PERIODICAL LITERATURE

EDITED BY GLEN E. WOOLFENDEN

ANATOMY AND EMBRYOLOGY

- BAUMEL, J. J. 1967. The characteristic asymmetrical distribution of the posterior cerebral artery of birds. Acta Anat., 67: 523-549.—The posterior cerebral arteries of birds normally and consistently exhibit asymmetry in configuration and distribution to the brain; based on study of 94 specimens representing 21 orders.—G.E.W.
- BAUMEL, J. J., AND L. GERCHMAN. 1968. The avian intercarotid anastomosis and its homologue in other vertebrates. Amer. J. Anat., 122: 1–18.—Dissections of the intrasphenoidal and intrastellar segments of the cerebral carotid arteries were made in 82 birds representing 21 orders. A well developed intercarotid anastomosis occurred in all specimens except for five species of the suborder Tyranni. The anastomosis serves as a substitute for the cerebral arterial circle of mammals and appears to have homologs in certain cartilagenous fishes, reptiles, and mammals—G.E.W.
- BOCK, W. J., AND R. S. HIKIDA. 1968. An analysis of twitch and tonus fibers in the hatching muscle. Condor, 70: 211-222.
- McNeil, R. 1968. Biometric analysis of testicular bilateral asymmetry of *Crotophaga major*. Ibis, 110: 87–89.—In a sample of 13 anis from the Orinoco delta, the right testis was significantly (at 99 per cent level) longer and wider than the left.—W.B.R.
- Ruschi, A. 1967. [The plumage and molt in *Phaethornis idaliae* (Bourcier and Mulsant).] Bol. Mus. Biol. Prof. Mello-Leitão, Zool., 27: 1-3.—Description of plumages in a common Brazilian hummingbird; the adult male definitive plumage requires 18 months to attain. (In Portuguese; English summary.)—E.E.
- Turček, F. J. 1966. On plumage quantity in birds. Ekol. Polska, Ser. A, 14: 617-634—The plumage weights of 249 individual birds of 91 species and 34 families, chiefly Palearctic, are expressed as percentages of the total body weight without stomach contents. Negative allometry (allomorphosis) was found. A positive correlation exists between the relative body surface and the percentage of plumage weight. On the basis of analysis of 83 birds of 47 species, the dry matter content of the avian body was 32 per cent and the water content 68 per cent.—F.J.T.
- Watson, G. E. 1968. Synchronous wing and tail molt in diving petrels. Condor, 70: 182-183.

BEHAVIOR

- BAKER, M. C. 1968. Feeding-perching behavior in the Mockingbird. Condor, 70: 268.
- Bengtson, S. A. 1968. Breeding behaviour of the Grey Phalarope in West Spitsbergen. Vår Fågelvärld, 27: 1-13.—The courtship displays of *Phalaropus fulicarius* are described and compared with those of *Phalaropus lobatus*.—L.d.K.L.
- Brackbill, H. 1968. A Slate-colored Junco display. Wilson Bull., 80: 236.
- BUTLER, R. W. 1968. Display of Black-throated Divers on sea. Brit. Birds, 61: 224-226.
- CHEKE, A. S. 1968. Copulation in the Hamerkop *Scopus umbretta*. Ibis, 110: 201–203.—Before copulating, the male of a pair seen in the field in Ethiopia strutted with crest erect carrying a piece of bark in his bill and false-mounted 10 times.—W.B.R.

- CODY, M. L. 1968. Interspecific territoriality among hummingbird species. Condor, 70: 270-271.
- Collias, N. E., and E. C. Collias. 1968. Anna's Hummingbirds trained to select different colors in feeding. Condor, 70: 273-274.
- COTTRELL, G. W. 1967. A problem species: *Lamprolia victoriae*. Emu, 66: 253–266.—Limited behavioral observations provide no solution to the problem of this species' familial relationship.—G.E.W.
- COUTLEE, E. L. 1968. Comparative breeding behavior of Lesser and Lawrence's Goldfinches. Condor, 70: 223-242.
- Ficken, M. S., and R. W. Ficken. 1968. Courtship of Blue-winged Warblers, Golden-winged Warblers, and their hybrids. Wilson Bull., 80: 161-172.
- Goodwin, D. 1967. Notes on behaviour of some Australian birds. Emu, 66: 237–252.—Behavior recorded for 11 passerines and 2 pigeons observed in South and Western Australia.—G.E.W.
- Hailman, J. P. 1968. Visual-cliff responses of newly-hatched chicks of the Laughing Gull *Larus atricilla*. Ibis, 110: 197–200.—In tests of 35-day-old chicks hatched in an incubator, 18 moved to avoid the "cliff" and 17 did not. Avoidance of cliffs by naive chicks of a ground nesting gull suggests that all gulls hatch with this ability and learn in early life whether it is more appropriate to freeze or to run when disturbed at the nest.—W.B.R.
- Kear, J., and P. A. Johnsgard. 1968. Foraging dives by surface-feeding ducks. Wilson Bull., 80: 231.
- LINKOLA, P. 1967. Der Dreizehenspecht, *Picoides tridactylus*, als Brutvogel in der Nachbarschaft des Hühnerhabichts, *Accipiter gentilis*. Ornis Fennica, 44: 21–24.— Of 21 Northern Three-toed Woodpecker nests 19 were in the immediate vicinity of those of Goshawks. The author thinks this habit provides protective advantage for the woodpecker. (In Finnish; German summary.)—M.D.F.U.
- LITTLE, J. d. V. 1967. Some aspects of the behavior of the Wattled Plover Afribyx senegallus (Linnaeus). Ostrich, 38: 259-280.—Detailed notes on breeding behavior.—M.A.T.
- MEYERRIECKS, A. J., AND J. BAIRD. 1968. Agonistic interactions between Blue-winged and "Brewster's" Warblers. Wilson Bull., 80: 150–160.
- MOREAU, R. E. 1967. Dust-bathing in Ploceidae? (letter). Ibis, 109: 445.—Often cited (originally by Mayr, Linsley, and Usinger, 1953: 120) as a behavior that links *Passer* with ploceids rather than finches, dust-bathing in fact is not known for ploceidae other than *Passer*.—W.B.R.
- Morse, D. H. 1968. The use of tools by Brown-headed Nuthatches. Wilson Bull., 80: 220-224.
- ORIANS, G. H., AND G. M. CHRISTMAN. 1968. A comparative study of the behavior of Red-winged, Tricolored, and Yellow-headed Blackbirds. Univ. California Publ. Zool., 84: 81 pp., 2 pls.—An outstanding treatise on the behavior of three closely related icterids, illustrated with first-rate drawings of display postures. The social organization of each species has affected their behavior patterns. Male Agelaius phoeniceus and A. tricolor have more kinds of vocalizations than displays; the reverse is true for Xanthocephalus and also for females of all three species. Many displays and vocalizations are similar, but striking differences do exist.—G.E.W.
- Perrins, C. 1968. The purpose of the high-intensity alarm call in small passerines. Ibis, 110: 200-201.—A bird in a flock often calls when a predator approaches, and authors (viz., Smith, Amer. Naturalist, 99: 59-63, 1965) have termed the behavior "altruistic" because it seems of value to the flock but not to the bird calling.

- Perrins heard single Great Tits, *Parus major*, in traps call in three cases, and found that the calls diverted his attention momentarily. If the calls affect predators the same way he reasons they have obvious survival value for the individual.—W.B.R.
- Sibson, R. B. 1967. The flocking of the Red-breasted Dotterel. Notornis, 14: 211-214.—Notes on post nuptial flocks of *Charadrius obscurus* at four localities in New Zealand.—G.D.S.
- SIMMONS, K. E. L. 1968. Food-hiding by Rooks and other crows. Brit. Birds, 61: 228-229.
- Snow, B. K., AND D. W. Snow. 1968. Behavior of the Swallow-tailed Gull of the Galapagos. Condor, 70: 252-264.
- STENDELL, R., AND L. WAIAN. 1968. Observations on food-caching by an adult female Sparrow Hawk. Condor, 70: 187.
- WILLIS, E. O. 1968. Studies of the behavior of Lunulated and Salvin's Antibrds. Condor, 70: 128-148.
- ZWICKEL, F. C. 1967. Early behavior in young Blue Grouse. Murrelet, 48: 2-7.— Description of vocalizations and brooding and feeding behavior of wild *Dendragapus obscurus* hens and chicks.—A.C.V.V.

DISEASES AND PARASITES

- AMERSON, A. B., Jr. 1967. Incidence and transfer of Rhinonyssidae (Acarina: Mesostigmata) in Sooty Terns (Sterna fuscata). J. Med. Entomol., 4: 197–199.— In Sooty Terns (460 adult and immature) from Johnston Atoll, central Pacific Ocean, incidence of rhinonyssids in adults increased (possibly due to courtship billing and feeding) during egg laying and decreased (possibly due to feeding of young) after eggs hatched. Low incidence in young terns (2 per cent) during the first 4 months of life suggests that transfer is not very efficient. During the 5th month incidence rose to 29 per cent, suggesting that the parasites are elsewhere in the host and require time to travel to the nasal cavity.—G.D.S.
- EDMAN, J. D., AND D. J. TAYLOR. 1968. Culex nigripalpus: seasonal shift in the bird-mammal feeding ratio in a mosquito vector of human encephalitis. Science, 161: 67-68.—Collections from Tampa and Vero Beach, Florida, show that this mosquito, a known vector of St. Louis encephalitis, fed mainly from birds in winter (November-May ratio, 78 bird:22 mammal in a sample of 663 engorged mosquitoes) and mainly from mammals (June-October ratio, 39 bird:61 mammal, sample 3,120) in two successive years. Change to mammal hosts coincides with onset of the rainy season and with peak mosquito populations, but the authors reject (prematurely, I believe) correlation of the feeding shift with seasonal changes in bird abundance. Seasonal change of hosts appears to be a basic characteristic of the mosquitoes that are both enzootic and epizootic vectors of arbovirus.—W.B.R.
- EMERSON, K. C., AND R. D. PRICE. 1968. A new species of *Dennyus* (Mallophaga: Menoponidae) from the Malaysian Spine-tailed Swift. Proc. Biol. Soc. Washington, 81: 87-90.—Holotype male *Dennyus giganteus* collected off type host *Chaetura gigantea gigantea* 14 October 1964 at Kabigaan Aborlan, Palawan, Philippines. Peters (Check-list of birds of the world, vol. 4, 1940) recognizes the avian genus *Hirundapus* for three species of swifts: *caudacutus*, *giganteus*, and *ernsti*. Several authors since Peters have included these swifts in the genus *Chaetura*; the *Dennyus* found on *Hirundapus* (*sensu* Peters) is unique in its large size, indented terminal abdominal segment, and male genitalia.—F.E.L.
- KIRMSE, P. 1966. Cnemidocoptic mite infestations in wild birds. Bull. Wildl. Dis.

- Assoc., 2: 86-99.—"Scaly leg" caused by mites of the genus *Cnemidocoptes*.—E.E. Kirmse, P. 1967. Pox in wild birds, an annotated bibliography. Wildl. Dis., no. 49: 1-10.
- Trainer, D. O., S. D. Folz, and W. M. Samuel. 1968. Capillariasis in the Gyrfalcon. Condor, 70: 276-277.
- WARNER, R. E. 1968. The role of introduced diseases in the extinction of the endemic Hawaiian avifauna. Condor, 70: 101-120.

DISTRIBUTION AND ANNOTATED LISTS

- Adams, B. 1968. Black-throated Gray Warbler and Virginia's Warbler banded in New Jersey. Wilson Bull., 80: 237.
- ALCORN, G. D. A winter record of the Trumpeter Swan in western Washington. Condor, 70: 185.
- Andrew, I. G. 1967. Farewell Spit and Golden Bay, January, 1967. Notornis, 14: 167–181.—Description of the Ornithological Society of New Zealand's second summer course (three 1-week sessions) held at Farewell Spit, including an annotated list of about 95 bird species found in the area.—G.D.S.
- Banko, W. E. 1968. Rediscovery of the Maui Nukupuu, Hemignathus lucidus affinis, and sighting of Maui Parrotbill, Pseudonestor xanthophrys, Kipahulu Valley, Maui, Hawaii. Condor, 70: 265–266.
- Bartle, J. A. 1967. Records of Cook's Petrels and Black Petrels from Great Barrier Island. Notornis, 14: 26–27.—Pterodroma cooki and Procellaria parkinsoni.—G.D.S.
- Behle, W. H. 1968. Records of the Snowy Owl for Utah. Wilson Bull., 80: 231-232.

 Benson, C. W., and M. P. S. Irwin. 1967. A contribution to the ornithology of Zambia. Zambia Mus. Pap., no. 1: 139 pp.—Detailed notes on range and taxonomy of some 240 species of Zambian birds, preparatory to the publication of the "Birds of Zambia." Zambia has now been well enough collected so that the apparent gaps in the ranges of many species may be assumed to be real. The authors' discussions of these gaps and their explanations in terms of habitat and interspecific competi-
- BLACKBURN, A. 1967. A brief survey of Cuvier Island. Notornis, 14: 3-8.—Includes annotated list of 32 bird species known to occur on this island off the northern tip of Coromandel Peninsula, New Zealand.—G.D.S.

tion are of particular interest.—M.A.T.

- CLARKE, G. 1967. Bird notes from Aden Colony. Ibis, 109: 516-520.—Detailed comment on 11 species, two new to Aden, and a list of 54 others, all seen at a sewage outlet in the summer of 1961.—W.B.R.
- Dawson, D. G. 1968. New Zealand tattler records. Notornis, 15: 39-42.—Review of New Zealand records of Wandering and Grey-rumped Tattlers (*Tringa incanus* and *T. brevipes*), which the author notes are sometimes listed as subspecies of *Heteroscelus incanus*.—G.D.S.
- Des Forges, G. 1968. An old record of Laughing Gull in Sussex. Brit. Birds, 61: 213-214.—On 2-9 July 1923.—H.B.
- EDEBURN, R. M. 1968. Breeding range extension of Saw-whet Owl in West Virginia. Wilson Bull., 80: 232.
- EISENMANN, E., AND H. LOFTIN. 1968. Birds of the Panama Canal Zone area. Florida Naturalist, 41: 57-60, 95.—A list of over 500 species known from the 10-mile wide Canal Zone and terminal cities, with some indication of status, and a bibliography.—E.E.
- EISENMANN, E., J. I. RICHARDSON, AND G. I. CHILD. 1968. Yellow-green Vireo collected in Texas. Wilson Bull., 80: 235.

- GARRIDO, O. H., AND F. G. Montaña. 1967. Nuevas adiciones para la avifauna de Cuba. Poeyana (Instituto de Biologia, Habana, Cuba), Ser. A. no. 51: 6 pp.—Six bird forms new to Cuba: Haematopus palliatus palliatus, Phalaropus fulicarius, Chordeiles minor vicinus, Empidonax flaviventris, Vireo gilvus gilvus, and Coereba flaveola bahamensis (on Cayo Tio Pepe on the north coast of Isabela de Sagua). All except the Coereba appear to be migrants from the north and all were collected in September, except the Phalaropus which were taken 30 January and 10 December. The Coereba, taken 31 March, may prove to be a Bahaman range extension. Two other Bahaman forms are now resident on Tio Pepe. (In Spanish; English summary.)—E.E.
- Garrido, O. H., and A. Schwartz. 1968. Antibios, reptiles y aves de la península de Guanahacabibes, Cuba. Poeyana, Ser. A, no. 53: 68 pp.—A report of the amphibians, reptiles, and birds of the Peninsula de Guanahacabibes, Pinar del Rio Province, Cuba. The list of 81 birds seen or collected is accompanied by brief notes on local abundance and distribution.—C.F.S.
- GOCHFELD, M. 1968. Notes on the status of the Tufted Duck (Aythya fuligula) in North America with a report of a new observation from Wyoming. Condor, 70: 186–187.
- Gore, M. E. J. 1968. A check-list of the birds of Sabah (Borneo). Ibis, 110: 165–196.—A briefly annotated list of 504 species, 356 of which are known to breed, in this area about the size of South Carolina at the northeast corner of Borneo. Habitats in Sabah, mostly lowland rain forest, are little disturbed but some large birds (storks, Great Argus Pheasant, imperial pigeons, Rhinoceros Hornbill) have decreased because of shooting. The Crocker Range including Mt. Kinabalu (13,455 feet) harbors a montane avifauna of about 70 species, a number of them endemic.—W.B.R.
- GRANT, P. J. 1968. Rose-breasted Grosbeak and Red-eyed Vireo in the Isles of Scilly. Brit. Birds, 61: 176-180.—Both species were first seen 6 October 1966, the female grosbeak stayed through 11 October.—H.B.
- Henderson, L. E. 1968. First record of the Emperor Penguin in New Zealand. Notornis, 15: 34-35.—Aptenodytes forsteri seen and photographed near Invercargill 5 April 1967.—G.D.S.
- JOHNSON, R. R., AND B. ROER. 1968. Changing status of the Bronzed Cowbird in Arizona. Condor, 70: 183.
- LAAKSONEN, A. 1967. On the distribution of the Marsh Warbler in Northern Karelia. Ornis Fennica, 44: 42-43—Acrocephalus palustris has expanded north to north-central Finland since the early 1960's, paralleling the similar expansion of Acrocephalus dumetorum. (In Finnish; English summary.)—M.D.F.U.
- LEWIS, R. A., M. L. MORTON, AND D. S. FARNER. 1968. A second large wintering population of White-crowned Sparrows, Zonotrichia leucophrys gambelii, in Washington. Condor, 70: 280.
- LIGON, J. D., AND R. P. BALDA. 1968. Recent data on summer birds of the Chiricahua Mountains area, southeastern Arizona. Trans. San Diego Soc. Nat. Hist., 15: 41–50.—An annotated list of 167 species. Important changes in status since 1958 are noted for Golden Eagle, Prairie Falcon, Harlequin Quail, Eastern Bluebird, and several hummingbirds. The first Arizona sighting of a Black Swift is reported.— J.R.J.
- LINDGREN, E. 1967. Possible nesting of the White-quilled Rock Pigeon in the Kimberley Region of Western Australia. Emu, 66: 383-386.—Petrophassa albipennis tentatively identified from photographs.—G.E.W.

- McCaskie, R. G. 1968. Noteworthy records of vireos in California. Condor, 70: 186
- McHenry, M. G. 1968. Mottled Ducks in Kansas. Wilson Bull., 80: 229-230.
- Musselman, T. E. 1968. Chuck-will's-widow and Wood Ibis in central Illinois. Wilson Bull., 80: 230.
- Newell, R. G. 1968. Influx of Great Shearwaters in autumn 1965. Brit. Birds, 61: 145-159.—Analysis of the occurrence of *Puffinus gravis* in unprecedented numbers off the western and northern coasts of Britain and Ireland, August-October 1965.—H.B.
- NILES, D. M. 1966. Observations on the summer birds of the Animas Mountains, New Mexico. New Mexico Ornithol. Soc. [P. O. Box 277, Cedar Crest, N. M.], publ. no. 2: 23 pp. \$.75.—Included is a brief description of the area and an annotated list including 85 bird species.—G.D.S.
- Olson, S. L., G. V. N. Powell, and E. Eisenmann. 1968. Distributional records from Cerro Campana, Panamá, with notes on a nesting of the Quail-Dove, *Geotrygon lawrencii*. Condor, 70: 179–180.
- Parslow, J. L. F. 1968. Eye-browed Thrushes in Northamptonshire, Hebrides and Scilly: a species new to Britain and Ireland. Brit. Birds, 61: 218-223.
- Ruschi, A. 1967. [Hummingbirds of the "San Matias" region in Bolivia.] Bol. Mus. Biol. Prof. Mello-Leitão, Zool., 29: 1-8.—In the Bolivian Chaco the writer collected 25 hummingbird species, of which 5 were unrecorded from Bolivia: Phaethornis nattereri, Chrysolampis mosquitus, Hylocharis s. sapphirina, Lophornis gouldii, and Heliactin cornuta. The plants whose flowers each species was visiting are indicated and in some cases the habitat niche is described. (In Portuguese; English summary).—E.E.
- SAWYER, M., AND M. I. DYER. 1968. Yellow-headed Blackbird nesting in southern Ontario. Wilson Bull., 80: 236-237.
- SCARLETT, R. J. 1967. Birds of the Heaphy River area. Notornis, 14: 31-33.—Sight records of 35 species.—G.D.S.
- SCARLETT, R. J. 1968. A second North Island locality for *Pachyornis elephantopus* (Owen). Notornis, 15: 36.
- Schorger, A. W. 1968. Breeding of the Trumpeter Swan at the Madison, Wisconsin, lakes. Wilson Bull., 80: 228-229.
- SHARROCK, J. T. R. 1968. Little Swift in Co. Cork: a species new to Ireland and Britain. Brit. Birds, 61: 160-162.
- Sibson, R. B. 1967. Long-tailed Skua ashore at Muriwai. Notornis, 14: 79-80.— First reported specimen of Holarctic *Stercorarius longicaudus* from southwestern Pacific.—G.D.S.
- Sick, H. 1967. Coryphaspiza melanotis marajoara subsp. nov. J. Ornithol., 108: 218-220.—A new subspecies of the Black-masked Finch from Marajó Island at the mouth of the Amazon; the species was previously unknown north of Goiás in central Brazil. Habitat and behavior are noted. (In German; English summary.)—E.E.
- SMITH, K. D. 1968. Swifts in Spain and Morocco (letter). Ibis, 110: 208.—Apus affinis is common in Morocco, and it, not A. caffer, is probably the white-rumped species lately found nesting in southern Spain (Ibis, 109: 113-115, 110: 106; Brit. Birds, 60: 286-290, 61: 36-41). All-dark swifts seen in Morocco in 1962-64 and reported as A. apus (Smith, Ibis, 107: 493-526, 1965) may in fact have been wintering A. unicolor from the Madeira and Canary islands.—W.B.R.

- SPELLERBERG, I. F. 1967. Distribution of the McCormick Skua (Catharacta maccormicki). Notornis, 14: 201-207.—Summarizes records of breeding and flying range since Murphy's 1936 treatment. Included is a survey of colonies in southern McMurdo Sound on 29 December 1965 and 14 January 1966 and notes from other dates.—G.D.S.
- Tomialojc, L. 1967. The Twite, Carduelis flavirostris (L.), in Poland and adjacent territories. Acta Ornithol. 10: 109–156.—Numerous and regular winter occurrences in Poland prompted a reassessment of status. The Twite is a regular winter visitor in western Poland, and the Polish population is thought to breed on the Kola Peninsula, although this area is rarely mentioned in the faunistic literature. Data on the species' winter ecology in Poland are given. (In Polish; English and Russian summaries.)—M.D.F.U.
- Townsend, W. C. 1968. Birds observed on San Nicolas Island, California. Condor, 70: 266-268.
- Uys, C. J., AND J. G. R. MACLEOD. 1967. The birds of the De Hoop Vlei region, Bredasdorp, and the effect of the 1957 inundation over a ten year period (1957–1966) on the distribution of species, bird numbers and breeding. Ostrich, 38: 233–254.
- VAN TETS, G. F., AND P. A. VAN TETS. 1967. A report on the resident birds of the territory of Christmas Island. Emu, 66: 309-317.—An annotated list of birds, including several endemic breeders such as *Sula abbotti* and *Fregata andrewsi*, for this Australian territory which lies 220 miles south of Java in the Indian Ocean. Phosphate mining soon may endanger certain species.—G.E.W.
- Wallace, G. J. 1968. Another August record of Kirtland's Warbler on its wintering grounds. Jack-Pine Warbler, 46: 7.—Near Nassau.—R.B.
- WARHAM, J. 1967. Snares Island birds. Notornis, 14: 122-139.—Annotated list of 37 bird species and a historical account of previous ornithological work on Snares Island (48°S, 166°E).—G.D.S.
- WOLFE, L. R. 1968. Recent breeding of Common Raven in west-central Texas. Condor, 70: 280-281.

ECOLOGY AND POPULATION

- AMES, P. L. 1968. L'histoire recente du Balbuzard (Pandion haliaetus) dans le sud du Connecticut, U.S.A. Aves, 5: 16-22.—Nearly a decade of censusing a large colony of Osprey at the mouth of the Connecticut River reveals a sharp decline in the population. Nesting failures were attributed to heavy predation, high tides destroying ground nests, and hatching failure. Samples of eggs and of fish brought to young were examined for DDT residues and compared with samples from the Potomac River of Maryland, and Maine, Rhode Island, and New Jersey. Fish from Connecticut and Rhode Island contain 5 to 10 times more residues than those of Maryland, where hatching success was twice that of Connecticut. The small quantities of DDT present in the eggs suggests that the embryos are not poisoned directly, but hatching may be affected. Similar information is given in Ames (J. Appl. Ecol., 3 (Suppl.): 87-97, 1966).—C.F.S.
- BLACKBURN, A. 1967. Feeding stations and food of the North Island Saddleback in November. Notornis, 14: 67-70.—The percentage of time *Philesturnus carunculatus* spent feeding in various parts of the forest and the food taken. Comparisons are made with previous observations for January, May, and August.—G.D.S.
- Burrows, W. M. 1968. Observations of the nesting association of the common Starling and House Sparrow. Notornis, 15: 31-33.—Sturnus vulgaris and Passer domesticus nested together in a 6-room nesting box.—G.D.S.

- EMLEN, J. T., AND J. A. WIENS. 1965. The Dickcissel invasion of 1964 in southern Wisconsin. Passenger Pigeon, 27: 51-59.—The authors took 60 roadside surveys to assess the size and extent of a massive invasion of Dickcissels in southern Wisconsin. Habitat preferences and associations with other grassland species were determined. Lack of previous surveys made it unclear whether the Dickcissel influx competitively replaced or was superimposed on the resident bird population. (See Wiens and Emlen below for additional surveys and analysis.)—J.J.D.
- FORDHAM, R. A. 1967. History and status of the Dominican Gull in Wellington. Notornis, 14: 144-153.—Larus dominicanus populations began to increase before 1890 and have grown rapidly in the last 25 years. In the latter period six colonies have shown a rapid increase, four being influenced by establishment and growth of "meatworks and refuse tips." The history of 21 mainland and 10 island colonies is given. Roosting sites are noted. The total population in December 1963 was about 15,200.—G.D.S.
- GIBSON, J. D. 1967. The Wandering Albatross (*Diomedea exulans*): results of banding and observations in New South Wales coastal waters and the Tasman Sea. Notornis, 14: 47-57.—Following brief descriptions of the albatrosses occurring in Australian waters is a presentation of capture techniques, weights, measurements, and plumages for some of 1,700 Wandering Albatrosses. Most of 61 recoveries are from South Georgia about 7,000 miles away. The many retraps are mentioned.—G.D.S.
- GILL, F. B. 1968. Birds of Rodriguez Island (Indian Ocean). Ibis, 109: 383-390.—
 Rodriguez, most remote and least known of the Mascarene Islands, is depressingly like the others (Mauritius, Reunion) in having lost most of its native biota. On a 1-week visit in September-October 1964, Gill found 17 species including three transient shorebirds new to the island (the known avifauna, living and extinct, totals 38 species) and the two endemic land-birds that survive, Bebrornis rodericana (a sylviid) and Foudia flavicans (a weaver finch). Both are limited to small relict patches of native forest where Foudia are still numerous, but only two Bebrornis were found. Gill saw little sign of the large seabird colonies thought to exist on islets of Rodriguez.—W.B.R.
- Guiler, E. R. 1967. The Cape Barren Goose, its environment, numbers and breeding. Emu, 66: 211-235.—Cereopsis have recovered from the drastic decline of 1960 and, although not so abundant as in 1964, are more widely dispersed. If productivity continues and predation, especially human, is kept low, the future of the species seems safe. Increased production could result in overpopulation problems. The Furneaux Group of islands northeast of Tasmania are especially important breeding localities. Much additional information on populations, breeding, and ecology is included.—G.E.W.
- HAFFER, J. 1967. On birds from the northern Chocó region NW-Colombia. Veröff. Zool. Staatssamml. München, 11: 123-149.—Report on a collection from Mutatá, on the northwest slope of the western Andes. Includes a stimulating zoogeographic discussion and comment on species pairs that replace each other in areas of seemingly continuous lowland forest (maps provided). The Chocó faunal region (wettest in South America) extends farther north on the west slope of the western Andes than on the Pacific watershed, probably because the drying trade winds are blocked. Data are included on wing and tail molt and on gonadal status. Chloropipo holochlora suffusa is new to the Colombian list. Campylorhynchus albobrunneus aenigmaticus of southwestern Colombia, which Meyer de Schauensee considers to

- show intermediacy with the cis-Andean C. turdinus, instead may indicate interbreeding with C. zonatus of northwestern Ecuador.—E.E.
- HIETAKANGAS, H. 1967. Nesting birds of Meltaus Game Research Area, northern Finland, in 1962–1964. Ornis Fennica, 44: 12–21.—Comparison of line transect census data from the 1940s and earlier shows an increase of southern species.—M.D.F.U.
- Hohn, E. O. 1967. The relevance of J. Christian's theory of a density-dependent endocrine population regulating mechanism to the problem of population regulation in birds (letter). Ibis, 109: 445-446.—Above certain population levels in some mammals stress caused by increased contact between individuals triggers endocrine events that depress fecundity (see Christian and Davis, Science, 146: 1550-1560, 1964). Hohn cites several cases in birds (caged cockerels, Willow Ptarmigan Lagopus lagopus) that seem similar.—W.B.R.
- JOHNSGARD, P. A., AND R. E. WOOD. 1968. Distributional changes and interaction between Prairie Chickens and Sharp-tailed Grouse in the Midwest. Wilson Bull., 80: 173-188.
- Keith, J. A. 1966. Reproduction in a population of Herring Gulls (Larus argentatus) contaminated by DDT. J. Appl. Ecol., 3 (Suppl.): 57-70.—Egg mortality and chick survival were determined in a population of Herring Gulls on northwestern Lake Michigan. Residues in nine apparently alive whole eggs averaged 19 ± 3 wet weight ppm of DDT, 202 ± 34 of DDE and 6.0 ± 0.9 of TDE. Residues in 10 dead eggs tended to be higher. Embryonic mortality, 30-35 per cent in 115 nests, was considered exceptionally high. Whole bodies of three chicks that died when 1 week old contained 35-48 wet weight ppm of DDT, 308-365 of DDE and 10-16 of TDE. Average total residues (DDT plus DDE plus TDE) in five healthy chicks were lower; 1.9 ± 0.7 in their brains, 7.0 ± 2.1 in breast muscle and 180 ± 22 in body fat. Overall success in 115 nests was 0.3-0.4 fledged young per pair, which was considered low.—A.C.V.V.
- McKenzie, H. R. 1967. Census records of godwit for Firth of Thames and Manukau Harbour. Notornis, 14: 18-21.—Limosa lapponica.—G.D.S.
- McKenzie, H. R. 1967. Census records of Knot for Firth of Thames and Manukau Harbour. Notornis, 14: 154–157.—Censuses of *Calidris canutus* from February 1951 to December 1966. Movements in relation to time of year are discussed and the relative abundance is contrasted with that of the Bar-tailed Godwit (*Limosa lapponica*).—G.D.S.
- McKenzie, H. R. 1967. Census records of Pacific Golden Plover for Firth of Thames and Manukau Harbour. Notornis, 14: 214-217.—Census data for *Pluvialis dominica* over a number of years and at different seasons, including comments on arrival and departure dates.—G.D.S.
- Nickell, W. P. 1968. Budgerigar winters in the open in Michigan. Wilson Bull., 80: 233.
- Pullen, R. C. 1967. Nesting success of a Pied Stilt colony. Notornis, 14: 76-79.— Data on 20 *Himantopus leucocephalus* nests.—G.D.S.
- RAITT, R. J., AND R. L. MAZE. 1968. Densities and species composition of breeding birds of a creosotebush community in southern New Mexico. Condor, 70: 193-205.
- ROBBINS, C. S. 1968. Net hours: a common denominator for the study of bird populations by banders. EBBA News, 31: 31-35.
- Rushi, A. 1967. [Hummingbirds of forest, scrub, savanna, field and grassland in Brazil, with their zoogeography (Trochilidae—Aves).] Bol. Mus. Biol. Prof. Mello-Leitão, Biol., 51: 1-23.—This useful paper is said to summarize a now completed

- "Trochilogeography" of Brazil. Brazil is divided into three zoogeographic provinces: the Hyleia or Amazonian, the Central (including most of the rest), and the Tupi or Atlantic (the southeastern coast from 14° 10′ to 29° 15′ S). A table lists each of the 150 forms of Brazilian hummingbirds, indicating the zoogeographic province inhabited, whether sedentary or "long distance" or "short distance" migrant, and respective habitats. Another table summarizes by zoogeographic province the number of species in each category of habitat and migratory tendency, with totals of forms and genera. A discussion of genera and endemism follows. General comments are given on habitat and nesting. Heliactin cornuta migrates from Bolivia to northeastern Brazil, apparently south of the Amazon. (In Portuguese; elaborate English summary.)—E.E.
- Segrè, A., J. P. Hailman, and C. G. Beer. 1968. Complex interactions between Clapper Rails and Laughing Gulls. Wilson Bull., 80: 213-219.
- Sibson, R. B. 1967. Speculating about shovelers near Auckland. Notornis, 14: 22-26.—Comments on increase of Anas rhynchotis.—G.D.S.
- SICK, H. 1967. [Rivers and periodic flooding in Amazonia as an obstacle to the avifauna.] Atlas do Simpósio sobre a Biota Amazonica (Zool.), 5: 495-520.—
 The ancestors of recent forms must have lived in the area before the Amazonian river system divided the populations; even now crossing the Amazon appears to occur, judging by the existence of a few forms whose major range is on an opposite side of the river close to the range of another conspecies or semispecies. The periodic flooding of level land by rising river water is a seasonal phenomenon to which some birds adapt by a kind of migration. (In Portuguese; long English summary.)—E.E.
- Sutton, G. M. 1968. Oriole hybridization in Oklahoma. Bull. Oklahoma Ornithol. Soc., 1: 1-7.—Hybridization between the Baltimore Oriole (*Icterus galbula*) and the Bullock's Oriole (*I. bullockii*) in western Oklahoma.—A.C.V.V.
- Thoresen, A. C. 1967. Ecological observations on Stanley and Green Islands Mercury group. Notornis, 14: 182–200.—Observations from 14 September to 17 December 1966 and visits to Green Island every second week from April to mid-July, 1967. Notes are included on Northern Blue Penguins (Eudyptula minor); Flesh-footed (Puffinus carneipes), Fluttering (P. gavia), and Allied Shearwaters (P. assimilis); Grey-faced (Pterodroma macroptera), White-faced Storm (Pelagrodroma marina), and Diving Petrels (Pelecanoides urinatrix); Pied Shags (Phalacrocorax varius); Southern Black-backed Gulls (Larus dominicanus); White-fronted Terns (Sterna striata); 14 species of land birds; and other vertebrates.—G.D.S.
- Turček, F. J. 1966. Über das Wiederauffinden von im Boden versteckten Samen durch Tannen- und Eichelhäher. Waldhygiene, 6: 215–217.—Nucifraga caryocatactes and Garrulus glandarius bury groups of two to five or more seeds of oak, beech, and mountain-pine from late August to October. During late autumn and winter the stores are rediscovered by trial and error. In late spring and in summer they are located by sighting the cotyledons and leaves. Only a part of the stores are rediscovered, but sylviculturists do not utilize the saplings of animal origin.—G.E.W.
- Wiens, J. A., and J. T. Emlen. 1966. Post-invasion status of the Dickcissel in southern Wisconsin. Passenger Pigeon, 28: 63-69.—Thirty-two roadside surveys taken to measure 1965 Dickcissel populations and to compare them with similar information obtained during a massive invasion in 1964 (see Emlen and Wiens above) showed a 60-75 per cent decline in 1965. The preferred habitat (alfalfa and mixed grasses and forbs) was the same in both years, but in 1965 fewer birds

occupied other less favorable vegetation types. Comparison of the 1964 and 1965 results suggests that the Dickcissel influx was superimposed on resident species rather than replacing them competitively.—J.J.D.

EVOLUTION AND GENETICS

- Hall, F. A., and S. W. Harris. 1968. Hybrid of Blue-winged Teal × Shoveller in northwestern California. Condor, 70: 188.
- HARRISON, J. M., AND J. G. HARRISON. 1968. Wigeon X Chiloe Wigeon hybrid resembling American Wigeon. Brit. Birds, 61: 169-171.
- Sick, H. 1967. "Bico de Ferro"—overlooked seedeater from Rio de Janeiro (Sporophila, Fringillidae, Aves). Anal. Acad. Brasileira Ciencias, 39: 307-314.—A population of Sporophila bouvreuil, the Capped Seedeater, never attains the definitive male plumage characteristic of the species. The author discusses henfeathered races and species on continents and islands, and the fact that in some populations of Brazilian birds the males change into a dull nonbreeding plumage, while in other populations they do not.—E.E.

GENERAL BIOLOGY

- Bell, H. L. 1967. Bower "painting" by Lauterbach's Bowerbird, Emu, 66: 353-355.—Chlamydera lauterbachi observed at Mount Hagen, New Guinea.—G.E.W.
- Benton, A. H. 1968. An unusual nesting situation of the Tree Swallow. Wilson Bull., 80: 233.
- BLACKBURN, A. 1967. Nesting of the Codfish Island Fernbird. Notornis, 14: 62-66.—Description of the habitat of *Bowdleria punctata* and records of several nests with eggs and some comments on voice.—G.D.S.
- BLACKBURN, C. F. 1968. Yellow-billed Magpie drowns it prey. Condor, 70: 281.
- Bravery, J. A. 1967. Field notes on the Oriental Cuckoo. Emu, 66: 267-271.— Remarks on *Cuculus saturatus* ecology, including diet, flight, and certain behavior.— G.E.W.
- Brode, E. D., Jr., and C. Maser. 1967. Analysis of Great Horned Owl pellets from Deschutes County, Oregon. Murrelet, 48: 11-12.—Small rodents, especially the Mountain Vole (*Microtus montanus*) made up 61.5 per cent of this sample from *Bubo virginianus*. Beatles, chiefly Cerambycidae, also were abundant, comprising 27.3 per cent of the total.—A.C.V.V.
- Burley, V. E. 1968. Incubation at low temperatures by the Zebra Finch. Condor, 70: 184.
- CALDER, W. A. 1968. Nest sanitation: A possible factor in the water economy of the Roadrunner. Condor, 70: 279.
- Carroll, A. L. K. 1967. Foods of the White-faced Heron. Notornis, 14: 11-17.—
 Contents of 89 stomachs show Ardea novaehollandiae is primarily a wetland-pasture and aquatic feeder. Although the birds are predominantly carnivores, eating various invertebrates and fish, 65 stomachs contained small amounts of plant material.—
 G.D.S.
- CARROLL, A. L. K. 1968. Foods of the harrier. Notornis, 15: 23-28.—Stomach contents of 124 Circus approximans showed their food to be predominantly birds, mammals, and insects, occasionally frogs and fish. Macerated plant material, found in many specimens, came from the gut of the prey. Fresh plant fragments appeared to have been taken accidentally. Proportions of each kind of food varied seasonally, but all the main categories were represented throughout the year.—G.D.S.

- CHENEY, S., AND P. W. CHENEY. 1967. Growth rate of nestling doves. Murrelet. 48: 14–16.—Nestling Mourning Doves were weighed daily from hatching to fledging.—A.C.V.V.
- COOPER, R. P. 1967. Unusual nesting sites of the Flame Robin. Emu, 66: 347-351. COURTNEY, J. 1967. Supplementary observations on juvenile Dollar-birds. Emu, 66: 337-340.
- Cowan, B. 1968. Welcome Swallows in Northern Hokianga, 1965–1967. Notornis, 15: 28–30.—General survey of *Hirundo neoxena* nests indicates a population increase during the study period. Describes nests, gives measurements, and records the contents of some.—G.D.S.
- DAVIS, R. E. 1968. Feeding experiments with Slate-colored Juncos and Tree Sparrows. IBBA News, 40: 20-24.
- Dawson, D. G. 1967. Roosting sparrows (*Passer domesticus*) killed by rainstorm, Hawke's Bay, New Zealand. Notornis, 14: 208–210.—Sex and age composition are given for 1,357 sparrows found dead on 3 and 4 February 1967 following high winds and heavy rains in Hastings. Ratios are compared with those obtained in nets and traps.—G.D.S.
- Erpino, M. J. 1968. Nest-related activities of Black-billed Magpies. Condor, 70: 154-165.
- ESCALANTE, R. 1968. Notes on the Royal Tern in Uruguay. Condor, 70: 243-247. FORSTÉN, P., AND A. TOUMINEN. 1967. The color phases of the Arctic Skua, Stercorarius parasiticus, in the archipelagoes of the Bothnian Sea, Gulf of Bothnia. Ornis Fennica, 44: 1-6.—In the small breeding population of the northern Baltic Sea color phase proportions differ from those of transients and stragglers found in the same area. (In Finnish; English summary.)—M.D.F.U.
- FOSTER, W. A. 1968. Total brood mortality in late-nesting Cliff Swallows. Condor, 70: 275
- Gill, H. B. 1967. The Yellow Wagtail Motacilla flava in northern Queensland. Emu, 66: 369-371.
- HARRIS, M. P. 1968. Egg-eating by Galápagos Mockingbirds. Condor, 70: 269-270. HAUKIOJA, E. 1967. Über die Farb- und Grössenvariation der in Westfinnland gefangenen Hühnerhabichte, *Accipiter gentilis*. Ornis Fennica, 44: 6-11.—Color variation, size, fat condition, and other data for 99 adult Goshawks banded in 1961-1966. (In German; Finnish summary.)—M.D.F.U.
- Jacobs, K. F. 1968. Capture of a Prairie Chicken by a Prairie Falcon. Bull. Oklahoma Ornithol. Soc., 1: 8-9.
- Jehl, J. R., Jr. 1968. The breeding biology of Smith's Longspur. Wilson Bull., 80: 123-149.—Color plate of female at nest.—F.E.L.
- Kikkawa, J., and Y. Yamashina. 1967. Breeding of introduced Black Swans in Japan. Emu, 66: 377-381.—Introduced Cygnus atratus breed during the boreal winter, but show a tendency to nest earlier each year.—G.E.W.
- Ligon, J. D. 1968. The biology of the Elf Owl, *Micrathene whitneyi*. Univ. Michigan Mus. Zool., Misc. Publ. no. 136: 1-70.—Foraging and breeding and nestling behavior of this often abundant owl were studied in southeast Arizona. The smallest of owls (35-55 g), it is almost exclusively insectivorous and occurs in any environment up to 7,000 feet that provides a nest cavity and abundant prey. As in other hole-nesting birds, the nest cavity is important in territory selection and courtship. Body temperature of an adult and juveniles in the nest cavity and nest cavity temperatures and humidity were recorded, as well as responses of captives to various

- ambient temperatures. Winter range, vocalizations, and molt are discussed.—F.E.L.
- MACDONALD, J. D. 1967. Variation in the Black-faced Wood-swallow. Emu, 66: 341-345.
- Mathiasson, S. 1968. First documented breeding of Kittiwake in Sweden. Vår Fågelvärld, 27: 43-51.—In 1967 on an island in the west coast archipelago, a young *Rissa* was found in a nest with a single parent that was banded in the Kattegat as a nestling in 1963. (English summary.)—L.D.K.L.
- MAYFIELD, H. F. 1968. Nests of the Red Warbler and Crescent-chested Warbler in Oaxaca, Mexico. Condor, 70: 271-272.
- McNeil, R., and A. Martinez. 1968. Notes on the nesting of the Short-tailed Pigmy-Tyrant (*Myiornis ecaudatus*) in Northeastern Venezuela. Condor, 70: 181–182.
- MURTON, R. K. 1968. Breeding, migration and survival of Turtle Doves. Brit. Birds, 61: 193-212.—"Of the eggs laid, 47 per cent hatch and 34 per cent are taken by predators; 82 per cent of the young hatched are fledged. The proportion of eggs which produce fledged young (breeding success) is 39 per cent. Breeding success increases throughout the season from 34 per cent in May to 48 per cent in July." Mortality rate of adults is about 50 per cent per annum.—H.B.
- Nickell, W. P. 1968. Mallards nest in trees and on walls. Jack-Pine Warbler, 46: 28-30.
- OHMART, R. D. 1968. Breeding of Botteri's Sparrow (Aimophila botterii) in Arizona. Condor, 70: 277.
- RAITT, R. J., AND R. D. OHMART. 1968. Sex and age ratios in Gambel Quail of the Rio Grande Valley, southern New Mexico. Southwestern Naturalist, 13: 27-34.— During 1959-1962, the sex ratio changed from nearly even among birds of the year to a preponderance of males among birds that had bred at least once. Fall age ratio of 3.29 immatures per adult declined to 1.50 in spring.—F.E.L.
- Reid, B. E., F. C. Kinsky, H. J. Cranfield, and R. C. Wood. 1967. Notes on recoveries and breeding behaviour of Adélie Penguins of known age at Cape Hallett. Notornis, 14: 140–143.—Study of breeding age and behavior of 31 individuals (50 different recoveries) of 457 Pygoscelis adeliae chicks banded during summers 1958–59 to 1961–62 and recovered 2 to 7 years later. Some information is included on breeding age, clutch size of known age birds, wandering, time of return to colony, strength of colony bond, pair bonds, and nesting sites.—G.D.S.
- Schwartz, P. 1968. Notes on two neotropical nightjars, Caprimulgus anthonyi and C. parvulus. Condor, 70: 223-227.
- SOPER, M. F. 1967. Some observations on Black Stilts. Notornis, 14: 8-10.—Comments on six nests of *Himantopus novaezealandiae.*—G.D.S.
- SOUTHERN, W. E. 1968. Further observations on foster-feeding by Purple Martins. Wilson Bull., 80: 234-235.
- WAKELIN, H. 1967. Fledging of young Shining Cuckoo. Notornis, 14: 71-75.— Chalcites lucidus young found in nest of Grey Warbler, Gerygone igata. Seven photographs.—G.D.S.
- Weller, M. W. 1968. Notes on some Argentine anatids. Wilson Bull., 80: 189-212. Wheeler, R. J., and L. E. Raice. 1967. Note on the predatory behavior of the Bald Eagle. Murrelet, 48: 20-21.—A Bald Eagle hit and carried a rubber Whitefronted Goose decoy for a short distance, suggesting occasional eagle predation on small to medium-sized geese.—A.C.V.V.
- Young, A. M. 1968. Predation by Catbirds on dragonflies. Condor, 70: 184.

MANAGEMENT AND CONSERVATION

CADE, T. J., C. M. WHITE, AND J. R. HAUGH. 1968. Peregrines and pesticides in Alaska. Condor, 70: 170–178.

ENDERSON, J. H., AND D. D. BERGER. 1968. Chlorinated hydrocarbon residues in Peregrines and their prey species from northern Canada. Condor, 70: 149-153.

FISHER, H. I. 1966. Midway's deadly antennas. Audubon, July-August. [Pages and volume not indicated on reprint.]—The first full year count (1964-65) of birds killed by striking the slanting cables supporting the 300 foot towers of the SCATTER communications apparatus indicates that $\frac{1}{6}$ of the world's population of 1,500,000 Laysan Albatross may be lost. Of 2,901 birds killed, 75 per cent were breeding adults. Most collide during high winds and rain, or periods of low visibility. One 2-day storm killed 437 adults. An average of 5 albatrosses collide on clear, quiet days. The SCATTER tower's toll is 20 times greater than other Midway towers, apparently because its supporting cables lack the insulators that make others more visible. The loss of one parent means the loss of the reproductive potential of two birds for 2 years. As 8 to 10 eggs are required to produce a breeding bird, the death of 2,200 breeding birds in 1 year offsets the annual production of $\frac{2}{3}$ of the colony. Not until 8 years elapse is the decreased number of young breeders entering the colony likely to be noticed. An apparently simple solution, bright colored plastic streamers attached to the cables, has been rejected. Relocation of the colonies away from the tower area, by breaking up unusable runways, has been suggested.—F.E.L.

Höglund, N. H. 1968. A method of trapping and marking Willow Grouse in winter. Viltrevy (Swedish Wildl.), 5: 95–101.—A noose is laid on the snow and a spring (contained in a metal tube) is released by a trigger string which tightens the noose around the foot of the bird. Long "hedges" are laid of fresh birch twigs and the snare-traps placed in 200-mm wide openings that the ptarmigans use as crossings. The trapped birds are marked with wing tags and coded paint markings along the inner webs of each primary which are only visible when the bird flies. Molted primaries retain the paint for 2–3 years and furnish valuable information on the bird's movements. Excellent photos and a detailed technical drawing and description.—M.D.F.U.

Saul, E. K. 1967. Birds and aircraft: a problem at Aukland's new international airport. J. Royal Aeron. Soc., 71: 366-376.—Discusses the geographical features contributing to the bird hazard, a history of the problem, bird species involved (migrant waders, gulls and terns, waterfowl, and land birds), daily movement patterns, seasonal patterns, and bird incidents. The following sections are devoted to a discussion of action taken against the birds: approaching the problem, environmental control, supplying alternative habitat, bird scaring, evaluation and prediction, and conclusion.—G.D.S.

MIGRATION AND ORIENTATION

Bellrose, F. C. 1966. Orientation in waterfowl migration. Pp. 73-99 in Animal orientation and navigation (R. M. Storm, Ed.). Proc. 27th Ann. Biol. Colloq., Corvallis, Oregon State Univ. Press.—Landscape features are used as guides whenever possible. Celestial cues may be resorted to for directional and perhaps navigational information. When neither of these methods is possible, the turbulent structure of the wind, probably in combination with reference points on earth, is used to maintain a course. Blue-winged Teal have greater navigational ability than Mallards, perhaps because teal cross the Gulf of Mexico in migration which

- requires greater navigational ability. Goalless orientation (i.e. initial flight by a released, displaced bird in a particular compass direction irrespective of breeding, winter, or flyway home location) appears to be motivated by stress and enables a bird to leave quickly. It may be followed by bicoordinate navigation.—C.F.S.
- Britton, P. L. 1967. Migration across the Mediterranean observed by radar (letter). Ibis, 109: 445.—"Swans" listed by Casement (Ibis, 108: 462-491, 1966) among birds seen crossing from Sicily toward Tunisia were probably Spoonbills *Platalea leucorodia*.—W.B.R.
- Cameron, R. A. D., L. Cornwallis, M. J. L. Percival, and A. R. E. Sinclair. 1967. The migration of raptors and storks through the near east in autumn. Ibis, 109: 489–501.—Work in southern Turkey and Lebanon in September, 1963–64–65, indicates that soaring migrants leave Europe at the Bosphorus, fly overland to round the northeast corner of the Mediterranean, and there meet migrants from interior Turkey and the Caucasus, the combined flight continuing south along the coast. Egyptian Vultures (Neophron), Honey Buzzards (Pernis), Common Buzzards (Buteo buteo), and White Storks predominate in early flights; Accipiter sp. and Aquila sp. in later September. Inland over the desert storks are numerous, raptors few.—W.B.R.
- FANKHAUSER, D. P. 1968. A comparison of migration between blackbirds and Starlings. Wilson Bull., 80: 225-227.
- HÖGSTRÖM, S., AND L. E. WISS. 1968. The occurrence of Bewick's Swan (Cygnus columbianus bewickii Yarrell) in Sweden and its migrations in the Baltic region. Vår Fågelvärld, 27: 14-42.—Documents a remarkable increase produced by a shift in its northeast-southwest migration routes. (English summary.)—L.D.K.L.
- NORD, L. 1968. The activities at Hartsö-Enskär Bird Station 1965–1967. Report No 1. Vår Fågelvärld, 27: 52–61.—A new station in the east coast archipelago of central Sweden. Total birds banded: 7,363; recoveries: 27. (English summary.)—L.p.K.L.
- Olrog, C. C. 1968. El anillado de aves en la Argentina, 1964-66. Quinto informe. Neotropica, 14: 17-22.—Argentine banding in 1964-66. Some recoveries suggest a loop migration between the coast and the interior. (In Spanish; English summary.)—E.E.
- Southern, W. E. 1968. Dispersal patterns of subadult Herring Gulls from Rogers City, Michigan. Jack-Pine Warbler, 46: 2-6.—Juveniles dispersed northward from the hatching site; their southward migration began late in the winter.—R.B.
- Tickell, W. L. N. 1967. Movements of Black-browed and Grey-headed Albatrosses in the South Atlantic. Emu, 66: 357-367—Over 38,000 individuals of *Diomedea melanophris* and *D. chrysostoma* banded on South Georgia and in the Falklands yielded 285 recoveries. *D. melanophris* primarily occurs off South Africa and *D. chrysostoma* off southeastern South America, with some records of both from the Australian region. Data on returns also are analyzed.—G.E.W.

MISCELLANEOUS

- Bassini, E. 1967. [The capture of the Blackbird (*Turdus merula* L.) in bird catching installations in Italy and their quantitative and qualitative evaluation.] Ric. Zool. Appl. Caccia, 43: 1-116.—Analysis of comparative data from installations in various parts of northern Italy year by year during the autumnal migration. A slight increase in captures has occurred in recent years. (In Italian; English, French, and German summaries.)—E.E.
- CATERINI, F. 1967. [Activity of the Tuscan Ornithological Observatory in the

- years 1941–1965.] Ric. Zool. Appl. Caccia, 44: 1–45.—Banding and recoveries of birds at the observatory at Pisa, Italy. Some 52,100 birds have been banded, including 8,583 Black Terns. (In Italian; English, French, and German summaries.)—E.E.
- FORDHAM, R. A. 1967. Durability of bands on Dominican Gulls. Notornis, 14: 28-30.—For size S lock-type aluminium-alloy bands on *Larus dominicanus*, rate of weight loss was constant and mean annual weight loss about 0.06 g. Bands may start falling off the 6th year and marked band loss may occur by about the 10th year.—G.D.S.
- Fritz, E. C. 1968. Let's make bird names helpful. BioSicence, 18: 492–494.—The author proposes about 70 descriptive names to replace present "unhelpful" English vernaculars for North American birds. "Black-nostril-bridged shrike" and "Black-squint yellow-headed warbler" may be more appropriate than Loggerhead Shrike and Blue-winged Warbler, but are not likely to have much future as common names.—W.B.R.
- Hall, B. P., and J. D. Macdonald. 1968. The sequence of bird lists (two letters). Ibis, 110: 208-210.—It is difficult to show relationships within groups if birds are listed in alphabetical order as Lack (Ibis, 110: 107-113, 1968) recently advocated.—W.B.R.
- KOEPCKE, H.-W., AND M. KOEPCKE. 1966. Las aves silvestres de importancia económica del Perú. Nos. 10-15, pp. 73-120. Ministerio de Agricultura, Servicio Forestal y de Caza, Lima, Peru. Price per number, Sucres 5 (about U.S. \$.30; available from Deutsche Buchhandlung, Casilla 1981, Lima, Peru).—These parts continue the valuable and inexpensive series on Peruvian birds of economic importance, a term given the broadest interpretation. The series was begun in 1963, and each number (after the first) includes 8 species, each on a separate page, with a good identifying drawing of the bird in its habitat, information on distribution of the species, subspecies in Peru, morphological characters, voice, field identification, separation from similar species, ecology, and relationship to man. Of the present six numbers, no. 10 concludes the ducks and treats the Cathartidae (including the little known and recently described Cathartes melambrotos); no. 11-12 the Accipitridae and most of the Falconidae; no. 13 Micrastur, Pandion, and the Cracidae; no. 14 concludes the Cracidae and Opisthocomus; no. 15 Psophia, Aramus, and the Rallidae. Much original information is included. Although in Spanish, the English name or names of each species also is given, which, since 1965, conforms with the usage of Meyer de Schauensee's recent books.—E.E.
- McNicholl, M. 1968. Trapping nesting Arctic Terns. IBBA News, 40: 8-11.
- MERTON, D. V. 1968. Narrative of the Kermadec Islands expedition 10/10/66–29/11/67. Notornis, 15: 3-22.—A description of the Ornithological Society of New Zealand's 25th Anniversary Expedition to the Kermadec Group. Describes the general area and summarizes some projects undertaken.—G.D.S.

PHYSIOLOGY

Allison, R. G., and R. E. Feeney. 1968. Penguin blood serum proteins. Arch. Biochem. Biophys., 124: 548-555.—An electrophoretic, immunological, and chromatographic comparison of serum proteins of the Adélie (Pygoscelis adeliae), Emperor (Aptenodytes forsteri), and Humboldt (Spheniscus humboldti) Penguins. Penguins were characterized by more multiple forms of serum transferrin when compared electrophoretically to chicken or human serum. The high sialic acid

- content of Adélie egg white was not reflected in the serum. Immunological studies indicate a close relationship among these species.—A.H.B.
- Bell, D. J., and J. Culbert. 1968. Plasma lactate in the hen—problems of its origin. Comp. Biochem. Physiol., 25: 627-637.—Plasma lactate is maintained at higher levels in hens than in mammals for long periods of time and is significantly higher in lines bred to lay than in poor layers. The origin of the higher lactate levels in the one line could not be established, but it appeared in some of the progeny when the two lines were crossed. Chicken erythrocytes neither consumed glucose nor produced lactate under either aerobic or anaerobic conditions, but the white cells of the blood and the cells of the bone marrow were metabolically active. The high plasma lactate may be correlated with changes in mineralization of bone.—A.H.B.
- CHANDOLA, A., AND J. P. THAPLIYAL. 1968. Endocrine regulation of body weight in the Spotted Munia, *Uroloncha punctulata*. Condor, 70: 248-251.
- Frankel, H. M., and D. Frascella. 1968. Blood respiratory gases, lactate, and pyruvate during thermal stress in the chicken. Proc. Soc. Exp. Biol. Med., 127: 997–999.—Increased ambient temperature produced a decrease in pCO₂, pH, lactate, and pyruvate in arterial blood.—A.H.B.
- Gaston, S., and M. Menaker. 1968. Pineal function: The biological clock in the sparrow. Science, 160: 1125-1127.—The perching activity of *Passer domesticus* kept in constant darkness has a persistent 24-hour rhythm; 32 birds whose pineal organs were removed lost this rhythm; 14 subjected to sham brain operations retained it. Sparrows lacking pineals are active during the light part of 24-hour light-dark cycles and they hold to this pattern for about a week when put back into constant darkness. The pineal organ is essential to the House Sparrow's ability to measure time in the dark, but how it works is not known. The incidence of jargon in papers about "circadian" rhythms is remarkably high.—W.B.R.
- JOHNSON, R. E., AND F. R. LOCKNER. 1968. Heart size and altitude in ptarmigan. Condor, 70: 185.
- Moss, R., and A. K. Lough. 1968. Fatty acid composition of depot fats in some game birds (Tetraonidae). Comp. Biochem. Physiol., 25: 559-562.—The linoleic and linolenic acid content in depot lipids and dietary lipids was high in the Red Grouse (Lagopus lagopus), Rock ptarmigan (Lagopus mutus), Black Grouse (Lyrurus tetrix), and Capercaillie (Tetrao urogallus). The depot fats were similar in composition to the fatty acids in the diet.—A.H.B.
- O'Hea, E. K., and G. A. Leveille. 1968. Lipogenesis in isolated adipose tissue of the domestic chick (Gallus gallus). Comp. Biochem. Physiol., 26: 111-120.—Isolated adipose has a low lipogenic capacity and depends more on acetate and pyruvate than glucose. Insulin did not stimulate acetate or pyruvate into fatty acids, but stimulated the incorporation of glucose into glyceride-glycerol.—A.H.B.
- OSUGA, D. T., AND R. E. FEENEY. 1968. Biochemistry of the egg-white proteins of the ratite group. Arch. Biochem. Biophys., 124: 560-574.—An extensive comparison of egg-white proteins by electrophoretic, physical, and chemical methods, plus examination of properties of purified fractions. The study included the cassowary (Casuarius aruensis), Emu (Dromiceius n. hollandiae), kiwi (Apteryx mantelli), Ostrich (Struthio camelus), rhea (Rhea americana), and tinamou (Eudromia elegans). Many of the individual constituents had similar properties, but definite differences were observed. Close biochemical and immunochemical relationships were found among the ratites, and they appear only remotely related to the tinamou.—A.H.B.

- RICKLEFS, R. E., AND F. R. HAINSWORTH. 1968. Temperature regulation in nestling Cactus Wrens: The development of homeothermy. Condor, 70: 121-127.
- 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: 137–163.—Physical properties, including erythrocyte and leucocyte numbers and differential ratio, pH, pCO₂ pO₂, O₂ saturation, hemoglobin levels, hematocrits, and mean cell volumes for an icterid species.—Authors' Abstract.
- Ward, P., and D. D'Cruz. 1968. Seasonal changes in the thymus gland of a tropical bird. Ibis, 110: 203-205.—In Yellow-vented Bulbuls, *Pycnonotus goiavier*, from Singapore the thymus was "enlarged" in 9 of 9 nestlings, 12 of 16 molting juveniles, and 7 of 7 molting adults; "absent" in 4 of 5 juveniles not in molt and 8 of 8 breeding adults. The thymus becomes enlarged during molt probably because of its role in producing lymphocytes for the increased blood volume required by growing feathers.—W.B.R.
- Wenn, R. V., and J. Williams. 1968. The isoelectric fractionation of hen's-egg ovotransferrin. Biochem. J., 108: 69-74.—Isoelectric fractionation is capable of separating the major and minor (electrophoretic) bands of ovotransferrin, and demonstrating the existence of three molecular species in the presence of non-saturating amounts of iron. These correspond to the metal free protein and the one- and two-iron atom complex. The binding constants for the two-iron atoms appear to be similar.—A.H.B.
- West, G. C., and M. S. Meng. 1968. The effect of diet and captivity on the fatty acid composition of Redpoll (Acanthis flammea) depot fats. Comp. Biochem. Physiol., 25: 535-540.—Fatty acids deposited in captive birds under constant conditions of light and temperature were the same regardless of the fatty acid composition of their diet. Trapped migrants, which feed on a natural supply of Chenopodium, contained three times as much linoleic acid as captive birds, and twice as much as wild birds in the breeding season. The authors suggest that photoperiod, temperature, and the physiological state of the bird (e.g. migrating, breeding, etc.) have a greater effect on fatty acid composition than does diet.—A.H.B.
- WILLIAMS, J. 1968. A comparison of glycopeptides from the ovotransferrin and serum transferrin of the hen. Biochem. J., 108: 57-67.—The amino acid sequences of the glycopeptide that carries the oligosaccharide are the same in ovotransferrin and serum transferrin, indicating that the carbohydrates are attached to the same site on the protein molecule. However, in the ovotransferrin the single oligosaccharide is composed of 4 mannose and 8 N-acetylglucosamine residues, while the carbohydrate of transferrin consists of 2 mannose, 2 galactose, 3 N-acetylglucosamine, and either 1 or 2 sialic acid residues.—A.H.B.
- ZAR, J. H. 1968. Standard metabolism comparisons between orders of birds. Condor, 70: 278.

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- Behle, W. H. 1968. A new race of the Purple Martin from Utah. Condor, 70: 166-169.
- CLANCEY, P. A. 1967. Miscellaneous taxonomic notes on African birds XXV. Durban Mus. Novitates, 8: 109-114.—Four new races described: Anthus leucophrys tephridorsus, from Kazungula Ranch, northwestern Rhodesia; Malaconotus olivaceus vitorum, from Sul do Save, Moçambique; Serinus canicollis griseitergum, from Umtali, Rhodesia; Emberiza flaviventris vulpecula, from Nairobi, Kenya.—M.A.T. CLANCEY, P. A. 1968. Subspeciation in some birds from Rhodesia. Parts I and II.

- Durban Mus. Novitates, 8: 115-152; 153-182.—An oddity in Clancey's treatment is his frequent listing of two subspecies from the same locality. In some cases he postulates winter wanderers, but in others he offers no explanation. If, as is probable, these are cases of intergradation they should be so designated. Clancey's treatment suggests a distinctness to the taxa that does not exist. One new subspecies, Glaucidium perlatum diurnum, is described from southeastern Rhodesia.—M.A.T.
- CRACRAFT, J. 1968. First record of the Turkey Meleagris gallopavo from the Pleistocene of Mexico. Condor, 70: 274.
- Falla, R. A. 1967. An Auckland Island rail. Notornis, 14: 107-113.—An interesting historical commentary on a lost type, "another" skin of which the authenticity has been doubted, and a recently acquired live rail of unknown age and sex from Aukland Islands. Present evidence indicates an endemic rail exists on Adams Island differing from Rallus p. pectoralis and assigned the name R. p. muelleri (Rothschild).—G.D.S.
- Galbraith, I. C. J. 1967. The Black-tailed and Robust Whistlers Pachycephala melanura as a species distinct from the Golden Whistler. Emu, 66: 289-294.—
 Pachycephala melanura probably breeds sympatrically with P. pectoralis along the east coast of Queensland and remains distinct; therefore it should be considered a separate species.—G.E.W.
- Goodwin, D. 1967. Australian pigeons: their affinities and status. Emu, 66: 319-336.—The Australian pigeons are discussed in reference to their affinities within the Columbidae. (From author's summary.)—G.E.W.
- IRWIN, M. P. S. 1968. A new race of the Bokmakierie Telophorus zeylonus (Linnaeus) (Aves) from the Chimanimani Mountains, Rhodesia. Arnoldia (Rhodesia), 3, no. 26: 5 pp.—Telophorus zeylonus restrictus subsp. nov., from Chimanimani Mts.—M.A.T.
- JEHL, J. R., JR. 1968. The systematic position of the Surfbird, Aphriza virgata. Condor, 70: 206-210.
- Maclean, G. L. 1967. Die systematische Stellung der Flughühner (Pteroclididae). J. f. Orn., 108: 203-217.—The sandgrouse should be placed in their own suborder Pterocli close to the Charadrii. (English summary.)—H.C.M.
- MEDWAY, D. G. 1967. Avian remains from new caves in the Taumatamaire District. Notornis, 14: 158–160.—Subfossil remains of 13 species, including 3 now extinct and 3 new for the area.—G.D.S.
- Orr, R. T., AND J. D. WEBSTER. 1968. New subspecies of birds from Oaxaca (Aves: Phasianidae, Turdidae, Parulidae). Proc. Biol. Soc. Washington, 81: 37-40.—
 Colinus virginianus harrisoni, Turdus assimilis oaxacae, and Ergaticus ruber rowleyi.
 —C.F.S.
- RECHER, H. F., AND J. T. RECHER. 1966. A contribution to the knowledge of the avifauna of the Sierra de Luquillo, Puerto Rico. Caribbean J. Sci., 6: 151-161.— Observations on the avifauna of Luquillo National Forest, incidental to a population study. The authors believe that the White-necked Crow (Corvus leucognaphalus) is now extinct, and question the validity of the supposed Puerto Rican race of the Broad-winged Hawk (Buteo platypterus brunnescens) based on a single individual collected in August 1935, suggesting that this species is only a migrant from North America.—E.E.
- RIPLEY, S. D., AND D. S. RABOR. 1968. Two new subspecies of birds from the Phillippines and comments on the validity of two others. Proc. Biol. Soc. Washington, 81: 31-36.—New subspecies Otus scops mirus and Micromacronus leytensis

- sordidus from Mindanao. Rhabdornis inornatus collected on Leyte agree with R. i. inornatus from Samar, and specimens from Mindanao invalidate the separation of R. i. alaris and R. i. zamboanga. A series of Chloropsis flavipennis from Leyte indicates the species is monotypic and that subspecific recognition of Mindanao birds is unwarranted.—C.F.S.
- Rowley, I. 1967. A fourth species of Australian corvid. Emu, 66: 191-210.—

 Corvus mellori can be distinguished from C. coronoides by smaller size, bifurcated and shorter hackles, well feathered inter-ramal area, call, behavior, and movements. These two species breed sympatrically in southern New South Wales.—G.E.W.
- Saunders, G. B. 1968. Seven new White-winged Doves from Mexico, Central America, and southwestern United States. North Amer. Fauna, no. 65: 30 pp.—

 Zenaida a. asiatica of Texas and northeastern México and Z. a. mearnsi of Arizona migrate to Central America and western México respectively. The resident populations of the species from México and Central America are divided into seven races. Descriptions and measurements are given for each.—G.E.W.
- SCARLETT, R. J. 1967. A sub-fossil record of a Barn Owl in New Zealand. Notornis, 14: 218–219.—Bones of *Tyto alba* from a subfossil deposit at Tom Bowling Beach, Northland.—G.D.S.
- SHORT, L. L., Jr. 1968. Variation of Ladder-backed Woodpeckers in southwestern North America. Proc. Biol. Soc. Washington, 81: 1-10.—Three subspecies of *Dendrocopos scalaris* are analyzed for length of wing, tail, fourth rectrix, and gonys, width of bill, and depth of black bar in 550 specimens. *D. s. mojavensis* and *D. s. yumaensis* do not deserve subspecific rank.—G.G.R.
- TATE, J., JR., AND L. D. MARTIN. 1968. Horned Lark and Black-billed Magpie from the Pleistocene of Nebraska. Condor, 70: 183.
- ZISWEILER, V. 1967. Numerische Taxonomie und ornithologische Systematik. J. f. Orn., 108: 474-479.—A general discussion of the possibilities of numerical taxonomy in ornithology.—H.C.M.

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