

Bryan, Jr., and J. C. Greenway, Jr. (Contribution to the Ornithology of the Hawaiian Islands, *Bull. Mus. Comp. Zool.*, 94, 1944:77-142). This paper consists of three parts: An introduction by Bryan deals with historical, faunal, and ecological aspects of Hawaiian bird-life. The main portion consists of a check-list including, beside the standard citations of original descriptions, vernacular names, and brief statements of general range, recorded range in the Hawaiian archipelago, synonyms in sources dealing with the South Pacific and Australian fauna, and occasional annotations. The last part is a commentary by Greenway on the genera of Drepanididae or honey-creepers; "no new facts are presented here," but the conclusions of earlier workers are examined critically in the light of their anatomical data and brief studies by the author. A new linear arrangement of drepanidine genera is suggested.

The Hawaiian avifauna now totals 232 species of which 104 are native, 94 introduced, and 34 vagrant. Of the native species, 77 are endemic, including about 45 species of honey-creepers. Many of the introduced species have not become established; 41 are so listed by Bryan. "So little field work has been done during the past 30 years that it is not wise to state what species are really extinct." The problem of foreign introductions is a serious one in Hawaii, and it is to be hoped that Bryan and Greenway's list will serve to focus more attention on this problem, directly and indirectly, by encouraging study of the present avifauna.—FRANK A. PITELKA.

#### MINUTES OF COOPER CLUB MEETINGS

##### NORTHERN DIVISION

APRIL.—The regular monthly meeting of the Northern Division of the Cooper Ornithological Club was held on Thursday, April 27, 1944, at 8:00 p.m., in Room 2503, Life Sciences Building, University of California, Berkeley, California, with President R. C. Miller in the chair and about 35 members and guests present. Minutes of the Northern Division were read and approved. Mr. Richard E. Genelly, 24 Morrill Court, Oakland, California, was proposed for membership by Mrs. Ruth Wheeler. Nominations were opened for the unexpired term of office of the recording secretary for the Northern Division. The name of Miss Alice Mulford was proposed by Alden H. Miller, seconded by Mrs. H. W. Grinnell. No other nominations were made, and Miss Mulford was elected to the office by vote of members present. Mrs. Kelly reported the following observations: at Bay Farm Island, Knots on April 16, Hudsonian Curlew on April 5, and Semipalmated Plover on April 26; at Ross Valley, Marin County, Black-headed Grosbeak on April 7; Gambel Sparrows last heard at Ala-

meda on April 22. Frank Pitelka reported a single Vaux Swift present among Cliff Swallows near Life Sciences Building, Berkeley, on April 27.

The speaker of the evening, Mr. Ben Glading of the California Division of Fish and Game, discussed ecology and management of the California Quail. In the main, Mr. Glading's talk consisted of an enumeration, with comment, of problems presented by the complex interrelations of an animal such as the quail with its associates and general environment. Among the problems discussed at some length were methods of censusing and of analyzing quail populations.

Adjourned.—FRANK A. PITELKA, *Acting Secretary*.

MAY.—The regular monthly meeting of the Northern Division of the Cooper Ornithological Club was held on Thursday, May 25, 1944, at 8:00 p.m. in Room 2503 Life Sciences Building, University of California, Berkeley, with President Robert C. Minard in the chair and about 35 members and guests present. Minutes of the Northern Division were read and approved. Brother Andrew, F.S.C., Mont LaSalle Novitiate, Napa, California, and Fred G. Evenden, Jr., 521 Hayes St., Woodburn, Oregon, were proposed for membership by Alden H. Miller.

Alden Miller reviewed "The censory basis of bird navigation," by Donald R. Griffin (*Quarterly Review of Biology for March, 1944*, pp. 15-31). Walter Donaghho of Honolulu reviewed George C. Munro's "Birds of Hawaii" with illustrations by Y. Oda.

Mrs. Kelly reported a Ruddy Turnstone and two Wandering Tattlers at the Cliff House, May 7; at St. Charles St., Alameda, one Western Tanager, May 3, many, May 21; a Hooded Oriole, April 28-29 and again two weeks later; an Ash-throated Flycatcher, April 28; and on May 2 a Long-tailed Chat seen by Dr. and Mrs. Hamilton. Mr. Brighton Cain reported two Tanagers and a good view of a male Cowbird at Mosswood Park, May 20. Mr. Walter Donaghho told about and imitated birds he had seen on Guadalcanal.

The speaker of the evening, Dr. Robert T. Orr, Associate Curator of Ornithology and Mammalogy at the California Academy of Sciences, discussed "Some Observations on the Habits of the Sooty Grouse in California." After mention of the taxonomy and distribution of gallinaceous birds, Dr. Orr described the habitat of the Sooty Grouse in clearings, brush patches, and open conifer forests of localized mountain slopes and ridges in the Tahoe, Tuolumne, and Sonora regions. The seasonal variation in food habits, from the winter diet of conifer buds, needles, and seeds to the adult summer diet of fern fronds, grass seed, berries, and fruits was discussed.

Adjourned.—ALICE S. MULFORD, *Recording Secretary*.