

contributes importantly to the fields of breeding behavior, ecology, and speciation. Since the time of Darwin, who discovered them, this group of finches, endemic to the Galapagos Archipelago off the coast of Ecuador, has been investigated by a series of distinguished students—Ridgway, Rothschild and Hartert, Snodgrass and Heller, Gifford, Lowe, Sushkin, Swarth, and others. But a modern interpretation of the specific relationships of the Geospizinae, stressing biology rather than taxonomy, has been needed.

New data offered by Lack are based, first, on field studies on four of the Galapagos Islands, but mainly Indefatigable, from mid-December, 1938, to early April, 1939, and second, on statistical studies of extensive collections of geospizids in American and British museums. The latest comprehensive systematic review, that of Swarth, is followed by Lack; most of the taxonomic changes made by the latter author are simplifications. The group Geospizinae consists of thirteen species and six genera; one monotypic genus, *Pinaroloxias*, occurs on Cocos Island, about 500 miles northeast of the Galapagos.

The main chapters deal with breeding behavior, ecology, coloration, variations in bill and wing, and general evolutionary problems. Indifference of the finches to human presence and individual differences in plumage, bill, and song enabled the author and his aid, W. H. Thompson, to observe the birds closely. "The breeding cycle follows a typical territorial passerine pattern" (p. 20). "Breeding habits of the different genera and species . . . are extremely similar" (p. 37). "Breeding habits have been far more conservative than food habits in the evolution of the Geospizinae" (p. 133). "Plumage characters have been much more conservative in evolution than size and shape of bill" (p. 134). But "many bill differences, especially those between closely related species, cannot be correlated with food differences" (p. 133). "Birds have not reached the Galapagos Islands via a land bridge. . . . The species of Geospizinae are not as sharply defined as in mainland birds, but they do not show the degree of overlapping or of hybridization sometimes claimed for them, and there is no need to assume for them some quite exceptional method of evolution" (p. 135).

Lack's efforts, and those of the editors, necessitated by wartime circumstances, in preparing the manuscript for publication, have resulted in a major contribution meriting careful study. A number of problems and questions are posed by Lack's stimulating discussions of this unusual group of birds; the exceptional opportunities which they afford would more than compensate for another extended period of field study. "Further collecting is needed to establish the position of some forms" (p. 6). "Attempts to cross-breed

the birds in aviaries on the Galapagos failed" (p. 1). Since Lack's "visit did not cover the non-breeding period," more observations, especially on feeding and flocking, are needed. The same applies to the biology of species claimed to have identical or similar ecological requirements.—FRANK A. PITELKA.

MINUTES OF COOPER CLUB MEETINGS

NORTHERN DIVISION

JUNE-JULY.—A combined June-July meeting of the Northern Division of the Cooper Ornithological Club was held on Thursday, July 5, 1945, at 8:00 p.m. in Room 2503, Life Sciences Building, University of California, Berkeley, with President W. I. Follett in the chair. The minutes for May were read and approved.

Five proposals for membership were read: Fredonia Buell, 2325 McKinley Ave., Berkeley, California, proposed by Hilda W. Grinnell; Chapman Grant, 2970 6th Ave., San Diego 3, California, proposed by Alden H. Miller; Mrs. M. Vincent Mowbray, 350 Congress Ave., New Haven 11, Connecticut, proposed by M. Vincent Mowbray; Betty Ruth Schuck, Department of Zoology, University of California, Life Sciences Building, Berkeley 4, California, proposed by Jean M. Linsdale; and Clarence Andrew Sooter, Soil Conservation Service, P. O. Box 1460, Alice, Texas, proposed by Alden H. Miller.

President Follett reported the signing by Governor Earl Warren of two bills opposed by the Club: Assembly Bill 89 provides for the payment of bounties on crows; Assembly Bill 1239 creates the Mt. San Jacinto Winter Authority with power to construct a tramway for skiers in this State park.

Opening the field observations, Mrs. G. Earle Kelly reported that on July 4 shorebirds were again present in large numbers and variety in Alameda. A Song Sparrow in Alameda and another in Oakland in June were each feeding a young Cowbird. Commander W. A. Hicks saw a White-headed Woodpecker (female) in Ross on June 24. Dr. Alden H. Miller observed three colonies of murrens in Marin County on July 1—one off Double Point, another near the mouth of Bear Valley, and the major colony of about a thousand young and adults one mile north of Bear Valley. Near this last location he also observed the flight under water of Pigeon Guillemots. On June 22, President Follett saw a pair of vultures near Belden, Plumas County, where observation since 1910 had not previously indicated their presence. A California Jay after some months has become tame enough to take peanuts from his fingers. Miss Amy Rinehart reported nesting of the Hooded Oriole in palm trees on Carrington St., near 40th Ave., Oakland, on June 28.

The speaker of the evening, Dr. Jean M. Linsdale of the Museum of Vertebrate Zoology, University of California, Berkeley, told of the work being carried on at the Museum's field station, the Hastings Natural History Reservation in Monterey County. Kodachrome motion pictures by Mrs. T. Eric Reynolds and Dr. Linsdale were shown.

Adjourned.—RUTH ELWONGER, *Acting Secretary*.

AUGUST.—The regular monthly meeting of the Northern Division of the Cooper Ornithological Club was held on Thursday, August 23, 1945, at 8:00 p.m., in Room 2503 Life Sciences Building, University of California, Berkeley, with President W. I. Follett in the chair. There were two proposals for membership: Mr. Fisher C. Bailey, 1220 Ralston St., Reno, Nevada, by Seth B. Benson, and Lt. (j.g.) George Petrides, St. Mary's College, Moraga, California, by Robert W. Storer.

The president announced the death of George Willett on August 2 and appointed Mrs. Grinnell chairman of a committee to prepare a resolution for the Northern Division.

Mr. Harwell told of a recent trip to Florida which included the photographing of Everglade Kites. This species, reduced in its range to the tule margins of Lake Okeechobee, can now be expected to increase in numbers as a result of the Soil Conservation program raising the water level over large areas. At Jackson Hole, Mr. Harwell saw four Trumpeter Swans with three cygnets, the adults having been transplanted there last year. He also reported the flooding of Lower Klamath Lake and its return after many years to conditions suitable for wildlife.

David Cutler observed White Pelicans in Alameda August 23. Commander Hicks reported seeing a White-tailed Kite on July 27, six miles south of Santa Rosa.

Mr. Ray reported that in the Tahoe region, near the California-Nevada state line, he took a set of three eggs of the Goshawk, in the latter part of April.

The speaker of the evening was Lt. (j.g.) Charles G. Sibley, who gave a comprehensive account of the avifauna of Emirau Island, St. Matthias Group, Bismarck Archipelago. Kodachrome slides introduced the four habitats occurring on this small coral island. Lt. Sibley described and illustrated by means of study skins many of the 44 species of birds found there.

Mrs. Harold C. Austin announced that the Army has withdrawn its request to use Point Lobos State Park for launching and target practice. She suggested, however, the completion and filing with the State Park Commission of a petition protesting military use of this Reserve.

Adjourned.—RUTH ELWONGER, *Acting Secretary*.

SOUTHERN DIVISION

MAY.—The monthly meeting of the Southern Division of the Cooper Ornithological Club was called to order on May 29, 1945, at 8:00 p.m., by President Walter W. Bennett, in Room 145, Allan Hancock Foundation, University of Southern California, Los Angeles, California.

The following names were proposed for membership: William Ryan Dawson, 2117 Tenth Avenue, Los Angeles 16, California, by George Willett, and William Daniel Quattlebaum, 1925 Paloma Street, Pasadena 4, California, by Dorothy E. Groner.

The following resolution was unanimously adopted:

WHEREAS, in the death of Herbert Newby McCoy on May 7, 1945, the Cooper Ornithological Club has lost a valued member, ex-president of the Southern Division and member of the Board of Governors; and

WHEREAS, although McCoy's principal scientific achievements were in a field other than ornithology, he had a strong personal interest in the Club and was always ready to support its activities; and

WHEREAS, his friendliness, courtesy, and unflinching generosity endeared him to all who were in close contact with him;

NOW, THEREFORE, BE IT RESOLVED, that the Southern Division of the Cooper Ornithological Club expresses its sorrow at the loss of an esteemed member and friend; and

BE IT FURTHER RESOLVED, that a copy of these resolutions be sent to the bereaved wife, together with an expression of our very sincere sympathy.

The status of A. B. 89, concerning crow bounties, was discussed. A communication from the Committee on Conservation of the Southern California Academy of Sciences was read by George Willett informing us that government engineers are studying plans to erect a diversion dam which, if constructed in the location now being considered, would eliminate the existence of the San Gabriel Wild Life Sanctuary on Durfee Road, El Monte, and that an alternate site for this diversion project had been, or might be considered. It was moved, seconded and carried that the Southern Division lend its strength toward the saving of this area, so ideally adapted to the preservation of an ecologic complex of undisturbed primitive river channel flora and fauna.

The Southern Division went on record as opposing A. B. 1239 which creates the Mount San Jacinto Winter Park Authority. The passage of this bill would alter the purpose for which the area was set aside as a State Park.

G. G. Benjamin presented a short résumé of observations of birds he had made recently on the island of Oahu. A. J. van Rossem gave highlights of his recent trip with Loye Miller to the Pajarito and Baboquivari mountains in Arizona, where they were attempting to work out the ranges of certain birds along the broken mountain chains near the Mexican border.

Adjourned.—DOROTHY E. GRONER, *Secretary*.