PERIODICAL LITERATURE

EDITED BY GLEN E. WOOLFENDEN

ANATOMY AND EMBRYOLOGY

- GEORGE, W. G., AND G. M. BROWN. 1968. The high frequency of occurrence of the vestigial claw in *Colinus virginianus virginianus*. Condor, 70: 390.
- HUTCHISON, R. E., R. A. HINDE, AND B. BENDON. 1968. Oviduct development and its relation to other aspects of reproduction in domesticated canaries. J. Zool., 155: 87-102.—Histology and development of the oviduct in unpaired canaries during the natural breeding season. The tubular glands develop by invagination of the epithelial cells, and albumen granules subsequently form in their cytoplasm. The epithelium differentiates into ciliated columnar cells and goblet cells. Oviduct and ovary development are closely correlated. The formation of albumen coincides with the relative enlargement of one ovarian follicle, the completion of brood patch defeathering, and intensive nest-building behavior. (From author's summary.)—K.P.A.
- KURODA, N. H. 1967. Morpho-anatomical analysis of parallel evolution between Diving Petrel and Ancient Auk, with comparative osteological data of other species. Misc. Repts. Yamashina Inst. Ornithol., 5: 111-137.—A detailed comparison of the anatomy, chiefly osteology, of *Pelecanoides urinatrix* and *Synthliboramphus* antiquus, with some data on other tubinares and alcids. The author found several characters in *Pelecanoides* that are typical of other petrels, suggesting derivation of this diving-adapted form from more typically aerial petrels. Unlike the late R. Verheyen, Kuroda attributes the resemblances of diving petrels and auks to "parallelism" (more correctly "convergence"—see Mayr, Animal species and evolution, 1963: 609). (In English.)—K.C.P.
- STRESEMANN, E., AND B. STEPHAN. 1968. Zahl und Zählung der Handschwingen bei den Honiganzeigern (*Indicatoridae*). J. Ornithol., 109: 221-222.—The honeyguides differ from all other flying birds in having only 5 metacarpal primaries. Four digital primaries are present as in all other flying birds but the remicle is lacking in some species of Indicatoridae. (English summary.)—H.C.M.
- SUTTON, G. M. 1968. Sexual dimorphism in the Hudsonian Godwit. Wilson Bull., 80: 251-252.

BEHAVIOR

- ALLEN, J. A., AND B. CLARKE. 1968. Evidence for apostatic selection by wild passerines. Nature, 220: 501-502.—In their predation on "populations" of green and brown baits in which one color was nine times more common than the other, Blackbirds (*Turdus merula*), Starlings, and House Sparrows showed apostatic selection (i.e. they took significantly more baits of the common color than expected). Individuals appeared to have color preferences that changed as a result of more frequent encounters with food of another color. "In summary, ground-feeding passerines . . . appear to hunt in a manner that would tend actively to maintain colour polymorphisms in their prey."—W.B.R.
- ARTMAN, J. P. 1968. Capture of American Coot by Great Horned Owl. Bull. Oklahoma Ornithol. Soc., 1: 23-24.
- BEASOM, S. L. 1968. Some observations of social hierarchy in the wild Turkey. Wilson Bull., 80: 489-490.
- COOKSEY, H. S. 1968. Loggerhead Shrike kills Cardinal. Bull. Oklahoma Ornithol. Soc., 1: 20.
- Dow, D. D. 1968. Allopreening invitation display of a Brown-headed Cowbird to Cardinals under natural conditions. Wilson Bull., 80: 494-495.

- GOBELL, R. E. 1968. The double-scratch in the genus *Passerculus*. Wilson Bull., 80: 334-335.
- GRAVES, H. B., AND P. B. SIEGEL. 1968. Chick's response to an imprinting stimulus: heterosis and evolution. Science, 160: 329-330.—Day-old crossbred chicks (n = 379) showed a significantly greater tendency to respond to, approach, and stay near an imprinting stimulus (flashing light, recording of broody hen clucks) than did purebred chicks (n = 290). The three traits measured (it is not clear to me how the authors measured response independent of approach) are thought to be strongly correlated, "heterotically inherited," and "probably adaptive during development of the domestic fowl."—W.B.R.
- GREAVES, J. W. 1968. Food concealment by Merlins. Brit. Birds, 61: 310-311.
- HEMMING, J. E. 1968. Copulatory behavior of the Red-necked Grebe on open water. Wilson Bull., 80: 326-327.
- KÖNIG, C. 1968. Lautäusserungen von Rauhfusskauz (Aegolius funereus) und Sperlingkauz (Glaucidium passerinum). Vogelwelt, Beiheft 1: 115–138.—Description and behavioral context of vocalizations, including among others, the variable territorial song, snapping, screeching, and contact calls of Tengmalm's (or Boreal) Owl; and two types of songs, and alarm and contact calls of the Pygmy Owl. —R.C.S.
- LEMON, R. E. 1968. The displays and call notes of Cardinals. Canadian J. Zool., 46: 141-151.—Description of the calls (with sonograms) and visual displays (with photograph tracings) of *Richmondena cardinalis* and a discussion of some motivational factors behind the displays. Compares the species with other richmondenine finches, and with emberizinae and carduelinae.—H.W.K.
- LENSINK, C. J. 1967. Arctic Loon predation on ducklings. Murrelet, 48: 41.— Gavia arctica was observed to capture a Lesser Scaup duckling by surfacing among the brood. On another occasion an Arctic Loon was observed pursuing a female Lesser Scaup that was giving a distraction display.—K.P.A.
- LORENZ, K., AND U. V. ST. PAUL. 1968. Die Entwicklung des Spiessens und Klemmens bei den drei Würgerarten Lanius collurio, L. senator und L. excubitor. J. Ornithol., 109: 137-156.—Description and analysis of the development of impaling and wedging behaviors in three species of shrikes. Movements of impaling and recognition of spikes appear to be largely innate. L. excubitor does more wedging than the other two species and shows an early interest in acute angles in corners, etc.—H.C.M.
- MAXWELL, G. R., AND L. S. PUTNAM. 1968. The maintenance behavior of the Black-crowned Night Heron. Wilson Bull., 80: 467-478.
- ORING, L. W. 1968. Vocalizations of the Green and Solitary Sandpipers. Wilson Bull., 80: 395–420.
- PEARSE, T. 1968. Feeding habits of the Sanderling and Lesser Yellowlegs. Murrelet, 49: 13-14.—Several *Crocethia alba* and a *Totanus flavipes* were observed skimming the surface of a small freshwater pond, probably for floating insects.—A.C.V.V.
- POKROVSKAVA, I. V. 1968. Observations on nest site selection in some passerines. Ibis, 110: 571-573.—As used here, nest site selection refers to the choosing, not the site chosen. In 1956-66 in woods near Leningrad the author watched 423 nests of 26 species "from the moment of nest site selection to the completion of the nest." Selection activities (by females only) consisted mainly of nest-forming movements and rapid hopping about on the prospective nest supports. Site selection lasted 2 to 9 days and tended to be prolonged by bad weather or presence nearby of potential nest predators.—W.B.R.

REYNARD, G. B., AND S. T. HARTY. 1968. Ornithological "mystery" song given by

male Virginia Rail. Cassinia, 50(1966-1967): 3-8.—The "kicker" song, which has been variously attributed to the Black and the Yellow Rail, here is attributed to a nocturnal vocalization of *Rallus limicola*.—G.E.W.

- RICHARDSON, F. 1967. Black Tern nest and egg moving experiments. Murrelet, 48: 52-56.—Moving entire *Chlidonias niger* nests with eggs to different parts of the 2-3 foot long nest platforms did not affect incubation or nest acceptance. Eggs placed just outside the nest were pulled back into it, whereas eggs moved from 3 to 8 inches outside the nest were incubated *in situ*. Moving the entire nest island up to 23 feet did not lead to desertion. Super-normal sized eggs (up to chicken size) were accepted and incubated.—K.P.A.
- ROYALL, W. C., AND R. E. PILLMORE. 1968. House Wren feeds Red-shafted Flicker nestlings. Murrelet, 49: 4-6.—One individual (presumably the male) of a pair of *Troglodytes aedon* occupying the same nest tree as a pair of *Colaptes cafer* consistently fed the flicker brood. The incidence of this feeding decreased after the wren eggs hatched. The wren exhibited aggressive behavior toward the flickers, particularly the female.—K.P.A.

SIMMONS, K. E. L. 1968. Foot-paddling by Pochards. Brit. Birds, 61: 308-309.

- THIELCKE, G. 1968. Gemeinsames der Gattung *Parus*. Ein bioakustischer Beitrag zur Systematik. Vogelwelt, Beiheft 1: 147–164.—Summarizes morphological and behavioral characteristics of the genus *Parus*. The song is basically the same in all but one of 11 species. The alarm calls in 15 species are divided into three different types. Nomenclatorial changes in *Parus* are pointless until more systematically reliable data are available.—R.C.S.
- VIRKKUNEN, I. 1967. Ethological observations on wintering woodpeckers, with special reference on the interactions between different species. Ornis Fennica, 44: 73-77.—The smaller *Dendrocopus major* successfully defends its winter territory against its larger congener, *D. leucotos*, with which it has no food competition; it is indifferent toward *Picus canus.*—M.D.F.U.
- WENZEL, B. M. 1968. Olfactory prowess of the Kiwi. Nature, 220: 1133-1134.— Among several "foul" smelling substances tested in controlled foraging and feeding experiments, five *Apteryx* showed a high aversion to amyl acetate. In other tests the birds demonstrated an unerring ability to locate hidden food by olfaction. In laboratory tests the birds' sensitivity to odors was relatively high, giving support to morphological and behavioral evidence for a strong olfactory sense in the species. —A.H.B.

DISEASES AND PARASITES

- CARRIKER, M. A., JR. 1967. Carriker on Mallophaga, posthumous papers, catalog of forms described as new, and bibliography. U. S. Natl. Mus. Bull., ix + 150 pp.—
 "Summary of more than 60 years of taxonomic investigations by a pioneering and world-recognized authority on neotropical Mallophaga." (From Wildl. Rev., no. 129, 1968.)—J.S.M.
- CHIRIAC, E. 1965. [Research on the parasite fauna of ichthyophagic birds in the Danube delta.] Ann. Univ. Bucuresti Ser. Stiint. Nat., 14: 137–153.—(From Biol. Abstr., 48(17), 1967. In Romanian; Russian and French summaries.)—J.S.M.
- DYL'KO, M. I. 1966. [Blood parasites of birds in Byelorussia.] Vyestsi Akad. Navul Byelarus. SSR Syer. Byal. Navuk, 2: 103-110.—(From Biol. Abstr., 40(14), 1967.)
 —J.S.M.
- HUFF, C. G., AND A. WETMORE. 1967. Blood parasites of birds collected in four successive years in Panama. Bull. Wildl. Dis. Assoc., 3: 178-181.
- HUIZINGA, H. W. 1966. Studies on the life cycle and development of Contracaecum

spiculigerum (Rudolphi, 1809) (Ascaroidea: Heteroceilidae) from marine piscivorous birds. Elisha Mitchell Sci. Soc., 82: 81–195.—Adults of this proventricular parasite were collected from *Phalacrocorax auritus*, *P. carbo*, and *Pelecanus occidentalis*. Experiments indicate the hatched second stage larvae is the infective form in either copepods or fish.—R.J.

- KAGERUKA, P. 1967. The mycotic flora of Antarctic Emperor and Adelie Penguins. Acta Zool. Pathol. (Antverpiensia), no. 44(1967): 87-99.—Aspergillosis is the chief cause of death of captive penguins. A survey in Antarctica suggests the infection does not exist in wild birds. Tables show incidence of aspergillosis in different orders of birds in the Antwerp zoo, and in the molds and yeasts found in cultures made in Antarctica.—E.E.
- MACDONALD, J. W. 1968. Listeriosis and erysipelas in wild birds. Bird Study, 15: 37-38.—Listeriosis was reported in *Sturnus vulgaris*, *Erithacus rubecula*, and *Phalacrocorax aristotelis*. Erysipelas was found in *Accipiter nisus*, *Circus cyaneus*, and *Rissa tridactyla*.—J.D.R.
- McLAUGHLIN, E. T. 1968. Pigeon malaria in San Juan, Puerto Rico. Caribbean J. Sci., 8: 101-102.—Of 35 Columba livia, 24 were infected with Haemoproteus columbae, the only haematozoan found. A hippoboscid, Pseudolynchia canariensis, is the probable vector.—W.B.R.
- OGDEN, C. G. 1967. Some parasitic nematodes from Australian birds. Ann. Mag. Nat. Hist., year 1966, Ser. 13, 9(106/108): 505-518.—Nematodes are described from *Podargus, Ninox, Malurus, Colluricincla*, and *Monarcha*, chiefly from Queensland. (From Helminthol. Abstr., 37: no. 934, 1968.)—J.S.M.
- PREMVATI, G. 1968. Echinostome trematodes from Florida birds. Proc. Helminthol. Soc. Washington, 35: 197-200.—Two new and one known species are recorded from Anhinga anhinga L. and Podilymbus podiceps in Leon County.—J.S.M.
- RAITIS, T., AND R. LEMMETYINEN. 1967. On the occurrence of Schistocephalus solidus (Cestoda) in terns. Ornis Fennica, 44: 68–72.—Twenty-two Arctic Terns (Sterna paradisaea), feeding on Gasterosteus aculeatus, were found to be tapeworm-infested, including a few young chicks. Eight terns from a population that fed on herring were free of the parasite. Many mensural data on the parasite as found in the birds and fish are given. (In Finnish, English summary.)—M.D.F.U.
- RýsAuý, B. 1966. Nuevas especies de cestodos (Cestoda:Cyclophyllidea) de aves para Cuba. Poeyana, Ser. A, no. 19: 22 pp.—New species are from Saurothera merlini decolor, Centurus s. superciliaris, Xiphidiopicus p. percussus, and Charadrius w. wilsonia. (From Helminthol. Abstr., 37: no. 184, 1968.)—J.S.M.
- SNOEVENBOS, G. H., E. W. MORIN, AND D. K. WETHERBEE. 1967. Naturally occurring Salmonella in "blackbirds" and gulls. Avian Dis., 11: 642-646.—Salmonella was found in grackles, cowbirds, Starlings, and gulls with sufficient frequency to suggest that these birds may play a role in the epidemiology of these pathogens. No evidence was found that salmonellosis had a limiting effect on the populations of these birds. (From Wildl. Rev., no. 129, 1968.)—J.S.M.
- STAMM, D. D. 1968. Arbovirus studies in birds in south Alabama, 1959–1960. Amer. J. Epidemiol., 87: 127–137.—From 3,020 blood samples 65 virus isolations were made; all isolations were from birds sampled between September and December. (From Wildl. Rev., no. 130, 1968.)—J.S.M.
- THRELFALL, W. 1967. Studies on the helminth parasites of the Herring Gulls, Larus argentatus Pontopp., in northern Caernarvonshire and Anglesey. Parasitology, 57: 431-453.—Examination of 650 birds in North Wales revealed 31 helminth species. Seasonal incidence, distribution within the gulls, burden as

correlated with food, and the availability of intermediate hosts are discussed. (From Helminthol. Abstr., 37: no. 90, 1968.)—J.S.M.

DISTRIBUTION AND ANNOTATED LISTS

- BLACKBURN, A. 1968. The birdlife of Codfish Island. Notornis, 15: 51-65.—Annotated list of 41 birds and 4 mammals studied from 12 to 17 December 1966 on Codfish Island about 2 miles from the northwestern coast of Stewart Island, New Zealand. Topography, vegetation, and history are described.—G.D.S.
- BOGUCKI, Z. 1967. [Red-breasted Goose, *Branta ruficollis*, in Poland.] Acta Ornithol., 10: 237–238.—A young bird taken in September, 1960.—(In Polish; English summary.)—M.A.J.
- BRITTON, H. A., AND P. L. BRITTON. 1968. Seafowl observed on a voyage, Cape Town to Southampton, 24th January to 5th February, 1968. Bull. Brit. Ornithol. Club, 88: 93-96.—Records of 24 species observed during the voyage.—K.P.A.
- CALDER, W. A. 1967. A sight record of the Indigo Bunting in Washington. Murrelet, 48: 40.—A singing male observed 23 June and 13 July 1958 at Forks, Washington, extends the known range of accidental occurrence over 500 miles northward.—K.P.A.
- CAMPBELL, J. M. 1968. Birds of Chandler Lake, Brooks Range, Alaska. Murrelet, 49: 16-24.
- CAMPBELL, R. W. 1967. Common Teals wintering in southwestern British Columbia. Murrelet, 48: 27.—Three male *Anas crecca* observed between 11 February and 15 April 1967 in the greater Vancouver area constitute the third occurrence in the province, and the one seen on Vancouver Island provides the first record for the island.—K.P.A.
- CLAPP, R. B. 1968. Additional new records of birds from the Phoenix and Line Islands. Ibis, 110: 573-575.—The list of 14 species includes eight shorebirds (see also Ibis, 109: 122-125).—W.B.R.
- COLLINS, C. T. 1968. Distributional notes on some Neotropical swifts. Bull. Brit. Ornithol. Club, 88: 133-134.—Lists the following locality records: Cypseloides cryptus from Ecuador; C. cherriei from Volcan de Irazu, Costa Rica, 9 August 1898; Chaetura chapmani near Aragua, Venezuela, 13 March 1968; and C. andrei meridionalis from near Aragua, Venezuela, 13 September 1952.—K.P.A.
- Dow, J. A. S., AND V. E. NEAL. 1968. Biological observations from the Rennick Glacier region, Antarctica 1967-68. Notornis, 15: 117-119.—Sight records of Skuas (*Catharacta maccormicki*), Snow Petrels (*Pagodrona nivea*), and an Antarctic Tern (*Sterna vittata*).—G.D.S.
- EDSCORN, J. B. 1969. Nesting Indigo Bunting (*Passerina cyanea*) [at Lake Hancock, Florida]. Florida Naturalist, 42: 40–41.—Southern breeding range extension for this and a few other species.—E.E.
- FRIEDMANN, H. 1968. The Olive Weaver-finch, Nesocharis ansorgei ansorgei in Uganda. Bull. Brit. Ornithol. Club, 88: 135-138.—An isolated population of Nesocharis ansorgei is reported from the west shore of Lake Victoria. It is separated from other known populations of the species by 170 miles.—K.P.A.
- FRIEDMANN, H., AND S. KEITH. 1968. First specimen of Otus scops turanicus (Louden) from Africa. Bull. Brit. Ornithol. Club, 88: 112.—Collected at Bura, Kenya, on 5 March 1963.—K.P.A.
- GARRIDO, O. H., AND F. GARCIA M. 1967. Nuevas adiciones para la avifauna de Cuba. Poeyana, Ser. A, no. 51: 6 pp.—Six additions include four (continental race of the Oystercatcher, Red Phalarope, Yellow-bellied Flycatcher, Warbling Vireo)

collected for the first time in the West Indies and the first record of the Bananaquit for Cuba. Specimens are in the Instituto de Biología, Havana.—W.B.R.

- GILLIARD, E. T., AND M. LECROY. 1968. Birds of the Schrader Mountain region, New Guinea. Results of the American Museum of Natural History expedition to New Guinea in 1964. Amer. Mus. Novitates, no. 2343: 41 pp.—Another of Mrs. LeCroy's papers based on Gilliard's field notes and specimens. The Schrader Mountains, visited 21 April to 25 May 1964, are "an isolated range forming the height of land between the Sepik and Ramu rivers in northern New Guinea." The history of collecting in the area and detailed descriptions of Gilliard's camp sites are given, together with a rather stark map. Highlight of the expedition was the rediscovery of the nominate population of the bowerbird *Chlamydera lauterbachi*, previously known only from the type, which had been postulated to be aberrant. Data presented within species accounts may include some or all of: weight, food, breeding notes, altitudinal distribution, behavior, and taxonomy. One meliphagid is described as new: *Melidectes belfordi schraderensis.*—K.C.P.
- GUIGEUT, C. J. 1968. First specimen record of Anna's Hummingbird for Canada. Murrelet, 49: 9.
- HALL, W. 1967. A Band-tailed Pigeon at Spokane, Washington. Murrelet, 48: 57.
- HARRISON, J. 1968. The occurrence of *Certhia familiaris macrodactyla* C. L. Brehm in the British Isles. Bull. Brit. Ornithol. Club, 88: 148–150.—A specimen taken at St. Helens Wood, Hastings, Sussex, on 10 October 1919 is the first definite record of this continental race in the British Isles.—K.P.A.
- HUBBARD, J. P., AND C. SEYMOUR III. 1968. Some notable bird records from Egypt. Ibis, 110: 575-578.—The list of 11 species from a locality in the Western Desert southwest of Alexandria includes three Asiatic birds collected for the first time in Africa, a sylviid *Phylloscopus inornatus* and two cardueline finches *Serinus pusillus* and *Carpodacus erythrinus.*—W.B.R.
- HUDSON, G. E. 1967. More Band-tailed Pigeons near Pullman, Washington. Murrelet, 48: 57.
- HUDSON, R. 1968. The Great Skua in the Caribbean. Bird Study, 15: 33-34.—The two individuals reported, one ringed in Scotland and one in Antarctica, appear to be the first authenticated records of this species in their respective recovery localities. —J.D.R.
- KANERVA, J. 1967. Valkokurkkusirkku (Zonotrichia albicollis) tavattu ensi kerran Suomessa. Ornis Fennica, 44: 108–109, 114.—The White-throated Sparrow was seen for the first time in Finland from 23 June to 20 July 1967 in Kotka, southeastern Finland. The bird was singing on a territory and was attracted by its own taped song. Detailed descriptions of the vocalizations are given. (In Finnish.)—M.D.F.U.
- KEITH, S. 1968. Notes on birds of East Africa, including additions to the avifauna. Amer. Mus. Novitates, no. 2321: 15 pp.—Records compiled in Kenya, Uganda, and Tanzania by the author and his wife July 1961 to July 1962 and September 1962 to December 1963. Sight records by R. Smart and A. Keith, reliable observers, also are included. Data, mainly range extensions, are given for 27 species, some rare and little known, including the first record for Africa of *Totanus flavipes*. Notes are given on voice, field identification, and ecology.—K.C.P.
- KRAMER, H., B. LIEKEFEDT, J. NIETHAMMER, AND G. VON PAPEN. 1967. Ornithologische Frühjahrsbeobachtungen bei Rovinj-Istrien. Larus, 19(1965): 149–155.
 —Faunistic data for 1955, 1957, 1960, and 1962.—M.D.F.U.

LIGON, J. D. 1968. First record of the Gyrfalcon in Idaho. Condor, 70: 397.

- LUNIAK, M. 1967. [Contribution to the avifauna of the province of Lublin.] Acta Ornithol., 10: 267–268. (In Polish; English summary.)—M.A.J.
- MARSHALL, R. V. A. 1968. Laughing Gull in Essex. Brit. Birds, 61: 415-416.---20 December 1957.-H.B.
- NICÉFORO, M., AND A. OLIVARES. 1967. Adiciones a la avifauna Colombiana, IV (Apodidae-Picidae). Hornero, 10: 403–435.—Compilation of records since Meyer de Schauensee's (1948–1952) list of Colombian birds, giving locality and reference. (English summary.)—E.E.
- NITECKI, C. 1967. [Birds of the Chodecz territory, district Wloclawek.] Acta Ornithol., 10: 268–279.—Notes on 181 species; the avifauna is strongly influenced by human activity. (In Polish; English summary.)—M.A.J.
- NORTHERN, J. R. 1968. Canada Warbler in California. Condor, 70: 391.
- NOTERMANS, F. J. 1968. Waarneming van een Havikarend, *Hieraaëtus fasciatus* (Vieill.) in het natuurreservaat De Groote Peel." Limosa, 41: 21-26.—A Bonelli's Eagle, seen during the period 9 September to 27 October 1967, was the second record for the Netherlands. (In Dutch; English summary.)—K.P.A.
- OGDEN, J. C. 1969. Apparent first nesting record for American Oystercatcher on Bonaire, Netherlands West Indies. Florida Naturalist, 42: 42.
- OWRE, O. T., AND D. R. PAULSON. 1968. Records of Falconiformes from the Lake Rudolf area, Kenya. Bull. Brit. Ornithol. Club, 88: 151–152.—Falco peregrinus, Aquila clanga, Circaetus gallicus, Buteo rufinus, and Accipiter nisus were collected. —K.P.A.
- PATERSON, A. 1968. New species records for the Bahamas. Bull. Brit. Ornithol. Club, 88: 109–110.—Reports seven species new to Andros Island and two (Anas cyanoptera and Podiceps grisegena) new to the Bahamas.—K.P.A.
- PATTERSON, B., AND R. ALLEN. 1968. A Maine nest of the Scarlet Tanager. Wilson Bull., 80: 495.
- POSLAWSKI, A. N. 1968. Durchzug und Übersommern von Limikolen im nördlichen Vorland des Kaspi. J. Ornithol., 109: 1-10.—Nonbreeding individuals of 10 species of palearctic shorebirds summer on the north coast of the Caspian Sea. Additional individuals and species use the area for molting or as a rest stop during migration. —H.C.M.
- SETON-BROWNE, C., AND J. HARRISON. 1968. Observations on wildfowl on the Batinah Coast, Muscat and Oman, south-east Arabia 1962–1967. Bull. Brit. Ornithol. Club, 88: 59–73.—Waterfowl habitats in the area are described. Records are listed for 18 species, including Greylag, White-fronted, Spur-winged, and Indian Pigmy Geese, and Common Scoter, each representing range extensions.—K.P.A.
- SICK, H. 1966. [On the species of Estrilda (Ploceidae, Aves), called Bico-de-Lacre, existing in Brazil.] Anal. Acad. Brasileira Ciencias, 38: 169–171.—The waxbill established in Brazil (apparently introduced prior to 1870) is *Estrilda astrild* and not *E. cinerea* [= *E. troglodytes*] as it appears in some Brazilian literature. Specimens indicate that the Brazilian birds belong to the brown-throated *astrild* complex of races. Distribution extends coastally from Baía to Rio Grande do Sul, with reports from the interior. (In Portuguese; English summary.)—E.E.
- SICK, H., AND L. F. PABST. 1967. [The birds of Rio de Janeiro (Guanabara), systematic, annotated list.] Arq. Mus. Nac., 53: 99–160.—The first checklist of the birds of the city of Rio de Janeiro and its environs, now the Brazilian state of Guanabara (formerly the federal district). Although the area is small, 1,356 square kilometers, or only 0.2 per cent of Brazil, the list includes 366 species, or 23 per cent of all recorded from Brazil. Some species recorded by early collectors have dis-

appeared or been extirpated from the region. A supplement adds 14 species (the printer omitted *Chlorestes notatus*). (In Portuguese; English summary.)—E.E.

- TEN KATE, C. G. B. 1968. Nieuwe waarnemingen vande Buidelmees (*Remiz pendulinus*) in ons land. Limosa, 41: 27-30.—Lists seven records (four of birds trapped and banded) of the Penduline Tit during the period 8 October 1967 to 1 January 1968. Two previous records exist. (In Dutch; English summary.)—K.P.A.
- VAN ZUYLEN, O. 1968. Tweede waarneming van Amerikaanse Zwarte Zeeeend (Melanitta nigra americana) in Nederland. Limosa, 41: 19-20.—An oil-soaked Common Scoter (Oidemia nigra) was taken alive on 2 November 1967. The specimen, an adult male, is the second record for the Netherlands. (In Dutch; English summary.)—K.P.A.
- VRIES, G. A. DE. 1968. Waarneming var een Iberische Tjifjaf in Baarn. Limosa, 41: 35-40.—A Chiffchaff, identified by song recordings as the Iberian race *brehmii*, was present from 29 April to 28 June 1967, and is the first record of this subspecies in the Netherlands. (In Dutch; English summary.)—K.P.A.
- WEBBER, G. L. 1968. Solitary Sandpiper in Wiltshire. Brit. Birds, 61: 265–267.–-13–25 September 1966.–H.B.
- WEBSTER, J. D. 1968. Ornithological notes from Zacatecas, México. Condor, 70: 395-397.
- WILLIAMS, L. E., Jr. 1968. Specimen of the Harlequin Duck in Florida. Wilson Bull., 80: 488-489.

ECOLOGY AND POPULATION

- AVELEDO, H. R. 1968. Aves comunes del Valle de Caracas. Estudio de Caracas, vol. 1. Ecología vegetal y fauna, pp. 327-407. Univ. Central de Venezuela, Caracas. —One chapter in a handsome volume dealing with the ecology and fauna of Caracas is devoted to birds. The 103 commoner species of the 159 listed as recorded are described with information on habitat and behavior. Many are illustrated in color photographs by Paul Schwartz and in a plate of tanagers by José Ayoza. (In Spanish.)—E.E.
- BLANK, T. H., T. R. E. SOUTHWOOD, AND D. J. CROSS. 1967. The ecology of the partridge. I. Outline of population processes with particular reference to chick mortality and nest density. J. Anim. Ecol., 36: 549-556.—The first in a series of papers describing investigations of various aspects of Grey or Hungarian Partridge (*Perdix perdix*) ecology pertinent to its decline in Great Britain. Analysis of census data collected by Blank and Ash (1962) and a discussion of the relationship between nesting densities in field boundaries and the nature of these boundaries. —H.W.K.
- BOURNE, W. R. P. 1968. Observation of an encounter between birds and floating oil. Nature, 219: 632.—When they swam into patches of heavy oil, Common Murres dived, gulls (Herring Gull, Kittiwake) flew. Either maneuver is effective in evading small oil-spills, but the different reactions may explain the much heavier mortality of diving birds in large spills, such as the "Torrey Canyon" disaster. —W.B.R.
- BROOKS, W. S. 1968. Comparative adaptations of the Alaskan redpolls to the Arctic environment. Wilson Bull., 80: 253–280.
- CAMPBELL, R. W., AND D. STIRLING. 1968. Notes on the vertebrate fauna associated with a Brandt's Cormorant colony in British Columbia. Murrelet, 49: 7–9.—Associated breeding birds are the Pelagic Cormorant, Glaucous-winged Gull, and Black Oystercatcher. No mammals live on the small islet.—K.P.A.

- CHERBATOFF, J., AND E. GERZENSTEIN. 1965. Observaciones ecológicas sobre la avifauna de la Sierra Mahoma (Departamento de San José, Uruguay). Anais do Segundo Congresso Latino-Americano de Zoologia, São Paulo, 1962: 305-312.— The Sierra Mahoma is a mass of granitoid rocks forming a "rock sea" 120 km from Montevideo. The bird life of its three plant communities is analyzed. (In Spanish.) —E.E.
- CODV, M. L. 1968. On the methods of resource division in grassland bird communities. Amer. Naturalist, 102: 107-147.—The distribution of bird species in grassland communities and associated differences in feeding habits were studied at 11 localities in Canada, United States, and Chile. The following generalizations are made: "The members of avian communities resident in simple grassland habitats coexist by virtue of differences in habitat preferences and feeding behavior, and in very tall vegetation by differences in feeding height. The sum of these ecological differences is constant for all communities. Using only two habitat indexes, vegetation height and its standard deviation, it is possible to predict (1) the number of species, (2) the differences in their feeding ecology, and (3) their relative habitat separation in the community which occupies this habitat. As these predictions are made for South American communities on the basis of the communities studied in North America, and as the predictions hold regardless of grazing or irrigation programs, it is suggested that these communities have a full quota of species which are optimally adapted to their current environment."—G.D.S.
- COULSON, J. C., G. R. POTTS, I. R. DEANS, AND S. M. FRASER. 1968. Exceptional mortality of Shags and other seabirds caused by paralytic shellfish poison. Brit. Birds, 61: 381-404.—Heavy mortality on Northumberland coast in May-June 1968 coincided with 78 cases among humans. A neurotoxin produced by dinoflagellates, transferred through food chains, is believed the cause.—H.B.
- COULSON, J. C., G. R. POTTS, I. R. DEANS, AND S. M. FRASER. 1968. Mortality of Shags and other sea birds caused by paralytic shellfish poison. Nature, 220: 23-24.
 --Following a bloom of the dinoflagellate, *Gonyaulax tamarensis*, 636 seabirds of 19 species were found dead on the northeast England coast 25-31 May 1968, killed by neurotoxin they ingested with shellfish or with fin fish that had fed on shellfish. Known mortality was 0.08 per cent of the local seabirds (16 species, mainly on Farne Islands), but 17 per cent for Shags (*Phalacrocorax aristotelis*). Actual mortality of Shags was estimated to be 80 per cent. Common Eiders, which feed on shellfish, were little affected and may have "some means of reducing the toxic effect of the poison." (See also Brit. Birds, 61: 381.)-W.B.R.
- COUTLEE, E. L., AND R. I. JENNRICH. 1968. The relevance of logarithmic models for population interaction. Amer. Naturalist, 102: 307-321.—Discusses the relative merits of classical mathematical models to investigate the nature of variations in population size with regard to ease of analysis and ecological relevance. A logarithmic model is proposed and evaluated, which in addition to reflecting observed fluctuations is easy to work with mathematically. Relationships between predator and prey are investigated in detail using this model. It can be applied to systems in which two species utilize the same food source and those involving more than two populations.—G.D.S.
- GOMPERTZ, T. 1968. Results of bringing individuals of two geographically isolated forms of *Parus major* into contact. Vogelwelt, Beiheft 1: 63-92.—Reactions of hybrids of Himalayan Great Tit (*P. m. nipalensis*) and a British one (*P. m. newtoni*) to the local population when released from captivity at the author's home in Middlesex. Vocalizations of the hybrid are described and compared to parental counter-

parts. Behaviorally no mutual recognition existed between the hybrid and the Himalayan parents and between the hybrid and the British form, but British Coal Tits (P. ater) did sing somewhat in response to sounds of the hybrids.—R.C.S.

- GRANT, P. R. 1968. Polyhedral territories of animals. Amer. Naturalist, 102: 75-80. —Discusses why territories of noncolonial birds breeding at high densities should be polyhedral in shape in structurally simple habitats. Observations of Pectoral Sandpipers (*Calidris melanotos*) of the arctic tundra are used to support this hypothesis. For this species calculations of angles between pairs of boundaries indicate the territories are hexagonal in shape.—G.D.S.
- GRANT, P. R. 1968. Bill size, body size, and the ecological adaptations of bird species to competitive situations on islands. Syst. Zool., 17: 319-333.—Bill length shows greater interspecific differences and less intraspecific variation in species sympatric on islands than among their mainland relatives. Differences in bill length are greater than differences in body size, suggesting that island birds reduce potential competition by modification of feeding habits, although a wide variety of other selective pressures also may be operative. Coexistence of closely related species on islands seems to require a greater degree of ecological independence than on the mainland.—A.S.G.
- HICKEY, J. J., AND D. W. ANDERSON. 1968. Chlorinated hydrocarbons and eggshell changes in raptorial and fish-eating birds. Science, 162: 271–273.—Weight of the shells of Bald Eagle, Osprey, and Peregrine Falcon eggs decreased 18 to 26 per cent, 1947–1967; while eggshell weights for Red-tailed Hawks, Golden Eagles, and Great Horned Owls changed little. Eggs taken in 1967 from five Herring Gull colonies showed a strong inverse correlation (r = 0.9863) between shell thickness and amount of DDE in egg contents. Change in eggshells of U. S. raptors coincides in date and degree with data from western Europe, and both began one year after chlorinated hydrocarbon insecticides came into general use.—W.B.R.
- HOLMES, R. T., AND F. A. PITELKA. 1968. Food overlap among coexisting sandpipers on northern Alaskan tundra. Syst. Zool., 17: 305-318.—Caldris alpina, C. melanotus, C. bairdii, and C. pusillus, whose diets overlap broadly, nest near Barrow, Alaska. Although partial habitat separation and differences in modal size of prey help reduce competition, early migration of adults of three species is deemed more important. The most extensive sympatry is between the two larger species, one of which shows fluctuation in its relatively low population density from year to year, while the other is opportunistic and may be locally abundant when and where favorable conditions prevail. It is suggested that these four species comprise a group more likely to coexist in unfavorable conditions than other combinations.—A.S.G.
- HOLMBRING, J. Å., AND H. KJEDEMAR. 1968. [The Dipper (*Cinclus cinclus*) in Östergötland, southern Sweden.] Vår Fågelvärld, 27: 97–121.—Wintering Dippers are mostly stationary and maintain defended territories from November to March. (English summary.)—L.DEK.L.
- KEAST, A. 1968. Moult in birds of the Australian dry country relative to rainfall and breeding. J. Zool., 155: 185-200.—In most of some 20 species inhabiting the dry western area of New South Wales the prebasic molt begins in November and is completed in February or March. This more protracted molt is considered to be of adaptive value by reducing physiological stress in this unpredictable environment. Breeding occurs only in spring seasons with ample rainfall, but the prebasic molt occurs whether the birds have bred or not. Molt may commence up to 2–3 weeks early if an early termination of spring breeding occurs or drought conditions render

breeding impossible. Molt may be delayed when breeding is protracted or delayed. Summer rain will induce out-of-season mid-molt breeding, particularly in years when no breeding occurred in spring. The birds may be in full molt at the time. --K.P.A.

- KIKKAWA, J. 1968. Ecological association of bird species and habitats in eastern Australia: similarity analysis. J. Anim. Ecol., 37: 143–165.—In order to assess the applicability of the structural classification of vegetation to the description of avian habitats in eastern Australia, species lists (presence and absence) of birds were subjected to similarity analysis using centroid sorting with the information statistic as its coefficient. A total of 182 species from 48 sites in the breeding season and 128 species from 21 sites in the nonbreeding season in northern New South Wales, and 83 species from 15 sites in wet lowlands of North Queensland were analyzed. —H.W.K.
- LARSSON, K. 1968. [The distribution of the Quail (Coturnix coturnix) and the Corncrake (Crex crex) in the province of Närke, central Sweden.] Vår Fågelvärld, 27: 122-135.—Both species are now increasing after periods of virtual absence. (English summary.)—L.DEK.L.
- NAKAMURA, T. 1967. A study of Paridae community in Japan. 1. The species composition, ecological segregation and seasonal fluctuation of numbers. Misc. Repts. Yamashina Inst. Ornithol., 5: 138-158.—Studies in several parts of Japan of Parus major, P. ater, P. varius, P. montanus, P. palustris, and Aegithalos caudatus. Sympatry and comparative ecology are analyzed, mostly in terms of social population structure within each species. (In Japanese; English summary and captions.) I found the summary inadequate with respect to the reasoning behind the author's conclusions; readers of Japanese can verify my suspicion that this may be an important paper.—K.C.P.
- NEWTON, I. 1967. The feeding ecology of the Bullfinch (*Pyrrhula pyrrhula* L.) in southern England. J. Anim. Ecol., 36: 721–744.—In both woodlands and open cultivated habitats Bullfinches obtained food from about 80 per cent of the woody and half of the herbaceous plants. The chief factor affecting the proportions in the winter diet was the size of the ash crop which acted as a buffer. Adults feed their nestlings on a mixture of seeds and small invertebrates brought to them in special pouches under the lower jaw. The winter supply of seed is thought to be the chief factor regulating the numbers of Bullfinches. Damage by Bullfinches to buds of fruit trees in southern England has increased enormously in the past 20 years, because of an increase in numbers of individuals caused by an expanded habitat tolerance. An impressive study.—H.W.K.
- NILSSON, L. 1968. Seasonal fluctuations in numbers of Swedish winter ducks. (Report no. 3 of the wildfowl counts in Sweden.) Vår Fågelvärld, 27: 142–171.— Data presented in numerous tables and diagrams. (In English.)—L.DEK.L.
- SALO, L. J. 1967. The changes in the nesting bird fauna of Lake Nurmijärvi during the period 1896-1965 with special reference to the present bird populations. Ornis Fennica, 44: 57-65.—This Finnish lake has been under surveillance for 69 years and the earlier estimates and later censuses are compared with recent census data showing the consequences of draining operations. Though the marsh habitat has been totally supplanted by cultivated fields and shrubby areas, some marsh passerines here called relict species—still hold out in small numbers.—M.D.F.U.
- SCHNELL, G. D. 1968. Differential habitat utilization by wintering Rough-legged and Red-tailed Hawks. Condor, 70: 373-377.

SEIDENSTICKER, J. C. IV. 1967. Notes on the food habits of the Great Horned Owl in

Montana. Murrelet, 49: 1-3.—Pellet analysis indicated that food of Great Horned Owls in Montana consists of 93 per cent mammals, 4 per cent birds, and 2 per cent *Catastomus* sp. Game, domestic, and fur-bearing species represented less than 1 per cent of the 20 species represented.—K.P.A.

- SILVOLA, T. 1967. Changes in the bird populations in Utsjoki, Finnish Lapland in 1964-1966, caused by the mass-occurrence of the caterpillar Oporinia autumnata. Ornis Fennica, 44: 65-67.—During the first of 2 peak years of the birch defoliating caterpillar the bird population of the forest rose to abnormal heights; during the second season the defoliated birch woods had very small breeding bird populations, presumably because the Brambling, Fringilla montifringilla, one of the commonest nesting birds, frequented the few uninfested birch woods and abandoned the defoliated areas. (In Finnish; English summary.)—M.D.F.U.
- STRONACH, B. W. H. 1968. The Chagana heronry in western Tanzania. Ibis, 110: 345-348.—About 50,000 pairs of 18 species (16 ciconiiforms, Anhinga rufa, Phalacrocorax africanus) nested in the Wembere flood plain in 1960 and 1962. Cattle Egrets (10,000 pairs), Anhingas, and Long-tailed Cormorants were the most common. —W.B.R.
- STURMAN, W. A. 1968. The foraging ecology of *Parus atricapillus* and *P. rufescens* in the breeding season, with comparisons with other species of *Parus*. Condor, 70: 309-322.
- VEPSÄLÄINEN, K. 1968. The effect of the cold spring 1966 upon the Lapwing (*Vanellus vanellus*) in Finland. Ornis Fennica, 46: 33–47.—Lapwings normally respond with reversed migration to cold and snowy spells in the spring, as such conditions deprive them of the food they obtain from the soil. A week of cold in April with snow and temperatures from -11° C to -18° C followed earlier thaw and mild weather. The Lapwings became too emaciated to start reversed migration and perished in great numbers; however those nesting in central and northern Finland were hardly affected because they had not yet arrived when the catastrophic conditions arose and could presumably halt or reverse their migration. Recovery in 1967 was greatest in the best Lapwing habitats and poorest in inferior habitat where the small local population was still absent in 1967. The author concludes that the sequence of recovery equalled the sequence of colonization in entirely new areas during the northward expansion of the species.—M.D.F.U.
- WARD, P., AND G. E. POH. 1968. Seasonal breeding in an equatorial population of the Tree Sparrow *Passer montanus*. Ibis, 110: 359-363.—Introduced birds in suburban Singapore breed from late December to May and molt from mid-May to late August, about the same cycle most native passerines follow.—W.B.R.
- ZIMMERMAN, J. L. 1968. Kansas breeding bird survey for 1967. Kansas Ornithol. Soc. Bull., 19: 9-13.—Gives average number of individuals seen per route (28 routes) for 105 species; maps show relative abundance of the Scissor-tailed Flycatcher, Mourning Dove, Western Kingbird, and Cardinal.—M.A.J.

EVOLUTION AND GENETICS

Cox, G. W. 1968. The role of competition in the evolution of migration. Evolution, 22: 180-192.—Migration may be dependent upon differential influences of intraspecific and interspecific competition. Culmen length and migrational status were compared for representatives of 20 orders, families, and subfamilies of birds to test the hypothesis. Groups characterized by a high variation in culmen length appear to have attained ecological isolation largely through differential food utilization, which also permits them to maintain their status as permanent residents where they occur. Groups in which differentiation in beak size is small are in general migratory, and appear to have attained ecological isolation as a result of behavioral rather than morphological differences.—J.D.R.

- FICKEN, M. S., AND R. W. FICKEN. 1968. Reproductive isolating mechanisms in the Blue-winged Warbler—Golden-winged Warbler complex. Evolution, 22: 166–179.--Behavioral patterns of hybridization in natural populations of *Vermivora pinus* and *V. chrysoptera*. Reproductive isolating mechanisms, including differences in behavior during pair formation, times of arrival on the breeding grounds, and reduced mating success of hybrids, were considered more important to the population structure in any area where the breeding ranges overlapped than were fertility of hybrids, similarities in courtship and habitat requirements, or unbalanced sex ratios. The authors concluded that "reproductive isolating mechanisms are presently stronger than opposing forces."—J.D.R.
- FRIEDMANN, H. 1968. The evolutionary history of the avian genus Chrysococcyx. U. S. Natl. Mus. Bull., 265: 137 pp.—The phylogeny, migration and distribution, courtship patterns, and parasitic behavior of the glossy cuckoos, including Misocalius and Calcites of Peters (1940). Discussion of parasitic behavior includes host selection, host egg removal, host-parasite nestling relations, nest mate eviction, and fledgling feeding by adult cuckoos. Mandibular egg placement has been observed in Chrysococcyx malayanus russatus and C. basalis and is thought to occur in C. klaas and C. cupreus. In plate 1, legends for birds two and three are transposed; the second bird illustrated is C. basalis and the third C. lucidus.—F.E.L.
- GOIN, O. B., AND C. J. GOIN. 1968. DNA and the evolution of the vertebrates. Amer. Midl. Naturalist, 80: 289–298.—Amounts of DNA per nucleus studied in the various vertebrate classes. Of the tetrapods, birds have lowest levels of DNA.—G.D.S.
- HARRISON, J. 1968. A hybrid Ring-necked Pheasant \times domestic fowl. Bull. Brit. Ornithol. Club, 88: 123–126.
- JOHNSGARD, P. A. 1968. Some putative Mandarin Duck hybrids. Bull. Brit. Ornithol. Club, 88: 140–148.—Reports specimens (skins and captive live birds) believed to be hybrids between *Aix galericulata* and the Wood Duck (*A. sponsa*) and Laysan Teal (*Anas platyrhynchos laysanensis*).—K.P.A.
- MARU, N., AND Y. ISHIMA. 1968. Hybrids of Golden Pheasant Chrysolophus pictus L. and domestic fowl G. gallus var. domesticus Brisson. Tori, 18: 284–286.—This cross was performed reciprocally by artificial insemination. With the Chrysolophus hen 2 of 23 eggs hatched, with the Gallus hen 1 of 60. All three hybrids lived to maturity. Includes photographs and descriptions of the hybrids at various ages. (In Japanese; English captions and summary.)—K.C.P.
- PACKARD, G. C. 1968. Evolutionary dynamics of House Sparrows: re-analysis of data on tarsus length. Kansas Ornithol. Soc. Bull., 19: 13-14.—A negative regression of tarsal length on isophane is shown for adult male and subadult male and female *Passer domesticus.*—M.A.J.
- PHILLIPS, A. R., AND L. L. SHORT, JR. 1968. A probable intrageneric hybrid pewee (Tyrannidae: Contopus) from México. Bull. Brit. Ornithol. Club, 88: 90-93.— Describes a pewee believed to be a hybrid between Contopus musicus (= C. pertinax) and C. sordidulus, taken on 11 May 1897 at San Andrés, near San Cristóbal de las Casas, Chiapas.—K.P.A.
- RISING, J. E. 1968. A multivariate assessment of interbreeding between the chickadees, *Parus atricapillus* and *P. carolinensis*. Syst. Zool., 17: 160-169.—Multivariate analysis of 154 Black-capped and Carolina Chickadees from Kansas indicates that

interbreeding and some back-crossing occurs in areas of sympatry. Field observations suggest that interbreeding reduces viability.—A.S.G.

SCHAFFER, H. E. 1968. A measure of discrimination in mating. Evolution, 22: 125– 129.—Puts forth a measure of discrimination that indicates the deviation of an observed pattern from a nondiscriminatory pattern and whether the deviation shows positive or negative assortative mating. Mating patterns were considered nondiscriminatory when the product of the frequencies of homogamic matings was equal to the product of the frequencies of heterogamic matings.—J.D.R.

GENERAL BIOLOGY

- APPERT, O. 1968. Neues zur Lebensweise und Verbreitung des Kurols, Leptosomus discolor (Hermann). J. Ornithol., 109: 116-126.—Observations on the distribution, ecology, and breeding of the Cuckoo-roller of Madagascar. (French summary).
 —H.C.M.
- BARTLE, J. A. 1968. Observations on the breeding habits of Pycroft's Petrel. Notornis, 15: 70–99.—Previous observations of *Pterodroma pycrofti* are summarized and distribution is discussed. Nesting habits, egg laying and incubation, population on breeding grounds, general breeding activity, and activity of nonbreeding birds were studied from 24 December 1962 to 11 January 1963 on Hen Island, New Zealand.—G.D.S.
- BROOKE, R. K. 1968. More of the plumages, moults and breeding seasons of southern African Starlings. Bull. Brit. Ornithol. Club, 88: 113-116.—A March breeding record and two partial, asymetrical albinos of *Lamprotornis australis* are reported. Possibly *L. splendidus* may undergo a complete prenuptial molt or two complete molts per year. Breeding and molt are thought to occur simultaneously in *Onychognathus nabouroup.*—K.P.A.
- GARRIDO, O. H. 1967. Nidada del Gavilancito Cubano, Accipter striatus fringilloides Vigors (Aves: Accipitridae). Poeyana, Ser. A, no. 50: 2 pp.—A typical egg of the species collected 2 January 1966 from a nest in a cabbage palm near Sagua la Grande, Las Villas Province, is the first known for any of the three exceedingly rare subspecies of Sharp-shinned Hawk that inhabit the northern Greater Antilles. --W.B.R.
- HEINTZELMAN, D. S., AND A. C. NAGY. 1968. Clutch sizes, hatchability rates, and sex ratios of Sparrow Hawks in eastern Pennsylvania. Wilson Bull., 80: 306-311.
- Hosono, T. 1967. A study of the life history of Blue Magpie. 4. Flock movements. Misc. Repts. Yamashina Inst. Ornithol., 5: 177–193.—Flocks of Cyanopica cyana were studied in August 1962 and December 1965. Differentiation is made between "family flocks" and "local flocks," each with typical routes, distances, and amounts of daily activity. (In Japanese; summary, but unfortunately not the captions of tables, in English.)—K.C.P.
- KURODA, N. H. 1967. Note on the whitish underparts of *Putfinus tenuirostris* and a supposed hybrid between *P. griseus*. Misc. Repts. Yamashina Inst. Ornithol., 5: 194-197.—Ten specimens of Slender-billed Shearwater caught in Japanese fishing nets in June 1967 showed variation in plumage color greater than has usually been described. In particular the under wing coverts, supposedly gray, may be almost as white as in the Sooty Shearwater. One specimen, intermediate in 10 mensural characters, is thought to be a hybrid between these two species. (In English.)—K.C.P.
- LONG, C. A., AND C. F. LONG. 1968. Comments on reproduction of the Common Grackle in central Illinois. Wilson Bull., 80: 493–494.

MERCER, A. J. 1968. Individual weight change in breeding Oystercatchers. Bird

Study, 15: 93-98.—Weight changes of banded female Oystercatchers, *Haematopus* ostralegus, were studied during the breeding season. The birds lost weight during the first half of the incubation period but regained the loss by the time hatching occurred. This pattern was repeated during the nestling period to give an overall W-shaped pattern.—J.D.R.

- MURTON, R. K., AND S. P. CLARKE. 1968. Breeding biology of Rock Doves. Brit. Birds, 60: 429-448.—Wild birds in a Yorkshire cave and beacon tower laid eggs throughout the year, but only about a fourth of the population bred in winter. On average, each pair produced 5 clutches of 2 eggs, hatched 3 or 4 clutches, and reared 4 or 5 young. Of the eggs laid, 65 per cent were hatched and 70 per cent of the nestlings were fledged; nestling deaths were much more frequent in winter. Total breeding success was 46 per cent, adult mortality about 30 per cent yearly. Factors responsible for maintaining wild-type plumage are discussed.—H.B.
- NEWTON, I. 1968. The moulting seasons of some finches and buntings. Bird Study, 15: 84–92.—Molt schedules were outlined for 10 species of British fringillids representing four genera (*Carduelis, Pyrrhula, Fringilla*, and *Emberiza*). Considerable variation between individuals and species was noted. The onset of molting was dependent upon the time of termination of breeding, not the time of year. The period of molt for each species was longer than the breeding period. In general, residents molted later than migrants.—J.D.R.
- PEVTON, L. J., AND B. B. DE WOLFE. 1968. A distinctive song pattern in Gambel's White-crowned Sparrow. Condor, 70: 385-386.
- RICKLEFS, R. E. 1968. On the limitation of brood size in passerine birds by the ability of adults to nourish their young. Proc. Natl. Acad. Sci., 61: 847-851.—Tentative conclusions, from a statistical comparison, as to cause of differences in clutch size between tropical and temperate zone species.
- RICKLEFS, R. E. 1968. The survival rate of juvenile Cactus Wrens. Condor, 70: 388-389.
- ROHWER, S. A., AND G. E. WOOLFENDEN. 1968. The varied diet of the Gull-billed Tern includes a shrub-inhabiting lizard. Wilson Bull., 80: 330-331.
- SNYDER, D. E. 1968. A leucistic Pine Grosbeak. Wilson Bull., 80: 333-334.
- VON HAARTMAN, L. 1967. Geographic variations in the clutch-size of the Pied Flycatcher. Ornis Fennica, 44: 89–98.—The trend of increasing clutch-size from SW to NE in Europe does not apply to the Pied Flycatcher; local variations are attributed to chance, habitat, and (perhaps) altitudinal differences.—M.D.F.U.
- WELLER, M. W. 1967. Distribution and habitat selection of the Black-headed Duck (*Heteronetta atricapilla*). Hornero, 10: 299–306.

MANAGEMENT AND CONSERVATION

- CowLES, R. B. 1968. Fire suppression, faunal changes and Condor diets. Proc. Tall Timbers Fire Ecol. Conf., 7: 217-224.—Cowles believes (no data given): 1) brush has covered formerly grassy slopes in the California Condor's range because fire has been suppressed; 2) because of the habitat change, the Condor's natural prey (jackrabbits, ground squirrels) has become scarce or unavailable; 3) Condors are thus forced to hunt in valleys, where they cannot feed efficiently, and to feed on large carcasses (mainly livestock), which may not provide adequate calcium. --W.B.R.
- NELSON, J. B. 1968. The biology and conservation of Abbott's Booby on Christmas Island. IUCN Bull., 2(8): 59.—Sula abbotti is confined to this Indian Ocean island between Java and Australia. The population, once thought to be under 100

pairs, "is not less than 2,000 pairs," but rapidly expanding phosphate mining threatens to destroy the interior forests where the boobies nest.—W.B.R.

MIGRATION AND ORIENTATION

- CLENCH, M. H. 1968. A remarkable recovery of a banded Lincoln's Sparrow. Powdermill Nature Reserve (Carnegie Mus.) Ed. Release, no. 78: 3 pp. (mimeographed).—Banded at Powdermill Nat. Res., 11:30, 15 May 1968 (weight, 18.7 g); caught by cat at Lee, northwestern Massachusetts, 350 miles northeast, 08:00, 17 May 1968. The bird probably migrated on the night of 16-17 May as the previous night was overcast.—W.B.R.
- COLLMAN, J. R., AND J. P. CROXALL. 1967. Spring migration at the Bosphorus. Ibis, 109: 359-372.—"Spotted Eagles" (Aquila clanga and A. pomarina) and Honey Buzzards (Pernis apivorus) made up over 80 per cent of 3,344 raptors identified (25 species), 23 March through 6 April 1965. Honey Buzzard migration is a month earlier at the Bosphorus than at Gibraltar. Few storks were seen and counts of all migrants were low, perhaps in part because of bad weather.—W.B.R.
- DELONG, R., AND M. C. THOMPSON. 1968. Bar-tailed Godwit from Alaska recovered in New Zealand. Wilson Bull., 80: 490-491.
- EVANS, P. R. 1968. Autumn movements and orientation of waders in northeast England and southern Scotland, studied by radar. Bird Study, 15: 53-64.—The birds followed direct overland routes from one feeding ground to another. Flight directions were not changed in spite of different wind conditions.—J.D.R.
- EVANS, P. R. 1968. Reorientation of passerine night migrants after displacement by the wind. Brit. Birds, 61: 281-303.—Scandinavian Pied Flycatchers and Redstarts blown to Britain in autumn were able to regain correct routes before reaching winter quarters. Of 77 migrants tested in orientation cages only 58 per cent showed appreciable activity, of which only 29 per cent oriented consistently. Heavy individuals were most active, single birds oriented under complete cloud cover, and 9 apparently compensated for their westerly displacement.—H.B.

MISCELLANEOUS

- HAVERSCHMIDT, F. 1968. Die Vogelbilder der Maria Sibylla Merian (1647–1717).
 J. Ornithol., 109: 223–227.—Concerning 12 paintings of birds of Surinam, painted ca. 1700.—H.C.M.
- KEAR, J. 1968. Plant poisons in the diet of wild birds. Bull. Brit. Ornithol. Club, 88: 98-102.—Lists 31 species of European plants containing toxins known to cause illness or death in man or domestic animals, along with bird species known to eat each.—K.P.A.
- OLIVER, H. C. 1968. Annotated index to some early New Zealand bird literature. Wildl. Publ., Dept. Internal Affairs (Wellington, New Zealand), no. 106: x + 222 pp.—J.W.H.
- SCOTT, T. G., M. B. NORGREN, AND W. S. OVERTON (compilers). 1967. Ten-year index to The Journal of Wildlife Management (Volumes 21-30, 1957-1966). The Wildlife Society, 234 pp. \$4.00, from the society at 3900 Wisconsin Ave., N.W., Washington, D. C. 20016.—Arranged under 59 main subject-category entries, from Age Composition to Wildlife Society, and cross referenced for author(s) and subject matter. An especially valuable work for libraries not housing the journal. —J.W.H.
- STEWART, P. A., AND E. L. HART. 1967. Incidental capture of vertebrate wildlife in blacklight insect traps. Amer. Midl. Naturalist, 78: 235-240.—For 410 traps and

50,950 trap-nights, 3 Sialia sialis, 4 Lanius ludovicianus, 2 Mimus polyglottos, and 2 Passer domesticus were captured, along with some other vertebrates.—G.D.S.

Physiology

- HAMNER, W. M. 1968. The photorefractory period of the House Finch. Ecology, 49: 211-227.—A fifth report for *Carpodacus mexicanus* on this subject is concerned with the temporal and physiological control of testicular regression and photorefractoriness. It presents a detailed description of physiological changes occurring during normal testicular regression and photorefractoriness, and photobiological and endocrinological experiments relating to onset and termination of photorefractoriness. In a refreshing and critical re-examination of the various hypotheses advanced to account for the photorefractory phenomenon, the author rejects these and proposes, tests, and discusses a new hypothesis. He also presents a model of breeding control for the entire annual cycle of the House Finch.—H.W.K.
- HARRIMAN, A. E., AND D. M. NANCE. 1968. Effects of drinking salt water on NaCl tolerance and preference in Japanese Quail. Amer. Midl. Naturalist, 80: 28-33.— Coturnix c. japonica reared on 0.15 M (molar) or 0.20 M NaCl were compared with controls as to tolerance for 0.25 M NaCl as drinking water and as to preference for various concentrations of salt water over water in two-bottle tests. Experimental groups showed a significantly greater intake of 0.25 NaCl and significantly reduced weight loss during the tolerance tests, suggesting that these quail can exist where drinking water is saline, but prefer fresh water.—G.D.S.
- LOFTS, B., AND R. K. MURTON. 1968. Photoperiodic and physiological adaptations regulating avian breeding cycles and their ecological significance. J. Zool., 155: 327-394.—An excellent compendium, summarizing information to date and relating laboratory experiments to the natural environment. Different species have evolved responses to a variety of proximal environmental stimuli which serve to synchronize reproductive events in such a way that the optimal breeding season can be anticipated. In temperate zones, seasonal daylength, modified in some cases by responses to temperature, weather, food supply, and behavioral interactions, is the most reliable environmental cue. The photorefractory phase found in many species functions as a safety mechanism preventing unseasonal breeding. A classification of photoperiodically controlled breeding cycles is presented and detailed examples of each are discussed. Tropical and equatorial birds have evolved a response to other environmental cues, e.g. rainfall, but they still retain the capacity to respond to photostimulation. In areas where environmental conditions remain constant, autonomous cycles have evolved. The evolution of photoperiodically controlled cycles from autonomous ones is discussed and one example of the reverse process (Zonotrichia capensis) is examined.—K.P.A.
- LUSTICK, S. 1969. Bird energetics: effects of artificial radiation. Science, 163 (no. 3865): 387-390.—Brown-headed Cowbirds exposed to radiation in the visible-near infrared (400-1400 m μ) consumed 26 per cent less oxygen than controls at air temperatures from 10° to 26.5°C. Wild type Zebra Finches (*Poephila castanotis*) tested at 10°C gave similar results, but oxygen consumption of albino Zebra Finches didn't differ significantly from controls. Solar radiation apparently increases effective insulation and reduces heat loss because dark feathers absorb (but white feathers reflect) radiant energy, thus decreasing the temperature gradient from body surface to feather surface. Sunbathing in birds may be primarily a thermoregulatory strategem that reduces stress from low environmental temperatures.—W.B.R.
- PETERSON, D. F., AND M. R. FEDDE. 1969. Receptors sensitive to carbon dioxide in lungs of chicken. Science, 162: 1499-1501.—Receptors responsive to the removal

of CO₂ from ventilatory gas were demonstrated in the lungs of the chicken. Afferent impulses from the receptors were conducted centrally in the vagi.—Authors' summary.

- PULLIAINEN, E., L. PALOHEIMO, AND L. SYRJALA. 1968. Digestibility of blueberry stems (Vaccinium myrtillus) and crowberries (Vaccinium vitis-idaea) in the Willow Grouse (Lagopus lagopus). Ann. Acad. Sci. Fennica, Ser. A. 4, no. 126: 15 pp. —Two captive pairs were fed frozen crowberries and stored blueberry stems, both extreme food items. Dry material comprises 14.8 per cent of crowberries and 45.2 per cent of blueberry stems. Crowberries were 81.0 per cent digested and blueberry stems 31.0 per cent digested.—M.D.F.U.
- RAITT, R. J. 1968. Annual cycle of adrenal and thyroid glands in Gambel Quail of southern New Mexico. Condor, 70: 366-372.
- RONALD, K., M. E. FOSTER, AND M. I. DYER. 1968. Physical properties of blood in the Red-winged Blackbird (Agelaius phoeniceus). Canadian J. Zool., 46: 157–163.— Erythrocyte numbers, leucocyte numbers, and differential ratio, pH, pCO₂, pO₂, O₂ saturation, haemoglobin levels, haematocrits, and mean cell volumes for the Red-winged Blackbird. Physical and chemical changes in avian blood could be indicators of various physiological states throughout the life history of the bird. —H.W.K.
- WEST, G. C., E. R. R. FUNKE, AND J. S. HART. 1968. Power spectral density and probability analysis of electromyograms in shivering birds. Canadian J. Physiol. Pharm., 46: 703-706.—Spectral analysis of shivering recorded on high frequency equipment indicated that a substantial amount of electrical activity occurred above 100 cps. Species differences in the effect of temperature on frequency distribution and upper and lower cut-off frequency were noted, but the occurrence of various amplitudes during shivering followed a normal distribution in both species studied. —A.H.B.
- WEST, G. C., AND M. S. MENG. 1968. Seasonal changes in body weight and fat and the relation of fatty acid composition to diet in the Willow Ptarmigan. Wilson Bull., 80: 426-441.
- WILLOUGHBY, E. J. 1968. Water economy of the Stark's Lark and Gray-backed Finch-lark from the Namib Desert of Southwest Africa. Comp. Biochem. Physiol., 27: 723-745.—Studies on two desert-inhabiting species that apparently require no drinking water. Water budgets were determined experimentally and regulation of water balance tested by deprivation experiments. Low rates of excretory and evaporative water loss are adaptive mechanisms to the dry environment.—A.H.B.
- WINGET, C. M., G. H. BOND, AND L. S. ROSENBLATT. 1968. Plasma enzyme responses to blood withdrawal in chickens. Comp. Biochem. Physiol., 27: 827-833.—Repeated withdrawal of blood lowers the level of plasma cholinesterase, and acid and alkaline phosphatase. Rates of depletion for phosphatases were highly correlated with the volume of blood removed, which also affected the hematocrit ratios.—A.H.B.

TAXONOMY AND PALEONTOLOGY

- ALCASID, G. L., AND P. GONZALES. 1968. A new race of the Naked-faced Spiderhunter (Arachnothera clarae) from Luzon. Bull. Brit. Ornithol. Club, 88: 129-130.--Arachnothera clarae luzonensis subsp. nov., from Dumagat, Pakil, Laguna, Luzon, Philippines.--K.P.A.
- BENSON, C. W., AND M. J. PENNY. 1968. A new species of warbler from the Aldabra Atoll. Bull. Brit. Ornithol. Club, 88: 102-108.—Nesillas aldabranus sp. nov. (Sylviidae), is described from the northern coast of Aldabra Atoll from two specimens, both taken at the type locality.—K.P.A.

- CLANCEY, P. A. 1968. On nominate Lybius leucomelas (Boddaert). Bull. Brit. Ornithol. Club, 88: 43-48.—The author recognizes five races of the Pied Barbet (Lybius leucomelas). L. l. namaqua is considered synonymous with L. l. leucomelas. Topotypical L. l. "namaqua" in fresh plumage lacks ventral spotting, this being subapical and appearing with wear. These birds are identical to specimens of typical L. l. leucomelas in similar plumage. The races L. l. nkatiensis and L. l. centralis occur to the north of the range of L. l. leucomelas (sensu Clancey). In both of these the breast is unspotted and the flanks are streaked.—K.P.A.
- CLANCEY, P. A. 1968. On the nominate race of *Pagonocichla stellata* (Vieillot). Bull. Brit. Ornithol. Club, 88: 53-55.—The presently recognized race of the Starred Robin varies geographically and is divided into two subspecies (*Pagonocichla s. stellata* and *P. s. margaritata* subsp. nov.). The nominate race is found in southern Cape Province from about Knysna, east to the interior temperate forests of the Transkei. *P. s. margaritata* occurs in coastal Pondoland and high, level forests in East Griqualand to Natal and southern Zululand.—K.P.A.
- CLANCEY, P. A. 1968. Variation in *Falco dickinsoni* P. L. Sclater, 1864. Bull. Brit. Ornithol. Club, 88: 120-123.—Dickinson's Kestrel exhibits color variation, pale birds being restricted to the southeastern part of the species' range. The discontinuous nature of the variation suggests that the species may be polymorphic. —K.P.A.
- CLANCEY, P. A. 1968. The status of Monticola pretoriae Gunning and Roberts, 1911.
 Bull. Brit. Ornithol. Club, 88: 126-128.—Monticola pretoriae is considered a subspecies of M. brevipes. The forms leucocapilla and kaokensis are placed in synonymy with M. b. brevipes.—K.P.A.
- CLANCEY, P. A. 1968. On the name of a race of *Buphagus erythrorhynchus* (Stanley). Bull. Brit. Ornithol. Club, 88: 135.—*Buphaga africanoides* A. Smith, 1831, antedates *caffer* as a subspecies name for *Buphagus erythrorhynchus*.—K.P.A.
- CLANCEY, P. A. 1968. The name of the Grey Sunbird. Bull Brit. Ornithol. Club, 88: 150-151.—The name *Nectarinia veroxii* must stand as a correct original spelling despite the emendation to *verreauxi*(i) used by several recent authors.—K.P.A.
- CRACRAFT, J. 1968. Reallocation of the Eocene fossil Palaeophasianus meleagroides Shufeldt. Wilson Bull., 80: 281-285.
- CRACRAFT, J. 1968. The Whooping Crane from the lower Pleistocene of Arizona. Wilson Bull., 80: 490.
- DICKERMAN, R. W. 1968. Notes on the Ocellated Rail (*Micropygia schomburgkii*) with first record from Central America. Bull. Brit. Ornithol. Club, 88: 25-30.—A specimen of *Micropygia schomburgkii* from Buenos Aires, Puntarenas Province, most closely resembles the nominate race, but has more extensive black borders on the dorsal spots than any of 28 specimens of *M. s. schomburgkii* examined. Its measurements also fall at the small extreme of those of the nominate form. A specimen typical of *M. s. schomburgkii* is recorded from San Joaquin, Beni Province, Bolivia, the first record for that country. Geographic variation and the juvenal plumage are described. The species exhibits sexual dimorphism.—K.P.A.
- HOWARD, H. 1968. Limb measurements of the extinct vulture, Coragyps occidentalis; with a description of a new subspecies. Pap. Archaeol. Soc. New Mexico, 1: 115-128.
 —This first comprehensive report on the range in size and proportions of the Pleistocene Coragyps is based on series of bones from the type locality, Rancho La Brea, and four other sites. A new subspecies is described from San Josecito Cave, Nuevo Leon, Mexico: Coragyps occidentalis mexicanus.—H.H.

- HOWARD, H. 1968. Fossil birds. Pp. 42-45 in Prehistory of Santa Rosa Island (Phil C. Orr, Ed.). Santa Barbara Mus. Nat. Hist. Publ., xxi + 253 pp.—Birds of 25 species are represented among 120 bones collected from Pleistocene deposits located, for the most part, in the canyons on the northwest coast of the island. Five extinct species are noted, including a large Gymnogyps, distinguishable from the species found at Rancho La Brea. Bones of Canada Geese are most abundant, and are referable to three subspecies on the basis of size; all are of stockier proportions than present-day races.—H.H.
- MEES, G. F. 1968. [Some new bird species for the avifauna of Surinam.] Gerfaut, 58: 101-107.—Previously unrecorded races or species for Surinam taken in January and February chiefly in the savannah region of Sipaliwini, near the Brazilian border. Of more than local taxonomic and distributional interest the paper includes descriptions of Nonnula rubecula tapanahoniensis (previously recorded as simplex) and Euscarthmus rufomarginatus savannophilus (first specimen of the species north of the Amazon), subspp. nov. Several other birds are recorded for the first time north of Amazonia: Heliactin cornuta, Colaptes c. campestris (chrysosternos deemed a synonym), Leuconerpes candidus (previously reported from northern South America only on the basis of the "Cayenne" type, whose locality was doubted), Xolmis cinerea, Neochelidon t. tibialis, and Sporophila b. bouvreuil. The author seemingly assumes that these birds represent local breeding populations isolated by the Amazonian forest, and such may prove to be the case, but in view of the evidence from Ruschi that the hummingbird Heliactin is a long distance migrant, the possibility of migration from farther south in South America should be considered. Myiarchus p. pelzelni, undoubtedly breeding, is found to be indistinguishable from the Paraguayan population, and M. swainsoni amazonicus Zimmer is deemed a synonym; M. pelzelni is considered specifically distinct from M. swainsoni. Piranga flava saira of Brazil is reported and macconelli of Guyana is deemed a synonym. It is puzzling why a paper with such broad taxonomic significance should have been published in Dutch, a language known to few ornithological systematists, when the author is fluent in English and the journal regularly publishes papers in English, French, and German. The summaries in French and English are too short for thorough understanding of this paper.-E.E.
- MILSTEIN, P. L. S. 1968. Affinity of *Turdus litsitsirupa*. Bull. Brit. Ornithol. Club, 88: 1.—A close affinity of *Turdus litsitsirupa* to *T. philomelos* and *T. viscivorus* is proposed. Observations on nests and eggs of *T. viscivorus* suggest closer relationship to that form.—K.P.A.
- PARKER, S. 1968. An instance of apparent sympatry between the Great and Spotted Bowerbirds. Bull. Brit. Ornithol. Club, 88: 56.—A single Great Bowerbird observed in central Queensland 4 April 1964 was in an area where the Spotted Bowerbird was moderately common. This is the first reported sympatry between the two species.—K.P.A.
- PARKER, S. 1968. The type-locality of White-quilled Rock Pigeon, *Petrophassa albipennis* Gould. Bull. Brit. Ornithol. Club, 88: 57-58.—Establishes the type locality as the "easternmost of the Sunday Islands, 123° 13' E, 16° 24' 30" S, at the mouth of King Sound, north-west Australia" from the account kept by the commander of the voyage.—K.P.A.
- SHORT, L. L., JR. 1968. Sympatry of Red-breasted Meadowlarks in Argentina, and the taxonomy of meadowlarks (Aves: *Leistes*, *Pezites*, and *Sturnella*). Amer. Mus. Novitates, no. 2349: 30 pp.—The first strong evidence for breeding season (as opposed to long-known nonbreeding season) sympatry of *Pezites militaris* and

P. defilippii, the two forms therefore being raised to specific rank. Their ecology, vocalizations, and external morphology are analyzed. Evidence suggests that P. bellicosa should be considered a third species rather than a race of militaris. Mostly on the basis of analogy with Pezites rather than on evidence, Leistes superciliaris is considered as a separate species from L. militaris. Finally, Leistes and Pezites are combined with Sturnella, which is considered to include three superspecies (the former three genera). When this is done, Pezites militaris must become Sturnella loyca, as Leistes militaris has priority. A diagnosis of the broadened genus Sturnella is presented, a contribution far too often omitted by genus-lumpers. N.B.—the boundaries of South American countries in the range map are incredibly distorted; such errors have been known to create international incidents!—K.C.P.

- THONGLONGYA, K. 1968. A new martin of the genus Pseudochelidon from Thailand (Passeriformes: Hirundinidae). Thai Natl. Res. Sci. Pap., Fauna Ser., no. 1: 1-14.--"A new species of an aberrant river martin, Pseudochelidon sirintarae sp. nov., is described. The specimens were collected from a lake in Amphoe Muang, Nakhon Sawan Province, central Thailand, in January-February 1968. The only other member of this genus is Pseudochelidon eurystomina found along the rivers of western Central Africa." Nine specimens including the adult female holotype, 53-1217, three unsexed adults, two immature males, one immature female, and two immature unsexed birds were captured alive in nets strung over marshes to catch migratory swallows and other birds. The nine were in a concentration of 6,000 swallows of various species. Named in honor of a princess and third daughter of the King of Thailand, the adult of the new species is pictured in a color plate as a yellow-billed and large-eyed black and iridescent-blue bird, with flesh-colored feet, white eye-ring, white rump patch, and two greatly elongated and racketed central rectices. It approximates the size of its African congener. Immatures lack the long racketed rectrices, and are brown rather than black. It has nine primaries and typical hirundinid ectoparasites. Its habits are unknown. One had parts of a beetle in its stomach. The bird probably occurs regularly at the type locality, as natives had a colloquial name for it—"Nok Ta Phong," meaning swollen-eyed birds.—J.W.H.
- VAURIE, C. 1968. Taxonomy of the Cracidae (Aves). Bull. Amer. Mus. Nat. Hist., 138: 131-260.—A comprehensive summary of the author's 4-year study. Taxonomy at the subspecific level and details of distribution, including lists of localities, were presented in 10 papers in Amer. Mus. Novitates, and are largely omitted in the present paper. An introductory section concentrates mostly on external morphology, but also includes brief discussions of distribution and extinction, and a proposed phylogeny. The body of the paper is a systematic list, including keys from the tribal to the species level. Each taxon also is carefully diagnosed. Emphasis in the species accounts is on external morphology, distribution, and geographic variation. Information on ecology and habits is presented for a few species, but most of the available data on living cracids are to be incorporated in a book by J. Delacour and D. Amadon. An appendix presents a check-list, including synonymies and Vaurie's preferred English name for each species (not always the same as Eisenmann's). Illustrations include maps, a few line drawings of morphological features, photographs of skulls, and some critical specimens, and a colored plate of heads of adult males of seven species of Crax.-K.C.P.

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