

PERIODICAL LITERATURE

EDITED BY GLEN E. WOOLFENDEN

ANATOMY AND EMBRYOLOGY

- DONNELLY, B. G., AND M. P. STUART. 1969. Some adaptations in the Crows *Sylvietta rufescens* (Vieillot) and *Sylvietta whytii* Shelley as reflected by their osteology. *Arnoldia*, 4(16): 1-15.—Osteological differences, particularly of the skull, suggest adaptation to different habitats and feeding methods.—E.E.
- LEBRET, T. 1968. Veel eertstejaars Kolganzen (*Anser albifrons*) krijgen's winters al een witte kol. *Limosa*, 41: 85-89.—Many White-fronted Geese show at least a partially developed white front patch by February of their first winter. Counts to determine the relative abundance of young birds should take these findings into account. (English summary.)—K.P.A.

BEHAVIOR

- BEVEN, G., AND M. D. ENGLAND. 1969. The impaling of prey by shrikes. *Brit. Birds*, 62: 192-199.—Discusses use of both spike and larder; records *Lanius excubitor* impaling dates in Algeria.—H.B.
- DIESELHORST, G. 1968. Ankunft des Weibchens, Paarbildung und Wahl der Nisthöhle beim Gartenrotschwanz (*Phoenicurus phoenicurus*). *J. Ornithol.*, 109: 396-401.—A detailed study of pair formation and nest site selection in the Redstart.—H.C.M.
- FULLERTON, G. J. 1969. Bald eagle captures duck. *Loon*, 41: 27.
- HARRISON, C. J. O. 1968. Some comparative notes on the Common and Yellow Silver-eyes. *Emu*, 68: 127-131.—In captivity the largely allopatric *Zosterops lateralis gouldi* and *Z. lutea* showed strong inclinations to flock or clump interspecifically. The birds frequently behaved as though they discriminated species by means of distinctive vocalizations and plumage.—R.G.W.
- HARRISON, C. J. O. 1969. The fixed feeding pattern of young Goldcrests. *Bird Study*, 16: 62-63.—Hand-reared *Regulus regulus* initiated food searching behavior in the upper portion of their cage even though fly maggots and other food was provided on the cage floor.—J.D.R.
- HARTBY, E. 1969. The calls of the Starling (*Sturnus vulgaris*). *Dansk Ornithol. Foren. Tids.*, 62: 205-230.—A detailed account and audiospectrograms of the calls but not "song." Played back danger calls elicited escape, approach, and ultimately habituation reactions.—E.E.
- INGOLFASSON, A. 1969. Behavior of gulls robbing eiders. *Bird Study*, 16: 45-52.—Three *Larus* species rob food from Common Eiders. Adult Glaucous Gulls defend rafts of Common Eiders against all other adult conspecifics, but often tolerate immatures and also adult Great Black-backed Gulls. Raft defense shows more similarities to territorial defense than to defense of food objects.—J.D.R.
- JONES, M. K. 1969. Song of female Blackbird. *Brit. Birds*, 62: 80.
- LECK, C. F. 1968. An additional observation of Laughing Gulls robbing a Black Skimmer. *Cassinia*, 50: 27.
- NICOLAI, J. 1968. Die Schnabelfärbung als potentieller Isolationsfaktor zwischen *Pytilia phoenicoptera* Swainson und *Pytilia lineata* Hueglin (Familie: Estrildidae). *J. Ornithol.*, 109: 450-461.—*Pytilia lineata* and *P. phoenicoptera* bred only with their own species in an aviary even when the only unmated birds of the opposite sex were of the other species. The birds are nearly identical except for beak color.

- Behavioral responses to beak color serve to isolate the two populations reproductively; they should be considered separate species, not geographic races of *phoenicoptera*. (English summary.)—H.C.M.
- SANDERSON, R. F. 1968. Cloaca pecking in the Dunnock (*Prunella modularis*). *Bird Study*, 15: 213.
- SCHLADWEILER, J. L. 1969. Additional observations of Teal diving. *Loon*, 41: 29.
- SIMMONS, K. E. L. 1969. Feeding behaviour of Great Grey Shrike in North Africa. *Brit. Birds*, 62: 203-204.—Dates, impaled and stored in bark crevices.—H.B.
- SWENNEN, C. 1968. Nest protection of Eiderducks and Shovelers by means of faeces. *Ardea*, 56: 248-258.—When alarmed, some incubating ducks defecate on the nest and eggs before leaving. Experiments indicate the unpleasant odor discourages ferrets and rats from eating the eggs.—E.E.
- WICKLER, W. 1968. Über den Fussgebrauch des Purpurhuhns (*Porphyrio*). *J. Ornithol.*, 109: 446-449.—The Purple Gallinule in Kenya holds water-lily buds in its feet while feeding. (English summary.)—H.C.M.

DISEASES AND PARASITES

- LEDGER, J. A. 1968. *Dennyus aequatorialis* n. sp. (Mallophaga: Menoponidae) from the mottled swift, *Apus aequatorialis*. *Novos Taxa Entomológicos*, no. 61: 1-8. Suppl. to *Rev. Entom. Moçambique. Inst. Investigação Cient. de Moçambique, Lorenzo Marques*.—E.E.
- VENTURA, A. K. 1968. Ectoparasites of Jamaican birds. *Caribbean J. Sci.*, 8: 165-172.—Based on a study of arboviruses at St. Catherine, 21 species of wild birds (a number of them migrants from continental North America) had either mites or mallophaga, or both. No virus was recovered from any avian ectoparasite.—E.E.

DISTRIBUTION AND ANNOTATED LISTS

- ALLEN, A. W. 1969. The Cardinal in the Watertown [New York] area. *Kingbird*, 19: 91.—Documents appearance in 1954 and breeding since the mid-1960s in northern New York.—E.E.
- BANNERMAN, D. A. 1969. Recent records new to the North Atlantic islands. *Bull. Brit. Ornithol. Club*, 89: 86-88.—Mostly species listed in the Addendum to "Birds of the Atlantic Islands." Among North American forms are Western Sandpiper, "American" Nighthawk (*Chordeiles minor*), Lesser Snow Goose, "American Sparrow-hawk" (*Falco sparverius*), American Redstart (at sea in area of Azores), American Black Duck (shot on Terceira, identified by Colonel Agostinho).—E.E.
- BELL, H. Z. 1969. A new bird for New Guinea. *Emu*, 69: 53.—Sight record of 4 *Lonchura punctulata* on 21 August 1966 some 30 km from Moresby.—G.E.W.
- BERNDT, R., AND U. RAHNE. 1968. Erstnachweis der Ringschnabelmöwe (*Larus delawarensis*) in Europa. *J. Ornithol.*, 109: 438-440.—First observation of the American Ring-billed Gull in Europe.—H.C.M.
- DAHM, A. G. 1969. A Corn-crake, *Crex crex* L., trapped in Kumasi, Ghana. *Bull. Brit. Ornithol. Club*, 89: 76-78.—A female trapped 13 February 1966 appears to be the first recorded from Ghana and the sixth from West Africa.—K.P.A.
- DELAFIELD, H. I. 1969. Black Vulture in northern Franklin County [New York]. *Kingbird*, 19: 92-93.—Found injured 10 November 1968 (photo.).—E.E.
- DENNIS, R. H. 1969. Cretzschmar's Bunting on Fair Isle: new to Britain and Ireland. *Brit. Birds*, 62: 144-148.
- DOWSETT, R. J. 1969. Barred Warbler *Sylvia nisoria* (Bechstein) at Lake Chad. *Bull. Brit. Ornithol. Club*, 89: 72-73.—A male netted 17 October 1968, after 6

- days of exceptionally strong northeasterly winds, is the first West African record.—K.P.A.
- DOWSETT, R. J. 1969. Greater Sandplovers *Charadrius leschenaultii* Lesson at Lake Chad. Bull. Brit. Ornithol. Club, 89: 73-74.—An immature collected 2 August 1968 and a female 21 August 1968 are the first records for West Africa.—K.P.A.
- FRENCH, R. P. 1969. Further notes on the avifauna of Chacachacare Island. J. Trinidad Field Naturalists' Club, 1969: 10-11.—Adds seven species to an earlier list in the 1967 issue of this journal.—W.B.R.
- FRENCH, R. P. 1969. The avifauna of Saut D'Eau Island. J. Trinidad Field Naturalists' Club, 1969: 16.—Nominal list of 27 species.—W.B.R.
- FRENCH, R. P. 1969. Two noteworthy bird records. J. Trinidad Field Naturalists' Club, 1969: 29.—Sight records of *Procnias alba* (White Bellbird) and *Pipile pipile* (Trinidad Piping-Guan).—W.B.R.
- FRIEDMANN, H., AND K. E. STAGER. 1969. Results of the 1968 Avil Expedition to Mt. Nyiru, Samburu District, Kenya. Ornithology. Los Angeles Co. Mus. Contrib. Sci., no. 174, 30 pp.—The first survey of the avifauna of the montane forest on Mt. Nyiru, northern Kenya. Some 29 species were found, but no endemic races are described. The fauna is compared with that of the other isolated north Kenyan montane forests on Mts. Marsabit and Kulal.—H.F.
- GINN, P. J. 1969. Birds of the Marandellas District [South Africa]. S. African Avifauna Ser. (Percy Fitzpatrick Inst. African Ornithol.; price 50 c.), 61: 1-52.
- GORDON, D. C. 1968. More hybrid flicker notes from Watertown [New York]. Kingbird, 18: 86-87.—Reports of five recent specimens. Editor's note adds information on hybrids elsewhere in New York state.—E.E.
- GRANTSAU, R. 1968. Die Wiederentdeckung der brasilianischen Kolibris *Augastes scutatus* und *Augastes lumachellus*. J. Ornithol., 109: 434-437.—Concerning the "rediscovery" of the Brazilian hummingbirds *Augastes scutatus* and *A. lumachellus*. Habitat and nest of both species are described. (English summary.)—H.C.M.
- HALL, J. R. 1968. The distribution of certain colonial weaver bird species in Uganda. Uganda J., 32: 205-211.—Discusses *Ploceus cucullatus* and *P. nigerrimus*.—E.E.
- HAYS, H. 1969. Second nesting record of the Louisiana Heron for New York state. Kingbird, 19: 93-94.—August 1966 within New York city. Describes a downy about 2 weeks old.—E.E.
- HAYWARD, K. C. 1967. Fauna del noroeste Argentino. 1. Las aves de Guayapa (La Rioja). Acta Zool. Lilloana (Tucumán, Argentina), 22: 211-220.—A list of 125 bird species collected over a period of years within a fenced property of 20,000 hectares, in an arid region of northwestern Argentina. Exclusion of goats, some permanent water, a plantation of date palms, and protection of birds has resulted in more birds than in neighboring areas. (In Spanish; English summary.)—E.E.
- HOLYOAK, D. T., AND D. A. RATCLIFFE. 1968. The distribution of the Raven in Britain and Ireland. Bird Study, 15: 191-197.—Distribution, habitat, and density of *Corvus corax* in the British Isles during the breeding season.—J.D.R.
- LOVERIDGE, A. 1969. A Sheathbill, *Chionis alba* (Gmelin) on St. Helena. Bull. Brit. Ornithol. Club, 89: 48-49.—The bird was first noted on 16 May (April?) and collected the following day. It may have arrived aboard a ship that docked the previous day, 15 April (May?).—K.P.A.
- MIDDLETON, A. L. A. 1969. Avifauna of Monash University campus. Emu, 69: 44-46.
- MIKKOLA, K. 1969. *Zonotrichia albicollis* in continental Europe. Bull. Brit. Ornithol.

- Club, 89: 68-69.—Cites records of two photographed birds: Malmo, Sweden, 5 December 1963, and Kotka, Finland, 23 June-20 July 1967.—K.P.A.
- MILLEGE, D. R. 1968. The first recorded occurrence of Baird's Sandpiper *Calidris bairdii* (Coues) in Australia. *Emu*, 68: 1-5.—Collected near Hobart, Tasmania, October 1966. The author believes this species, as well as other northern hemisphere waders, is increasing its wintering range.—R.G.W.
- MOLTONI, E. 1968. Gli uccelli dell'Arcipelago Ponziano (Mar Mediterraneo). *Riv. Ital. Ornithol.*, 38: 301-426.—The avifauna of Ponziian Archipelago, a group of small islands northwest of the Gulf of Naples. Of 194 forms recorded, 23 may breed. A table compares the species known from these islands with those recorded in the neighboring and larger islands of Ischia and Capri. (In Italian.)—E.E.
- MOREAU, R. E. 1969. The Sooty Falcon *Falco concolor* Temminck. *Bull. Brit. Ornithol. Club*, 89: 62-67.—Summarizes distributional information.—K.P.A.
- OLROG, C. C. 1967. Notas ornitológicas VII. Sobre la colección del Instituto Miguel Lillo de Tucumán. *Acta Zool. Lilloana*, (Tucumán, Argentina) 22: 249-253.—Distributional and taxonomic notes on Argentine birds. *Nycticorax nycticorax obscurus* collected in Jujuy. In *Anas puna* the speculum color differs in the two sexes; in its ally *A. versicolor* it is the same; they probably should be deemed distinct species. Measurements of *Rupornis leucorrhous* suggest two populations, the larger one in the temperate zone of the high Andes north to Venezuela, the smaller on the lower Andean slopes and southeastern Brazil. A migrant *Ictinia misisippensis*, juvenile female, from Yuto, Jujuy, 28 August 1965. *Catharus dryas maculatus* (or an undescribed form) from Jujuy. Sight observation of *Stercorarius pomarinus* 12-15 March 1966, at Cabo San Antonio; compared with *S. parasiticus* also present. Several *Dendroica striata* (males in breeding plumage) seen 12-15 February 1966, at Villa Gesell, 100 km north of Mar del Plata, Buenos Aires; only one specimen known from Argentina. (In Spanish; English summary.)—E.E.
- O'NEILL, J. P. 1969. Distributional notes on the birds of Peru, including twelve species previously unreported from the Republic. *Occ. Pap. Mus. Zool., Louisiana State Univ.*, no. 37: 1-11.—Reports *Cathartes burrovianus*, *Glaucidium minutissimum*, *Ciccaba virgata*, *Chaetura chapmani*, *C. egregia*, *Nonnula sclateri*, *Automolus melanopezus*, *Myrmotherula sclateri*, *Cercomacra nigricans*, *Myrmeciza goeldii*, *Ramphotricon megacephala*, *Lophotriccus eulophotes*, and *Sporophila caerulescens* for the first time from Peru. Includes distributional notes on other poorly known species.—K.P.A.
- PIECHOCKI, R. 1968. Beiträge zur Avifauna der Mongolei. Teil I. Non-Passeriformes. *Mitt. Zool. Mus. Berlin*, 44: 149-292.—First part of a catalogue of the birds of Mongolia based in part on expeditions made by German ornithologists in 1962 and 1964. Contains data and maps on zoogeography and details on measurements, molt etc. of specimens collected.—E.E.
- POST, P. W. 1968. Photographs of New York state rarities. 13. Yellow-nosed Albatross. *Kingbird*, 18: 66-68.—Reviews the American records of *Diomedea chlororhynchos* from the North Atlantic.—E.E.
- ROOTH, J. 1968. [On the occurrence of the Yellow-winged Parrot, *Amazona barbadensis rothschildi* on Bonaire.] *Ardea*, 56: 281-283.—Data on numbers, about 50 pairs, and behavior. (In Dutch; English summary.)—E.E.
- RUSCHI, A. 1967. Lista actual das aves do Estado do Esp. Santo [Brasil]. *Bol. Mus. Biol. Prof. Mello Leitão, Zool.* no. 28A: 1-45.—A list of the 709 species and subspecies of birds currently known from the Brazilian state of Espírito Santo, giving scientific, local, and English names, the latter drawn from Meyer de

- Schauensee. Because of increasing forest destruction some of the species listed no longer occur in the area, and with clearing and drying of the habitat more birds from arid eastern Brazil are likely to appear. (In Portuguese; English summary.)—E.E.
- SCHEDER, F. G. 1969. Photographs of New York state rarities. 17. Sandhill Crane. Kingbird, 19: 74-76.—Six observations since 1948, annually since 1965; latest, first noted 20 October 1968, was later found shot and identified as *Grus canadensis tabida*.—E.E.
- SHARROCK, J. T. R. 1969. Scarce migrants in Britain and Ireland during 1958-67. Brit. Birds, 62: 169-189.—Hoopoe, Golden Oriole, and Tawny Pipit.—H.B.
- SICK, H. 1968. Über in Südamerika eingeführte Vogelarten. Bonn. Zool. Beitr., 19: 298-306.—An account with maps of introduced birds that have become established: *Lophortyx californicus*, *Columba livia*, *Carduelis carduelis*, *Chloris chloris*, *Estrilda astrild*, and *Passer domesticus*. A few South American species also have become established outside their natural range following introduction. (English summary.)—E.E.
- SMITH, P. A. 1969. Observations from the interior of Muscat and Oman during 1966-67. Bull. Brit. Ornithol. Club, 89: 52-60.—Lists 75 species identified in all four seasons, 15 thought to be new for Oman, and the Little Grebe believed to be the first for Arabia.—K.P.A.
- STEINBACHER, J. 1968. Weitere Beiträge über Vögel von Paraguay. Senckenbergiana Biologica, 49: 317-365.—Report on additional material from Paraguay, supplementing the author's 1962 paper. *Actitis macularia* and *Lessonia rufa* are new to Paraguay. Each specimen is listed, with data on gonadal condition, iris color, measurements, and often taxonomic comments and information on molt.—E.E.
- THOMAS, D. G. 1968. Waders of Hobart. Emu, 68: 95-125.—A report on the status of 32 waders at the southern limits of their migratory ranges, with details on occurrence, distribution, breeding, plumage, and ecology.—R.G.W.
- WEBER, D., AND R. PANTLE. 1968. Varied Thrush at Candor [New York]. Kingbird, 18: 85.—Reviews New York state records.—E.E.

ECOLOGY AND POPULATION

- BARRY, T. W. 1968. Observations on natural mortality and native use of eider ducks along the Beaufort Sea coast. Canadian Field-Naturalist, 82: 140-144.—Natives kill an estimated 1 per cent of the total population migrating through this region. An estimated 100,000 eiders, about 10 per cent of the total population, perished from starvation during bad ice conditions in the spring of 1964.—R.W.N.
- BELL, B. D., C. K. CATCHEPOLE, AND K. J. CORBETT. 1968. Problems of censusing Reed Buntings, Sedge Warblers and Reed Warblers. Bird Study, 15: 16-21.—A comparison of the breeding populations of *Emberiza schoeniclus*, *Acrocephalus scirpaceus*, and *A. schoenobaenus* as measured by the B. T. O. Common Birds Census and by intensive population studies. The Common Birds Census estimated 78 per cent of the numbers of Reed Buntings, 75 per cent of the Sedge Warblers, and 37 per cent of the Reed Warblers.—J.D.R.
- BENGTSON, S.-A., AND B. SVENSSON. 1968. Feeding habits of *Calidris alpina* L. and *C. minuta* Leidl. in relation to the distribution of marine shore invertebrates. Oikos, 19: 152-157.—Foraging behavior and food of fall migrating *Calidris* in southern Sweden. A sand bank was studied in detail to determine its invertebrate fauna and the effect of shorebirds feeding on this fauna.—H.W.K.
- BERTHOLD, P. 1968. Die Massenvermehrung des Stars *Sturnus vulgaris* in fortpflanzungsphysiologischer Sicht. J. Ornithol., 109: 11-16.—Attributes the tremendous

- increase in Starling populations in Europe in the past century to the loss of migratory habits. Sedentary Starlings begin breeding a year earlier and have more second broods than migratory birds. (English summary.)—H.C.M.
- BLOOD, D. A. 1968. Population status of Peregrine Falcons in the Queen Charlotte Islands, British Columbia. *Canadian Field-Naturalist*, 82: 169-176.—*Falco peregrinus peali* is harvested annually under permit for recreational and scientific purposes. From 1952 to 1967 at least 211 nestlings are known to have been removed without any apparent effect upon reproductive success. From 1964 to 1968 an average of 27 nestlings has been taken annually. An average of 2.5 nestlings was found in 76 eyries (1962-1967), with at least 43 breeding territories occupied from 1965 to 1967.—R.W.N.
- BOECKER, M. 1968. Zur Tagesaktivität der Seeschwalben. *J. Ornithol.*, 109: 62-66.—Correlates some activities of Common and Arctic Terns at the nesting colony with time of day, others with tidal rhythms; still others show no correlation with either factor. (Confusing English summary.)—H.C.M.
- BONGIORNO, S. F., AND J. SWINEBROAD. 1969. Increase in Herring Gull colony in Cape May, New Jersey. *Wilson Bull.*, 81: 99-100.
- BRITTON, P. L. 1968. Two African species pairs. *Bull. Brit. Ornithol. Club*, 88: 163-166.—Discusses the species pairs *Merops pusillus*-*M. variegatus* and *Tchagra senegala*-*T. australis*. The first two seemingly cannot coexist in western Zambia, although size differences suggest they should be able to do so. Limited evidence on the second pair suggests syntopic competition is reduced or eliminated by significant differences in their weight to wing length ratios.—K.P.A.
- BUB, H. 1967. Über den Säbelschnäbler (*Recurvirostra avosetta*) und den Grossen Brachvogel (*Numenius arquata*) im Jadebusen bei Hochwasser. *Vogelwarte*, 24: 135-142.—Analyzes the use of various high tide resting areas by Avocets and Curlews in the Jade Bay area of northwest Germany. Groups of birds exhibit some, but not complete fidelity to a given area.—H.C.M.
- BURTON, R. W. 1968. Breeding biology of the Brown Skua, *Catharacta skua lönnerbergi* (Mathews), at Signy Island, South Orkney Islands. *Brit. Antarctic Surv. Bull.*, no. 15: 9-28.—A 3-year study of 25 to 30 pairs. A conspicuous boulder, used as a display site, is the focal point of a strongly defended nesting territory. Feeding is done elsewhere, primarily on penguin eggs and young. No signs of chick starvation were noted, and the 60 per cent nesting mortality occurs primarily in the egg stage. Experienced breeders are more likely to lay fertile eggs and incubate them properly.—F.E.L.
- CAIRNS, J. 1968. The Serpent Eagles *Spilornis cheela* of Penang Island, Malaya. *Ibis*, 110: 569-571.—Semicolonial breeding of 20 pairs in a mangrove forest where nests are as little as 50 yards apart. The clutch is one egg and females will re-lay up to four times, each successive egg being "shorter, but no less broad." Incubation requires 28 days, fledging about 4 months. Young attain full adult plumage in one year and breed "in the second season after birth." Great Tits (*Parus major*), known at Penang only from mangroves near Serpent Eagle eyries, line their nests with fur or rats the eagles take as prey.—W.B.R.
- CAMPBELL, R. W., AND D. L. FROST. 1969. Additional notes on the White Pelican Colony at Stum Lake, British Columbia. *Condor*, 71: 73.
- CARBYN, L. N. 1968. Overwintering birds observed along the Mackenzie-Great Slave Lake highways. *Arctic*, 21: 294-297.
- COOK, R. E. 1969. Variation in species densities of North American birds. *Syst. Zool.*, 18: 63-84.—This study, patterned on Simpson's study of mammalian

- densities, includes Mexico and covers 1,257 species exclusive of seabirds. Many of the trends observed in mammals, e.g., latitudinal gradient, topographic effect, east-west gradient, and peninsula effect are evident. Discusses the influence of historical (glaciation) and ecological (especially the arid Great Plains) factors on the present density pattern.—A.S.G.
- DOW, D. D. 1968. Home range and habitat of the Cardinal in peripheral and central populations. *Canadian J. Zool.*, 47: 103–114.—A comparison of habitat, population density, and home ranges (equals territory size in Tennessee, but not in Ontario) for *Richmondia cardinalis* in western Tennessee and southern Ontario.—H.W.K.
- DOWSETT, R. J. 1968. Oxpeckers *Buphagus* spp. on game animals at night. *Bull. Brit. Ornithol. Club*, 88: 130–132.—*Buphagus africanus* and *B. erythrorhynchus* roost on large mammals at night. Buffalo are favored, but giraffe, kudu, eland, and black rhinoceros also are nocturnal hosts. Only one instance of nocturnal feeding has been noted.—K.P.A.
- DUST, J. L., AND R. T. DUST. 1968. Ecological factors contributing to nesting failure in a heron colony. *Wilson Bull.*, 80: 458–466.
- EMISON, W. B. 1968. Feeding preferences of the Adélie Penguin at Cape Crozier, Ross Island. *Antarctic Res. Ser. (American Geophysical Union, Wash., D. C.)*, 12: 191–212.—Adults returning to feed chicks were intercepted and had their stomach contents sampled with a tightly stoppered, calibrated plexiglass tube. After inserting the tube, stomach contents are sucked up by pulling the stopper up the tube. By number of individuals the diet is composed of 91 to 95 per cent euphausiids, 4 to 8 per cent fish, and less than 2 per cent amphipods; by volume 60 per cent euphausiids, 39 per cent fish, and 1 per cent amphipods. During the chick-feeding period, an average-sized baleen whale consumes enough euphausiids to rear 5,000 additional Adélie chicks. A population study of this penguin, a major nonharvested krill-consuming species, should show the effect of intensive whaling.—F.E.L.
- ERDMAN, D. S. 1967 [= 1968]. Sea birds in relation to game fish schools off Puerto Rico and the Virgin Islands. *Caribbean J. Sci.*, 7: 79–85.—Mixed feeding flocks of Audubon's Shearwaters, Brown Noddies, and Bridled Terns were the most reliable indicators of tuna schools off Puerto Rico and the Virgin Islands. The fishes found in tuna stomachs included many of the same species that Longley and Hildebrand (1941. *Carnegie Inst. Washington, Publ.* 535) found in the Dry Tortugas tern colony.—W.B.R.
- EVANS, R. M. 1969. Territorial stability in Sharp-tailed Grouse. *Wilson Bull.*, 81: 75–78.
- FISHER, H. I. 1967. Body weights in Laysan Albatrosses, *Diomedea immutabilis*. *Ibis*, 109: 373–382.—Males are significantly heavier than females (3,300 vs. 3,000 g) when they reach Midway Atoll in November and remain so except just before egg-laying (egg weighs 300 g) and at the end of the male's incubation stints. Both sexes lose 25 per cent of initial weight during incubation and intensive care of the chick and show a net loss for the season of 10 to 15 per cent. Chicks, which weigh about 3,000 g in mid-May when adults stop feeding them daily, go to sea in mid-July weighing roughly 2,000 g. Chicks of a possible dwarf "mutant" on Eastern Island weighed a quarter less than normal young of the same age.—W.B.R.
- FORDHAM, R. A. 1968. Dispersion and dispersal of the Dominican Gull in Wellington, New Zealand. *Proc. New Zealand Ecol. Soc.*, 15: 40–50.—Details population structure of *Larus dominicanus* as indicated by total censuses, fixed transects, and banding from 1961 to 1965. Presents data on population density, flock cohesion,

- monthly fluctuations in age-composition of the population, and recoveries and sight records of banded birds. Compared with other gull species Dominican Gulls in Wellington are remarkably sedentary.—R.W.S.
- FREDRIKSSON, S. 1968. Migration at Ålanda Lake, mid-western Sweden, 1962–1967. *Vår Fågelvärld*, 27: 309–326.—The most notable feature of these observations is the flight of large numbers of gulls in July and August on the thermal updrafts created over the lake. (English summary.)—L.D.K.L.
- GEORGE, W. G. 1968. The association of invading White-winged Crossbills with a southern tree. *Wilson Bull.*, 80: 496–497.
- GRANT, P. J. 1968. Some inland observations of migratory activity in the Dunnock [*Prunella modularis*]. *Bird Study*, 15: 106–107.
- GRANT, P. R. 1969. Colonization of islands by ecologically dissimilar species of birds. *Canadian J. Zool.*, 47: 41–43.—A large difference in bill length, and presumably feeding ecology, characterizes sympatric congeneric species on West Indian islands. This is attributable more to a large initial difference between the colonists than to divergence in the island environment. (From author's abstract.)—H.W.K.
- GRIFFITHS, J. 1968. Multi-model frequency distributions in bird populations. *Bird Study*, 15: 29–32.—Frequency distributions of wing lengths of *Phylloscopus trochilus*, were converted to percentage cumulative frequencies (PCF). The PCF values were plotted on arithmetic probability paper to determine the "population lines," from which population parameters could then be determined.—J.D.R.
- HANSON, W. C. 1968. Recent history of Double-crested Cormorant colonies in southeastern Washington. *Murrelet*, 49: 25–26.
- HARRISON, C. J. O. 1968. Egg mimicry in British Cuckoos. *Bird Study*, 15: 22–28.—The incidence of *Cuculus canorus* eggs that are similar to hosts appears to be greater in Europe than in Britain. Possibly because of the absence of large numbers of one host species in Britain, selection to accommodate frequent changes of host species appears to be operating along with, and in opposition to, selection for eggs that resemble the host. Selection for mimicry may be attributable to predation irrespective of any action by the host.—J.D.R.
- HJORTH, I. 1968. Significance of light in the initiation of morning display of the Black Grouse (*Lyrurus tetrix* L.). *Viltrevy*, 5: 39–94.—A detailed ecological study based on statistical evaluation of data from 1958 to 1964. Black Grouse display all year except during the postbreeding molt, though in midwinter only when external conditions are favorable. Cocks start their display around sunrise in winter but earlier during the rest of the year. In spring early arrivals on the display grounds may leave if weather conditions are unfavorable, but may return after sunrise. The abrupt transition from winter to summer arrival habits coincides with the disappearance of snow on the ground. Early start of display on snowless ground may be adaptive as it allows mating before the major predator of hens, the male goshawk, starts its hunting. A black cock against a snowy background would be vulnerable to crepuscular predators. A lengthy discussion on the relation between timing of initiation of display and light intensities.—M.D.F.U.
- HORN, H. S. 1968. The adaptive significance of colonial nesting in the Brewer's Blackbird (*Euphagus cyanocephalus*). *Ecology*, 49: 682–694.—The behavior of individual birds and their reproductive success in 8 colonies (10 to 30 pairs each) in a sagebrush desert in eastern Washington. The author studied foraging and antipredator behavior intensively and concludes that colonial nesting in this species is primarily adapted to a variable food supply.—H.W.K.

- JAMES, T. R., AND R. W. SEABLOOM. 1968. Notes on the burrow ecology and food habits of the Burrowing Owl in southwestern North Dakota. *Blue Jay*, 26: 83-84.—Observations at 15 burrows in 1964 and analysis of 42 pellets.—R.W.N.
- JUNG, K. 1968. Die Brandgans (*Tadorna tadorna*) Brutvogel und Überwinterer bei Salzgitter. *J. Ornithol.*, 109: 22-24.—The Shelduck has become established near Salzgitter, 230 km inland, possibly because of highly saline ponds in the area.—H.C.M.
- KADLEC, J. A., AND W. H. DRURY. 1968. Structure of the New England Herring Gull population. *Ecology*, 49: 644-676.—A comprehensive analysis of population increase since the early 1900's, reproduction, and mortality. Age distribution was determined by plumage classification on aerial censuses from Mexico to Nova Scotia.—H.W.K.
- KINSKY, F. C. 1968. An unusual seabird mortality in the southern North Island (New Zealand) April, 1968. *Notornis*, 15: 143-155.—Account of 588 birds found dead or alive on beaches after tropical cyclone of 9 and 10 April 1968. High mortality of albatrosses (110 *Diomedea epomophora* and 26 *D. exulans*) recorded, but other species also affected.—G.D.S.
- KOHL, I. 1967. Über die taxonomische Stellung der karpatischen Haubenmeisen, *Parus cristatus*. *Larus*, 19(1965): 158-178.—A study of over 200 skins from central and northeastern Europe, mainly the Carpathian mountains, corroborates L. Szijj's (1957) finding that the northern Carpathians and Transylvania are inhabited by the nominate race. Previously both areas were thought populated by *P. c. mitratus*. The author speculates on the geographic history of the Crested Tits of Central Europe during and after the Pleistocene glaciations.—M.D.F.U.
- LENSINK, C. J. 1967. Arctic Loon predation on ducklings. *Murrelet*, 48: 41.—A *Gavia arctica* seized and killed a 1- to 4-day-old Lesser Scaup duckling.—A.C.V.V.
- LOOFT, V. 1968. Bestand und Ökologie der Greife in Schleswig-Holstein. *J. Ornithol.*, 109: 206-220.—A detailed survey of breeding populations of the 13 species of diurnal raptors in 15,678 km² of the Northwest-German province of Schleswig-Holstein in 1967. (English summary.)—H.C.M.
- MAKATSCHEV, W. 1968. Beobachtungen an einem Brutplatz der Korallenmöwe (*Larus audouinii*). *J. Ornithol.*, 109: 43-56.—Activities at a colony of Audouin's Gull in northern Sporades. The species is known to breed on only 8 islands in the Mediterranean with a total breeding population of 800 to 1,000 pairs.—H.C.M.
- MARCUS, M. B. 1968. Plumage and reproductive condition in the Masked Weaver *Ploceus velatus* Vieillot. *Rev. Zool. Bot. Africa*, 78: 107-111.—In the Transvaal 15 males showed a positive correlation between testis activity (size, spermatogenesis) and plumage (nonbreeding or molting versus breeding), and also between testis activity and bill color (black in breeding males). From a single uncompleted nest 7 males and 2 females were shot, though none was noted to display wing flutter.—R.B.P.
- MATHISEN, J. E., AND A. MATHISEN. 1968. Species and the abundance of diurnal raptors in the panhandle of Nebraska. *Wilson Bull.*, 80: 479-486.
- MCLAREN, I. A. 1968. Censuses of the Ipswich Sparrow on Sable Island. *Canadian Field-Naturalist*, 82: 148-150.—An estimated "total population of about 4,000 birds before any young had been fledged . . . seems to indicate a reassuringly high population in the restricted and vulnerable breeding range of this interesting bird."—R.W.N.
- MORSE, D. H. 1968. A quantitative study of foraging of male and female spruce-woods warblers. *Ecology*, 49: 779-784.—Males of *Dendroica magnolia*, *D. coronata*,

- D. virens*, and *D. fusca* foraged nearer the height of their singing areas than of their nests. Females foraged nearer the height of their nest than the singing perches of their males. A most interesting study.—H.W.K.
- NICHOLLS, T. H. 1968. Wisconsin's 1966-67 Snowy Owl invasion. Passenger Pigeon, 30: 107-112.—Dates, perch sites, habitat preferences, activities, and some food information for 93 of the 345 *Nyctea scandiaca* reports from north central United States. Wisconsin Snowy Owl reports for the last 8 years show a 3-year cycle.—F.E.L.
- NIETHAMMER, G. 1967. Hagel erschlägt Kiebitze (*Vanellus vanellus*). Vogelwarte, 24: 107-109.—Hail killed 300 of 1,000 Lapwings.—H.C.M.
- NISSON, L. 1968. The international midwinter censuses of ducks and swans in Sweden 1967-1968. Vår Fågelvärld, 27: 333-344.—About 100,000 ducks and a few thousand swans were counted each year in 355 and 392 localities respectively. (English summary.)—L.D.K.L.
- NORTON-GRIFFITHS, M. 1967. Some ecological aspects of the feeding behavior of the Oystercatcher *Haematopus ostralegus* on the edible mussel *Mytilus edulis*. Ibis, 109: 412-424.—Oystercatchers open exposed mussels by prying them loose and hammering the ventral margin until it breaks. Tests show this is the weakest part of the shell. They open submerged mussels, which gape slightly, mainly by inserting the bill to cut the posterior adductor muscle. Method used and size of prey selected varies between mussel beds, because bigger mussels on firm substrates cannot be detached for proper hammering. Variation also exists between Oystercatchers, because individuals hammer or cut but not both, and young birds "develop the same feeding technique as their parents." A fine study.—W.B.R.
- OELKE, H. 1968. Wo beginnt bzw. wo endet der Biotop der Feldlerche? J. Ornithol., 109: 25-29.—The distance of territories of the Skylark (*Alauda arvensis*) from nearby trees or urban areas is related to the height and area of the trees or urban structures. (English summary.)—H.C.M.
- OGLVIE, M. A. 1968. The numbers and distribution of the European White-fronted Goose in Britain. Bird Study, 15: 2-15.—Compares censuses by local bird watchers of wintering *Anser albifrons* in Britain for 1965, 1966, and 1967.—J.D.R.
- OLSON, S. L. 1969. Parula Warblers feeding in salt marsh. Florida Naturalist, 42: 40.—A flock of some 25 feeding in *Spartina* grass on 23 March 1968 in Florida.—E.E.
- PEARSON, T. H. 1968. The feeding biology of sea-bird species breeding on the Farne Islands, Northumberland. J. Anim. Ecol., 37: 521-552.—Examination of food and feeding biology of Arctic, Common, and Sandwich Terns, Kittiwake, Lesser Black-backed Gull, Puffin, Guillemot, Shag, and Cormorant based on food regurgitated by young and adults, observation of food carried in the bill for certain species, and shooting (shags and cormorants). Potential feeding ranges, feeding frequencies, and growth rates of young were determined for most of the species. Comparisons of time budgets for food gathering, differences in brood-sizes, availability of food fishes, etc., lead the author to conclude that in the fish-eating species of sea-birds brood size is not limited by food supply.—H.W.K.
- PHILLIPS, J. S. 1968. Stonechat breeding statistics. Bird Study, 15: 104-105.—Average clutch (and brood) size of *Saxicola torquata* for 5 years was first clutch 4.9 (4.4), second clutch 5.7 (4.7), and third clutch 5.3 (3.3). Nesting success in 1967 was 60 per cent. Young females raised fewer young than older females.—J.D.R.
- PORTENKO, L. A. 1968. Studien an einigen seltenen Limicolen aus dem nördlichen und östlichen Sibirien III. Der Graubruststrandläufer-*Heteropygia melanotos*

- (Vieill.). J. Ornithol., 109: 96-115.—The Pectoral Sandpiper (*Calidris* or *Erolia melanotos*) has apparently spread to Siberia from North America as both populations winter in South America. Contains detailed life-history information. "*Heteropygia*" appears to be most closely related to *Philomachus*.—H.C.M.
- RUCNER, R. 1967. Beitrag zur qualitativen und quantitativen Bestandsaufnahme der Ornis in einigen Waldgesellschaften Westkroatiens. *Larus*, 19(1965): 44-85.—Census work carried out in 6 wooded communities along 9 transects in the Dalmatian archipelago of the Adriatic during two nesting seasons showed lowest densities in the montane beech forest and fir woodland, and highest in the beech-fir mixed forest and Mediterranean scrub woods. Results of the transects are given in absolute numbers as well as calculated for a chosen standard length of 12 km. Some additional index values are given for each censused community. (In Serbo-Croatian; German summary.)—M.D.F.U.
- RUCNER, R. 1967. Beitrag zur Kenntniss der ökologischen Bedeutung der Ornis aus der Umgebung von Klenjec in Hrvatsko Zagorje. *Larus*, 19(1965): 86-106.—An ecofaunistic study of the avifauna in three different environments near Zagreb, the Croatian capital. (In Serbo-Croatian; German summary.)—M.D.F.U.
- RICKLEFS, R. E., AND F. R. HAINSWORTH. 1968. Temperature dependent behavior of the Cactus Wren. *Ecology*, 49: 227-233.—An excellent study combining field and experimental observations on behavioral responses (microhabitat selection) to increasing temperature.—H.W.K.
- ROHWER, S. A., AND G. E. WOOLFENDEN. 1969. Breeding birds of two Florida woodlands: Comparisons with areas north of Florida. *Condor*, 71: 38-48.
- SCHOENER, T. W. 1968. Sizes of feeding territories among birds. *Ecology*, 49: 123-141.—An interesting, detailed analysis of size variation in breeding territories on home ranges of land birds that obtain most or all of their food on the territory. Territory size varies in a predictable way with size of occupants, density of acceptable and accessible food, and density of preferred habitat, and increases more rapidly with body weight for predators than for omnivores or herbivores, a relationship that holds true for both birds and mammals. Well researched; the literature cited is a worthy contribution in itself.—H.W.K.
- SHARROCK, J. T. R. 1968. Migration seasons of the *Sylvia* warblers at Cape Clear Bird Observatory. *Bird Study*, 15: 99-103.
- SIBLEY, R. C., R. D. MALLETT, J. C. BORNEMAN, AND R. S. DALEN. 1968. Third Cooperative Survey of the California Condor. *California Fish and Game*, 54: 297-303.—Survey of *Gymnogyps californianus* on 17 to 18 October 1967 reported a minimum of 46 birds, 5 less than a similar survey reported in 1966, but not necessarily representing a decrease in the population. "The actual condor population is in all probability greater than the minimum population figure arrived at in the survey."—R.W.S.
- SIBLEY, F. C., AND R. W. McFARLANE. 1968. Gulls in the Central Pacific. *Pacific Sci.*, 22: 314-321.—The 41 specimens and over 50 sight records of gulls gathered by Pacific Program personnel from February 1963 to May 1966 indicate that *Larus argentatus* and *L. glaucescens* are the most frequent visitors to the Hawaiian Islands, *L. atricilla* and *L. pipixcan* to the Line Islands. Wind drift is presumed to be primarily responsible for these arrivals. Gulls arrive in good condition and do not remain long on any one island. The suggestion that the less efficient salt gland of gulls is a limiting factor appears to be invalid.—R.W.S.
- STEGFRIED, W. R. 1968. Breeding season, clutch and brood sizes in Verreaux's Eagle. *Ostrich*, 39: 139-145.—Egg laying is restricted to the cool months in autumn

- and winter. *Aquila verreauxi* usually lays two eggs, but invariably raises only one chick. The paper relates these factors to current theories on the natural regulation of animal numbers (From author's summary.)—M.A.T.
- SNOW, D. W. 1968. Movements and mortality of British Kestrels, *Falco tinnunculus*. Bird Study, 15: 65-83.—Cycles in *Falco tinnunculus* were examined through studies of migration, mortality, and fluctuations in the number of nestlings banded between 1925 and 1966. Fluctuations in the numbers banded were due to differences in the number of families banded, not to differences in family sizes. High local concentrations of nesting Kestrels appeared to be due to local increases in food supply. Increased migration activity in the autumn seemed related to a high local breeding density that might reduce food supply.—J.D.R.
- STALLCUP, P. L. 1968. Spatio-temporal relationships of nuthatches and woodpeckers in ponderosa pine forests of Colorado. Ecology, 49: 831-843.—A 2-year study of interspecific segregation of foraging activities of nuthatches (*Sitta carolinensis*, *S. canadensis*, *S. pygmaea*) and woodpeckers (*Colaptes cafer*, *Sphyrapicus varius*, *S. thyroideus*, *Dendrocopos villosus*, *D. pubescens*, and *Picoides tridactylus*) in ponderosa pine in Colorado. Population composition and density of all but three also were determined. Nuthatches and woodpeckers were segregated by spatial and behavioral differences in foraging activities and by temporal differences in their residential status.—H.W.K.
- STELFOX, D. 1968. A note on magpies and Rocky Mountain bighorn sheep. Canadian Field-Naturalist, 82: 224.—For 20 minutes two Black-billed Magpies fed on ticks on a ewe and a yearling lamb, both of which "stood docilely" while receiving treatment.—R.W.N.
- STIRLING, D. 1968. Notes on food and feeding habits of some wintering birds. Canadian Field-Naturalist, 82: 14-17.—Food supplied by man is considered important in the survival of seven wintering species of the boreal forest in central Alberta. Food storage also is important for some.—R.W.N.
- STONEHOUSE, B. 1969. Environmental temperatures of Tertiary penguins. Science, 163: 673-675.—Early Tertiary sea temperatures (from oxygen isotope measurement) indicate that Australasian fossil penguins, including giant forms, lived in temperatures equal to the warmest in which modern penguins are found. Large size probably was related to deep diving rather than environmental temperature.—W.B.R.
- ŠTROMAR, L. 1967. Vierjährige Silbermövenberingung, *Larus argentatus* Pontopp., auf den Inselchen Mrkan und Bobara in Dalmatien. Larus, 19(1965): 133-144.—From 1962 to 1965 a total of 1,319 nestling Herring Gulls were banded. Observations on habitat and breeding biology are presented. In colonies disturbed by human interference adult gulls killed more chicks. The few long-distance recoveries indicate a dispersal of the young in all directions, as is known for the Atlantic population. (In Serbo-Croatian; German summary.)—M.D.F.U.
- STURMAN, W. A. 1968. Description and analysis of breeding habits of the chickadees, *Parus atricapillus* and *P. rufescens*. Ecology, 49: 418-431.—A multiple regression analysis, used to describe the breeding habitats and to analyze extent of coexistence of these two species in Washington shows they are largely non-overlapping. Abundance of *P. rufescens* is mostly highly correlated with per cent of upper story coniferous canopy volume and the average height of the upper story conifers. For *P. atricapillus*, the canopy volume of all trees, all bushes, and middle story trees together most accurately predicts its abundance. Apparently chickadees respond to these features of the habitat when selecting a breeding place. Comparative studies

- on the San Juan Islands, from which *P. atricapillus* is absent, also were conducted. An excellent study.—H.W.K.
- THRELFALL, W. 1968. The food of three species of gulls in Newfoundland. Canadian Field-Naturalist, 82: 176-180.—Analysis of stomach contents of 502 birds of three species (401 Herring Gulls, 32 Great Black-backed Gulls, and 69 Black-legged Kittiwakes) collected in summer and winter for a parasite study.—R.W.N.
- WARD, P. 1969. The annual cycle of the Yellow-vented Bulbul *Pycnonotus goiavier* in a humid equatorial environment. J. Zool., 157: 25-45.—A 2-year study in a uniform climate, Singapore Island, reveals well-marked breeding and molting seasons timed to occur in the period of increased insect abundance in the first half of the year.—K.P.A.
- WESTERNHAGEN, W. v. 1968. Limicolen-Vorkommen an der westafrikanischen Küste auf der Banc d'Arguin (Mauretanian). J. Ornithol., 109: 185-205.—The islands and flats of the west coast of Africa between Cape Blanc and Cape Timiris are a major resting area for six species of shorebirds with as many as 200,000 occurring on the island of Arel alone. Describes behavior of the birds including fish eating and tern-nest robbing by the turnstone *Arenaria interpres*. (French summary).—H.C.M.
- WILLIAMS, G. R. 1968. The Cape Barren Goose, (*Cereopsis novaehollandiae* Latham) in New Zealand. Notornis, 15: 66-69.—*Cereopsis* has been introduced into New Zealand from Australia and apparently also has reached the country unaided. Its history in New Zealand is given along with various sight records.—G.D.S.
- WILLIAMSON, K. 1968. Buntings on a barley farm. Bird Study, 15: 34-37.—Density, as measured by the Common Birds Census, and habitat preference of *Emberiza schoeniclus*, *E. calandra*, and *E. citrinella* on a 202-acre farm.—J.D.R.

EVOLUTION AND GENETICS

- CLANCY, P. A. 1968. Subspeciation in the southern populations of the Chestnut-backed Finch-lark *Eremopteryx leucotis* (Stanley). Arnoldia (Natl. Mus. So. Rhodesia, Salisbury), 4(1): 1-5.
- COOKE, F., AND F. G. COOCH. 1968. The genetics of polymorphism in the goose *Anser* [*Chen*] *caerulescens*. Evolution, 22: 289-300.—Polymorphism in Snow and Blue Geese, estimated by sampling a large colony of breeding birds and their offspring, appeared to be determined by a single pair of alleles, BB and Bb in blue birds and bb in white birds. Incomplete dominance, additional interacting genes, and assortative mating also influence polymorphism. Assortative mating appears to be a manifestation of imprinting by male goslings.—J.D.R.
- FICKEN, R. W., M. S. FICKEN, AND D. H. MORSE. 1968. Competition and character displacement in two sympatric pine-dwelling warblers (*Dendroica*, Parulidae). Evolution, 22: 307-314.—In the vicinity of Maryland, Pine (*D. pinus*) and Yellow-throated (*D. dominica*) Warblers coexist. Not only do they forage differently, but *D. pinus* is dominant over *D. dominica* and reacts to the latter as it would to a conspecific male.—J.D.R.
- GREENSLADE, P. J. M. 1968. Island patterns in the Solomon Islands bird fauna. Evolution, 22: 751-761.—Distribution patterns of endemic infraspecific birds are considered in terms of the presently existing islands. Fauna size is discussed in relation to island area (direct relationship) and degree of isolation of the islands (inverse relationship).—J.D.R.
- HAFFER, J. 1969. Speciation in Amazonian forest birds. Science, 165: 131-137.—Haffer argues that "rupturing and rejoining" of the Amazonian forest (about 10

- dry-period forest refugia), caused by recurring Pleistocene wet-dry cycles, favored rapid differentiation and accounts for the large number of forest bird species in the area.—W.B.R.
- HARRISON, JA., AND JE. HARRISON. 1969. The evolutionary position of the snow geese as suggested by goose hybrids and variants. *Bull. Brit. Ornithol. Club*, 89: 39-41.—Hybrids between *Anser anser* × *Branta canadensis* and *B. leucopsis* × *A. albifrons* and occasional aberrant individuals of *B. canadensis maxima* exhibit a tendency toward a white head and neck. This is cited as evidence indicating a relationship between the *Branta* geese and the snow geese! However, it hardly seems a sound basis for stating that this indicates snow geese are really a link between the genera *Anser* and *Branta*.—K.P.A.
- JOHNSTON, R. F. 1969. Character variation and adaptation in European sparrows. *Syst. Zool.*, 18: 206-231.—The phenetics of the *Passer domesticus*—*P. hispaniolensis* superspecies, including various hybrid populations commonly called Italian sparrows, are examined by univariate and multivariate statistics. Dimensional and color characteristics exhibit a close relationship with climate, with bone lengths generally conforming to Allen's rule. Thickness of bony elements shows no geographic variation; thus southern individuals are both longer and relatively thinner. Sexual dimorphism occurs in wing and sternal elements, but not other dimensional characters. This complex dimorphism is attributed to interactions of differing selective pressures for display and fighting and in thermoregulation with common use of a single food source. Cluster analyses suggest that adaptive responses to climatic gradations account for some of the variation that has been used to construct intraspecific classifications of these birds.—A.S.G.
- KEAST, A. 1968. Competitive interactions and the evolution of ecological niches as illustrated by the Australian honeyeater genus *Melithreptus* (Meliphagidae). *Evolution*, 22: 762-784.—Changes in morphological characters and feeding patterns occur in faunistically impoverished, isolated areas. In contrast, populations on extensive continental areas show little variation. Evolutionary shifts appears to be more common in isolated populations where a greater number of vacant niches permits greater diversification.—J.D.R.
- LACK, D. 1969. Subspecies and sympatry in Darwin's Finches. *Evolution*, 23: 252-263.—In a reexamination of the problem, Lack accepts ecological factors as being largely responsible for the present distribution. The distance between islands appears to be small enough so that interisland wandering probably occurs fairly commonly, thereby reducing the role of isolation in bird distributions. The birds of small and outlying islands, where the extent of niches is small, are more generalized than birds on large, central islands where larger niches permit specialization.—J.D.R.
- LECK, C. F. 1968. A possible hybrid between the Canada Goose and the Pink-footed Goose. *Cassinia*, 50: 9-11.—An apparent hybrid of Canada Goose with an unknown parent, seen in Pennsylvania in three successive winters. The suggested *Anser fabalis* parentage is based on pink legs and toes and pink and black bill; domestic goose parentage also is indicated as possible.—E.E.
- MACDONALD, J. D. 1969. Hybridization in *Pardalotus*. *Emu*, 69: 41-44.—*Pardalotus substriatus* and *P. melanocephalus* hybridize, apparently through secondary contact. Although no specimens are known, field evidence suggests *P. melanocephalus* and *P. ornatus* also attempt to interbreed. The apparently greater reproductive isolation of *ornatus* casts doubt on the earlier suggestion that it is a hybrid of *striatus* and *substriatus*.—G.E.W.

- MOYNIHAN, M. 1968. Social mimicry; character convergence versus character displacement. *Evolution*, 22: 315-331.—The term "social mimicry" is applied "to all resemblances among species which have been evolved to facilitate social reactions of any type—except the warning and aggressive forms of mimicry involved in predator—prey relations." Owing to lack of information, the paper is largely speculative, however several interesting concepts are examined. Interspecific mimicry is presumed to be a manifestation of intraspecific mimicry. Group mimicry appears to enhance efficiency by limiting sign stimuli to a small number that are used in both intraspecific and interspecific behavior. Predictions for species groups characterized by similar appearance include: (1) increased similarity within sympatric groups as opposed to allopatric groups, (2) intragroup resemblances should increase with age of sympatry, (3) a direct relationship should exist between number of species and degree of similarity, and (4) the degree of resemblance should be directly related to frequency and closeness of contacts between individuals of different species.—J.D.R.
- SAGE, B. 1969. A Northern Pintail \times Chiloe Wigeon hybrid. *Bull. Brit. Ornithol. Club*, 89: 69-71.—Describes a male hatched in captivity.—K.P.A.
- SAMMALISTO, L. 1968. Variations in the selective advantage of hybrids in the Finnish population of *Motacilla flava* L. *Ann. Zool. Fennica*, 5: 196-206.—Two quantitatively variable traits, the amount of black on the head in the race *thunbergi* and the width of the white supercilium in *flava*, are mutually exclusive and in intergrades are either both reduced or absent. South Finland is in the zone of secondary intergradation, with hybrid populations and with some proportion of the parental races, while northern Finland has hybrids and *thunbergi* but no pure *flava*. A large scale study of hybrids (where the subtle differences in the above characters were graded by three scientists and personal bias thus largely eliminated) revealed interesting shifts in time of the hybrid zones. During the last 12 years the proportion of "intermediate" males has decreased in both South and North Finland. In the south both parental races gained as the intermediates decreased, but *flava* does not reach northern Finland, and only *thunbergi* gained there. Intermediate males seem to be superior over the parental genotypes by virtue of their high tolerance of cold when nestlings. This is inferred from their high proportion on wet habitats with arctic microclimates and from their high frequency in all populations in years in which cold weather preceded the species nesting period. This study illustrates the importance of ecological data in a taxonomic enquiry, for these two races select different habitats, but the hybrid population is brought together by the fact that the two sexes of each race select the habitat of the other in Finland and thus always are present for hybridization. Thus microclimatic fluctuations and behavioral traits, being, as shown, correlated with habitat gradients and morphometric ratios stay in equilibrium with one another where secondary intergradation is the adaptation mechanism.—M.D.F.U.
- SHORT, L. L., JR. 1969. "Isolating mechanisms" in the Blue-winged Warbler-Golden-winged Warbler complex. *Evolution*, 23: 355-356.—Certain conclusions of Ficken and Ficken (1968. *Evolution*, 22: 166-179.) are discounted because they used only the classical two hybrids plus parental types for their analyses and ignored the existence of introgression within the complex.—J.D.R.
- STEGMANN, B. 1968. Über die phyletischen Beziehungen zwischen Regenpfeifer-vögeln, Tauben und Flughühnern. *J. Ornithol.*, 109: 441-445.—Discusses the phylogenetic relationships of sandgrouse, pigeons, and shorebirds.—H.C.M.

- THOMSON, A. L. 1969. The subspecies concept. *Bird Study*, 16: 1-13.—This paper was presented to the British Trust for Ornithology as the first annual Witherby Memorial Lecture, dedicated to Harry Forbes Witherby (1873-1943). The author's concluding remarks were: "To sum up in a sentence: the general thesis of this lecture is that the subspecies has lost much of its former supposed validity as a basic taxonomic unit; but that, with advances in knowledge, sub-specific categories of all kinds have acquired increasing significance as growing points of evolution."—J.D.R.
- VÄISÄNEN, R. A. 1969. Evolution of the Ringed Plover (*Charadrius hiaticula* L.) during the last hundred years in Europe. A new computer method based on egg dimensions. *Ann. Acad. Sci. Fennica (Helsinki)*, Ser. A, 4(149): 1-90.—Using the clutch as the basic unit, egg size was analyzed by computer methods. Correlation is almost perfect between mean wing length and egg volumes for populations from different parts of the Ringed Plover range. The author contends that dated egg collections, statistically treated, can be scientifically useful in many ways, and provide a reliable indication of changes in body size in the evolution of populations. In Europe, the most northern or arctic populations are small, and those of the British Isles and nearby continental waters are large. Eggs collected in the early 1800s show a sharp step cline existed between small and large birds, but, presumably with the warming of the climate, the more southern populations have extended northward, interbred with the smaller birds, and produced a middle-sized population in Fennoscandia that breeds earlier. The author treats *C. semipalmatus* as a species, pointing out that as sharp a difference in wing length exists where the Alaskan birds approach the range of *C. hiaticula* in eastern Siberia as in eastern Canada in relation to Greenland.—E.E.
- WELLER, M. W. 1969. An unreported hybrid *Metopiana peposaca* × *Anas georgica*. *Bull. Brit. Ornithol. Club*, 89: 49-52.—Collected in the wild in Santiago Prov., Chile, June 1938.—K.P.A.

GENERAL BIOLOGY

- BEDARD, J. 1969. Histoire naturelle du Gode. *Alca torda*. L., dans le golfe Saint-Laurent, province de Quebec, Canada. Etude du Service canadien de la faune, no. 7: 1-79.—Breeding biology of the Razorbill (*Alca torda*) studied in 1962-63 on St. Marys Islands, Gulf of St. Lawrence. Northern distribution in summer in the western Atlantic corresponds to the August 4° C surface isotherm. Following breeding, birds disperse over the continental shelf, but only northern populations migrate. Late departure of ice results in compression of the prenesting phase. Height of activities and attendance at the colony occurs in early July and, on a daily basis, about midday (attendance) or in the 4 hours preceding darkness (activity). Social behavior is described. Vocalizations vary mainly in their duration and intensity. The birds are assiduous incubators, with a complex nest-relief ceremony, which are factors correlated with dangers of open-ledge nesting. Incubation lasts about 37 days, and young remain at the nest about 18 days. Growth and survival of chicks were studied in detail. A decrease in weight of chicks occurs in the last 3 days at the nest. Survival rate was high, over 66 per cent for eggs and chicks, and in undisturbed parts of the study area it probably was higher. (From English summary.)—J.W.H.
- CAVE, A. J. 1968. The breeding of the Kestrel, *Falco tinnunculus* L., in the reclaimed area Oostelijk Flevoland, Netherlands. *J. Zool.*, 18: 313-407.—A 5-year study emphasizing the relationship between breeding and the food supply and other environmental factors. The vole *Microtus arvalis* was the main prey item in

- over 7,000 pellets collected. Food supply has a positive effect on both breeding density and the time of laying, although weather also affects both. Mortality in the first year after fledging was estimated to be 51 per cent and annual adult mortality 42 per cent. First year birds disperse widely, but adults generally winter within 10 km of their breeding site. Long-eared Owls used some of the nest boxes and may have competed with Kestrels for nest sites. Experiments with captive birds showed that food supply in winter had a definite effect on the development of oocytes and possibly the time of laying and clutch size. Early and late broods differed only slightly in per cent fledged. Large broods (6-7) had higher mortality than medium sized (4-5) ones but more young survived from the larger broods.—J.J.D.
- DHONDT, A. A., AND J. HUBLE. 1968. Fledging-date and sex in relation to dispersal in young Great Tits. *Bird Study*, 15: 127-134.—Late fledged, immature *Parus major* did not appear to have a higher mortality rate than young fledged earlier in the breeding season. More late fledglings were recovered away from their birth place during their first winter and they tended to move farther than early fledglings. Immature females tended to emigrate more and farther than males.—J.D.R.
- HARRISON, C. J. O. 1969. Helpers at the nests in Australian passerine birds. *Emu*, 69: 30-40.—Birds additional to the pair helping at single nests are known for representatives of nine Australian passerine families. The proportion of Australian birds showing this behavior is high in comparison with other avifaunas from other regions and may be because of some common factor, possibly climate. In Australian species the helpers are often adults apparently capable of breeding. The behavior could have evolved in adults if it is assumed the dominant pair pass on to their offspring the dual capacity to act as a member of a dominant pair or as a helper in different situations.—G.E.W.
- HARRIS, M. P. 1969. Age at breeding and other observations on the Waved Albatross *Diomedea irrorata*. *Ibis*, 111: 97-98.—Banding of 1,861 adults and 1,063 young (1960-66) at the only known breeding stations, Hood Is., Galapagos, yielded two recoveries of young birds from Ecuador. Recaptures of adults were mostly (173 of 174) in the same colony where banded; one banded as young in November 1961 was found nesting in July 1967. Few young are produced in years of above average rain.—W.B.R.
- SCHÖNWETTER, M. (ed. and completed by W. Meise). 1968-1969. *Handbuch der Oologie*. Lief. 15, 16, vol. 2: 65-192. Price, 14 marks per Lief. Akademie-Verlag, Leipsiger Strasse 3-4, 108 Berlin, Germany.—Volume 2 of the handbook is devoted to the Passeriformes, and Lief. 14 and 15 deal wholly with the non-oscine families, completed in Lief. 16 (also including Alaudidae and part of Hirundinidae). The editor, who now becomes in effect a co-author, includes data from literature as recent as 1967. Occasionally information on nest, not merely eggs, is given, and interesting comparisons are made between egg weight and body weight. The largest of the families treated, Tyrannidae, is covered in Lief. 15. Tyrannid eggs are so varied that they are divided into 14 classes; not infrequently different species of the same genus fall into different egg pattern classes. Most remarkable are the carmine tinged and marked eggs of *Onychorhynchus swainsoni* (*coronatus* and *mexicanus* eggs are less roseate) and *Lophotriccus pileatus*, which may reflect a relationship between the two genera; for both carry usually concealed crests that can be fanned across the head. Lief. 15 includes a color plate of eggs of 28 species.—E.E.

MANAGEMENT AND CONSERVATION

- MCKNIGHT, TOM L. 1969. Barrier fencing for vermin control in Australia. *Geogr. Rev.*, 59: 330-347.—While concerned mainly with rabbits, dingos, and kangaroos, three recent emu barrier fences erected in Western Australia (p. 347) from the map (p. 343) appear to have an approximate length of 500 miles. The official list of vermin for Western Australia includes 18 species of birds.
- REA, S. C. 1969. Plastic device causes gull mortality. *Wilson Bull.*, 81: 105-106.
- SNOW, D. W. 1968. Birds and the 1967-68 foot-and-mouth epidemic. *Bird Study*, 15: 184-190.—The spread of foot-and-mouth disease was correlated with strong winds but not with bird movements.—J.D.R.

MIGRATION AND ORIENTATION

- ALNÄS, I., AND A. LARSSON. 1969. The activities at Ottenby Bird Station 1963 and 1964. Report No. 48. *Vår Fågelvärld*, 28: 9-17.—English summary.—L.D.K.L.
- CHRISTENSEN, N. H., AND J. R. JACOBSEN. 1969. "Headwind migration." *Dansk Ornithol. Foren. Tids.*, 62: 153-159.—The authors contend that Rabøl's view (1964, 1967) that a basic type of migratory behavior, "headwind migration" exists, is unwarranted.—E.E.
- EMLEN, S. T. 1969. Bird migration: influence of physiological state upon celestial orientation. *Science*, 165: 716-718.—When male Indigo Buntings ready to migrate were presented with the same star clues (May 1 planetarium sky of 30° N) at the same time (May 1968), four whose cycle had been speeded by 15-hour days oriented south, while five kept at the day-length usual on the wintering grounds oriented north. Direction of migratory flight in Indigo Buntings apparently depends on the bird's internal state, rather than on what it sees in the night sky.—W.B.R.
- GWYNN, A. M. 1968. The migration of the Arctic Tern. *Australian Bird Bander*, 6(4): 71-75.—Adds some recent Australian data to those in Salomonsen's 1967 paper, and provides map.—E.E.
- HARRISON, J. 1969. The altitude of a migrating Shoveler. *Bull. Brit. Ornithol. Club*, 89: 72.—A female was hit by an airplane at 13,000 feet on 3 October 1968 somewhere between Bombay and Bangkok.—K.P.A.
- MUNTEANU, D. 1969. Bird migration in Rumania. *Bull. Brit. Ornithol. Club*, 89: 33-35.—A superficial survey of the broad pattern of migration routes in Rumania. In autumn most birds pass east of the Carpathian Mountains and fly through Asia Minor or begin a trans-Mediterranean crossing near Cyprus. Another major fall route skirts the west side of the Carpathians and then heads easterly following the Danube.—K.P.A.
- PAPI, F., AND L. PARDI. 1968. Are pigeons able to home when release at sea? *Monitore Zool. Ital.*, 2: 217-231.—Homing pigeons from the same lofts were released at sea at distances varying from 100 to 255 km (within sight of land on clear days) and also on land. Releases lost were 12.6 per cent of adults from land, and 52 per cent of adults and 80.4 per cent of young birds at sea. The reduced capacity to home from sea raises questions about current theories of bird navigation. (In English; Italian summary.)—E.E.
- PERDECK, A. C., AND B. J. SPEEK. 1968. Ringverslag van het Vogeltrekstation. *Limosa*, 41: 118-142.—An extensive tabulation of data on birds banded and recovered in the Netherlands in 1967. A total of 136,847 birds were banded during the year. Recoveries included 2,847 birds banded in the Netherlands and 556 birds banded abroad. (English summary.)—K.P.A.

- RABØL, J. 1969. Reversed migration as the cause of westward vagrancy by four *Phylloscopus* warblers. *Brit. Birds*, 62: 89-92.
- RABØL, J. 1969. Headwind-migration. Answer. *Dansk Ornithol. Foren. Tids.*, 62: 160-165.—Rabøl replies to the criticism of Christensen and Jacobsen (1969) by explaining his views.—E.E.
- RADFORD, M. C. 1968. The autumn migration records of the Red-breasted Flycatcher. *Bird Study*, 15: 154-160.—The Red-breasted Flycatcher, *Muscicapa parva*, which breeds in central Europe and eastward, is encountered regularly along the east coast of Britain in spring, and especially in the autumn. Most of the records are of immature birds, suggesting a juvenile dispersal. Other possible reasons for their occurrence are presented.—J.D.R.
- ROBERTSON, W. B., JR. 1969. Transatlantic migration of juvenile Sooty Terns. *Nature*, 222: 632-634.—Banding records of *Sterna fuscata* on the Dry Tortugas indicate that first year birds after passing through the Gulf of Mexico and the Caribbean Sea move east across the Atlantic to the Gulf of Guinea in western Africa, and may remain there until their third year. This migration functions to reduce population pressure on the breeding sites and the surrounding waters.—E.E.
- ROOS, G. 1969. Banding activities at Falsterbo Bird Station 1965-1967. Report No. 39. *Vår Fågelvärld*, 28: 18-44.—A detailed report on banding and recoveries with numerous tables and maps. (English summary.)—L.D.K.L.
- SICK, H. 1968. Vogelwanderungen im kontinentalen Südamerika. *Vogelwarte*, 24: 219-243.—A review of migration in continental South America. Migration to escape the southern winter occurs in numerous species and is even perceptible in central Brazil, although few species are known to go farther north than northern South America. A considerable number of North American breeders winter in South America, most of them from eastern North America. These birds spend a longer time on their wintering than on their breeding grounds. Altitudinal migration occurs not only in the Andes but in the relatively low mountains of southeastern Brazil. Other forms of movement occur with sufficient regularity to be considered migration: the post-breeding dispersal of the guano birds and the Gray Gull (*Larus modestus*) on the Pacific coast; the migration during the dry season of species from the arid parts of Ecuador and Peru, and water birds in exceptionally dry periods; migration correlated with flowering, fruiting, and seeding; migration resulting from periodic flooding from rising waters of the Amazon and other rivers; migration from regular burning of the savannas, comparable for some birds to following army-ants; migration of ducks for molting. In numbers the most spectacular migrations among South American land birds are those of the Eared Dove (*Zenaida auriculata*) in northeastern Brazil and the Chilean Pigeon (*Columba araucana*) in Chile; impressive migration of the Purple Gallinule (*Porphyryla martinica*) occurs in northeastern Brazil. Daily movements of considerable distances occur in some birds for feeding and going to roosts, which often have a seasonal aspect. (English summary.)—E.E.
- STOLT, B. O. 1969. The orientation funnel—a simple aid for the migration researcher. *Vår Fågelvärld*, 28: 1-6.—In experiments conducted in an Emlen orientation cage with Chaffinches (*Fringilla coelebs*) and White Wagtails (*Motacilla alba*), the results diverged from observations in the field.—L.D.K.L.
- TICKELL, W. L. N., AND J. D. GIBSON. 1968. Movements of Wandering Albatrosses *Diomedea exulans*. *Emu*, 68: 7-20.—The results of long-term banding on breeding grounds and winter feeding grounds indicate a seasonal circumpolar movement of *D. exulans*. Breeding birds banded on South Georgia were recovered wintering

on the New South Wales Coast and vice versa. These localities are separated by approximately 180 degrees of longitude. Young birds return to the breeding area 3 years after fledging.—R.G.W.

MISCELLANEOUS

- BOSWALL, J. 1969. New Palearctic bird sound recordings during 1966-67. *Brit. Birds*, 62: 49-65.—Evaluates 23 records or sets issued in Britain, Europe, and Japan.—H.B.
- BOTTOMLEY, J. B. 1968. Bird-photography by stalking. *Brit. Birds*, 61: 546-549.—A discussion of tactics and equipment, supplemented by 23 fine examples of results obtainable.—H.B.
- CAMPBELL, R. W. 1968. Capturing Ancient Murrelets by night-lighting. *Blue Jay*, 26: 90-91.
- COURTSAL, F. R., AND R. E. IVERS. 1969. Homes for birds. *Conserv. Bull.* (U. S. Govt. Printing Office, 20 cents), 14: 1-18.—Revision of Kalmbach and McAtee's work of same title. Contains specifications for building and placement of houses or nest supports for birds. It seems foolish to me to encourage people to build an artificial nest site for catbirds and thrashers (p. 7) or for "warblers" (p. 8). Moreover, the geographic limitations of this booklet are never stated. Thus, a Californian might easily waste time building and erecting houses for birds that either do not occur in his area or, as with Purple Martins, are ecologically so isolated from most human residential places that getting the birds to nest in a man-made structure is unlikely at best.—J.W.H.
- FRINGS, H., M. FRINGS, AND C. FRINGS. 1966. An annotated bibliography on North Pacific albatrosses. *Pacific Sci.*, 20: 312-337.—A subject matter cross-referenced listing by author of 380 titles with information on *Diomedea immutabilis*, *D. nigripes*, or *D. albatrus* with notes on the contents of each.—J.J.D.
- HAMMERSLOUGH, J. S., AND R. G. BJORKLUND. 1968. Radio tracking of prematurely dislodged nestling herons. *Jack-Pine Warbler*, 46: 57-61.—Transmitter attachment techniques for nestling *Ardea herodias*, *Casmerodius albus*, and *Nycticorax nycticorax* that fell from tree nests 35' to 80' high.—F.E.L.
- HAUKIOJA, E. 1968. [Reliability of the line survey method in bird census, with reference to Reed Bunting and Sedge Warbler.]—*Ornis Fennica*, 45: 105-113.—Based on field work on color-marked *Emberiza schoeniclus* and *Acrocephalus schoenobaenus* on a 25 h island covered with low willow bushes and meadows, the discussion includes counts of nests, singing males, song sites, and mapping methods. Earlier methodists pointed out the shortcomings of line censuses regarding absolute numbers of breeding pairs. Haukioja emphasizes that the method is even less useful for calculation of relative abundance because differences in breeding cycle cause differences in conspicuousness of the species being compared.—M.D.F.U.
- HÖHN, E. O. 1969. Eskimo bird names at Chesterfield Inlet and Baker Lake, Keewatin, Northwest Territories. *Arctic*, 22: 72-76.
- NYHOLM, E., AND O. GINSTRUP. 1968. A balance for weighing eggs of smaller birds in the field. *Oikos*, 19: 149-151.—A light-weight and easy-to-handle electromagnetic balance with weighing error of less than 0.2 per cent in the 50 mg to 3 g range.—H.W.K.
- SCHORGER, A. W. 1968. An early colonial duck decoy. *Canadian Field-Naturalist*, 82: 223-224.
- ŠTROMAR, L. 1967. Bird-Banding in 1963 and 1964: 1. Results of the Bird-Banding carried out by the Ornithological Department of the Biological Institute of the

- University in Zagreb, XVth Report; 2. Foreign Recoveries made in Yugoslavia, XIIth Report. *Larus*, 19(1965): 5-43.—In 1963 a total of 13,497 birds of 137 species, and in 1964 a total of 12,665 individuals of 130 species were banded. All birds banded since 1910 are given in a table; the total is 204,863 (but country borders have changed and the total for the area of Yugoslavia actually is larger). (In Serbo-Croatian; English summary.)—M.D.F.U.
- VACIN, V. J. 1969. Black-chinned Hummingbird at Silver Lake, near Oklahoma City. *Bull. Oklahoma Ornithol. Soc.*, 2: 14-15.—An adult male with malformed bill remained about a house with hummingbird feeders from 1 May to 5 September 1969. He would follow the owners, and once when the author's wife was wearing a blouse with red spots poked at the spots with his bill.—E.E.
- VEPSÄLÄINEN, K. 1968. Wing length of Lapwing (*Vanellus vanellus*) before and after skinning, with remarks on measuring methods. *Ornis Fennica*, 45: 124-126.—Lapwings remeasured about 6 months after skinning showed significant reduction in wing chord measurement. The reduction was uneven, averaging 4.5 mm (or 2 per cent); in one of the 11 individuals as much as 12 mm and in another no reduction occurred. Using skin measurements for comparison with measurements of live birds maybe unreliable in some cases.—E.E.

PHYSIOLOGY

- BERGER, M., AND J. S. HART. 1968. Ein Beitrag zum Zusammenhang zwischen Stimme und Atmung bei Vögeln. *J. Ornithol.*, 109: 421-424.—Recordings of the patterns of respiration during distress calls in the Evening Grosbeak. (English summary.)—H.C.M.
- CHAUDHURI, C. R., AND I. B. CHATTERJEE. 1969. L-ascorbic acid synthesis in birds: phylogenetic trend. *Science*, 164: 435-436.—The ability to make vitamin C and the organs where it is made varies as follows in the birds studied: kidney only—10 nonpasserines of 10 orders; liver and kidney—House Crow (*Corvus splendens*) and Common Myna (*Acridotheres tristis*); liver only—the one woodpecker examined and 10 passerines, including thrushes, starlings, and ploceids; incapable—16 passerines of 9 families. This pattern seems to be phylogenetic and parallels that found in mammals, where higher primates lack the ability to synthesize ascorbic acid. Notably neither corvids nor ploceids qualify as the most highly evolved passerines by this criterion.—W.B.R.
- PORTER, R. D., AND S. N. WIEMEYER. 1969. Dieldrin and DDT: effects on Sparrow Hawk eggshells and reproduction. *Science*, 165: 199-200.—Captive *Falco sparverius* fed diets containing dieldrin and DDT combined (at two levels, 6 and 18 ppm) laid eggs with thinner shells, broke and ate more eggs, and raised fewer young than control pairs (differences significant at $P < .05$). Thus experimentally produced reproductive failure duplicates in detail the observed failures of several populations of wild raptors.—W.B.R.
- TANHUANPAA, E., AND E. PULLIAINEN. 1969. Major fatty acid composition of some organ fats in the Willow Grouse (*Lagopus lagopus*) and the Rock Ptarmigan (*Lagopus mutus*). *Ann. Acad. Sci. Fennica, Ser. A.*, 4(141): 14 pp.—A study of organ fat values of six specimens of each species indicates linoleic acid, so important for viable egg production, was abundant in the tissues of grouse prior to egg laying. The nature and origin of linoleic acid concentration in heart tissue also is discussed.—M.D.F.U.

TAXONOMY AND PALEONTOLOGY

- DA ROSA PINTO, A. A. 1968. [Some forms new for Angola and others for science discovered in the district of Cuando-Cubango (Angola).] *Bonn. Zool. Beitr.*, 19: 280-288.—Describes as subsp. nov.: *Mirafra africana irwini*, *Mirafra angolensis niethammeri*, *Macronyx grimmoodi cuandocubangensis*, *Tchagra australis bocagei* and *Buphagus erythrorhynchus angolensis*. (In Portuguese; English and German summaries.)—E.E.
- GALBRAITH, I. C. J. 1969. The Papuan and Little Cuckoo-Shrikes, *Coracina papuensis* and *robusta*, as races of a single species. *Emu*, 69: 9-29.—Previously regarded as two species because of a supposed overlap in range and because only *Coracina robusta* was known to have a melanic immature plumage, Galbraith shows both suppositions are wrong, and suggests they be considered races of *C. papuensis*.—G.E.W.
- GRANTSAU, R. 1968. [A new species of *Phaethornis* (Aves, Trochilidae).] *Pap. Av. Zool. (S. Paulo)*, 22: 57-59.—*P. maranhaoensis* sp. nov. described from Imperatriz, Maranhão, Brazil, from a series of males; compared with *P. nattereri* and *idaliae*. (In Portuguese; English summary.)—E.E.
- GYSSELS, H. 1968. Biochemical approach to the central systematic position of the Ciconiiformes. *Ardea*, 56: 267-280.—Electrophoresis of lens proteins shows at least three basically different pherogram types in the Ciconiiformes; *Cochlearius* has a lens pattern which in its immunological reaction is of an anseriform type.—E.E.
- HARRISON, C. J. O. 1969. The affinities of the Blue Wren, genus *Malurus* and related genera: with special reference to the grass-wren genus *Amytornis*. *Emu*, 69: 1-8.—The Australasian genera *Malurus*, *Stipiturus*, *Amytornis*, *Todopsis*, *Chenorhamphus*, and *Clytomyias* are regarded as a subtaxon of the timaliids, primarily because of a gap in the interscapular zone of the spinal feather tract. This apterium is covered by elongated feathers of the cervical and humeral tracts. Previously Harrison pointed out the extreme morphological similarity of *Amytornis* and certain babblers and behavioral similarities between *Malurus* and the same group. *Lamprolia* differs from the named genera in regards to this pterolographic feature.—G.E.W.
- HENDRICKSON, H. T. 1969. A comparative study of the egg white proteins of some species of the avian order Gruiformes. *Ibis*, 111: 80-91.—From protein patterns, the main gruiform stem consists of: 1, a compact group including the Sunbittern, trumpeters, finfoots, *Turnix*, and rails; 2, the somewhat divergent cranes; 3, the Limpkin, intermediate between cranes and the rail-like assemblage. Egg white proteins of *Cariama*, the Kagu, and bustards differ greatly from others studied, and bustards, at least, probably are not gruiforms.—W.B.R.
- HOWARD, H. 1969. Avian fossils from three Pleistocene sites in central Mexico. *Los Angeles Co. Mus. Contrib. Sci.*, no. 172: 1-11.—A collection of 44 un-associated bird bones from Chapala, Tequixquiac, and San Marcos represents 28 species, 17 of which had no previous fossil record in Mexico. Of 9 extinct forms, 5 relate to the Pleistocene of Rancho La Brea, California, or San Josecito Cave, Mexico; 1 (from Chapala) is referred to a Late Pliocene species (*Pliolymbus baryosteus* Murray), and 3 are undescribed.—H.H.
- IRWIN, M. P. S. 1969. *Camaroptera stigmatosus* (Reichenow), the male breeding dress of *Camaroptera fasciolata* (Smith). *Bull. Brit. Ornithol. Club*, 89: 44-48.—An examination of sexed and dated specimens of "*Camaroptera stigmatosus*" has shown that it represents the alternate plumage of male *C. fasciolata*.—K.P.A.

- KOEPCKE, M. 1968. Die Rassengliederung von *Nothoprocta pentlandi* (Tinamidae) in Peru mit Beschreibung einer neuen Subspezies. Bonn. Zool. Beitr., 19: 225-234.—A review of the races of the Andean Tinamou. *N. p. niethammeri* subsp. nov. described from Lomas de Lachay, 90 km north of Lima, in coastal central Peru. A specimen from the coastal area of southern Peru is probably of an undescribed race.—E.E.
- MACLEAN, G. I. 1969. South African lark genera. Cimbebasia, Ser. A (State Mus., Box 1203, Windhoek, South West Africa), 1: 80-94.—A revision of the African genera based in part on behavioral criteria.—E.E.
- MOREAU, R. E., AND P. WAYRE. 1968. On the Palearctic quails. Ardea, 56: 208-227.—While vocalizations of *Coturnix coturnix* of Europe and of *C. j. japonica* are extremely different, that of *C. j. ussuriensis* also differs from both (audiospectrograms provided), although morphologically hardly separable from the insular *japonica*. In captivity crossbreeding experiments suggest little incompatibility between *C. c. coturnix* and commercial stock of nominate *japonica*.—E.E.
- NOVAES, F. C. 1968. [Geographic variation in *Platyrhynchus saturatus* Salvin and Godman (Aves, Tyrannidae).] Rev. Bras. Biol., 28(2): 115-119.—*P. s. pallidiventris* subsp. nov. described from Marituba, Oriboca, state of Pará, Brazil. Data on biology in Brazil. (In Portuguese; English summary.)—E.E.
- PARKES, K. C. 1969. An undescribed subspecies of Hepatic Tanager *Piranga flava* from Colombia. Bull. Brit. Ornithol. Club, 89: 81-83.—*Piranga flava toddi*, subsp. nov., is described from El Cauca, Magdalena, Colombia (900 m).—K.P.A.
- PARKES, K. C. 1969. Two new subspecies of the Red-crowned Ant Tanager *Habia rubica* from Venezuela, with remarks on Colombian populations. Bull. Brit. Ornithol. Club, 89: 83-85.—*Habia rubica crissalis*, subsp. nov., is described from Mirasol, about 15 km S of Cumanocoa, Sucre, Venezuela, and *H. r. mesopotamia*, subsp. nov., from the Rio Yuruán, eastern Bolivar, Venezuela.—K.P.A.
- RIPLEY, S. D. 1969. Comment on the Little Green Heron of the Chagos Archipelago. Ibis, 111: 101-102.—This subspecies of *Butorides striatus* and those on other islands of the western Indian Ocean apparently derive from *B. s. javanicus* of India and southeast Asia.—W.B.R.
- ROUX, R., AND C. W. BENSON. 1969. A note on *Sarothrura lugens*. Bull. Brit. Ornithol. Club, 89: 67-68.—Describes a recently collected adult female *S. l. lugens* from Obala Camaroun, which is separable from *S. l. lynesii* only on the basis of size.—K.P.A.
- SCOTT, R. E. 1969. Wing formula of Willow Warbler and Chiffchaff. Bird Study, 16: 60-62.—An examination of 280 *Phylloscopus collybita* and 296 *P. trochilus*, shows the accepted method of differentiation of the two species, using the relative length of the second outermost primary, to be incorrect.—J.D.R.