

RECENT LITERATURE

EDITED BY GLEN E. WOOLFENDEN

ANATOMY AND EMBRYOLOGY

- BOCK, W. J. 1964. Kinetics of the avian skull. *J. Morphol.*, **114**: 1-42.—An important paper on the structure, mechanics, and function of the movable upper jaw in birds, with details on the associated parts of the skull, jaw muscles, and ligaments.—E. E.
- DOMINIC, C. J. 1963. On the testicular asymmetry in some Indian birds. *Proc. Zool. Soc. Calcutta*, **16**: 141-146.—Asymmetry was found in nine of 58 species (621 specimens) examined. The left testis was larger than the right in six species; the right testis was larger in three species. An outward bending of the left testis was characteristic of all species of woodpeckers studied.—M. K. R.
- PASTERNAK, L., AND D. J. McCALLION. 1962. Heterogeneous inductions in the chick embryo. *Canadian J. Zool.*, **40**: 585-591.
- SAAYMAN, J. E. 1963. 'N Bydrae tot die skedelmorfologie van *Passer melanurus melanurus*. *Ann. Univ. Stell.*, **38**: 189-213.—The nasal capsules and associated glands, the membrane bones of the nasal capsules and palatal region, the hyoid apparatus, and the trigeminus musculature of *Passer m. melanurus* are described and compared with those of other birds. (In Afrikaans; English summary.)—Author's abstract.
- SALT, W. R. 1963. The composition of the pectoralis muscles of some passerine birds. *Canadian J. Zool.*, **41**: 1185-1190.—Although both the pectoralis major and pectoralis minor muscles of a number of species of passerines are red, the pectoralis majors are composed of dark and pale fibers. The two fibers differ in size and in fibrillar and non-fibrillar content. In the pectoralis minor muscles of the snow bunting, *Plectrophenax nivalis*, the ratio of dark to pale fibers is about two to one but this ratio is different in other species. It is suggested that the two types of fiber serve different functions and thus affect the mode of flight.—Author's abstract.
- SCHOONEES, J. 1963. Some aspects of the cranial morphology of *Colia indicus*. *Ann. Univ. Stell.*, **38**: 215-246.—The nasal capsules, nasal glands, and articular-basitemporal articulation of *Colia indicus* are described. The histological relationships between the bones of the palate and the structures concerned with cranial kinesis were investigated.—Author's abstract.
- SUTTON, G. M. 1964. On plumages of the young Lesser Prairie Chicken. *Southwestern Nat.*, **9**: 1-5.—Included are a color plate of a two or three day old chick, a black and white plate of a two-week old bird, and a photograph comparing young specimens of *Tympanuchus pallidicinctus* and *T. cupido pinnatus*. The earlier literature on this subject contains a number of errors.—G. E. W.

BEHAVIOR

- ALDER, L. P. 1964. Unusual behaviour of non-breeding Shelduck. *British Birds*, **57**: 31-32.—Catching and dropping wind-blown tufts of sheep's wool.—H. B.
- ANDERSON, J. 1964. Ring Ouzels attacking adder at their nest. *British Birds*, **57**: 128.
- BAIRD, A. C. 1964. Rook and Hooded crow hanging upside down from wires. *British Birds*, **57**: 182-183.
- BERGMAN, G. 1964. Zum Problem der gemischten Kolonien: Tonband- und Dresurversuche mit Limicolen und Anatiden. *Ornis Fennica*, **41**: 1-13.—The Ruddy

- Turnstone, Tufted Duck, Redshank, and Common Eider breed in close association with larid colonies. Of these four species, the turnstone and Tufted Duck show greater reaction to the alarm calls of gulls and terns and to the calls of other species. All four species developed conditioned responses to sound recordings, sometimes played in association with a dummy goshawk, of calls of larids that initially produced no response. The turnstone and Tufted Duck learned much faster. (In German.)—M. D. F. U.
- BOSWALL, J. 1964. Song of White's Thrush. *British Birds*, **57**: 183-184.
- BUSSE, P., AND J. GOTZMAN. 1962. [Nesting competition and mixed clutches among some birds inhabiting next-boxes.] *Acta Ornithol.*, **7**: 1-32.—Observations on eight, common, hole-breeding species are critically analyzed, and many aspects of aggressive nest site competition are illuminated. Four species are called aggressors because they do not normally avoid holes with remnants of old nests, and because they nest later than the four 'host' species; thus, when nesting holes are scarce, they aggressively take over active nests of the host species. The host species also exhibit nest site competition but do not accept holes with a nest already started. Mixed and double clutches occur only among the host species (but may contain host and aggressor eggs), and at least 11 out of 29 mixed clutches were successful. These phenomena are explained as interplay of breeding, territorial, aggressive, and defensive behavior patterns. (In Polish; brief English summary.)—M. D. F. U.
- CAMPBELL, B. 1964. Curlews displaying in autumn. *British Birds*, **57**: 33.
- DOWNES, [Mrs.] J. R. 1963. Can Blue Jays swim? *Bird-Banding*, **34**: 221.—A juvenile swam 25 feet after falling in a pond.—G. W. C.
- GOBEIL, R. E. 1963. The comparative feeding behavior of wintering Evening Grosbeaks and Purple Finches. *Bird-Banding*, **34**: 217-218.—Heaviest feeding by both species occurred early in the morning. During the day Evening Grosbeaks were more sporadic in appearance at a feeder but fed more rapidly than Purple Finches. Aggressive behavior and postures of both species are described.—G. W. C.
- GRAY, P. H. 1963. A checklist of papers since 1951 dealing with imprinting in birds. *Psychol. Rec.*, **13**: 445-454.—A list of 158 titles, arranged alphabetically by author.—M. K. R.
- HOLCOMB, L. C. 1964. Behavior of a semi-tame horned owl. *Jack-pine Warbler*, **42**: 239-242.
- HORI, J. 1964. Shelduck hiding with young. *British Birds*, **57**: 78-79.
- JÓZSEFIK, M. 1961. [Seasonal trophic mutualism between certain species of Ardeidae and *Aspius aspius* (L.) on the Volga delta.] *Acta Ornithol.*, **6**: 1-9.—The large predatory minnow, *Aspius aspius*, scares small fish into shallow water where herons are feeding; the herons drive these small fish back into the habitat of the fish predator. (In Polish; English and Russian summaries.)—M. D. F. U.
- KEITH, L. B. 1964. Territoriality among wintering Snowy Owls. *Canadian Field-Nat.*, **78**: 17-24.
- LANYON, W. E., AND F. B. GILL. 1964. Spectrographic analysis of variation in the songs of a population of Blue-winged Warblers (*Vermivora pinus*). *Amer. Mus. Novitates*, no. 2176: 18 pp.—The population studied is a "pure" one (i.e., showing little or no evidence of introgression with *V. chrysoptera*) at Huntington, Long Island, New York. The term "song" is given a useful, broad, working definition. As in other parulids, each male has a repertoire of two distinct song types, called I and II, whose respective functional significance is as yet unclear. All songs are composed of combinations of four distinct components (A, B, C, D); type I songs are A, AB, ACB or AC, while type II are CDAC, ACDC or DAC. Type I may or

- may not include component B, but never D; type II always includes D but never B. Individual males showed very little variation within their given song types. This study is considered as groundwork for future studies in areas of overlap with *V. chrysoptera*, from which greater song variability in *V. pinus* has been reported.—K. C. P.
- LEES, H. T. 1964. Immobility saving Mallard from dogs. *British Birds*, **57**: 202.
- OAKLEY, C. T. 1964. Blackbird and Song Thrush sharing a nest. *British Birds*, **57**: 204.—Both species laid, both incubated, the adult Blackbird disappeared, the young of both species hatched. No further observations were made.—H. B.
- TINBERGEN, N., AND M. NORTON-GRIFFITHS. 1964. Oystercatchers and mussels. *British Birds*, **57**: 64–70.—Observations on opening methods.—H. B.
- WATSON, A., AND D. JENKINS. 1964. Notes on the behaviour of the Red Grouse. *British Birds*, **57**: 137–170.—Discussion of distraction behavior (four types), voice, sexual behavior, territorial behavior (preservation of pair bond is often more important to male than defense of territorial boundary), and aggression (shown by day-old chicks).—H. B.
- WILLIAMS, K. 1964. Tawny Owls feeding young on fish. *British Birds*, **57**: 202–203.

DISEASES AND PARASITES

- AMARAL, V. DO, AND E. H. BIRGEL. 1964. [Note on the presence of *Cnemidocoptes pilae* Lavoipierre and Griffiths, 1951 (Acarina: Sarcoptiformes) in *Melospittacus undulatus* in Brazil.] *Arq. Ins. Biol.*, São Paulo, **31**: 53–55.—The first record of this parasite in Brazil. (In Portuguese; English summary.)—M. K. R.
- BORG, K., AND K. BAKOS. 1963. Dissemination of myxomatosis by birds. *Nord. Vet. Med.* 1963: 159–166.—Virulent virus was found on the beak and claws of *Buteo buteo* and *Corvus corone cornix*. (From *Wildl. Rev.*, no. 111: 42, 1963.)—J. S. M.
- BRENES, R. R., AND G. ARROYO. 1962. Helmitos de la República de Costa Rica XX. Algunos tremátodos de aves silvestres. *Rev. Biol. Trop.*, Univ. Costa Rica, **10**: 205–277.—Several new trematode species from *Momotus momota conexus*, *Facana s. spinosa*, *Gymnostinops montezuma*, *Crotophaga sulcirostris*, and *Leucopternis semiplumbea* in Costa Rica. (English summary; from *Helminthol. Abstr.*, **33**: no. 1510, 1964.)—J. S. M.
- CLARK, G. M. 1964. One new and one previously unreported nasal mite (Acarina, Speleognathinae) from North American birds, with observations on speleognathid taxonomy. *J. Parasitol.*, **50**: 158–162.—Hosts: Eared Grebe from California; Greater and Lesser yellowlegs and Pectoral Sandpiper from Texas.—J. S. M.
- CORNWELL, G. 1963. New waterfowl host records for *Sarcocystis rileyi* and a review of sarcosporidiosis in birds. *Avian Diseases*, **7**: 212–216.—New hosts are *Aythya americana*, *A. valisneria*, and *Bucephala clangula*. The life cycle is briefly reviewed. (From *Wildl. Rev.*, no. 111: 49, 1963.)—J. S. M.
- CORNWELL, G. 1963. Observations on waterfowl mortality in southern Manitoba caused by *Echinuria uncinata* (Nematoda, Acuariidae). *Canadian J. Zool.*, **41**: 699–703.—Cygnetts of the Trumpeter Swan and ducklings of the Blue-winged Teal, Canvasback, and Redhead were killed by this nematode. Symptoms of the disease and table of known hosts of *E. uncinata* are given. (From *Helminthol. Abstr.*, **33**: no. 147, 1964.)—J. S. M.
- CORNWELL, G. W., AND A. B. COWAN. 1963. Helminth populations of the Canvasback (*Aythya valisneria*) and host-parasite environmental interrelationships. *Trans. 28th N. Amer. Wildl. Conf.*: 173–199.—Diseased birds from the Detroit River had

- nearly five times as many helminths as "normal" ones. Other observations note that adults feeding on large amounts of *Chara* had few helminths; ducklings carried five times as many worms as adults; ducklings from marshes were more heavily parasitized than those from pot holes; large numbers of tapeworms were present by the second week of life; the peak of helminth infection appears in ducklings 8-9 weeks old and decreases after 12 weeks. (From Wildl. Rev., no. 112: 59, 1963.)—J. S. M.
- DERYO, A. 1964. [Preliminary communication on studies of Mallophaga of rapacious birds of the Lublin province.] Wiad. Parasitol., **10**: 89-90.—Reports 10 species of lice from 68 hawks and owls of the genera *Accipiter*, *Aquila*, *Asio*, *Buteo*, *Falco*, *Milvus*, *Strix*, and *Tyto*. (In Polish; English summary.)—J. S. M.
- DUBOIS, G., AND R. L. RAUSCH. 1964. Studies on the helminth fauna of Alaska. XL. *Strigea gruis* sp. n., a trematode parasite of *Grus canadensis* (L.). J. Parasitol., **50**: 445-447.—Of 13 Sandhill Cranes from Alaska three were infected; this is the second trematode species described from gruiform birds.—J. S. M.
- FRANCIS, D. W., H. CAMPBELL, AND G. R. NEWTON. 1963. A study of *Salmonella* infection in a flock of Chukar Partridges. Avian Diseases, **8**: 501-506.—Reusing pens for new birds without prior disinfection led to a build-up of infection that continued from year to year. (From Wildl. Rev., no. 113: 59, 1964.)—J. S. M.
- GALVIN, T. J. 1964. Experimental *Toxocara canis* infections in chickens and pigeons. J. Parasitol., **50**: 124-127.—Infective eggs of this nematode were injected by pipette directly into the crop of young chickens and pigeons. Infective stage larvae were recovered from both hosts (primarily from the liver) for the duration of the study, 142 days.—J. S. M.
- HARRISON, J. M. 1963. Aspergillosis in an immature Bewick's Swan. Wildfowl Trust, 14th. Ann. Rept. 1961-1962: 165.—"It seems likely that the fungus had been ingested with bread fed to the swan by the general public." (From Wildl. Rev., no. 113: 64, 1964.)—J. S. M.
- HAYSE, F. A., AND P. JAMES. 1964. *Trichomonas gallinae* isolated from the White-fronted Dove (*Leptotila verreauxi*). J. Parasitol., **50**: 89.—First record for this dove; from Texas.—J. S. M.
- HERMAN, C. M. 1963. Disease and infection in the Tetraonidae. J. Wildl. Mgmt., **27**: 850-855.—States that ". . . no single etiologic agent is universally responsible for disease in grouse." The biology of pathogens and hosts as well as the influence of ecological factors must be considered as a whole if the impact of disease on the survival or population fluctuations of grouse is to be correctly assessed. (From Wildl. Rev., no. 112, 1963.)—J. S. M.
- HODASI, J. K. M. 1963. Helminths from Manitoba birds. Canadian J. Zool., **41**: 1227-1231.—Nine trematode, five cestode, six nematode, and one acanthocephalan species were recorded from 85 birds examined. (From Wildl. Rev., no. 113: 56, 1964.)—J. S. M.
- HUANG, S. I. 1962. [Helminths of game birds of the lower Amur River.] Tr. Gel'mintol. Lab. Akad. Nauk SSSR, **12**: 284-316.—Examination of 563 birds of the orders Galliformes, Columbiformes, Charadriiformes, and Anseriformes disclosed 69 trematode, 65 cestode, 42 nematode, and 6 acanthocephalan species. (In Russian; from Wildl. Rev., no. 112: 42, 1963.)—J. S. M.
- KELLEY, G. W. 1962. Removal of *Syngamus trachea*, gapeworm, from pheasants with subcutaneously injected disopenol. Poultry Sci., **41**: 1358-1360.—Injections of 8.7 to 10.5 mg per kg caused some mortality but reduced the number of worms or eliminated them. (From Helminthol. Abstr., **33**: no. 266, 1964.)—J. S. M.

- KEYMER, I. F., AND D. K. BLACKMORE. 1964. Diseases of the skin and soft parts of wild birds. *British Birds*, **57**: 175-179.
- KHALIL, L. F. 1963. On some nematodes from the Sudan with the description of a new species. *J. Helminthol.*, **37**: 221-234.—*Syphaciella sudanica* n. sp. from sandgrouse, *Pterodes senegallus*. (From *Helminthol. Abstr.*, **33**: no. 638, 1964.)—J. S. M.
- KORPACZEWSKA, W. 1963. Tapeworms of aquatic birds in some Mazurian lakes. *Acta Parasitol., Polonica*, **11**: 315-336.—Examination of 751 birds belonging to 50 species collected from mesotrophic and eutrophic lakes. Results are given in extensive tables. The composition of the parasite (cestode) fauna depends on ecological factors (e.g. diet), and not the systematic position of the host.—M. K. R.
- KORPACZEWSKA, W. 1963. Formation of a population structure and cestode complexes in water birds. *Acta Parasitol. Polonica*, **11**: 337-344.—Studies on cestode size and density relationships in *Phalacrocorax carbo*, *Podiceps cristatus*, and *Fulica atra*.—M. K. R.
- KUROCHKIN, Y. U., K. M. RIZHIKOV, AND N. M. GUBANOV. 1961. [The nematode fauna of anseriform birds in Verkhoyan.] *Tr. Astrakhanskogo Gosvdarstvennogo Zapovednika* no. 5: 326-329. (In Russian.)
- KUROCHKIN, Y. U., AND V. I. ZABLOTSKI. 1961. [Helminth fauna of Laridae in the region of the Caspian Sea.] *Tr. Astrakhanskogo Gosudarstvennogo Zapovednika* no. 5: 296-318. (In Russian.)
- LOCKE, L. N. 1963. Multicentric neurofibrosarcoma in a Canada Goose, *Branta canadensis*. *Avian Diseases*, **7**: 196-202.—Probable infection from female from eastern shore of Maryland. (From *Wildl. Rev.* no. 111: 51, 1963.)—J. S. M.
- LUMSDEN, R. D., AND J. A. ZISCHKE. 1963. Studies on the trematodes of Louisiana birds. *Zeit. f. Parasitenk.*, **22**: 316-366.—Reports 31 species of trematodes, including 1 new species each from *Rallus elegans*, *Gallinula chloropus cachinnans*, and *Hydranassa tricolor*; 46 text figures, five tables, and a bibliography of more than 90 titles are included. (From *Helminthol. Abstr.*, **33**: no. 1526, 1964.)—J. S. M.
- MACDONALD, J. W. 1963. Mortality in wild birds. *Bird Study*, **10**: 91-108.—In all, 206 birds of 59 species in Britain were examined to determine causes of death; nine per cent of the deaths were from parasitism and eight per cent from infection. (From *Wildl. Rev.*, no. 112: 41, 1963.)—J. S. M.
- MACDONALD, J. W. 1963. Another case of fungus disease affecting a Robin. *British Birds*, **56**: 462.—“Feather loss and thickening of the skin of a robin (*Erithacus rubecula*), presumably caused by fungus (*Trichophyton gallinae*).” (From *Wildl. Rev.*, no. 113: 56, 1964.)—J. S. M.
- MAJUMDAR, G., AND G. K. CHAKRAVARTY. 1963. New nematodes from birds. Part I. *Zeit. f. Parasitenk.*, **23**: 1-10.—Indian hosts: *Sturnopastor contra*, *Acridotheres tristis*, *Molpastes cafer bengalensis*, and *Coturnix coturnix*. (From *Helminthol. Abstr.*, **33**: no. 1626, 1964.)—J. S. M.
- MANDAL, A. K., AND M. M. CHAKRAVARTY. 1963. Studies on some aspects of avian Coccidia (Protozoa: Sporozoa). 1. A new species of *Dorisiella* from the Indian tree pie, *Crypsirina vagabunda* (Latham). *Proc. Zool. Soc. Calcutta*, **16**: 147-151.—*Dorisiella vagabunda* n. sp. is described from the intestine of the Indian tree pie.—M. K. R.
- MAXFIELD, B. G., W. M. REID, AND F. A. HAYES. 1963. Gastrointestinal helminths from Turkeys in southeastern United States. *J. Wildl. Mgmt.*, **27**: 261-271.—Authors found 4 trematode, 8 cestode, and 13 nematode species in 390 wild, 76 pen-raised wild, and 68 domestic Turkeys. The high incidence of parasitism found

- in wild Turkeys suggests that parasites may be introduced into new areas during trapping and transfer programs.—J. P. R.
- MUKHIN, A. B. 1963. [Control of *Hymenolepis* infections in ducks.] Veterinariia, **40**: 55–56.—Treatment with 100 ml of 0.3% CuSO₄ followed by 50 ml of Glauber's salt after a starvation period of 15 to 18 hours caused passage of this tapeworm. (In Russian; from Helminthol. Abstr., **33**: no. 282, 1964.)—J. S. M.
- MYERS, B. J., R. E. KUNTZ, AND W. H. WELLS. 1962. Helminth parasites of reptiles, birds, and mammals in Egypt. VII. Check list of nematodes collected from 1948 to 1955. Canadian J. Zool., **40**: 531–538.
- NOSEK, J., M. GRESIKOVA, J. REHACEK, O. KOZUCH, AND P. ALBRECHT. 1962. The role of birds in a natural focus of tick-borne encephalitis. IV. Experimental infection of pheasants (*Phasianus colchicus*) with tick-borne encephalitis virus. J. Hyg. Epidemiol. Microbiol. and Immunol. (Prague), **6**: 478–482.—“Neither subcutaneous nor intramuscular inoculations were followed by detectable presence of virus in the blood, brain or internal organs.” (In English with French, German, and Spanish summaries; from Wildl. Rev., no. 113: 58, 1964.)—J. S. M.
- ODENING, K. 1963. Echinostomatoidea, Notocotylata und Cyclocoelida (Trematoda, Digenea, Redioinei) aus Vögeln des Berliner Tierparks. Bijdragen tot de Dierkunde, **33**: 37–60.—Keys, descriptions, illustrations, and taxonomic discussion.—M. K. R.
- PAVLOV, A. V., AND T. P. SERGEEVA. 1961. [Nematodes of Ralliformes in the U. S. S. R.] Tr. Gelmintol. Lab. Acad. Nauk SSSR, **11**: 180–193.—Hosts include *Fulica atra*, *Crex crex*, *Porzana porzana*, *P. parva*, *P. pusilla*, *Rallus aquaticus*, and *Gallinula chloropus*. (In Russian; from Helminthol. Abstr., **33**: no. 905, 1964.)—J. S. M.
- PEMBERTON, R. T. 1963. Helminth parasites of three species of British gulls, *Larus argentatus* Pont., *L. fuscus* L. and *L. ridibundus* L. J. Helminthol., **27**: 57–88.—Data are given on the incidence and intensity of infection with 18 trematode, 8 cestode, 8 nematode, and 1 acanthocephalan species recovered from 164 gulls from northern England. From Helminthol. Abstr., **33**: no. 906, 1964.)—J. S. M.
- PRICE, R. D., AND J. R. BEER. 1963. Species of *Colpocephalum* (Mallophaga, Menoponidae) parasitic upon the Falconiformes. Canadian Entomol., **95**: 731–763.—Discussion of 25 species of *Colpocephalum* (sen. lat.) from hawks, 8 of which are new. Keys to species from the Falconiformes and Strigiformes are included.—M. K. R.
- RAYSKI, C., AND M. A. M. FAHMY. 1962. Investigation on some trematodes of birds from the east Scotland. Zeit. f. Parasitenk., **22**: 186–195.—Reports 11 trematode species from 32 aquatic birds of 14 species. (From Helminthol. Abstr., **33**: no. 1536, 1964.)—J. S. M.
- RIZHIKOV, K. M., A. V. PAVLOV, A. K. AKHMEROU, AND V. L. KONTRIMAVICHUS. 1961. [Report of the Amur Helminthological Expedition (314 SGE) in 1958.] Tr. Gelmintol. Lab. Akad. Nauk SSSR, **11**: 373–392.—Helminths found have not as yet been identified, but the scientific names and incidence of infection of hosts examined, including 2,097 birds, are given in this report. (In Russian; from Helminthol. Abstr., **33**: no. 983, 1964.)—J. S. M.
- RIZHIKOV, K. M., AND T. N. TIMOFEEVA. 1961. [The helminth fauna of wild and domestic aquatic birds in the Amur region.] Tr. Gelmintol. Lab. Akad. Nauk SSSR, **11**: 213–222.—In all, 11 cestode, 15 trematode, 12 nematode, and 1 acanthocephalan species were recovered from 90 wild and 24 domestic Anseriformes examined. (In Russian; from Helminthol. Abstr., **33**: no. 907, 1964.)—J. S. M.

- ROSLIEN, D. J., P. L. FORE, AND A. O. HAUGEN. 1962. Blood parasites in relation to pheasants and quail in Iowa. *Proc. Iowa Acad. Sci.*, **69**: 239-244.—Examination of wild and pen-reared pheasants (364) and Bobwhite (673) were negative for *Haemoproteus*, *Leucocytozoon*, and *Plasmodium*. Experiments to infect pheasants with *Plasmodium* and Bobwhite with *Leucocytozoon* were unsuccessful. (From *Wildl. Rev.*, no. 113: 56, 1964.)—J. S. M.
- SAVAGE, A., AND J. M. ISA. 1962. An unusual blood condition in a Trumpeter Swan. *Canadian J. Zool.*, **40**: 1314-1315.
- SCHAD, G. A. 1962. Helminth parasitism in a flock of domestic geese introduced to Arctic summer conditions in Canada. *Canadian J. Zool.*, **40**: 1-4.
- SINGAL, D. P. 1963. On a new species of the cestode genus *Hymenolepis* Weinland, 1858, from the common babbler, *Turdoides caudatus caudatus* (Dumont, 1825). *Proc. Zool. Soc. Calcutta*, **16**: 135-139.
- SINGAL, D. P. 1963. On a new cestode belonging to the genus *Anonchotaenia* Cohn, 1900, from the House Sparrow, *Passer domesticus indicus* Jardine and Selby, 1835. *Proc. Zool. Soc. Calcutta*, **16**: 215-219.—*Anonchotaenia antirima* n. sp. is described from House Sparrows collected at Delhi.—M. K. R.
- SPASSKI, A. A. 1961. [Classification and faunistic problems of cestodes of birds of the Middle Volga area.] *Tr. Gel'mintol. Lab. Akad. Nauk SSSR*, **11**: 251-258.—A total of 16 species of tapeworms were collected from 24.3 per cent of 276 birds, representing 12 orders. (In Russian; from *Helminthol. Abstr.*, **33**: no. 909, 1964.)—J. S. M.
- SPASSKI, A. A., AND L. P. BOBOUA. 1961. [Pseudophyllidae and Tetraphyllidae from aquatic birds in Kamchatka.] *Tr. Gel'mintol. Lab. Akad. Nauk SSSR*, **11**: 259-269.—Hosts include: *Mergus merganser*, *M. albellus*, *Podiceps griseigena*, *Anas platyrhynchos*, *Nyroca marila*, *Larus ridibundus*, *L. shistisagus*, *Gavia stellata*, and *Sterna hirundo*. (In Russian; from *Helminthol. Abstr.*, **33**: no. 910, 1964.)—J. S. M.
- SPASSKI, A. A., AND M. D. SONIN. 1961. [Report of the Kamchatka Helminthological Expedition (317GE) in 1959.] *Tr. Gel'mintol. Lab. Akad. Nauk SSSR*, **11**: 414-431.—Helminths found have not yet been identified but the scientific names of and incidence of infection in 1,711 vertebrates, including birds, are given in this report. (In Russian; from *Helminthol. Abstr.*, **33**: no. 988, 1964.)—J. S. M.
- TRAINER, D. O., AND G. W. FISCHER. 1963. Fatal trematodiasis of coots. *J. Wildl. Mgmt.*, **27**: 483-486.—*Sphaeridiotrema*, presumably *S. globulus*, was incriminated in the death of over 700 *Fulica americana* in Wisconsin over a two-year period. Mortality occurred primarily during spring migration. (From *Wildl. Rev.*, no. 111: 54, 1963.)—J. S. M.
- TUREMURATOU, A. T. 1962. [Helminths of the Ardeidae and Iari of the Amu-Darya River Delta.] *Tr. Gel'mintol. Akad. Nauk SSSR*, **12**: 263-277.—Examination of 189 birds of 12 species showed the presence of 23 species of trematodes, 7 of cestodes, 14 of nematodes and 2 of acanthocephalans. (In Russian; from *Wildl. Rev.*, no. 112: 42, 1963.)—J. S. M.
- WASHINGTON, D. 1964. Unusual growths on feet of Chaffinches. *British Birds*, **57**: 184. Resembling epidermoid cancers.—H. B.
- WILLIAMSON, W. M., E. B. TILDEN, AND R. E. GETTY. 1963. Mycotic infections occurring during an 8-year period at the Chicago Zoological Park, Brookfield, Illinois. *Bijdragen tot de Dierkunde*, **33**: 83-85.—Reports 40 species of birds infected, mostly with *Aspergillus*.—M. K. R.

DISTRIBUTION AND ANNOTATED LISTS

- ANDREW, D. G. 1964. Birds in Ireland during 1960-1962. *British Birds*, **57**: 1-10.—A summary of the more significant observations.—H. B.
- ATKINSON, R. N. 1963. Flammulated Owl nesting in British Columbia. *Canadian Field-Nat.*, **77**: 59-60.
- BAILLIE, J. L. 1963. Three bird immigrants from the old world. *Trans. Roy. Canadian Inst.*, **34**: 95-105.—A short history of the Black-headed Gull (*Larus ridibundus*), Little Gull (*L. minutus*), and Cattle Egret (*Bubulcus ibis*), in the new world, with emphasis on Ontario.—M. K. R.
- BELCHER, M., AND R. W. NERO. 1964. First specimen record of Pine Warbler for Saskatchewan. *Blue Jay*, **22**: 97-99.
- BENSON, C. W., AND M. P. S. IRWIN. 1964. Some additions and corrections to *A Check list of the birds of Northern Rhodesia*. No. 5. *Occ. Papers Natl. Mus. S. Rhodesia*, **4**(no. 27B): 106-127.
- BERLIOZ, J., AND J. ROCHE. 1963. Étude d'une collection d'oiseaux de la Somalie. *Bull. Mus. Natl. d'Hist. Nat.*, **35**: 580-592.—An annotated list of 111 species and subspecies.—M. K. R.
- BOND, J. 1961. Notes on birds of Cozumel Island, Quintana Roo, Mexico. *Caribbean J. Sci.*, **1**: 41-47.—Brief comment on 34 species (nominal mention of 30 others) seen in February, 1961, of which 6 are here first reported for Cozumel; 21 species known only from collections of G. F. Gaumer should be considered hypothetical, because the specimens may have come from the adjacent mainland. Special notes on natural history and relationships of *Melanoptila glabrirostris* and *Vireo bairdi*.—W. B. R.
- BOND, J. 1962. The hypothetical element of the avifauna of Tobago. *Caribbean J. Sci.*, **2**: 113-118.—No authentic Tobago specimens are known for 30 species that have been credited to the avifauna.—W. B. R.
- BORRERO H., J. I., AND J. H. CAMACHO. 1961. Notas sobre aves Colombianas. *Novedades Colombianas*, **1**: 427-429.—Colombian specimens of *Anas bahamensis* are assigned to the subspecies *rubrirostris*. (In Spanish.)—E. E.
- BORRERO H., J. I., AND J. H. CAMACHO. 1961. Notas sobre aves de Colombia y descripción de una nueva subespecie de *Forpus conspicillatus*. *Novedades Colombianas*, **1**: 430-445.—*Forpus conspicillatus metae* subsp. nov. described from Laguna de Tanané, about 25 km southeast of Villavicencio, Meta, Colombia. *Tiaris fuliginosa* is recorded for the first time from Colombia. Notes and distributional data on 12 other species. (In Spanish; English summary.)—E. E.
- BRAZIER, F. H. 1964. Status of the Mockingbird in the northern Great Plains. *Blue Jay*, **22**: 63-75.—A detailed compilation, especially for Saskatchewan, showing recent range extension within this region.—R. W. N.
- DREW, L. C., AND C. J. PHILLIPS. 1964. Observations concerning the birds of Beaver Island, Charlevoix County, Michigan. *Jack-pine Warbler*, **42**: 234-238.—An island of 55 square miles located 19 miles west of the Michigan mainland has a recorded avifauna of 167 species.—R. B.
- ERSKINE, A. J., AND R. C. STEIN. 1964. A re-evaluation of the avifauna of the Cariboo parklands. *Repts. Provincial Mus.*, 1963, pp. 18-35.—An annotated list of the birds in this area of British Columbia, with notes on status changes since Munro's list, published in 1955.—M. K. R.
- FISHER, D. 1964. First occurrence of the Ruff in Western Australia. *Western Australian Nat.*, **9**: 90-91.—Second specimen of *Philomachus pugnax* collected in Australia; obtained 29 October 1963 at the Lower King River near Albany.—M. K. R.

- GERZENSTEIN, E., AND J. CHEBATAROFF. 1963. Notas sobre distribución y migración de aves en el Uruguay. Univ. de la Republica, Fac. Human. y Cien. Montevideo, 15 pp.—The avifauna of Uruguay is divided into sedentary species (ca. 60 per cent); summer breeders; winter visitants from North America present in the austral summer; winter visitants from the Antarctic islands, southern South America and the Andes; and occasional or irregular visitants. More South American birds migrate than is generally realized. (In Spanish; good English summary.)—E. E.
- HAFFER, J. 1961. Notas sobre la avifauna de la Peninsula de la Guajira. Novedades Colombianas, **1**: 374–396.—Notes on the avifauna of the arid Guajira Peninsula in northeastern Colombia. *Caprimulgus cayennensis insularis* is reported as new to Colombia. (In Spanish; English summary.)—E. E.
- HAMERSTROM, F., AND F. HAMERSTROM. 1963. Range of the Red-bellied Woodpecker in Wisconsin: 1963. Passenger Pigeon, **25**: 131–136.
- HEATWOLE, H., L. KELTS, R. LEVINS, AND F. TORRES. 1963. Faunal notes on Culebra Island, Puerto Rico. Caribbean J. Sci., **3**: 29–30.—Adds sight records of five species to the list of known birds.—W. B. R.
- HORVATH, L., AND G. TOPAL. 1963. The zoological results of Gy. Topal's collectings in south Argentina. 9. Aves. Ann. Hist. Nat. Mus. Natl. Hung. Zool., **55**: 531–542.—Collection of 266 specimens of 76 species made chiefly near El Bolsón, Río Negro, El Hoyo, and Cholila, Chubut. Some southern range extensions are indicated, and sight observations of some rare birds are mentioned, including *Buteo ventralis* on the Piltriquitron range in late June and *Falco kreyenborgi* at Piedra Pintada in late July (collected on 15 August 1961 by K. Kovacs). (In English.)—E. E.
- HOY, G., F. CONTINO, AND E. R. BLAKE. 1963. Addendas a la avifauna Argentina. Bol. Acad. Natl. Ciencias Rep. Argentina, **43**: 295–308.—A list of 370 forms collected from northwestern Argentina including the following forms new to Argentina: *Falco r. rufigularis*, *Gnorimopsar chopi sulcirostris*, *Catharus dryas maculatus*, *Catamblyrhynchus diadema citrinifrons*, *Basileuterus signatus flavovirens*, *Ciccaba h. huhula*, and *Gtotrygon frenata margaritae*.—M. K. R.
- JORDANIA, R. G. 1961. Avifauna of Tbilisi and its vicinity. Acta Ornithol., **6**: 83–105.—A complete check-list of the avifauna around Tiflis, Georgia, in the Caucasus. (In Russian; English and Polish summaries.)—M. D. F. U.
- KEMSIES, E., AND W. RANDLE. 1964. A distributional summary and some behavioral notes for Smith's Longspur, *Calcarius pictus*. Canadian Field-Nat., **78**: 28–31.
- LEOPOLD, N. F. 1963. Checklist of birds of Puerto Rico and the Virgin Islands. Univ. Puerto Rico Agr. Exp. Sta., Bull. 168, 119 pp.
- LOFTIN, H. 1963. Notes on autumn bird migrants in Panama. Caribbean J. Sci., **3**: 63–68.—Observations on 57 species of North American migrants include records from extensive mist-netting. Describes flights of "thousands upon thousands" of Turkey Vultures along the Pacific slope in the direction of Colombia.—W. B. R.
- LOFTIN, H., AND S. OLSON. 1963. Notes on spring migrants in Panama (Aves). Caribbean J. Sci., **3**: 191–195.—Records of 48 species in spring migrations of 1962–63, including many taken in mist nets. In contrast to the autumn flights, spring migration of hawks and Turkey Vultures occurs mainly on the Atlantic slope of the Isthmus.—W. B. R.
- LONG, R. C. 1964. Some observations from Portuguese East Africa. Ostrich, **35**: 17–21.—118 species observed from 1951–58; ecological notes for 43 species.—M. K. R.

- MARR, B. A. E., AND J. T. R. SHARROCK. 1964. Black-browed Albatross off Co. Cork. *British Birds*, **57**: 179-180.
- MCCANDLESS, J. B. 1961. Bird life in southwestern Puerto Rico. I. Fall migration. *Caribbean J. Sci.*, **1**: 3-12.—Summary of the author's observations since 1950. Status and extreme dates for each migrant, and average dates of occurrence for the more common species. Major groups represented are shorebirds, Parulidae, and ducks.—W. B. R.
- MCCANDLESS, J. B. 1962. Bird life in southwestern Puerto Rico. II. The winter season. *Caribbean J. Sci.*, **2**: 27-39.—Mainly a tabular comparison of Christmas bird counts of 1921-28 and 1955-60. Most species increased on the recent counts because of better coverage, but all resident ducks and marsh birds decreased greatly. Migrant ducks and Myrtle Warblers are more common in Puerto Rico when winters are severe in southern U. S.—W. B. R.
- MINTON, C. D. T. 1964. Stilt Sandpiper on Lincoln/Norfolk/Cambridge borders. *British Birds*, **57**: 125-126.—19-20 July 1963.—H. B.
- NERO, R. W. 1963. Birds of the Lake Athabasca region, Saskatchewan. *Saskatchewan Nat. Hist. Soc., Special Publ. No. 5*, 143 pp. Illus.
- NERO, R. W., AND C. S. HOUSTON. 1963. Additions to the check-list of Saskatchewan birds. *Blue Jay*, **21**: 132-133.
- OLIVARES, A., AND J. H. CAMACHO. 1961. Dos nuevas garzas para Colombia. Noveidades Colombianas, **1**: 424-426.—*Nyctanassa violacea bancrofti* (presumably a migrant) and *Zebrius undulatus* recorded as new to Colombia. (In Spanish.)—E. E.
- OLROG, C. C. 1963. Lista y distribucion de las aves argentinas. *Opera Lilloana IX*, Univ. Nacional de Tucuman, Tucuman, Argentina. 377 pp.—Essentially a check-list with introductory material on migrations, life zones, and ecology.—M. K. R.
- PAUL, W. A. B. 1964. Birds of Kleena Kleene, Chilcotin District, B. C., 1959-1962. *Canadian Field-Nat.*, **78**: 13-16.
- REES, E. I. S. 1963. Marine birds in the Gulf of St. Lawrence and Strait of Belle Isle during November [1960-1961]. *Canadian Field-Nat.*, **77**: 98-107.
- ROLLE, F. J., H. HEATWOLE, R. LEVINS, AND F. TORRES. 1964. Faunal notes on Monito Island, Puerto Rico. *Caribbean J. Sci.*, **4**: 321-322.—Report of the first landing by biologists on this islet three miles northwest of Mona includes sight records of seven seabirds.—W. B. R.
- SAVILE, D. B. O., AND D. R. OLIVER. 1964. Bird and mammal observations at Hazen Camp, northern Ellesmere Island, in 1962. *Canadian Field-Nat.*, **78**: 1-7.
- SCHOUTEDEN, H. 1963. La faune ornithologique des districts du Bas-uele et du Haut-uele (Contributions a l'Ornithologie de la Republique du Congo. IV.). Koninkrijk Museum Voor Midden-Afrika, Tervuren, Belgie Zologische Documentatie nr. 4.—Annotated checklist with locality records.—M. K. R.
- SCOTTER, G. W., AND L. E. ERICKSON. 1963. Birds of the Taltson River region, N. W. T. *Blue Jay*, **21**: 64-67.—A brief, annotated list of 44 species recorded in 1962.—R. W. N.
- SHRUBB, M. 1964. Stilt Sandpiper in Sussex. *British Birds*, **57**: 126-127.—7 August 1963.—H. B.
- SIMKIN, D. W. 1963. A Surf Scoter nesting record for northwestern Ontario. *Canadian Field-Nat.*, **77**: 60.
- SKEAD, C. J. 1964. Birds of the Amatole Forests, King William's Town and Stutterheim, C. P. *Ostrich*, **35**: 142-159.
- SMYTHIES, B. E. 1963. Borneo bird notes from various hands. *Sarawak Mus. J.*, **11**: 268-290.—Field notes, range extensions, etc., of 99 species. Recently collected

- specimens, of *Stercorarius parasiticus* and *Sturnus sinensis*, bring the total number of species recorded from this area to 556.—M. K. R.
- SUGDEN, L. C. 1963. A Garganey duck in the wild in Alberta. *Blue Jay*, **21**: 4-5.
- TAMAYO, Y. 1963. Ornitología de las islas Margarita, Coche y Cubagua (Venezuela): (Primera Parte). *Mem. Soc. Cienc. Nat. La Salle*, **23**: 75-112.—General description of area with notes on migratory movements, zoogeographical observations, ecology, and conservation. (In Spanish.)—M. K. R.
- TAMAYO, Y. 1963. Ornitología de las islas Margarita, Coche y Cubagua (Venezuela): (Segunda Parte). *Mem. Soc. Cienc. Nat. La Salle*, **23**: 167-249.—Second part of the annotated checklist of this region, including local names of birds and taxonomic, distributional, and ecological notes. (In Spanish.)—M. K. R.
- TOSCHI, A. 1962. Contributo alla ornitofauna d'Etiopia. *Ric. Zool. appl. alla Caccia (Supplemento)*, **2**: 301-412.—Annotated list of birds compiled from 800 specimens collected in Ethiopia from 1939 to 1942, with taxonomic and ecological notes. (In Italian.)—M. K. R.
- WADE, D. E. 1964. Snowy Plover taken in Saskatchewan. *Blue Jay*, **22**: 95-97.
- WALLACE, D. I. M. 1964. Least Sandpiper in the Isles of Scilly. *British Birds*, **57**: 124-125.—4 October 1962.—H. B.

ECOLOGY AND POPULATIONS

- ALVARADO, J. R. 1964. Las cuevas Grande y Clara de Terezén, Estado Monagas.—Estudio espeleológico. *Soc. Venezolana Cienc. Nat.*, **25**: 252-260.—Large colonies of the Oil-bird, or Guácharo, *Steatornis caripensis*, were seen in two caves called Grande and Clara in the Terezén area, Sierra de Caripe, 25 km from the town of Caripe, Estado Monagas, northeastern Venezuela.
- ANDREW, D. G. 1964. The North Atlantic population of the Great Skua. *British Birds*, **57**: 210-211.
- BERGSTROM, E. A. 1964. A local population of Blue Jays in Connecticut. *Bird-Banding*, **35**: 41-42.—Both resident and migratory individuals probably present at certain times.—G. W. C.
- BOYD, E. M., AND S. A. NUNNELEY. 1964. Banding records substantiating the changed status of ten species of birds since 1900 in the Connecticut Valley. *Bird-Banding*, **35**: 1-8.—Analysis of numbers of the Carolina Wren, Tufted Titmouse, and Cardinal banded yearly from 1956 to 1960 indicates that these species, accidental or unknown around 1900, have become permanent residents. Winter banding records for 1956 to 1960 indicate that the Mourning Dove, Purple Finch, Song Sparrow, and Brown-headed Cowbird, formerly only summer residents, are tending to become permanent residents, and the Slate-colored Junco, White-throated Sparrow, and Fox Sparrow, formerly only transients, are tending to overwinter. Changes in climate, vegetation, and human activities in the valley since 1900 are discussed as possible causative factors.—G. W. C.
- BRUN, E. 1963. Ornithological features of Nord-Fugloy and Sor-Fugloy. *Astarte*, no. 22.—Ecological notes of 40 species of birds from these small islands off northern Norway.—M. K. R.
- DAVISON, V. E., AND E. G. SULLIVAN. 1963. Mourning Doves' selection of foods. *J. Wildl. Mgmt.*, **27**: 373-383.—A variety of 200 food items was appraised by offering the items to wild Mourning Doves in natural settings and observing feeding behavior.—J. P. R.
- DEXTER, R. W. 1964. Chimney Swift returns at Kent, Ohio, 1962 and 1963, with notes on nesting success. *Bird-Banding*, **35**: 38-39.

- DICKENS, R. F. 1964. The North Atlantic population of the Great Skua. *British Birds*, **57**: 209-210.
- EDBERG, R. 1964. Breeding frequency of the Common Tern (*Sterna hirundo*) on Lake Hjälmaren (approx. 59°20' N, 15°30' E). *Vår Fågelvärld*, **23**: 97-102.—Islets, sandbanks, and shelves harbor 51 terneries. One, comprised of 267 pairs, is the largest known colony in Sweden. Three-fifths of the colonies had fewer than 10 breeding pairs. (In Swedish; English summary.)—M. D. F. U.
- FENNELL, C. M. 1963. Stomach analyses of some Taiwan birds. *Bull. Inst. Zool. Acad. Sinica*, **2**: 65-73.—Stomach contents of 238 specimens representing 65 species.—M. K. R.
- GOLLOP, J. B. 1963. The fall recoveries of young Mallards banded at Kindersley, Saskatchewan. *Blue Jay*, **21**: 7-10.—Geographical and seasonal distribution of 1,104 first-year band recoveries of Kindersley-raised Mallards.—R. W. N.
- HARTMAN, F. E. 1963. Estuarine wintering habitat for Black Ducks. *J. Wildl. Mgmt.*, **27**: 339-347.—Animals, especially clams, were the most important food, and mud flats were the most important feeding areas. Portions of the flats remaining ice free in severe weather were vital, emergency, feeding areas.—J. P. R.
- HENNESSY, T. E., AND L. VAN CAMP. 1963. Wintering Mourning Doves in northern Ohio. *J. Wildl. Mgmt.*, **27**: 367-373.—A description of flock formation, movements, mortality factors, and band recoveries in a wintering population of Mourning Doves.—J. P. R.
- HEWSON, R. 1964. Herd composition and dispersion in the Whooper Swan. *British Birds*, **57**: 26-31.
- HORVATH, O. 1964. Seasonal differences in Rufous Hummingbird nest height and their relation to nest climate. *Ecology*, **45**: 235-241.—Spring nests occur at low levels in conifers, summer nests at higher levels in deciduous trees; thus similar microclimates (light, temperature, relative humidity, radiation) at the nest tend to be maintained in spite of changes in macroclimate.—S. C. K.
- IMPEKOVEN, M. 1964. Zuwege und Verbreitung der Knäkente, *Anas querquedula*; eine Analyse der Europäischen Beringungsergebnisse. *Ornith. Beob.*, **61**: 1-34.—Migration, breeding areas, and winter quarters of the Garganey based on banding recoveries and counts. Many of the conclusions shown in 13 maps. (In German; English summary.)—G. E. W.
- JAMES, P. 1963. Freeze loss in the Least Grebe (*Podiceps dominicus*) in lower Rio Grande delta of Texas. *Southwestern Nat.*, **8**: 45-46.
- JOZEFIK, M. 1962. [On the influence of some environmental factors on the quantity and distribution of colonies of the Sand Martin, *Riparia riparia* (L.), on the river San.] *Acta Ornithol.* **7**: 69-87.—A thorough and novel study of nest site and colony ecology. The San, a tributary of the Vistula, has been explored along its full course of 264 miles. Banks in the middle course of the river provide optimal conditions for breeding. Climate and human factors alter the hydrological conditions of the river, which in turn affect colony sites. The gregarious habits of the species show enough behavioral plasticity to allow re-establishment of colonies of different sizes when the original one is destroyed.—M. D. F. U.
- KAMMERAAD, J. W. 1964. Nesting habits and survival of Yellow Warblers. Jack-pine Warbler, **42**: 243-248.—Hatching of one 5-egg clutch was spread over three days. When feeding the young, males sometimes brought more than one insect to the nest at one time.—R. B.
- KARVIK, N. G. 1964. The terrestrial vertebrates of Dalsland in southwestern Swe-

- den. Acta Vertebratica, **3**: 1-239.—An excellent quantitative ecological study with emphasis on birds.—M. K. R.
- KEITH, A. R. 1964. A thirty-year summary of the nesting of the Barn Owl on Martha's Vineyard, Massachusetts. Bird-Banding, **35**: 22-31.—A summary is given of brood size from 1932 through 1960; the severe winter of 1960-61 nearly or completely destroyed the population. Recoveries of 13 individuals banded on Martha's Vineyard and 8 banded elsewhere in Massachusetts are also listed.—G. W. C.
- KURODA, N. 1963. A survey of sea birds of Teuri I., Hokkaido, with notes on land birds. Misc. Repts. Yamashina's Inst. Ornith. and Zool., **3**: 363-383.—A study (with maps and photographs) of a sea-bird colony in northern Japan with a total breeding population estimated at 161,700 individuals, chiefly *Cerorhinca monocerata* and *Larus crassirostris*. In the study period (27-31 May 1963) 24 species of land birds were recorded, of which 10 were new for the island. The island is suggested as an excellent observation point for migration of land birds over coastal seas. (In Japanese; English summary.)—K. C. P.
- LACK, D. 1964. A long-term study of the Great Tit (*Parus major*). J. Anim. Ecol., **33**, Jubilee Symposium Suppl.: 159-173.—From 1947 to 1962 populations of the Great Tit varied between 7 and 86 pairs; the commonest clutch size was nine; the brood size with highest rate of survival through fledging was 9 to 10. Clutch size and production rate of nestlings was slightly lower at high breeding densities. Population fluctuations varied inversely with mortality rates of juveniles which in turn were inversely correlated with size of beechnut crops.—S. C. K.
- LEMMETYINEN, R. 1963. [Occurrence and feeding habits of gulls in the north-eastern part of the Gullkrona.] Suomen Riista, **16**: 69-82.—Inventories of the bird fauna in the archipelago of Turku, southwest Finland, from 1948 to 1963 reveal a marked increase in the numbers of gulls, particularly *Larus fuscus*. Analysis of pellets from gulls indicated a diet of grain, fish, and garbage. Only *L. marinus* was found to utilize ducklings as food. (In Finnish; English summary.)—M. K. R.
- LOCKIE, J. D., AND D. A. RATCLIFFE. 1964. Insecticides and Scottish Golden Eagles. British Birds, **57**: 89-102.—In a wide area the number of pairs rearing young declined from 72 per cent in 1937-60 to 29 per cent in 1961-63. Failures include breakage of eggs by the eagles themselves and inability of females to lay eggs; 10 eggs from seven eyries contained chlorinated hydrocarbons, presumably ingested by the female with carrion.—H. B.
- LOFTIN, H. 1963. Some repeats and returns of North American migrants in Panama. Bird-Banding, **34**: 219-221.
- MACARTHUR, R., AND R. LEVINS. 1964. Competition, habitat selection, and character displacement in a patchy environment. Proc. Natl. Acad. Sci., **51**: 1207-1210.—A discussion of closely related species and the details of their differences which allow coexistence. Examples include brief mention of several birds.
- MATHIASSEN, S. 1963. [Fulmars (*Fulmarus glacialis*) in Swedish waters, a biometrical-morphological study in order to establish their geographical origin.] Vår Fågelvärld, **22**: 271-289.—Bill lengths from birds in the northern Atlantic area indicate a cline; within the cline three morphological groups are recognized. The race, *F. g. minor*, is retained for the geographically isolated populations of northern Canada and western Greenland. Fulmars from Sweden during the non-breeding season average smaller than those breeding around the Great Britain-Faroe Islands area; it appears that Swedish birds originate from more distant breeding areas than earlier supposed. (In Swedish; English summary.)—M. K. R.
- MAYER-GROSS, H. 1964. Late nesting in Britain in 1960. British Birds, **57**: 102-

- 118.—Nesting of Song Thrushes, Blackbirds, and certain other species continued one month longer than normal; the apparent causes were high rainfall and less than average sunshine in July.—H. B.
- MEANLEY, B. 1964. Origin, structure, molt, and dispersal of a late summer Red-winged Blackbird population. *Bird-Banding*, **35**: 32–38.—Banding studies, carried out from 1958 through 1962 at the Patuxent River Marsh, Anne Arundel County, Maryland, and involving 6,000 birds, indicate that the population is mostly of local origin. Most individuals remain in the marsh for at least one month. Population samples of 1,409 birds in 1961 and 1,215 birds in 1962 indicated that from 52.4 to 57.8 per cent were males and from 34.7 to 44.4 per cent were adults. The main period of molt, late July to late September, corresponds to the population peak in the marsh. The main wintering ground for the birds is the southern Atlantic Coastal Plain from southeastern Virginia to southeastern Georgia.—G. W. C.
- MOREL, G., AND F. BOURLIÈRE. 1962. Relations ecologiques des avifaunes sédentaire et migratrice dans une savane sahélienne du bas senegal. *La terre et la vie*, no. 4, pp. 371–393.—Monthly counts of all birds (66 residents and 31 Palearctic migrants) occurring on 25 hectares of sahelian savannah in the lower Senegal valley were taken from February, 1960, to May 1962. Migratory status, reproductive season, niche, staple food, average adult weight, and number of individuals seen per month are given for each species. Monthly biomass of all avian consumers is estimated, both for each species and for three major groups having different food habits (vegetarian, polyphagous, and insectivorous). Highest densities and greatest biomasses of residents and migrants were concurrent. Lowest densities for sedentary species were reached during the second half of the dry season at which time the carrying capacity is probably no more than one bird per acre. Interesting data are given on seasonal fluctuations of birds assigned to the three food groups. It is concluded that migration is an adaptation for the efficient use of food surpluses that sedentary species are unable to exploit fully.—G. E. W.
- NAKAMURA, T. 1963. A survey of an upland grassland bird community during breeding season. *Misc. Repts. Yamashina's Inst. Ornith. and Zool.*, **3**: 334–357.—Comparison of breeding bird censuses made during three seasons, using two different methods, in central Honshu, Japan. Various ecological data are supplied for the four commonest species, *Emberiza fucata*, *E. yessoensis*, *Acrocephalus bistrigiceps*, and *Saxicola torquata*. (In Japanese; English summary.)—K. C. P.
- NICKELL, W. P. 1964. Some mammal predators in a colony of Common Terns. *Bird-Banding*, **35**: 40.—Mortality at a colony in Macomb County, Michigan, attributed to a Norway rat, which was severely wounded by the defending terns, and in another year to a Virginia opossum.—G. W. C.
- NUNNELEY, S. A. 1964. Analysis of banding records of local populations of Blue Jays and of redpolls at Granby, Mass. *Bird-Banding*, **35**: 8–22.—Data for 778 Blue Jays banded from 1960 to 1963 show that large monthly fluctuations in numbers occur and suggest that individuals differ in status as residents or migrants and possibly change status from year to year. The size and composition of a redpoll flock was studied from 3 March to 5 April 1962. Estimates of flock size by two capture-recapture methods showed that arrival occurred in a single wave that peaked near the center of the period. Individuals stayed for varying lengths of time. The sexes did not differ in length of stay or repeat behavior.—G. W. C.
- PARRINDER, E. T. 1964. Little Ringed Plovers in Britain during 1960–62. *British Birds*, **57**: 191–198.—Increase and spread documented.—H. B.
- RICHARDSON, F., AND J. BOWLES. 1964. A survey of the birds of Kauai, Hawaii.

- Bernice P. Bishop Mus. Bull. 227. Honolulu, Hawaii. 51 pp.—Effects of civilization on native birds of Kauai and probable future of these species on the island. A description of their habitats and suggestions for preservation. The annotated list (39 species) is based mainly upon field notes taken during summer, 1960.—M. K. R.
- RIVERO, J. A. 1963–1964. The distribution of Venezuelan frogs. [4 parts.] Caribbean J. Sci., **3**: 7–15, 87–102, 197–199; **4**: 307–318.—A detailed consideration of the factors influencing animal distribution in Venezuela and parts of adjacent Colombia; includes many references to birds and the ornithological literature.—W. B. R.
- ROWAN, M. K. 1964. Relative abundance of raptorial birds in the Cape Province. Ostrich, **35**: 224–227.
- SKEAD, C. J. 1964. Birds of the macchia on the eastern Amatole Mountains, Cape Province. Ostrich, **35**: 228–233.—An ecological study, with particular emphasis on the habitats occupied by species of this region.—M. K. R.
- SOIKKELI, M. 1964. The distribution of the southern Dunlin (*Calidris alpina schinzii*) in Finland. Ornis Fennica, **41**: 13–21.—Formerly a sporadic breeder, the bird has become a regular and more abundant species. Its increase may be due partly to amelioration of climate and partly to shrinking of its breeding grounds around the North Sea and in southern Scandinavia.—M. D. F. U.
- STERLING, R. T. 1963. Wascana goose summers on the arctic prairie. Blue Jay, **21**: 134–135.—A Canada Goose banded as a preflight young at Regina in 1962 was found on the Thelon River in 1963.—R. W. N.
- WALLACE, D. I. M. 1964. Herring Gulls breeding in inner London. British Birds, **57**: 80–81.—Feral pairs breed near the sea-bird aviary in Regent's Park zoo.—H. B.
- WHITNEY, N. R. 1963. Results of Piñon Jay banding in South Dakota. Bird-Banding, **34**: 219.—Data for eight recoveries, two repeats, and seven returns from 95 individuals banded over an eight-year period.—G. W. C.
- WINTERBOTTOM, J. M. 1964. Report on the Witwatersrand duck counts, 1954–59 (African Wildfowl Enquiry Publication No. 10). Ostrich, **35**: 188–201.

TAXONOMY AND PALEONTOLOGY

- AMADON, D. 1964. Taxonomic notes on birds of prey. Amer. Mus. Novitates, no. 2166: 24 pp.—Miscellaneous notes accumulated during preparation of a monograph of diurnal birds of prey. A review of variation in *Chondrohierax* results in the recommendation that a single species with four races be recognized. The two genera of snail kites, *Helicolestes* and *Rostrhamus*, are combined under the latter name (the possibility of convergent adaptations is not mentioned). Sexual dimorphism in size in *Harpagus* is unusual among kites. Stresemann's review of *Spilornis* is accepted with minor reservations. Distribution and variation of *Circus buffoni* are briefly reviewed. In *Accipiter*, species discussed are *A. meyerianus*, *A. bicolor* and relatives, and *A. collaris*. Apparently *Leucopternis melanops* and *L. kuhli* overlap geographically and must be considered two species. The superspecies *L. albicollis* includes two forms, *occidentalis* and *polionota*, which are also considered to be full species. *Urubitinga* cannot be separated from *Buteogallus*, and *Heterospizias* barely so, although authors continue to use *Urubitinga* and to place the *Heterospizias* (wrongly) near *Accipiter*. The aberrant *Busarellus* belongs near the *Buteogallus* complex, but neither within it as placed by Friedmann nor among the fish-eagles as placed by Ridgway. The relationships of several Neotropical members of *Buteo* are clarified, and the winter range of *B. swainsonii* discussed. Separation of *Hiera-*

- aetus* and *Spizastur* is tentatively upheld, although a slip of the pen on p. 13 caused the author to write "S." instead of "H." in front of *pennatus* and *morphnoides*. Relationships of the caracaras are clarified; four species of *Phalcoboenus* and two of *Polyborus* are admitted. Traylor's opinion that *Micrastur buckleyi* is not conspecific with *M. semitorquatus* is verified, and the female and young of the former described for the first time. The status of the confusing small species of *Micrastur* is analyzed, and a new subspecies from northwestern Argentina, *M. ruficollis olrogi* is named (it should be pointed out that this name appears as a *nomen nudum* in Olog, Opera Lilloana, **9**: 8, 115, 354; 1963).—K. C. P.
- BLAKE, E. R. 1961. Variation in the Short-eared Owls of northern South America. *Novedades Colombianas*, **1**: 361-373.—Description and distribution of the races.—E. E.
- CLANCEY, P. A. 1964. Polytypic variation in the White-browed Robin *Cossypha heuglini* Hartlaub. *Occ. Papers Natl. Mus. S. Rhodesia*, **4**(no. 27B): 5-15.—An appraisal of polytypic variation of this species and a revision of the geographical races. Five geographical races are described.—M. K. R.
- CLANCEY, P. A. 1964. On the geographical variation of *Spermestes cucullatus* Swainson, especially in the southern aspects of its range. *Occ. Papers Natl. Mus S. Rhodesia*, **4**(no. 27B): 26-29.—An evaluation of the geographical variation in this species and a description of a new subspecies, *Spermestes cucullatus tessellatus*, based on pygal characteristics.—M. K. R.
- GYSELS, H. 1963. New biochemical techniques applied to avian systematics. *Experientia*, **19**: 1-5.—By means of electrophoresis using agar medium, soluble proteins of lens and muscles were studied. In the lens, a sharply limited fraction was regularly seen in the Passeriformes and varied significantly only in the Hirundinidae. This fraction also occurs in lens pherograms of Strigiformes, Gruiformes, Ciconiiformes, Psittaciformes, and Coraciiformes, and of Buteoninae. Some fractions lose their sharp-cut character with age. In muscle pherograms the mobility of the main fraction (probably myoglobin) is often characteristic for the genus or family.—M. K. R.
- HAFFER, J. 1961. A new subspecies of woodpecker from northern Colombia: *Picumnus cinnamomeus persaturatus*, subsp. nova. *Novedades Colombianas*, **1**: 397-400.—Type from San Isidro, 15 km northwest of El Carmen, Bolivar.—E. E.
- HARDY, J. W. 1964. Behavior, habitat, and relationships of jays of the genus *Cyanolyca*. *Occ. Pap. Adams Center for Ecol. Studies*, no. 11: 1-14.—Vocalizations (analyzed by sound spectrograms) and plumages of Mexican species of *Cyanolyca* are similar to those of *Aphelocoma*. *Cyanolyca* should be included in the tribe Aphelocomini. In Mexico, *C. pumilo* occurs in cloud forest rather than oak forest as has sometimes been stated. *C. argenticula* and *C. mirabilis* should probably be considered conspecific on inferential grounds.—R. B.
- MAYR, E., J. T. MARSHALL, AND R. K. SELANDER. 1964. *Cardinalis* Bonaparte, 1838 (Aves); proposed validation under the plenary powers. *Bull. Zool. Nomencl.*, **21**: 133-136.—A proposal submitted to the International Commission on Zoological Nomenclature to restore the name *Cardinalis* Bonaparte, rejected in 1918 as a junior homonym of the still-born *Cardinalis* Jarocki (with the Scarlet Tanager as type). Should the Commission use its plenary power as requested, *Cardinalis* will replace *Richmondia* and also *Pyrrhuloxia* (if considered generically inseparable).—E. E.
- SHARROCK, J. T. R., AND M. B. DALE. 1964. An interpretation of variation in the dark-headed forms of the Yellow Wagtail. *British Birds*, **57**: 37-40.—"From the

data available, there can be no justification for any split at the specific level."—H. B.

- TUMMERMANN, G. 1962. Die verwandtschaftlichen Affinitäten der Sturmvögel im Lichte der vergleichenden Parasitologie [Abstract] Zeit. f. Parasitenk., **22**: 100–101.—“Ornithologists have considered the Procellariiformes to be related to various other groups of birds but comparative studies of the Mallophaga of these other groups show connections with Charadriiformes and Pelecaniformes only. Among the latter the Fregatidae appear to be genuine intermediate forms. The phylogenetic relationships of petrels and penguins (Sphenisciformes), established on the basis of their cestode fauna, are questionable because these birds have lost their original helminth fauna as a consequence of the change of habitat; their cestodes and nematodes have been secondarily acquired.” (From Helminthol. Abstr., **33**: no. 911, 1964.)—J. S. M.
- VAURIE, C. 1964. Systematic notes on Palearctic birds. No. 53. Charadriidae: the genera *Charadrius* and *Pluvialis*. Am. Mus. Novitates, no. 2177: 22 pp.—The last of this series of papers; an index to nos. 34 through 53, all concerning non-passerines, will be issued. No mention is made of the authors who “lump” *Pluvialis* into *Charadrius*. Evidence is presented to show that Bock erred in “lumping” *C. semipalmatus* with *hiaticula*, *sanctae-helenae* with *pecuarius*, *marginatus* with *alexandrinus*, and *veredus* with *asiaticus*. Geographic variation is discussed in *C. hiaticula*, *C. leschenaultii*, *P. dominica*, *P. apricaria*, and *P.* (“*Squatarola*”) *squatarola*.—K. C. P.