PERIODICAL LITERATURE

EDITED BY HERBERT W. KALE II[1]

Anatomy and Embryology

Burton, P. J. K. 1973. Structure of the depressor mandibulae muscle in the Kokako *Callaeas cinerea*. Ibis 115: 138–140.

Clark, G. A., Jr. 1973. Notched toe pads in climbing oscines. Condor 75: 119–120.

Edwards, H. M., Jr., F. Denman, A. Abou-Ashour, and D. Nugara. 1973. Carcass composition studies. 1. Influences of age, sex and type of dietary fat supplementation on total carcass and fatty acid composition. Poultry Sci. 52: 934–948.—Data on total body fat, water and lean dry carcass composition of commercial broiler chickens and the changes in these parameters with growth and different feeding regimes of fatty acids, indicate important differences in carcass composition between the sexes that develop with increasing age. Presents data in a form comparable with carcass composition studies conducted on other birds reported in the literature.—I.L.B.

Gebhardt, S. 1971. Eye color in Blue Jays. IBB News 43: 52–53.

Girouard, R. J., and B. K. Hall. 1973. Pituitary-adrenal interaction and growth of the embryonic avian adrenal gland. J. Exp. Zool. 183: 323–332.—The pituitary controls growth of the adrenal gland in embryonic *Gallus gallus*.—A.S.G.

Grandjean, P. 1972. Some morphological observations on the Guillemot (*Uria aalge aalge* Pont.) on Ellidaey, Westmann Islands. Dansk Ornithol. Foren. Tids. 66: 51–56.

Healy, W. M., and J. W. Thomas. 1973. Effects of dusting on plumage of Japanese Quail. Wilson Bull. 85: 442–448.

Hoover, E. 1972. Hairy Woodpecker with deformed eye. IBB News 44: 107.

Hoover, E. 1972. Weight variation of Downy Woodpeckers. IBB News 44: 149–150.—Of 40 male and 40 female *Dendrocopos pubescens* banded and weighed in Michigan, July 1968-June 1971, females averaged 28.6 g, males 27.8 g. Both sexes were heaviest in May, lightest in August.—D.M.F.

Lesseps, R. J. 1973. Developmental change in morphogenetic properties: Embryonic chick heart tissue and cells segregate from other tissues in age-dependent pattern. J. Exp. Zool. 185: 159–168.—Adhesiveness of heart cells increases during the period 1 to 4 days of incubation.—A.S.G.

Manwell, C., and C. M. Ann Baker. 1973. Low levels of lysozyme in the egg white from the Fairy Penguin *Eudyptula minor*. Ibis 115: 586–589.

Raikow, R. J. 1973. Locomotor mechanisms in North American ducks. Wilson Bull. 85: 295–307.

Rylander, M. K., and E. G. Bolen. 1973. Tongue structure of the Plumed Whistling Duck (*Dendrocygna eytoni*). Condor 75: 246–247.

Warner, R. W. 1972. The anatomy of the syrinx in passerine birds. J. Zool. 168: 381–393.—A histological approach to syringology, but with serious omissions and inadequate treatment of subject.—M.H.C.

Diseases and Parasites

Bennett, G. F., and A. G. Campbell. 1973. Avian Haemoproteidae. 3. Description of *Haemoproteus fusca* sp. n. and redescription of *Haemoproteus halcyonis*

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De Mello, 1935, parasite of the kingfisher family Alcedinidae. J. Parasitol. 59: 337–343.—From White-collared Kingfisher, *Halcyon chloris*. Includes a key to the alcedinid haemoproteids.—W.K.T.

BUSH, A. O., D. B. PENCE, D. J. FORRESTER. 1973. *Tetrameres (Gynaecophila) williamsi* sp. n. (Nematoda: Tetrameridae) from the White Ibis, *Eudocimus albus*, with notes on *Tetrameres (Tetrameres) grusi* Shumakovich from the Sandhill Crane, *Grus canadensis*. J. Parasitol. 59: 788–792.—Ibises from Florida and Louisiana were found infected. *T. williamsi* was named in honor of Lovett E. Williams, Jr. Reports *T. grusi* for the first time from North America.—W.K.T.

CARTER, J. M., A. G. CANARIS, AND J. R. BRISTOL. 1973. A survey of the parasites of Starlings (*Sturnus vulgaris* L.) in El Paso County, Texas. J. Parasitol. 59: 775.—Helminths infected 53% of 60 starlings, a lower rate than reported in other surveys and probably attributable to the xeric environment. Two species of acanthocephalans were found in 14 birds. One nematode, *Oxyspirura petrowi*, removed from the eyes of one bird, represents a new host record. The only external parasite was a mallophagan, *Degeeriella nebulosa* found on 10 individuals.—W.K.T.

CUNNINGHAM-VAN SOMEREN, G. R. 1973. *Vidua fischeri* (Reichenow) parasitic on *Granatina ianthinogaster* (Reichenow). J. East African Nat. Hist. Soc. and Nat. Mus. No. 139.—First established record for Kenya. Detailed notes on mouth markings of young and behavior of adult whydahs.—R.B.P.

FERNANDO, M. A., I. J. HOOVER, S. G. OGUNGBADE. 1973. The migration and development of *Cyathostoma bronchialis* in geese. J. Parasitol. 59: 759–764.—Experimental hosts were the Domestic Goose (*Anser cygnoides*) and the Canada Goose (*Branta canadensis*.)—W.K.T.

GUTIÉRREZ, R. J. 1973. Hematozoa from New Mexico Mourning Doves. J. Parasitol. 59: 932. Of 339 doves examined, 312 (92.0%) were positive. *Haemoproteus* was the most common genus represented. Attributes the higher incidence of *H. maccallumi* to a seasonal reduction in *H. sacharovi*.—W.K.T.

JENSEN, A. C. 1973. Warning—Red Tide! Sea Frontiers 19: 164–175.—Describes the history and occurrence of red tides. Also discusses biology and toxicology of organisms affecting marine animals (*Gymnodinium breve*) and warm-blooded animals (*Gonyaulax spp.*). Many gulls and ducks were killed in September 1972 by red tide in Gloucester, Massachusetts. Well-illustrated.—J.T.D.

KOCAN, R. M., AND J. O. KNISLEY. 1973. Two new diving duck hosts for *Plasmodium circumflexum*. J. Parasitol. 59: 104.—Redhead (*Aythya americana*) from North Carolina; Lesser Scaup (*A. affinis*) from Chesapeake Bay.—W.K.T.

LOCKE, L. N., AND L. T. YOUNG. 1973. An unusual case of lead poisoning in a Whistling Swan. Maryland Birdlife 29: 106–107.—Autopsy revealed an ingested lead sinker and typical pathological conditions.—H.B.

LOOS-FRANK, B. 1971. Zur Trematodenfauna der Silbermöwe (*Larus argentatus*) an der südlichen Nordsee. Vogelwarte 26: 202–212.—Examination of 180 Herring Gulls revealed 18 species of trematodes; gives seasonal incidence, infection rates, and comparisons with other studies. (English summary.)—H.C.M.

MARKUS, M. B., AND J. H. OOSTHUIZEN. 1972. The haematozoa of South African birds. 6. Avian malaria. Vet. Rec. 91: 198–199.—*Plasmodium* found in *Francolinus swainsonii* and *F. coqui* in Transvaal.—R.B.P.

MORIEARTY, P. L., D. E. POMEROY, AND B. WANJALA. 1972. Parasites of the Marabou Stork (*Leptoptilos crumeniferus* Lesson) in Queen Elizabeth National Park, Uganda. East African Wildl. 10: 311–315.

PENCE, D. B. 1973. The nasal mites of birds from Louisiana. 6. New and addi-

tional records of Dermanyssids (Rhinonyssinae) with description of a new species. J. Parasitol. 59: 359–362.—Describes *Ptilonyssus bombycillae* sp. n. from the Cedar Waxwing. The bird is also a new host for *Sternostoma hirundinis*. New geographic records include *Rhinoecius cooremani* from the Barred Owl and *Tinaminyssus zenaidurae* comb. n. from the Mourning Dove.—W.K.T.

PENCE, D. B. 1973. The nasal mites of birds from Louisiana. 7. The Ereynetidae (Speleognathinae). J. Parasitol. 59: 364–368.—Describes *Astrida coccyzae* sp. n. from the Yellow-billed Cuckoo. Gives new host records for the ereynetids.—W.K.T.

PENCE, W. D. 1973. The nasal mites of birds from Louisiana. 8. Additional records and description of a new species (Acarina: Dermanyssidae, Ereynetidae, Epidermoptidae, and Cytoditidae). J. Parasitol. 59: 874–880.—Describes *Sterostoma pirongae* sp. n. from the Summer Tanager, along with several new host-parasite records. Discusses the systematics of the "*sairae*" species group of the genus *Ptilonyssus* and concludes that *Ptilonyssus constrictus* is a synonym of *P. sairae*.—W.K.T.

PENCE, D. B. 1973. The nasal mites of birds from Louisiana. 9. Synopsis. J. Parasitol. 59: 881–892.—Conclusion of this study whereby over 1900 specimens of 193 species of birds from southern Louisiana were examined for nasal mites. About 48% of the species had one or more mite. Discusses the incidence, host-parasite relationships, affinites, and other considerations concerning these endo-parasites. Includes a list of the mite species and their hosts.—W.K.T.

PENCE, D. B., AND A. O. BUSH. 1973. *Polycyclorchis eudocini* gen. et. sp. n. (Trematoda: Cyclocoelidae) from the trachea of the White Ibis, *Eudocimus albus* L. J. Parasitol. 59: 85–89.

POULSON, A., AND H. GITAY. 1972. A possible role of the Cattle Egret in the dissemination of the granulosis virus of the bollworm. Ostrich 43: 231–232.—*Bubulcus ibis* had virus particles in the feces.—R.B.P.

SAH, R. L., L. N. ACHARJYO, AND G. C. MOHANTY. 1973. Lymphomatosis in a Peahen and Pied Hynah. Poultry Sci. 52: 1210–1212.

SCHMIDT, G. D., AND C. H. COURTNEY. 1973. *Parvitaenia heardi* sp. n. (Cestoidea: Dilepididae) from the Great Blue Heron, *Ardea herodias*, in South Carolina. J. Parasitol. 59: 821–823.—Immature specimens also found in a Brown Pelican.—W.K.T.

STABLER, R. M., N. J. KITZMILLER, AND C. E. BRAUN. 1973. *Plasmodium* in a Darwin's Tinamou from Colorado. J. Parasitol. 59: 395.—Two of 24 *Nothura darwinii* reared in open pens were infected with *Plasmodium pedioecetii*, a new host-parasite record. Authors report that this malarian parasite has been found in several gallinaceous species collected in the wild in Colorado.—W.K.T.

VARMA, M. G. R., E. T. W. BOWEN, D. I. H. SIMPSON, AND J. CASALS. 1973. Zirga [sic = Zirqa] virus, a new arbovirus isolated from bird-infesting ticks. Nature 244: 452.—The new virus, one of the Hughes group of arboviruses, was found in *Ornithodoros muesebecki* ticks infesting nests of *Phalacrocorax nigrogularis* on Zirqa Island in the south end of the Persian Gulf. It probably causes a febrile illness of oil workers on the island.—W.B.R.

DISTRIBUTION AND ANNOTATED LISTS

AILEY, D. G., AND T. OSBORNE. 1972. A Marin County, California, breeding site for Ashy Petrels. California Birds 3: 71.—Northernmost breeding locality for *Oceanodroma homochroa*.—L.C.B.

ANDERSON, M. 1973. Birds of Numagapak Point, northeastern Alaska. Arctic 26: 186–197.

AUSTIN, G. T., E. L. SMITH, AND S. SPEICH. 1972. New Arizona bird records. California Birds 4: 43–44.

BAILEY, E. P. 1973. Discovery of a Kittlitz's Murrelet nest. Condor 75: 457.—At Cold Bay, near tip of Alaska Peninsula.—H.W.K.

BAYLISS-SMITH, T. P. 1973. A recent emigrant to Ontong Java atoll, Solomon Islands. Bull. Brit. Ornithol. Club 93: 52–53.—Documented arrival and establishment in June 1972 of the Cardinal Lory, *Eos cardinalis*, a large flock of which was apparently displaced to this atoll via hurricane.—F.B.G.

BINFORD, L. C., AND R. W. STALLCUP. 1972. American Redstart breeding in California. California Birds 3: 87–90.—Breeding range of *Setophaga ruticilla* extended 210 km southwest.—L.C.B.

BROWN, R. G. B. 1973. A Black-capped Petrel north of Bermuda. Amer. Birds 27: 742.—A petrel, apparently *Pterodroma hasitata*, seen in Gulf Stream at 37° 57′ N, 62° 30′ W. Reviews recent observations in North Atlantic.—E.E.

BURLEIGH, T. D. 1972. A winter record for the Rough-winged Swallow in Monterey County, California. California Birds 3: 45.

DAVIS, T. H. 1973. Photographs of New York state rarities—23. Sage Thrasher. Kingbird 23: 72–74.—Eight east coast reports 1949–1971 and five New York reports 1942–1973 of *Oreoscoptes montanus*; two in spring, six in October, and five late fall to January.—M.C.B.

FALL, B. 1973. Noteworthy bird records from South Texas (Kenedy County). Southwestern Naturalist 18: 244–247.—Records of 14 species including the then northernmost record of the Mexican Crow (*Corvus imparatus*) in Texas.—J.J.D.

FIELD, G. D. 1973. Ortolan and Blue Rock Thrush in Sierra Leone. Bull. Brit. Ornithol. Club 93: 81–82.—About 50 *Emberiza hortulana* wintered in 1973. Two records suggest that *Monticolz solitarius* regularly wintered in Sierra Leone in small numbers above 5000 feet.—F.B.G.

GOCHFELD, M. 1973. Observations on new or unusual birds from Trinidad, West Indies, and comments on the genus *Plegadis* in Venezuela. Condor 75: 474–478.

GOODPASTURE, K. A., AND F. J. ALSOP, III. 1972. Traill's Flycatcher nests at Nashville, Tennessee. Migrant 43: 81–84.—First breeding record for central part of state; adults of "fitz-bew" species (*Empidonax trailli*).—E.F.P.

HAWTHORNE, V. M. 1972. Painted Bunting record for northeastern California. California Birds 3: 91–92.

HOLMES, R. T., AND C. P. BLACK. 1973. Ecological distribution of birds in the Kolomak River-Askinuk Mountain region, Yukon-Kuskokwim Delta, Alaska. Condor 75: 150–163.

HOWARD, W. I. 1973. Audubon's Warbler winters in Chemung County [New York]. Kingbird 23: 84–85.

HUNN, E. 1973. Noteworthy bird observations from Chiapas, Mexico. Condor 75: 483.

HUNT, G. L., JR., AND M. W. HUNT. 1973. Clutch size, hatching success, and eggshell-thinning in Western Gulls. Condor 75: 483–486.

JACKSON, J. A. 1974. The Evening Grosbeak in Mississippi. Mississippi Kite No. 5: 2–8.

KIBBE, D. P. 1973. Gray Jay near Robert Truman State Park [New York]. Kingbird 23: 83.

KING, D. G. 1973. The birds of the Shira Plateau and west slope of Kibo, Kili-

manjaro. Bull Brit. Ornithol. Club 93: 64–71.—Notes on the high altitude birds of the poorly known areas of West Kilimanjaro. Of particular interest are breeding records for the *Cercomela sordida* and the dependence of the sunbird *Nectarinia johnstoni* on flowering *Lobelia deckenii*. *Apus aequatorialis* and *Cisticola brunnescens* are recorded from upper Kilimanjaro for the first time (from author's summary.)—F.B.G.

LeGrand, E. K., and H. E. LeGrand. 1973. Traill's Flycatcher nesting at Raleigh, N. C. Chat 37: 24.—Nest with eggs and young; "fitz-bew" song form (*Empidonax trailli*).—E.F.P.

Lehman, P. 1973. European Fieldfare at Larchmont, Westchester Co., New York. Kingbird 23: 83–84.—*Turdus pilaris* observed from 3-12 February 1973. Lists four earlier North American records.—M.C.B.

Linehan, J. T. 1973. Nest records of Cerulean Warbler in Delaware. Wilson Bull. 85: 482–483.

McDaniel, J. W. 1973. Vagrant albatrosses in the western North Atlantic and Gulf of Mexico. Amer. Birds 27: 563–565.—Recent reports of *Diomedea chlororhynchos* and *D. melanophris*.—E.E.

Meijering, M. P. D. 1973. Zum Vorkommen der Elfenbeinmöwe *Pagophila eburnea* Phipps auf Spitzbergen im 17. Jahrhundert. Ardea 61: 128–130.—Records of the Ivory Gull on Spitzbergen in the 17th century. (In German, English summary.)—N.A.M.V.

Osborne, T. O. 1973. Recent nesting of the Rhinoceros Auklet in California. Condor 75: 463–464.

Parker, G. R., and R. K. Ross. 1973. Notes on the birds of Southampton Island, Northwest Territories. Arctic 26: 123–129.

Randall, R. N. 1971. The Red Crossbill at Bismarck, North Dakota. IBB News 43: 64–65.

Svensson, L. 1973. Booted Warbler *Hippolais caligata* found in Sweden. Ottenby Bird Station Report No. 64. Vår Fågelvärld 32: 204–206.—(English summary.)

Swickard, D. K. 1972. Status of the Least Tern at Camp Pendleton, California. California Birds 3: 49–58.—Includes life history data.—L.C.B.

Tangren, G. V. 1972. Records of Common Gallinules at Honey Lake, California. California Birds 3: 72.—Two sightings of *Gallinula chloropus* in Great Basin.—L.C.B.

White, C. M. N. 1973. *Diomedea cauta* in South African waters. Bull. Brit. Ornithol. Club 93: 56.—Records of the New Zealand form *D. c. cauta*.—F.B.G.

Zimmerman, D. A. 1973. Cattle Egrets in northern Mexico. Condor 75: 480–481.

Ecology and Population

Ainley, D. G. 1972. Brown Pelicans in north-central coastal California. California Birds 3: 59–64.—Monthly winter censuses at four localities suggest decline in numbers.—L.C.B.

Beck, B. B., C. W. Engen, and P. W. Gelfand. 1973. Behavior and activity cycles of Gambel's Quail and raptorial birds at a Sonoran Desert waterhole. Condor 75: 466–470.

Belknap, J. B. 1973. The Evening Grosbeak in New York state. Kingbird 23: 122–124.—Historically and now.—M.C.B.

Brown, L. H., D. Powell-Cotton, and J. B. D. Hopcraft. 1973. The breeding of the Greater Flamingo and Great White Pelican in East Africa. Ibis 115: 352–374.

—Summarizes information especially numbers, breeding seasons and success, for *Phoenicopterus ruber* and *Pelecanus onocrotalus* in Kenya and Tanzania.—R.W.S.

BUCKLEY, P. A., ET AL. 1973. The changing seasons. The winter season December 1, 1972.—March 31, 1973. Amer. Birds 27: 578–665.—Good discussion of boreal and montane irrupters, stragglers and displacements, invaders, introduced species, and reported hybrids. Palearctic species continue to be reported from Alaska: Whooper Swan and Bean Goose from Adak Island. Two 1972 specimens previously believed to be Oriental Cuckoos (*Cuculus saturatus*) prove to be first North American records of Common Cuckoos (*C. canorus*).—E.E.

BULMER, M. G., AND C. M. PERRINS. 1973. Mortality in the Great Tit *Parus major*. Ibis 115: 277–281.—Banding data from Wytham Wood indicate females have annual survival rate of 48% and males 56%. Discusses reasons for differences.—R.W.S.

BURGER, J. 1973. Competition between American Coots and Franklin's Gulls for nest sites and egg predation by the coots. Wilson Bull. 85: 449–451.

BURTT, H. E., AND M. L. GILTZ. 1971. Comparative blackbird populations at two banding stations. IBB News 43: 3–5.—Common Grackle, Brown-headed Cowbird, Red-winged Blackbird, and Starling populations at Columbus, Ohio.—D.M.F.

CLANCEY, P. A. 1973. The status and characters of the races of the Red-back Shrike wintering in the South African subregion. Detailed discussion of racial composition of wintering Red-back Shrikes. Bull. Brit. Ornithol. Club 93: 93–97.—Of 146 males from the South African subregion, 30% were *pallidifrons*, 35% were nominant *collurio*, and 26% were *kobylini*. Gives detailed descriptions of the characters of each race and their African distribution.—F.B.G.

CRASE, F. T., AND R. W. DEHAVEN. 1972. Current breeding status of the Yellow-headed Blackbird in California. California Birds 3: 39–42.—About 1912 breeding adults in 32 colonies.—L.C.B.

CRAWFORD, J. A., AND E. G. BOLEN. 1973. Spring use of stock ponds by Lesser Prairie Chickens. Wilson Bull. 85: 471–472.

DAVIS, R. S. 1971. Survival rates of Barn Swallows at Glenhaven Farm. IBB News 43: 13–15.—A total of 84 *Hirundo rustica* with 58 returns were banded near Clayton, Illinois from 1947 through 1950. A mean survival rate for adults of 43% with slightly higher survival rates for males than females indicates a life expectancy of 6 years for this species.—D.M.F.

DE LONG, MRS. W. C. 1971. Harris' Sparrow banding project. IBB News 43: 16–19—Banding results, returns, and survival ratios for *Zonotrichia querula* near Hamburg and Shennandoah, Iowa for 1963–1971.—D.M.F.

DIAMOND, A. W. 1973. Habitats and feeding stations of St. Lucia forest birds. Ibis 115: 313–329.

DOUTHWAITE, R. J. 1973. Pied Kingfisher *Ceryle rudis* populations. Ostrich 44: 89–94.—Densities along shores of lakes in East Africa of 2–6 birds per km, and exceptional densities of 9–16 birds per km on Kazinga Channel.—R.B.P.

DUNBAR, M. J. 1973. Stability and fragility in Arctic ecosystems. Arctic 26: 179–185.

EHRENROTH, B. 1973. [The occurrence of the Gray-headed Woodpecker *Picus canus* in Värmland, west-central Sweden.] Vår Fågelvärld 32: 260–268.—Notes on choice of nest tree, feeding of the young, call notes, general behavior, and suggestions for the protection of this rare species. (English summary.)—L.DEK.L.

ENEMAR, A., S. G. HÖJMAN, P. KLAESSON, L. NILSSON, AND B. SJÖSTRAND. 1973. [Study of passerine population densities in alpine birch forest by means of territory

mapping and nest count in quadrated plot.] Vår Fågelvärld 32: 252–259.—Mainly discusses the effectiveness of various census methods. (English summary.)—L.DEK.L.

FRANKS, E. C. 1973. Life expectancies of five passerine species in the DDT era. Amer. Birds 27: 571–572.—Band recapture records of certain species hatched before 1946 and after 1949 showed no significant differences in life expectancies of birds that reached the first January of life. Generally in passerines pesticides upset reproductive physiology, but do not kill adults.—E.E.

FREDRICKSSON, S., S. JACOBSSON, AND B. SILVERIN. 1973. [Studies of population structure in passerines during the breeding season with the aid of netting and banding.] Vår Fågelvärld 32: 245–251.—The floating population in an alpine habitat on the south slope of a Lapland mountain was studied intensively. Males outnumbered females. Numbers of captures were related to the degree of the species' mobility. No sharp delineation was detected between the floating and the breeding populations. (English summary.)—L.DEK.L.

HARRIS, M. P. 1973. The biology of the Waved Albatross *Diomedea irrorata* of Hood Island, Galapagos. Ibis 115: 483–510.—Includes notes on previous history of the colony, census data for 1970–71, details on breeding biology, food, molt, age of first breeding, survival of adults and immatures, and discusses return of immature birds to the colony and mass desertions.—R.W.S.

HJORT, C., AND A. LARSSON. 1973. [Shorebird census 1965–1973 at Ottenby Bird Station. Report No. 63.] Vår Fågelvärld 32: 199–203.—The study covers five species, all of which reached a marked low in 1966 from mortality during an abnormal cold spell in April. Each showed a strong trend toward recovery by 1973. (English summary.)—L.DEK.L.

VAN BALEN, J. H. 1973. A comparative study of the breeding ecology of the Great Tit *Parus major* in different habitats. Ardea 61: 1–93.—This is another fine chapter in the saga of the Great Tit, covering several study areas in The Netherlands over periods of up to 16 years. Previous studies showed that Great Tits breed in greater density in oakwoods than in pinewoods. This study describes feeding conditions and their effect on reproduction, especially survival of nestlings, in the two types of woods. The main food of nesting Great Tits is caterpillars. Far more frass was collected in oakwoods, and peak abundance occurred earlier by more than a month there than in pinewoods. In oakwoods the caterpillar peak occurs on the average 7 days after the eggs hatch, in pinewoods 41.5 days. Early broods in oakwood receive more food than do late broods in oakwood and all broods in pinewoods. Tits in pinewoods have longer feeding days than those in oakwoods, but still the parents are not able to satisfy the young, thus leading to greater mortality there. Surprisingly, in all areas nestling survival is not related to brood size, and reasons for this are discussed. Apparently the Great Tit is adapted for reproduction in deciduous woods. The pinewood populations have not adapted their breeding season to local conditions but start breeding when they do in oakwoods.—N.A.M.V.

EVOLUTION AND GENETICS

BENGSTON, S. 1972. An apparent hybrid between Barrow's Golden-eye *Bucephala islandica* and the Common Goldeneye *B. clangula* in Iceland. Bull. Brit. Ornithol. Club 92: 100–101.—Sight record correlated with increasing occurrence of Common Goldeneyes in Iceland.—F.B.G.

BENGSTON, S.-A., AND D. F. OWEN. 1973. Polymorphism in the arctic Skua *Stercorarius parasiticus* in Iceland. Ibis, 115: 87–92.—Discusses frequency distribution and possible adaptive significance of the light-dark, north-south cline. —R.W.S.

BULMER, M. G. 1973. Inbreeding in the Great Tit. Heredity 30: 313–325.—Data from 397 matings of Great Tits (*Parus major*) over 7 years at Oxford, England, resulted in the finding of seven consanguineous matings (pairs mated 2 or more years were counted but once). The lower limit of the coefficient of inbreeding (F) is 0.0036. Dispersal from birthplace to the site of first nesting averaged 702 m in males, and 864 m in females. Discusses inbreeding depression and presents a model for inbreeding in a large, uniform habitat unlike the variable, broken habitat in which the study was accomplished.—L.L.S.

CLARK, G. A. 1973. Holding food with the feet in passerines. Bird-Banding 44: 91–99.—Discusses the evolution and taxonomic utility of foot food-holding behavior based on an extensive literature survey and new observations.—B.A.H.

CLARK, G. A., JR. 1973. Unipedal postures in birds. Bird-Banding 44: 22–26.—This singular subject is based on records from 56 species of 23 families that stand on one foot for extended time periods. Possible functions and evolutionary significance are conjectured.—B.A.H.

CODY, M. L. 1973. Coexistence, coevolution and convergent evolution in seabird communities. Ecology 54: 31–44.—Six coexisting species of alcids in Washington State forage in different zones at sea, but otherwise do not differ greatly in food habits or breeding season. Two selective factors, predation and interspecific competition for food, are important in the breeding biology, morphology, and ecology of these alcids. Species that feed inshore guard chicks in small colonies at exposed cliff sites. Such chicks develop rapidly and leave the nest before reaching adult weight. Species feeding far offshore nest in burrows in large colonies. Chicks of these species grow slowly and do not leave the nest until after they attain adult weight. Alcid communities of northern Iceland have similar adaptive patterns, but southern hemisphere seabirds do not.—C.R.B.

COOKE, F., P. J. MIRSKY, AND M. B. SEIGER. 1972. Color preferences in the Lesser Snow Goose and their possible role in mate selection. Canadian J. Zool. 50: 529–536.—Young of two color morphs of *Anser caerulescens* (Cooch 1961, Auk 78: 72) reared with natural blue, white, or pink-dyed foster parents subsequently showed a preference for birds whose color resembled that of the foster parent. Such preferences, although not irreversible, may account for assortive mating within this polymorphic species.—R.M.E.

CRACRAFT, J. 1973. Continental drift, paleoclimatology, and the evolution and biogeography of birds. J. Zool. 169: 455–545.—A paper of major importance. It contains a detailed review of continental relationships during the Mesozoic and Cenozoic, a shorter review of the paleoclimatology during these periods, and a thoughtful (if often speculative) consideration of avian evolution and biogeography in light of recent and revolutionary geological discoveries concerning plate tectonics and continental drift. The author concludes "that a number of avian orders and families had their origin in Gondwanaland and predrift configurations of the continents were major determinants of their biogeography. Penguins, ratites, galliforms, and suboscines among others are the best examples. Tropical-subtropical Eurasia was probably the center of origin for the oscines, and primitive stocks entered the New World mostly through

Beringia and mostly prior to the Miocene (but also via a North Atlantic land connection prior to the early Eocene)."—M.H.C.

CRACRAFT, J. 1973. Vertebrate evolution and biogeography in the Old World tropics: Implications of continental drift and palaeoclimatology. Pp. 373–393 *in* Implications of continental drift to the earth sciences (D. H. Tarling and S. K. Runcorn, Eds.), London, Academic Press.—Presents a "tentative" hypothesis on the historical biogeography of Recent vertebrates that differs greatly from Darlington's (1957) hypothesis and reinterprets the broad patterns of evolution and biogeography in the Old World tropical vertebrate fauna in terms of continental drift and palaeoclimatology.—H.W.K.

CRAIG, J. L. 1972. Investigation of the mechanism maintaining polymorphism in the New Zealand Fantail, *Rhipidura fuliginosa* (Sparrman). Notornis 19: 42–55.—Counts in East Otago gave 88% pied and 12% black. Morph frequency varies in relation to vegetation type, feeding station, and possibly altitude. Differences probably are controlled by a single locus.—G.D.S.

FJELDSA, J. 1973. Possible female hybrids between *Bucephala islandica* and *clangula*. Bull. Brit. Ornithol. Club 93: 6–9.—Two specimens from Iceland.—F.B.G.

GILL, F. B., F. J. STOKES, AND C. STOKES. 1973. Contact zones and hybridization in the Jamaican Hummingbird, *Trochilus polytmus* (L.). Condor 75: 170–176.

HARRIS, M. P. 1972. *Coereba flaveola* and the Geospizinae. Bull. Brit. Ornithol. Club 92: 164–168.—Speculates that *Coereba* could be ancestral to the Geospizinae.—F.B.G.

HATHAWAY, E. V. 1972. A polymorphic population of *Mimus polyglottus*. Indiana Audubon Quart. 50: 113.—Several extremely melanistic mockingbirds found near northeastern Indianapolis.—H.W.K.

HOLYOAK, D. T. 1973. Significance of colour dimorphism in Polynesian populations of *Egretta sacra*. Ibis 115: 419–420.—Presents data on distribution but no discussion of significance.—R.W.S.

LACK, D. 1973. The numbers of species of hummingbirds in the West Indies. Evolution 27: 326–337.—One of David Lack's last papers, this concludes that the number of hummingbird species on each West Indian island generally is determined primarily by ecological factors, not by dispersal difficulties. Each West Indian hummingbird is purported to occur on all the islands on which it can survive. The correlation between the number of species and size of islands may result from a correlation of habitat diversity and island size. The high degree of endemism among West Indian hummingbirds is attributed to rapid evolution. Competitive exclusion is responsible for the geographic replacement of similarly sized, ecologically similar hummingbird species.—L.L.S.

MADERSON, P. F. A. 1972. On how an auchosaurian scale might have given rise to an avian feather. Amer. Naturalist 106: 424–428.—Presents a morphologic model of feather origins.—G.D.S.

NILES, D. M. 1973. Adaptive variation in body size and skeletal proportions of Horned Larks of the southwestern United States. Evolution 27: 405–426.—Reports on variation in Horned Larks at 1 Arizona, 3 Kansas, 6 Colorado, 5 northern Texas, and 18 New Mexico localities, based upon computer analyses of 18 linear measurements of 1346 adults, and certain environmental data.—L.L.S.

PAULSON, D. R. 1973. Predator polymorphism and apostatic selection. Evolution 27: 269–277.—Apostatic selection is invoked to explain polymorphism in avian predators, chiefly falconiforms. In most cases polymorphic hawks are those

foraging for prey (certain mammals, birds) capable of forming search images. The several exceptions among the hawks are offset to some degree by apparent correlation of diet and polymorphism within a number of species, e.g. *Accipiter novaehollandiae*. The vast majority of falconiforms showing polymorphism do so ventrally (or dorsally and ventrally), as expected if it is to benefit predators seeking prey below them. Jaegers may have similarly based polymorphism.—L.L.S.

PREVETT, J. P., AND C. D. MACINNES. 1973. Observations of wild hybrids between Canada and Blue Geese. Condor 75: 124–125.

REDFIELD, J. A. 1973. The use of incomplete family data in the analysis of genetics and selection at the Ng locus in Blue Grouse (*Dendragapus obscurus*). Heredity 31: 35–42.—The mode of inheritance was studied for polymorphism in a single gene locus (three alleles) through starch gel electrophoresis. Incomplete family data were used, i.e. genotypes were determined for females and some of their offspring, but not the male parents. The author concludes that "fitness is a complex function of different types of selection at different times in the year."—L.L.S.

REDFIELD, J. A. 1973. Demography and genetics in colonizing populations of Blue Grouse (*Dendragapus obscurus*). Evolution 27: 576–592.—Combined field studies of Blue Grouse populations on Vancouver Island and electrophoretic analysis of polymorphism at a single marker locus in blood esterase. Following logging, population density of the colonizing grouse increased up to the seventh year. The proportion of yearling birds in the colonizing population dropped for the first 3 years, then stabilized (at 45%). As the density of the population increased, heterozygosity increased at the locus studied. Further study is needed, but these results suggest that genetic structure changes occur with shifts in population density.—L.L.S.

REDFIELD, J. A., F. C. ZWICKEL, J. F. BENDELL, AND A. T. BERGERUD. 1972. Temporal and spatial patterns of allele and genotype frequencies at the Ng locus in Blue Grouse (*Dendragapus obscurus*). Canadian J. Zool. 50: 1657–1662.—Allele frequencies did not differ between nine populations on Vancouver Island. Suggests this is maintained by selection of a balanced polymorphism.—R.M.E.

ROHWER, S. A. 1973. Significance of sympatry to behavior and evolution of Great Plains meadowlarks. Evolution 27: 44–57.—Probably as consequences of interspecific territoriality relating to meadowlarks inhabiting vegetationally simple grasslands, Rohwer purports to find sympatric male Eastern and Western Meadowlarks (*Sturnella magna* and *S. neglecta*, respectively), compared with nearby allopatric populations, to the brighter yellow below, to have a more melanic and more extensive black breast patch, to respond more readily to inappropriate songs (i.e. those of the other meadowlark species), to fight more frequently as a consequence of the ineffectiveness of song, and, for *neglecta* males to resemble *magna* males more closely in size. The data, particularly for vocalizations, are rather scanty in view of the difficulty in treating these subtle aspects of meadowlark biology. The slight shifts in color of the breast, "statistically significant," make one wonder that these "display" colors are at all present in females of these polygamous icterids. Rohwer's results bear importantly on speciation and interspecific behavior, and they are in need of corroboration.—L.L.S.

SAMMALISTO, L. 1968. Hybridization of two extreme races of a widespread bird species, the Grey-headed Wagtail, *Motacilla flava* L. Trav. Mus. Hist. Nat. "Grigore Antipa" 9: 529–547.

SITTMANN, K. 1972. Sex ratio in pigeons segregating at the dilute locus. Canadian J. Zool. 50: 137–142.—Reanalysis of published data from Norway and U.S.A. indicated that the relationships between viability, pigmentation, and sex differ seasonally.—R.M.E.

SMITH, S. M. 1973. Food manipulation by young passerines and the possible evolutionary history of impaling by shrikes. Wilson Bull. 85: 318–322.

SOULÉ, M. 1970. A comment on the letter by Van Valen and Grant. Amer. Naturalist 104: 590–591.—A response to a paper listed below.—G.D.S.

TERBORGH, J. 1973. Chance, habitat and dispersal in the distribution of birds in the West Indies. Evolution 27: 338–349.—Several diverse aspects of West Indian bird distribution are considered in this all-too-brief article. Avifaunal differences between large islands are found to reflect their ecological (habitat) differences. For small and medium islands random processes contribute more than interisland habitat differences to avifaunal differences among these islands. There are strong dispersal differences among avian families, but among families reaching the West Indies an adaptive balance maintains, their proportions remaining relatively constant despite variation in the size of the islands. Sympatry within the various families represented on these islands tends to be comparable to that obtaining on the mainland, presumably because competitive exclusion limits the buildup of sympatry that might be expected to occur as a result of frequent colonization by species of these relatively mobile, water-crossing groups. Thus it is argued that insular avifaunas fluctuate about an equilibrium in which both the number of species and the level of sympatry within competing groups (= families) are limited by the opposition of contrary tendencies.—L.L.S.

VAN VALEN, L., AND P. R. GRANT. 1970. Variation and niche width reexamined. Amer. Naturalist 104: 589–590.—Comments on Soulé and Stewart's (1970, Amer. Naturalist 104: 85) evidence that purports to give evidence against the hypothesis that morphological variation tends to be greater in populations with wider niches. Authors claim that Soulé and Stewart's evidence is irrelevant to the problem.—G.D.S.

WILLSON, M. F. 1971. Ecological overlap and bill-size differences: a comment. Amer. Midl. Naturalist 86: 215.—Bill length similarities among four tropical tanagers related to foraging similarities. Discusses problems of relating competition intensity and means of reducing competition by morphologic differences.—G.D.S.

MANAGEMENT AND CONSERVATION

ANON. 1973. Information wanted on Monk Parakeet. Pennsylvania Game News, 44 (6): 40—Pennsylvania Game Commission seeks data on Monk Parakeets (*Myiopsitta monachus*) that have established wild breeding populations and may become agricultural pests.—J.T.D.

BRIDGEWATER, D. D. 1972. Status of rare and endangered birds in captivity with a general reference to mammals. Zoologica 57: 119–125.—Of the 340 forms reported as rare and endangered by the IUCN, 62 were reported in captivity during 1964–70. Only half of these bred once or more in captivity. Significant captive breeding success occurred primarily in Anseriformes, Galliformes, and Psittaciformes. Although the number of zoos exhibiting endangered species is increasing, the ratio of potential breeding groups to successful breeding is low and stable.—F.E.L.

BRIGGS, D., AND G. AXELL. 1973. Gull Island. Pacific Discovery 26 (4): 22–25.—

Reports on effects of intrusion by man and industry at Sea Gull Island, Oregon, nesting colony for California Gulls (*Larus californicus*) and Ring-Billed Gulls (*Larus delawarensis*). Includes photographs.—J.T.D.

BRIGGS, S. A. (Ed.). 1973. Landscaping for birds. Audubon Naturalist Soc. Central Atlantic States, Inc. (8940 Jones Mill Road, Washington, D.C. 20015). 62 pp., $2.00.—The seven chapters in this booklet originally appeared as articles in Atlantic Naturalist and are aimed largely at the central Atlantic states region. Includes two general premises that hold true in any climate: first, anyone can make a modest lot attractive to native birds, even one that a builder has ravaged, and second, a garden that harbors wildlife is more enjoyable for its human denizens too. (From foreword by G. Watson.)—H.W.K.

COMAR, M. C. 1973. Eldorado shorebird slaughter. Kingbird 23: 36–37.—Twenty-three freshly-killed shorebirds and a pile of 12-gauge shotgun shells at a Nature Conservancy sanctuary on Lake Ontario (photo).—M.C.B.

DEKKER, D. 1972. The need for complete protection of the Peregrine Falcon. Canadian Field-Naturalist 86: 307–309.—Published under "Letters." Argues against breeding projects in favor of maximizing the production of wild populations and recommends a moratorium on the "taking or using of any more Peregrines from the wild."—R.W.N.

DONOHOE, R. W., AND C. E. MCKIBBEN. 1973. History of wild-turkey (*Meleagris gallopavo*) transplants in the Ohio hill country. Ohio J. Science 73: 96–102.—In contrast to results with game farm birds, attempts to reintroduce wild-caught *M. g. silvestris* in southeastern Ohio were successful. Introduction of *M. g. osceola* and *M. g. intermedia* did not succeed.—A.S.G.

HEUSMANN, H. W., AND J. E. CARDOZA. 1973. Relocation of a Wood Duck clutch from a natural cavity to a nest-box. Wilson Bull. 85: 467–468.

KING, W. B. 1973. Conservation status of birds of central Pacific islands. Wilson Bull. 85: 89–103.—A comprehensive and highly informative report from the Conservation Committee of the Wilson Ornithol. Soc., based chiefly on investigations by personnel of the Pacific Ocean Biological Survey Program of the Smithsonian Institution between 1963 and 1968. Includes sound recommendations that should be supported and strongly advocated by ornithologists and conservationists in the U.S. and U.K.—H.W.K.

LAHRMAN, F. W. 1972. The Whooping Crane in Saskatchewan. Blue Jay 30: 146–150.—A review of crane conservation efforts in the province and elsewhere with a recommendation for the designation of a marsh in southern Saskatchewan as a "potential breeding area for a second migratory flock." Suggests present captives in New Orleans and San Antonio "are far too precious to be kept as mere zoo attractions," but should be released in large enclosures in suitable nesting habitat.—R.W.N.

MCLEAN, R. G. 1972. Acceptance of apholate-treated bait by pigeons. Amer. Midl. Naturalist 87: 527–530.—*Columba livia* tested with various baits and concentrations showed aversion to larger quantities of corn treated with concentrations higher than 0.3%—G.D.S.

MEYBURG, B.-U., AND J. GARZÓN HEYDT. 1973. Sobre la proteccion del Aguila Imperial (*Aquila heliaca adelberti*) aminorando artificialmente la mortandad juvenil. Ardeola 19: 107–108.—Reduction of nestling mortality of the Imperial Eagle in Spain by transferring the third hatchling (which usually dies) to an active nest with only one chick or infertile eggs. Fledging success in nine nests was increased by 43%. (English and German summaries.)—E.E.

MORRISON, J. A., AND J. C. LEWIS (Eds.) 1972. Proceedings, First National Bobwhite Quail Symposium. Stillwater, Oklahoma State Univ. Res. Found. 390 pp. $5.50.—A hefty volume on the Bobwhite, comprised of 40 papers and a "partial" bibliography of over 900 references, is the result of a 4-day symposium 23–26 April 1972. Three panel sessions were devoted to: Trends in principal management themes (4 papers), heretical ideas about Bobwhite ecology and management (4 papers), and landholder-sportsmen relations (3 papers). Two technical sessions covered: Problems and methods in management (11 papers) and current research on Bobwhite life history (10 papers). A final section included seven "supplemental" papers. As to be expected, the quality of papers varies greatly, but anyone working with the Bobwhite, or any other game bird, should read this volume.—H.W.K.

NIETHAMMER, G. 1971. Vogelleben am Ab-e-Istada (Afghanistan). Vogelwarte 26: 221–227.—This lake is one of the most important resting places in Afghanistan for waterfowl and waders. (English summary.)—H.C.M.

SCHORTMEYER, J. L., AND S. L. BECKWITH. 1971. Chemical control of pigeon production. Quart. J. Florida Acad. Sci. 34: 132–140.—Ornitrol, a chemosterilant, was used on feral *Columba livia* at a few sites in three Florida cities. To use this embryocide effectively much information on population movements and breeding schedules must be known.—G.E.W.

SOLMAN, V. E. F. 1973. Birds and aircraft. Biol. Conserv. 5: 79–86.—A review of the work done by the National Research Council of Canada to reduce bird-aircraft strikes. Habitat management, forecasts of bird movements, and other techniques have reduced the number of strikes and resultant damage to airplanes.—J.J.D.

WATSON, G. E. 1973. Sea-bird colonies in the islands of the Aegean Sea. Natl. Geogr. Soc. Res. Repts., 1966 Projects: 299–305.—A search for nesting colonies of the rare Audouin's Gull, *Larus audounini*. Removal of eggs and young by fishermen and shepherds, by egg collectors, and by museum and trophy specimen hunters, and disturbance of nesting grounds by bird-watching "life-listers" continues to threaten seriously the already greatly reduced populations of this gull. Concludes with a plea for protection during the mid-April to late June breeding cycle by international conservation groups.—H.W.K.

MIGRATION AND ORIENTATION

ALERSTAM, T., AND C.-A. BAUER. 1972. A radar study of the spring migration of the crane (*Grus grus*) over the southern Baltic area. Vogelwarte 27: 1–16.—An attempt to record by radar all the spring migration of cranes in the southwestern Baltic.—H.C.M.

BARTLETT, D., AND J. BARTLETT. 1973. Beyond the north wind with the Snow Goose. Natl. Geogr. 144: 822–847.—Describes fall and spring migrations of geese along the central flyway. The authors hand-reared and imprinted on themselves 11 Snow goslings (*Chen caerulescens hyperborea*), 3 Blues (*C. c. caerulescens*), and 1 Sandhill Crane (*Grus canadensis*). Numerous color photographs.—J.T.D.

BERGMAN, G., AND K. O. DONNER. 1971. Wind drift during the spring migration of the Common Scoter (*Melanitta nigra*) and the Long-tailed Duck (*Clangula hyemalis*). Vogelwarte 26: 157–159.—Radar studies reveal that the two species migrate over land without compensating for wind drift.—H.C.M.

BERTHOLD, P. 1972. [On the decline of migrant records in song birds in SW-Germany and its possible reasons.] Vogelwelt 93: 216–226.

BERTHOLD, P. 1973. Relationships between migratory restlessness and migration distance in six *Sylvia* species. Ibis 115: 594–599.—Supporting evidence that endogenous timing of migratory activity regulates the species-specific winter ranges. —R.W.S.

BROWDER, J. A. 1973. Long-distance movements of Cattle Egrets. Bird-Banding 44: 158–170.—Sightings of traveling flocks of *Bubulcus ibis* at Dry Tortugas (Florida), unquantified evidence of seasonal population fluctuations in Florida, and evidence of long distance movement elsewhere in the world, suggest that long distance movement is well-established in Cattle Egrets. Documents starvation of Cattle Egrets at Dry Tortugas, but provides no estimate of numbers that starve. Proposes a model for the genetic basis of Cattle Egret movement.—B.A.H.

CLARK, W. S. 1972. Migration trapping of hawks [and owls] at Cape May, N. J.—fifth year. EBBA News 35: 121–131.

CLENCH, M. H. 1973. The fall migration route of Kirtland's Warbler. Wilson Bull. 85: 417–428.

DEWOLFE, B. B., G. C. WEST, AND L. J. PEYTON. 1973. The spring migration of Gambel's Sparrows through southern Yukon Territory. Condor 75: 43–59.

DIAMOND, A. W., AND R. W. SMITH. 1973. Returns and survival of banded warblers wintering in Jamaica. Bird-Banding 44: 221–224.—Analyzes combined records for 10 species of banded North American Parulidae known to return to wintering grounds in Jamaica and establishes a survival value of ca. 50%. This value is lower than similar calculations for breeding warblers, and may reflect a decline in fidelity to wintering areas with increased age.—B.A.H.

ELY, C. H. 1973. Returns of North American birds to their wintering grounds in southern Mexico. Bird-Banding 44: 228–229.—Of 289 birds banded in Chiapas and Oxaca in 1971–1972, 10% were recaptured the next winter in the same localities, and in some cases in the same net sets.—B.A.H.

EVANS, P. R., AND G. W. LATHBURY. 1973. Raptor migration across the Straits of Gibraltar. Ibis 115: 572–585.—Based on spring passages of 1967–70 and autumn passages of 1967–69, relates migration to weather conditions.—R.W.S.

FLOCK, W. L. 1973. Radar observations of bird movements along the Arctic coast of Alaska. Wilson Bull. 85: 259–275.

GAUTHREAUX, S. A., JR. ET AL. 1973. The changing seasons. Spring migration 1973. Amer. Birds 27: 743–822.—Cold weather slowed migration. As usual, western species reported in the East and eastern ones in the West.—E.E.

GYLLIN, R. 1971. Notes on the spring migration of storks and raptors in Bulgaria. Vogelwarte 26: 182–185.—Storks and raptors apparently migrate across the eastern Balkans in spring. It was formerly believed that the birds avoided all of the Balkans by detouring to the west.—H.C.M.

HAACK, W., AND H. RINGLEBEN. 1972. Über den mauserzug nichtbrütender Graugänse (*Anser anser*) im nord- und mitteleuropäischen Raum. Vogelwarte 26: 257–276.—Nonbreeding, presumably immature Greylag Geese migrate to distant, traditional localities to molt. (English summary.)—H.C.M.

HARWOOD, M. 1973. The view from Hawk Mountain. New York, Scribner's. 191 pp. $6.95.—Discusses annual migration of hawks at Hawk Mountain, Pennsylvania. Also treats conservation fight by the Hawk Mountain Sanctuary Association during the last 30 years.—J.J.D.

HILDITCH, C. D. M., T. C. WILLIAMS, AND I. C. T. NISBET. 1973. Autumnal bird migration over Antigua, W. I. Bird-Banding 44: 171–179.—Tracking and weather

radar studies suggest that migrants passing over northeasterly Caribbean islands travel at greater altitudes than at other eastern seaboard sites where comparable studies have been made. Air speeds and radar signatures suggest most migrants in September–October to be small shorebirds.—B.A.H.

IMBODEN, C., AND D. IMBODEN. 1972. Formel für Orthodrome und Loxodrome bei der Berechnung von Richtung und Distanz zwischen Beringungs- und Wiederfundort. Vogelwarte 26: 336–346.—Formulae and a computer program for calculating distance and direction between banding and recovery localities. Large errors in direction and sizable errors in distance can result if one merely examines a mercator projection. (English summary.)—H.C.M.

JOHNSON, N. K. 1973. Spring migration of the Western Flycatcher with notes on seasonal changes in sex and age ratios. Bird-Banding 44: 205–220.—A survey of museum specimens suggest that most first-year *Empidonax d. difficilis* migrate through Arizona and California later and farther inland than older birds. The male:female sex ratio among first-year birds is close to 50:50 in fall, 60:40 among all birds in winter, and 63:37 among all birds in spring. Age ratios for first-year to older birds vary from 82% in fall, 42, 36, and 27% respectively, in winter, spring, and breeding season.—B.A.H.

JØRGENSEN, O. H. 1971. [Observations on the migration and wintering of the Grey Wagtail (*Motacilla cinerea*) in Denmark.] Dansk Ornithol. Foren. Tids. 65: 26–30.—(In Danish, English summary.)

KÄLLANDER, H. O., RYDÉN, AND C. WEIKERT. 1972. Unterschiede in der Beobachtungs-Effektivität bei der Registrierung vom Küsten-Seevogelzug. Vogelwarte 26: 303–310.—A study of observer variance (up to 50%!) in recording the visible migration of seabirds. (English summary.)—H.C.M.

KENNEDY, R. S. 1973. Notes on the migration of juvenile Ospreys from Maryland and Virginia. Bird-Banding 44: 180–186.—An analysis of band records of *Pandion haliaetus* from Virginia and Maryland shows that juveniles migrate south along the U.S. east coast, thence through the Greater Antillies, and finally by an undetermined route to northwestern South America. Maryland/Virginia juveniles migrate earlier than counterparts from the northeast. Major cause of mortality is said to be by shooting, but possible bias exists in this conclusion.—B.A.H.

KLEEN, V. M. 1972. A traveling Wilson's Warbler. IBB News 44: 235–236.—An adult male *Wilsonia pusilla* banded on 4 September 1970 in Londonderry, Vermont was captured on 19 September 1971 at Carbondale, Illinois.—D.M.F.

MCCLELLAND, B. R. 1973. Autumn concentrations of Bald Eagles in Glacier National Park. Condor 75: 121–123.

MEDWAY, L. 1973. A ringing study of migratory Barn Swallows in West Malaysia. Ibis 115: 60–86.—Describes habitat, geographical origin, migratory schedule, wintering range, movements, molt, age distribution, wing length and weight, gonad changes, and returns and survival based on 1276 recaptures from 62,665 *Hirundo rustica* captured and banded in Bentong (3° N, 102° E.)—R.W.S.

MELTOFTE, H., S. PIHL, AND B. M. SØRENSEN. 1972. [Autumn migration of waders (Charadrii) at Blåvandshuk, West Jutland 1963–1971.] Dansk Ornithol. Foren. Tids. 66: 63–69.—(In Danish, English summary.)

MONTGOMERY, R. A. 1972. Homing experiments with Brown-headed Cowbirds (1934–1938). IBB News 44: 168–174.—Seventy-one male and 6 female *Molothrus ater* trapped at Waukegan, Illinois were released 162 times. About 71% of males released returned within 8 weeks, while 28.4% of females returned. Releases of shorter distances yielded higher returns, and higher returns came from birds re-

leased along their migration or wintering range. Average return speed was about 30 miles per day.—D.M.F.

MOREL, G. 1973. The sahel zone as an environment for Palaearctic migrants. Ibis 115: 413–417.—Discussion of "Moreau's paradox".—R.W.S.

MYRES, M. T. 1972. Radar observations of three probably transoceanic migratory movements across the Gulf of Alaska in Spring 1965. Syesis 5: 107–116.—Probably Black Brant or Sooty Shearwaters. (From author's summary.)—H.W.K.

PAGE, G., B. FEARIS, AND R. M. JUREK. 1972. Age and sex composition of Western Sandpipers on Bolinas Lagoon. California Birds 3: 79–86.—Adult *Calidris mauri* arrive at this coastal California locality in autumn, 1 month prior to immatures. In spring males migrate through before females. Data suggest that a large proportion of males remain in North America during the winter, while most females move farther south.—L.C.B.

PASQUIER, R. F. 1973. Parasitic Jaegers seen from Great Gull Island, New York. Kingbird 23: 75–78.—Documents the movements of *Stercorarius parasiticus* near Long Island during August and September.—M.C.B.

PATTERSON, B. N. 1973. More on one-night mileage of migrants. Bird-Banding 44: 227–228.—At least one, and probably four *Spinus pinus* traveled over 96 miles in 16 hours.—B.A.H.

PEARSON, D. J., AND G. C. BACKHURST. 1973. The head plumage of eastern yellow-headed Yellow Wagtails wintering at Nairobi, Kenya. Ibis 115: 589–591.—Differential migration of *Motacilla flava flavissima* and *M. f. lutra*.—R.W.S.

PETERSEN, F. D., AND J. RABØL. 1972. Comparison of overcast and starry sky orientation in night migrating passerines. Dansk Ornithol. Foren. Tids. 66: 113–122.—Experiments suggest that birds are able to take a compass direction under an overcast sky.—H.A.J.

PRIGOGINE, A. 1972. The seasonal migrations of the Common Black Cuckoo-Shrike *Campephaga flava* Vieillot. Bull. Brit. Ornithol. Club 92: 83–90.—Northern Zaire (Kasai, Maniema, and South Kivu) records are of nonbreeding birds from Katanga. Breeding birds from plateau country south of Zaire move into eastern lowlands in June to September. Wintering *C. flava* overlap with nonbreeding *C. petiti*.—F.B.G.

PRIGOGINE, A. 1973. The migratory movements of the Pygmy Kingfisher *Ceyx picta natalensis* in the Republic of Zaire. Bull. Brit. Ornithol. Club 93: 82–90.—*Natalensis* is present in the southern Katanga between September and May but farther north occurs from April to August. *Natalensis* may be specifically distinct from nominate *picta* because of apparent sympatry.—F.B.G.

RABØL, J., AND H. NOER. 1972. Spring migration in the Skylark (*Alauda arvensis*) in Denmark. Influence of environmental factors on the flocksize and correlation between flocksize and migratory direction. Vogelwarte 27: 50–65.—The frequency of size of flock resembles closely the negative binomial distribution. Flock size increases with cloudiness or low visibility. Flocks appear better oriented and less likely to be involved in reversed migration than single birds.—H.C.M.

RABØL, J., H. NOER, AND R. DANIELSEN. 1971. Bird migration observed by radar in Denmark October 1968 to September 1969. Dansk Ornithol. Foren. Tids. 65: 1–11.—The movements observed fit rather well into the pattern of migration over Denmark known from field observations, banding, etc.—H.A.J.

RABØL, J., AND F. D. PETERSON. 1971. Experiments on the orientation of night migrating passerines in Denmark, Autumn 1969. Comparison of the reactions at 6 different sites. Dansk Ornithol. Foren. Tids. 65: 20–25.—*Sylvia borin*, *S.*

atricapilla, and *Phoenicurus phoenicurus* have a direction shift towards south-southwest as the season proceeds, with a more easterly direction in western and northern Denmark, and more westerly direction in eastern and southern Denmark. This should compress the Scandinavian migrating stream through Denmark and thus enable migrants to avoid the Baltic and especially the North Sea.—H.A.J.

SCHIEMANN, H. 1972. Über Winterquartiere nordeuropäischer Odinshühnchen (*Phalaropus lobatus*). Vogelwarte 26: 329–336.—Northern Phalaropes from northern Europe appear to winter in the Indian Ocean. (English summary.)—H.C.M.

SCHLENKER, R. 1972. Zum Herbstzug des Zwergschnäppers (*Ficedula parva*) im Bereich der Deutschen Bucht. Vogelwarte 27: 65–68.—Red-breasted Flycatchers have become more common during fall migration in the general area of the Helgoland Bight in the past 20 years. (English summary.)—H.C.M.

SVENSSON, L. O. 1973. [The migration 1971–1972 at Hjällsnäsviken in southwestern Sweden.] Vår Fågelvärld 32: 120–124.—The "pronounced leading lines" of the locality appeared to have a considerable influence on the birds' movements. Tables and maps illustrate the paper. (In Swedish, English summary.)—L.DEK.L.

TAYLOR, W. K. 1973. Black-throated Blue and Cape May Warblers killed in central Florida. Bird-Banding 44: 258–266.—Analyses based on sex, ages, and weights of *Dendroica caerulescens* and *D. tigrina* killed at a 1500-foot television tower in central Florida and at the Kennedy Space Center's Vehicle Assembly Building on the Florida east coast in spring and fall.—B.A.H.

THELLE, T. 1970. [Migration of the Oystercatcher (*Haematopus ostralequs* from west Norway to the Wadden Sea.] Dansk Ornithol. Foren. Tids. 64: 229–247.—The migration was studied in the period 1–7 August 1967 from two localities in southwest Norway and five localities in Jutland, Denmark. The largest migration was seen at Blåvand, Jutland, where 40,000 birds passed during this period. (In Danish, English summary.)—H.A.J.

ULLRICH, B. 1972. Zum Frühjahrszug des Blaukehlchens (*Luscinia svecica cyanecula*) mit besonderer Berücksichtigung der Gewichtsvariation der Rastvögel. Vogelwarte 26: 289–298.—A lengthy analysis of the spring migration of the Bluethroat in south Germany, based largely on the captures of 44 birds. (English summary.)—H.C.M.

VAUK, G. 1972. Weitere Feststellungen über den Durchzug der Türkentaube (*Streptopelia decaocto*) auf Helgoland 1963–1970. Vogelwarte 26: 285–289.—Trapping data and band recoveries of the Collared Turtle Dove. (English summary.)—H.C.M.

VAUK, G., AND C. HORNBERGER. 1972. Über den Durchzug der Dorngrasmücke (*Sylvia communis*) auf Helgoland 1958–1969. Vogelwarte 26: 298–303.—An analysis of 12 years of trapping data on migrant Whitethroats. On Helgoland the bird is about twice as common in spring as in fall. Numbers vary greatly from year to year. (English summary.)—H.C.M.

WILTSCHKO, W., AND F. W. MERKEL. 1971. Zugorientierung von Dorngrasmücken (*Sylvia communis*) in Erdmagnetfeld. Vogelwarte 26: 245–249.—Whitethroats kept in rooms in Frankfurt appear to orient if the normal earth's magnetic field is present; disorientation appears when the magnetic field is reduced in intensity by 25%. The wintering areas have magnetic fields of yet lower intensity suggesting that the birds can adjust to lower magnetic fields. (English summary.)—H.C.M.

WEYDEMEYER, W. 1973. The spring migration pattern at Fortine, Montana. Condor 75: 400–413.

MISCELLANEOUS

BELL, M. W., AND D. A. KLEBENOW. 1973. Hurricane impact on Bobwhite cover. Southwestern Naturalist 17: 433–435.—Damage by Hurricane Celia apparently provided better cover for *Colinus virginianus* and improved the habitat.—J.J.D.

BERNSTEIN, M. H., S. P. THOMAS, AND K. SCHMIDT-NIELSEN. 1973. Power input during flight of the Fish Crow, *Corvus ossifragus*. J. Exp. Biol. 58: 401–410.—Because it is of similar body size to the previously examined (by V. Tucker) Laughing Gull, but of different wing morphology and wingbeat frequency the Fish Crow was selected for test during sustained flight in a wind tunnel. "Power input varied little with air speed, but decreased with increasing angle of descent. Minimum power input for horizontal flight (0.083 Wg^{-1}) was 6.4 times greater than mean resting power input. During horizontal flight, power input . . . exceeded by about one-third that for the Laughing Gull."—A.S.G.

BLEITZ, D. 1970. Mist nets and their use. IBB News 42: 43–56.—A good review of mist-netting techniques.—D.M.F.

BRAUM, H. W., AND M. B. SKAGGS. 1972. Warbler catching in water drip traps. IBB News 44: 123–132.

BULL, J. 1973. Exotic birds in the New York City area. Wilson Bull. 85: 501–505.

BULL, P. C., AND P. D. GAZE. 1972. Bird distribution mapping scheme. Notornis 19: 267–270.—Discusses a grid system and distribution reporting scheme for New Zealand. Includes maps for Mynas (*Acridotheres tristis*) on North Island and Spur-winged Plovers (*Lobibyx novaehollandiae* on South Island.—G.D.S.

BUTLER, M. 1973. Monk Parakeet (*Myiopsitta monachus*), a recent colonizer in eastern North America. Wilson Bull. 85: 259.—A painting by the artist.—H.W.K.

CHRISTENSEN, S., AND B. P. NIELSEN. 1970. [Field-identification of eagles and buzzards of the genera *Circaëtus*, *Hieraaëtus*, *Buteo*, and *Pernis*.] Dansk Ornithol. Foren. Tids. 64: 1–44.—A detailed study with figures of undersides and upper-sides of all plumages. (In Danish, English summary.)—H.A.J.

COLLINS, C. T. 1972. Weights of some birds of north-central Venezuela. Bull. Brit. Ornithol. Club 92: 151–153.—Weights of 59 species. *Streptoprocne zonaris* is heavier than it is on Trinidad.—F.B.G.

COLSTON, P. R. 1972. African passerine bird weights. Bull. Brit. Ornithol. Club 92: 115–116.—Lists 239 weights for 98 Kenyan species.—F.B.G.

COWARDIN, L. M., AND D. A. DAVENPORT. 1973. Computerized system for organizing and maintaining files of banding data. Bird-Banding 44: 187–195.

CRETIN, J. Y., J. FRANÇOIS, AND J. SIMERAY. 1971. Une Hirondelle de fenêtre (*Delichon urbica*) en albinisme total. Jean-le-Blanc 10: 34.—An albino House Martin.—A.C.

DUNSTAN, T. C. 1972. A harness for radio-tagging raptorial birds. IBB News 44: 4–8.

DUSI, J. L., R. T. DUSI, AND D. L. BATEMAN. 1971. The use of mist nets and decoys in heron and ibis banding studies. IBB News 43: 6–7.—Describes the use of silhouette and three-dimensional models with mist nets to capture Little Blue Heron, Cattle Egret, and White Ibis near nesting colonies.—D.M.F.

EDGAR, A. T. 1972. Classified summarized notes 1963–1970. Notornis 19 (Suppl.):

1–91.—Summary of selected observations submitted to central registry of Ornithol. Soc. of New Zealand from 1963 to 1970.—G.D.S.

EDWARDS, W. M. 1973. Abundant life in a desert land. Natl. Geogr. 144: 424–436.—Describes Organ Pipe Cactus National Monument in southern Arizona. Includes photographs of Harris's Hawk (*Parabuteo unicinctus harrisi*), Gila Woodpecker (*Centurus u. uropygialis*), and Roadrunner (*Geococcyx californianus*). J.T.D.

FOG, J. 1971. Bird-markings by the Game Biology Station 1950–70. Dansk Ornithol. Foren. Tids 65: 129–132.—The Kalø Game Biology Station banded 108,931 birds of 106 species from 1950–70. Of these 60% were gallinaceous, 25% anserine, and 12% gulls.—H.A.J.

GODFREY, G. A. 1970. A transmitter harness for small birds. IBB News 42: 3–5.

GOLDBERG, M. G. 1972. Preparation of sunflower seed for feeding finches. IBB News 44: 16–17.

HALD-MORTENSEN, P. 1971. [Red-backed Shrike (*Lanius collurio*) still able to fly with only four primaries in the left wing.] Dansk Ornithol. Foren. Tids. 65: 75–77.—(In Danish, English summary.)

HAMERSTROM, F. 1971. Ageing Red-tailed Hawks by tail color in Wisconsin. IBB News 43: 9–11.

HARDY, J. W. 1973. Feral exotic birds in southern California. Wilson Bull. 85: 506–512.

HARTMAN, S. G. 1972. New designs for a systematic exhibit of birds. Curator 15: 113–120.—The functional and aesthetic aspects of a new exhibit at the Peabody Museum of Natural History, Yale University designed to aid in identification of Connecticut birds.—F.E.L.

HAUKIOJA, E. 1971. Processing molt card data with reference to the Chaffinch *Fringilla coelebs*. Ornis Fennica 48: 25–32.—Presents a computer programming system for the molt of the Chaffinch in Finland in 1970.—M.D.F.U.

HEDGREN, S., AND L. LARSSON. 1973. [Glaucous Gull *Larus hyperboreus*, Iceland Gull *L. glaucoides*, and other gulls of deviating coloration—the difficulties of field identification of gulls with light-colored wings.] Vår Fågelvärld 32: 173–198.—Deals with significant keys to identification: (1) the color and pattern of the plumage, the shape of the tips of the primaries for age determination; (2) color patterns of the beak; (3) the color of the eye and eye ring; (4) the color of the legs, plus measurements and flight pattern. Also a useful discussion on the criteria for species determination of albinos and gulls in other deviating plumages. (Well-illustrated, tables and diagrams, an informative English summary.)—L.DEK.L.

HILSABECK, J. L. 1972. Wing chord measurements in Tree Sparrows. IBB News 44: 225–227.—Measurements of 87 *Spizella arborea* from northwest Missouri show a longer left wing.—D.M.F.

HOHN, E. D. 1973. Mammal and bird names in the Indian languages of the Lake Athabasca area. Arctic 26: 163–171.

Jeffreys, M. W. 1973. The Quelea finch: the origin of the word. Bokmakierie 25: 46–48.—The "quail" of Exodus and Numbers may be the source of the name *Quelea*. The old spellings of quail (the first before any known more definite reference to the finch) are "qualia" and "qualea."—R.B.P.

KLIMKIEWICZ, M. K. 1972. Breeding bird atlas of Montgomery County, Maryland. Maryland Birdlife 28: 130–141.—A 2-year pilot project of a chapter of the

Maryland Ornithol. Soc., this first American effort was patterned after Britain's. It recorded 132 species in a piedmont county adjacent to Washington, D. C. Breeding was confirmed for 111 species; active nests of 80 were located. Includes maps and discussion of results.—H.B.

KUHK, R., AND E. SCHÜZ. 1971. Ungewöhnliche Vogelmarkierungen. Vogelwarte 26: 197–202.—Accounts of birds "banded" with slips of paper and other home-made devices. (English summary.)—H.C.M.

LEBERMAN, R. C. 1972. Key to age and sex determination of Ruby-throated Hummingbirds in autumn. IBB News 44: 197–202.

MACBRIAR, W. N., JR. 1971. Wing measurement variation: 2. IBB News 43: 21–27.—Discusses the sources of variation in wing measurements especially in Bank Swallows.—D.M.F.

MACBRIAR, W. N., JR. 1972. Salvaged bird tags. IBB News 44: 60.

MARTIN, M. W. 1973. A postal gallery of marine life: sea birds. Sea Frontiers 19: 107–109.—Most popular bird depicted on stamps is the penguin.—J.T.D.

MCGAHAN, J. 1973. Gliding flight of the Andean Condor in nature. J. Exp. Biol. 58: 225–237.—Observations of 57 *Vultur gryphus* gliding along a measured stretch of beach. Air speed was determined by a vector analysis of ground speed and wind velocity. Initial data yield "implausibly low values" for parasite drag coefficient. Substitution of values for Black Vultures yields an adjusted L/D ratio of 14 for a condor gliding with wings fully extended. Flexion of the wings reducing span by 20% increased estimated optimum air speed by 9–10%.—A.S.G.

MCGAHAN, J. 1973. Flapping flight of the Andean Condor in nature. J. Exp. Biol. 58: 239–253.—Description of wingbeats from film (64 fps) of *Vultur gryphus* and discussion of aerodynamics. At air speeds near those of equilibrium gliding, flapping reduces sinking speed without increasing forward air speed. Computations of minimum power output generated by a startled condor suggest that the condor is incapable of extended, sustained flight in still air.—A.S.G.

NACHTIGALL, W. 1973. Geschichte der Erforschung des Vogelflugs von der Renaissance bis zur Gegenwart. J. Ornithol. 114: 283–304.—An account of the history of bird flight investigations from Da Vinci to the present. (English summary.)—H.C.M.

OWRE, O. T. 1973. A consideration of the exotic avifauna of southeastern Florida. Wilson Bull. 85: 491–500.

PURCHASE, D. 1972. Seventeenth annual report of the Australian bird-banding scheme, July 1970 to June 1971. CSIRO Wildl. Res. Tech. Pap. No. 25: 1–87.—A summary of banding totals and recoveries with tabulation of longevity records for selected species.—B.A.H.

ROBERTSON, C. J. R. 1972. Preliminary report on bird banding in New Zealand 1964–1971. Notornis 19: 61–73.—Historical data and information on the number of each species banded, recovered, and recovered again.—G.D.S.

ROGGE, C., AND G. ROGGE. 1972. Some banding recoveries and returns. IBB News 44: 184–189.—Data on 24 recoveries and 141 returns of passerines, banded or recovered at Sioux Falls, South Dakota.—D.M.F.

SALOMONSEN, F. 1971. [From Zoological Museum 24. Twelfth preliminary list of recoveries of birds ringed in Greenland.] Dansk Ornithol. Foren. Tids. 65: 11–19.—(In Danish, English summary.)

SALOMONSEN, F. 1972. Ringmaerkning af fugle i Grønland 1966–69. Tids Grønland 111–120.—Although in Danish, a table provides a summary of birds banded

in Greenland from 1946–65 and 1966–69. The overall total through 1969 was 45 species and 127,470 individuals banded (32 and 38,212 in 1966–69), with 36 species and 7311 individuals recovered in Greenland (18 and 1385 in 1966–69) and 23 species and 942 individuals outside Greenland (13 and 247 in 1966–69). —J.P.H.

SALOMONSEN, F. 1973. The making of an Arctic naturalist. Arctic 26: 91–94.—Autobiographical.—J.A.J.

SALVADORI, A., AND K. A. YOUNGSTROM. 1973. A system survey of a bird observatory: Part 1. A recording form for banding data. Bird-Banding 44: 249–257.—Presents an 80-character recording form for bird banders with criteria for coding biometric and qualitative data in a format ready for keypunching. The form is suitable for use by careful laymen but is designed so that most common recording errors will be detectable with an error-checking program.—B.A.H.

SCHIFTER, H. 1973. A specimen of *Coua delalandei* (Temminck) (Cuculidae) in the Naturhistorisches Museum, Vienna (Austria). Bull Brit. Ornithol. Club 93: 2–3.—Attention redrawn to one of the few specimens of this extinct Madagascar species.—F.B.G.

SLADEN, W. J. L. 1972. Whistling Swan color marking program. IBB News 44: 94–98.

SMITH, H. C. 1972. Wildlife and fences. Blue Jay 30: 159–160.—Short-eared Owl and Willet found entangled.—R.W.N.

SNELLING, J. C. 1973. Lanner Falcons breed in captivity: U.S.A. Bokmakierie 25: 27–33.—*Falco biarmicus* from South Africa bred successfully in captivity. Details of breeding chambers are given, and "stripping" technique of removing eggs as they are laid caused supernormal clutch.—R.B.P.

SOUTHERN, W. E. 1972. Use of the cannon-net in Ring-billed Gull colonies. IBB News 44: 83–93.

STILES, F. G., AND L. L. WOLF. 1973. Techniques for color-marking hummingbirds Condor 75: 244–245.

VON BRÖCKEL, K. 1973. Vergleichende Messungen an lebenden und frischtoten Gartengrasmücken (*Sylvia borin*). J. Ornithol. 114: 118–122.—A comparison of measurements of live and freshly killed birds. Wing length, total length, and weight differed significantly between the two groups. (English summary.)—H.C.M.

VOOUS, K. H. 1973. List of Recent holarctic bird species. Non-passerines. Ibis 115: 612–638.

WEBSTER, J. D. 1973. Richardson's Zacatecas collection, 1. Condor 75: 239–241.

WEIS-FOGH, T. 1973. Quick estimates of flight fitness in hovering animals, including novel mechanisms for lift production. J. Exp. Biol. 59: 169–230.—Most examples are of insects, but principles are of general interest.—A.S.G.

WENTWORTH, J. M., AND D. P. KIBBE. 1973. Field identification of the Ruff and Reeve (*Philomachus pugnax*) in North America. Kingbird 23: 116–121.—Considers the characteristics of each sex and individual variations. Compares the Ruff and seven other medium-sized shorebirds that might be confused with it. —M.C.B.

WILLIAMS, T. C., AND E. J. BURKE. 1973. Solar power for wildilfe telemetry transmitters. Amer. Birds 27: 719–720.—Solar cells of reduced weight and size may be practicable.—E.E.

WOODS. 1972. Field notes—how to. Kansas Ornithol. Soc. Bull. 23: 15.—Suggestions on how to record field observations.—R.S.

WYLIE, S. R., AND S. S. FURLONG. 1973. Key to North American waterfowl. (Illustrated by J. R. Schroeder.) Harrisburg, Pennsylvania Game Comm. 32 pp. $3.00.—An identification key to 46 species found in the 48 contiguous states. Full color illustrations show 35 duck, 8 goose, and 3 swan species and include black-and-white silhouettes showing them in takeoff and flight positions. Color keys indicate usage of Atlantic, Mississippi, central, and Pacific flyways, and whether birds are common, uncommon, rare, or accidental in each flyway. Gives flight patterns, food, and habitat for each species. Book is printed on waterproof plastic sheets for use in the field.—J.T.D.

PESTICIDES AND POLLUTION

ANDERSON, D. W., AND J. J. HICKEY. 1972. Eggshell changes in certain North American birds. Proc. 15th Intern. Ornithol. Congr.: 514–520.

AZEVEDO, J. A., JR., E. G. HUNT, AND L. A. WOODS, JR. 1972. Melanistic mutant in Ringneck Pheasants. California Fish and Game 58: 175–178.—Melanistic young with muscular incoordination were produced by captive stock of *Phasianus colchicus torquatus* that received DDT contaminated diets. Significance of DDT in origin of the mutation was not established.—F.E.L.

BEJER-PETERSON, B., P. R. HERMANSEN, AND M. WEIHE. 1972. On the effects of insecticide sprayings in the forest on birds living in nest boxes. Dansk Ornithol. Foren. Tids. 66: 30–50.—Spraying with parathion, lindane, DDT, and malathion from helicopter in June in Norway spruce areas of 1.27–14.43 ha. had no influence on bird population in the following years.—H.A.J.

BEST, L. B. 1972. First-year effects of sagebrush control on two sparrows. J. Wildl. Mgmt. 36: 534–544.—Breeding pairs of Brewer's Sparrow declined 54% on a totally herbicide sprayed plot while Vesper Sparrows showed no change. No change in either species was found after strip or partial sprayings.—J.J.M.

BLUS, L. J., C. D. GISH, A. A. BELISLE, AND R. M. PROUTY. 1972. Further analysis of the logarithmic relationship of DDE residues to eggshell thinning. Nature 240: 164–166.—Refutes a criticism of their earlier paper on this subject. —J.J.M.

BUNCH, T. D., AND J. B. LOW. 1973. Effects of dieldrin on chromosomes of semi-domestic Mallard Ducks. J. Wildl. Mgmt. 37: 51–57.—Juvenile *Anas platyrhynchos* treated at the same level (0, 4, 10, or 30 ppm) as their parents showed no increase of chromosomal abnormalities. At the highest level, there was a significantly reduced mitotic index. *In vitro* cell studies showed decreases of mitotic index at low levels but chromosomal aberrations only at levels that would probably be lethal *in vivo*.—J.J.M.

CARLSON, R. W., AND R. T. DUBY. 1973. Embryotic effects of three PCB's in the chicken. Bull. Environ. Contam. Toxicol. 9: 261–266.

COOKE, A. S. 1971. Uptake of DDT and DDE by the quail and chick. Pesticide Sci. 2: 144–147.

COOL, K. L., R. L. LINDER, AND D. R. PROGULSKE. 1972. Adoptive behavior of caged pheasants exposed to chicks and dieldrin. Amer. Midl. Naturalist 88: 262–269.—Sublethal doses did not affect adoptive behavior of confined hen *Phasianus colchicus*.—J.J.M.

COULTER, M. C., AND R. W. RISEBROUGH. 1973. Shell-thinning in eggs of the

Ashy Petrel (*Oceanodroma homochroa*) from the Farallon Islands. Condor 75: 254–255.

CROXALL, J. P. 1972. Guillemots killed by fluoride ? Marine Pollution. Bull. 3: 149–152.

DAVISON, K. L. 1973. Dieldrin-^{14}C balance in rats, sheep and chickens. Bull. Environ. Contam. Toxicol. 10: 16–24.—In chickens, elimination balances intake after 22–26 weeks, about four times longer than required in rats.—J.J.M.

DAVISON, K. L., AND J. L. SELL. 1972. Dieldrin and p,p-DDT effects on some microsomal enzymes of liver of chickens and Mallard ducks. J. Agr. Food Chem. 20: 1198–1205.—Documents increased estradiol metabolism.—J.J.M.

DILWORTH, T. G., J. A. KEITH, P. A. PEARCE, AND L. M. REYNOLDS. 1972. DDE and eggshell thickness in New Brunswick Woodcock. J. Wildl. Mgmt. 36: 1186–1193.—A slight (2.9%) but statistically significant thinning was found comparing *Philohela minor* eggs from 1971 with those laid before 1925. Thinning would have to be about 10 times greater for population effects to be seen. No correlation was found between thinning and DDE residues, possibly because of a narrow range of values. Total DDT residues in eggs were correlated with DDT use at nesting areas. Changing contamination of the wintering range because of changes in the fire ant control program was reflected in the absence of heptachlor epoxide and appearance of mirex residues.—J.J.M.

DYCK, J., K. AREVAD, AND M. WEIHE. 1972. Reproduction and pesticide residues in orchard passerine populations in Denmark. Dansk Ornithol. Foren. Tids. 66: 1–30.—No evidence that poisoning was a mortality factor of importance for nestlings and adults exists. The major effect of pesticide sprayings is reduction of available food, but when foraging grounds exist outside the sprayed plots, the populations of passerine birds within the plots are able to maintain themselves.—H.A.J.

FABER, R. A., AND J. J. HICKEY. 1973. Eggshell thinning, chlorinated hydrocarbons, and mercury in inland aquatic bird eggs, 1969 and 1970. Pesticide Monit. J. 7: 27–36.—A decrease in eggshell thickness index from pre-1946 values was found in all 19 species examined, and was statistically significant in 10 species. Greatest thinning occurred in Great Blue Herons, Red-breasted Mergansers, Common Mergansers, and Double-crested Cormorants. Again DDE is the major residue associated with thinning.—J.J.M.

FISHER, H. I. 1973. Pollutants in North Pacific albatrosses. Pacific Sci. 27: 220–225.—Both *Diomedea nigripes* and *D. immutabilis* from Midway Atoll contain appreciable residues of DDT, DDE, and PCB's in visceral fat. No significant decreases in eggshell weight have occurred yet.—J.J.D.

FLICKINGER, E. L., AND D. L. MEEKER. 1972. Pesticide mortality of young White-faced Ibis in Texas. Bull. Environ. Contam. Toxicol. 8: 165–168.—Three nesting colonies were almost total failures. Most young were found dead. Those seen dying had signs of dieldrin poisoning. Residues in seven dead or dying birds indicated severe dieldrin poisoning and high exposure to mercury. Rice field feeding areas had been planted with aldrin and mercury treated seed (aldrin is readily converted to dieldrin).—J.J.M.

FOSTER, T. S. 1973. Evaluation of the possible estrogenic activity of methoxychlor in the chicken by means of feeding trials. Bull. Environ. Contam. Toxicol. 9: 234–242.—This DDT substitute produced no estrogenic or toxic effects at dosages up to 10 ppm for 5 weeks.—J.J.M.

GREICHUS, Y. A., A. GREICHUS, AND R. J. EMERICK. 1973. Insecticides, poly-

chlorinated biphenyls and mercury in wild cormorants, pelicans and their eggs, food and environment. Bull. Environ. Contam. Toxicol. 9: 321–328.

GRINNER, L. A., AND R. HERDMAN. 1970. Effects of oil pollution on waterfowl/A study of salvage methods. Water Quality Office, Environ. Prot. Agency. 35 pp.—Contains practical information on cleaning and caring for contaminated birds. Recommends a 1% solution of cleaner Polycomplex A-11. When held after cleaning, proper nutrition (including live fish for piscivores) is vital. Omnivores or herbivores (gulls, ducks, geese) are more easily rehabilitated than carnivores (grebes, loons, murres).—J.J.M.

HEALTH, R. G., J. W. SPANN, J. F. KREITZER, AND C. VANCE. 1972. Effects of polychlorinated biphenyls on birds. Proc. 15th Intern. Ornithol. Congr.: 475–485.

HOUGH, E. J., AND M. E. ZABIK. 1972. Distribution of mercury in organs of McGraw-Mallard ducks given methyl-mercury chloride. Poultry Sci. 51: 2101–2103.

HUDSON, R. H., R. K. TUCKER, AND M. A. HAEGELE. 1972. Effect of age on sensitivity: acute oral toxicity of 14 pesticides to Mallard ducks of several ages. Toxicol. Appl. Pharmacol. 22: 556–561.—Young birds are not always more sensitive than adults.—J.J.M.

KING, W. B., AND J. L. LINCER. 1973. DDE residues in the endangered Hawaiian Dark-rumped Petrel (*Pterodroma phaeopygia sandwichensis*). Condor 75: 460–461.

KREITZER, J. F. 1973. Thickness of American Woodcock eggshell, 1971. Bull. Environ. Contam. Toxicol. 9: 281–286.

KREITZER, J. F., AND J. W. SPANN. 1973. Tests of pesticidal synergism with young Pheasants and Japanese Quail. Bull. Environ. Contam. Toxicol. 9:250–256.—Lethality was usually additive when 18 pesticides were tested in 13 chemical pairs.—J.J.M.

LILLIE, R. J. 1973. Studies on the reproductive performance and progeny performance of caged White Leghorns fed malathion and carbaryl. Poultry Sci. 52: 266–272.

LILLIE, R. J., H. C. CECIL, J. BITMAN, AND G. F. FRIES. 1973. Dietary calcium, DDT source and age of hen on the reproductive performance of caged White Leghorns fed DDT. Poultry Sci. 52: 636–644.

LONGCORE, J. R., AND B. M. MULHERN. 1973. Organochlorine pesticides and polychlorinated biphenyls in Black Duck eggs from the United States and Canada, 1971. Pesticide Monit. J. 7: 62–66.—Residue levels are generally lower than in a 1964 survey, possibly due to decreased DDT use. Eggshells from 1964 were significantly thinner than those from 1971 or 1940.—J.J.M.

LONGCORE, J. R., AND F. B. SAMSON. 1973. Eggshell breakage by incubating Black Ducks fed DDE. J. Wildl. Mgmt. 37: 390–394.—After 5 months at 10 ppm, eggshells were thinned, breakage and egg disappearance increased. Mechanical incubation, used in an earlier study, fails to reveal breakage of thinned eggs.—J.J.M.

MCEWAN, E. H., AND A. F. C. KOELINK. 1973. The heat production of oiled Mallards and scaup. Canadian J. Zool. 51: 27–48.

MICK, D. L., K. R. LONG, AND S. M. ALDINGER. 1973. The effects of dietary dieldrin on residues in eggs and tissues of laying hens and the effects of phenobarbitol and charcoal on these residues. Bull. Environ. Contam. Toxicol. 9:

197–203.—Neither of the materials tested hastened the elimination of residues despite their efficacy in mammal studies.—J.J.M.

MULLER, H. D., AND D. C. LOCKMAN. 1973. The influence of dieldrin on tibial bone calcium deposition in domestic chicks. Bull. Environ. Contam. Toxicol. 9: 351–355.

NELSON, J. R., L. E. WOOKEY, C. F. NOCKLES, AND J. V. SCHULTZE. 1972. Interaction of vitamin A and dieldrin on Mallard liver lipids and biotin content. Poultry Sci. 51: 747–751. Liver biotin is depressed and fatty acid composition is altered at low dose of 1 mg/kg. Enzyme interference is probably involved.—J.J.M.

NEWTON, I. 1973. Success of Sparrowhawks [*Accipiter nisus*] in an area of pesticide usage. Bird Study 20: 1–8.

PARKHURST, C. R., AND P. THAXTON. 1973. Toxicity of mercury to young chickens, 1. Poultry Sci. 52: 273–276.

PARSLOW, J. L., D. F. JEFFERIES, AND H. M. HANSON. 1973. Gannet mortality incidents in 1972. Marine Pollution Bull. 4: 41–44.—Two events involving almost 40 dead *Moris bassana* each. High PCB levels may have contributed to death in one incident.—J.J.M.

POLAND, J. J., J. B. KISSAM, J. K. REED, AND B. D. BARNETT. 1972. The uptake of DDT by domestic turkeys ranged on treated clay soil. Poultry Sci. 51: 1024–1026.

RADHARKRISHNAN, C. V., W. P. THOMPSON, AND D. J. FORRESTER. 1972. Susceptibility of chickens fed p,p′-DDT to histomoniasis. Bull. Environ. Contam. Toxicol. 8: 147–152.

RATCLIFFE, D. A. 1972. The Peregrine population of Great Britain in 1971. Bird Study 19: 117–156.—Compares a comprehensive census of *Falco peregrinus* with a similar census in 1962 and interim sample surveys. The decline in numbers and reproductive success, which began in the mid-50s, continued through 1963 then levelled off. A slow recovery has occurred recently, but numbers are still only 54% of prewar levels. Recovery has occurred at most inland locations while coastal areas show little or no improvement. Organochlorine pesticides are still implicated as the major cause of the decline. Emphasizes behavioral effects and discusses eggshell thinning. Recovery has been greatest in areas with greatest recent reductions in pesticide contamination. Coastal areas showing little population improvement are associated with intense agriculture or highly contaminated marine food chains.—J.J.M.

SEABLOOM, R. W., G. L. PEARSON, L. W. ORING, AND J. R. REILLY. 1973. An incident of fenthion mosquito control and subsequent avian mortality. J. Wildl. Dis. 9: 18–20.

SMAIL, J., D. G. AINLEY, AND H. STRONG. 1972. Notes on birds killed in the 1971 San Francisco oil spill. California Birds 3: 25–32.—Data on numbers, local distribution, geographic origin, subspecies, sex ratios, measurements, and color phases.—L.C.B.

SNYDER, N. F. R., H. A. SNYDER, J. L. LINCER, AND R. T. REYNOLDS. 1973. Organochlorines, heavy metals, and the biology of North American accipiters. BioScience 23: 300–305.—Cooper's and Sharp-shinned hawks have declined seriously in the eastern U. S. in the past 25 years while the Goshawk population was stable or increasing, but few data are available on the possible role of chemical pollutants. This fine study shows that in the western U. S. (where

information on population trends is scanty!) the familiar DDT syndrome seems to be affecting these species. DDE was the only important pollutant in 51 Cooper's Hawk eggs collected 1969–71 in Arizona-New Mexico with significantly higher ($P < 0.05$) levels in eggs from unsuccessful nests. Amount of shell thinning correlated strongly ($P < 0.01$) with amount of DDE in egg contents and 90% of the eggshells were thinner than the mean for pre-1947 eggs. Egg breakage in 11 of 60 nests and anomalous breeding behavior in three of 11 pairs studied from blinds were associated with peak DDE levels. DDE in eggs was directly related to the percentage of birds (particularly small insectivores) in the diet of individual pairs ($P < 0.05$; $n = 7$ pairs, 308 prey items). Additional small samples ($n = 4$ or 5 eggs) suggest that Oregon Cooper's Hawks have about the same DDE level; Goshawks in Oregon and Arizona-New Mexico have less than half the DDE load of Cooper's Hawks; and Sharp-shinned Hawks in the two areas carry 5 to 10× more DDE than Cooper's Hawks. See also for useful comments on analytical procedures.—W.B.R.

SOARES, J. H. JR., D. MILLER, H. LAGALLY, B. R. STILLINGS, P. BAUERSFELD, AND S. CUPPETT. 1973. The comparative effect of oral ingestion of methyl mercury on chicks and rats. Poultry Sci. 52: 452–458.

STICKLE, L. F., S. N. WIEMEYER, AND L. J. BLUS. 1973. Pesticide residues in eggs of wild birds: Adjustment for loss of moisture and lipid. Bull. Environ. Contam. Toxicol. 9: 193–196.

THAXTON, P., AND C. R. PARKHURST. 1973. Toxicity of mercury to young chickens, 2. Poultry Sci. 52: 277–280.

THAXTON, P., AND C. R. PARKHURST. 1973. Toxicity of mercury to young chickens, 3. Poultry Sci. 52: 761–764.

VERMEER, K., F. A. J. ARMSTRONG, D. R. M. HATCH. 1973. Mercury in aquatic birds at Clay Lake, western Ontario. J. Wildl. Mgmt. 37: 58–61.—On a highly contaminated waterway, mercury levels of 2–16 ppm in Herring Gull eggs were not associated with reduced hatching or fledging success. Breast muscle residues in six species of waterfowl averaged from 0.5 to 12.3 ppm. Levels were associated with diet, being lowest in the primary herbivorous American Wigeon and highest in Hooded Mergansers that fed chiefly on highly contaminated crayfish.—J.J.M.

WAIBEL, G. P., G. M. SPEERS, AND P. E. WAIBEL. 1972. Effects of DDT and charcoal on performance of White Leghorn hens. Poultry Sci. 51: 1963–1967.—Residues in fat and eggs of birds fed both chemicals were lower than those fed only DDT. No changes of eggshell thickness, hatchability, or progeny growth were caused by 300 ppm DDT.—J.J.M.

WALKER, W., W. G. MATTOX, AND R. W. RISEBROUGH. 1973. Pollutant and shell thickness determinations of Peregrine eggs from West Greenland. Arctic 26: 256–258.

WHITEHEAD, C. C., AND R. J. PETTIGREW. 1972. The effect of 2,4-dichlorophenoxyacetic acid on laying hens. Brit. Poultry Sci. 13: 191–195.—Herbicide doses of 50 or 150 mg/kg produced no effects on egg production, egg weight, eggshell thickness, hatchability, or progeny growth.—J.J.M.

WRIGHT, F. C., J. S. PALMER, AND J. C. RINER. 1973. Accumulation of mercury in tissues of cattle, sheep and chicken given the mercurial fungicide, Panogen 15, orally. J. Agr. Food Chem. 21: 414–416.

PHYSIOLOGY

BORCHELT, P., AND R. K. RINGER. 1973. Temperature regulation development in Bobwhite quail (*Colinus virginianus*). Poultry Sci. 52: 793–798.—When cooled, chicks showed 9° C decrease in body temperature at 1 day of age and were able to maintain body temperature by 30 days of age.—I.L.B.

CALDWELL, P. J. 1973. Development of thermoregulation in Mallard ducklings. Condor 75: 113–114.

CADE, T. J. 1973. Sun-bathing as a thermoregulatory aid in birds. Condor 75: 106–108.

GOTIE, R. F., AND J. C. KROLL. 1973. Growth rate and ontogeny of thermoregulation in nestling Great-tailed Grackles, *Cassidix mexicanus prosopidicola* (Icteridae). Condor 75: 190–199.

JOHNSTON, D. W. 1973. Cytological and chemical adaptations of fat deposition in migratory birds. Condor 75: 108–113.

KENDALL, M. D., P. WARD, AND S. BACCHUS. 1973. A protein reserve in the pectoralis major flight muscle of *Quelea quelea*. Ibis 115: 600–601.—The sarcoplasm functions as a readily mobilized protein reserve.—R.W.S.

LONG, C. A. 1973. Exponential relations of standard metabolic rates of birds and the weight of eggs. Wilson Bull. 85: 323–326.

MARTIN, D. D., AND A. H. MEIER. 1973. Temporal synergism of corticosterone and prolactin in regulating orientation in the migratory White-throated Sparrow (*Zonotrichia albicollis*). Condor 75: 369–374.

MILSOM, W. K., K. JOHANSEN, AND R. W. MILLARD. 1973. Blood respiratory properties in some antarctic birds. Condor 75: 472–474.

MITCHELL, B. W., AND H. S. SIEGEL. 1973. Physiological responses of chickens to heat stress measured by radiotelemetry. Poultry Sci. 52: 1111–1119.—Describes equipment that could be useful in studies with many large birds.—I.L.B.

MOLDENHAUER, R. R., AND P. G. TAYLOR. 1973. Energy intake by hydropenic Chipping Sparrows (*Spizella passerina passerina*) maintained on different diets. Condor 75: 439–445.

MURTON, R. K., N. J. WESTWOOD, AND R. J. P THEARLE. 1973. Food supply and stress factors in photoperiod experiments. Ibis 115: 132–134.—Physiologists take heed.—R.W.S.

RICKLEFS, R. E. 1973. Patterns of growth in birds. 2. Growth rate and mode of development. Ibis 115: 177–201.—Most species grow at some physiological maximum rate. An important contribution.—R.W.S.

SOUTHWICK, E. E. 1973. Remote sensing of body temperature in a captive 25-G bird. Condor 75: 464–466.

TUCKER, V. A. 1973. Bird metabolism during flight: evaluation of a theory. J. Exp. Biol. 58: 689–709.—Pennycuick's (1969) theory for energetic requirements of avian flight predicts the metabolic rates of Budgerigars and Laughing Gulls flying level at intermediate speeds within 10%, but yields values too low or too high for birds less than 0.1 kg and more than 0.5 kg respectively. The theory is modified by a different computation of induced power, different estimates of equivalent flat plate area and profile power, and addition of power terms for respiration and circulation. The modified theory permits evaluation of metabolic rates of birds and bats in level flight given only the body mass. If wingspan is measured as well, the modified theory predicts measured values within a mean absolute error of 8.3%.—A.S.G.

TAXONOMY AND PALEONTOLOGY

ARBIB, R. 1973. What the A.O.U. Check-list Committee has done to your life list. Amer. Birds 27: 576–577.—Summarizes taxonomic changes (not always accurately) and English names affected by the Thirty-second Supplement to the A.O.U. Check-list. Unfortunately fails to mention that although overall species names are provided where two or more former "species" are merged into one, the Committee expressly left "available" the old common names in their accustomed use.—E.E.

CLANCEY, P. A. 1973. Miscellaneous taxonomic notes on African birds. 37. Durban Mus. Novitates 10 (1): 1–22.—Clancey claims to be able to distinguish southern African *Clamator glandarius* from northern African and Palearctic birds by tail length, and he illustrates the differences "based on . . . selected adults." He claims the larger birds in southern Africa are migrants from north of the Equator. However, breeding birds that I collected in South Africa include several that are larger than some specimens collected in the Palearctic. Another bad subspecies Clancey defends is a supposed South African form of *Quelea quelea*. Clancey appears not to appreciate the variability of male plumage in Quelea populations and does not realize the extent of the migrations between successive breeding sites Ward described. Two "new subspecies" are described here for *Cisticola rufilata* (*vicinior*) and *Nectarinia mariquensis* (*lucens*).—R.B.P.

CLANCEY, P. A. 1973. Subspeciation in the Grassbird *Sphenoeacus afer* (Gmelin) (Aves: Sylviidae). Arnoldia (Rhodesia) 6 (5): 1–6.—Recognizes *S. a. afer*, *S. a. intermedius*, *S. a. natalensis*, and a form described new here, *S. a. excisus*, from the eastern highlands of Rhodesia and adjacent Mocambique.—R.B.P.

CROSSIN, R. S., AND C. A. ELY. 1973. A new race of Sumichrast's Wren from Chiapas, Mexico. Condor 75: 137–139.

DICKERMAN, R. W. 1973. Further notes on the Western Grebe in Mexico. Condor 75: 131–132.

ESCALANTE, R. 1973. The Cayenne Tern in Brazil. Condor 75: 470–472.

FARRAND, J., JR., AND S. L. OLSON. 1973. The correct spelling of Scopoli's specific name for the Maylaysian Crested Wood Partridge (*Rollulus*). Bull. Brit. Ornithol. Club 93: 53–54.—Should be *roulroul*, not *rouroul*.—F.B.G.

FEDUCCIA, A. 1973. Fossil birds from the late Pleistocene Ingleside fauna, San Patricio County, Texas. Condor 75: 243–244.

FRAILEY, C. D. 1972. Additions to the Pleistocene avifauna of Arredondo Florida. Quart. J. Florida Acad. Sci., 35: 53–54.—With the two new additions, *Coragyps occidentalis*, an extinct species, and *Asio flammeus*, the Arredondo Pleistocene avifauna is represented by 45 species.—G.E.W.

HALD-MORTENSEN, P. 1970. A new subspecies of the Senegal Firefinch (*Lagonosticta senegala* (L.)) from West Africa. Dansk Ornithol. Foren. Tids. 64: 113–117.—Describes a new subspecies, *L. s. guineensis*, from N. Zerekore, Guinea.—H.A.J.

HARRISON, C. J. O., AND C. A. WALKER. 1973. An undescribed extinct fish-eagle from the Chatham Islands. Ibis 115: 274–277.—*Ichthyophaga australis* sp. nov.—R.W.S.

HOLYOAK, D. T. 1973. An undescribed extinct parrot from Mauritius. Ibis 115: 417–418.—*Lophopsittacus bensoni* sp. nov.—R.W.S.

ISENMANN, P. 1972. Biometrische Untersuchungen an der Gelbfüssigen Silbermöwe (*Larus argentatus michahellis*) aus der Camarge. Vogelwarte 27: 16–24.—A study of the measurements of 160 breeding specimens of the yellow-legged race of the

Herring Gull. The wing tip appears to have more black than in northern European populations. (English summary.)—H.C.M.

KAHL, M. P., AND E. SCHÜZ. 1972. Zur Benennung und zur taxonomischen Gruppierung der 17 Arten Störche (Ciconiidae). Vogelwarte 26: 277–280.—A reclassification of the storks, based largely on behavior. Three tribes, 6 genera, and 17 species are recognized. (English summary.)—H.C.M.

KEAR, J. 1972. The Blue Duck of New Zealand. Living Bird 11: 175–192.—Reviews *Hymenolaimus malacorhynchus* breeding biology, and discusses its taxonomic position. Evolutionary affinities seem to be with the perching ducks and especially the dabbling ducks.—G.E.W.

MUKHERJEE, A. K., AND J. M. DASGUPTA. 1973. On the taxonomic status of the genus *Sauropatis* Cabanis and Heine (family Alcedinidae). Bull. Brit. Ornithol. Club 93: 79–81.—Lists many differences that justify separation of the two species *chloras* and *sancta* from the genus *Halcyon* and inclusion in the genus *Sauropatis*.—F.B.G.

OLSON, S. L. 1973. A classification of the Rallidae. Wilson Bull. 85: 381–416.

OLSON, S. L. 1973. A study of the neotropical rail *Anurolimnas castaneiceps* (Aves: Rallidae) with a description of a new subspecies. Proc. Biol. Soc. Washington 86: 403–412.—Includes a description of a race (*A. c. coccineipes*) of the little-known Chestnut-headed Crake from southwestern Columbia and northeastern Ecuador.—H.W.K.

PARKES, K. C. 1973. Distribution and generic placement of the Plain Tyrannulet (*Inezia inornata*). Condor 75: 249–250.

PRIGOGINE, A. 1972. Description of a new green bulbul from the Republic of Zaire. Bull. Brit. Ornithol. Club 92: 138–141.—Describes *Andropadus ballae* from a single specimen from primary forest. Resembles *A. v. virens*.—F.B.G.

SCHLEE, D. 1973. Harzkonservierte fossile Vogelfedern aus der untersten Kreide. J. Ornithol. 114: 207–219.—A brief presentation of the microstructure of some feather parts preserved in amber from the lower cretaceous. (English summary.)—H.C.M.

SCHNELL, G. D. 1973. A reanalysis of nest structure in the weavers (Ploceinae) using numerical taxonomic techniques. Ibis. 115: 93–106.—Use of 48 OTUs (Operational Taxonomic Units) from Crooks' original study. Discusses similarities and differences in results.—R.W.S.

SHORT, L. L. 1973. Remarks on the status of *Campethera*: "*scriptoricauda*", and related species. Bull. Brit. Ornithol. Club 93: 72–74.—*Campethera scriptoricauda* is apparently a race of *C. bennettii*, which together with *C. punctuligera* and *C. nubica* form a superspecies. Competition with *C. abingoni* may have caused divergence of *bennetti* and *punctuligera* from *nubica* (from author's summary.)—F.B.G.

SHORT, L. L. 1973. A new race of *Celeus spectabilis* from eastern Brazil. Wilson Bull. 85: 465–467.

SIBLEY, C. G. 1973. The relationships of the swallow-tanagers *Tersina virdis*. Bull. Brit. Ornithol. Club 93: 75–79.—The combined evidence of egg whites and other characters suggest that there is no basis for taxonomic separation from other tanagers beyond the generic level and that the closest relatives of *Tersina* are probably *Thraupis* and *Tangara*. Discusses some of the general problems of tanager taxonomy.—F.B.G.