RECENT LITERATURE

EDITED BY FRANK McKINNEY

ANATOMY AND EMBRYOLOGY

BÄHRMANN, U. 1959. Zur Mauser einiger Rabenvögel. Vogelwelt, **79** (5): 129–135. The molt of *Corvus cornix, Coloeus monedula, Pica pica* and *Garrulus glandarius.*

BEHAVIOR

BERGMAN, G. 1958. Auslösung von Übersprungseinschlafen sowie Ermüdung der akustisch ausgelösten Revierverteidigung durch Magnetophonwiedergabe der Aggressionlaute beim Steinwälzer (*Arenaria interpres*). Ornis Fennica, **35**: 151–154. The release of displacement activity and the exhaustion of territorial defense released by recorded reproduction of the aggression call of the Turnstone. (In German; Finnish summary.)

HALL, K. R. 1958. Observations on the nesting sites and nesting behaviour of Kittlitz's Sandplover *Charadrius pecuarius.* Ostrich, **29**: 113–125.—The data on distraction display is of general interest.—E. E.

HANES, J. W., JR. 1958. Some notes on a Bachman's Warbler and his song. Atl. Nat., **13**: 233–235.

HARTSHORNE, C. 1958. The relation of bird song to music. Ibis, **100**: 421–445.—The author, involved in studies of "singing" of birds for some years, continues his intricately reasoned and intriguing, if for the most part "unprovable," speculation here. Bird song is considered as primitive music and "as an evolutionary anticipation of human music." Evidences given to support this theory are seen in the use by birds of elementary musical devices, avoidance of mechanical regularity, learning of songs and tunes, partial non-utilitarian nature and playful cultivation of sound production, association of quality of singing with quantity of singing.—J. W. H.

HESS, E. H. 1958. "Imprinting" in animals. Scientific American, **198**: 81–90.—Laboratory studies of imprinting using mallard ducklings and a mechanical model of a male mallard indicated that there is a critical age for imprinting which reaches a peak when the ducklings are 16 hours old. It was found that the distance traveled by ducklings during the imprinting period was positively correlated with the degree of imprinting attained. The time that elapsed during the imprinting period had little effect on the degree of imprinting.—J. C. H.

HØJGAARD, M. 1958. Observations and experiments conducted on a tame Blue Tit (*Parus caeruleus* L.). Dansk Orn. Foren. Tidsskr., **52**: 12–40.—A male Blue Tit reared for about a year from a fledgling showed no fear of predators, even when other birds reacted strongly. Unfamiliar objects of contrasting colors did arouse fear. Calls normal to wild Blue Tits were uttered, but not the song. Experiments showed ability to learn quickly to discriminate between form and even number. During the winter, and increasingly in the spring, the bird attempted to copulate on the hands of persons.—E. E.

HUMPHREY, P. S. 1958. Diving of a captive Common Eider. Condor, **60**: 408–410.

KAREILA, R. 1958. Observations of birds breeding in the mountains Urtasvaarri, with special reference to the behaviour of the Snow Bunting (*Plectrophenax nivalis*). Ornis Fennica, **35** (4): 140–150. (In Finnish; English summary.)

KILHAM, L. 1958. Territorial behavior of wintering Red-headed Woodpeckers.

Wilson Bull., **70**: 347–358.—Twelve *Melanerpes erythrocephalus* wintered in a four acre woods containing many acorns. Each woodpecker protected a territory, containing a roost hole and acorns that it had stored, from birds of the same and other species.—J. T. T.

KLOPFER, P. H. 1958. Influence of social interactions on learning rates in birds. Science, **128**: 903.—Greenfinches (*Chloris chloris*) learned avoidance responses in feeding more efficiently when feeding alone than when a member of a pair. —J. C. H.

LANYON, W. E. 1958. The motivation of sun-bathing in birds. Wilson Bull., **70**: 280.—Evidence is presented indicating that warmth may stimulate the sun-bathing behavior.—J. T. T.

LANYON, W. E., AND W. R. FISH. 1958. Geographical variation in the vocalizations of the Western Meadowlark. Condor, **60**: 339–341.

LEBRET, T. 1958. The "jump-flight" of the Mallard, *Anas platyrhynchos* L., the Teal, *Anas crecca* L. and the Shoveler, *Spatula clypeata* L. Ardea, **46**: 68–72.—The jump-flight display of these three species is described and discussed with emphasis on its seasonal distribution, significance, and analogous behaviors in other species.—W. C. D.

LEBRET, T. 1958. Inciting ("hetzen") by flying ducks. Ardea, **46**: 73–75.—This behavior is discussed for the Mallard and other dabbling ducks.—W. C. D.

LEBRET, T. 1958. Baltsbewegingen van het Nonnetje, *Mergus albellus* L. Ardea, **46**: 75–79.—Social display movements of the Smew are described. Comparable movements of other ducks are mentioned.—W. C. D.

LÖHRL, H. 1958. Das Verhalten des Kleibers (*Sitta europaea caesia* Wolf). Zeitschrift für Tierpsychologie, **15**: 191–252.—This five-year study of the European Nuthatch has resulted in a very valuable and scholarly presentation of the behavior of this species throughout its entire life cycle. Feeding behavior, territoriality, nesting, sexual behavior, agonistic behavior, development of behavior in the young, etc. are all treated thoroughly. (English summary.)—W. C. D.

LOVELL, H. B. 1958. Baiting of fish by a Green Heron. Wilson Bull., **70**: 280–281.—A *Butorides virescens* was observed repeatedly placing pieces of bread in the water and catching fish that were attracted by the bread.—J. T. T.

MEYERRIECKS, A. J. 1958. The amateur and the study of bird behavior. Bull. Mass. Aud. Soc., **42**: 127–133.—Useful hints on the methods and value of bird behavior studies; with bibliography.—E. E.

MILLER, R. C. 1958. Morning and evening song of robins in different latitudes. Condor, **60**: 105–107.—Data are presented to show that morning song begins and ends progressively earlier with increase in latitude and that duration of morning song increases with latitude. Evening song tends to terminate earlier at higher latitudes.—D. W. J.

NOLAN, V., JR. 1958. Singing by female Indigo Bunting (*Passerina cyanea*) and Rufous-sided Towhee (*Pipilo erythrophthalmus*). Wilson Bull., **70**: 287–288.

OEHME, H. 1958. Die "Landung" der Vögel. Beitr. z. Vogelkunde, **6** (4): 251–261.—Landing methods of birds, with diagrams and photos.

PETZOLD, H-G. 1958. Einige Bilder und Gedanken zum Thema "Kronismus beim Weissstorch." Beitr. z. Vogelkunde, 6 (4): 261–265. Photographs and discussion of the killing by the White Stork of its own young.

SCHMIDT, G. 1959. Zum Sozialverhalten von Tauchenten (*Aythya*) bei Eisgang. Ornith. Mitteil., **11**: 58.—In February when the bays began to freeze at Kiel,

Germany, the Tufted Ducks and Greater Scaup followed each other in single file through the open passages in the ice, thus tending to keep them open.

Diseases and Parasites

Ezzat, M. A. and G. Tadros. 1958. Contribution to the Helminth fauna of Belgian Congo birds. Ann. Mus. Roy. Congo Belge Tervuren, Sci. Zool., **69**: 1–81.

Gutiérrez, R. O. 1956. El ganso común *Coscoroba coscoroba* (Molina, 1782) huésped de *Dicheilonema rhea* (Owen, 1843). Holmbergia, 5 (12–13): 227–232. Coscoroba Goose host of a nematode parasite hitherto known only from the Rhea, *Rhea americana*.—E. E.

Distribution and Annotated Lists

Gilliard, E. T. 1959. Notes on some birds of northern Venezuela. Amer. Mus. Novit., **1927**: 33 pp.—Brief notes on 104 species seen between April 17 and May 2, 1955. Of particular interest are observations on breeding behavior, including descriptions of nests of 19 species A counterbalanced, suspended nest of *Phaethornis augusti* is figured. There is evidence that *Stelgidopteryx ruficollis* appropriates nest burrows dug by *Galbula ruficauda*. Eggs of *Molothrus bonariensis* were found in nests of *Turdus leucomelas* and *Tachyphonus rufus*. In cooperation with E. Eisenmann, further progress is made in the standardization of English vernacular names for Neotropical birds.—K. C. P.

Hayward, C. L. 1958. Additional notes on the Purple Martin in Utah. Condor, **60**: 406.

Holgersen, H. 1958. Sjeldne gjester i den Norske fuglefauna. Stavanger Mus. Årbok 1957, 103–111. (In Norwegian).—Lists the following of interest from North America: *Botaurus lentiginosus, Erolia melanotos, Erolia alpina arctica,* and *Oenanthe oenanthe leucorrhoa.*

Hooker, T. 1958. Birds seen on the eastern Canary Island of Fuerteventura. Ibis, **100**: 446–449.

Howell, T. R. 1958. Cape May Warbler in Nicaragua. Condor, **60**: 142.

Hüe, F., and R. D. Etchécopar. 1958. Un mois de recherches ornithologiques aux îles Canaries. La Terre et la Vie, **105** (3): 186–219.—The present status of birds in the Canaries, and their distribution.—E. E.

Johnson, N. K. 1958. Notes on the Red Crossbill in Nevada. Condor, **60**: 136–138.

Kessel, B., and T. J. Cade. 1958. Birds of the Colville River, Northern Alaska. Biol. Pap. Univ. Alaska, No. 2: 1–83. Price, $1.—This list of the species recorded from a major sector of Arctic Alaska, gives data on local distribution, abundance, habitat, breeding, migration and behavior. There are useful tables of the avian habitats, indicating whether used for nesting, courtship, foraging, resting or escaping. The 90 breeding species of the Arctic slope of Alaska are tabulated as to their preferences for the coastal, foothill, or alpine zones of the area. Exceptionally interesting for an annotated list are some of the behavioral items included; *e.g.*, the breeding association of Canada Geese with Rough-legged Hawks, Gyrfalcons and Peregrine Falcons, the latter two being intolerant of each other.—E. E.

Kenyon, K. W., and D. W. Rice. 1958. Birds of Kure Atoll, Hawaii. Condor, **60**: 188–190.—An annotated list of sixteen species is presented, and estimated populations of 13 resident sea birds are given. Red-tailed Tropic-birds and Laysan Albatrosses were the most abundant forms.—D. W. J.

LIVERSIDGE, R. 1958. A species new to South Africa *Xema sabini* (Sabine). Bull. Brit. Orn. Club, **78**: 149–150.—A Sabine's Gull taken off Slang Bay, Cape Province, Feb. 26, 1958, the first for the Indian Ocean.—E. E.

LIVERSIDGE, R., G. F. BROEKHUYSEN, AND A. R. THESEN. 1958. The birds of Langebaan Lagoon. Ostrich, **29**: 95–106.—A tidal lagoon on the Atlantic coast of South Africa is particularly rich in migrant waders. Many Palearctic waders remain during the months when the species are breeding in the north.—E. E.

MARCHANT, S. 1958. The birds of the Santa Elena Peninsula, S. W. Ecuador. Ibis, **100**: 349–387.—A systematic account is given of the birds of this most arid part of southwestern Ecuador, based on 420 specimens collected between 1954 and 1957. Status of species, elements of the fauna, seasonal movements, effects of environmental conditions and man-made alterations, and matters of taxonomy are discussed.—J. W. H.

MOLTONI, E. 1958. La Rondine di mare maggiore—*Hydroprogne caspia* (Pallas)—in Italia. Riv. Ital. Orn., **28**: 218–223.—A review of Italian specimens of the Caspian Tern.—E. E.

MOREAU, R. E. 1958. Notes on Musophagidae. Ibis, **100**: 620–621.—The author gives information, provided by correspondents, that supplements his recent long papers on the Musophagidae (Ibis, 1958. **100**: 67–112, 238–270). The new information extends ranges and habitats of certain species, and corrects minor errors of omission and transposition in the longer papers.—J. W. H.

MYRES, M. T. 1958. The European Starling in British Columbia: 1947–1957. Occ. Pap. Brit. Colum. Prov. Mus., no. **11**: 1–60.—Reached British Columbia 55 years after its introduction on the Atlantic coast in New York; now a common and widespread breeder.—E. E.

OLROGG, C. C. 1958. Notas ornitológicas sobre la colección del Instituto Miguel Lillo, Tucumán. III. Acta Zool. Lilloana, **15**: 5–18.—Distributional and taxonomic notes on Argentine birds in the collection of the Instituto Miguel Lillo, Tucumán, Argentina. Described as new: *Larus belcheri atlanticus, Scapaneus leucopogon major*. Examination of the type indicates that *Asthenes pyrrholeuca leptasthenuroides* (Lillo) has priority over *A. p. affinis* (Berlepsch). Supposed records of *Atticora c. cyanoleuca* from northwestern Argentina are questioned; all examples seen from Tucumán, Salta and Jujuy belong to *patagonica*. (In Spanish; English summary.)—E. E.

OLROGG, C. C. 1958. Observaciones sobre la avifauna antarctica y de alta mar desde el Rio de la Plata hasta los 60° de latitud sur. Acta Zool. Lilloana, **15**: 19–33. Results of a voyage to the South Orkneys, the South Shetlands, and Antarctic areas. (In Spanish; short English summary.)—E. E.

ORLANDO, C. 1958. Cattura di un Albatro urlatore (*Diomedea exulans exulans*, Linnaeus) in Sicilia. Riv. Ital. Orn., **28**: 101–113.—Full account of capture of a live male immature Wandering Albatross near Palermo, Sicily on Oct. 4, 1957, with photographs. Weight in flesh, 6.8 kgms.—E. E.

RAUSCH, R. 1958. The occurrence and distribution of birds on Middleton Island, Alaska. Condor, **60**: 227–242.—This is another significant annotated list coupled with a rather detailed study of ecologic formations. Emphasis is given to these formations (six of them), and the breeding birds of each formation are given with certain annotations. Finally, twenty-five transient species are listed.—D. W. J.

Ecology and Population

Bookhout, T. A. 1958. The availability of plant seeds to bobwhite quail in southern Illinois. Ecol., **39**: 671–681.—Little correlation was found between available plant seeds and frequencies and volumes of seeds taken.—S. C. K.

Curio, E. 1958. Geburtsortstreue und Lebenswartung junger Trauerschnapper (*Muscicapa h. hypoleuca* Pallas) Vogelwelt, **79** (5): 135–148. A careful study of birthplace fidelity and life expectancy in young Pied Flycatchers of the Berlin area.

Fallet, M. 1958. Der Jahresrhythmus eines grossstädtischen Bestandes des Haussperlings (*Passer domesticus*). Schriften Naturw. Ver. Schleswig-Holstein, **29**: 39–46. The annual population rhythm of the House Sparrow at Kiel, Germany. In December the population was 15,000; by the start of the next breeding season only 10,000. In late summer the population had increased by at least 11,250 more, yet brood dispersal, etc. reduced the total to about 17,000 in autumn.—E.E.

MacArthur, R. H.—1958. Population ecology of some warblers of northeastern coniferous forests. Ecol., **39**: 599–619.—Detailed analysis of niche requirements of Myrtle, Black-throated Green, Blackburnian, Cape May, and Bay-breasted Warblers.—S. C. K.

Morris, R. F., W. F. Cheshire, C. A. Miller, and D. G. Mott. 1958. The numerical response of avian and mammalian predators during a gradation of the spruce budworm. Ecol., **39**: 487–494.—During a spruce budworm outbreak in New Brunswick, Bay-breasted, Blackburnian, and Tennessee Warblers increased in numbers and Magnolia, Myrtle, and Black-throated Green Warblers decreased. Rodents and insectivores varied mostly independently. Mammal and avian predators had little control value on the outbreak.—S. C. K.

Mossman, A. S. 1958. Selective predation of Glaucous-winged Gulls upon adult red salmon Ecol., **39**: 482–486.—Gulls kill proportionately more female than male salmon.—S. C. K.

Preston, F. W. 1958. Analysis of the Audubon Christmas counts in terms of the lognormal curve. Ecol., **39**: 620–624.—Christmas bird counts approximate a lognormal curve except for an excessive number of species represented by one or two individuals and an underestimation of the numbers of very common species.—S. C. K.

Sharp, W. M. 1958. Microclimatic influences created by ground nesting birds. Ecol., **39**: 757.—Body heat of incubating birds stimulates increased growth of surrounding grasses and forbs. "Preening" the grass blades induces them to form an arch over the nest.—S. C. K.

Evolution and Genetics

Bock, W. J. and W. DeW. Miller. 1959. The scansorial foot of the woodpeckers, with comments on the evolution of perching and climbing feet in birds. Amer. Mus. Novit., **1931**: 45 pp.—An important paper, actually written by Bock but incorporating material from an unpublished MS. written by Miller about 1915. The zygodactyl arrangement of the toes is shown to be an adaptation for perching rather than for climbing as is often stated. Only in the wrynecks, piculets, and "ground woodpeckers," which relatively seldom climb on vertical trunks, is the toe arrangement functionally zygodactyl. Truly scansorial woodpecker feet are divided into a "short hallux" and a "long hallux" group. Miller's term "ectropodactyl" is advocated for the toe arrangement in the functional scansorial woodpecker foot. The evolution of various perching and climbing foot-types is postu-

lated and diagrammed. There are several foot-types in each category. Whereas each type developed as a functional adaptation, the existing differences between foot-types within a category (perching or climbing) have a phylogenetic rather than an adaptive origin.—K. C. P.

HAMILTON, T. H. 1958. Adaptive variation in the genus *Vireo*. Wilson Bull., **70**: 307–346.—The species of *Vireo* inhabiting North and Middle America are compared, and the intraspecific variation of some species is studied. Sympatric species occupy different plant associations or different strata of the same association. Longest wing lengths within species occur in populations of hot, arid regions; shortest occur in hot, humid regions; and intermediate lengths occur in cold regions. These results appear to conflict with Bergmann's rule. Migratory forms have more pointed wing-tips than resident forms. Tail length is positively correlated with wing length, and bill length is less so. Pigment variation supports Gloger's rule. *V. flavifrons* is considered to have evolved from *V. solitarius*, the two species now inhabiting different habitats and winter ranges. The variations in *Vireo* are compared with those in other genera.—J. T. T.

SAVILE, D. B. O. 1958. The loon wing. Evolution, **12**: 263.

SIBLEY, C. G., and D. A. WEST. 1958. Hybridization in the Red-eyed Towhees of Mexico: the Eastern Plateau populations. Condor, **60**: 85–104.—Use hybrid index between *Pipilo erythrophthalmus* and *P. ocai* with 6 plumage differences, and then give five gradations between each pure species. In this fashion a series of specimens is evaluated from critical areas of hybridization in central Mexico. In one area the two species are sympatric but hybridization occurs, yet in another area of sympatry no hybridization has been found.—D. W. J.

SNOW, D. W. 1958. Climate and geographical variation in birds. New Biology, **25**: 64–84.—A good discussion of the "ecogeographical rules."—E. E.

STORER, R. W. 1958. Loons and their wings. Evolution, **12**: 252–263.—In commenting on an article on adaptive evolution in birds' wings by D. B. O. Savile, Storer points out that loons are not relatives of the Hesperornithes. The present form of the wings of loons is stated to be a modification permitting swift flight despite a high wing-loading.—J. C. H.

GENERAL BIOLOGY

LEFEBVRE, E. A., and J. H. LEFEBVRE. 1958. Notes on the ecology of *Dactylortyx thoracicus*. Wilson Bull., **70**: 372–377.—Notes on the Singing Quail's habitat in Tamaulipas, Mexico, voice, behavior, and feeding.—J. T. T.

MCNALLY, J. 1957. The feeding habits of cormorants in Victoria [Australia]. Victoria Fish and Game Dept. Fauna Contrib., no. 6: 1–36. Stomach contents and feeding methods of the following: *Phalacrocorax carbo, P. sulcirostris, P. varius, P. melanoleucus, P. fuscescens,* and *Anhinga novae-hollandae*. Weights by sexes are also given.

MEANLEY, B., and R. I. MITCHELL. 1958. Food habits of Bachman's Warbler. Atl. Nat., **13** (4): 236–238.—Stomach contents of 14 examples taken between 1905–1916, and feeding behavior.—E. E.

MIDDLEMISS, E. 1958. The Southern Pochard *Netta erythrophthalma brunnea*. Ostrich, Suppl. 2: 1–34. African Wildfowl Enquiry. Rept. no. 1.—A full account of what is known about the African race of a duck, the nominate race of which breeds in South America.—E. E.

MOHR, H. 1958. Ein Fall von Polygamie bei der Rauchschwalbe (*Hirundo rustica*).

Orn. Mitteil., **10:** 7–9.—Two pairs of European Barn Swallows nested in a barn near Wetzlar, Germany. On the death or disappearance of one male, the other male helped to feed the young in both nests, and apparently fathered a second brood of each female—said to be an unprecedented case of polygyny in this species. (In German.)—E. E.

NICKERSON, B. 1958. Some observations on the Carmine Bee-eater *Merops nubicus* Gmelin in the French Sudan. Ibis, **100:** 454–457.—The association between this bee-eater and flocks of locusts is described. Flocks of the birds follow the locusts; nesting grounds may be determined by the locality of locust concentrations rather than presence of optimum nesting substrate.—J. W. H.

NØRREVANG, A. 1958. On the breeding biology of the guillemot (*Uria aalge* (Pont.)). Dansk Ornith. Foren. Tidsskr., **52:** 48–74.—A detailed study of the breeding behavior of the Common Murre on the Faroes. It contains much ethological data, and a comparison with the reported behavior of Brünnich's Guillemot (Thick-billed Murre). (In English.)—E. E.

QUAY, T. L. 1958. The foods and feeding habits of the Savannah Sparrow in winter. Jour. Elisha Mitchell Sci. Soc., **74** (1): 1–6.—Stomach contents of 200 specimens from vicinity of Raleigh, North Carolina.—E. E.

ROBERTSON, W. B., JR. 1958. Investigations of Ring-necked Pheasants in Illinois. Ill. Dept. Cons., Tech. Bull., No. **1:** 1–137. Springfield, Illinois.—First of a series of technical bulletins of the Illinois Department of Conservation. Illinois pheasant range is agricultural land used for dairy farming and grain crops in the glaciated northeastern area. The paper includes data on seasonal behavior, weights, age and sex ratios, brood sizes, nesting, population trends, ecology, hunting and management. The author believes that two factors work in a complementary fashion to prevent successful establishment in southern and western Illinois: lack of sufficient calcium grit in the soil and too high preincubation temperatures.—E. E.

ROBINSON, R. H. 1958. Use of nest boxes by Wood Ducks in the San Joaquin Valley, California. Condor, **60:** 256–257.

SCHNELL, J. H. 1958. Nesting behavior and food habits of Goshawks in the Sierra Nevada of California. Condor, **60:** 377–403.—This study entails a careful, detailed report of a nesting pair of Goshawks. Included in the report are matters relating to prey items (mostly small birds), caching of adults, male and female behavior, development of the young, and feeding of young. From hatching until two nestlings left the nest (49 days), the total estimated weight of prey consumed was 13,000 gms. When these birds left the nest, one weighed about 850 gms. and the other about 600 gms.—D. W. J.

SICK, H. 1958. Geselligkeit, Schornstein-Benutzung und Überwinterung beim brazilianischen Stachelschwanzsegler *Chaetura andrei*. Vogelwarte, **19:** 248–253. The social behavior, use of chimneys and wintering roosts of the swift, *C. andrei*, in the state of Rio de Janeiro, Brazil. While only a single nest is usually placed in one chimney, the pair is often accompanied by companions, as has been reported for the North American Chimney Swift (*C. pelagica*). Large flocks were found roosting together in winter. (In German.).—E. E.

SICK, H. and J. OTTOW. 1958. Vom brasilianischer Kuhvogel, *Molothrus bonariensis*, und seinen Wirten, besonders dem Ammerfinken, *Zonotrichia capensis*. Bonn. Zool. Beitr., **9:** 40–62. An important study of the Shiny Cowbird and its hosts (particularly the Rufous-collared Sparrow) in Brazil. Althought the cowbird often punctures the eggs of its host, a considerable proportion of sparrows hatch in parasitized nests and are successfully fledged. (In German.)—E. E.

SKUTCH, A. F. 1958. Roosting and nesting of Araçari Toucans. Condor, **60**: 201–219.—This account adds much to life history data concerning these elusive birds. For the two species, *Pteroglossus torquatus* and *P. frantzii*, both of which inhabit parts of Central America, there is a discussion relating to food, voice, roosting, nesting, and care of fledglings. Emphasis is placed upon roosting; these species occupy woodpecker holes or other natural cavities. As many as five or six birds roost together, sometimes with nestlings.—D. W. J.

SLADEN, W. J. L. 1957. Penguins. Scientific American, **197**: 44–51.—A popular account presenting information about the distribution of this group of birds, and their reproduction, food habits, ecology, sounds, longevity, health, and adaptations to extreme cold.—J. C. H.

SLADEN, W. J. L. 1958. The Pygocelid penguins. I. Methods of Study. II. The Adélie Penguin *Pygoscelis adeliae* (Hombron & Jacquinot). Falkland Islands Dependencies Survey, Sci. Rept., no. 17: 1–97, 12 photo. pls. Price, 47 s. 6 d. F. I. D. Sci. Bureau, 22 Gayfere St., London S. W. 1, England. A detailed and interesting study of the biology of the Adélie Penguin made in 1948, 1950, and 1951, with the aid of marked birds and motion picture photography. At the start of the breeding season the birds walk some 200 miles from open water (the source of food) to the rookery. Each member of the pair makes two long fasts during the breeding season, the longer fast of the male lasting continuously for about 40 days.—E. E.

SOUTHERN, W. H. 1958. Nesting of the Red-eyed Vireo in the Douglas Lake Region, Michigan. Jack-Pine Warbler, **36**: 105–130, 185–207.—An elaborate study, based on numerous nests, treating sizes of territory, defense behavior, location, size and construction of nests, incubation periods, clutch size, development and care of young. There are useful tables showing nesting success, and comparing nesting data in many species of *Vireo*. The author believes only the female incubates, although the male (which has no brood patch) sometimes sits on the nest.—E. E.

STONEHOUSE, B. 1956. The Brown Skua *Catharacta skua lönnbergi* (Mathews) of South Georgia. Falkland Islands Dependencies Survey, Sci. Rep., no. 14: 1–25, 2 photos. pls. Price, 10 s. F. I. D. Sci. Bureau, 22 Gayfere St., London S. W. 1, England.—Habitat, behavior, breeding biology, comparison with allied species, and taxonomy.

USPENSKI, S. M. 1958. The bird bazaars of Novaya Zemlya. Translations of Russian Game Repts., **4**: 159. Dept. North Aff. and Natl. Res. Canada. Price $1. A translation by J. M. MacLennan of a Russian book published in 1956. The nesting colonies of Arctic sea-birds known locally as "bird bazaars" are exploited for food in the Soviet Union. This study was made to determine methods for providing an annual "crop" of eggs and meat. This required study of the biology of the chief nesting species: *Uria lomvia, Cepphus grylle, Plautus alle, Uria aalge, Fratercula arctica,* and *Rissa tridactyla,* and of an important predator, *Larus hyperboreus*—of interest to ornithologists.—E. E.

WARHAM, J. 1958. The nesting of the Little Penguin *Eudyptula minor*. Ibis, **100**: 605–616.—Observations on breeding behavior were made at Cat Island, off southern Australia. Two pairs and their broods are the basis for most of the information presented. When the chicks are guarded the adults alternate their time at the nest, the relieving bird feeding the chicks upon arrival. Chicks leave the burrow at about 23 days of age, become independent, and go to sea between 56 and 60 days of age. Displays of this species are described and in most cases they are

analogous to those of New Zealand and Antarctic penguins. Coition occurs freely in the nesting period and recurs at the time of molt. Non-breeding individuals are the first to molt.—J. W. H.

WARNCKE, K., and J. WITTENBERG. 1958. Eizahl des Kuckucks. Vogelwelt, **79:** 20–22.—The number of eggs laid by the parasitic Cuckoo (*Cuculus canorus*) in one breeding season. (In German.)—E. E.

MIGRATION AND ORIENTATION

COCHRAN, W. W., and R. R. GRABER. 1958. Attraction of nocturnal migrants by lights on a television tower. Wilson Bull., **70:** 378–380.—Nocturnal migrants approached the red lights from different directions and circlel. Judged by the number of calls heard, birds were more numerous near the tower than one or two miles away and were more numerous when the lights were on than when they were off.—J. T. T.

MCCLURE, H. E. 1958. Dispersal of egrets on the Kanto Plain, Japan. Wilson Bull., **70:** 359–371.—The annual variation in the egret (three species of *Egretta*) population of the area is described. Dispersal of young egrets from breeding colonies brings peak density in the rice fields in August and September, coinciding with the peak of encephalitis infections in the area. Notes on other ardeids are included.—J. T. T.

OLSSON, V. 1958. Dispersal, migration, longevity and death causes of *Strix aluco, Buteo buteo, Ardea cinerea* and *Larus argentatus*. A study based on recoveries of birds ringed in Fenno-Scandia. Acta Vertebratica, **1,** no. 2: 89–189. Price, 20 Swedish kronor. Nordiske Museet and Skansen, Stockholm, Sweden. The banding data on four common species with different migration tendencies were studied. A good bibliography of pertinent European literature is included. The Tawny Owl, a sedentary species, shows a radial dispersal by young birds. The nominate race of the Common Buzzard, *B. b. buteo,* concentrates in large flocks that leave the Scandinavian Peninsula to follow a narrow path southwestward over western Europe. Young Common Herons disperse after fledging, with the more northern-bred birds moving predominantly northwards; after this late summer dispersal the entire population migrates out of Scandinavia. Two breeding Herring Gull populations have different winter ranges. Ages of the oldest banded birds recovered: Tawny Owl (10–11), Common Buzzard (17–18), Common Heron (18–19), Herring Gull (16–17). Falling of worn bands and failure to return illegible bands make for disproportionately fewer recoveries of older birds.—E. E.

PHYSIOLOGY

ASSENMACHER, I. 1958. La mue des oiseaux et son déterminisme endocrinien. Alauda, **26:** 251–289. A lucid and useful review and synthesis of published data on the endocrine basis of molt in birds, with an extensive bibliography. The thyroid gland is believed to be most important in producing molt. While sex hormones, in some species, affect the form and color of the new feathers or may give molt its cyclical character, in many species molt occurs without regard to the stage of the gonadal cycle. (In French.)—E. E.

NAMAKURA, T. 1958. Seasonal changes of thyroid gland and gonads of the Japanese Tree-Sparrow. 3. On the thyroid activity in seasons based on the histology. Misc. Rep. Yamashina's Inst. for Orn. and Zool., no. 12: 22–23. The month by month activity of the thyroid gland, as indicated by the sectional areas of

epithelial cells, follicles and colloidal part. (In Japanese; table, fig., and summary in English.)—E. E.

STEEN, J. 1958. Climatic adaptation in some small northern birds. Ecol. **39:** 625–629.—Freshly caught wild birds exposed experimentally to temperatures down to −25°C. maintained a lower body temperature and lower rate of oxygen consumption overnight compared with birds acclimatized for one week at −10°C. —S. C. K.

TAXONOMY AND PALEONTOLOGY

BRODKORB, P. 1958. Fossil birds from Idaho. Wilson Bull., **70:** 237–242.—Three new species—a cormorant, a swan, and a rail—are described and others are listed and commented upon.—J. T. T.

BRODKORB, P. 1958. Birds from the Middle Pliocene of McKay, Oregon. Condor, **60:** 252–255.—A collection of avian fossils from this area revealed the following forms: *Nettion bunkeri, Lophortyx shotwelli* (new species), and *Bartramia umatilla* (new species).—D. W. J.

CLANCEY, P. A. 1958. Taxonomic notes on two southern African species of Paridae. Ibis, **100:** 451–454.—It is proposed that *Parus niger* be divided into two subspecies, *P. n. niger* and *P. n. xanthostomus,* the latter epithet available from Shelley 1892. *P. afer cinerascens,* it is further proposed, is divisible into two distinct races: *P. a. cinerascens* and *P. a. intermedius,* the latter epithet being already available from Shelley 1900. *P. a. damarensis* Reichenow thus would be a synonym *of P. a. cincerascens.*—J. W. H.

CLANCEY, P. A. 1958. Geographical Variation in the Fairy Flycatcher. Ostrich, **29:** 112.—*Stenostira scita* of South Africa.

ELGOOD, J. H. 1958. A new species of *Malimbus.* Ibis, **100:** 621–624.—A new weaver, family Ploceidae, is described and named *Malimbus ibadanensis.* Known only from the area of Ibadan, Nigeria, it is much like *M. cassini,* but the female is entirely black, and the male has more red on the breast. The new species is described, and its habitat, behavior (including nesting), food, relationships with other species of the genus are given. Possibility of hybrid origin is mentioned but largely discredited.—J. W. H.

ESCALANTE, R. 1958. The subspecific identity of the Oystercatcher in Uruguay. Condor, **60:** 191–192.

GRANT, C. H. B. 1958. Ornithological nomenclature and nomenclatorial procedure. 26 pp. Caxton Holmesdale Press, 24 South Park, Sevenoaks, England.—A set of proposals for ornithological nomenclature, published posthumously by the author's friends. Captain Grant was a believer in strict priority starting with Jan. 1, 1758, had no patience with *nomina conservanda,* and opposed emendations even when the intended spelling appeared in the same publication (unless expressly stated to be a correction). His views certainly do not accord with the International Rules, though in most points they agree with the A.O.U. Code.—E. E.

HOWARD, H. 1958. Further records from the Pleistocene of Newport Bay Mesa, California. Condor, **60:** 136.

HOWARD, H. 1958. An ancient cormorant from Nevada. Condor, **60:** 411–413.

HUMPHREY, P. S. 1958. Classification and systematic position of the eiders. Condor, **60:** 129–135.—The author amasses evidence from a study of tracheal structure, plumage, food, and diving habits to propose eiders should belong to a separate Tribe Somateriini, next to the Anatini. *Lampronetta* is placed in the genus *Somateria,* while *Polysticta* is retained as a separate genus.—D. W. J.

HUSAIN, K. Z. 1958. Subdivisions and zoogeography of the genus *Treron* (Green Fruit-Pigeons). Ibis, **100:** 334–348.—These pigeons, which early were grouped into as many as six genera, later reduced to three or four, and most recently regarded as a single genus, are regarded as composing a single genus here, but one with several natural categories above the specific. The author recognizes and describes the genus, two subgenera, five species-groups, two super-species, and twenty-one species. *Sphenurus formosae australis* (McGregor 1907) is invalid because of *T. a. australis* (Linnaeus 1771). The author proposes that the former be renamed *T. f. mcgregorii* (nom. nov.). Species of *Treron* in Africa may have evolved from an Oriental dry-country form or an Oriental evergreen-forest form. In the latter case, the Oriental dry-country form, *T. phoenicoptera,* was derived from the form of the north African savanna in the period from late Miocene to late Pliocene.—J. W. H.

MACKWORTH-PRAED, C. W. 1958. The correct name of the Peregrine Falcon. Bull. Brit. Orn. Club, **78:** 149.—Contends that *Falco japonensis* Gmelin, 1788, should be adopted because of page priority. (*Cf.* Holthuis and Junge, Ardea, **46:** 167–170, 1958).—E. E.

MAINARDI, D. 1958. I gruppi sanguini degli uccelli ed il loro valore nella moderna sistematica. Riv. Ital. Orn., **28:** 114–124.—The blood groups of birds and their value in modern systematics. Contains a useful bibliography, much of it from non-ornithological journals. (In Italian.)—E. E.

MAINARDI, D. 1958. La filogenesi nei Fringillidi basata sui rapporti immunologici. Inst. Lombardo Scienze e Letteri (Milano), Rendiconti, Cl. Sci. (B), **92:** 336–356. (In Italian, with English summary.)—Serological examination of the red blood cells of 9 key species shows close relation between Estrildinae and Passerinae, and between Emberizinae and *Fringilla,* with the Carduelinae standing in intermediate position between these two major groups. The analysis agrees closely with the arrangement of Tordoff based on the skull, and in part with that of Stallcup.

MAYR, E. 1958. The sequence of the songbird families. Condor, **60:** 194–195.

MOYNIHAN, M. 1959. A revision of the family Laridae (Aves). Amer. Mus. Novit., **1928:** 42 pp.—This paper is an example of applying results of comparative behavior studies to taxonomy; morphological characters used are chiefly those of Dwight and von Boetticher. Behavior patterns and displays mentioned by name are not described or analyzed; references are given to earlier papers covering these matters. In large part, Moynihan has moved the existing classification down one notch in the hierarchy. The family Laridae is considered to include the skuas (given subfamily status) and the skimmers (given the status of a third tribe, along with the gulls and the terns, within the subfamily Larinae). Genera are greatly expanded. Except that in the "Sternini" Moynihan admits *Larosterna* and *Anoüs* (including *Procelsterna* and *Gygis*) as well as *Sterna,* his genera are exactly equivalent to his tribes. Within these large genera he admits numbered "groups," most of which are equivalent to currently recognized genera. Taxonomic innovations also include some regroupings of sequence of species within genera. Species relationhips are discussed in a few cases.—K. C. P.

PARKES, K. C. 1958. Specific relationships in the genus *Elanus.* Condor, **60:** 139–140.

RAND, A. L., and M. A. TRAYLOR, JR. 1959. Three new birds from West Africa. Fieldiana, Zool., **39,** no. 25: 269–273. The following new races are described *Polipicus elliotii gabela,* Gabela, Angola; *Nectarinia superba nigeriae,* Ifon,

Province of Ondo, Nigeria; *Serinus capistratus hildegardae,* Mt. Soque, Angola. —M. A. T.

RAND, A. L., and RABOR, D. S. 1959. Three new birds from the Philippine Islands. Fieldiana, Zool., **39,** no. 26: 275–277. Three new races are described: *Trichoglossus johnstoniae pistra,* Mount Malindang, Zamboanga Peninsula, Mindanao; *Harpactes ardens linae,* Sandayong, Sierra Bullones, Bohol; *Coracina striata boholensis,* Sandayong, Sierra Bullones, Bohol.—M. A. T.

VERHEYEN, R. 1958. Contribution à la systematique des Alciformes. Bull. Inst. Roy. Sci. Natur. Belg., **34,** no. 45: 1–15. The alcids are placed in a separate order, with the diving petrels, *Pelecanoides,* treated as a suborder—removed from their traditional place among the Procellariiformes.—E. E.

WAKEFIELD, N. A. 1958. The Yellow-tufted Honeyeater. With a description of a new subspecies. Emu, **58:** 163–194.—Variation and distribution of *Meliphaga melanops* of eastern Australia. New subspecies: *M. melanops gippslandica,* from Gooding, Gippsland, Victoria; the new form shows an approach to *M. cassidix,* formerly occurring in south Gippsland.—E. E.

WEBBE, R. 1958. Brent Geese (*Branta bernicla* (L.)) in Denmark and the colour problem. Dansk Orn. Foren. Tidsskr., **52:** 41–47.—Raises questions as to the relations between pale and dark-breasted forms in Europe and America.—E. E.

WHITE, C., M. N. WHITE, AND R. E. MOREAU. 1958. Taxonomic notes on the Ploceidae. Bull. Brit. Orn. Club, **78:** 140–145.—The Estridinae are removed and given family rank. The *Passer griseus-diffusus* group of African sparrows are all treated as races of *P. griseus,* even though *luangwae* is stated to be sympatric with *griseus.*—E. E.

WINTERBOTTOM, J. M. 1958. Systematic notes on birds of the Cape Province: VI. The classification of the South African Fringillidae. Ostrich, **29:** 110–111.

WINTERBOTTOM, J. M. 1958. A new subspecies of *Parisoma layardi* Hartlaub. Bull. Brit. Orn. Club, **78:** 148–149.—*P. l. aridicola* from Noisabis, Little Namaqualand, Cape Province.—E. E.

MISCELLANEOUS

KRATOCHVÍLA, J. J. *et al.* 1958. Investigations on vertebrates in Czechoslovakia. A survey of research institutes and addresses of scientific workers. Vertebratological Laboratories, Czechoslovak Acad. Sci., Brno. Lists ornithological organizations and ornithologists with their working aims. (In English.)

MILLS, H. B. *et al.* 1958. A century of biological research. Ill. Nat. Hist. Surv. Bull., **27:** 85–234. The history of the Illinois State Natural History Survey.

Erratum—'The Auk,' **76** (2), p. 256, April, 1959, next to last line on the page: Substitute "MEANLEY, B." for "SCHMID, F." (see correction Atl. Nat., **14** (1): 58, 1959).

Dr. Herbert Friedmann was awarded the Daniel Giraud Elliot Medal at the April, 1959, meeting of the National Academy of Sciences for his monograph "The Honeyguides" (U. S. Natl. Mus. Bull., **208,** 1955).