of information contained in the preceding volumes. It is a simple alphabetical index referring to the various pages of the complex Subject Index, where subjects are more elaborately treated (with author and date given). A Corrigenda to the preceding parts is included. With the constantly increasing flood of ornithological literature, a good bibliography, such as this, is essential.—E. EISENMANN.

RECENT LITERATURE

EDITED BY FRANK MCKINNEY

ANATOMY AND EMBRYOLOGY

- DUIJM, M. 1959. On the position of a ribbon-like central area in the eyes of some birds. Arch. Néerlandaises Zool., 13, Suppl. 1: 128-145.—Review of the known occurrence of a ribbon-like ridge visible on macroscope examination of the retina in some birds. Although presence or absence seems to run in families, some genera of the same family and even some species in the same genus may lack it while others show the ribbon-like area; e.g., Corvus brachyrhynchos is reported to have it and Corvus corone cornix to lack it. The author believes that the head of a bird is held in a way that tends to place the ribbon-like area in horizontal position and that this may serve in spatial orientation. (In English.)
 E. E.
- KAMAR, G. A. R. 1959. Developmental changes in the reproductive organs of the male Fayomi fowl. Poultry Sci., 38: 775-781.

LINDENMAIER, P. and M. R. KARE. 1959. The taste end-organs of the chicken. Poultry Sci., 38: 545-550.

- MEUNIER, K. 1959. Die Allometrie des Vogelflügels. Zeitsch. wissensch. Zool., 161: 444-482.—The relations of bird wing dimensions to body weight, size, type of flight, treated mathematically from an aerodynamic viewpoint.—E. E.
- RIGDON, R. H. 1959. The respiratory system in the normal white pekin duck. Poultry Sci., **38**: 196-210.—Gross and fine anatomy of the respiratory tract are studied by injection of latex and of ink as well as by histological methods. Number of connections of the nine air sacs, extent of pneumaticity of bones, and a peculiar feature of the parabronchi in that groups of them terminate as large air spaces at the surface of the lungs are described.—P. H. B.

BEHAVIOR

ALDER, J. 1957. The Dipper's winking. Brit. Birds, 50: 267-269.

- BARBER, D. R. 1959. Singing pattern of the common chaffinch, Fringilla coelebs Linn. Nature, 183: 129.—Differences in breeding song activity exist between bird populations in different parts of the country.—H. C. S.
- BLUME, D. and G. JUNGE. 1959. Beobachtungen an Grauspechten (*Picus canus*) im Hessischen Hinterland. Vogelwelt, **80**: 65-74.—Behavior notes on the Grey-headed Woodpecker in Germany. Drawings showing comparative peering postures of four European woodpeckers when disturbed from their holes, and tables comparing the behavior of *P. canus* with the allied Green Woodpecker (*P. viridis*) are interesting.—E. E.

- BOSIGER, E. and J. LECOMTE. 1959. Sur les réactions des mésanges a des modifications apportées a leur nid. Alauda, 27: 16-21.—Reactions of the Blue and Great Tits (*Parus caeruleus* and *P. major*) to modifications of their nest. Though tits nest in dark holes, when wooden bird boxes in which they were incubating had one side replaced by a pane of glass they rarely abandoned them. —E. E.
- CHISHOLM, A. H. 1959. The history of anting. Emu, **59**: 101-130.—A useful review of the major literature and theories of "anting," adding many Australian records not included in recent papers. The view is advanced "the general purpose of anting, in its various phases, is the stimulating and soothing of the body" and "has affinity with the impulse of birds to submit themselves to the influences of dust, water, sun, smoke, steam and air."—E. E.
- CONWAY, W. G. 1959. The behavior of two captive ostriches at a burning leaf pile. Wilson Bull., **71**: 188-189.—Two *Struthio camelus* repeatedly "bathed" in the smoke of burning leaves. The possible relation of this behavior with anting, dusting, etc. is discussed.—J. T. T.
- DORST, J. 1959. Impressions ornithologiques aux îles Galapagos. L'Oiseau, 29: 77-87.—Most birds are remarkably fearless in the Galapagos. Dendroica petechia enters houses to pick insects off window screens; it is most frequently seen on the ground or on the rocks of the sea shore.—E. E.
- FUSHIWARA, H. 1959. Anting by the Japanese Grey Thrush, *Turdus cardis cardis* Temminck. Tori, 15: 61-70.—A captive bird in an excited state as a result of injection of pituitary body hormone and testicle hormone anted with ants, but did not eat them. The writer suggests that the formic acid "acts as protoplasma poison and consequently histamine is produced in the bird's body" which "excites parasympathetic nervous system and . . . represses antagonistically exciting sympathetic nervous system," thus eliminating stress. (In Japanese; English summary.)—E. E.
- GILLIARD, E. T. 1959. Notes on the courtship behavior of the Blue-backed Manakin (Chiroxiphia pareola). Amer. Mus. Novitates, 1942: 19 pp.—Observations made on Tobago Island, March 16–19, 1958. Half of the paper consists of detailed excerpts from field ledger, illustrated by sketches of complex dances of this species. Two forms of dance noted: a vertical "cartwheel" involving two males, and a "bouncing" dance of one to four males. Four "bowers" were used interchangeably by the group of males studied. Gilliard's observations differ in several respects from those of Snow on the same species in the same general area, particularly in that Gilliard never saw a female enter the display areas by manakins, birds of paradise, and bowerbirds is a defensive mechanism to deprive predators, attracted to the area by the displaying birds, of cover. —K. C. P.
- LEHTONEN, L. 1959. [On the effect of the eclipse of the sun on the daily rhythm and behavior of birds.] Ornis Fennica, **36**: 41-42.—The behavior of various birds in Finland during an 89 per cent eclipse on June 30, 1954. (In Finnish; German summary and table legends.)—E. E.
- MEYERRIECKS, A. J. 1959. Foot-stirring feeding behavior in herons. Wilson Bull., 71: 153-158.—Three species of herons of southern Florida used their feet in different ways to disturb fish for easier catching by the herons. The methods are described and compared with published descriptions of those of other species. —J. T. T.

- MITCHELL, K. D. G. 1957. Further aircraft observations of birds in flight. Brit. Birds, 50: 291-302.
- MOUNTFORT, G. 1957. Nest-hole excavation by the Bee-eater [Merops apiaster]. Brit. Birds, 50: 263-267.
- MYRES, M. T. 1959. Display behavior of Bufflehead, Scoters, and Golden-eyes at copulation. Wilson Bull., 71: 159–168.—The movements associated with copulation in five species of ducks (*Bucephala albeola*, B. islandica, B. clangula, *Melanitta deglandi*, M. perspicillata) are described and compared. These displays are more conservative, in an evolutionary sense, than are courtship displays.—J. T. T.
- O'DONALD, P. 1959. Possibility of assortive mating in the Arctic skua. Nature, 183: 1210–1211.—Departure from random mating among color phases of Arctic skua is indicated.—H. C. S.
- PAULIAN, P. 1959. Observations sur l'aptitude à la plongée chez les Procellariiformes. L'Oiseau, 29: 128-130.—Comments on the diving ability of various petrels and albatrosses.—E. E.
- RIPLEY, S. D. 1959. Competition between sunbird and honeyeater species in the Moluccan Islands. Amer. Nat., 93: 127-132.—Two pairs of sunbirds Nectarinia sericea had their territories within the much larger territory of a honeyeater Myzomela obscura. The two species are of similar size and feed on the same flowers. The honeyeater was highly aggressive, and when attacked the sunbird meekly left the food tree to await the honeyeater's departure to another part of its extensive foraging area. Despite submissiveness the sunbird is much commoner than the honeyeater. It is suggested that the latter's aggressiveness tends to limit successful reproduction, resulting in a smaller population.—E. E.
- SCHWAB, R. G. and J. B. MONNIE. 1959. Strife over a nesting site between Downy [Dendrocopos pubescens] and Red-headed [Melanerpes erythrocephalus] Woodpeckers. Wilson Bull., 71: 190-191.—The Redheads won.—J. T. T.
- SELANDER, R. K. and D. R. GILLER. 1959. Interspecific relations of woodpeckers in Texas. Wilson Bull., 71: 107-124.—The very similar *Centurus carolinus* and *C. aurifrons* are sympatric in a narrow zone near Austin, Texas, where they usually inhabit different habitats. Both species occur in the city of Austin, defending mutually exclusive territories. Interspecific antagonism did not occur between a pair of *C. carolinus* and one of *Melanerpes erythrocephalus.*—J. T. T.
- SIMMONS, K. E. L. 1956. Feather-eating and pellet-formation in the Great Crested Grebe. Brit. Birds, 49: 432-435.
- SKEAD, C. J. 1959. A study of the Redshouldered Widowbird Coliuspasser axillaris axillaris (Smith). Ostrich, 30: 13-21.—This African Ploceid is remarkable for its similarity in both male and female plumages to an American Icterid, of like habitat, the Red-winged Blackbird (Agelaius phoeniceus). C. axillaris males are territorial and generally polygamous (though some males succeed in attracting only one nesting female). The male builds one or more loose network nests, and within this framework a female builds a compact nest chamber.—E. E.
- SMITH, R. L. 1959. The songs of the Grasshopper Sparrow. Wilson Bull., 71: 141-152.—Four songs of *Ammodramus savannarum* are described, as are their functions: proclaiming territory, attracting a female, etc.—J. T. T.
- STENCER, J. and J. B. FALLS. 1959. The utilized territory of the Ovenbird. Wilson Bull., 71: 125-140.—The utilized territories of male Seiurus aurocapillus were smallest in dense aspen, largest in open mixed stands. The changes in utilized territory with changing breeding activities are described.—J. T. T.

THORPE, W. H. 1956. Records of the development of original and unusual feeding methods by wild passerine birds. Brit. Birds, **49**: 389-395.

- THORPE, W. H. 1959. Talking birds and the mode of action of the vocal apparatus of birds. Proc. Zool. Soc. Lond., **132**: 441-455.—The vocal apparatus of the more primitive birds is believed to act like a wind instrument. The syrinx in many song birds can be compared to the human vocal apparatus; sound spectrographs indicate that some species must have two or more separately modifiable resonant chambers, though anatomical studies are insufficient to enable more than a guess to be made as to their location.—E. E.
- VALVERDE, J. A. 1959. Moyens d'expression et hiérarchie sociale chez le Vautour fauve (Gyps fulvus (Hablilz)). Alauda, **27**: 1–15.—Behavioral means by which the temporary feeding hierarchy in the Griffon Vulture is maintained. The author believes dominance is mainly determined by hunger.—E. E.

DISEASES AND PARASITES

- BELLROSE, F. C. 1959. Lead poisoning as a mortality factor in waterfowl populations. Ill. Nat. Hist. Surv. Bull., 27, art. 3: 235-288.—Annual loss of North American waterfowl due to lead poisoning estimated 2-3 per cent.—E. E.
- Owen, D. F. 1957. Neottiophilum praeustum in birds' nests. Brit. Birds, 50: 160-164.
- SALES, V. A. D. 1957. D.D.T. poisoning of birds. Brit. Birds, 50: 20-22.

DISTRIBUTION

- ANDERSON, N. L. 1959. The incidence of ducks and geese in the Asheville, North Carolina, area during fall, winter, and spring migration. Chat, 23: 25-27. —Water impoundments have attracted formerly unusual species.—E. E.
- BOND, J. 1959. Fourth supplement to the Check-list of Birds of the West Indies (1956): 1-12. Acad. Nat. Sci. Phila.—Additional records, including corrections, taxonomic notes, and migration data. Gives dates when Cattle Egret was first reported from the various islands. Among most interesting are specimens from Barbados of Haematopus ostralegus prattii, Charadrius melodus, Tringa glareola, Philomachus pugnax (many), Larus delawarensis, Cuculus canorus, Apus melba (the last two first records for the Western Hemisphere); and from Martinique of Diomedea melanophrys.—E. E.
- BROSSET, A. 1959. Les oiseaux de la Moulaya (Maroc Oriental). Les migrateurs. Alauda, 27: 36-65.-Migrants in eastern Morocco.
- BULL, P. C. 1959. Birds of the Hutt Valley [New Zealand]. Proc. N.Z. Ecol. Soc., no. 6: 52-58.—Local movements of various species described, particularly dispersal pattern of the introduced Blackbird (*Turdus merula*) and Song Thrush (*Turdus ericetorum*). An annotated list of the birds of the area is included.—E. E.
- CATUNEANU, I. I. 1958. [The nesting colonies of the Danube delta and the need for creating an ornithological reserve.] Ocrotierea Naturii, **3**: 79–115. Acad. Romanian People's Rep.—The location of nesting colonies and migration routes in the Danube delta, with many maps. (In Romanian; French and Russian summaries.)—E. E.

- DELEUIL, R. 1959. Sur quelques oiseaux observés dans les Alpes entre 1,600 et 2,400 mètres (Région du Lauzet-Lauteret). L'Oiseau, 29: 131-141.--Notes on birds in the French Alps.--E. E.
- EATON, S. W. 1959. The Tufted Titmouse invades New York. Kingbird, 9: 59-62.
- FUNDERBURG, J. B., JR. and T. L. QUAY. 1959. Summer maritime birds of southeastern North Carolina. Jour. Elisha Mitchell Sci. Soc., 75, no. 1: 13-18.
- HALL, C. F., J. E. HILDEBRAND, R. T. BINHAUMER, and O. T. HALL. 1959. The birds of Galveston Island. Texas Jour. Sci., 11: 93-109.-- A species list.
- HAWAII AUDUBON SOCIETY. 1959. Hawaiian Birds. Honolulu, Fisher. Pp. i-iv, 1-60.
- HOUSTON, G. S. and M. G. STREET. 1959. The birds of the Saskatchewan River. Carlton to Cumberland. Saskatchewan Nat. Hist. Soc., Spec. Publ., no. 2: 1-205. Price, \$1.50.—An annotated list of the birds of an area in central Saskatchewan, with bibliography, and historical and biographical notes. Those regarding the Franklin expeditions have importance in systematics.—E. E.
- JONES, S. B. and P. E. H. JONES. 1959. Crowned cranes in Cambridgeshire. Nature, 183: 560.—Two adult and two immature *Balearica pavonica*.
- KOLSCH, E. 1959. Verbreitung und Oekologie des Ortolans (*Emberiza hortulana*) in der Vorderpfalz. Vogelwelt, **80**: 74–83.—Documents the recent spread of the Ortolan into the Palatinate, Germany, and its ecology.—E. E.
- LABITTE, A. and A. LANGUETIF. 1959. Notes sur les oiseaux nicheurs de l'Île Dumet en 1958. L'Oiseau, 29: 142–156.—Nesting birds (chiefly sea birds) on an islet off the French Atlantic coast.—E. E.
- MOORE, N. W. 1957. The past and present status of the Buzzard [Buteo buteo] in the British Isles. Brit. Birds, 50: 173-197.
- PHILLIPS, W. W. A. 1958. 1956 Supplement to the (1952) revised check-list of the birds of Ceylon. Spolia Zeylanica, 28: 183-192. Natl. Mus. Ceylon.
- PHILLIPS, W. W. A. and R. W. SIMS. 1958. Some observations on the fauna of the Maldive Islands: Part III—Birds. Jour. Bombay Nat. Hist. Soc., 55: 195–217.—Annotated list of all species. The small breeding shearwater is not persicus, but Procellaria (Puffinus) lherminieri bailloni. Suggests that persicus be considered a race of P. lherminieri.—E. E.
- PIECHOCKI, R. 1958. Beiträge zur Avifauna Nord- und Nordost Chinas (Mandschurei). Abhandl. u. Ber. Staatl. Mus. Tierk. Dresden, 24: 105-203.—Report on birds collected on the Chinese-German expedition to northern and northeastern China, May to September, 1956. 190 species are treated, with measurements, weights, and often data on molt, nesting, and behavior. The area covered extended from Shantung province north into Manchuria and Inner Mongolia. —E. E.
- PINTO, ANTONIO A. DA ROSA. 1958. A contribution towards the study of the avifauna of the island of Inhaca. Bol. Soc. Estudos Moçambique, 27, nr. 112, Sept.-Oct., 29-62.—Partial list, in a general symposium on the natural history of this island, located at the entrance of Lourenço Marques Bay, southern Mozambique.
- RAYNOR, G. S. 1959. Recent range extension of the Veery on Long Island. Kingbird, 9: 68-69.
- RICHARDSON, R. A., M. J. SEAGO, and A. C. CHURCH. 1957. Collared Doves [Streptopelia decaocto] in Norfolk: a bird new to the British list. Brit. Birds, 50: 239-246.

- RINGLEBEN, H. 1959. Für Niedersachsen neue Brut- und Gastvögel. Bertr. Naturk. Niedersachsens, 12: 4-36.—New records of breeding birds and accidentals from Lower Saxony, Germany. (In German.)—E. E.
- RUSCHI, A. 1959. A Trochilifauna de Brasilia, com a descrição de um novo representante de Amazilia (Aves). E o primeiro provoamento com essas aves ai realizado. Bol. Mus. Biol. Prof. Mello-Leitão. Biologia, no. 22: 1-16.—The hummingbirds of Brasilia, the new capital of Brazil. Subsp. nov.: Amazilia versicolor kubtchecki.—E. E.
- SAMS, J. R. and K. STOTT, JR. 1959. Birds of San Diego County, California: an annotated checklist. Occ. Pap. San Diego Soc. Nat. Hist., no. 10: 1-49.
- SICK, H. 1959. O redescobrimento no Brasil do bacurau Caprimulgus longirostris Bonaparte (Caprimulgidae, Aves). Bol. Museu Nacional n. s. Zool. no. 204: 1-15, photo. Rio de Janero, Brazil.—Rediscovery of the nightjar Captimulgus longirostris longirostris Bonaparte in Brazil; taken at several highland localities in the states of Minas Gerais and Rio de Janero, and heard (and a tail feather found) within the Federal District at Rio. Distribution, habitat, behavior, and voice described (compared with that of C. maculicaudus). A letter in English from E. Mayr contains taxonomic notes on subspecies and descriptive data. (In Portuguese; summary in German.)—E. E.
- VARIOUS AUTHORS. 1957. The rarer birds of prey. Their present status in the British Isles. Brit. Birds, 50: 129-155.—Reviews the status of Golden Eagle, Goshawk, Kite, Honey Buzzard, Marsh Harrier, Hen Harrier, Montagu's Harrier, Osprey, Hobby, and Peregrine detailing many changes which have taken place in recent years.—F. M.
- WETMORE, A. 1959. The birds of Isla Escudo de Veraguas, Panamá. Smith. Misc. Coll., **139**, no. 2: 1-27.—Birds seen or taken on March 1-2, 1958, on a small wooded island off the Caribbean coast of western Panama. New subsp. described: *Manacus vitellinus amitinus, Thryothorus nigricapillus odicus, Thraupis virens caesitia.* Differentiation from the forms of the nearby mainland is interesting, because this island must have been connected with the mainland during the glacial stages of the Pleistocene. *Progne subis* migrating northward along the coast Feb. 18-March 6.—E. E.
- WILLIAMSON, K. 1957. A desert race of the Great Grey Shrike [Lanius excubitor pallidirostris] new to the British Isles. Brit. Birds, 50: 246-249.
- WILLING, R. L. 1958. Australian discoveries of Emperor penguin rookeries in Antarctica during 1954–57. Nature, 182: 1393–1394.—Five additional rookeries discovered; a map shows their location.—H. C. S.
- WILSON, J. E. 1959. The status of the Hungarian Partridge in New York. Kingbird, 9: 54-57.
- ZIMMERMAN, D. A. and J. VAN TYNE. 1959. A distributional check-list of the birds of Michigan. Occ. Pap. Mus. Zool. Univ. Mich., 608: 1-63.—326 species (356 forms) of which 215 have bred. Accounts of distribution are based largely on collected specimens; localities and dates are given where 10 or fewer Michigan records exist or where most records are unpublished.—E. E.

ECOLOGY AND POPULATION

BOYD, A. W. 1957. Sewage-farms as bird-habitats. Brit. Birds, 50: 253-263.
 BRERETON, J. L. and C. SOURRY. 1959. Some observations on the distribution and abundance of closely-related parrots of the New England District of New South

Wales. Emu, **59**: 93-100.—Ecological comparison of three Australian parrots: *Platycercus elegans* and *eximius* and *Psephotus haematonotus.*—E. E.

- DHARMAKUMARSINHJI, R. S. 1958. Ecological study of the Great Indian Bustard Ardeotis nigriceps (Vigors) [Aves:Otidae] in Kathiawar, Peninsula, Western India. Jour. Zool. Soc. India, 9: 140–152.
- MERCER, B. V. 1959. 'At sea' observations of pelagic birds and the assessment of population densities. Bird Notes, 28: 418-425.—An ingenious method of estimating population densities from a moving ship.—E. E.
- Novaes, F. C. 1958. As aves e as comunidades bióticas no alto Rio Juruá, Território do Acre. Bol. Mus. Paraense Emilio Goeldi. n.s. Zool., no. 14: 1-14.—Describes the distribution in different habitats and vertical stratification in a forest in Amazonian Brazil of various species and families.—E. E.
- RATCLIFFE, F. N. 1958. Factors involved in the regulation of mammal and bird populations. Australian Jour. Sci., 21: 79-87.
- TUTMAN, I. 1959. [Ornithophaenological notes from Dubrovnik, Jugoslavia, and vicinity.] Larus, 11: 75-103.—(In Jugoslav; German translation.)

Evolution and Genetics

- JEROME, F. N. and C. M. HUNTSMAN. 1959. A gynandromorph which arose from a sex-linked cross. Poultry Sci., 38: 727-731.—Produced by a cross of New Hampshire male by Barred Rock female.—P. H. B.
- SIBLEY, C. G. and P. A. JOHNSGARD. 1959. An electrophoretic study of egg-white proteins in twenty-three breeds of Domestic Fowl. Amer. Nat., 93: 107-116.— The variation in egg-white proteins of distinct breeds of *Gallus gallus* was no greater than expected as normal errors in the technique, thus indicating that such protein structures are phylogenetically conservative.—E. E.
- UDAKAWA, T. 1956. Karyogram studies in birds VIII. The chromosomes of some species of Turdidae and Troglodytiidae (sic). Jap. Jour. Zool., 12: 105-111.—Chromosomes of Turdus cardis, Luscinia akahige (two subspecies), Troglodytes troglodytes fumigatus, and Cinclus pallasii hondoensis. No visible chromosomal difference was detected between the Turdus and other Asiatic species of this genus previously studied. Troglodytes showed a closer similarity to the Turdus group than to Cinclus; Troglodytes has the same chromosome formula (with some differences in the macrochromosomes) as the Daurian Redstart Phoenicurus a. aureus. Of these species Cinclus was the most widely divergent.—E. E.

GENERAL BIOLOGY

ANDERSEN, F. S. 1959. Bills, eggs, and nests of captured Arctic Terns (Sterna paradisaea Pont.) and Common Terns (Sterna hirundo L.). Dansk Ornith. Foren. Tidssk., 53: 84-102.—Birds banded and examined in a Danish breeding colony over an eight-year period. About a third of the Arctic Terns and all Common Terns had blackish bill tips; bills of the former averaged significantly smaller but there was a wide overlap. In 9 per cent of the Arctic Terns the clutch was three eggs (the usual clutch was two); but two 14-year-old birds and a 10-year-old laid only one egg. Clutches of Arctic Terns in Greenland average smaller. Data on egg sizes, return to nest sites, banding recoveries are given. (In English; Danish summary.)—E. E.

- BOYD, H. 1957. Early sexual maturity of a female Mallard. Brit. Birds, 50: 302-303.—A female Mallard, probably hatched after the beginning of May, was banded in September and retrapped with a brood on November 6.—F. M.
- CARVALHO, C. T. DE. 1958. Notas ecológicas sobre Coereba flaveola. (Passere, Coerebidae). Bol. Mus. Paraense Emilio Goeldi. n.s. Zool., no. 10: 1-10... Notes on feeding, song, reproduction, development of nestlings, and other behavior of the Bananaquit in Brazil. (In Portuguese; English summary.)—E. E.
- DAVIS, P. 1957. The breeding of the Storm Petrel. Brit. Birds, 50: 85-101, 371-384.—A detailed study of *Hydrobates pelagicus* made at Skokholm, Pembrokeshire, deals with many aspects of breeding biology and behaviour from the pre-egg stage through the development of the chick.—F. M.
- DAVIS, T. A. W. 1956. Gulls feeding on grain. Brit. Birds, 49: 400-404.
- FEINDT, P. and K. REBLIN. 1959. Die Brutbiologie des Mittelspechts Dendrocopos medius medius (L.). Beitr. Naturk. Niedersachsens, 12: 36-48.—Breeding biology of the Middle Spotted Woodpecker.
- GEILER, H. 1959. Geschlechterverhältnis, Korpergewicht und Flugellänge der Individuen einer mitteldeutschen Sperlingspopulation. Beitr. z. Vogelkunde, 6: 359-366.—Sex ratio, body weight, and wing length in a German House Sparrow (Passer domesticus) population.—E. E.
- GIBB, J. and P. H. T. HARTLEY. 1957. Bird foods and feeding-habits as subjects for amateur research. Brit. Birds, 50: 278-291.
- GILLHAM, E. H. 1957. Notes on Tufted Duck in St. James's Park, London. Brit. Birds, 50: 2-10.—A study of breeding and postbreeding populations.
- GUICHARD, G. 1959. Notes sur la biologie du Cisticole des Jones (Cisticola juncidis cisticola Temm.). L'Oiseau, 29: 88-95.—On the biology of the Fantailed Warbler in the Camargue.—E. E.
- HALL, K. R. L. 1959. Nest records and additional behaviour notes for Kittlitz's Sandplover *Charadrius pecuarius* in s.w. Cape Province. Ostrich, **30**: 33-38.— Data for seven years show some egg laying throughout the year except the wet months of May and June; the peak months were December and January. Clutch size, position of eggs in the scrape, incubation periods, egg-covering reaction, and distraction displays are discussed.—E. E.
- HAVERSCHMIDT, F. 1959. Notes on the nesting of *Turdus leucomelas* in Surinam. Wilson Bull., 71: 175-177.
- HINDWOOD, K. A. 1959. The nesting of birds in the nests of social insects. Emu, 59: 1-36.—A compilation of birds known to nest in nests of termites, ants, and wasps. Nesting in termitaria occurs in many parrots, trogons, kingfishers, puffbirds, but has been reported also of hole-nesting species of other groups. Not mentioned, but a regular termitarium nester is the Orange-chinned Parakeet, Brotogeris jugularis of tropical America.—E. E.
- JAKOBS, B. 1959. Zum Brutvorkommen und zur Brutbiologie der Zippammer (*Emberiza cia cia* L.) im Moseltal. Orn. Mitteil., **11**: 121–125.—Breeding biology of the Rock Bunting.
- KURODA, N. 1959. A comparative study of the breeding biology of rural and urban colonies of the Gray Starling, *Sturnus cineraceus* Temminck. Japan Wildlife Bull., **17**: 31-77.—A thorough comparative study of two breeding colonies of this starling, one in Tokyo (one season, 18 occupied nest-boxes) and one in an agricultural area just outside Tokyo (two seasons, 17 and 20 occupied boxes). In addition to clearly presented numerical data on many aspects of breeding biology, there are interesting discussions of correlation of available food

supply with stage of nesting cycle, and of the phenomena affecting clutch size in this species. The rural colony fed over a wider area, but primarily on a single diet item (mole-crickets). The urban colony was restricted to small city parks for foraging, but obtained a wider variety of animal and plant food. Further investigations on food preferences are planned. (In English, with Japanese summary.)—K. C. P.

- LACK, D. 1957. Notes on nesting Nightjars. Brit. Birds, 50: 273-277.
- MENC, H. 1959. Food habits of nesting Cooper's Hawks and Goshawks in New York and Pennsylvania. Wilson Bull., 71: 169–174.—Prey brought to the nests were identified and counted. For Accipiter cooperii the commonest items were Starlings, Flickers, Meadowlarks, and Chipmunks. For A. gentilis they were Crows and Red Squirrels.—J. T. T.
- OWEN, D. F. and G. C. PHILLIPS. 1956. The food of nestling Purple Herons [Ardea purpurea] in Holland. Brit. Birds, 49: 494-499.
- PICKERING, C. H. C. 1959. Notes sur le Puffin Cendre (*Puffinus diomedea borealis*) aux Îles Salvages. L'Oiseau, **29:** 1-3.—Notes on the nesting of Cory's Shearwater on the Salvages. Some 20,000 are killed for food annually.—E. E.
- STEIN, F. 1959. Beitrag zur Biologie des Flussregenpfeifers, Charadrius dubius curonicus Gm. Beitr. z. Vogelkunde, 6: 321-338.—This completes the account of the biology of the Little Ringed Plover, begun in Beitr. z. Vogelk, 6: 311-320, 1958.
- WACKERNAGEL, H. 1959. Ein Bruterfolg beim Chilenischer Flamingo in Zoologischen Garten Basel. Orn. Beob., 56: 33-40.—At the Basel Zoo, in a mixed "colony" of flamingos, a pair of Chilean Flamingos successfully bred in June 1958. The incubation period was 29 days. At five days the nestling left the nest briefly, at 11 days it entered the water, at 12 weeks it could fly and had acquired full juvenal plumage, but the parents fed it until January when it was six months old.—E. E.
- WALTERS, J. 1959. Regenpfeifer-Notizen aus dem "Seewinkel" im Burgenland (Oesterreich). Vogelwelt, 80: 33-42.—Studies in the nesting and development of the Little Ring Plover and Kentish (Snowy) Plover (Charadrius dubius and C. alexandrinus) in Austria, with comparison of behavior in the Netherlands. —E. E.
- WARNCKE, K. 1959. Eigenartiges Brutverhalten beim Mäusebussard [Buteo buteo]. Vogelwelt, 80: 93.—Single egg clutches in the Common Buzzard. Among 33 normal clutches were five with single eggs; of these two proved infertile, two hatched, and one nest was not subsequently observed. As has been suggested for the Peregrine Falcon, and the Red Kite, single egg clutches are more likely to be infertile and perhaps indicate old age.—E. E.

MIGRATION AND ORIENTATION

- ALLEN, R. H. and G. RUTTER. 1957. The moult migration of the Shelduck from Cheshire in 1956. Brit. Birds, 50: 344-346.
- ARNOULD, M., ET AL. 1959. Baguages, controles et reprises d'oiseaux migrateurs en Tunisie. Mém. Soc. Sci. Nat. Tunisie, no. 4: 1-105, maps.—Banding data from Tunisia, with articles discussing aspects of migration.—E. E.
- ASH, J. S., M. W. RIDLEY, and N. RIDLEY. 1956. On the movements and survival of woodpigeons and stock doves. Brit. Birds, 49: 298-305.

CORNWALLIS, R. K. 1957. The pattern of migration in 1955 at the East Coast Bird Observatories. Brit. Birds, 50: 105-118.

- GAUSS, G. H. 1959. Ueber das Zugverhalten der Tannenmeise (Parus ater). Vogelwelt, **80**: 83–89.—The Coal Tit, which favors coniferous woods, in autumn in Germany migrates directly southwest through forest, but will modify its direction to avoid open country, preferring to follow tree-bordered roads and streams, or even flying to isolated trees. The birds show hesitation to cross roads. When forced to traverse open areas without trees the southwestern direction is resumed.—E. E.
- Goodbody, I. M. 1956. Autumn migration on the Kintyre Peninsula. Brit. Birds, **49:** 417-431.
- HARPER, W. G. 1959. The study of bird migration movements by radar. New Scientist, 5: 791-793.—Study in Britain of mysterious radar echoes, called "angels," indicates that they represent flocks of moving birds. Nocturnal migration movement greatly exceeds daytime migration, reaching a maximum just before midnight. The heaviest migration occurs with clear skies. The most common height of migration is between 2,000-3,000 feet.—E. E.
- LACK, D. 1957. The Chaffinch migration in North Devon. Brit. Birds, 50: 10-19.
- MARSHALL, A. J. and M. C. WILLIAMS. 1959. The pre-nuptial migration of the Yellow Wagtail (Motacilla flava) from latitude 0.04'N. Proc. Zool. Soc. Lond., 132: 313-320.—Two European races of *M. flava* winter near Victoria Nyanza, Uganda, Africa, straddling the Equator, in an area where temperature and humidity changes are negligible. Specimens taken at Entebbe between October and April indicate that molt to a bright plumage occurs while gonads are still inactive, and that gonadal recrudescence and fat deposition are governed by an endogenous rhythm and not by any external climatic or light change occurring in the tropics. Birds may be kept in phase by conditions on the breeding grounds affecting the timing of reproductive activities in the breeding period preceding the southward migration.—E. E.
- MONK, J. F. 1958. Notes on the ornithology of southwest Portugal. Anais Faculd. Ciên. do Porto, **40**: 7-24. Inst. Zool, Porto, Portugal.—Observations during migration September 12–October 2, 1956. (In English.)
- NISBET, I. C. T. and J. BAIRD. 1959. The autumn migration of the Doublecrested Cormorant through eastern New England. Mass. Aud. Bull., 43: 224-227, map.—Most *Phalacrocorax auritus* breeding on the Atlantic coast are believed to cross the base of Cape Ann and Boston Bay, Massachusetts, then to cut *overland* in a southwesterly direction to southeastern Rhode Island, thence to Block Island, and Montauk Point on Long Island, New York. Relatively few birds follow the Massachusetts coast.—E. E.
- PEAKALL, D. B. 1956. Migration at the Smith's Knoll Light-vessel, Autumn 1953. Brit. Birds, **49**: 373-388.—Observations made from mid-September to mid-November from a vessel situated 26 miles from the Norfolk coast and 90 miles from Holland. The study supports the theory that the main departure of Passerines from the Continent occurs at dawn.—F. M.
- PROVINCE OF QUEBEC SOCIETY FOR THE PROTECTION OF BIRDS. 1958. Report on birds. Annual Rept. 1957: 12-35. Montreal.—The tabular migration summary, showing when each species was first and last noted in spring and fall and the height of migration in each season, is lucid and useful. It should be noted that this summary refers only to the Montreal area, not to the entire province;

confusion might have been avoided by so indicating in the title or at the start of the article. Near Quebec city a Western Meadowlark male reported to be mated to an Eastern Meadowlark female, with three young reared. A Green-tailed Towhee taken October 31, 1957 at St. Augustin, first for Quebec province. —E. E.

- SCHIERBAUM, D., ET AL. 1959. Waterfowl banding in New York. N.Y. Fish and Game Jour., 6: 86-102.—Methods of capture and migration routes. A map shows localities of recovery.—E. E.
- SUMMERS-SMITH, D. 1956. Movements of House Sparrows. Brit. Birds, 49: 465-488.—Reviews the subjects of movements and migration, extension of range, subspecies and regional variations in *Passer domesticus.*—F. M.
- SVÄRDSON, G. 1957. The "invasion" type of bird migration. Brit. Birds, 50: 314-343.—Ordinary migration is an adaptation to a seasonal food shortage while invasion is an adaptation to annual food fluctuations. Scandinavian literature on invasions of Siskins, Waxwings, Redpolls, Crossbills, and Fieldfares is reviewed. "It is suggested that invasions start annually, like ordinary migration, and that they are released by the same proximate factors. The movement is halted, however, early in some years, while it proceeds in others, the reason being that a rich food supply brings the flight to a stop."—F. M.
- ULFSTRAND, S. 1959. [The bird migration at Falsterbo (Scania, SW Sweden) in 1955. (Report from Falsterbo Bird Station No. 14.)] Var Fågelvärld, 18: 131-162.—For various Falconiformes there are graphs showing numbers migrating in a given period, comparing 1955 with the average for previous years. (In Swedish; good summary and legends to figs. in English.)—E. E.
- VERWEY, J. 1959. Orientation in migrating marine animals and a comparison with that of other migrants. Arch. Néerlandaises Zool., 13, Suppl. 1: 418-446. --A useful review (including bird data) in English.--E. E.

Physiology

- BOAS, N. F. 1958. The effect of desoxycorticosterone acetate on testis size and function in the cockerel. Endocrin., 63: 323-328.
- BOWMAN, J. C. and J. D. H. ARCHIBALD. 1959. Effect of controlled lighting on production characters in the fowl. Nature, 183: 1138-1139.—Restricted lighting during rearing and increased lighting during laying increased egg production. —H. C. S.
- Fox, S. and T. R. MORRIS. 1958. Flash lighting for egg production. Nature, 182: 1752-1753.
- FRANTZ, W. L. 1958. Some factors affecting spermatokinesis in the testes of the house sparrow (*Passer domesticus*). Endocrin., 63: 507-516.—Evidence that water absorption causes rupture of Sertoli cells and subsequent release of sperm. —H. C. S.
- HAZELWOOD, R. L. 1958. The peripheral action of tolbutamide in domestic fowl. Endocrin., **63**: 611-618.
- KOBAYASHI, H. 1958. On the induction of molt in birds by 17 a-oxyprogesterone-17-capronate. Endocrin., **63**: 420-430.—Of 19 species of birds tested, three (*Melopsittacus, Uroloncha, Coturnix*) molted after injection, 16 did not respond. The first group breed all year round, the second has a restricted breeding season. —H. C. S.

- KOWALEWSKI, K. 1958. Uptake of radiosulfate in growing bones of cockerels treated with cortisone and certain anabolic-androgenic steroids. Endocrin., 63: 759-764.
- LYTLE, I. M. and F. W. LORENZ. 1958. Progesterone in the blood of the laying hen. Nature, 182: 1681.
- MATTHEWS, L. N. 1959. Salt excretion in marine birds. Nature, 183: 202.— Visible drops of water on nose of giant petrel.—H. C. S.
- MEYER, R. K., M. APPASWAMY RAO, and R. L. ASPINALL. 1959. Inhibition of the development of the bursa of Fabricius in the embryos of the common fowl by 19-nortestosterone. Endocrin., 64: 890-897.
- MILLER, A. H. 1959. Reproductive cycles in an equatorial sparrow. Proc. Nat. Acad. Sci., 45: 1095-1100.—In individual males of *Zonotrichia capensis*, studied in southern Colombia, the maxima and minima of the reproductive period cover six months so that there are two complete cycles in the calendar year.
- MIRSKY, I. A. and S. GITELSON. 1958. The diabetic response of geese to pancreatectomy. Endocrin., 63: 345-348.
- MIRSKY, I. A., G. PERISUTTI, and N. C. DAVIS. 1959. The destruction of glucagon by the blood plasma from various species. Endocrin., **64**: 992-1001.—Includes chicken.
- MORRIS, T. R. and S. Fox. 1958. Artificial light and sexual maturity in the fowl. Nature, 182: 1522-1523.—Further evidence that sexual maturity is affected by changes in day length and not by absolute day length.—H. C. S.
- NEWCOMER, W. S. 1959. Effects of hypophysectomy on some functional aspects of the adrenal gland of the chicken. Endocrin., **65**: 133-135.—Results imply functional independence of adrenal cortical tissue and anterior pituitary in chicken.—H. C. S.
- POLIN, D. and P. D. STURKIE. 1958. Parathyroid and gonad relationship in regulating blood calcium fractions in chickens. Endocrin., 63: 177-182.
- Rose, G. G., and J. B. TRUNNELL. 1959. Thyroid epithelium in tissue cultures: observations on the morphology and functional capacities of embryo chick thyroids. Endocrin., 64: 344-354.
- Roy, R. N. and B. C. GUHA. 1958. Production of experimental scurvy in a bird species. Nature, 182: 1689–1690.—The red-vented bulbul (*Pycnonotus cafer*) is incapable of synthesizing ascorbic acid.—H. C. S.
- RUSSELL, F. S. 1958. Salt excretion in marine birds. Nature, 182: 1755.— Drops of water observed on beaks of Lesser Black-backed Gulls.—H. C. S.
- SMOCZKIEWICZOWA, A. 1959. Sodium, potassium, calcium and chloride ion contents and protein fractions in the fluids of chick embryos. Nature, 183: 1260-1261.
- TABER, E., M. CLAYTOR, J. KNIGHT, J. FLOWERS, D. GAMBRELL, and C. AYERS. 1958. Some effects of sex hormones and homologous gonadotrophins on the early development of the rudimentary gonad in fowl. Endocrin., 63: 435-448.
- URIST, M. R., O. A. SCHJEIDE, and F. C. MCLEAN. 1958. The partition and binding of calcium in the serum of the laying hen and of the estrogenized rooster. Endocrin., 63: 570-585.

TAXONOMY AND PALAEONTOLOGY

AMADON, D. 1959. The subspecies of *Tinamus tao* and *Tinamus solitarius* (Aves). Amer. Mus. Novitates, 1955: 7 pp.—Admitted are T. t. septentrionalis, larensis, kleei, and tao; and T. s. pernambucensis and solitarius. These large tinamous are known from relatively few specimens; series of the recognized races available to the author ranged from 0 to 12 skins.—K. C. P.

- BRODKORB, P. 1959. The Pleistocene avifauna of Arredondo, Florida. Bull. Florida State Mus., 4: 269-291.—Identified are 43 species; described as new: Falco readei, Colinus suilium, Dorypaltus prosphatus (Charadriidae, n. gen.) Cremaster tytthus (Icteridae, n. gen.), all from the Illinoian glacial stage, and believed to be interglacial relicts.—E. E.
- BRODKORB, P. 1959. Pleistocene birds from New Providence Island, Bahamas. Bull. Florida State Mus., 4: 349-371.—The deposit is believed to relate to part of the Wisconsin glacial stage when the land area of the Bahamas was much greater and closely approached Cuba. Of 15 birds identified, only four still occur on the island; the others are today more southern or are known only as fossils. Described as new: Caracara creightoni, Burhinus nanus, Claucidium dickinsoni, Otus providentiae, Bathoceleus hyphalus (Picidae, n. gen.), Corcus wetmorei. The author points out that the gender of Caracara is feminine.—E. E.
- CLANCEY, P. A. 1959. Miscellaneous taxonomic notes on African birds. XII. Durban Mus. Novit, 5: 151-179.—Subsp. nov.: Apaloderma narina arcanum, southern Sudan; Malaconotus sulfureopectus terminus, eastern Cape Province; Ploceus velatus inustus, western Cape Province. Also discusses Ploceus intermedius.—E. E.
- GALBREATH, E. C. 1959. Collecting fossils from Harvester Ant Mounds. Trans. Kansas Acad. Sci., 62: no. 2, Summer, 173-174.
- KOEPKE, M. 1959. Ein neuer Asthenes (Aves, Furnariidae) von der Küste und dem westlichen Andenabhang Südperus. Beitr. z. neotrop. Fauna, 1, no. 3: 243-248.—A new species of spinetail, Asthenes cactorum, described from the cactus desert, western slope Andes of southern Peru, collected between Atico and Arequipa. Attractive drawings of the bird and its nest and habitat.—E. E.
- LEVINE, N. D. "1958." [= 1959]. Uniform endings for the names of higher taxa. Syst. Zool., 7: 134-135.—Still another attempt. Under the author's suggested system the Mallard would belong to the class Aveasida, subclass Neornithasina, superorder Neognathorica, order Anserorida, suborder Anserorina, family Anatidae, subfamily Anatinae, and tribe Anatibida.—K. C. P.
- MAINARDI, D. 1958. Immunology and chromatography in taxonomic studies on gallinaceous birds. Nature, 182: 1388–1389.—Numida and Meleagris have closer immunological affinities than either to Gallus.—H. C. S.
- PARKES, K. C. 1958. Systematic notes on North American birds. 2. The waterfowl (Anatidae). Ann. Carnegie Mus., 35: 117-125.—Does not fully agree with either the lumping of Delacour or the conservatism of the new A.O.U. Check-list in their taxonomic treatments. Agrees that the shovelers may be a polyphyletic group.—E. E.
- RIPLEY, S. D. 1958. A note on the Firethroat and the Blackthroated Robin. Postilla, no. 37: 1-3.—Considers Luscinia obscura of northwest China a distinct species and not a color phase of L. pectardens.—E. E.
- RIFLEY, S. D. 1959. Comments on birds from the western Papuan Islands. Postilla, no. 38: 1-17.—Chiefly a list with taxonomic comments of birds taken on Kofiau Island. Described as new: Monarcha julianae (in M. leucurus superspecies), Nectarinia sericea mariae.—E. E.

- SIBLEY, C. G. 1958. Hybridization in some Colombian tanagers, avian genus Ramphocelus. Proc. Amer. Phil. Soc., 102, no. 5: 448-453.—A color cline exists between the scarlet-rumped R. flammigerus of the Cauca Valley and the yellow-rumped R. icteronotus of the Pacific coast. Orange-rumped birds, "R. chrysonotus," are believed to have resulted from hybridization, following the cutting of heavy forest formerly separating these populations. It is proposed that the two forms be treated as conspecific, sub nom. R. flammigerus. R. passerinii Bonaparte 1831, of Middle America, may prove to be as closely related to icteronotus; it bears an earlier name. There is a discussion of analogous cases of hybridization, some, like Collaptes, involving similar carotenoid pigments.—E. E.
- SIMS, R. W. 1959. The Ceyx erithacus and rufidorsus species problem. Jour. Linnaean Soc. London, Zoology, 44: 215-221.—In view of the intermediacy of characters in areas where these strikingly different kingfishers overlap, lack of reproductive isolation is indicated, and it is proposed to treat them as one species, C. erithacus.—E. E.
- SMITH, H. M. "1958" [= 1959]. The synthetic natural populational species in biology. Syst. Zool., 7: 116-119.—An attempt to reconcile three fundamentally different species concepts ("Mendelian," "clonal," and "phyletic"), using the terminology usually applied to the first of these.—K. C. P.
- STARRETT, A. "1958" [= 1959]. What is the subspecies problem? Syst. Zool.,
 7: 111-115.—Viewpoints expressed in papers in Systematic Zoology on specific and infraspecific taxonomy are reviewed. The relative importance of the concept vs. the category of "subspecies" depends on the aims of the system of classification, and is affected by the stage of knowledge of the group of animals being studied. Unwise use of the subspecies by some authors is irrelevant to the evaluation of infraspecific systematics, as such authors would probably abuse any alternative system of classification.—K. C. P.
- STORER, R. W. and D. A. ZIMMERMAN. 1959. Variation in the Blue Grosbeak (Guiraca caerulea) with special reference to the Mexican populations. Occ. Pap. Mus. Zool. Univ. Mich., 609: 1-13.—G. c. chiapensis Nelson considered a valid race.
- VAURIE, C. 1959. Systematic notes on Palearctic birds. No. 33. Passeriformes. Amer. Mus. Nat. Hist.: 15 pp.—An analytical index to the author's series of papers in the Amer. Mus. Novitates, 1953–1958. In addition to usual indices (chronological list, illustrations, new forms, and alphabetic index to names), Vaurie has indexed his papers according to the nature of the taxonomic or biological problems discussed.—K. C. P.
- VAURIE, C. 1959. Systematic notes on Palearctic birds. No. 34. Picidae: The genera Picus and Dryocopus.—With the publication of the passerine volume of his Palearctic list, Vaurie now commences work on the nonpasserines. The races of the Green Woodpecker (P. viridis) are reduced to four, one of which (vaillantii of North Africa) has usually been considered a separate species. Nine Palearctic (plus four extralimital, not examined) races are admitted of the Gray-headed Woodpecker (P. canus), and two of the Great Black Woodpecker (D. martius).—K. C. P.
- VAURIE, C. 1959. Systematic notes on Palearctic birds. No. 35. Picidae: The genus *Dendrocopos* (Part 1).—Species discussed, with the number of races admitted (a reduction from previous authors in all cases), are *D. major* (22), *leucopterus* (0), *syriacus* (0), *assimilis* (0), *darjellensis* (2), *cathpharius* (6),

medius (3), and leucotos (12). D. major tianshanicus is tentatively identified as a hybrid population, D. major x D. leucopterus. Hybridization between D. syriacus and D. assimilis is also discussed. Described as new is D. cathpharius ludlowi (Tsera, Pome, southwestern Sikang).—K. C. P.

- WETMORE, A. 1959. Notes on certain grouse of the Pleistocene. Wilson Bull., 71: 178–182.—Tympanuchus, Pedioecetes, and Bonasa from sites in Arkansas and Pennsylvania.—J. T. T.
- WINTERBOTTOM, J. M. 1959. A review of the subspecies of the Yellow Canary Serinus flaviventris (Swainson). Ann. South African Mus., 44: 315-321.— Subsp. nov.: S. f. quintoni from Hillmore, Beaufort West, in the Karoo areas of South Africa.—E. E.
- WOOLFENDEN, G. E. 1959. A Pleistocene avifauna from Rock Spring, Florida. Wilson Bull., 71: 183-187.—Thirty-five species and one additional genus were identified from a deposit probably formed in a fresh water habitat. Only two of the species are extinct.—J. T. T.

NOTES AND NEWS

The Secretary of the Union has been authorized by the Council to prepare an up-to-date membership list during 1960. Members of all classes are urged to bring to his attention errors in the latest list (October 1957), such as omissions of names, misspellings, erroneous alphabetization, incorrect class letters preceding names, wrong addresses, etc. Without such cooperation from those most concerned, a list relatively free of mistakes cannot be produced.

Mrs. Marjorie Ledingham, Secretary of the Local Committee on Arrangements for the Regina meeting, brings to the attention of the membership that copies of the group photograph may still be obtained from Stan's Photography, 3420 Hill Avenue, Regina, Saskatchewan, at a cost of \$1.25 (*including* twenty-five cents for mailing).

She points out also that any registered member or guest who failed to receive a free "Avocet Calendar" at the banquet may acquire one by writing to Mr. Elmer Fox, 1053 Gladmer Park, Regina.

Through the generosity of the Marcia Brady Tucker Foundation, Inc., we are again in a position to award funds to assist promising young ornithologists to attend the annual meeting of the Union. The amount granted will depend upon distance to be travelled and personal need. Any member may nominate candidates. It is not required that awardees present papers at the meeting, but since some may wish to apply for a position on the program, it is important that nominations be in hand *not later than* 1 June 1960.

Please send to the Secretary (H. G. Deignan, U.S. National Museum, Washington 25, D.C.) the following information: (1) name, age, and address of the nominee; (2) education and experience of the nominee; (3) a statement by the sponsor on the capabilities, special interest, and financial need of the nominee.