PERIODICAL LITERATURE

EDITED BY HERBERT W. KALE II1

New or Revised Periodicals

- ARDEOLA. 1973. Vol. 19: 1-150.—The organ of the Sociedad Espanola de Ornitologia is now an annual. This volume contains several articles and many short notes on biology, distribution, and behavior (see abstracts below) and some excellent photographs, mainly of birds of prey. Of particular interest are the notes indicating an increase in Spain of the Black-winged Kite (Elanus caeruleus), perhaps paralleling the expansion in America of its close ally the White-tailed Kite (E. leucurus), the first Spanish sightings of the American Wigeon and Wilson's Phalarope (Steganopus tricolor) the first European record of the Grayhooded Gull (Larus cirrocephalus), and a hybrid specimen of Anas crecca and A. penelope. (Chiefly in Spanish.)—E.E.
- Publicaciones Biológicas del Instituto de Investigaciones Científicas de la Universidad Autónoma de Nuevo León. (Publ. Biol. Inst. invest. Cient. UANL, Mexico).—A new irregular publication appeared under date of 1 August 1973 with an ornithological paper (see Contreras-Balderas below). Only institutional subscriptions or exchanges will be accepted, but copies of papers may be purchased by writing to the university at Monterrey, Mexico.—E.E.
- The Sunbird. A quarterly journal published by the Queensland Ornithological Society, P. O. Box 97, St. Lucia, Queensland, 4067, Australia. Vol. 1, No. 1, March 1970.—Although it has a deceptively humble appearance (mimeographed in the first three volumes, now photo-offset from typed copy) this new regional journal contains a high percentage of literate and well-researched material. Subject matter ranges from formal taxonomic and zoogeographic papers to informal, but interestingly written reports of field observations, faunal lists, and regional records. Approximately 100 pages, with indices, are published annually; subscription rates are AU \$2.00 for nonmembers.—M.H.C.

REHAVIOR

- Balda, R. P., and G. C. Bateman. 1973. Unusual mobbing behavior by incubating Piñon Jays. Condor 75: 251-252.
- Baptista, L. F. 1973. Leaf bathing in three species of emberizines. Wilson Bull. 85: 346-347.—Aimophila ruficeps, Junco hyemalis oreganus, and Zonotrichia leucophrys.—H.W.K.
- Bergmann, H. -H. 1973. Die Imitationsleistung einer Mischsänger-Dorngrasmücke (Sylvia communis). Ein Beitrag zum Problem angeborener und erworbener Gesangsmerkmale. J. Ornithol. 114: 317-338.—A Whitethroat sang some songs that included a part of the Blackcap (S. atricapilla) song. Previous work indicates that Whitethroat song is innate, raising questions as to how this individual acquired its song. (English summary.)—H.C.M.
- BOLWIG, N. 1973. Agonistic and sexual behavior of the African Ostrich (Struthio camelus). Condor 75: 100-105.
- Brown, J. L. 1971. An exploratory study of vocalization areas in the brain of the Red-winged Blackbird (Agelaius phoeniceus). Behaviour 39: 91-127.—Evoked vocalizations were analyzed spectrographically and the responsive regions plotted on a sectional atlas of the brain.—F.E.L.

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- Brown, J. L. 1973. Behavior elicited by electrical stimulation of the brain of the Steller's Jay. Condor 75: 1-16.
- CONRADS, K. 1971. Über die Ruse des Ortolans (*Emberiza hortulana* L.). Vogelwarte 26: 169-175.—Spectrograms and descriptions of the calls of the Ortolan. (English summary.)—H.C.M.
- CUTHBERT, F. J., AND W. E. SOUTHERN. 1973. Ring-billed Gull relocates nest as a result of egg displacement. Bird-Banding 44: 225-227.
- Drost, R. 1971. Über das Verhalten freilebender Teichhühner (Gallinula chloropus) gegenüber Menschen. Vogelwarte 26: 175–182.—Moorhens recognize the
 person who feeds them and learn peculiarities of his behavior. (English summary.)—H.C.M.
- EMLEN, J. T. 1973. Vocal stimulation in the Great Horned Owl. Condor 75: 126-127.
- FITZPATRICK, J. W. 1973. Response by a Long-eared Owl to Barred Owl calls. Wilson Bull. 85: 334-335.
- GAILEY, J., AND N. BOLWIG. 1973. Observations of the behavior of the Andean Condor (Vultur gryphus). Condor 75: 60-68.
- GOCHFELD, M. 1973. Confused nocturnal behavior of a flock of migrating Yellow Wagtails. Condor 75: 252-253.
- GURTLER, W. 1973. Artisolierende Parameter des Revierrufs der Türkentaube (Streptopelia decaocto). J. Ornithol. 114: 305-316.—An investigation of the characteristics of the territorial call that influence recognition by conspecifics. Taped calls were modified in frequency, time length, and pattern of the various elements, and played to birds. Frequency appeared to be the most important single characteristic. (English summary.)—H.C.M.
- Hailman, J. P. 1973. Double-scratching and terrestial locomation in emberizines: some complications. Wilson Bull. 85: 348-350.
- Hamerstrom, F., and F. Hamerstrom. 1971. Potential eines männlichen Greifvogels (*Buteo jamaicensis*) in Bezug auf Nestbau, Brüten and Jungenaufzucht. Vogelwarte 26: 192–197.—A tamed Red-tailed Hawk courted and copulated with humans, built a nest, incubated chicken eggs, and reared young hawks provided by the keeper! (English summary.)—H.C.M.
- HARRISON, C. J. O. 1973. Nest-building behavior of Quaker Parrots Myiopsitta monachus. Ibis 115: 124-128.—Based on observations in aviary in London Zoo.—R.W.S.
- HAYS, H. 1972. Polyandry in the Spotted Sandpiper. Living Bird 11: 43-57.—
 On Great Gull Island, New York, female Actitis macularia often nested with several males successively. Females shared incubation of their final clutch with that male, but males reared all the young. (See Oring and Knudson below.)—G.E.W.
- Helb, H.-W. 1973. Analyse der artisolierenden Parameter im Gesang des Fitis (*Phylloscopus t. trochilus*) mit Untersuchungen zur Objektivierung der analytischen Methode. J. Ornithol. 114: 145-206.—More than 380 individual Willow Warblers were exposed to taped songs in over 1800 tests. The 72 different tapes used included normal song, songs modified electronically, rearranged songs, artificial songs, and songs of other species. Some modified songs produced a stronger response than normal song (e.g. rearranged songs, double songs, songs with enriched overtones). Generally, those songs that elicited a strong immediate response had a lesser effect on subsequent responses to normal song than songs that

- evoked a weak initial response. The effects of season, time of day, and environmental factors on response are also analyzed. (English summary.)—H.C.M.
- Hogan, J. A. 1971. The development of a hunger system in young chickens. Behavior 39: 128-201.—Unlike aggressive and sexual behaviors where functional experience does not seem essential for normal development, a hunger system does not develop in the absence of functional experience.—F.E.L.
- Hogan, J. A., and E. L. Abel. 1971. Effects of social factors on response to unfamiliar environments in *Gallus gallus spadiceus*. Anim. Behav. 19: 687-694.
- Holmes, R. T. 1973. Social behaviour of breeding Western Sandpipers *Calidris mauri*. Ibis 115: 107-123.—Describes interactions between males and between males and females, and parental behavior. Discusses the adaptive significance of the territorial system and pair-bond relationship. Fine drawings by V. Page.—R.W.S.
- Huber, M. R., and J. B. Cope. 1973. House Sparrow dispossesses nesting Eastern Kingbird. Wilson Bull. 85: 338-339.
- KAHL, M. P. 1973. Comparative ethology of the Ciconiidae. Part 6. The Black-necked, Saddlebill, and Jabiru Storks (Genera Xenorhynchus, Ephippiorhynchus, and Jabiru). Condor 75: 17-27.
- Kovach, J. K. 1971. Effectiveness of different colors in the elicitation and development of approach behavior in chicks. Behaviour 38: 154–168.—Naive Rhode Island Red chicks responded significantly less to green than to white, blue, yellow, and red.—F.E.L.
- Kushlan, J. A. 1973. Promiscuous mating behavior in the White Ibis. Wilson Bull. 85: 331-332.
- Lemmetyinen, R. 1971. Nest defense behaviour of Common and Arctic Terns and its effects on the success achieved by predators. Ornis Fennica 48: 13–24.— Frequency of attacks on predators increased during the breeding cycle, being highest, and the attacks most vigorous, during the fledging period. No significant differences were shown between the two species in their behavior directed against dummies, but Arctic Terns were clearly more aggressive toward man. Terns nesting solitarily were just as successful in protecting their broods from predators as were colony nesters. The attacking terns hampered mink and young crows in their nest plundering attempts in open habitats, but a few trees or juniper bushes offered these predators effective shelter.—M.D.F.U.
- LÖHRL, H. 1973. Einfluss der Bruteraufläche die Gelegegrösse der Kohlmeise (Parus major). J. Ornithol. 114: 339-347.—A well-performed field experiment shows that the diameter of the nest hole influences clutch size in the Great Tit. (English summary.)—H.C.M.
- LÖHRL, H., AND G. THIELCKE. 1973. Alarmlaute europäischer und nordafrikanischer Tannenmeisen (*Parus ater ater, P. a. atlas, P. a. ledouci*) und der Schwarzkopfmeise (*P. melanolophus*). J. Ornithol. 114: 250-252.—Nest predator alarm calls differ between European, North American, and African forms. Speculates on the evolution of calls in the various forms. (English summary.)—H.C.M.
- LOMHOLT, J. P. 1971. [Observations on the singing activity of the Yellowhammer (*Emberiza citrinella*).] Dansk Ornithol. Foren. Tids. 65: 179–187. (In Danish, English summary.)
- McLaren, P. L. 1973. Physical combat in the Brown-headed Cowbird. Wilson Bull. 85: 342-343.
- Merkel, F. W., and K. Fischer-Klein. 1972. Winkelkompensation bein Zwerg-wachteln (*Excalfactoria chinensis*). Vogelwarte 27: 39-50.—Chinese Painted

- Quail forced to turn in a passageway will tend to turn in the original direction when they emerge in an open field. Speculates that this "angle sense" may play a role in distance, as well as proximal orientation. (English summary.)—H.C.M.
- Monroe, B. L., Jr. 1973. Wing-flashing in the Black-and-white Fantail (*Rhipidura leucophrys*). Wilson Bull. 85: 340.
- Naether, C. 1973. Concerning the behavior of Mute and Whooper Swans in nature. Game Bird Gazette 22 (7): 13-14.
- Oring, L. W., and M. L. Knudson. 1972. Monogamy and polyandry in the Spotted Sandpiper. Living Bird 11: 59–73.—Infrequent polyandry but no promiscuity was the rule for two small populations of *Actitis macularia* in Minnesota. High predation and food availability over a long breeding season in temperate regions may have selected for their serial polyandry. Discusses similar breeding nexuses in other shorebirds. (See Hays above.)—G.E.W.
- POTTER, E. F. 1972. Two instances of apparent sublimation of sex drive in Robins. Chat 36: 109-110.—Adult male mounted pine cones while female was unreceptive during period between failure of one nesting attempt and beginning of the next one. Also reports juvenile American Robins mounting and mobbing pine cones and mobbing other sunbathing juvenile American Robins.—E.F.P.
- Rea, A. M. 1973. Interordinal copulation on coastal Venezuela. Wilson Bull. 85: 337-338.—A male Ruddy Ground Dove (Columbina talpacoti) mounted a presumed female Myiozetetes flycatcher (possibly M. cayenensis).—H.W.K.
- Schubert, G. 1971. Experimentelle Untersuchungen Über die Artkennzeichnenden Parameter in Gesang des Zilpzalps, *Phylloscopus c. collybita* (Vieillot). Behaviour 38: 289-314.—Determination of species-specific parameters of the song of the Chiffchaff using play-back experiments with normal and modified song. (Author's summary.)—F.E.L.
- Schubert, M. 1971. Untersuchungen Über die Reaktionsauslösenden Signalstrukturen des Fitis-Gesanges, *Phylloscopus t. trochilus* (L.), und das Verhalten Gegenüber Arteigenen Rufen. Behaviour 38: 250–288.—Determination of song structure using play back experiments. (Author's summary.)—F.E.L.
- SIMMONS, K. E. L., AND U. WEIDMANN. 1973. Directional bias as a component of social behaviour with special reference to the Mallard, *Anas platyrhynchos*. J. Zool. 170: 49-62.—In three types of "shake" given during social display by male Mallards, the first sideways turn of the head is usually toward the female of greatest "interest."—M.H.C.
- SMITH, J. N. M., AND R. DAWKINS. 1971. The hunting behaviour of individual Great Tits in relation to spatial variations in their food density. Anim. Behav. 19: 695-706.—Experimental support of Royama's model of a predator sampling different parts of the habitat and foraging most where success is greatest.—F.E.L.
- Stewart, P. A. 1972. Blue Jays mob a dead Common Grackle. Chat 36: 109.— Head and tail of dead bird were buried beneath fallen pine needles leaving an exposed part bearing little resemblance to a bird.—E.F.P.
- STEYN, P. 1973. Courtship flight of the Chanting Goshawk, Melierax musicus. Ostrich 44: 85.
- THIELCKE, G. 1972. Waldbaumläufer (Certhia familiaris) ahmen artfremdes Signal nach und reagieren darauf. J. Ornithol. 113: 287-296.—Occasional male Brown Creepers include in their song themes from the song of the Short-toed Tree Creeper (C. brachydactyla). The reaction of male brachydactyla to playback of these mixed familiaris songs is similar to the reaction to conspecific songs. A hand-reared familiaris isolated from conspecifics but not from brachydactyla

- developed a mixed song. This bird, and six of eight mixed songsters in the field, reacted to brachydactyla as well as familiaris songs. Only four of 200 normal familiaris reacted to brachydactyla songs. Concludes that part of the song is learned. (English summary.)—H.C.M.
- Thompson, W. L. 1972. Singing behavior of the Indigo Bunting, *Passerina cyanea*. Z. Tierpsychol. 31: 39–59.—The birds acquire new song figures during their first singing season, but add nothing in subsequent seasons, indicating a rather prolonged, but still finite, "critical period." Also analyzes the frequency of singing, bout length, etc., and suggests possible motivations involved in various vocalizations.—H.C.M.
- THORPE, W. H. 1973. Duet-singing birds. Sci. Amer. 229 (2): 70-79.—Field studies conducted at Lake Nakuru and Kapenguria, Kenya, Kabale, Uganda, and aviary work done in England indicate that primary function of duetting is maintenance of close communication between birds in dense foliage. Birds studied were Bell Shrikes (Laniarius aethiopicus), Black-headed Gonolek (Laniarius erythrogaster), Chubb's Cisticola (Cisticola chubbi), and White-browed Robin-Chat (Cossypha heuglini). Author also suggests that song of Cisticola nigriloris may be a species-specific character. Includes sound spectrograms, standard musical notation diagrams, and one page of color paintings.—J.T.D.
- Tinbergen, N. 1971. Clever gulls and dumb ethologists—or: The trackers tracked. Vogelwarte 26: 232-238.—A delightful account of how a curious naturalist and his wife discovered how gulls find crabs buried in the sand. The peculiar habit of the crabs was unknown to science until evidence of the gull's activities aroused the curiosity of the naturalist's wife.—H.C.M.
- Topt, D. 1971. Zur Gesanglichen Reaktion der Schmätzerdrossel Cossypha heuglini Hartlaub. Behaviour 38: 146–153.—Reaction of White-browed Robin-Chats to the experimenter's whistled phrases. (Author's summary.)—F.E.L.
- TROBEC, R. J., AND L. W. ORING. 1972. Effects of testosterone propionate implantation on lek behavior of Sharp-tailed Grouse. Amer. Midl. Naturalist 87: 531-536.—Territories were changed little by implantation of 30 mg of testosterone propionate. Implanted subdominate males showed increase in overt aggression, but not in highly ritualized aggression.—G.D.S.
- VAN DER WEYDEN, W. J. 1973. Geographical variation in the territorial song of the White-faced Scops Owl Otus leucotis. Ibis 115: 129-131.
- Verbeek, N. A. M. 1972. Comparison of displays of the Yellow-billed Magpie (*Pica nuttali*) and other corvids. J. Ornithol. 113: 297-314.—Descriptions of a variety of behaviors, including displays. Comparison with those of other corvids suggests that magpies diverged from the main line early in the evolution of the group.—H.C.M.
- VERNON, C. J. 1973. Vocal imitation by southern African birds. Ostrich 44: 23-30.—Lists birds that sound like other birds, based on field impressions of Vernon and others. Some imitations are said to be "generally slurred and incomprehensible."—R.B.P.
- Weidmann, U., and J. Darley. 1971. The role of the female in the social display of Mallards. Anim. Behav. 19: 287-298.—Though introduction of a strange female Mallard to a trio of males in spring and autumn usually results in social display and aggression, introduction of a male does not.—F.E.L.
- WEYDEMEYER, W. 1973. Singing habits of Traill's Flycatcher in northwestern Montana. Wilson Bull. 85: 276-282.—Willow Flycatcher, *Empidonax traillii brewsteri.*—H.W.K.

- Wickler, W. 1973. Artunterschiede im Duettgesand zwischen Trachyphonus d'arnaudii usambiro und den anderen Unterarten von T. d'arnaudii. J. Ornithol. 114: 123-128.—The duet song of male usambiro is completely different from that of other d'arnaudii in structure and origin. The birds respond only weakly to taped playbacks of the song of the other taxon. The author argues that usambiro should be considered a distinct species. (English summary.)—H.C.M.
- WICKLER, W. 1972. Aufbau und Paarspezifität des Gesangsduettes von Lanarius funebris (Aves, Passeriformes, Laniidae). Z. Tierpsychol. 30: 464-476.—Pair specificity and structure of duetting in an African shrike. Thus far 24 "elements" of song have been identified. Elements sung by one member of a pair are not sung by the other member, suggesting sex specificity. Elements are combined in various ways into duets. Over 90% of the duets of each pair are of a few consistently repeated types. The appearance of a particular call by an individual at a given time is determined by its own "song program," the preceding call of its partner, and the repertoire of its neighbors. Neighboring pairs have most elements in common; combinations are pair specific. (English summary.)—H.C.M.
- Wickler, W. 1972. Duettieren zwischen artverschiedenen Vögeln im Freiland. Z. Tierpsychol. 31: 98–103.—An individual shrike (*Laniarius funebris*) sang a perfect duet with a drongo (*Dicrurus adsimilis*). Both species commonly duet with their mates but the songs of the two species are very different and it seems unlikely that the birds were mistaking each other for conspecifics. The drongo adjusted its calling to that of the shrike. Duetting is not necessarily correlated with pair bonding. (English summary.)—H.C.M.
- Williams, T. C., and J. M. Teal. 1973. The flight of blindfolded birds. Bird-Banding 44: 102-109.—Six bird species showed differing abilities to fly when blindfolded. Only one, *Larus argentatus*, was able to sustain flight for more than 1000 m. For the gull and other species the ability to fly when blindfolded improved with experience.—B.A.H.
- Winkel, W. 1971. Über den Bruttrieb der Silbermöwe (Larus argentatus) in Beziehung zur Farbe der Eier. Vogelwarte 26: 249–254.—Herring Gull clutches were replaced on the eighth day of incubation with infertile eggs, some of normal appearance, others dyed blue, red, or yellow. Four yellow and seven red clutches were spontaneously abandoned; no blue or normal clutches were abandoned prematurely. Birds incubated the remaining red, yellow, and blue clutches for more than 20 days longer than normally colored eggs. (English summary.)—H.C.M.
- WINKLER, H. 1972. Beiträge zur Ethologie des Blutspechts (*Dendrocopos syria-cus*). Das nicht-reproduktive Verhalten. Z. Tierpsychol. 31: 300–325.—A reasonably detailed description of various nonreproductive behaviors of the Syrian Woodpecker. (English summary.)—H.C.M.

DISTRIBUTION AND ANNOTATED LISTS

- Alsop, F. J., III. 1972. A preliminary list of Tennessee birds. Migrant 43: 57-64.—Details circumstances surrounding hypothetical or otherwise unusual records. —E.F.P.
- Anderson, O. G. N. 1970. [Ornithological observations on the 5th Pearyland expedition in the summer of 1968.] Dansk Ornithol. Foren. Tids. 64: 104-112. (In Danish, English summary.)
- BOYAJIAN, N. 1971. Notes on the summer birds of the New Jersey Palisades. Linnaean News-letter 26 (6): 1-2.

- BROEKHUYSEN, G. J. 1971. White Storks breeding in the Bredasdorp District, most southern part of the wintering quarters. Vogelwarte 26: 164-169.—In 1960 the birds began to breed in South Africa within the wintering range and far from previously known breeding sites. Ten years of observations show that the birds are not increasing in numbers.—H.C.M.
- CAIN, B. W. 1973. Effect of temperature on energy requirements and northward distribution of the Black-bellied Tree Duck. Wilson Bull. 85: 308-317.
- CARTER, W. A. 1972. Second Western Bluebird record for Oklahoma. Bull. Oklahoma Ornithol. Soc. 5: 33.
- CEDERVAL, G., AND S. SVENAEUS. 1973. [White-throated Robin Irania gutturalis found in Sweden.] Ottenby Bird Station Rept. No. 62. Vår Fågelvärld 32: 128–130.—(In Swedish, English summary.)
- COLBY, J. F. 1972. Egg-toothed Marbled Murrelet in Pierce County, Washington. Murrelet 53: 49.
- Contreras-Balderas, A. J. 1973. Tres nuevos registros de aves para el estado de Neuvo León, México. Publ. Biol. Inst. Invest. Cient. UANL, Mexico 1: 1-5.— First specimen records for Mexican state of Neuvo León of Mycteria americana, Bubulcus ibis, and Dendroica nigrescens. (English summary.)—E.E.
- CRUZ, A. 1972. Birds of the Lluidas Vale (Worthy Park) region, Jamaica. Quart. J. Florida Acad. Sci. 35: 72-80.—A list of 87 species, including 21 of the 24 Jamaican endemics, and three-fourths of all birds known to breed on Jamaica. Gives some data on relative abundance of northern migrants.—G.E.W.
- DINSMORE, J. J. 1972. Avifauna of Little Tobago Island. Quart. J. Florida Acad. Sci. 35: 55-71.—Little Tobago, a 280-acre island, is 1 mile from Tobago. Describes habitats and the status of the 59 bird species known to occur there. Gives population estimates for most species and breeding schedules for some.—G.E.W.
- DYBBRO, T. 1970. [Distribution of the Grey Heron (*Ardea cinerea*) in Denmark 1968.] Dansk Ornithol. Foren. Tids. 64: 45-69.—In 1968, Denmark had 1883 pairs breeding in 107 colonies. (In Danish, English summary.)—H.A.J.
- GILTZ, M. L. 1973. The Purple Finch nests in central Ohio. Wilson Bull. 85: 350-351.
- GRUCHY, C. G., A. A. R. DYKES, AND R. H. BOWEN. 1972. The Short-tailed Albatross recorded at Ocean Station Papa, North Pacific Ocean, with notes on other birds. Canadian Field-Naturalist 86: 285–287.—A list of 15 pelagic species and 7 land birds seen about 1000 miles west of British Columbia.—R.W.N.
- Herndon, L. R. 1972. Black-throated Gray Warbler. Migrant 43: 67-68.—Specimen found dead near radar installation adds species to Tennessee state bird list.— E.F.P.
- HUBBARD, J. P. 1973. First specimens of certain thrushes and vireos from New Mexico. Wilson Bull. 85: 339.—Catharus m. minimus, C. fuscescens salicicola, Vireo griseus noveboracensis, V. flavifrons.—H.W.K.
- HUNTER, W. F., AND P. H. BALDWIN. 1972. Black Swift nest in Glacier National Park. Murrelet 53: 50-51.
- JOHNSTON, D. W., C. H. BLAKE, AND D. W. BUDEN. 1971. Avifauna of the Cayman Islands. Quart. J. Florida Acad. Sci 34: 141-156.—The Caymans lie about 180 miles south of Cuba and comprise about 90 square miles of low-lying limerock. Includes a brief history of early collecting and an annotated list.—G.E.W.
- JØRGENSEN, O. H. 1970. [The distribution of the Grey Wagtail (*Motacilla cinerea*) as a breeding bird in Denmark.] Dansk Ornithol. Foren. Tids. 64: 70-77. (In Danish, English summary.)

- LACK, D., AND A. LACK. 1973. Birds of Grenada. Ibis 115: 53-59.—Notes on resident and transient birds seen in 1971 with notes on habitat and relative abundance. Leptotila wellsi still exists and Apus apus is new for the West Indies.— R.W.S.
- Lack, D., E. Lack, P. Lack, and A. Lack. 1973. Birds of St. Vincent, Ibis 115: 46-52.—Notes on breeding species of land birds with notes on habitat and relative abundance in 1971. *Chaetura martinica* lives in the rain forest.—R.W.S.
- Manns, R. 1972. Roseate Spoonbills in northwest Georgia. Oriole 37: 12.
- Meltofte, H. 1972. Ornithological observations in the Norwegian Sea, the Greenland Sea, and NE Greenland, July-August 1972. Dansk Ornithol. Foren. Tids. 66: 108-112.
- Parnell, J. F. 1972. Reddish Egret at Pea Island NWR. Chat 36: 106-107.—An acceptable photograph adds species to North Carolina state bird list.—E.F.P.
- Prescott, K. W. 1972. Pelargopsis capensis innominata in north Borneo. Bull. Brit. Ornithol. Club 92: 159-160.—Single specimen collected in 1945 resembles Philippine race in some characters.—F.B.G.
- Prescott, K. W. 1973. First report of *Pitta e. erythrogaster* from Leyte. Bull. Brit. Ornithol. Club 93: 32-33.—Shipboard specimen from Leyte coast.—F.B.G.
- Purroy, F. J. 1973. El Vencejo Real, *Apus melba*, en los pirineos. Ardeola 19: 89-95.—Status of the Alpine Swift in the Spanish Pyrenees, with location of breeding colonies. (English summary.)—E.E.
- ROBERTSON, C. J. R., R. S. ABEL, AND F. C. KINSKY. 1972. First New Zealand record of Magellanic Penguin (*Spheniscus magellanicus*). Notornis 19: 111–113.

 —Bird found 12 March 1972 in exhausted condition on Waimarama Beach.—G.D.S.
- Ross, G. J. B. 1973. Mediterranean Shearwater in Natal waters. Ostrich 44: 85. —Calonectris diomedea collected 120 miles south-southwest of Durban.—R.B.P.
- ROWLETT, R. A. 1972. A "wild" flamingo in Maryland? Maryland Birdlife 28: 148-149. In late June 1972, following tropical storm "Agnes," a flamingo appeared on Assateague Island and stayed through at least 3 September. It behaved like a truly wild bird; all past occurrences have been regarded as escapes.—H.B.
- SAGE, B. L. 1973. Cedar Waxwings in central Alaska. Condor 75: 245-246.
- Salt, W. R. 1972. Western records of the Chestnut-sided Warbler. Canadian Field-Naturalist 86: 390-391.—Including breeding records for Alberta and British Columbia.—R.W.N.
- Salvan, J. 1972. Notes ornithologiques du Congo-Brazzaville. Oiseau 42: 241-252.—Annotated list of species.—A.C.
- Sanger, G. A. 1973. New northern record for Xantus' Murrelet. Condor 75: 253. Schwilling, M. D. 1972. Arctic Loon taken at Wilson reservoir. Kansas Ornithol. Soc. Bull. 23: 13-14.—A juvenal female *Gavia arctica pacifica*, first specimen reported for Kansas, shot by a duck hunter in Russell County in late October 1970.—R.S.
- Schwilling, M. D., and S. W. Capel. 1972. Ground Doves in Barton and Mc-Pherson Counties, Kansas. Kansas Ornithol. Soc. Bull. 23: 19-20.
- SEALY, S. G. 1972. Additional winter records of McKay's Bunting. Canadian Field-Naturalist 86: 386-388.—A review of all North American records; extends "its known winter range westward to the Seward Peninsula and southward to the Alaska peninsula."—R.W.M.

- SENNER, S. 1972. Curlew Sandpiper in Kansas. Kansas Ornithol. Soc. Bull. 23: 13.—An adult female *Erolia ferruginea*, the first specimen for Kansas, collected 4 August 1972 in Barton County. Mentions two earlier Barton County sight records.—R.S.
- SIEGFRIED, W. R., AND P. G. H. FROST. 1973. Regular occurrence of *Porphyrula martinica* in South Africa. Bull. Brit. Ornithol. Club 93: 36-38.—Records in South Africa tend to be about a month later than records from islands in mid-Atlantic.—F.B.G.
- SIMPSON, M. B., Jr. 1972. Notes on the summer birds of the South Mountains. Chat 36: 99-101.—Occurrence of a singing male Swainson's Warbler at 1320 feet in Burke County, North Carolina, on 16 June 1970 is of particular interest.— E.F.P.
- SINGER, F. J. 1973. Raven sightings in the Adirondack Mountains. Kingbird 23: 35-36.—Recent sightings of *Corvus corax* in northern New York state.—M.C.B.
- Skaar, P. D., R. B. Clapp, and R. C. Banks. 1973. Re-evaluation of some Montana bird records. Condor 75: 132-133.
- SMITH, N. J. H. 1973. House Sparrows (Passer domesticus) in the Amazon. Condor 75: 242-243.
- STORER, J. E., AND M. WILSON. 1972. Pileated Woodpecker near Drumheller, Alberta. Blue Jay 30: 97.
- Thomas, D. K., and H. F. I. Elliott. 1973. Nesting of the Roseate Tern (Sterna dougallii) near Dar es Salaam. Bull. Brit. Ornithol. Club 93: 21–23.—Adds details of previously published record.—F.B.G.
- TIKASINGH, E. S. 1973. First record of the Ovenbird in Trinidad, West Indies. Wilson Bull. 85: 86.
- Tomlinson, R. E. 1973. New distributional records of breeding Mexican Ducks. Condor 75: 120-121.
- Tuck, L. M., and M. J. Borotra. 1972. Additions to the avifauna of St. Pierre and Miquelon. Canadian Field-Naturalist 86: 279–284.—Annotated list of 67 species brings the total avifauna of the three French islands off the south coast of Newfoundland to 185.—R.W.N.
- TURNER, B. N. 1972. Lazuli Buntings in Manitoba. Blue Jay 30: 36-41.
- Valentine, A. E. 1973. Nesting of a Turkey Vulture in Alpena County, Michigan. Jack-Pine Warbler 51: 92.
- Vermeer, K., D. R. M. Hatch, and J. A. Windsor. 1972. Greater Scaup is common breeder on northern Lake Winnipeg. Canadian Field-Naturalist 86: 168.—One brood and 13 nests found on a small island about 300 miles south of the expected range. This supports a report in the 1915 Auk of this species breeding in the northern half of Lake Winnipeg.—R.W.N.
- VINCENT, J. 1972. A new addition to the list of South African birds. Ostrich 43: 234–235.—Psittacula krameri, perhaps derived from Zanzibar where it was introduced.—R.B.P.
- Wahl, T. R. 1972. Glaucous-winged Gull nesting at Lake Whatcom, Bellingham, Washington. Murrelet 53: 51.
- WALKER, A. 1972. The Least Tern in Oregon. Murrelet 53: 52.
- Walley, W. J. 1972. First record of the Long-eared Owl in Riding Mountain National Park [Manitoba]. Blue Jay 30: 101.—A nest record.—R.W.N.
- Watson, G. E., and G. J. Divoky. 1972. Pelagic bird and mammal observations

- in the eastern Chukchi Sea, early fall 1970. Pp. 111–172 in An ecological survey in the eastern Chukchi Sea, September–October 1970. U.S. Coast Guard Oceanographic Rept. No. 50.—Discusses previous studies on marine birds and mammals in this area, cruise tracks and environmental conditions, species accounts, migration and postdispersal movements, ice affinities, food habits, and relative abundance.—H.W.K.
- Wauer, R. H. 1973. Status of certain parulids of west Texas. Southwestern Naturalist 18: 105-110.—Recent records of 32 species.—J.J.D.
- WAUER, R. H. 1973. Bronzed Cowbird extends range into the Texas Big Bend country. Wilson Bull. 85: 343-344.
- Webster, M. A. 1972. The Hong Kong bird report 1970-71. Hong Kong Bird Watching Society Publ. [c/o P. O. Box 21], 82 pp.—Consists of brief summaries of the status of 266 species recorded in 1970 and of 247 in 1971. Also includes longer write-ups on other subjects by various authors, including a survey of an egretry and occurrences of kites (Milvus migrans) by D. J. Bovey.—J.P.H.
- Weeden, R. B., and J. S. Weeden. 1973. Two records of White-throated Sparrows (Zonotrichia albicollis) in Alaska. Condor 75: 248.
- Weseloh, D. V. 1972. First verified record of the Black-necked Stilt in Alberta. Canadian Field-Naturalist. 86: 165.
- Westerskov, K. E. 1972. History of distribution of the Crested Grebe (*Podicets cristatus*) in the North Island and Nelson-Marlborough. Notornis 19: 74–82.—
 This rare bird in New Zealand is now confined to South Island. Discusses past information on their presence on North Island and in northern South Island.—G.D.S.
- WINTERBOTTOM, J. M. 1972. Birds of the Maltahöhe district, South West Africa. Ostrich 43: 217-227.
- WINTERBOTTOM, J. M. 1972. Changes of status of birds in Humansdorp District. Ostrich 43: 234.—Compares a recent, unpublished list by J. Blignaut with one published 55 years earlier. Some birds have disappeared.—R.B.P.
- WOLFORD, J. W. 1972. Sabine's Gulls in Alberta. Canadian Field-Naturalist. 86: 389.
- woods. 1972. A note on the early history of the House Sparrow in Kansas. Kansas Ornithol. Soc. Bull. 23: 11.—A summary of early information on Passer domesticus in Kansas, with a possible first record of introduction in 1865.—R.S.
- woods. 1972. The Swallow-tailed Kite returns to Kansas. Kansas Ornithol. Soc. Bull. 23: 17-18.—Sight record of an adult *Elanoides forficatus* in Shawnee County on 6 September 1972, possibly the first Kansas record since 1914. Author also points out apparent conflict in literature concerning white-rump character of adult plumage.—R.S.
- WORTHEN, G. L. 1973. Harlan's [Red-tailed] Hawk from Utah: first record for the Great Basin. Wilson Bull. 85: 79.
- WORTHEN, G. L. 1973. First recorded specimens of the White-winged Crossbill from Utah. Wilson Bull. 85: 243-244.
- YOUNG, W. F. 1973. Specimen of White-fronted Goose [from Belize] now in museum. Belize Aud. Soc. Bull. 5 (3): 1.—Anser albifrons frontalis, collected 16 miles northwest of Belize City, 15 January 1973.—E.E.
- ZOBBE, B. 1971. [Preliminary report on the birds of spring at Skagen.] Dansk Ornithol. Foren. Tids. 65: 141-147. (In Danish, English summary.)

ECOLOGY AND POPULATIONS

- Bartholomew, G. A., and C. J. Pennycuick. 1973. The flamingo and pelican populations of the Rift Valley Lakes in 1968–1969. East African Wildl. 11: 189–199.
- Bauer, E. A. 1973. The Falklands. Sea Frontiers 19: 279–289.—Overgrazing by sheep, introduction of alien predators, and overexploitation by man has reduced populations of birds and seals in the Falkland Archipelago, 260 miles southeast of Argentina. Author estimates that billions of penguins were rendered for oil since 1820. Recent establishment of wildlife sanctuaries for 61 species of breeding birds may lure tourists. Color photographs of endemic birds complement this well-written essay.—J.T.D.
- Berthold, P. 1973. Über starken rückgang der Dorngrasmücke Sylvia communis und anderer Singvogelarten im westlichen Europa. J. Ornithol. 114: 348–360.— Data show a widespread 25 to 75% decline in the population of Whitethroats since 1968. Pesticide contamination of wintering grounds in Africa may be the cause. What is happening to our bird populations? (English summary.)—H.C.M.
- Bloch, D. 1970. [The Mute Swan (Cygnus olor) breeding colonially in Denmark.] Dansk Ornithol. Foren. Tids. 64: 152-162.—In 1966, 523 pairs of Mute Swans (one-sixth of the total Danish population) bred in 20 colonies of four or more pairs each, with 90 pairs in the largest colony on Suderø. (In Danish, English summary.)—H.A.J.
- Bradley, R. A. 1973. A population census of the Belding's Savannah Sparrow, *Passerculus sandwichensis beldingi*. Western Bird Bander 48: 40–43.—The subspecies breeds in very small territories in tidal *Salicornia flats*. Total population is about 2000 in California, 4000 in Baja California in 14 known sites; probably extirpated in nine other sites, and one site not checked.—M.H.C.
- CRUZ, A. 1973. Food and foraging ecology of the Chestnut-bellied Cuckoo. Wilson Bull. 85: 336-337.
- Davis, T. H. 1972. The increase of the Tufted Titmouse, Mockingbird, and Cardinal in the New York City-Long Island area over the past 22 years. Linnaean News-letter 25 (8): 1–4. Analysis based on Christmas counts. Climate and growth of suburbs important factors.—F.E.L.
- Dehaven, R. W., and J. A. Neff. 1973. Recoveries and returns of Tricolored Blackbirds, 1941–1964. Western Bird Bander 48: 10–11.—Populations of Agelaius tricolor in coastal California tend to remain separate from those in the Central Valley. Age record of 13 years.—M.H.C.
- DUFFEY, D. C., AND A. POOLE. 1973. The status of the Least Tern on eastern Long Island in 1972. Linnaean News-letter 27 (1): 1-2.
- Dybbro, T. 1970. [The Kentish Plover (*Charadrius alexandrinus*) breeding in Denmark.] Dansk Ornithol. Foren. Tids. 64: 205-222.—About 136 pairs in 1969. (In Danish, English summary.)—H.A.J.
- DYBBRO, T. 1970. [The status of the Stork (*Ciconia ciconia*) in Denmark 1961–1969.] Dansk Ornithol. Foren. Tids. 64: 78-84.—Storks continue to decrease in Denmark. In 1969, 65 pairs fledged 93 young. (In Danish, English summary.)—H.A.J.
- DYBBRO, T., AND O. H. JØRGENSEN. 1971. [Distribution of the Black-tailed Godwit (*Limosa limosa*), Dunlin (*Calidris alpina*), Ruff (*Philomachus pugnax*), and Avocet (*Recurvirostra avosetta*) in Denmark 1970.] Dansk Ornithol. Foren. Tids. 65: 116-128.—Some 350 pairs of Godwit, 600 pairs of Dunlin, 450-500

- pairs of Ruff, and 2300 pairs of Avocet (increasing from 750 pairs in 1920) bred. (In Danish, English summary.)—H.A.J.
- ELY, C. A. 1971. Mid-winter bird count for 1970. Kansas Ornithol. Soc. Bull. 22: 1-6.
- ELY, C. A. 1972. Mid-winter bird count for 1971. Kansas Ornithol. Soc. Bull. 23: 1-7.—This and the preceding paper report and comment on 21 bird counts conducted in Kansas.—R.S.
- ENG, R. L., AND P. SCHLADWEILER. 1972. Sage Grouse winter movements and habitat use in central Montana. J. Wildl Mgmt. 36: 141–146.—Winter ranges of female *Centrocerus urophasianus* were determined by radio tracking. Grouse prefer dense sagebrush cover (over 20% canopy coverage) during winter. Sagebrush control programs reduce capacity to support wintering grouse.—L.H.F.
- Eriksson, K. 1971. Irruption and wintering ecology of the Great Spotted Woodpecker *Dendrocopos major*. Ornis Fennica 48: 69-76.—The study is based on winter bird censuses carried out in Finland from 1956 through 1968. Includes cone crop figures and recoveries of ringed birds. Demonstrates statistically that the density of wintering Great Spotted Woodpeckers depends on the spruce cone crop, and that the irruption populations fluctuate simultaneously in Finland and Norway. Young birds tend to erupt annually. High population density and early territoriality of the young release a mass emigration, the extent of which the cone crops regulate. (From author's abstract.)—M.D.F.V.
- Fretwell, S. 1973. The regulation of bird populations on Konza Prairie. The effects of events off of the prairie. Proc. Third Midwest Prairie Conf. 22–23 September 1972. Publ. Div. Biol. Kansas State Univ. 3: 71–76.—Dickcissel populations on a Kansas prairie may be determined largely by events in the northern South American llanos during the winter and the Texas prairie in spring.—H.W.K.
- GOCHFELD, M. 1973. Least Tern Colonies on Jones Beach and Western Fire Island in 1972. Linnaean News-letter 27 (3): 1–2.
- GÖRANSSON, G., AND J. KARLSSON. 1973. [The range expansion in Europe and the occurrence in Sweden of the Penduline Tit Remiz pendulinus.] Vår Fågelvärld, 32: 107–110.—A notable extension northward since 1950. (In Swedish, English summary.)—L.DEK.L.
- Graber, R. R., J. W. Graber, and E. L. Kirk. 1971. Illinois birds: Turdidae. Illinois Nat. Hist. Surv. Biol. Notes 75: 1–44.—Migration, distribution, nesting cycles, populations, and food habits are the main topics covered for each of the nine species of Turdidae recorded from Illinois. Only studies done in Illinois are mentioned, but the work is thorough, well-presented, and a valuable summary of information.—J.J.D.
- Graber, R. R., J. W. Graber, and E. L. Kirk. 1972. Illinois birds: Hirundinidae. Illinois Nat. Hist. Surv. Biol. Notes 80: 1–36.—This, the third in a series of papers, covers the seven swallow species recorded from Illinois. The main emphasis is on migration dates, distribution, populations, nesting cycle, and food habits using information from published records and the authors' own extensive fieldwork.—J.J.D.
- Hadow, H. H. 1973. Winter ecology of migrant and resident Lewis' Woodpeckers in southeastern Colorado. Condor 75: 210-224.
- HAKALA, A. 1971. A quantitative study of the bird fauna of some open peatlands in Finland. Ornis Fennica 48: 1–11.—Bogs, fens, and various other types of peatlands were censused during 1966–68 and avian densities were calculated

- from transect data. Compared to earlier studies, the proportion of individuals belonging to northern species increased, but such southern species as *Vanellus vanellus* and *Larus ridibundus* seem to have adapted to living in peat bogs.—M.D.F.U.
- Hald-Mortensen, P. 1970. [Lesser Redpoll (Carduelis flammea cabaret (Müller)) breeding in Denmark.] Dansk Ornithol. Foren. Tids. 64: 163–193.—The first Danish records of Redpolls in summer were in 1954. The distribution of the species is now restricted to a zone less than 10 km broad, but more than 400 km long, along the west coast of Jutland. (In Danish, English summary.)—H.A.J.
- Hansen, P., and S. Christensen. 1970. [The Firecrest (Regulus ignicapillus) in Denmark.] Dansk Ornithol. Foren. Tids. 64: 253-266.—The Firecrest has increased in Denmark both as migrant and breeding bird, especially since 1967. (In Danish, English summary.)—H.A.J.
- HAUKIOJA, E. 1971. Short distance dispersal in the Reed Bunting Emberiza schoeniclus. Ornis Fennica 48: 45-67.—Based on information from over 2200 banded individuals (932 as nestlings) in southwestern Finland in 1966-70. Netting efficiency and suitability of the habitat for buntings were quantified. Adults, especially males, show high philopatry to the previous nest site and their postbreeding movements are limited. Young move away from the birthplace at the end of the summer before migration, but, unlike several other songbirds, not right after fledging. The following spring they return to the place where they stayed before fall migration. Though the distances involved are not great, the author thinks that the premigratory movement is true dispersal. A limited removal experiment carried out in the spring revealed the spacing nature of the spring movements. Thus the premigratory dispersal movement could be called "epideictic" movement (sensu Wynne-Edwards).—M.D.F.U.
- Haukioja, E., and M. Haukioja. 1971. Assessment of the Goshawk (Accipiter gentilis) population and its influence in Finland. Suomen Riista 23: 17–22.— Analyzes Finnish and Swedish banding recoveries (1950–66 and 1944–60, respectively) and assumes a mortality rate of about 60%. About 20% of the autumn Goshawk population are killed by man and about 70% of these are young. (Finnish with English and Swedish abstracts.)—M.D.F.U.
- HEATH, F., AND J. M. ZUPAN. 1971, 1972. The breeding bird censuses of the Van Cortland Park Swamp: An analysis. Linnaean News-letter 25 (2): 3-4; (3): 3-5; (4): 4-6; (5): 3-4; (6): 2-3; (7): 1-2; 26 (1): 2-5; (2): 1-2; (4): 1-2; (5): 1-3. Compares the censuses of the 1960s with those of 1937 and 1938.—F.E.L.
- JØRGENSEN, O. H. 1971. [Results of breeding bird censuses in Danish farmland in 1969 and 1970.] Dansk Ornithol. Foren. Tids. 65: 98-108.—In 100 ha of farmland with about 6 km of rather dense hedges, 94 and 97 territories/km² respectively were found in 1969 and 1970. In 80 ha of a large drained and cultivated seabed without hedges, 34 territories/km² were found in 1970. The dominant species in both areas was Alauda arvensis. (In Danish, English summary.)—H.A.J.
- Kepler, C. B., and A. K. Kepler. 1972. The distribution and ecology of the Puerto Rican Whip-poor-will, an endangered species. Living Bird 11: 207-239.—

 Caprimulgus noctitherus, now known only from the southwestern part of Puerto Rico, numbers about 500 breeding pairs. Density in optimal habitat—semi-deciduous forests on slopes have 75 m—is one pair per 4.9 ha. Compares the breed-

- ing biology of this endemic Whip-poor-will with that of the sympatric *Chordeiles gundlachii*. Human population growth and industralization threaten the species.—G.E.W.
- Lack, D., and P. Lack. 1972. Wintering warblers in Jamaica. Living Bird 11: 129–153.—Describes ecological differences between 20 parulids wintering in Jamaica. The two resident warblers, both leaf gleaners, are separated largely by habitat. The wintering species are separated by habitat or feeding methods. The factors responsible for low species diversity and broad niches of the resident land birds appear not to operate in winter. Foraging parties of insectivorous birds were not seen in Jamaica where accipitrine hawks were absent.—G.E.W.
- Lahtt, E. 1972. Nest sites and nesting habitats of the Ural Owl Strix uralensis in Finland during the period 1870-1969. Ornis Fennica 49: 91-97.—The population of this boreal owl increased in Finland. Because of the subsequent shortage of nest sites, compounded by silvicultural measures in the southern half of the country, increasing use of man-provided nest sites induced expansion into other habitats. The author describes the increasing occupancy of breeding boxes made especially for this owl during the 1960s.—M.D.F.U.
- Leisler, B. 1972. Die Jahresverbreitung des Mariskensängers (Acrocephalus melanopogon) nach Beobachtungen und Ringfunden. Vogelwarte 27: 24-39.—Breeding and wintering distributions of the Moustached Warbler with analysis of the environmental determinants. (English summary.)—H.C.M.
- LEMMETYINEN, R. 1972. Growth and mortality in the chicks of Arctic Terns in the Kongsfjord area, Spitzbergen in 1970. Ornis Fennica 49: 45-53.—Nests were protected by boards, and no predation occurred. Compared to studies in Finland the growth rate of chicks was slower, which is attributed to climatic factors. Second chicks hatched after the hatching of first clutches had less chance of survival than they did in Finland. The food also differed, the main item in Finland being fish, in Spitzbergen krill.—F.D.F.U.
- Leuthold, W., and B. Leuthold. 1972. Blutschnabelweber (*Quelea quelea*) als Beute von Greif- und Stelzvögeln. Vogelwarte 26: 352–354.—Observations of predation by various hawks, eagles, and storks on swarms of the Quelea at waterholes in Africa.—H.C.M.
- Mathiasson, S. 1971. Untersuchungen an Klappergrasmücken (*Sylvia curruca*) im Niltal in Sudan. Vogelwarte 26: 212–221.—Observations on the ecology and behavior of wintering Lesser Whitethroats in the Nile second cataract region. (English summary.)—H.C.M.
- Moilanen, P. 1971. On the Mallards (Anas platyrhynchos) wintering in natural conditions in Southern Häme, Southern Finland. Suomen Riista 23: 23-38.—The number of wintering Mallards fluctuates according to weather conditions. About 2.4 males per female was the average, but male preponderance increased with increasing size of the wintering population. Flock size increased with increasing cold, and as freeze-up decreased the amount of open waters, predation increased. Starvation was seldom noted, and several interesting feeding adaptations are described, e.g. probing for cereal sprouts under light snow cover, diving against the current, etc. (Finnish with English summary.)—M.D.F.U.
- Morse, D. H. 1973. The foraging of small populations of Yellow Warblers and American Redstarts. Ecology 54: 346-355.—In and near Muscongus Bay, Maine, are many small islands of varying habitat and size. On islands with mixed forests, Yellow Warblers (*Dendroica petechia*) and American Redstarts (*Setophaga ruticilla*) fledge young regularly and direct interactions between the species do not

- appear important. Both species use deciduous growth more than predicted by chance alone. Spruce-clad islands were occupied by only one species, young were seldom fledged, and most male Redstarts on such islands were first-year birds. Size of standing insect crop did not seem to affect the tendency of these species to occupy an island or their ability to fledge young. Spruce-woods warblers—Parula, (Parula americana), Myrtle (= Yellow-rumped) (Dendroica coronata), and Black-throated Green (D. virens)—divided the habitat vertically and displayed an interspecific social hierarchy (Morse 1971). Yellow Warblers and Redstarts divide habitat horizontally without a well-defined social hierarchy. Up to three species of spruce-woods warblers may be found on islands too small to support more than one pair of a given species, but never both Yellow Warblers and Redstarts.—C.R.B.
- MÜLLER-SCHWARZE, D., AND C. MÜLLER-SCHWARZE. 1973. Differential predation by south polar Skuas in an Adélie Penguin rookery. Condor 75: 127–131.
- Nero, R. W. 1972. Further records of summer flocking of Common Loons. Blue Jay 30: 85-86.—From 1943 to 1971 flocks of up to 100 or more birds have been observed within 50 miles of Flin Flon, Manitoba. This habit is little understood and has seldom been reported elsewhere.—R.W.N.
- NIEMAN, D. 1972. Trumpeter Swans in the Cypress Hills [Saskatchewan]. Blue Jay 30: 93-95.—In 1971, 16 birds were found, including three breeding pairs. Prior to 1961 only one pair had ever been recorded.—R.W.N.
- Nilsson, L. 1973. [The 1972 breeding population of the Mute Swan Cygnus olor in Scania and Blekinge, southern Sweden.] Vår Fågelvärld 32: 115-119.—(In Swedish, English summary.)
- ÖSTERLÖF, S. 1973. [The Osprey *Pandion haliaetus* in Sweden 1971.] Vår Fågelvärld 32: 100–106.—A nationwide census revealed 1,238 breeding pairs. (In Swedish, English summary.)—L.DEK.L.
- PARKER, J. W. 1971. Activity of Red-tailed Hawks at a corn stubble fire. Kansas Ornithol. Soc. Bull. 22: 17-18.—At least 11 Buteo jamaicensis, apparently hunting, were seen at a fire in Kansas the evening of 21 March 1969. The author's conclusion that the Red-tails must have been attracted to the fire from a large nearby wintering area seems to ignore the possibility that the hawks may have been migrants. The author's use of the plumage descriptive term "dark phase" seems inappropriate in the case of this species.—R.S.
- Penhale, L. B. 1972. Reproductive failure of Pelagic Cormorant, San Luis Obispo County, California, 1970. California Fish and Game 58: 238.—Thirty pairs of *Phalacrocorax pelagicus* produced 66 eggs, only two of which hatched. Neither bird survived. Gives no reason for this failure.—J.J.D.
- Pennycuick, C. J., and G. A. Bartholomew. 1973. Energy budget of the Lesser Flamingo (*Phoeniconaias minor* Geoffroy). East African Wildl. 11: 199-209—Relates energy requirements to estimates of food availability.—I.L.B.
- PIRKKOLA, M. K., AND E. NIEMELÄ. 1971. Duck wing collection survey in Finland, autumn 1968. Suomen Riista 23: 119–126. Hunters and game research personnel collected over 1000 wings. Discusses species composition, sex and age ratios, and hunting pressure in connection with a slight change in species composition compared with previous years. (Finnish with English and Swedish abstract.)—M.D.F.U.
- Predy, R. G. 1972. Another summer concentration of Common Loons. Blue Jay 30: 221.—An estimated 500 birds on Reed Lake in north central Manitoba on 25 July 1972.—R.W.N.

- Pulliam, H. R. 1973. Comparative feeding ecology of a tropical grassland finch (*Tiaris olivacea*). Ecology 54: 284–299.—Yellow-faced Grassquits are less plentiful in Jamaica than in Costa Rica although the species is present in the same number of habitats at both sites. Size of seed selected by Jamaican birds in the laboratory was less stereotyped than that of their Costa Rican counterparts. No difference in bill size exists to account for seed size preferences.—C.R.B.
- Reese, J. G. 1973. Nesting success of Chesapeake Bay Ospreys in 1973. Maryland Birdlife 29: 105–106.—Of 162 nests watched in three areas, 115 produced young, averaging 1.43, 1.43, and 1.15 fledglings per nest, the highest numbers in 10 years of study. Rainy weekends and a clamming ban that discouraged boaters and crabbers, probably reduced nest disturbance.—H.B.
- REMMERT, H. 1973. Über die Bedeutung warmblütiger Pflanzanfresser für den Energiefluss in terrestrischen Ökosystemen. J. Ornithol. 114: 227–249.—A discussion of the effects of homeothermic vertebrate herbivores (mainly mammals) on the ecosystem. A reasonable review of the problem but the paper seems out of place in an ornithological journal. (English summary.)—H.C.M.
- RICKARD, W. H., AND B. J. RICKARD. 1972. A comparison of winter bird populations after a decade. Murrelet 53: 42-47.—Records show no dramatic changes in bird usage of a streamside forest in eastern Washington.—A.C.V.
- ROBERTSON, R. J. 1972. Optimal niche space of the Red-winged Blackbird (Agelaius phoeniceus). 1. Nesting success in marsh and upland habitat. Canadian J. Zool. 50: 247–263.—Water depth and breeding synchrony and density were associated with reduced predation and greater nesting success in marsh habitat.—R.M.E.
- ROBERTSON, R. J. 1973. Optimal niche space of the Red-winged Blackbird. 3. Growth rate and food of nestlings in marsh and upland habitat. Wilson Bull. 85: 209-222.
- Salomonsen, F. 1972. Zoogeographic and ecological problems in arctic birds. Proc. 15th Intern. Ornithol. Congress: 25-77.—Some 141 species regularly breed in the Arctic, of which most are nonpasserine and migratory. Discusses their distribution at present and in the Pleistocene, and the possible areas of origin of some forms. Details such ecological factors as climatic rigors, short breeding period, and seasonal food shortages, and considers low temperatures as the main limiting factor for birds. Discusses various ecogeographic "rules" (i.e. Bergmann's, Allen's, Gloger's) along with other adaptative responses, such as accelerated breeding and molt cycles, increased fecundity, delayed maturation, and increased polymorphism in arctic birds.—J.P.H.
- SANGER, G. A. 1972. Preliminary standing stock and biomass estimates of seabirds in the subarctic Pacific region. Pp. 589-611 in Biological oceanography of the northern North Pacific Ocean (A. Y. Takenouti et al., Eds). Tokyo, Idemitsu Shoten.—Presents very rough estimates of numbers and biomass of pelagic birds by season and oceanographic domain based on cruises in 1967 and 1969. Includes estimates of total annual food intake and fecal production.—H.W.K.
- Scharf, W. C. 1970. Gull Point, South Manitou Island—1966–1969. IBBA News 42: 6-9.—Both Herring Gull and Ring-billed Gull nesting populations have declined during the study period. The seemingly high juvenile Ring-billed Gull mortality of 1969 was thought to be caused by motorized vehicles on the island.—D.M.F.
- SIEGFRIED, W. R. 1972. Food requirements and growth of Cattle Egrets in South Africa. Living Bird 11: 193-206.—Bubulcus ibis raised only two chicks from

- broods of three or four in an area of human disturbance where, it is postulated, prey larger than grasshoppers, such as frogs, are scarcer than in the more natural habitats. Presents growth and energy budgets.—G.E.W.
- SMITH, J. M. 1972. Variations in duck numbers at Christchurch during the 1967 New Zealand shooting season. Notornis 19: 36-41.—Counts of Anas superciliosa, A. platyrhynchos, and hybrids between 16 April and 18 July. Discusses flight patterns, feeding habits, and behavior.—G.D.S.
- SNOW, B. K., AND D. W. SNOW. 1972. Feeding niches of hummingbirds in a Trinidad village. J. Anim. Ecol. 41: 471–485.—A detailed analysis of the feeding habits of nine species of hummingbirds. Discusses adaptation relative to food habits, flowers selected, and size of the bird.—C.R.B.
- SOIKKELI, M. 1970. Mortality and reproductive rates in a Finnish population of Dunlin Calidris alpina. Ornis Fennica 47: 149–158.—Because emigration and immigration were negligible, banding and return data were used in this quite philopatric population to present population turnover data from seven seasons in the 1960s. A mean mortality rate of 25% consisted of higher female and lower male mortality. Approximately 20% of first breeders were 1 year old. Total life span averaged 5.3 years. Population size during 8 years was quite stable and the adult mortality rate and the reproductive rate (mean clutch size 3.9, relaying, some triple relaying, and some second broods) were sufficient to maintain the population.—M.D.F.U.
- SOIKKELI, M. 1970. Dispersal of Dunlin Calidris alpina in relation to sites of birth and breeding. Ornis Fennica 47: 1-9.—Out of 5 banded young that were later found breeding, nearly one fourth settled within 0.5 km and half within 5 km from their birthplace. Lack of suitable habitat beyond 5 km prevented more precise curves of diminishing rate of philopatry but the species is known in Finland to disperse up to 280 km from place of birth to breeding sites in their second year of life. Philopatry to the first breeding site was greater than to the birthplace. Thus overall rate of philopatry is high in this species, as is to be expected of a quite strongly subspeciated wader.—M.D.F.U.
- SPITZ, F. 1971. Répartition et densités d'oiseaux nicheurs en forêt de Fontainebleau. Passer 7: 82-102.—Population studies of breeding birds.—A.C.
- Spitzer, G. 1972. Jahreszeitliche Aspekte der Biologie der Bartmeise (Panurus biarmicus). J. Ornithol. 113: 241-275.—Seasonal aspects of the biology of the Bearded Tit, which may rear as many as four broods. Offspring of first broods may breed in their first summer. Presents details on gonadal cycles, fat deposition, and molt. In autumn the birds engage in high flights above their reedy haunts; the author argues that this peculiar behavior leads to irruptive migrations when populations are high. The stomach undergoes morphological changes in winter, permitting the birds to switch their diets from insects to seeds. An excellent detailed study of an interesting, secretive species. (English summary.)—H.C.M.
- Tamisier, A. 1972. Exigences fondamentales des Sarcelles d'hiver en période d'hivernage. Oiseau 42: 179–182.—In response to criticism of an earlier paper the author clarifies his views on the fundamental winter requirements of Anas crecca. During November and December predation pressure encourages daytime gregariousness and nightly foraging. At the end of winter, increasing food needs and night-shooting force the teal to feed also during daylight hours.—A.C.
- THELLE, T., AND B. NETTERSTRØM. 1971. [Counts of waders in the Danish Wadden Sea, July and August 1969.] Dansk Ornithol. Foren. Tids. 65: 164-172.—From 28 July through 3 August 1969, 145,000 waders of 27 species were counted, in-

- cluding 103,700 Calidris alpina, 8655 Limosa lapponica, and 8200 Haematopus ostralegus. (In Danish, English summary.)—H.A.J.
- Utter, J. M., and E. A. Lefebyre. 1973. Daily energy expenditure of Purple Martins (*Progne subis*) during the breeding season: estimates using D₂O¹⁸ and time budget methods. Ecology 54: 597–604.—Comparison of two prominent techniques for estimating daily energy expenditures indicates that time budget studies provide relatively accurate approximations of values obtained by means of doubly labeled water.—C.R.B.
- Van Velzen, W. T. 1972. Distribution and abundance of the Brown-headed Cowbird. Jack-Pine Warbler 50: 110-113.—Uses data from the Breeding-bird Survey to show the continental distribution of *Molothrus ater*, with special reference to Michigan. Includes two maps.—W.T.V.
- Vermeer, K. 1972. Variation in density of breeding ducks across the aspen parklands and grasslands of Canada. Blue Jay 30: 154–158.—Comments received from waterfowl biologists suggest this is a hasty analysis and premature report and a revised version is supposedly in preparation. With data for 10 species for the period 1960-69, an attempt is made to relate density to standard survey blocks or strata and habitat.—R.W.N.
- Vermeer, K. 1972. Comparison of the clutch initiation of Caspian and Common Terns at Lake Winnipeg. Blue Jay 30: 218-220.—Based on 797 Caspian Tern clutches and 645 Common Tern clutches, the latter species began nesting earlier. Notably, 1000 Caspian Tern nests were found in a colony on a small island not far south of the 53rd parallel.—R.W.N.
- VERMEER, K., AND D. R. M. HATCH. 1972. Additional information on Great Blue Heron colonies in Manitoba. Blue Jay 30: 89-92.—Supplements a previous report on island colonies; 37 colonies observed in 1971 had from five to 127 active nests. Lists colonies known to have disappeared, mostly during the last decade.—R.W.N.
- Vernon, C. J. 1972. On the life-expectancy of the Matopos Black Eagles. Ostrich 43: 206-210.—Estimated to be 7.8 years, based on V. Gargett's data for Aquila verreauxi.—R.B.P.
- VOOREN, C. M. 1972. Seasonal abundance and behavior of sea birds in the Bay of Plenty, New Zealand. Notornis 19: 250-260.—Describes and correlates seasonal abundance patterns of petrels and other birds in 1968 and 1969 with information on breeding sites.—G.D.S.
- Walter, H., and A. M. Demartis. 1972. Brutdichte und ökologische Nische sardischer Stadtvögel. J. Ornithol. 113: 391–406.—A breeding census and observations on the "niches" of urban birds in Sardinia. Spotless Starling, Spanish Sparrow, and Tree Sparrow predominate. The latter species has invaded Sardinia in the last 75 years, and its niche there is different than in other parts of its range. Niches of all three species appear to overlap. (English summary.)—H.C.M.
- Wendland, V. 1972. 14jährige Beobachtungen zur Vermehrung des Waldkauzes (Strix aluco L.). J. Ornithol. 113: 276–286.—Observations of the breeding and ecology of a Tawny Owl population over a 14-year period. In years of low rodent populations only few pairs bred; in good rodent years, more pairs bred. Breeding was higher in a suburban population where prey was more readily available. (English summary.)—H.C.M.
- WHITE, S. C., AND G. E. WOOLFENDEN. 1973. Breeding of the Eastern Bluebird in central Florida. Bird-Banding 44: 110-123.—A thorough report based on a 7-year study of Sialia sialis nesting biology in a subtropical climate. Presents

details on the nesting cycle, breeding season, clutch size, nest success, hatching success, and characteristics of egg and nestling mortality. Includes large samples of bluebirds nesting in natural cavities as well as man-made boxes in which better nesting success was found. Early nestings contribute disproportionately to annual productivity, hatching success being better early in the season. Nest failures or partial failures usually involve whole clutches or broods, and usually occur during the nestling stage. Hatching success is low compared to other passerines and to bluebirds nesting in the north. The authors suggest high ambient temperature may cause hatching failure.—B.A.H.

- Wiens, J. A. 1973. Interterritorial habitat variation in Grasshopper and Savannah Sparrows. Ecology 54: 877–884.—Latest territories to be established were larger in Grasshopper Sparrows (Ammodramus savannarum) but time of establishment did not have a significant effect upon territory size in Savannah Sparrows (Passerculus sandwichensis). The territories of the former showed little systematic variation; centrally located territories were smaller than peripheral territories in the latter. Percent coverage of grass accounted for most of the variation in size of Savannah Sparrow territories. These species initially occupied different portions of the same habitat, but differences disappeared as late arrivals established territories and breeding populations stabilized. Individual variation in territorial habitat in the species may be extensive and patterned according to territory size, position, and time of occupancy.—C.R.B.
- WILLIS, E. O. 1973. Local distribution of mixed flocks in Puerto Rico. Wilson Bull. 85: 75-77.
- ZWICKEL, F. C. 1972. Grazing and predation on Blue Grouse. Murrelet 53: 52-53.—Predation on *Dendragapus obscurus* was greater in an ungrazed area in Washington because of a larger raptor population.—A.C.V.

GENERAL BIOLOGY

- AINLEY, D. G., AND R. E. LERESCHE. 1973. The effects of weather and ice conditions on breeding in Adelie Penguins. Condor 75: 235-239.
- ALLEN, G. A., Jr. 1973. Whistling Swan research. Game Bird Gazette 22 (7): 30-34.
- Andersen-Harild, P. 1971. [The winter quarters of the Danish Black-Headed Gull (*Larus ridibundus*).] Dansk Ornithol. Foren. Tids. 65: 109-115. (In Danish, German summary.)
- Balda, R. P., and G. C. Bateman. 1972. The breeding biology of the Pinon Jay. Living Bird 11: 5-42.—The colonial nesting activities of *Gymnorhinus cyanocephalus* were followed for 4 years on breeding grounds in ponderosa pines. Courtship began in mid-November and included presentation of seeds of ponderosa and piñon pines. Intensity of courtship feeding seemed directly related to seed supply. Nest building was highly synchronized. Over 85% of all nests were in the warmer southern half of the tree canopy. Discusses nesting synchrony, social induction, and nest dispersion.—G.E.W.
- Baldwin, M. 1973. Nests of the Red Wattle-bird. Sunbird 4: 10-12.—Details of construction of two Anthochaera carunculata nests.—M.H.C.
- Behle, W. H. 1973. Further notes on Rosy Finches wintering in Utah. Wilson Bull. 85: 344-346.
- Berthold, P., and H. Berthold. 1971. Über jahreszeitliche Änderungen der Kleingefiederquantität in Beziehung zum Winterquartier bei Sylvia atricapilla

- und S. borin. Vogelwarte 26: 160–164.—A comparison of the body plumage (not including the head or wings) of juvenal and adult Blackcaps and Garden Warblers. Numbers of feathers were not significantly different between species or plumages. Adult plumage weighed significantly more than juvenal plumage in both species. S. atricapilla has a significantly heavier adult plumage than S. borin, probably because it winters in a colder climate. (English summary.)—H.C.M.
- Beruldsen, G. R. 1972. A nest of the Jabiru. Sunbird 3: 40-41.—Description of a nest of *Xenorhynchus asiaticus* in southeast Queensland.—M.H.C.
- Bezzel, E. 1972. Zur Jahresperiodik und Bestandsfluktuation alpiner Fichtenkreuzschnäbel (*Loxia curvirostra*). Vogelwarte 26: 346–352.—Crossbills occurred in the Bavarian Alps in only 4 of 6 years, each time remaining about 12 months. The observations suggest that crossbills do not breed every year but can breed twice in 12 months. (English summary.)—H.C.M.
- BLOOM, P. H. 1973. Seasonal variation in body weight of Sparrow Hawks in California. Western Bird Bander 48: 17-19.—Pooled data from 295 weights of Falco sparverius taken in four localities.—M.H.C.
- Braithwaite, R. M. 1973. Nesting habits of White-capped Noddies. Sunbird 4: 1-4.—A week's observations at an *Anous minutus* colony on Australia's Great Barrier Reef.—M.H.C.
- BROOKE, R. K. 1972. Bird breeding in Rhodesia. Rhodesia Sci. News 6: 352-354.—A 20-year nest record card system provides data on breeding season and clutch size for some 420 species. Some 10% of the breeding species lay eggs in every month of the year, but all have a peak breeding period. Egg-laying seasons of 6 months or more are commonplace. Rhodesia is within the tropics and has three seasons: hot wet, hot dry, and cold dry. Most species have peak breeding seasons falling within one or another of these seasons, depending on availability of food or nesting material, and possibly on "competition from phylogenetic or ecological relatives".—E.E.
- Bruning, D. 1973. Hemipodes (*Turnix sylvatica*). Game Bird Gazette 22 (5): 7-10.—Includes growth data.—I.L.B.
- CALDER, W. A. 1973. The timing of maternal behavior of the Broad-tailed Hummingbird preceding nest failure. Wilson Bull. 85: 283-290.
- Collins, C. T. 1973. Notes on survival and band wear in White-throated Swifts. Western Bird Bander 48: 20–21.—Two, possibly all three Aeronautes saxatalis, banded in 1970 at a southern California roost were still using that roost in 1973. Excessive band wear may be a serious problem with this potentially long-lived species.—M.H.C.
- CRONERT, H., AND Å. SVENSSON. 1973. [Observations on the nesting of a Penduline Tit Remiz pendulinus in Sweden.] Vår Fågelvärld, 32: 111–114.—Both sexes built the nest. The female alone fed the young, which remained in the nest 23 days. (In Swedish, English summary.)—L.DEK.L.
- Dawson, P. 1973. A yellow Scaly-breasted Lorikeet. Sunbird 4: 9-10.—Plumage abnormality, presumably from absence of melanins, in *Trichoglossus chlorolepidotus*.—M.H.C.
- DIAMOND, A. W. 1973. Notes on the breeding biology and behavior of the Magnificent Frigatebird. Condor 75: 200-209.
- Dunn, E. K. 1973. Changes in fishing ability of terms associated with windspeed and sea surface conditions. Nature 244: 520-521.—Sandwich and Common terms on the coast of Northumberland, England, fed with significantly

- greater efficiency (fewer unsuccessful dives, more fish caught per unit time; various P < 0.01 to < 0.05) in moderate seas (windspeed up to about 15 knots) than in calm seas. Moderately disturbed sea surface conditions probably "impair the fish's view of the tern more than the tern's view of the fish".—W.B.R.
- ENDERSON, J. H., S. A. TEMPLE, AND L. G. SWARTZ. 1972. Time-lapse photographic records of nesting Peregrine Falcons. Living Bird 11: 113-128.—Nearly 70,000 pictures were obtained of seven breeding pairs of Falco peregrinus along the Alaska-Yukon border. Important information was obtained on participation of the sexes in incubating, brooding, and feeding, and on molt of the adults.—G.E.W.
- ESTES, R. D. 1973. The flamingo eaters of Ngorongoro. Natl. Geogr. 144: 534-539.—Photographs and text describe hyena (*Crocuta crocuta*) predation on flamingos (*Phoeniconaias minor*) at Lake Makat, Tanzania.—J.T.D.
- Frederiksen, K. S., M. Jensen, E. H. Larsen, and V. H. Larsen. 1972. [Some data illustrating time of breeding and clutch size in tits (Paridae).] Dansk Ornithol. Foren. Tids. 66: 73-85.—Nestbuilding began 10 days before laying of 1st egg, which varied from 18 April to 11 May. (In Danish, English summary.)—H.A.J.
- Freeland, D. B. 1973. Some food preferences and aggressive behavior by Monk Parakeets. Wilson Bull. 85: 332-334.
- FRY, C. H. 1972. The biology of the African Bee-eaters. Living Bird 11: 75-112.—The 14 Meropidae inhabiting African savannas feed mainly on venomous Hymenoptera captured in flight. Similar in structure and habits, these bee-eaters diverge in weight by a factor of four. They also differ in habitat, breeding season, and migration. Discusses, among other topics, behavior and phylogeny.—G.E.W.
- George, W. G. 1973. Molt of juvenile White-eyed Vireos. Wilson Bull. 85: 237-330.
- GLASS, M. B. 1971. Some remarks on the evening departure during winter of the Long-eared Owl (Asio otus). Dansk Ornithol. Foren. Tids. 65: 173-179.—
 In 25 evenings 421 records showed that the first flight of the evening took place at an illumination varying between 0.98 log lux and 0.18 log lux, inclusively. Strong winds disturbed the departure pattern.—H.A.J.
- GOCHFELD, M. 1973. Encrusted wings causing flightlessness in young terns. Wilson Bull. 85: 236–237.—Dried, cementlike excrement.—H.W.K.
- Hannebrink, E. L. 1973. Characteristics and behavior of a peafowl-guinea hybrid. Game Bird Gazette 22 (2): 8-11.
- HARGROVE, J. W., B. E. MARSHALL, AND D. L. MENTZ. 1972. Observations on the Fiscal Shrike. Rhodesia Sci. News 6: 349-352.—Although territorial, some 35 pairs nested in 68.9 ha of the University of Rhodesia campus in 1971-72.—E.E.
- Haukioja, E. 1970. Clutch size of the Reed Bunting Emberiza schoeniclus. Ornis Fennica 47: 101-135.—In 4 years over 1000 nestlings were color-banded. Clutches of individual females are less variable than the clutches of the population of the whole. The most efficient brood size, five, is also the most common, and this suggests that individual selection determines the clutch size. These findings, along with many others, mainly corroborate Lack's theses about the clutch size in this open nester. The author emphasizes that most previous clutch-size studies have been made on hole-nesting birds.—M.D.F.U.
- HERMANSEN, P. 1972. [Time of breeding, clutch size, and distribution of the

- Bittern (Botaurus stellaris) in Denmark.] Dansk Ornithol. Foren. Tids. 66: 57-63. (In Danish, German summary.)
- HUMMEL, D. 1973. Die Leistungserparnis beim Verbandsflug. J. Ornithol. 114: 259-282.—A theoretical consideration of the aerodynamics of flying in group formation. Presents models and calculations that permit estimating the power saved by flying in formation. (English summary.)—H.C.M.
- INGRAM, G. 1972. Notes on the feeding of White-browed Wood-swallows (Artamus superciliosus.) Sunbird 3: 64-65.—On nectar.—M.H.C.
- JEHL, J. R., JR. 1973. Studies of a declining population of Brown Pelicans in northwestern Baja California. Condor 75: 69-79.
- KAUFMAN, D. W. 1973. Captive Barn Owls stockpile prey. Bird-Banding 44: 225.—Nonnesting Tyto alba in cages repeatedly killed but did not eat all small mammals they were given.—B.A.H.
- Kaufman, D. W. 1973. Use of marked prey to study raptor predation. Wilson Bull. 85: 335-336.
- King, J. R. 1973. The annual cycle of the Rufous-collared Sparrow (Zonotrichia capensis) in three biotopes in north-western Argentina. J. Zool. 170: 163-188.—Comparison of gonadal activity, nesting, molt, and certain aspects of behavior among populations in arid chaco parkland, subtropical foothill transition zone, and mountain semi-desert. Temporal coordination of the annual cycle seems to be controlled basically by photoperiod, but is modified by habitat conditions (spring growth of vegetation). This is important to breeding success in an environment with unpredictable rainfall patterns.—M.H.C.
- KROLL, H. 1972. Zur Nahrungsökologie der Gartengrasmücke (Sylvia borin) beim Herbstzug 1969 auf Helgoland. Vogelwarte 26: 280–285.—Analysis of the contents of 80 stomachs of the Garden Warbler taken in fall migration on the island of Helgoland. (English summary.)—H.C.M.
- Krueger, W. F. 1973. Maximizing hatchability in game bird operations. Game Bird Gazette 22 (3): 29-31.—Useful information for anyone who may need to hatch eggs of various species.—I.L.B.
- Kuyt, E. 1972. Longevity in a captive Sparrow Hawk. Blue Jay 30: 197.—Almost 12 years old.—R.W.N.
- LAHRMAN, F. W. 1972. Unusually large flock of Knots and Ruddy Turnstones feeding in stubble field. Blue Jay, 30: 226.—At least 5000 birds were feeding in a "burned-over stubble field of Durum wheat" on 21 May 1972 at the north end of Last Mountain Lake, Saskatchewan.—R.W.N.
- LANGHAM, N. P. E. 1972. Chick survival in terns (Sterna spp.) with particular reference to the Common Tern. J. Anim. Ecol. 41: 385–395.—Fledging success of tern chicks decreases with order of hatching, with starvation being the principal cause of death. Restriction imposed by a single parent feeding chicks may determine, to a degree, the optimal clutch size.—C.R.B.
- LASKEY, A. R. 1973. A longevity and round trip record of Purple Finches. Bird-Banding 44: 227.—One male Carpodacus purpureus was caught when at least 9 years old. A female traveled from Tennessee to Connecticut and returned to Tennessee.—B.A.H.
- Leuthold, W. 1970. Some breeding data on [the] Somali Ostrich. East African Wildl. 8: 206–207.
- Levine, E. 1971. Crow predation on the Upland Plover. Linnaean News-letter 25 (4): 1-2.

- LITTLEFIELD, C. D. 1973. Swainson's Hawk preying on fall armyworm. Southwestern Naturalist 17: 433.—A migrating concentration of *Buteo swainsoni* fed even after the worms were sprayed with parathion.—J.J.D.
- LORBER, P. 1973. Multiple brooding in the Kurrichane Thrush *Turdus libonyanus*. Ostrich 44: 84.—Three successive broods by "the same pair of thrushes," unringed, but a young of the second brood begged at the nest with the nestlings of the third.—R.B.P.
- MADGE, S. G. 1972. The nest and eggs of the Purple-throated Cuckoo Shrike Campephaga guiscalina. Bull. Brit. Ornithol. Club, 92: 145-147.
- Marti, C. D. 1973. Food consumption and pellet formation rates in four owl species. Wilson Bull. 85: 178-181.—Bubo virginianus, Asio otus, Speotyto cunicularia, and Tyto alba.—H.W.K.
- Marti, C. D. 1973. Ten years of Barn Owl prey data from a Colorado nest site. Wilson Bull. 85: 85-86.
- MASSEY, B. W. 1973. Recoveries of California Least Terns. Western Bird Bander 48: 46-47.—Five Sterna albifrons browni, banded as nonflying juveniles, were recovered from 5 to 15 years later. One individual was nesting in the same colony where it hatched 6 years earlier.—M.H.C.
- MAYFIELD, H. F. 1973. Black-bellied Plover incubation and hatching. Wilson Bull. 85: 82-85.
- McVaugh, W., Jr. 1972. The development of four North American herons. Living Bird, 11: 155-173.—Describes and illustrates in color the eggs and several stages in the development of the young of Florida caerulea, Casmerodius albus, Hydranassa tricolor, and Nycticorax nycticorax.—G.E.W.
- Mills, J. A. 1973. The influence of age and pair bond on the breeding biology of the Red-billed Gull Larus novaehollandiae scopulinus. J. Anim. Ecol. 42: 147–162.—Age at first breeding varies in this species. Males tend to breed earlier than females, and may begin at 2 years of age. Most of these gulls do not breed until 3, 4, or 5 years of age. Pair bonds of the previous season are usually retained, but those gulls that changed mates had a significantly lower reproductive success the previous season than did those that retained mates. Also includes extensive data on the ages of mates and the influence of age upon reproduction.—C.R.B.
- MORLAN, R. E. 1972. Predation at a northern Yukon Bank Swallow colony. Canadian Field-Naturalist 86: 376.—By a black bear and a Northern Shrike.—R.W.N.
- MORTON, M. L., AND D. E. WELTON. 1973. Postnuptial molt and its relation to reproductive cycle and body weight in Mountain White-crowned Sparrows (Zonotrichia leucophrys oriantha). Condor 75: 184-189.
- Moss, R. 1972. Food selection by Red Grouse (Lagopus lagopus scoticus (Lath.)) in relation to chemical composition. J. Anim. Ecol. 41: 411-428.—Nitrogen and phosphorus are among the most important nutrients in the diet of this grouse, and food high in these elements may be selected, particularly in the spring.—C.R.B.
- MURPHY, D. F. 1972. Weasel harasses Rock Ptarmigan. Canadian Field-Naturalist. 86: 292-293.
- Nachtigall, W. 1972. Bemerkungen über zweidimensionale Hochfrequenzaufnahmen fliegender Vögel und über Zeitlupen-Reihenbilder von A. Piskorsch. J. Ornithol. 113: 427-434.—Analysis of high-speed movie films of bird flight. (English summary.)—H.C.M.

- Nero, R. W. 1972. Western Grebe fatally entangled in fishing line. Blue Jay 30: 41-42.
- Ohmart, R. D. 1973. Breeding adaptations of the Roadrunner. Condor 75: 140-149.
- Orians, G. H. 1973. The Red-winged Blackbird in tropical marshes. Condor 75: 28-42.
- OWEN, M. 1972. Some factors affecting food intake and selection in White-fronted Geese. J. Anim. Ecol. 41: 79–92.—Detailed analysis of the rate of feeding, amount of food, and food selection by European Anser a. albifrons. Author notes little selection of food, and concludes high rate of food intake is more important than a nutritious diet, because geese digest food so inefficiently.—CRB
- Owen, R. B., Jr., and W. B. Krohn. 1973. Molt patterns and weight changes of the American Woodcock. Wilson Bull. 85: 31-41.
- PAYNE, R. B. 1973. The breeding season of a parasitic bird, the Brown-headed Cowbird, in central California. Condor 75: 80-99.
- Pepper, S. R., and H. J. Kennedy. 1970. Moult and measurements of Redpolls *Carduelis flammea* in North Sweden, 1968. Ornis Fennica 47: 35-36. Study of a mist-netted population of adults and fledglings.—M.D.F.U.
- Peterson, F. D. 1972. Weight-changes at Hesselø in night migrating passerines due to time of day, season, and environmental factors. Dansk Ornithol. Foren. Tids. 66: 97-107.—Discusses weight changes in Erithacus rubecula, Phoenicurus phoenicurus, Acrocephalus scirpaceus, and Sylvia curruca.—H.A.J.
- PHILLIPS, A. R. "1971" (Actual publication date—1973). Avian breeding cycles: are they related to photoperiods? Ser. Zool. 1: 87-98.—The theme of this paper seems to be: "simple, uncomplicated indoor experiments may be adequate for elementary chemistry laboratories, but . . . such experiments on agitated, caged animals throw little if any light on the interplay of stimuli and inhibitors in the wide complex outdoors." The author questions the role of photoperiod in inducing breeding in birds. He proceeds to present examples of birds not responsive (apparently) to changes in photoperiod, but does not mention or attempt to explain any of a mountain of physiological studies he is attempting to refute. It does not seem likely he has read carefully some of the particular works he attacks. He does set a record for unwarranted abuse of well-known ornithologists in an obscure journal.—C.R.B.
- PINEL, H. W., AND C. A. WALLIS. 1972. Unusual nesting record of Red-tailed Hawk in southern Alberta. Blue Jay 30: 30-31.—Cliff-nesting has not been reported previously for western Canada.—R.W.N.
- Powers, L. R. 1973. Record of a Robin feeding shrews to its nestlings. Condor 75: 248.
- Pratt, E. 1972. Some answers about Coucal nesting. Sunbird 3: 19-25.—Some pairs of *Centropus phasianus* are clearly double-brooded, the second nest hatching while the first brood is still being fed in the territory.—M.H.C.
- PREVETT, J. P. 1972. Grackles retrieve dead smelt from Lake Erie. Canadian Field-Naturalist 86: 163-164.
- PREVETT, J. P., B. C. LIEFF, AND C. D. MACINNES. 1972. Nest parasitism at McConnell River, N.W.T. Canadian Field-Naturalist 86: 369-372.—"A shortage of suitable nest sites during the period of nest initiation appeared to be the major factor" in this region where the nesting season is short. Canada Goose, Common Eider, Sandhill Crane, and Herring Gull nests were parasitized by Blue

- Geese from an adjacent, dense colony. Several other species combinations were recorded.—R.W.N.
- PROCTOR, N. S. 1973. Marsh Hawk catches fish. Wilson Bull. 85: 332.
- Rees, C. 1972. Some notes on nesting Great Horned Owls. Blue Jay 30: 98-100.
- Rehkugler, G. E. 1973. Characterizing the shape of the hen's egg. Poultry Sci. 52: 127-139.—An interesting and thorough treatise that might provide some methodology of interest to oologists.—I.L.B.
- Reid, B. 1972. North Island Brown Kiwi: Apteryx australis mantelli/egg measurements and weights of a young chick. Notornis 19: 261-266.
- REYNOLDS, I. 1972. Unusually coloured White-throated Warbler. Sunbird 3: 93-94.—Plumage description of a *Gerygone olivacea* with a broad black breast band. The bird was feeding fledglings, hence presumably adult. It later lost the black band through molt.—M.H.C.
- RICHARDS, W. S. 1972. The railway—a hazard to birds. Blue Jay 30: 48-49.
- ROBERTSON, J. S. 1972. Sooty Tern—storm wreck. Sunbird 3: 84–86.—Plumage description of a juvenile *Sterna fuscata* found after a storm on the Australian coast near Brisbane.—M.H.C.
- ROTHSTEIN, S. I. 1973. Extreme overlap between first and second nestings in the Rose-breasted Grosbeak. Wilson Bull. 85: 242-243.
- ROTHSTEIN, S. I. 1973. The occurrence of unusually small eggs in three species of songbirds. Wilson Bull. 85: 340-342.—Quiscalus quiscula, Agelaius phoeniceus, and Dumatella carolinensis.—H.W.K.
- ROTHSTEIN, S. I. 1973. Variation in the incidence of hatching failure in the Cedar Waxwing and other species. Condor 75: 164-169.
- RÜPPELL, G. 1973. Strömungstechnisch bedeutsame Strukturen am bewegten Kleinvogelflügel. J. Ornithol. 114: 220–226.—An analysis of wing feather structure and deformation, based on high-speed photographs of birds in flight. (English summary.)—H.C.M.
- Samuel, D. E. 1972. Notes on Barn and Cliff swallows. EBBA News 35: 76-84.—Includes observations on behavior, breeding, netting, arrival dates, mensural data.—A.C.V.
- SAVILE, D. B. O. 1972. Evidence of tree nesting by the Marbled Murrelet in the Queen Charlotte Islands. Canadian Field-Naturalist 86: 389-390.—Though no nest of this species has yet been found.—R.W.N.
- Schmidt, E. 1972. Über die Vogelnahrung der Schleiereule Tyto alba und der Waldohreule Asio otus in Ungarn. Ornis Fennica 49: 98–102.—Both owls are predominantly predators of mammals but take some birds as well. Pellet studies show that the Barn Owl preys chiefly on sparrows Passer domesticus and P. montanus—these forming 98% of the bird remnants found in material from over 100 different localities in Hungary. The Long-eared Owl takes a larger variety of bird species (only 54% of the birds taken were Passer spp.) corresponding to its wider choice of feeding habitat. (In German, English summary.)—M.D.F.U.
- Sefton, A. E., and P. B. Siegel. 1973. Mating behavior of Japanese Quail. Poultry Sci. 52: 1001–1007.—Mating activity was at a maximum among males between 70 and 210 days of age.—I.L.B.
- SEYMOUR, N. R. 1972. Success of three gull species feeding on swarming ants in Antigonish County, Nova Scotia. Canadian Field-Naturalist. 86: 391-392.—Bonaparte's, Ring-billed, and Herring Gulls.—R.W.N.

- SHORT, L. L. 1973. Habits, relationships, and conservation of the Okinawa Wood-pecker. Wilson Bull. 85: 5-20.
- SIEGFRIED, W. R. 1972. Ring-billed Gulls robbing Lesser Scaup of food. Canadian Field-Naturalist 86: 86.—Scaup feeding in spring on Lake Manitoba occasionally surfaced with aquatic vegetation streaming from their bills, which gulls pirated. —R.W.N.
- SIEGFRIED, W. R. 1972. Aspects of the feeding ecology of Cattle Egrets (Ardeola ibis) in South Africa. J. Anim. Ecol. 41: 71–78.—This paper examines the average prey size and food items eaten by nestling, juvenile and adult Cattle Egrets in the southwestern Cape Province of South Africa, and is one of several recent food habit studies of this bird (see Fogarty and Hetrick 1973, Auk 90: 268–280).—C.R.B.
- Soikkell, M. 1973. Breeding success of the Caspian Tern in Finland. Bird-Banding 44: 196-204.—Clutch size for *Hydroprogne caspia* ranges from 1.29 to 2.77 depending on whether clutches are seasonally early or late. Variation of clutch size and hatching success in comparable periods between 1970 and 1972 was slight. In 1972 chick mortality was higher than in 1970-71 and was attributed to starvation. Many similarities to North American studies.—B.A.H.
- Stewart, P. A. 1972. Replacement of cavity-hunting Starlings and House Sparrows after removal. Wilson Bull. 85: 291-294.
- Stewart, R. M. 1973. Breeding behavior and life history of the Wilson's Warbler. Wilson Bull. 85: 21-30.
- STEYN, P. 1973. Observations on the Tawny Eagle. Ostrich 44: 1–22.—Aquila rapax studies in Rhodesia include details of breeding seasons, nesting success, sibling aggression, and food.—R.B.P.
- STORTEIR, S., AND A. PALMGREN. 1971. Long-term recording of incubating rhythm and feeding frequency with the aid of radioactive tagging. Ornis Fennica 48: 33-35.—Low activity ⁶⁵Zn was used to minimize the risk of harm to the tagged Black Guillemots, *Cepphus grylle*. Shows the recording apparatus and a sample chart. (In Swedish with ample English summary.)—M.D.F.U.
- STRANGE, I. J. 1973. Penguins of the Falklands. Pacific Discovery 26 (3): 16-24.—Describes breeding cycles of Rockhopper, Magellan, Gentoo, Macaroni, and King Penguins. Also discusses predation by Striated Caracara (*Phalcobaenus australis*), Southern Sea Lion (*Otaria byronia*), and man. Includes many fine photographs.—J.T.D.
- STRESEMANN, E. 1971. Über das Einsetzen der Handschwingen-Mauser bei Möwen und seine Auslösung. Vogelwarte 26: 227-232.—Molt of flight feathers is not affected by the breeding season. (English summary.)—H.C.M.
- STRESEMANN, E., AND V. STRESEMANN. 1972. Die postnuptiale und die praenuptiale Vollmauser von *Pericrocotus divaricatus* Raffles. J. Ornithol. 113: 435–439.—
 The species is unique among Campephagidae in having the longest migration route and two complete molts each year. (English summary.)—H.C.M.
- SUTTON, G. M. 1972. Winter food of a central Oklahoma Roadrunner. Bull. Oklahoma Ornithol. Soc. 5: 30.
- Teulings, E. 1973. Plumage variations in the Summer Tanager. Chat 37: 40-42.

 —Banding study indicates that males with mixed red and yellow plumage eventually become normal red males; aberrant females may return the next year still in mixed plumage or as normal yellow females.—E.F.P.
- THOMAS, D. G. 1972. Moult of the Banded Dotterel (Charadrius bicinctus) in winter quarters. Notornis 19: 33-35.—This short-distance migrant breeds in New

- Zealand and winters in some numbers in Australia. Flight feathers are renewed on or near the breeding ground coinciding with prebasic molt. An incomplete prealternate molt involving body feathers occurs on wintering grounds.—G.D.S.
- THOMAS, J. P. 1971. Notes sur la reproduction de la Mésange à longue queue en forêt de Sénart. Passer 7: 105-107.—Breeding biology of the Long-tailed Tit.—A. C.
- Trapp, J. L. 1973. Mute Swans entangled in fishing line. Jack-Pine Warbler 51: 91-92.
- Väisänen, O. Hildén, M. Soikkeli, and S. Vuolanto. 1972. Egg dimension variation in five wader species: the role of heredity. Ornis Fennica 49: 25-44.— Indirect methods, mainly analysis of variance in clutches of marked females, year after year, were used in *Charadrius hiaticula*, *Calidris temminckii*, *C. alpina*, *Lobipes lobatus*, and *Tringa totanus*. Slight (mean: 1-2%) variation regularly occurs according to laying sequence within the clutch, between clutches of the same year, and between those of consecutive years. Female body size and egg size had good positive correlation. Authors conclude that the role of heredity in egg size variation is as great in waders as in *Gallus domesticus* that had been studied by direct methods, i.e. crossing experiments. The more precocial a species, the more suitable are indices of egg dimensions for taxonomic and evolutionary studies; and the more altricial the species, the more egg dimensions depend upon the age of the female and influence the young's chance of survival.—M.D.F.U.
- VAN RIPER, C., III. 1973. The nesting of the Apapane in lava caves on the island of Hawaii. Wilson Bull. 85: 238-240.
- Vauk, G., and E. Wittig. 1971. Nahrungsökologische Untersuchungen an Frühjahrsdurchzüglern der Amsel (*Turdus merula*) auf der Insel Helgoland. Vogelwarte 26: 238-245.—An examination of 200 stomachs of blackbirds taken on Helgoland in spring migration revealed that bird seed used in the traps constituted all of the vegetable matter eaten. Snails (including the marine *Littorina*) and beetles constituted most of the animal food. Comparisons with food habits in other localities reveal the species to be highly adaptive. (English summary.)—H.C.M.
- Vernon, C. J. 1973. Polyandrous Actophilornis africana. Ostrich 44: 85.—One female and two male African Jaçanas (unringed) seen "associating" in an unaggressive manner on a dam where two nests with eggs were found. No courtship is reported.—R.B.P.
- Von Blotzheim, U. N. G. 1972. Zur Mauser von Charadrius hiaticula, dubius, und alexandrinus. J. Ornithol. 113: 323-333.—Contrary to published accounts, differences exist in the molt among the three species. Indeed, races of the Ringed Plover differ from each other. (English summary.)—H.C.M.
- VON HAARTMAN, L. 1971. Einige Bemerkungen über die Form des Vogel-Eies. Vogelwarte 26: 185-192.—A detailed, comparative analysis of the shape of avian eggs in relationship to body size, body form, and taxonomic group. (English summary.)—H.C.M.
- Walkinshaw, L. H. 1973. A history of Sandhill Cranes on the Haehnle Sanctuary, Michigan. Jack-Pine Warbler 51: 54-74. Presents data from studies of *Grus canadensis* made since 1935 including nest measurements, location maps, egg weights and measurements, laying, hatching, incubation periods and dates, and much other life history material.—W.T.V.
- WATSON, R. M., T. SINGH, AND I. S. C. PARKER. 1970. The diet of duck and coot on Lake Naivasha. East African Wildl. 8: 131-145.—Little overlap in food habits

- of coot (Fulica cristata) and several species of ducks: Aythya erythrophthalma, Anas undulata, A. punctata, A. querquedula, A. erythrorhyncha, Sarkidiornis melanotos, Dendrocygna bicolor, and Thalassornis leuconotus.—I.L.B.
- Weir, D. G. 1973. Status and habits of Megapodius pritchardii. Wilson Bull. 85: 79-82.
- West, G. C. 1973. Foods eaten by Tree Sparrows in relation to availability during summer in northern Manitoba. Arctic 26: 7-21.—Some potential foods are ignored by the birds, others are eaten with greater frequency than would be expected if feeding were related to availability. Food does not seem to be a limiting factor for breeding Tree Sparrows at Churchill, Manitoba.—J.A.J.
- WILLIAMS, G. R., AND M. HARRISON. 1972. The Laughing Owl Sceloglaux albifacies (Gray, 1844)/a general survey of a near-extinct species. Notornis 19: 4–19.—This native New Zealand owl was once widespread but is now close to extinction. Includes descriptions of appearance, calls, behavior, food habits, and breeding biology.—G.D.S.
- WILLSON, M. F., AND J. C. HARMESON. 1973. Seed preferences and digestive efficiency of Cardinals and Song Sparrows. Condor 75: 225-234.
- Wilson, V. J. 1972. Notes on *Otis denhami jacksoni* from the Nyika Plateau. Bull. Brit. Ornithol. Club 92: 77-81.—Records from eastern Zambia including breeding on the Nyika Plateau. Describes stomach contents.—F.B.G.
- WINTERBOTTOM, J. M. 1973. Notes on the ecology of *Serinus* spp. in the western Cape. Ostrich 44: 31–33.—Tabulates habitat and breeding season for seven species.—R.B.P.
- WINTERBOTTOM, J. M., AND J. M. UNDERHILL. 1972. Ninth (interim) report on the nest record cards scheme. Ostrich 43: 232.—A total of 64,111 cards.—R.B.P.
- WOODARD, A. E., H. ABPLANALP, AND R. L. SNYDER. 1973. Oviposition time in Chukar Partridge. Poultry Sci. 52: 536-540.—Maximum rate of laying occurred 8-9 hours after the onset of light.—I.L.B.
- woods. 1972. Two cowbird hosts new to Kansas. Kansas Ornithol. Soc. Bull. 23: 14-15.—Hosts for *Molothrus ater* were *Coccyzus americanus* in 1962 (first record west of Mississippi River) and *Passer domesticus* in 1964. In the latter case *Sialia sialis* may have been the intended victim.—R.S.
- WRIGHT, R. E. 1973. Observations on the urban feeding habits of the Road-runner (Geococcyx californianus). Condor 75: 246.
- WÜSTENBERG, K. 1973. The colorful occupants of nestholes. Pacific Discovery 26 (5): 16-22.—Ecology and breeding biology of hole-nesting birds in southwestern Germany currently under study at Vogelwarte Radolfzell (of the Max Planck Institute) in Möggingen, Germany. Nest boxes (1000) were placed at varying elevations. Briefly describes nest building of European Nuthatch (Sitta europaea), Great Tit (Parus major), Pied Flycatcher (Ficedula hypoleuca), Coal Tit (Parus ater), Alpine Tit (Parus montanus), Treecreeper (Certhia familiaris), and Short-toed Treecreeper (Certhia brachydactyla). Other animals found using nest boxes were dormice, bats, and squirrels. Includes many photographs.—
 J.T.D.
- ZWICKEL, F. C. 1973. Dispersion of female Blue Grouse during the brood season. Condor 75: 114-119.