **58**: 346-347.
- MACKO, J. K. 1964. Príspevok k poznaniu fauny nematodov a pentastomid čajkovitých vtákov Slovenska. *Biológia*. Bratislava, **19**: 118-122.—Five species of Nematoda are recorded from *Larus ridibundus*, *Sterna hirundo*, *Chlidonias niger*, and *C. leucopterus* in Slovakia. (German and Russian summaries; from *Helminthol. Abstr.*, **34**: no. 1698, 1965.)—J.S.M.
- MARKUS, M. B. 1965. Method of infestation of the Red-faced Coly *Colius indicus* Latham with cestode parasites. *Ostrich*, **36**: 40-41.—Eating fruit contaminated by the feces of other birds could result in the ingestion of cestode eggs.—G.E.W.
- SCHMIDT, G. D. 1965. *Polymorphus swartzi* sp. n., and other acanthocephala of Alaskan ducks. *J. Parasitol.*, **51**: 809-813.—Three species of *Polymorphus* (one new) from *Bucephala islandica*, *Melanitta deglandi*, and *Aythya affinis*. Gives a key to the species of *Polymorphus*, largely a parasite of birds.—J.S.M.
- SCHMIDT, G. D. 1965. *Corynosoma bipapillum* sp. n. from Bonaparte's Gull *Larus philadelphia* in Alaska, with a note on *C. constrictum* Van Cleave, 1918. *J. Parasitol.*, **51**: 814-816.—The first acanthocephalan reported from Bonaparte's Gull. *Anas acuta*, *Melanitta deglandi*, and *Aythya affinis* are hosts for *C. constrictum*.—J.S.M.
- SZIDAT, L. 1964. Vergleichende helminthologische Untersuchungen an den argentinschen Grossmöwen *Larus marinus dominicanus* Lichtenstein und *Larus ridibundus maculipennis* Lichtenstein nebst neuen Beobachtungen über die Artbildung bei Parasiten. *Zeit. f. Parasitenk.*, **24**: 351-414.—The parasites of gulls from Patagonia indicate that two groups of helminths exist, one in southern- and one in northern-hemisphere gulls, and that southern gulls are more primitive since they have

more primitive helminths. Comparative studies of the Mallophaga and behavior of gulls support this conclusion. Several new helminths described. (Spanish summary; from *Helminthol. Abstr.*, **34**: no. 2252, 1965.)—J.S.M.

DISTRIBUTION AND ANNOTATED LISTS

- BALLIE, J. L. 1965. Two vanished birds. Meeting Place: J. Roy. Ontario Mus., **1**: 92-96.—A specimen each of the extinct Great Auk and Labrador Duck have been purchased by the museum. The known histories of these specimens and a brief summary of the histories of the species are given.—K.C.P.
- BOND, J. 1965. Tenth supplement to the check-list of birds of the West Indies (1956). *Acad. Nat. Sci., Philadelphia*, 16 pp.—This supplement includes a discussion of geographic variation in the songs of 18 birds. Brief taxonomic, distributional, and ecological notes on 23 species, and recent reports of birds new or rare on the islands follow. Fulvous Tree Ducks nested in Cuba in 1964, and have occurred widely in the Lesser Antilles, where previously unknown. Collection of a Black Rail in Cuba in early July suggests the existence of an indigenous West Indian population. An Eskimo Curlew shot on Barbados, 4 September 1963, is now in the Academy collection.—W.B.R.
- BULL, J., *et al.* 1965. The changing seasons. A summary of the 1965 nesting season. *Aud. Field Notes*, **19**: 518-544, 549-578.—Cattle Egrets now breed in Arkansas, have increased to over 20,000 pairs in coastal Texas, and bred again in southern Ontario. Glossy Ibis bred in Arkansas and are increasing on Long Island, New York. Roseate Spoonbills increased in Texas. Includes a number of records of out-of-range breeding by Anatidae, notably the Fulvous Tree Duck in Florida. Peregrine Falcons no longer breed in northeastern United States, and Osprey and Bald Eagle have declined. North and south breeding range extensions of passerines reported.—E.E.
- CHEKE, A. S. 1964. Notes on *Colonyctris leucomelas* and other sea birds seen from S. S. "CATHAY" between Taiwan and Yokohama 20-22 August 1963. *Misc. Repts. Yamashina's Inst. Ornith., and Zool.*, **4**: 118-120.—A log, with map, of birds observed and a discussion of shearwater distribution. (In English; Japanese summary.)—K.C.P.
- CLANCEY, P. A. 1965. Comments on the status of the Mangrove Kingfisher *Halcyon senegaloides* Smith in South Africa. *Ostrich*, **36**: 93-94.—This species breeds in South Africa and evidently leaves the mangroves to seek nesting sites along the banks of streams farther inland.—M.A.T.
- DIRIG, R. E. 1965. Winter Wren nest in Delaware County, 1964. *Kingbird*, **15**: 220-221.—Data on nesting in New York state.—E.E.
- DUSI, R. T. 1965. Sight record of the Scarlet Ibis for Alabama. *Wilson Bull.*, **77**: 401.
- EASTERLA, D. A. 1965. Arctic Loons invade Missouri. *Condor*, **67**: 544.
- ERDMAN, D. S. 1964. Notes on the oystercatcher *Haematopus ostralegus* from Puerto Rico and the Virgin Islands. *Caribbean J. Sci.*, **4**: 545-546.—Reports 11 sight records, 1945-1964.—W.B.R.
- EVANS, G. H. 1965. Yellow Warbler on Bardsey Island: a bird new to Great Britain and Ireland. *Brit. Birds*, **58**: 457-461.—Male, probably a bird of the year, 29 August 1964.—H.B.
- FOGDEN, M. P. L., AND J. T. R. SHARROCK. 1965. Rose-breasted Grosbeak in Co. Cork. *Brit. Birds*, **58**: 440-441.—First-winter male, 7 October 1962.—H.B.
- GARCIA MONTAÑA, F., AND O. H. GARRIDO. 1965. Nuevos registros de nidificación de

- aves en Cuba. Poeyana (Instituto de Biología, Cuba), Series A, No. 9, 3 pp.—Specimens collected in 1963–65 established first records of breeding in Cuba for the Roseate and Sandwich terns and Fulvous Tree Duck; the last nested in rice fields in Las Villas Province.—W.B.R.
- GARRIDO, O. H., AND F. GARCIA MONTAÑA. 1965. Aves nuevas para Cuba. Poeyana (Instituto de Biología, Cuba), Series A, No. 10, 6 pp.—First Cuban specimens of 14 forms, of which 7 species and 2 subspecies (*Puffinus diomedea*, *Xema sabini*, *Empidonax traillii*, *Troglodytes a. aedon*, *Toxostoma rufum*, *Regulus calendula*, *Vireo philadelphicus*, *Dendroica p. pinus*, and *C. chlorura*) apparently are first specimens from the West Indies. Bond has noted these records in recent supplements to his check-list of birds of the West Indies; several small discrepancies in details exist between the two accounts.—W.B.R.
- HARBER, D. D., AND THE RARITIES COMMITTEE. 1965. Report on rare birds in Great Britain in 1964. Brit. Birds, **58**: 353–372.—Includes 14 North American species; a supplementary list for 1963 adds 2 others.—H. B.
- JONES, M. 1965. Bimaculated Lark on Lundy: a bird new to Great Britain and Ireland. Brit. Birds, **58**: 309–312.
- KURODA, N. 1964. [Records of 'land-birds at sea': a review.] Misc. Repts. Yamashina's Inst. Ornith. and Zool., **4**: 124–146.—A bibliography of 162 titles, arranged geographically and annotated. (In Japanese; English summary and map caption.)—K.C.P.
- LERAAS, H. J. 1965. A record of the Mountain Plover in Washington state. Condor, **67**: 540–541.
- MCCASKIE, G., AND E. A. CARDIFF. 1965. Notes on the distribution of the Parasitic Jaeger and some members of the Laridae in California. Condor, **67**: 542–544.
- MITSUISHI, K., J. TOMINAGA, AND Y. HASUO. 1964. [On two examples of *Pterodroma hypoleuca* strayed inland by typhoons.] Misc. Repts. Yamashina's Inst. Ornith. and Zool., **4**: 121–123.—Two Bonin Gadfly Petrels, casual in Japan, picked up inland after typhoons in August and September 1964. One taken alive and released. Photographs of bird and map of typhoon routes. (In Japanese; English summary.)—K.C.P.
- PINK, E. 1965. Male Townsend's Warbler in Dutchess County [New York]. Kingbird, **15**: 223.—Seen 24 and 25 April 1965.—E.E.
- PRYTHERCH, R. J. 1965. Pied-billed Grebe in Somerset: a bird new to Great Britain and Ireland. Brit. Birds, **58**: 305–309.—First-winter bird, 22 December 1963.—H.B.
- PULICH, W. M. 1965. The Golden-checked Warbler of Texas (*Dendroica chrysoparia*). Aud. Field Notes, **19**: 545–548.—Distribution, status, ecology, and nesting behavior, with map and habitat photograph.—E.E.
- RISING, J. D. 1965. Summer birds from Cherokee County, Kansas. Kansas Orn. Soc. Bull., **16**: 9–14.—List of 75 species recorded in the county, 4–11 June 1964, with remarks on breeding status and densities in oak forests.—A.S.G.
- SCHWARTZ, A., AND R. F. KLINIKOWSKI. 1965. Additional observations on West Indian birds. Notul. Nat., No. 376: 16 pp.—Comments on taxonomy, distribution, and abundance of about 60 species based on observations and collections of 1963–64, principally in Hispaniola and the Lesser Antilles. *Coccyzus melanocoryphus* from Granada, *Oxyura j. rubida* from Eleuthera, Bah., and *Numenius p. phaeopus* from Barbados are reported as new to West Indies. Distributions of races of *Microligea palustris* and *Loxigilla violacea* on Hispaniola are clarified. The subspecies name *guadelupensis* is revived for populations of *Saltator albicollis* inhabiting Guadeloupe and Dominica.—W.B.R.

- SHARLAND, R. E. 1965. Birds ringed in Nigeria in 1964, seventh annual report. *Nigerian Field*, **30**: 187-189.—Totals for 1964 were 3,754 individuals of 40 migrant species, including 3,277 *Motacilla flava* caught at roosts in marshes. *Cettia cetti* and *Emberiza hortulana* (2 of each banded) are new species for West Africa. One Barn Swallow and 7 Yellow Wagtails banded in Nigeria were recovered in North Africa and Europe; 47 Yellow Wagtails and individuals of 3 other species were recaptured where banded in previous winters. A Whimbrel and 2 Barn Swallows banded in Europe were recovered in Nigeria.—W.B.R.
- TEDARDS, A. M. 1965. Cliff Swallows nesting in South Carolina. *Chat*, **29**: 95-97.—At the Hartwell Dam, upper Savannah River between South Carolina and Georgia, 16 nests, some of which fledged young.—G.E.W.
- TRAYLOR, M. A., AND R. C. HART. 1965. Some interesting birds from Barotseland. *The Puku*, **3**: 133-141.—Distributional and breeding records from Kalabo District, Barotseland, extreme western Zambia.—M.A.T.
- WALKINSHAW, L. H. 1965. The dispersion of Sandhill Cranes from the Baker Sanctuary area. Jack-pine Warbler, **43**: 86-99.—Abundance and nesting, 1921-62, in Calhoun and two adjacent counties, Michigan.—R.B.
- WALKINSHAW, L. H. 1965. The Wattled Crane, *Bugeranus carunculatus* (Gmelin). *Ostrich*, **36**: 73-81.—Distribution, description, and detailed report on the nesting of this African crane.—M.A.T.
- WHITE, C. M. 1965. Roadside raptor count through Utah, Colorado, and Kansas. *Kansas Orn. Soc. Bull.*, **16**: 18-19.—Records of 76 individuals of 9 species seen on 1,140 mile trip.—A.S.G.
- WINTERBOTTOM, J. M. 1964. Notes on the relative abundance of passerine and non-passerine birds in Africa south of the equator. *Amer. Nat.*, **98**: 450-452.—Comment on the generalization by Klopfer and MacArthur (1960) that "as one proceeds from North temperate regions towards the tropics, the proportion of non-passerines in the avifauna increases." The author presents African data which suggest the generalization may be valid only in New World northern hemisphere.—H.W.K.
- WINTERBOTTOM, J. M. 1965. American Purple Gallinule in South Africa. *Ostrich*, **36**: 90.—Four more records of *Porphyryla martinica* from southwestern Cape Province, previously misidentified as *P. alleni*. The latter is not found on the southwestern cape west of George.—M.A.T.

ECOLOGY AND POPULATION

- BRIDGE, D., M. BRIDGE, *et al.* 1965. Twenty-ninth breeding-bird census. *Aud. Field Notes*, **19**: 582-630.—Includes counts from arctic tundra on Baffin Island and tropical cloud forest in Mexico, covering some 70 diverse plots. Of special interest are censuses taken in the Great Plains area of North Dakota in a variety of study sites, including shelterbelts, grassland, cultivated fields, and marshes. Includes graphs of densities in various parts of the country of certain common forest species and a comparison of the composition, by families, of a British Columbia and a Connecticut coniferous forest.—E.E.
- BROOKE, R. K. 1965. Shifts in the avifauna of the Salisbury district of Southern Rhodesia during the historical period. *Proc. Central African Sci. Med. Congr. Lusaka*, **1963**: 297-307.—With a shift from vlei to dry-land cultivation, dry-grassland and woodland birds have decreased, and wet-grassland and aerial-feeding birds have increased.—M.A.T.
- BUCKNER, C. H., AND W. J. TURNER. 1965. Avian predation on the larch sawfly,

- Pristiphora erichsonii* (Htg.) (Hymenoptera: Tenthredinidae). Ecology, **46**: 223-236.—Effects of 43 species of birds, in or near tamarack bogs in Manitoba, as predators of the larch sawfly. Preferences for adult or larval forms, variability of predation, and relationships of prey and predator densities are discussed.—H.W.K.
- CADE, T. J. 1965. Relations between raptors and columbiform birds at a desert water hole. Wilson Bull., **77**: 340-345.
- DUNGER, G. T. 1965. Wase Rock—its history, geology, fauna and climbs. Nigerian Field, **30**: 148-184.—Wase Rock in central Nigeria is a steep volcanic plug that rises 980 feet from its base. The fauna includes 12 birds. A breeding colony of 2,000 adult Rosy Pelicans (*Pelecanus onocrotalus roseus*) occupies the summit in the dry season (approximately November-May) and fishes in the Benue River 35 miles away. Time of arrival is determined by the duration of the rains. Breeding was strongly asynchronous; eggs to six-week old young present in mid-February. Some late-hatched young were abandoned by adults when the rains came early. Marabou Storks prey on the young pelicans. One young was infested with a mallophagan (*Piagetiella titan*) and a nematode (*Contracecum spiculigerum*). Numerous photographs of this colony included.—W.B.R.
- FRANCIS, W. J. 1965. Double broods in California Quail. Condor, **67**: 541-542.
- HAILMAN, J. P. 1964. Breeding synchrony in the equatorial Swallow-tailed Gull. Amer. Nat., **98**: 79-83.—Study of nests on Plazas and Tower islands in the Galápagos in November failed to show synchrony of breeding in the colony as a whole, but natural groups of nests within the colony had statistically significant breeding synchrony. Discusses social stimulation.—H.W.K.
- KING, J. R., D. S. FARNER, AND L. R. MEWALDT. 1965. Seasonal sex and age ratios in populations of the White-crowned Sparrows of the race *gambelii*. Condor, **67**: 489-504.
- KRÜGER, P. 1965. Über die Einwirkung der Temperatur auf das Brutgeschäft und das Eierlegen des Rabhuhnes (*Perdix perdix* L.). Acta Zool. Fennica **112**: 1-64.—Influence of temperature and other environmental factors on breeding of partridges held captive in southern Finland. In four springs of study (1959-1962) breeding occurred during that half of May with similar temperature and thermal radiation. The first eggs were laid when temperatures reached a mean of 6.5°C. In some years with unusually warm springs, breeding occurred in the cooler part of May and clutch size was smaller. Reduction in clutch size with decreasing latitude may be an adjustment to temperature at laying. Temperature and radiation influenced laying frequency, clutch size, and fertility. Many eggs in large clutches were not incubated for weeks. External factors, such as dense vegetation, and internal factors frequently prevented damage from overheating. Several protective behavioral mechanisms were found. Early nests containing eggs from protracted laying were abandoned frequently in favor of better sites. Nesting hollows were dug deeper in warm than in cool soil. Eggs were kept better covered when the soil was relatively warm. In warm environments the eggs were covered with earth before incubation. Observations of laying hens and experiments on chicks of the partridge and other species indicate that temperature of the eggs (i.e. the environment) is sensed by an unknown thermoreceptor, perhaps located in the region of the eye. The entire behavioral mechanism is reminiscent of the egg care of the Megapodiidae. The effect of climatic conditions at the time of breeding upon distributional limits of gallinaceous birds is discussed. Southern species, like the partridge, are able to advance further north along the Baltic coast of Finland than in the interior. Northern species extend farther south in the interior. (In German; English summary.)—M.D.F.U.

- LACK, D. 1964. A long-term study of the Great Tit (*Parus major*). Pp. 159-173 in Brit. Ecol. Soc. Jubilee Sym.—Results of a study (1947-62) of a breeding population of the Great Tit in a wooded estate near Oxford. Some data on the Blue Tit (*P. caeruleus*) and Coal Tit (*P. ater*) are also presented. The critical factor determining population fluctuations was mortality of juveniles between fledging time and beginning of winter. Predation, disease, and territorial behavior did not limit breeding density. Food shortage may be the chief density-dependent factor.—H.W.K.
- LACK, D. 1965. Evolutionary ecology. *J. Anim. Ecol.*, **34**: 223-231.—The Presidential address to the British Ecological Society; defines "evolutionary ecology" and presents 10 principles, illustrated with selected examples from birds and mainly from factors influencing clutch size. An excellent review of the latter subject.—H.W.K.
- LEE TEH-HOW, CHENG SEN-WU, AND CHENG TSO-HSIN. 1965. [Avifaunal studies of the Uh-Shuh autonomous region, Chinghai Province.] *Acta Zool. Sinica*, **17**: 217-229.—Systematic and ecological notes on 110 species in five vegetation zones at elevations from 2,500-4,600 meters. (In Chinese; English summary.)—R.B.
- MACARTHUR, R. H. 1964. Environmental factors affecting bird species diversity. *Amer. Nat.*, **98**: 387-397.—Field observations and census figures of several workers are treated mathematically and discussed in an effort to account for diversity of bird species in complex or heterogeneous habitats. Point censuses of breeding birds make possible a separation of diversity into vertical, horizontal, and temporal components. The increased diversity of tropical species seems to be primarily vertical or horizontal and has little large scale temporal component.—H.W.K.
- MEANLEY, B. 1965. Early-fall food and habitat of the Sora in the Patuxent River marsh, Maryland. *Chesapeake Sci.*, **6**: 235-237.
- MESTER, H. 1965. Feeding habits of the Great Grey Shrike in winter. *Brit. Birds*, **58**: 375-383.
- MEYERRECKS, A. J. 1965. Ring-billed Gulls gorge on fiddler crabs. *Wilson Bull.*, **77**: 402-403.
- NICKELL, W. P. 1965. Habitats, territory and nesting of the Catbird. *Amer. Midl. Nat.*, **73**: 433-478.—A detailed study based on observations of 4,085 nests. Includes information on nest site and construction, relationships with nesting associates, eggs and young (with thorough discussion of clutch size), behavior at nest, adaptability, predators and ectoparasites, cowbird parasitism (not significant), and secondary uses of nests by other birds and by mammals.—A.S.G.
- PEHRSSON, O. 1965. [Studies of resting and wintering sea-fowl in the inner archipelago of southern Bohuslän.] *Vår Fågelvärld*, **24**: 107-132.—Shallow bays of the Swedish North Sea coast provide shelter and food for over 30 species of non-breeding waterfowl. Their numbers, feeding, and roosting relations are discussed, with emphasis on the Mallard, Green-winged Teal, Common Goldeneye, and Mute and Whooper swans. Prolonged daytime sleeping by the Whooper Swan in the winter seems to result in higher survival than do the more active habits of the Mute Swan. (In Swedish; English summary.)—M.D.F.U.
- PERRINS, C. 1964. Survival of young swifts in relation to brood-size. *Nature*, **20**: 1147-1148.—Swifts starting with broods of four raised fewer young per brood than those with broods of three.—G.E.W.
- PERRINS, C. M. 1965. Population fluctuations and clutch-size in the Great Tit, *Parus major* L. *J. Anim. Ecol.*, **34**: 601-647.—An analysis of factors affecting population density and production of offspring of the Great Tit near Oxford. Most of the young tits die before winter. The number surviving is related to the beach-nut crop or associated factors. The earliest breeding birds produce the most surviving

- young. Four types of variation in clutch size are shown. Great Tits usually rear as many young as they can and the numbers are influenced by the food supply.—H.W.K.
- PLUMB, W. J. 1965. Observations on the breeding biology of the Razorbill. *Brit. Birds*, **58**: 449-456.—Average incubation period 36 days; hatching success 69 per cent; fledging period 18.5 days; fledging success 78 per cent; total breeding success 53 per cent.—H.B.
- POSTUPALSKY, S., AND J. P. KLEIMAN. 1965. Osprey preys on turtle. *Wilson Bull.*, **77**: 401-402.
- RICE, O. O. 1965. Lark Bunting nesting colony, Shawnee County [Kansas], 1964. *Kansas Orn. Soc. Bull.*, **16**: 1-2.—General observations including descriptions of nest and site in this locality east of normal breeding range.—A.S.G.
- RICKLEFS, R. E. 1965. Brood reduction in the Curve-billed Thrasher. *Condor*, **67**: 505-510.
- STICKEL, D. W. 1965. Territorial and breeding habits of Red-bellied Woodpeckers. *Amer. Midl. Nat.*, **74**: 110-118.—Territorial behavior was variable. Pairing, incubation, rearing, and fledging behavior are described.—A.S.G.
- THOMAS, H. W. 1965. Redwinged Blackbird nests 6 inches apart. *Kingbird*, **15**: 223-224.
- TWIEST, G. 1965. Some effects of DDT on nesting Robins. Jack-pine Warbler, **43**: 62-69.—Nesting success was low. Cause of at least half of the failures was DDT poisoning of adults or young.—R.B.
- WAHLSTEDT, J. 1965. [Siberian Nuthatches (*Sitta europaea asiatica*) in Norrbotten, Sweden, 1962-64.] *Vår Fågelvärld*, **24**: 172-182.—After a small invasion in 1952, this bird irrupted again in Scandinavia, with a large scale invasion in 1962-63 in Finland and northern Sweden. Over 30 observations of individuals, pairs, or small groups were made. Territorial behavior was noted in the spring, but no nesting occurred. An "afterwave" in the following year resulted in three records in Sweden. This subspecies lives east of the Ural Mountains (some 2,000-2,500 km from northern Sweden) and is easily distinguished in the field from the nominate form which nests in Scandinavia. (In Swedish; English summary).—M.D.F.U.
- WALKINSHAW, L. H. 1965. One hundred thirty-three Michigan Sandhill Crane nests. Jack-pine Warbler, **43**: 137-143.—Lower peninsula nests were built in marshes, upper peninsula nests were in bogs. Of 201 eggs, 68 per cent hatched and 63 per cent produced fledglings. Gives nest dates, behavior, and measurements of eggs and young.—R.B.
- WATSON, A. 1965. A population study of ptarmigan (*Lagopus mutus*) in Scotland. *J. Anim. Ecol.*, **34**: 135-172.—Annual changes in a 500 hectare area of natural arctic-alpine plant community in the Cairn Gorms, Scotland. Presents breeding and wintering population densities, territory size, mortality factors of adults and young, breeding success, and behavioral changes in the periods of study.—H.W.K.

EVOLUTION AND GENETICS

- BOCK, W. J., AND G. VON WAHLERT. 1965. Adaptation and the form-function complex. *Evolution*, **19**: 206-299.—A report of several years' dialogue concerning the nature and mode of adaptation. Definitions are offered in an attempt to clarify certain concepts confused by ambiguities in terminology. Extensive references. Although not primarily avian in outlook, this paper will be of interest to all students of avian adaptations.—A.S.G.

- GRANT, P. R. 1965. A systematic study of the terrestrial birds of the Tres Marias Islands, Mexico. Postilla, no. 90: 106 pp.—Based on 3,000 specimens and the 90 per cent rule of recognition, 20 of the 34 terrestrial breeding birds of the Tres Marias have endemic races. The islands have probably been present since Pliocene times. Most of the island forms have longer tarsi and bills, reduced body-size, and less distinctive plumage. These may be adaptive responses to few species but generally higher densities of those present on the islands. Variability is frequently greater in mainland populations in most cases because they are larger and geographically more extensive.—G.E.W.
- GRANT, P. R. 1965. Plumage and the evolution of birds on islands. Syst. Zool., **14**: 47–52.—The plumages of island birds are, in general, less distinctive than those of their mainland counterparts, possibly as a result of reduced selection for specific distinctiveness.—A.S.G.
- GRANT, P. R. 1965. The adaptive significance of some size trends in island birds. Evolution, **19**: 355–357.—Tendencies for increased tarsal and bills lengths in island birds are linked with a greater variety of utilized perches and food sizes. Mensural characters of island birds and other island animals, principally rodents, are discussed in relation to availability of vacant niches.—A.S.G.
- HARRIS, S. W., AND R. J. WHEELER. 1965. Hybrid of Blue-winged Teal \times Cinnamon Teal in northwestern California. Condor, **67**: 539–540.
- LANCASTER, F. M. 1963. The inheritance of plumage colour in the common duck (*Anas platyrhynchos* Linné). Bibliographia Genetica, **19**: 317–404, 18 plates (order from Martinus Nijhoff, The Hague; price 22.50 guilders).—A review of earlier work on genetics of plumage color in domestic ducks, plus results of six years of experimentation. Three chapters: Multiple allelomorphs in the duck, Sex-linkage and the inheritance of dilution factors, The inheritance of white and white markings. Only two multiple allelic series are known in this species. Some experiments with Muscovies (*Cairina moschata*) and with Mallard \times Muscovy hybrids. The color plates are poorly reproduced. A useful addition to the literature of avian genetics.—K.C.P.
- SCHOENER, T. W. 1965. The evolution of bill size differences among sympatric congeneric species of birds. Evolution, **19**: 189–213.—Analysis of bill length differences among sympatric congeneric species of 46 families. Partitioning of the food niche by differences in physical properties of food is most likely where diversity of competing species is low. Evolutionary and ecological implications are discussed.—A.S.G.
- SPRING, L. W. 1965. Climbing and pecking adaptations in some North American woodpeckers. Condor, **67**: 457–488.

GENERAL BIOLOGY

- CARR, T., AND C. J. GOIN, JR. 1965. Bluebirds feeding Mockingbird nestlings. Wilson Bull., **77**: 405–407.
- EASTWOOD, E., AND G. C. RIDER. 1965. Some radar measurements of the altitude of bird flight. Brit. Birds, **58**: 393–426.—Median altitude at night, 2,000 feet; in daytime, 1,800 feet; mean altitudes tend to be higher in overcast than in clear weather; altitudes over sea and land identical up to 1,200 feet, then higher over land; presence of a freezing level in atmosphere may impose a ceiling.—H.B.
- ELLIOTT, B. G. 1965. The nest of the Red Warbler. Condor, **67**: 540.
- ENDERSON, J. H. 1965. A breeding and migration survey of the Peregrine Falcon. Wilson Bull., **77**: 327–339.

- HAILMAN, J. T. 1965. Cliff-nesting adaptations of the Galápagos Swallow-tailed Gull. *Wilson Bull.*, **77**: 346-362.
- HAVERSHMITZ, F. 1965. A nest of the Double-banded Pygmy Tyrant. *Condor*, **67**: 538-539.
- HOGMAN, W. J. 1965. A study of nesting Red-tailed Hawks. Jack-pine Warbler, **43**: 54-61.—The appearance of young and nest during the six weeks following hatching.—R.B.
- HSIA, WU-PING AND CHIA HSIANG-KAN. 1965. [On the growth of the nestlings of the Tree Sparrow.] *Acta Zool. Sinica*, **17**: 121-136.—Daily measurements and weights of 24 nestlings of *Passer montanus saturatus* in Peking. Eyelids began to open on fourth day; peak weight (19 gm) on tenth day; weight at leaving the nest (fifteenth day) was 16.7 gm. (In Chinese; English summary.)—R.B.
- KUC, M. 1964. A botanical analysis of the excrements of the Northern Ptarmigan (*Lagopus mutus hyperboreus* Sundevall) from Hornsund (SW Spitsbergen). *Ekologia Polska, Ser. A*, **12**: 395-399.—Angiosperm remains made up 95 per cent of the bulk of the feces collected in summer. *Poa alpina* was by far the most important species.—R.B.
- KURODA, N. 1964. [Data on body weight, fat weight and gonad size of lighthouse struck and other birds.] *Misc. Repts. Yamashina's Inst. Ornith. and Zool.*, **4**: 71-75.—Data presented for 34 species. Using Ishizawa's weak-formalin injection method, "there seems to be no appreciable difference [in weight] between short time and long preserved specimens." (In Japanese; English summary.)—K.C.P.
- KURODA, N. 1964. [Comparison of migratory adaptations in the Rustic and Black-faced buntings.] *Misc. Repts. Yamashina's Inst. Ornith. and Zool.*, **4**: 76-90.—Morphological comparisons between *Emberiza rustica* (which migrates to Siberia across the Sea of Japan) and *E. spodocephala* (which makes only short movements along the Japanese coast) based on birds killed at a lighthouse in April. Adaptations of *E. rustica*, probably for long-distance migration: greater fat deposition relative to body size; more pointed wing tip; greater wing length, span, and area; larger aspect ratio and wing loading; smaller wing breadth; longer wing bones; shorter and differently shaped tail; and lighter legs and head. (In Japanese; English summary and captions.)—K.C.P.
- KURODA, N. 1964. Analysis of variation by sex, age, and season of body weight, fat, and some body parts in the Dusky Thrush, wintering in Japan: a preliminary study. *Misc. Repts. Yamashina's Inst. Ornith. and Zool.*, **4**: 91-105.—A study of 64 specimens of *Turdus naumanni eunomus* from the Noto Peninsula, Honshu. Analysis of seasonal variation in weights of various organs and muscles showed that post-arrival (autumn) gain in body weight was not due to fat deposition, but to increase in weight of muscles and organs. Spring weight gains were entirely due to fat accumulation prior to departure. Rate of fat deposition given for various regions of the body. Digestive organs of gorged birds may reach 12 per cent of body weight. Juvenile females were the most, and adult males the least, emaciated upon arrival in Japan. (In English; Japanese summary.)—K.C.P.
- NIERGATH, G. 1965. Nesting and migrant bird populations in a southwestern Michigan marsh. Jack-pine Warbler, **43**: 121-135.—Data on numbers of nests, eggs, and nestlings of Red-winged Blackbird, Swamp Sparrow, and Long-billed Marsh Wren in 20 acres of cattail bluejoint marsh.—R.B.
- PUCKERING, P. J. 1965. Lesser Black-backed Gull in same area in successive winters and a case of progressive albinism. *Brit. Birds*, **58**: 342-343.

- RAMANJULU, B. V. 1965. Indian Fairy Bluebird (*Irena puella puella*). Peacock, **2**: 30-32.—Data on behavior and nesting, in the wild and in captivity.—E.E.
- ROWLEY, J. S., AND R. T. ORR. 1965. Nesting and feeding habits of the White-collared Swift. Condor, **67**: 449-456.
- SELANDER, R. K. 1965. On mating systems and sexual selection. Amer. Nat., **99**: 129-141.—A consideration of certain aspects of the relationships of mating systems, sexual selection, sex ratios, rates of maturation in males, and behavior in grackles and other icterids.—H.W.K.
- SHORT, L. L., JR. 1965. A melanistic Pileated Woodpecker specimen from Georgia. Wilson Bull., **77**: 404-405.
- SULLIVAN, J. O. 1965. "Flightlessness" in the Dipper. Condor, **67**: 535-536.
- THOMPSON, M. E. 1965. Report of Western Kingbird's nest. Jack-pine Warbler, **43**: 147-148.—A successful nest of *Tyrannus verticalis* in Kalamazoo Co., Michigan. Nearby a group of fledglings with plumage characteristic of *T. tyrannus* was seemingly attended by two adults, one *T. verticalis* and one *T. tyrannus*.—R.B.
- VAN VALEN, L. 1965. Morphological variation and width of ecological niche. Amer. Nat., **99**: 377-390.—A comparative statistical analysis of bill width and length of six bird species on Atlantic islands with the same species on the European mainland, including Britain. Niches are broader on some islands than on the mainland.—H.W.K.
- WAUER, R. H. 1965. Intraspecific relationship in Red-shafted Flickers. Wilson Bull., **77**: 404.
- WEBER, H. 1965. Studies of less familiar birds: Red-breasted Flycatcher. Brit. Birds, **58**: 434-438.—Data on 23 nests, 1 watched from blind.—H.B.
- WILCOX, L. 1965. Netting birds on the south shore of Long Island, New York. Tiana Station 1958-1964. The Kingbird, **15**: 205-215.—Report of birds banded and recovered. Includes details on increase of weight in autumn migrants recaptured after a few days stay.—E.E.
- YUNICK, R. P. 1965. A roof-nesting Upland Plover. The Kingbird, **15**: 221-222.

MANAGEMENT AND CONSERVATION

- GULLION, G. W. 1965. A critique concerning foreign game bird introductions. Wilson Bull., **77**: 409-414.
- LEOPOLD, A. S. 1964. Predator and rodent control in the United States. Trans. 29th N. Amer. Wildl. and Nat. Res. Conf., pp. 27-49.—Recommends a complete reassessment of goals, policies, and operations of the Branch of Predator and Rodent Control, Fish and Wildlife Service, with a view to limiting killing to cases of proven need. Suggests an advisory board, appointed by the Secretary of the Interior, to assure consideration of total public interest.—G.E.W.
- WURSTER, D. H., C. F. WURSTER, JR., AND W. N. STRICKLAND. 1965. Bird mortality following DDT spray for Dutch Elm disease. Ecology, **46**: 488-499.—A detailed comparative study of avian populations in Hanover, New Hampshire, where elms were sprayed with DDT for many years, and in nearby Norwich, Vermont, where a spray program has never been conducted. Chemical analyses of 106 birds found dead after spraying are presented, with special emphasis on the Robin, whose loss was estimated at 70 per cent of the population.—H.W.K.

MIGRATION AND ORIENTATION

- BASSINI, E. 1965. [Quantitative and qualitative analysis of the data of capture of the Siskin (*Carduelis spinus* L.) in some bird-catching installations in Italy.] Ric.

- Zool. Appl. alla Caccia, **39**: 1-43.—Information on numbers captured in various parts of Italy during autumnal migration from 1936-1963, by years and months, with daily averages. (In Italian; English summary.)—E.E.
- DZUBIN, A. 1965. A study of migrating Ross Geese in western Saskatchewan. *Condor*, **67**: 511-534.
- EDBERG, R. 1965. [Migration through the Kalmar Sound in 1961.] *Vår Fågelvärld*, **24**: 97-106.—Report on migration along the west coast of the Baltic. In 8.5 months of regular observation 390,000 birds were seen flying south and 15,000 east in fall migration, and 150,000 flying north and 6,500 west in spring migration. Discusses rarities and peak periods for certain species. (In Swedish; English summary.)—M.D.F.U.
- GRAUE, L. C. 1965. Experience effects on initial orientation in pigeon homing. *Animal Behav.*, **13**: 149-153.—A single release can cause deviation in later flights. When release points vary sixty degrees or more, an average deviation may result from accumulated experience.—A.S.G.
- ISHIZAWA, J., AND T. NAKAMURA. 1964. [Studies on the migration of Gray's Grasshopper Warbler. 1. Distribution and migration in Japan and the vicinity.] *Misc. Repts. Yamashina's Inst. Ornith. and Zool.*, **4**: 63-70.—Based principally on birds killed at lighthouses, the four main migration routes of *Locustella fasciolata* are worked out. A history of changes in breeding area and migration routes is suggested, correlated with changes in coastal lines during the Pleistocene. (In Japanese; English summary and captions.)—K.C.P.
- KAWAGUCHI, K., AND R. MARUMO. 1964. [Mass mortality of Slender-billed Shearwater, *Puffinus tenuirostris*, in Suruga Bay.] *Misc. Repts. Yamashina's Inst. Ornith. and Zool.*, **4**: 106-113.—A "wreck" estimated at more than 4,000 birds of this species occurred in late May 1964. Four specimens were dissected. Correlation is suggested with an unusual combination of meteorological and oceanographical conditions. (In Japanese; English summary and captions.)—K.C.P.
- OZAWA, K. 1964. [Records and observations of an unusual wreck of Slender-billed Shearwater on the Pacific coast of Japan, end of May 1964]. *Misc. Repts. Yamashina's Inst. Ornith. and Zool.*, **4**: 114-117.—Observations made by personnel of a training ship of Tokyo University of Fisheries. Great numbers of *Puffinus tenuirostris* were seen at sea, and many were washed ashore in areas southwest of those reported by Kawaguchi and Marumo (see above). (In Japanese; brief English summary.)—K.C.P.
- ROBERTSON, W. B., JR. 1965. Migrations of Sooty Terns (Letter to Editor). *Nigerian Field*, **30**: 190-191.—Lists banding and recovery data for 13 Sooty Terns banded as juveniles at Dry Tortugas, Florida, and recovered in West Africa.—W.B.R.
- SHELDON, W. 1965. Hawk migration in Michigan and the Straits of Mackinac. *Jack-pine Warbler*, **43**: 79-83.—Hawks cross the Straits and larger expanses of water.—R.B.
- STEVENSON, H. M. 1965. Some records of North American migrants in Ecuador. *Wilson Bull.*, **77**: 407.

MISCELLANEOUS

- BANKS, R. C. 1965. Weight change in frozen specimens. *J. Mammal.*, **46**: 110.—Specimens weighed in the field, sealed in plastic bags and frozen on dry ice were reweighed one and three months later; average weight loss was 0.59 per cent and 0.35 per cent, respectively. Some showed no change and a few weighed more the second time.—G.E.W.

- DAVIS, J. 1965. A plea for quantitative banding. *Western Bird Bander*, **40**(1): 6-8.—Trapping area and schedule, number of traps, and kind of traps and bait should be standardized by individual bird banders. They should then attempt to quantify their data.—G.E.W.
- HUNDLEY, M. H., AND C. R. MASON. 1965. Birds develop a taste for sugar. *Wilson Bull.*, **77**: 408.
- MALONE, C. R. 1965. Killdeer (*Charadrius vociferus* L.) as a means of dispersal for aquatic gastropods. *Ecology*, **46**: 551-552.—Two species of fresh-water snails were found capable of attaching themselves to the feet of Killdeer. When removed from water, the snails remained attached, retaining their viability for sufficient lengths of time to effect passive overland dispersal (from authors' abstract).
- NICKELL, W. P. 1965. Some natural and artificial materials used in the nests of common birds in Michigan. Jack-pine Warbler, **43**: 70-78.—Includes list summarizing kinds of plant (about 30), animal, or artificial materials, how used in nest, and species of birds using them.—R.B.
- PROCTOR, V. W., AND C. R. MALONE. 1965. Further evidence of the passive dispersal of small aquatic organisms via the intestinal tract of birds. *Ecology*, **46**: 728-729.—Viable disseminules of fresh-water algae and crustaceans were recovered from feces of representatives of three orders of birds in addition to waterfowl (from authors' abstract).

PHYSIOLOGY

- BEACH, F. A., AND N. G. INMAN. 1965. Effects of castration and androgen replacement on mating in male quail. *Proc. Natl. Acad. Sci.*, **54**: 1426-1431.—Ten male Japanese quail *Coturnix coturnix japonica* from a captive stock where checked to establish their activity in mating tests and then castrated; within eight days all sexual responses were abolished. About one month later a pellet of testosterone propionate was implanted in each. Sexual advances to females began in three days, and in eight days were wholly comparable to those seen prior to castration. In five castrates the effect of the pellet was dissipated completely in three months. These were again implanted and within eight days resumed mating activity at the normal level.
- BRENNER, F. J. 1965. Metabolism and survival time of grouped Starlings at various temperatures. *Wilson Bull.*, **77**: 388-395.
- GOLDSMITH, T. H. 1965. The red-yolked egg of the touraco, *Tauraco corythaix*. *Postilla*, no. 91: 7 pp.—The bright vermilion of the yolk is caused by the carotenoid astaxanthin or astacene and not turacin.—G.E.W.
- KENDEIGH, S. C., AND G. C. WEST. 1965. Caloric values of plant seeds eaten by birds. *Ecology*, **46**: 553-555.—Presents gross energy values for 51 species of seeds of wild plants collected in east-central Illinois.—Author's abstract.
- NAGARA, C. L., R. P. BREITENBACH, AND R. K. MEYER. 1965. Relation of castration to fat stores in male pheasants. *Ecology*, **46**: 741-744.—A study of the effect of castration on lipid levels in visceral stores, liver, and plasma in captive game farm pheasants over a two-year period. Adrenal and thyroid weights were also studied.—H.W.K.
- THAPYLIYAL, J. P., AND S. CHATTERJI. 1965. Juvenile phase in the weaver finch (*Ploceus philippinus*). *J. Exp. Zool.*, **159**: 203-208.—The photosensitive weaver bird has a long juvenile phase when, although the bird is insensitive to photostimulation, the gonads respond to injected gonadotrophins. The immature status of the

hypothalamo/hypophyseal complex may be responsible for the long pre-photo-responsive phase (from authors' abstract).

TAXONOMY AND PALEONTOLOGY

- BINFORD, L. C. 1965. Two new subspecies of birds from Oaxaca, Mexico. Occ. Pap. Mus. Zool., Louisiana State Univ., no. 30: 6 pp.—*Dendrocolaptes certhia sheffleri* (color plate) and *Rhynchocyclus brevirostris pallidus*.
- CLANCEY, P. A. 1965. Miscellaneous taxonomic notes on African birds. XXIII. Durban Mus. Novit., **8**: 1–17.—Variation in *Caprimulgus fossii* and *Monticola angolensis* discussed, and two new races described: *C. f. griseoplurus*, Murwamusa Pan, Bechuanaland, and *M. a. hylophila*, west of Gokwe, northwestern Rhodesia.—M.A.T.
- CLANCEY, P. A. 1965. The characters and ranges of the subspecies of the Kurrichane Thrush. *Arnoldia* (Natl. Mus. S. Rhod.), **2**(2): 7 pp.—Four races of *Turdus libonyana* are recognized in southern Africa.—M.A.T.
- CLANCEY, P. A. 1965. The South African subspecies of the Green-cap Eromomela *Eromomela scotops* Sundevall. *Arnoldia* (Natl. Mus. S. Rhod.), **2**(3): 6 pp.—Three races are recognized from southern Africa, of which one, *E. s. chlorochlamys*, Sabi-Lundi confluence, is described as new.—M.A.T.
- DICKERMAN, R. W. 1965. The nomenclature of the Red-winged Blackbird (*Agelaius phoeniceus*) of south-central Mexico. Occ. Pap. Mus. Zool., Louisiana State Univ., no. 31: 6 pp.—*Agelaius phoeniceus nelsoni*, subsp. nov., from Puebla, Morelos and Guerrero "hybridizes" with *A. p. gubernator* along Tlaxcala—Puebla border.—G.E.W.
- LANYON, W. E. 1965. Specific limits of the Yucatan Flycatcher, *Myiarchus yucatanensis*. Amer. Mus. Novit., no. 2229: 12 pp.—Relationships of the Yucatan Flycatcher, a species of extremely limited distribution, to other members of its genus have been debated. Vocal characters (and playback experiments) indicate that *M. yucatanensis* is not conspecific with *M. stolidus* of the West Indies, but its affinities are still not clear. New records of *M. yucatanensis* are given for Tobasco, Petén, and Cozumel Island.—K.C.P.
- LOWERY, G. H., JR., AND J. P. O'NEILL. 1965. A new species of *Cacicus* (Aves: Icteridae) from Peru. Occ. Pap. Mus. Zool., Louisiana State Univ., no. 33: 5 pp.—*Cacicus koepckeae*, the Selva Cacique; includes color plate by O'Neill.
- MARKUS, M. B. 1965. Eyelid of Black-eyed Bulbul *Pycnonotus barbatus* (Desfontaines). *Ostrich*, **36**: 41.—*Pycnonotus barbatus layardi* has a yellow line on the inner surface of the upper eyelid. This may indicate a link with *P. nigricans* which has a yellowish eye-wattle.—G.E.W.
- PARKES, K. C. 1965. A small collection of birds from the island of Buad, Philippines. Ann. Carnegie Mus., **38**: 49–67.—This collection, now in the Royal Ontario Museum, has been erroneously mentioned in the literature as being from Leyte; Buad is geographically and faunally related to Samar. The collection is listed for the first time, with notes on molt, taxonomy and distribution. Includes critical taxonomic studies of five species: *Ducula aenea*, *Pycnonotus goiavier*, *Hypsipetes philippinus*, *Macronus striaticeps*, and *Oriolus chinensis*. A specimen of *Ninox philippensis* is the only one known to be extant from Samar.—K.C.P.
- PHILLIPS, A. R. 1964. Notas sobre aves mexicanas, III. Rev. Soc. Mexicana Hist. Nat., **25**: 217–242.—Taxonomic reviews of several species with a key to the white-throated Mexican races of *Amazilia* and description of *A. violiceps wagneri* from Oaxaca. Phillips considers *A. verticalis* (used for *A. violiceps* in A.O.U. Check-list,

- 1957) a synonym of *A. cyanocephala*. He considers *viridifrons* a race of *A. violiceps*, not an age stage, and *A. cyanocephala* and *A. violiceps* as separate but closely related species. *Cyanocorax coeruleus woodhousei* should not be the dark cotype supposedly from Fort Thorn, New Mexico, but the pale cotype from the San Francisco Mountains of Arizona collected by Woodhouse. The darker race he names *C. c. suttoni*, with cotypes from Scrogg's Arroya, Pueblo, Colorado. It migrates into Arizona. Three races of *Toxostoma lecontei*, including the newly described *T. l. macmillanorum* from the San Joaquin Valley, California, are recognized. *Regulus calendula arizonensis* from near Phelps Ranger Station, White Mountains, Arizona, and *Poocetes gramineus altus* from Kendrick Pass, San Francisco Mountains, Arizona, are described and one each of the races of these two species is rejected.
- Considering the nomenclatural confusion created by the use of cotypes (e.g. *C. woodhousei*) it is regrettable that Phillips lists cotypes instead of indicating holotypes for his new subspecies. (In Spanish; English summary.)—E.E.
- POST, P. W. 1965. Photographs of New York state rarities. 3. "Spotted" Towhee. The Kingbird, **15**: 202-203.—Records of the "Spotted Towhee" in the east reviewed; all specimens identified as *Pipilo erythrophthalmus arcticus*; photograph of bird in New York, 7 January 1965.—E.E.
- S.A.O.S. LIST COMMITTEE. 1965. Ninth report of the S.A.O.S. List Committee. Ostrich, **36**: 51-58.—Reports 38 decisions concerning the nomenclature and taxonomy of species on the South African list.—M.A.T.
- SHORT, LESTER L., JR. 1965. Variation in West Indian flickers (Aves, *Colaptes*). Bull. Florida State Mus., **10**: 1-42.—The populations, *Colaptes auratus chrysocaulosus* of Cuba and *C. a. gundlachi* of Grand Cayman, are somewhat specialized for arboreal life and comprise a distinct subspecies group of *C. auratus (sensu lato)*, most closely resembling flickers of the eastern U. S. Ancestral stock probably reached Cuba from Florida in early Pleistocene and later colonized Grand Cayman from Cuba. The little-known "*Nesocelus*" *fernandinae* of Cuba apparently represents an earlier (Pliocene?) radiation of flickers. No important morphological differences characterize *Nesocelus*, and it should be regarded as a sub-genus of *Colaptes*. Origin and relationships of *C. fernandinae* are obscure. It has color pattern features also shown by some South American flickers, but these may be primitive characteristics of the genus.—W.B.R.
- VAURIE, C. 1965. Systematic notes on the bird family Cracidae. No. 2. Relationships and geographical variation of *Ortalis vetula*, *Ortalis poliocephala*, and *Ortalis leucogastra*. Amer. Mus. Novit., no. 2222: 36 pp.—The status of the chachalacas of Mexico and Central America is reviewed; three species (see title) are admitted. All may overlap in coastal Chiapas. Distribution and species characters are given in detail. Two subspecies of *O. poliocephala* and four of *O. vetula* are admitted after analysis of geographic variation; *O. leucogastra* is monotypic.—K.C.P.
- VAURIE, C. 1965. Systematic notes on the bird family Cracidae. No. 3. *Ortalis guttata*, *Ortalis superciliaris*, and *Ortalis motmot*. Amer. Mus. Novit., no. 2232: 21 pp.—Analysis of geographic variation and distribution in these three South American chachalacas. Five subspecies of *O. guttata* and two of *O. motmot* are admitted; *O. superciliaris* is monotypic.—K.C.P.
- WINTERBOTTOM, J. M. 1965. The type localities of four Falconiformes. Ostrich, **36**: 91.—Restricted type localities are proposed for: *Gyps coprotheres* (Forster) Cape Town; *Torgos trocheliotus* (Forster), Great Namaqualand; *Buteo rufofuscus* (Forster), Cape Town; *Circus ranivorus* (Daudin), Duiwenhok River, Swellendam District.—M.A.T.