

RECENT LITERATURE

Ecologic races of song sparrows in the San Francisco Bay region.—Part I, Habitat and abundance. Part II, Geographical variation. MARSHALL, JOE T. Condor, 50: 193-215, 233-256, 9 figs., 3 tables, 1948.—The San Francisco Bay region in west central California is only about 60 miles long, and little more than half as wide. Yet in this small space four subspecies of song sparrows, *Melospiza melodia*, occur as residents, three of them restricted to small ranges within this area, and the fourth more widespread. Of the three endemic subspecies, *M. m. pusillula* occupies the salt marshes of the south arm of the bay; *samuelis* occupies the salt marshes of the north arm of the bay; and *maxillaris* occupies the brackish marshes of a northeast extension of the north arm of the bay. The fourth and more widespread subspecies *gouldii* occupies the riparian, fresh water marsh, and chaparral habitats of the uplands surrounding the bay and west to the sea coast.

These races have been quoted as an example of the effect of ecology in producing subspecies and considered as ecological rather than geographical subspecies. The status of the various populations as subspecies may be questioned on the basis of lack of a range of any extent in which characters are constant, "no race possesses stable characters over a fixed area" "they are nothing but color races definable solely because they contain a population which is the culmination of some color gradient—entirely different races could be designated on the basis of some other character gradient" (p. 254). But the variations in color of upper and underparts, and in measurements are real, and, with names, populations are more easily discussed.

Song sparrow habitat and song sparrows are not distributed continuously over the area. The bayside marshes are interrupted by areas of open water or by ranges of hills projecting into the bay. Bayside plains largely separate the bayside marsh habitats from those of the uplands, though in almost all cases each area of marsh is connected with some upland habitat by a tenuous band of riparian habitat.

There seems to be some confusion as to what is meant by the "isolation" effective in producing subspecies. Many very different subspecies have developed within species with continuous ranges. Not infrequently the variation correlates with a difference in habitat, and there is usually a broader or narrower band of intergradation. The two subspecies are "isolated" in space, except for their zone of contact. Each subspecies may be developed with characters adapting it to its particular habitat, and to that extent it is an ecological subspecies. However, the bulk of each population is isolated in space, though there are no gaps in the range, no barriers or "geographical isolation." The concept of ecological subspecies, which has never been demonstrated for birds, is that a preference for one or another type of habitat may enable two subspecies of one species to occur throughout an area, "isolated" by habitat preferences, but without either spatial isolation or geographical barriers.

In the present case, though the characters of the various races are said to be not obviously adaptive, they are definitely correlated with ecology. And further, the various habitats replace each other geographically! The unusual feature is that this subspeciation has all occurred in such a small area.

From the detailed presentation on habitats and variation, it appears that several factors have been important: (1) the sedentary nature of the populations and the little wandering of individuals; (2) the relatively large blocks of marsh habitat at three separate places on the bay; (3) the dense population of song sparrows supported by these marsh habitats, compared with the more sparsely populated upland areas;

(4) the selective pressure of the marsh habitat; and (5) the isolation (gaps in distribution, that is, uninhabitable habitat) of various habitats, or parts of them.

Marshall perhaps tends to overemphasize the isolation factor to make his point, which is true, that these are not ecological races but geographical races. The importance of geographical isolation is shown by *samuelis* and *pusillus* each occupying salt marsh habitat, apparently alike, at opposite ends of the bay area, with gaps in the marsh habitat between. It is also shown by the lack of intergradation between bayside and upland populations, except along the narrow connecting corridors and in the few cases where a small salt marsh habitat adjoined an area of upland habitat and the population of the salt marsh habitat was not appreciably different.

The importance of habitat is evident in the general correlation of range of subspecies and extent of habitat. It is also evident where thin lines of song sparrows occupied territory joining salt marsh and uplands. The change (that is, zone of intergradation) from one subspecies to the next occurred not halfway along the connecting avenues, nor at the position on the avenue where the population is narrowest or least dense, but precisely at the zone of intermediate habitat.

Marshall's conclusion is inescapable—that these are not ecological races in the sense that within the same area two subspecies occur throughout, the one occurring at any point depending on the habitat available. Rather, they are typical geographical subspecies representing each other geographically.

In miniature, they represent what happens on a continental scale. Sharp ecological differences reinforced by partial geographical isolation (gaps in the range due to uninhabitable terrain) have greatly reduced the zone of overlap and made evolution possible on this small scale.—A. L. RAND.

The parasitic cuckoos of Africa.—FRIEDMANN, HERBERT. (Wash. Acad. Sci., Wash., D. C.), pp. xii + 204, 10 plates. January 10, 1948. Price, \$4.50.—This is the first in a series of monographs to be published by the Washington Academy of Sciences.

Following the general pattern established in his 'The Cowbirds' (1929) and in subsequent publications, Dr. Friedmann has brought together all available information on these birds. The data are derived from publications, personal experience, and correspondence over a period of some 25 years that he has been interested in brood parasitism.

The species and certain races of *Clamator*, *Cuculus*, *Pachycoccyx*, *Cercococcyx*, and *Chrysococcyx* are discussed in relation to their taxonomy, range, migration, courtship, eggs, parasitic behavior, species parasitized, and plumages at different ages. This mass of factual material is briefly analyzed and evaluated, in each account, in the light of the author's wide experience in this phase of ornithology. Such discussions give added value and interest.

As is noted in the introduction, there are many gaps in our knowledge of these cuckoos. This book fills out part of the story but, at the same time, the scantiness of the data in several sections re-emphasizes the need for additional field work before definite conclusions can be formulated. Even though this state of affairs may prohibit extensive theorizing as to the implications of parasitism in these species, the general ornithological reader would have been interested in a more complete treatment of Dr. Friedmann's comments or thoughts on this interesting group. Two pages of "concluding remarks" hardly do justice to the time and effort expended in gathering the data.—H. I. FISHER.

Catalogue of Birds of the Americas and the Adjacent Islands.—HELLMAYR, CHARLES E. and BOARDMAN CONOVER. Field Mus. Nat. Hist., Zool. Series, vol. 13, pt. 1, no. 3: vi + 383 pp., December 16, 1948.—The publication of two parts of such a series as this in a single year is without precedent, and the statement in the preface that the final part is now in course of publication foreshadows the completion of the magnificent enterprise initiated by C. B. Cory over 30 years ago.

The present part contains the Charadriiformes and conforms to the high standards set in the previous parts. The literature up to the end of 1944 has been taken into account and some new forms described since that date and prior to January 1, 1947, are mentioned in footnotes. In this connection it is interesting to note that the only known breeding station of the bristle-thighed curlew, discovered in 1948, is listed under the range of that species.

It is a pleasure to observe the degree of conservatism displayed in recognizing some of the new "discoveries", setting up of old names, and even continuing the recognition of forms named many years ago. Such statements as "the difference too inconstant for recognition", "divergence too slight to be expressed in nomenclature" appear in footnotes scattered throughout the work.

No radical innovations are introduced; generic concepts as a rule are maintained as at present, although *Endomychura* is lumped with *Brachyramphus* in spite of Storer's assertion that this course is incorrect. *Larus schistisagus*, *Larus occidentalis* and subspecies and *Larus dominicanus* and subspecies are all considered races of *Larus marinus*.

This volume maintains the high standards of thoroughness and accuracy which characterize the previous ones and which render the 'Catalogue of Birds of the Americas' an ornithologist's "must."—J. L. PETERS.

Waterfowl of Japan.—AUSTIN, OLIVER L., JR. (Gen. Hdqts., Supreme Comm. Allied Powers, Tokyo), Nat. Resources Sec., Rept. No. 118: 1-109, many ills. and tables. January 17, 1949.—This report is designed to acquaint members of the occupation forces with the kinds and status of waterfowl in Japan and to form a partial basis for action on the waterfowl problem.

The first two-thirds of the publication consist of species accounts in which the present status, distribution and field characters are stressed. These deal with 40 species of ducks, geese and swans. Of importance in these accounts are the results of banding work, heretofore not published. Records of occurrence are cited for the rarer forms.

The last 35 pages are devoted to a general treatment of the subject, including areas of winter concentration, flight routes, kill by districts, the total recorded kill from 1924 to 1947, and the means by which this kill was attained.

The importance of the wild waterfowl industry in Japan is shown by the fact that 10 per cent of all bird meat currently used comes from this source. Its annual market value probably exceeds one million dollars. The pressure of this use lies on a few species, for of the 40 species discussed, seven are reported as stragglers only and 19 are too scarce to be of economic importance. Only six species breed in Japan, and then to only a limited extent. None of the species are endemic to Japan alone.

Prior to 1900, the populations declined rapidly. Since 1900, the decline has been slowed down, but present kill is greater than the annual increment. Many deleterious methods of securing birds, such as kill-netting and liming have only recently been outlawed, and some still persist. In this connection it is interesting to note

that live-netting, under the proper conditions and supervision, could be made to work effectively as an instrument of game management.

From the standpoint of increase of knowledge of birds the significant sections of this paper are those concerned with banding. Results of banding in Japan have never been widely circulated. By analyzing the records from 1925, when banding operations were started, to 1942, when they ceased, it has been possible to define certain routes of migration and areas of concentration. It has, for example, been found that there is considerable exchange of individuals between areas of winter concentration and that most of the birds killed in Japan were produced elsewhere.—
H. I. FISHER.

- ADAMS, R. G. 1949. Close nesting of hawfinches in Devon. *Brit. Birds*, **42** (3): 54.
- ALLEGRET, P. 1948. Anomalies de développement chez un râle d'eau (*Rallus aquaticus* L.). *Oiseau*, **18**: 174-175.
- AMES, ANNA C. 1948. The family *Icteridae* (part 1). *Aud. Bull. Ill. Aud. Soc.*, No. **68**: 11-16.
- ANDERSON, S. I. 1949. Little owl raiding starling's nest. *New Zealand Bird Notes*, **3** (4): 110.
- ANDERSON, S. I. 1949. Early morning bird song at Herbert, North Otago. *New Zealand Bird Notes*, **3** (4): 111.
- ANONYMOUS. 1949. Bird life in Collin's Valley, Wakatipu. *New Zealand Bird Notes*, **3** (4): 85-106.
- ANONYMOUS. 1948. N. O. U. Cooperative bird migration and occurrence list for the first half of 1948. *Nebr. Bird Rev.*, **16** (2): 83-88.
- ANONYMOUS. 1949. The 1948 Christmas bird count. *Pass. Pigeon*, **11** (1): 40-44.
- ANONYMOUS. 1949. Christmas bird census. *Warbler*, Des Moines Aud. Soc., **6** (1): 3.
- ANONYMOUS. 1949. Christmas bird count. *Aud. Warbler*, Oregon Aud. Soc., **12** (5): 4.
- ANONYMOUS. 1949. Rediscovery of *Notornis*. *New Zealand Bird Notes*, **3** (4): 81.
- ANONYMOUS. 1949. Further adventures of Charles Cordier. *Animal Kingdom*, **52** (1): 3-9, 28-29, many photos.
- ANONYMOUS. 1949. (Photograph of magpie geese.) *Zoonooz*, **22** (3): front.
- APPERT, OTTO. 1949. Wählt der Goldregenpfeifer auf seinen Herbstzügen alljährlich die gleiche Reiseroute? *Orn. Beob.*, **46** (1): 23-24.
- ARMSTRONG, EDWARD A. 1949. Diversionary display.—Part 1. Connotation and terminology. *Ibis*, **91** (1): 88-97.
- ASH, JOHN. 1949. Display of common curlew. *Brit. Birds*, **42** (3): 61-62.
- ATKINS, H. 1949. Arrival of shining cuckoo. *New Zealand Bird Notes*, **3** (4): 109.
- AUSTIN, OLIVER L., JR. 1947. (March, 1948.) The new *Tori*. *Tori*, **12** (56): 1-3. In English and Japanese.
- AUSTIN, OLIVER L. 1949. Site tenacity, a behaviour trait of the common tern (*Sterna hirundo* Linn.). *Bird-Banding*, **20** (1): 1-39.
- AUSTIN, S. AND W. A. WRIGHT. 1949. Kite in Essex. *Brit. Birds*, **42** (3): 60.
- B[ANNERMAN], D. A. 1949. Ferdinand I, Tsar of Bulgaria [obituary of]. *Ibis*, **91** (1): 151-153.
- BARANOVITS, F. 1948. Vögel trinken Saft verletzter Bäume. *Vogel Heimat*, **19** (3): 54-55.
- B[ARCLAY]-S[MITH], P. 1949. Tom Russell Goddard, M. Sc. [obituary of]. *Ibis*, **91** (1): 153-154.

- BARGER, N. R. 1948. Record of a buff-breasted sandpiper in Wisconsin. *Pass. Pigeon*, **10** (4): 164.
- BARNES, IRSTON R. 1948. The Chesapeake and Ohio Canal. *Wood Thrush*, **4** (2): 46-55, 2 pls., 1 map.
- BARNES, I. R. 1949. Winter bird associations. *Wood Thrush*, **4** (3): 105-106.
- BARROS, RAFAEL V. 1948. Anotaciones sobre las aves de Maullin. *Rev. Univ. (Univ. Católica de Chile)*, **33** (1): 35-60.
- BECKERLEGGE, J. E. 1949. Unusual song of goldfinch. *Brit. Birds*, **42** (3): 54-55.
- BEHREND, FRED W. 1948. A record of the snow bunting in east Tennessee. *Migrant*, **19** (4): 64-66.
- BENCKESER, HAROLD R. 1948. Notes from Brule, Nebr. *Nebr. Bird Rev.*, **16** (2): 94-96.
- BENTHAM, HOWARD. 1949. Probable Scandinavian chiffchaff in Surrey. *Brit. Birds*, **42** (1): 23-24.
- BERKOWITZ, ALBERT. 1949. New bird at impounding reservoir. *Warbler, Des Moines Aud. Soc.*, **6** (1): 1.
- BERLIOZ, J. 1948. Note critique sur le genre *Pithys* Vieillot (Formicariidés). *Oiseau*, **18**: 1-4.
- BERLIOZ, J. 1948. Notes critiques sur les cuculiformes du Gabon. *Oiseau*, **18**: 152-162.
- BLANCOU, L. 1948. Contribution à l'étude des oiseaux de l'Oubangui-Chari oriental. *Oiseau*, **18**: 33-77.
- BLOESCH, MAX. 1949. Die Störche in der Schweiz. *Orn. Beob.*, **46** (1): 13-16, 1 table.
- BOEHM, E. F. 1948. The Australian raven (*Corvus coronoides*) in relation to other species of birds. *S. Aust. Orn.*, **19** (3): 26-27.
- BOS, G. AND PHILIPPONA, J. 1948. Het voorkomen van de Glanskop, *Parus palustris longirostris* Kleinschm., en de Matkop, *Parus atricapillus rhenanus* Kleinschm., in de duinstreek van Noord- en Zuid-Holland. *Ardea*, **36** (3): 113-121.
- BOULIÈRE, F. 1948. Un cas de déviation de l'aileron chez *Alopochen aegyptiacus*. *Oiseau*, **18**: 171-172.
- BOWEN, W. WEDGWOOD. (no date). The temperature factor in bird distribution. *Proc. N. H. Acad. Sci. for 1946*, **1** (6): 11-25, 8 figs.
- BRODEKORP, PIERCE. 1949. Variation in the North American forms of western flycatcher. *Condor*, **51** (1): 35-39, 1 table.
- BROUWER, G. A. 1948. Naschrift. *Ardea*, **36** (3): 110-113.
- BROUWER, G. A. 1948. Prof. Mr. Dr. Th. van Swinderen (1784-1851) en zijn werkzaamheid in het belang van de ornithologie. *Ardea*, **36** (3): 121-142, 2 tables, 1 pl.
- BROWN, E. J. 1949. Morepork returns to cage. (*Ninox*). *New Zealand Bird Notes*, **3** (4): 111.
- BROWN, PHILIP E. 1949. The breeding of avocets in England, 1948. *Brit. Birds*, **42** (1): 2-12, 2 tables.
- BRUNS, H. 1948. Ist die Misteldrossel-Parklandschaftsform bei uns eingewandert oder in NW-Deutschland aus der Waldform entstanden? *Orn. Mitt.*, No. **1**: 5-7.
- BRUNS, H. 1948. Der Gesangsbeginn der Meisen in Göttingen und im übrigen Nord- und Westdeutschland. *Orn. Mitt.*, No. **1**: 7-8.
- BRUNS, H. 1948. Strahlungsintensität der Sonne und Wintergesang der Meisen. *Orn. Mitt.*, No. **2**: 13-14.

- BRUNS, H. 1948. Bemerkenswertes aus der deutschen Vogelwelt von 1948. *Orn. Mitt.*, No. 2: 14-15.
- BÜTIKOFER, E. 1948. Bienenzucht und Vogelschutz. *Voegel Heimat*, 19 (3): 40-42.
- BÜTIKOFER, E. 1948. Erlebnisse bei der Aufzucht von Eulen. *Voegel Heimat*, 19 (3): 52-54, 1 photo.
- BÜTIKOFER, E. 1948. Krähenzug 1948 bei Wiedlisbach (Bern.) *Voegel Heimat*, 19 (3): 56-57.
- BÜTTIKER, W. 1948. Zur Belchenschlacht am Untersee. *Voegel Heimat*, 19 (3): 37-39.
- CAMPBELL, AL AND LEE. 1948. Some unusual records. *Aud. Bull. Ill. Aud. Soc.*, No. 68: 7.
- CAMPBELL, HELEN F. 1949. Hoopoe in Co. Cork killed by sparrow-hawk. *Brit. Birds*, 42 (1): 24-25.
- CASEMENT, R. 1949. Large clutches of common gull. *Brit. Birds*, 42 (1): 28.
- CARDIFF, EUGENE E. AND BRUCE E. 1949. The oven-bird and the American red-start in Imperial Valley, California. *Condor*, 51 (1): 44-45.
- CHAPMAN, MRS. GLEN. 1948. Philadelphia vireo at Aurora, Nebraska. *Nebr. Bird Rev.*, 16 (2): 93.
- CHRISTIANSEN, ARTHUR. 1949. (Photographs of *Stercorarius parasiticus* and *Sterna macrura*.) *Brit. Birds*, 42 (3): plate 12.
- CLAGUE, W. D. AND GOODWIN, DEREK. 1949. Blue tit and stock-dove snow-bathing. *Brit. Birds*, 42 (1): 23.
- CLEMENT, ROLAND C. 1949. Labrador notes on gyrfalcons. *Bull. Mass. Aud. Soc.*, 33 (1): 371-374.
- CLINARD, J. W. 1948. Hummingbird catches gnats in flight. *Chat*, 12 (5): 84.
- COFFEY, BEN B., JR. 1948. Louisiana heron recorded in Tennessee and north Mississippi. *Migrant*, 19 (4): 71-72.
- COLLISTER, MRS. CARL. 1948. Western swamp sparrow probable resident in Lincoln County. *Nebr. Bird Rev.*, 16 (1): 56.
- CONDÉ, P. J., R. FOLKARD, J. KEIGHLEY, AND R. A. RICHARDSON. 1949. Lapland bunting in Pembrokeshire. *Brit. Birds*, 42 (3): 55-56.
- CONDÉ, P. J. AND J. KEIGHLEY. 1949. Woodchat shrike in Pembrokeshire. *Brit. Birds*, 42 (3): 57.
- CONDON, H. T. 1948. Additions and corrections to a list of birds of the Northern Territory. (Australia). *S. Aust. Orn.*, 19 (3): 30.
- COOPER, J. R. 1949. Siskins breeding in Westmorland. *Brit. Birds*, 42 (1): 22.
- CORNISH, A. V. 1949. Nuthatches "hawking" insects. *Brit. Birds*, 42 (3): 56.
- COUFFER, JACK C. 1949. The saw-whet owl in Los Angeles County, California. *Condor*, 51 (1): 45.
- COULSON, J. C. 1949. Arctic tern perching on telephone wire. *Brit. Birds*, 42 (1): 28.
- CRAIGHEAD, FRANK C., JR. AND JOHN J. CRAIGHEAD. 1949. Nesting Canada geese on the Upper Snake River. *Journ. Wildl. Manag.*, 13 (1): 51-64, 1 fig., 1 table.
- CRANDALL, LEE S. 1949. A longevity record. *Animal Kingdom*, 52 (1): 31.
- CULLEN, D. F. 1949. Flock of oyster-catchers inland in winter. *Brit. Birds*, 42 (1): 27.
- CUNNINGHAM, J. M. 1949. An inland record of the white-fronted tern. *New Zealand Bird Notes*, 3 (4): 82.

- CUSA, N. W. 1949. Birds of the North Atlantic in March. *Brit. Birds*, **42** (2): 33-41.
- DATHE, HEINRICH. 1948. Beobachtung einer Gartenrotschwanzbegattung am Boden. *Voegel Heimat*, **19** (3): 56.
- DATHE, HEINRICH. 1949. Zum Abzug der Würger in Italien. *Orn. Beob.*, **46** (1): 21-22.
- DATHE, HEINRICH. 1949. Zum Bussardzug Herbst 1947. *Orn. Beob.*, **46** (1): 23.
- DAVID-BEAULIEU, A. 1948. Note sur quelques oiseaux nouveaux pour le Tranninh et même pour l'Indochine. *Oiseau*, **18**: 133-140.
- DAVIS, MALCOLM. 1949. Ruff seen in Washington [D. C.]. *Wood Thrush*, **4** (3): 105.
- DAVIS, T. A. W. 1949. Display of white-throated manakins, *Corapipo gutturalis*. *Ibis*, **91** (1): 146-147.
- DEAR, L. S. AND ALLIN, —. 1948. Nesting records—1948 [Port Arthur, Ontario]. *Thunder Bay Field Nat. Club Newsletter*, Port Arthur, Ont., **3** (1): 2.
- DENNIS, JOHN V. 1949. Records of butterflies being used as food by birds. *Bird-Banding*, **20** (1): 51.
- DE RUITER, L. C. AND MAURENBRECHER, L. L. A. 1948. Stadsvogels van Makassar (Zuid-Celebes). *Ardea*, **36** (3): 163-198, 1 table, 1 pl.
- DEWINDT, CLARA. 1949. Dovekies. *Bull. Mass. Aud. Soc.*, **32** (9): 347-348, 1 pl.
- DEXTER, RALPH W. 1949. Banding studies on the English sparrow. *Bird-Banding*, **20** (1): 40-50.
- DIEDRICH, J. L. 1948. Alaska bird notes. *Pass. Pigeon*, **10** (4): 131-136, 2 pls.
- DROST, R. 1948. Die Vogelwarte Helgoland. *Vogelwarte*, **1**: 2-5, 1 fig.
- DROST, R. 1948. Populationsstudien an der englischen Schafstelze, *Motacilla flava flavigissima* Blyth, auf Helgoland. *Vogelwarte*, **1**: 18-28, 1 fig.
- DURANGO, S. 1948. Om beteenden och spelytringar hos törnskathanen (*Lanius c. collurio* L.) under tiden för revirbesättandet, innan honan anlänt. *Vår Fågelvärld*, **7** (4): 145-157. English summary.
- DURANGO, S. 1949. The nesting associations of birds with social insects and with birds of different species. *Ibis*, **91** (1): 140-143. Translated by the author from his original paper in *Fauna och Flora*, 1947: 165-209, 249-259.
- EDWARDS, GEORGE, HOSKING, ERIC AND SMITH, STUART. 1949. Reactions of some passerine birds to a stuffed cuckoo. *Brit. Birds*, **42** (1): 13-19, 18 figs.
- EICHLER, W. 1948. Nestbewohner und Parasiten beim Bienenfresser. *Voegel Heimat*, **19** (3): 45-46.
- ENGEL, ROSE B. 1948. A year of bird notes. *Aud. Bull. Ill. Aud. Soc.*, No. **68**: 3-6.
- ERNST, ROGER. 1948. Gnatcatchers present problems. *Bull. Mass. Aud. Soc.*, **32** (8): 305-307, 1 pl., 1 table.
- ETCHÉCOPAR, R. D. 1948. Le "Severn wild-fowl trust." *Oiseau*, **18**: 163-169, 2 drawings.
- ETCHÉCOPAR, R. D. 1948. Visite à la réserve de l'Ile Rouzic. *Oiseau*, **18**: 179-182.
- ETCHÉCOPAR, R. D. 1948. Visite à l'Ile Dumet (12 Juin 1948). *Oiseau*, **18**: 176-178.
- FENNEL, CHESTER. 1949. Birding in Japan (continued). *Elepaio*, **9** (7): 33-35.
- FINLAYSON, H. H. 1948. Sexual (?) display in the domestic turkey. *S. Aust. Orn.*, **19** (3): 25.
- FITTER, R. S. R. 1949. Birds robbing other birds of food. *Brit. Birds*, **42** (1): 32.

- FRIEDMANN, HERBERT. 1949. The Baer pochard, a bird new to the North American fauna. *Condor*, **51** (1): 43-44.
- FUJIMURA, KAZUO. 1948. On *Turdus celaenops*. *Tori*, **12** (57): 57-62. In Japanese; resume in English.
- FURUSAWA, IKUZO. 1947. (March, 1948). The observation of the short-tailed bush-warbler. *Tori*, **12** (56): 6-11. In Japanese; resume in English.
- GALE, J. A. B. 1949. Oyster-catcher's nest with five eggs. *Brit. Birds*, **42** (3): 63, pl. 14.
- GERBER, R. 1948. Über die Kletterkunst des Siebenschläfers, *Glis g. glis* L. *Voegel Heimat*, **19** (3): 57.
- GÉROUDET, PAUL. 1949. Des nichées d'oiseaux infectées par un staphylocoque. *Orn. Beob.*, **46** (1): 19-21.
- GLANDON, EARL W. 1948. Golden-winged warbler at Stapleton, Logan County. *Nebr. Bird Rev.*, **16** (2): 93-94.
- GOLLOP, BERNARD. 1949. Sora's egg in red-wing's nest. *Can. Field-Nat.*, **63** (1): 42.
- GOODWIN, DEREK. 1949. House-sparrows pursuing pigeons. *Brit. Birds*, **42** (3): 64.
- GOODWIN, DEREK. 1949. Incubation of tame jay. *Brit. Birds*, **42** (3): 53.
- GOODWIN, DEREK. 1949. Notes on the migration of birds of prey over Suez. *Ibis*, **91** (1): 59-63.
- GOODRUM, PHIL, W. P. BALDWIN, AND JOHN W. ALDRICH. 1949. Effect of DDT on animal life of Bull's Island, South Carolina. *Journ. Wildl. Manag.*, **13** (1): 1-10, 3 tables, 1 pl.
- GOVAN, ADA C. 1949. Of these I sing. *Bull. Mass. Aud. Soc.*, **32** (9): 331-336, 2 pls.
- GREFE, ROSETTA A. 1948. The 1948 spring season in the Crete area. *Nebr. Bird Rev.*, **16** (2): 80-82.
- GRISCOM, LUDLOW. 1949. The changing seasons. *Aud. Field Notes*, **3** (1): 3-4.
- GROBE, D. W. 1948. Neuere Wiedehopf-Beobachtungen in Südhannover. *Orn. Mitt.*, No. **1**: 5.
- GUY, G. 1949. Birds observed in Avon-Heathcote estuary. *New Zealand Bird Notes*, **3** (4): 109.
- HACHISUKA, MASAUIJI. 1948. Additional notes to the Hainan birds. *Tori*, **12** (57): 63-66. In English; resume in Japanese.
- HACHISUKA, MASAUIJI. 1947. (March, 1948.) The restoration of moa heads. *Tori*, **12** (56): 19-22, 4 figs.
- HAGEN, YNGVAR. 1948. Invasion des Tannenhävers (*Nucifraga c. caryocatactes*) in Süd-Norwegian Herbst 1943. *Vogelwarte*, **1**: 40.
- HAKE, THEODORE R. 1949. Western grebe reported [Del.]. *Wood Thrush*, **4** (3): 105.
- HARRISON, HAL H. 1948. Pennsylvania birdlife. Sec. Ed. (Pa. Game Comm., Harrisburg), 72 pp., many illus., 6 col. pls.
- HAVERSCHMIDT, FR. 1949. Behaviour of an incubating oyster-catcher. *Brit. Birds*, **42** (3): 63, pl. 14.
- HAVERSCHMIDT, FR. 1949. Notes on the purple heron. *Brit. Birds*, **42** (3): 60, pl. 13.
- HAYMAN, R. W. 1949. Early redstart in Surrey. *Brit. Birds*, **42** (3): 59.
- HEBARD, FREDERICK V. 1949. Glaucous gull records and other notes. *Fla. Nat.*, **22** (2): 36.

- HEINZE, PAUL. 1948. Stockenten als Welsbeute. *Voegel Heimat*, **19** (3): 56.
- HELLEBREKERS, A. W. 1948. Achteruitgang van de broedvogels in de duinen bij Wassenaar. *Limosa*, **21** (4): 140-141.
- HELLEBREKERS, W. PH. J. 1948. Oölogische en nidologische mededelingen, 1948. *Limosa*, **21** (4): 138-140.
- HENDRICKS, BARTLETT. 1948. Berkshire birds (part 1). *Bull. Mass. Aud. Soc.*, **32** (8): 291-298, 4 figs., 1 map.
- HENDRICKS, BARTLETT. 1949. Berkshire birds (cont.). *Bull. Mass. Aud. Soc.*, **32** (9): 337-341, 5 figs.
- HENDRICKS, BARTLETT. 1949. Berkshire birds (cont.). *Bull. Mass. Aud. Soc.*, **33** (2): 65-74, 1 fig.
- HODGES, JAMES. 1949. Another cause of mortality in land birds. *Bird-Banding*, **20** (1): 51.
- HODGES, JAMES. 1949. An unusual mourning dove nest. *Condor*, **51** (1): 45.
- HODGKIN, JOHN. 1949. Birds at Moa Flat, Heriot, Otago. *New Zealand Bird Notes*, **3** (4): 109.
- HODGKIN, JOHN. 1949. High-flying bittern. *New Zealand Bird Notes*, **3** (4): 109.
- HOFFMAN, H. J. 1949. Probable singing by female grasshopper-warbler. *Brit. Birds*, **42** (3): 58-59.
- HOLMES, G. H. 1948. A mottled summer tanager at Tryon, N. C. *Chat*, **12** (5): 84.
- HOOGERWERF, A. 1948. *Accipiter tr. trivirgatus* (Temm.) met *Oriolus chinensis maculatus* Vieill. en *Ptilinopus melanospila melananchen* (Salv.) als prooi. *Limosa*, **21** (4): 144-145.
- HOOGERWERF, A. 1948. Kraaien en Maraboes. *Limosa*, **21** (4): 142, 2 figs.
- HOOGERWERF, A. 1948. Op levende prooi jagende *Haliastur indus intermedius* Gurney. *Limosa*, **21** (4): 142-144.
- HOOGERWERF, A. 1948. Vreemd ongeval van een jong van de nachtreiger, *Nycticorax n. nycticorax* (L.). *Limosa*, **21** (4): 145.
- HOOGERWERF, A. 1948. Eigenaardige vis-methode van *Ardeola speciosa* (Horsf.). *Limosa*, **21** (4): 145.
- HOWARD, HILDEGARDE. 1949. Avian fossils from the marine Pleistocene of southern California. *Condor*, **51** (1): 20-28.
- HOWELL, JOSEPH C., AND MEYERRIECKS, ANDREW J. 1948. Avocet seen in Knox County, Tenn. *Migrant*, **19** (4): 73.
- HUSSEY, N. W. 1949. Feeding behaviour of black-headed gulls. *Brit. Birds*, **42** (1): 28.
- JANY, EBERHARD. 1948. L'influence de l'humidité du climat sur la coloration du plumage chez les pies-grièches grises de l'Afrique du Nord (*Lanius excubitor* L.). *Oiseau*, **18**: 117-132, 1 fig., 1 table.
- JOUANIN, CHR. 1948. Liste des Trochilidés trouvés dans les collections commerciales de Bahia. *Oiseau*, **18**: 104-116.
- JOHNSON, ALLAN E. 1948. Duck hawk in Fillmore County. *Nebr. Bird Rev.*, **16** (1): 55.
- JOHNSTON, DAVID W., AND AUTRY, H. V. 1949. Notes on birds collected at Highlands, N. C. *Chat*, **13** (1): 18-19.
- JOPSON, HARRY G. M. 1949. Dovekie picked up at Pawley's Island, S. C. *Chat*, **13** (1): 17.
- JULIEN, M. H. 1948. Observations faites à l'île d'Ouessant durant les étés de 1946 et 1947. *Oiseau*, **18**: 27-32.

- KIMBALL, JAMES W. 1949. The crowing count pheasant census. *Journ. Wildl. Manag.*, **13** (1): 101-120, 3 figs., 4 tables, 1 map.
- KING, FRANK H. 1949. The American egret in Wisconsin. *Pass. Pigeon*, **11** (1): 3-17, 4 pls., 3 tables, 1 fig., 1 map.
- K[INNEAR], N. B. 1949. Percy Roycroft Lowe [obituary of]. *Ibis*, **91** (1): 147-151, portrait.
- KIVOSU, YUKOYASU. 1946. (August 10, 1948.) *Nihon Chorui Kensaku*. (Keys to the Japanese birds.) (Sanseido Press, Tokyo), pp. 1-263, numerous figs. Price, 350 yen. In Japanese.
- KLIMOWITZ, MRS. STEVE. 1948. Orioles fight off cowbird. *Pass. Pigeon*, **10** (4): 149.
- KOBAYASHI, HEIICHI. 1948. Breeding of *Bubulcus ibis coromandus* and *Rostratula b. bengalensis* near Himeji City. *Tori*, **12** (57): 67-69. In Japanese; resume in English.
- KOBAYASHI, KEISUKE. 1948. Nest and eggs of *Butorides striatus amurensis*. *Tori*, **12** (57): 53-57, 3 figs. In Japanese; resume in English.
- KUHK, RUDOLF. 1948. Wirkung der Regen- und Kälteperiode 1948 auf den Mauersegler, *Micropterus apus* (L.). *Vogelwarte*, **1**: 28-30.
- KUMAGAI, SABURO. 1948. The ptarmigan of Attu Island. *Tori*, **12** (57): 69-70. In Japanese; resume in English.
- KUMLIEN, L., AND HOLLISTER, N. 1948. The birds of Wisconsin (cont.). *Pass. Pigeon*, **10** (4): 142-148.
- KUMLIEN, L., AND HOLLISTER, N. 1949. The birds of Wisconsin (cont.). *Pass. Pigeon*, **11** (1): 36-40.
- KUMERLOEVE, DR. 1948. Erneutes Auftreten der Rosenseeschwalbe (*Sterna d. dougalii* Mont.) auf der Insel Amrum. *Orn. Mitt.*, No. **2**: 9.
- KURODA, NAGAMICHI. 1947. (March, 1948.) Congratulatory note for the new Bulletin. *Tori*, **12** (56): 3-4. In Japanese.
- KURODA, NAGAMICHI. 1947. (March, 1948.) Comparatively rare birds in Tokyo. *Tori*, **12** (56): 5-6. In Japanese; resume in English.
- KYLE, JENNIE L. 1949. Hudsonian godwits in Florida. *Fla. Nat.*, **22** (2): 37.
- LABITTE, ANDRÉ. 1948. Quelques notes sur le coucou *Cuculus canorus* L. en pays Drouais. *Oiseau*, **18**: 78-93.
- LACK, DAVID AND E. T. SILVA. 1949. The weight of nestling robins. *Ibis*, **91** (1): 64-78.
- LEA, ROBERT B. AND EDWARDS, ERNEST P. 1949. Eye-color of the green jay in Mexico. *Condor*, **51** (1): 44.
- LEBRET, T. 1948. Waarnemingen over leeftijdsgroepen bij Kolganzen, *Anser a. albifrons* (Scop.). *Ardea*, **36** (3): 198-200. English summary.
- LEES, JOHN. 1949. Weights of robins—Part 1. Nestlings. *Ibis*, **91** (1): 79-88.
- LENDON, ALAN. 1948. Records of Australian birds that have been bred in captivity in South Australia. *S. Aust. Orn.*, **19** (3): 22-25.
- LEOPOLD, A. S. 1949. Adios Gavilán. *Pacific Discovery*, **2** (1): 4-13, 16 photos.
- LIBBERT, WALTER. 1948. Zum Herbstdurchzug des Kranichs (*G. grus*) in Nordafrika. *Vogelwarte*, **1**: 36-37.
- LLOYD, HOYES. 1949. Bird records for the Ottawa district. *Can. Field-Nat.*, **63** (1): 31-34.
- LOWE, PERCY R. 1949. On the position of the genus *Zavattariornis*. *Ibis*, **91** (1): 102-104, 7 figs. *Zavattariornidae*, new family.

- MACKINTOSH, D. R. 1949. The use of thermal currents by birds on migration. *Ibis*, **91** (1): 55-59.
- MACKWORTH-PRAED, C. W. AND C. H. B. GRANT. 1949. On the indigo-birds of Africa. *Ibis*, **91** (1): 98-102.
- MACKWORTH-PRAED, C. W. AND C. H. B. GRANT. 1949. [Three short notes on East African Birds.] *Ibis*, **91** (1): 145.
- MAGNUSSON, MAURITZ AND GUNNAR SVÄRDSON. 1948. Livslängd hos tornsvalar (*Micropterus apus* L.). *Vår Fågelvärld*, **7** (4): 129-144, 2 tables. English summary.
- MANVILLE, RICHARD H. 1948. The Huron Island rookery. *Jack-Pine Warbler*, **26** (4): 152-155, 3 pls.
- MANWELL, REGINALD D. 1949. Malaria, birds, and war. *Amer. Scientist*, **37** (1): 60-68.
- MASON, EDWIN A., AND CROMPTON, DAVIS H. 1948. Is switch grass useful to birds? *Bull. Mass. Aud. Soc.*, **32** (8): 309-310, 1 pl., 1 table.
- MAY, D. J. 1949. Studies on a community of willow warblers. *Ibis*, **91** (1): 24-54.
- McDOWELL, ROBERT D. AND LUTTRINGER, LEO A. 1948. Pennsylvania birds of prey. (Pa. Game Comm., Harrisburg), 32 pp., many ills., 4 col. pls.
- MCGIFFERT, J. 1949. Common tern perching on flower-head. *Brit. Birds*, **42** (1): 27-28, 1 pl.
- MCMEEKING, J. M. 1949. "Smoke-bathing" of rook. *Brit. Birds*, **42** (1): 22.
- MEANLEY, BROOKE. 1949. Nesting warblers of the Pocomoke. *Wood Thrush*, **4** (3): 106.
- MEES, G. F. 1948. De reacties van vogels op oorlogsrumsroer. *Limosa*, **21** (4): 141.
- MENDALL, HOWARD L. 1949. Food habits in relation to black duck management in Maine. *Journ. Wildl. Manag.*, **13** (1): 64-101, 9 tables, 1 map.
- MISCELLANEOUS. 1949. Christmas bird census [Port Arthur, Ontario]. *Thunder Bay Field Nat. Club Newsletter*, Port Arthur, Ont., **3** (1): 1.
- MOLTONI, EDGARDO. 1948. Ulteriori notizie sul Grifone *Gyps f. fulvus* (Hablizl). *Riv. Ital. Orn.*, **18** (4): 196.
- MOLTONI, EDGARDO. 1949. A proposito dell' *Euplectes zavattarii*, Moltoni. *Riv. Ital. Orn.*, **19** (1): 1-3.
- MOLTONI, EDGARDO. 1949. Ibridi tra Fagiano di monte e Gallo cedrone (*Lyrurus tetrix* \times *Tetrao urogallus*). *Riv. Ital. Orn.*, **19** (1): 34-39, 3 figs.
- MOLTONI, EDGARDO. 1949. Alimentazione della Gru. (*Grus grus*). *Riv. Ital. Orn.*, **19** (1): 44-45, 1 fig.
- MOLTONI, EDGARDO. 1949. Pavoncella a ciuffo anomalo. (*Vanellus vanellus*). *Riv. Ital. Orn.*, **19** (1): 45-46, 1 fig.
- MOMIYAMA, TOKU TARO. 1947. (March, 1948). A new locality for the Japanese swamp-warbler. *Tori*, **12** (56): 4-5. In Japanese; resume in English.
- MONCRIEFF, PERRINE. 1949. Gray warbler and cuckoos. *New Zealand Bird Notes*, **3** (4): 111-112.
- MOREAU, R. E. 1949. Mortality of migrants in the southern Red Sea. *Ibis*, **91** (1): 146.
- MORRISON, ALASTAIR. 1949. Land-birds over the Indian ocean. *Ibis*, **91** (1): 145.
- MOSER, R. ALLYN. 1948. Recent changes in nomenclature of Nebraska birds. *Nebr. Bird Rev.*, **16** (2): 74-75.
- MUNRO, GEORGE C. 1949. Nature in Kapiolani Park. *Elepaio*, **9** (7): 35-36.
- NESTLER, RALPH B. 1949. Salt (sodium chloride) requirements of bobwhite quail. *Journ. Wildl. Manag.*, **13** (1): 121-123, 2 tables.

- NESTLER, RALPH B. 1949. Supplements to yellow corn for winter-maintenance and subsequent reproduction of quail. *Journ. Wildl. Manag.*, **13** (1): 123-126, 1 table.
- NESTLER, RALPH B. 1949. Acceptance of seeds of four legumes by the bobwhite quail. *Journ. Wildl. Manag.*, **13** (1): 143-144, 3 tables.
- NEUMANN, DIETER. 1948. Austernfischer am Kiessee in Göttingen. *Orn. Mitt.*, No. **1**: 5.
- NICE, MARGARET MORSE. 1948. Desert and mountain in Southern Arizona. *Aud. Bull. Ill. Aud. Soc.*, **67**: 1-7, 5 pls.
- NICE, MARGARET M. 1948. Song sparrows at Wintergreen Lake. *Jack-Pine Warbler*, **26** (4): 143-151, 1 pl.
- NICHOLS, JOHN T. 1949. Shorebirds and decoys. *Wood Thrush*, **4** (3): 82-91, 2 figs.
- NIEBUHR, OTTO. 1949. Die Vogelwelt des Feuchten Eichen-Hain-buchenwaldes. *Orn. Abh.*, **1**: 1-28, 7 figs.
- NIEBUHR, OTTO. 1949. Schwankungen im Nachtigallenbestand eines Gebietes südöstlich von Celle. *Orn. Mitt.*, No. **1**: 1-4.
- OEHLENSCHLAEGER, ELIZABETH A. 1948. Great horned owl babies. *Pass. Pigeon*, **10** (4): 137-141, 1 pl.
- OLIVIER, GEORGES. 1948. Capture d'un aigle fauve (*Aquila c. chrysaëtos* (L.)) en Seine-Inférieure. *Oiseau*, **18**: 172.
- OLIVIER, GEORGES. 1948. Les fluctuations du gros-bec en Haute-Normandie. *Oiseau*, **18**: 172-173.
- OLIVIER, GEORGES. 1948. Sur l'abondance des cygnes durant l'hiver 1946-47. *Oiseau*, **18**: 173-174.
- OMMANNEY, G. G. 1949. Unusual plumage condition of blue jay (*Cyanocitta cristata*). *Can. Field-Nat.*, **63** (1): 39.
- OLSSON, VIKING. 1948. En jämförelse mellan fågellivet 1947 och 1948 inom ett område vid nedre Dalälven. *Vår Fågelvärld*, **7** (4): 147-163, 2 figs., 1 table. English summary.
- PACKARD, FRED M. 1948. Yellow rails in south central South Dakota. *Nebr. Bird Rev.*, **16** (2): 94.
- PARKS, G. HAPGOOD. 1949. Junco family's interrelations reveal further complications. *Bird-Banding*, **20** (1): 50.
- PAYNTER, RAYMOND A. JR. 1949. Recent recoveries of banded birds. In Ninth Ann. Rept. Bowdoin Sci. Station, Bowdoin College Bull. **11**: 7-13.
- PENOT, J. 1948. Notes biologiques sur le cincle plongeur *Cinclus cinclus* (L.). *Oiseau*, **18**: 141-151, 3 drawings.
- PRESENTI, P. G. 1949. Richerche sulla migrazione della cinciallegra e della passera scopiaiola. (*Parus* and *Prunella*). *Riv. Ital. Orn.*, **19** (1): 22-26.
- PETERSEN, NIELS FR. AND KENNETH WILLIAMSON. 1949. Polymorphism and breeding of the rock dove in the Faeroe Islands. *Ibis*, **91** (1): 17-23, 1 fig.
- PHILLIPPS, W. J. 1947. The Maori method of taking grey duck and black teal near Taupo. *Journ. Polynesian Soc.*, **56** (4): 333-335, 1 fig.
- QUAINTANCE, CHARLES W. 1949. Vignettes of Barro Colorado Life. *Turtox News*, **27** (3): 74-78, 3 photos.
- RAND, A. L. 1948. Birds of Southern Alberta. *Nat. Mus. Can. Bull.* **111** (Biol. Ser. 37): 1-105, 4 pls., 1 fig.
- RAPP, WILLIAM F., JR. 1948. Nebraska birds in the G. D. Swezey cabinet of natural history at Doane College. *Nebr. Bird Rev.*, **16** (2): 76-79.

- RICHDALE, L. E. 1948. Wild life on an island outpost. Expedition to the Snares Islands (1947-48). No. 8. (Otago Daily Times, Dunedin), pp. 107-120, 4 pls.
- RICHTER, CARL H. 1948. A water thrush catching flies. Pass. Pigeon, **10** (4): 149.
- RICHTER, CARL H. 1948. Vireo chases [broad-winged] hawk. Pass. Pigeon, **10** (4): 149.
- RIEDEL, JOS. 1948. Eine Steinkauzstudie. Voegel Heimat, **19** (3): 42-43.
- RIGGENBACH, HANS ED. 1949. Die Brutvögel in der Stadt Basel. Orn. Beob., **46** (1): 3-13.
- RINGLEBEN, HERBERT. 1948. Über einen Schwalben- und einen Rotschwänze-Bastard. Vogelwarte, **1**: 40-41.
- RITTINGHAUS, HANS. 1948. Die Feldlerche (*Alauda arvensis*) Standvogel auf der kleinen Nordsee-Insel Mellum. Vogelwarte, **1**: 37-39.
- ROBBINS, CHANDLER S. 1948. Distribution and migration program of the Fish and Wildlife Service. Pass. Pigeon, **10** (4): 150-151.
- ROBBINS, CHANDLER S. AND ROBERT E. STEWART. 1949. Effects of DDT on bird populations of scrub forest. Journ. Wildl. Manag., **13** (1): 11-16, 1 fig., 2 tables.
- ROBBINS, SAMUEL D., JR. 1949. The 1948 nesting season. Pass. Pigeon, **11** (1): 21-28, 5 pls.
- ROOKES, K. B. 1949. Herring-gull with yellow legs in Dorset. Brit. Birds, **42** (1): 29-30.
- ROSSI, DOMENICO. 1949. La nidificazione del nibbio reale (*Milvus m. milvus*) in un documentario a passo ridotto. Riv. Ital. Orn., **19** (1): 27-33, 7 figs.
- ROTHSCHILD, MIRIAM. 1949. Tameness in birds. Ibis, **91** (1): 108-110.
- ROUGEOT, P. C. 1948. Nouvelles notes sur les Palmpèdes du Gabon. Oiseau, **18**: 94-97.
- RÜPPEL, W., AND SCHÜZ, E. 1948. Ergebnis der Verfrachtung von Nebelkrähen (*Corvus corone cornix*) während des Wegzuges. Vogelwarte, **1**: 30-36, 1 map.
- RUTTLEDGE, ROBERT F. 1949. Black terns on Lough Ree. Brit. Birds, **42** (1): 27.
- RUTTLEDGE, ROBERT F. 1949. Common gull breeding in its second year. Brit. Birds, **42** (1): 29.
- RUTTLEDGE, ROBERT F. 1949. Bill and leg colouration of the common heron in the breeding-season. Brit. Birds, **42** (3): 42-45.
- SALOMONSEN, FINN. 1948. The distribution of birds and the recent climatic change in the North Atlantic area. Dansk Orn. Foren. Tidsskrift, **42** (2): 85-99.
- SALOMONSEN, FINN. 1948. Anden foreløbige Liste over genfundne grønlandske Ringfugle. Blisgaasen (*Anser albifrons*) og dens Slaegtninge. Dansk Orn. Foren. Tidsskrift, **42** (2): 100-108. English summary.
- SALOMONSEN, FINN. 1948. Fuglelivet i Härjedalen, zoogeografisk belyst. I. Almindelig oversigt. Dansk Orn. Foren. Tidsskrift, **42** (2): 216-253, 7 figs. English summary.
- SCHELLING-KAUFMANN, E. 1948. Eine Studienreise nach Schweden im Sommer 1948. Voegel Heimat, **19** (3): 47-52.
- SCHINZ, JULIE. 1949. Bericht über die Brutkolonie der Lachmöwe im Neeracherried für 1948. Orn. Beob., **46** (1): 18-19.
- SCHÜZ, E. 1948. Störche als Eingeborenen-Beute. Vogelwarte, **1**: 8-18, 8 pls., 1 fig.
- SCHÜZ, E. 1948. Zum Vordringen der Türkentaube (*Streptopelia decaocto*). Vogelwarte, **1**: 41-42.
- SELBY, G. 1949. Starlings working field. New Zealand Bird Notes, **3** (4): 110.

- SHAFESBURY, ARCHIE D. 1949. Christmas Bird Count, 1948. *Chat*, **13** (1): 3-14, 1 map.
- SHAFESBURY, ARCHIE D. 1949. Scarlet tanagers seen during summers in Guilford County, N. C. *Chat*, **13** (1): 17.
- SHORT, T. M. 1949. Arctic tern banded in Greenland, recovered in Ontario. *Bird-Banding*, **20** (1): 50.
- SIBSON, R. B. 1949. New arctic wader for New Zealand list. *New Zealand Bird Notes*, **3** (4): 82.
- SINCLAIR, JOHN O. 1949. Aggressive behaviour of common snipe. *Brit. Birds*, **42** (3): 62-63.
- SIMMONS, K. E. L. 1949. Juvenile house-martins bringing mud. *Brit. Birds*, **42** (1): 24.
- SKUTCH, ALEXANDER F. 1949. Life history of the ruddy quail-dove. *Condor*, **51** (1): 3-19.
- SMITH, HARRY R. 1948. A visit to the Bear River migratory waterfowl refuge. *Aud. Bull. Ill. Aud. Soc.*, **67**: 8-13, 2 pls.
- SMYTHIES, J. R. 1949. Spring occurrence of dotterel in Co. Kerry. *Brit. Birds*, **42** (1): 25-26.
- SNYDER, L. L. 1949. On the distribution of the golden eagle in eastern Canada. *Can. Field-Nat.*, **63** (1): 39-41.
- SPENCER, K. G. 1949. Behaviour of young and adult lapwings. *Brit. Birds*, **42** (1): 26-27.
- STABLER, HAROLD B. 1949. Escaped magpies in Maryland. *Wood Thrush*, **4** (3): 106.
- STAGER, KENNETH E. 1949. The dickcissel in California. *Condor*, **51** (1): 44.
- STANFORD, F. G. 1949. "Anting" of green woodpecker. *Brit. Birds*, **42** (3): 59.
- STATON, J. 1949. Notes on some birds in Nottinghamshire in 1947. *Brit. Birds*, **42** (1): 20-21.
- STEAD, EDGAR F. 1948. Bird life on the Snares. *New Zealand Bird Notes*, Spec. No. 3 (3): 69-80, 2 pls.
- STEINBACHER, G. 1948. Ornithologische Beobachtungen bei Gönnern, Kreis Biedenkopf (Hessen). *Orn. Mitt.*, No. **2**: 10-11.
- STEINBACHER, GEORG. 1948. Nordische Wintergäste am Niederrhein. *Orn. Mitt.*, No. **2**: 11.
- STEPHENSON, J. L. 1948. Lennon's marsh. *Chat*, **12** (5): 82-84, 3 pls.
- STEVENSON, P. P. L. 1949. Alternative call of chaffinch. *Brit. Birds*, **42** (3): 55.
- STEWART, ROBERT E. 1949. Birds of the marshes. *Wood Thrush*, **4** (3): 92-99, 3 pls., 1 fig.
- STOKES, A. F. 1949. Stilts nesting at Ardmore, 1947-48 season. *New Zealand Bird Notes*, **3** (4): 107-108.
- STOTT, KEN, JR. 1949. Mexican parrot talk. *Zoonooz*, **22** (3): 4-6.
- STRESEMANN, ERWIN. 1949. The present status of ornithology in Germany. *Ibis*, **91** (1): 105-107.
- STUDER, WALTER. 1949. Bericht über den Kurs über Vogelkunde in La Sauge. *Orn. Beob.*, **46** (1): 27-28.
- STUPKA, ARTHUR. 1948. Snow goose in Great Smoky Mountains National Park. *Migrant*, **19** (4): 72-73.
- SUMMERS-SMITH, C. M. 1949. Golden oriole in Hampshire in December. *Brit. Birds*, **42** (3): 53-54.

- SUTTER, E. 1949. Nachtrag zu: Der Raubvogelzug im Herbst 1947. *Orn. Beob.*, **46** (1): 23.
- SUTTON, GEORGE M. 1949. Meeting the west on Florida's east coast. *Fla. Nat.*, **22** (2): 23-33, 1 pl.
- SUTTON, GEORGE M. 1948. Probable breeding of the ruby-crowned kinglet in the lower peninsula of Michigan. *Jack-Pine Warbler*, **26** (4): 159-160.
- SWANBERG, OLAF. 1949. (Photograph of long-tailed tit, *Aegithalos caudatus caudatus*.) *Brit. Birds*, **42** (3): plate 11.
- TAIT, ERIC M. 1949. Nesting of the Pacific harlequin duck in vicinity of Penticton, B. C. *Can. Field-Nat.*, **63** (1): 43.
- TAKA-TSUKASA, NOBUSUKE. 1947. (March, 1948.) The parakeets of China. *Tori*, **12** (56): 12-19. In Japanese; resume in English.
- TANNER, MAX. 1948. Erlebnisse mit einem Haubentaucher. *Voegel Heimat*, **19** (3): 55-56.
- TEAGUE, W. G. 1949. Lesser black-backed gull perching on tree. *Brit. Birds*, **42** (3): 64.
- TEMPERLEY, GEORGE W. 1949. Red-breasted flycatcher in County Durham. *Brit. Birds*, **42** (1): 23.
- TEMPERLEY, GEORGE W. 1949. Ferruginous duck in County Durham. *Brit. Birds*, **42** (3): 61.
- TEN KATE, C. G. B. 1948. Ornithologie van Nederland. *Limosa*, **21** (4): 118-135, 1 fig.
- TENNESSEE ORNITHOLOGICAL SOCIETY MEMBERS. 1948. The 1948 Christmas season bird count. *Migrant*, **19** (4): 66-71.
- THIELE, HANS-ULRICH. 1948. Ein kleines Vogelparadies im Niederbergischen Lande. *Orn. Mitt.*, No. **2**: 11-13.
- THORPE, W. H. 1949. Ornithological work in Austria. *Ibis*, **91** (1): 143-144.
- TİLY, MRS. I. 1949. Birds in field, Manapouri-Mossburn road. *New Zealand Bird Notes*, **3** (4): 110.
- TİLY, MRS. I. 1949. Long-tailed cuckoo raiding nests. *New Zealand Bird Notes*, **3** (4): 111.
- TOSCHI, AUGUSTO. 1949. Sulla psicologia degli uccelli. *Riv. Ital. Orn.*, **19** (1): 4-21.
- TOUSEY, KATHARINE. 1949. The Caloosahatchee from a cruiser. *Bull. Mass. Aud. Soc.*, **33** (2): 49-53, 1 pl.
- TUCKER, B. W. 1949. Remarks on a seasonal colour change in the bill and legs of herons. *Brit. Birds*, **42** (3): 46-50.
- TUCKER, B. W. 1949. (Predilection of rooks and crows for rubber objects.) *Brit. Birds*, **42** (3): 52-53.
- TUTMAN, IVAN. 1949. Osservazioni ornitologiche sulla penisola Lapad. *Riv. Ital. Orn.*, **19** (1): 40-44.
- TUTT, H. R. 1949. Cuckoo's egg in nest of song-thrush. *Brit. Birds*, **42** (3): 59.
- TYLER, BRUCE P. 1948. Status of the house wren in northeastern Tennessee. *Migrant*, **19** (4): 73-74.
- TYRELL, W. BRYANT. 1949. Kent Island, avian paradise. *In Ninth Ann. Rept. Bowdoin Sci. Station, Bowdoin College Bull.* **11**: 4-5, many photos.
- VAIDEN, MERRITT G. 1948. Additional records of birds from Bolivar County, Mississippi. *Migrant*, **19** (4): 61-64.
- VAN BEMMEL, A. C. V. AND VOOUS, K. H. 1948. The breeding race of *Podiceps ruficollis* from the Kei Islands. *Ardea*, **36** (3): 203.

- VAN BEMMEL, A. C. V. 1948. *Columba vitiensis metallica* Temm. op Lombok. *Ardea*, **36** (3): 203-204.
- VAN DER BAAN, GRÉ. 1948. Waarneming van een Baardgrasmus, *Sylvia cantillans* (Pall.), bij Amsterdam. *Ardea*, **36** (3): 204-205.
- VAN HEURN, W. C. 1948. Beschouwing naar aanleiding van een broedgeval van de Bonte Kraai (*Corvus cornix* L.). *Ardea*, **36** (3): 205-207.
- VAN IJZENDOORN, A. L. J. 1948. Over het voorkomen van *Numenius tenuirostris* Vieill. in Nederland. *Limosa*, **21** (4): 113-118, 1 fig., 4 tables.
- VAN IJZENDOORN, A. L. J. 1948. Sterfte onder Kerkuilens, *Tyto alba* (Scopoli). (Mortality among barn-owls.) *Limosa*, **21** (4): 135-138. English summary.
- VAN LYNDEN, A. J. H. 1948. Nogeen melanistische Kokmeeuw, *Larus r. ridibundus* L. *Ardea*, **36** (3): 204.
- VERHEYEN, R. 1948. Vogelbescherming in België. *Ardea*, **36** (3): 105-110.
- VINCENT, A. W. 1949. On the breeding habits of African birds. *Ibis*, **91** (1): 111-139.
- VLEUGEL, D. A. 1948. Enkele waarnemingen over "vorstvlucht" en "randtrek" in het Sloe-Schengengebied tijdens de winters van 1935/1936 en 1936/1937. *Ardea*, **36** (3): 143-162, 3 figs. English summary.
- VON HAUGWITZ, E. 1948. Vogelzugkatastrophe in New York. *Orn. Mitt.*, No. **2**: 10.
- VON LEHMANN, DR. 1948. Wornellregenpfeifer und Kanut an der unteren Weser südöstl. Bremen. *Orn. Mitt.*, No. **2**: 9.
- VON WESTERHAGEN, ——. 1948. Vom Zug des Wespenbussards (*Pernis apivorus*). *Orn. Mitt.*, No. **2**: 10.
- WALKER, LEWIS W. 1949. Ospreys of Ventana. *Nat. Hist.*, **58** (2): 64-66, 4 photos.
- WALKINSHAW, LAWRENCE H. 1948. Brown creeper nesting in Calhoun County, Michigan. *Jack-Pine Warbler*, **26** (4): 157-158, 2 pl.
- WALKINSHAW, LAWRENCE H. AND STOPFLET, JOHN J. 1949. Bird observations at Johnson River, Alaska. *Condor*, **51** (1): 29-34, 5 figs., 1 table.
- WARD, ROSWELL. 1948. Henry A. Ward, Museum builder of America. (Rochester Hist. Soc., Rochester, New York), pp. 1-297, 12 ills.
- WATERHOUSE, M. J. 1949. Rook and jackdaw migrations observed in Germany. *Ibis*, **91** (1): 1-16.
- WEEKS, J. T. 1949. Notes on some birds of Ruwenzori. *Ibis*, **91** (1): 107-108.
- WEEKS, M. F. 1949. Bird population of exotic forests, 1940-1948. *New Zealand Bird Notes*, **3** (4): 83-84.
- WEEKS, M. F. 1949. Bird comradeship. *New Zealand Bird Notes*, **3** (4): 110.
- WELLER, L. G. 1949. Nuthatches walling up abandoned nesting-hole. *Brit. Birds*, **42** (3): 56-57.
- WENDNAGEL, AD. 1949. Die Störche in der badischen Nachbarschaft von Basel. *Orn. Beob.*, **46** (1): 16-18.
- WHEELER, ROBERT J., JR. 1948. The wild turkey in Alabama. *Ala. Dept. Cons.*, pp. 1-92, 4 figs., 13 pls., 10 tables.
- WHITCOMBE, J. H. 1949. Gannets taking food thrown from ships. *Brit. Birds*, **42** (1): 25.
- WHITE, J. B. 1948. House wren nesting at Greeneville, Tenn. *Migrant*, **19** (4): 74.
- WHITELEY, E. F. 1949. Probable breeding of pied flycatcher in Cheshire. *Brit. Birds*, **42** (3): 57-58.

- WHITTELL, H. M. AND SERVENTY, D. L. 1948. The birds of western Australia. (Pub. Lib., Mus. and Art Gallery W. Aust.), Spec. Publ. 1, 126 pp.
- WIGMAN, A. B. 1948. Drinkende sperwer (*Accipiter nisus*). Limosa, **21** (4): 142.
- WIGMAN, A. B. 1948. Vroeg bolderende korhanen (*Lyrurus tetrix*). Limosa, **21** (4): 142.
- WIGHTMAN, G. 1949. Bittern v. harrier. New Zealand Bird Notes, **3** (4): 110.
- WIGHTMAN, J. S. 1949. Purple heron in Pembrokeshire. Brit. Birds, **42** (1): 25.
- WILKENS, KLAUS AND MICHAEL. 1948. Schwartzhalstaucher im Ahlhorner Fischteichgebiet und auf der Thülsfelder Talsperre (Südoldenburg). Orn. Mitt., No. 1: 4-5.
- WILLIAMS, RALPH B. 1949. The seasonal occurrence of rosy finches at Juneau, Alaska. Condor, **51** (1): 40-42, 1 fig.
- WILLIAMS, RALPH B. AND CLYDE P. MATTESON, JR. 1948. Wyoming hawks. (Wyoming Fish and Game Comm., Cheyenne), pp. 1-84, many ills.
- WINN, H. ELLIOTT. 1949. Birds observed and species populations of Kent Island. In Ninth Ann. Rept. Bowdoin Sci. Station, Bowdoin College Bull. **11**: 16-18.
- WINN, H. ELLIOTT. 1949. Nesting mortality rate of the tree swallow. In Ninth Ann. Rept. Bowdoin Sci. Station, Bowdoin College Bull. **11**: 19-20.
- WINN, H. ELLIOTT. 1949. Stomach contents of a marsh hawk. In Ninth Ann. Rept. Bowdoin Sci. Station, Bowdoin College Bull. **11**: 20.
- YAMASHINA, YOSHIMARO. 1948. Hyojiro Orii: An appreciation. Tori, **12** (57): 47-53, 1 pl. In Japanese; resume in English.
- YAMASHINA, YOSHIMARO. 1948. Histological study of the abnormal sexual organs in two specimens of the duck, *Anas platyrhyncha*. Seibutu, **3** (3-4): 81-87. In Japanese; resume in English.
- YEATES, G. K. 1948. Quelques notes sur la reproduction de la glaréole *Glaréola pratincola pratincola* (L.) en France. Oiseau, **18**: 98-103, 3 photos.
- YEO, P. F. 1949. Blackbird carrying nest-material in autumn. Brit. Birds, **42** (3): 59.
- YOUNGWORTH, WM. 1948. Bird notes from northwestern South Dakota. Nebr. Bird Rev., **16** (1): 55-56.
- YOUNGWORTH, WM. 1948. Some Nebraska bird records for 1948. Nebr. Bird Rev., **16** (2): 92-93.
- ZAVITZ, C. HAROLD. 1949. Clay-colored sparrow at Bayfield, Ontario. Can. Field-Nat., **63** (1): 42-43.
- ZIMMER, JOHN T. AND PHELPS, WILLIAM H. 1949. Four new subspecies of birds from Venezuela. Amer. Mus. Nov., No. **1395**: 1-9. *Pyrrhura leucotis auricularis* (Cerro Humo, Paria Peninsula, State of Sucre); *Amazilia tobaci caudata* (Campos Alegre Valley, State of Sucre); *Basileuterus culicivorus roraimae* [not *Basileuterus roraimae* Sharpe, 1885] (Paulo, Mt. Roraima, State of Bolívar); *Myospiza auri-frontis tenebrosa* (San Carlos, Terr. of Amazonas), new subspecies.
- ZIMMER, JOHN T. AND PHELPS, WILLIAM H. 1949. A new name for *Basileuterus culicivorus roraimae* Zimmer and Phelps. Amer. Mus. Nov., No. **1412**: 1.

OBITUARIES

SIR HUGH STEWART GLADSTONE, Lord Lieutenant of Dumfries County since 1946 and a Corresponding Fellow of the American Ornithologists' Union since 1923, died at Thornhill, Scotland, April 5, 1949, in his 72nd year. Born April 30, 1877, the eldest son of the late S. S. Gladstone, he received his early education at Eton and