

Bancroft Way, Berkeley, by Paul F. Bunker; Miss Dorothy Hildebrand, Kelseyville, by Emily Smith; Miss Ruth A. Hoerl, 1128 S. Stanislaus St., Stockton, by Barbara Norris; Ernest H. Norrback, 130 Naples St., San Francisco, by Alden H. Miller; Helen (Mrs. A. B.) Thornthwaite, care of Mounted Police, Old Crow Detachment, Yukon Territory, via Fort Yukon, Alaska, by E. L. Sumner.

Mr. Cain announced that the last of the series of lectures sponsored by the Audubon Association of the Pacific would be a talk upon shore-birds by Mrs. G. E. Kelly on the evening of April 30. He cordially invited Cooper Club members to attend. A visit to the island in Lake Merritt was described by Mr. Cain. He reported that because of the depredations of gulls, ducks find it impossible to rear young on the island. Newly hatched mallards, however, when transferred to cages by the Park employees have grown to maturity. Two swans were found to be brooding together on a nest containing fourteen eggs. It was surmised that both birds were females. Steps are being taken, Mr. Cain stated, in accordance with Mr. Grinnell's suggestion, to remove exotic and crippled birds from the lake. A pelican bone found on the island was exhibited.

Mrs. James T. Allen reported that a Long-tailed Chat has been seen at Oak Springs on the Tunnel Road. Mr. Don C. Meadows commented upon the excellence of the salt marshes near El Cerrito Hill as a place in which to observe shore-birds, having himself recently seen many sandpipers, terns of several species, and four Bonaparte Gulls at that point.

Vice-President Linsdale announced that because the annual meeting of the Cooper Club will be held in Berkeley on May 15 to 17, no meeting will be held by the Northern Division on the fourth Thursday of that month.

The speaker of the evening was Mr. Milton P. Skinner, field naturalist, for many years resident in the Yellowstone National Park. Mr. Skinner's discussion of the "Birds of Yellowstone Park" was illustrated by lantern slides showing maps of the region, the prevalent trees, and photographs of various birds, and was supplemented by a description of the three main routes by which migratory birds reach the Park.

Adjourned.—HILDA W. GRINNELL, *Secretary*.

SIXTH ANNUAL MEETING

The Sixth Annual Meeting of the Cooper Ornithological Club was held in Berkeley, California, Friday and Saturday, May 15 and 16, 1931. The scientific sessions were held in Room 2503 Life Sciences Building, University of California. Registration of members and visitors began at 9 a. m. At 9:30 George M. Wright, President of the Northern Division, formally opened the meeting with a greeting and address of welcome to the members and guests assembled.

L. H. Miller, President of the Board of Governors responded to the welcome. A telegram was read from Stanley G. Jewett, expressing hope for the success of the meeting.

Approximately 80 persons were in attendance at each of the four scientific sessions and more than 200 were present at the evening showing of motion pictures.

Alden H. Miller described "The fossil passerine birds from the Pleistocene of Carpinteria, California", which include 21 species, 19 of which are in the local Recent fauna. In Pleistocene time the region evidently supported more forest cover. A. M. Woodbury described "Bird habitats in Zion Canyon, Utah", where the narrow gorge restricts many of the habitats. Colored lantern slides portrayed the details of various habitats. L. H. Miller described the "Ecology of the Carpinteria region in the Pleistocene" as indicated by avian fossils heretofore recovered. He now concludes that *Wetmoregyps daggetti* was a forest inhabiting species rather than a walking eagle as previously considered. John B. Price reported on "Flocking habits of Zonotrichias and further notes on Quail", continuing studies previously reported in the Condor, from banding and marking of trapped birds with paint. Artificial exchange of Valley Quail in the flocks indicates that the former do not normally exchange between flocks, nor do all transplanted quail return to their original flocks. Repeated trappings of crown sparrows has shown a somewhat wider degree of range for these birds. Mary M. Erickson reported upon "Territorial behavior in the Wren-tit". Most individuals and pairs have small ranges, and for breeding purposes their ranges are still further restricted. Invasion of the borders of a range by other Wren-tits is sometimes resisted at various seasons; other species of birds may be driven out of Wren-tit territories. Of 26 pairs

studied, the average territory was about 0.48 acre per pair. E. L. Sumner, Jr., described the "Behavior of nesting Red-tailed Hawks", with respect to five pairs on the Los Baños Game Refuge in Merced County, California, where territories for nesting are small in the presence of adjacent wide forage areas. Nests have been blown bodily out of trees by the prevailing high winds. Golden Eagles have been seen to fly inverted when attacked by Red-tailed Hawks. T. T. McCabe presented "Notes on western hermit thrushes", resulting from a critical study of this group in which particular difficulty has been found in separating the *guttata-sequoiensis* assemblage.

At the afternoon session on Friday, J. R. Pemberton presided.

W. E. Ritter discussed "Family and group relations in the California Woodpecker", reporting a nest near Orinda attended by 3 males and 2 females where males were seen to both incubate and feed, 2 males having incubated in one nest at the same time. James Moffitt outlined "A survey of California water-fowl breeding grounds" now being carried on by him under the auspices of the California Division of Fish and Game. Contrary to opinion among sportsmen, the locally-reared population of ducks is believed to be a considerable part of the total winter population. Attention is being given to such factors as water relations, effect of flooding, burning of tules, and desirable types of food plants, and to the species of water-fowl most in need of encouragement. Canada Geese in Honey Lake Valley are nesting on broken-down tules and on tops of high hay stacks; artificial nesting sites on posts will be provided. John McB. Robertson described "Some changes in the bird life of western Orange County, California", where crows earlier were only diurnal visitors, chiefly in winter, but have been breeding since 1921, now commonly, in eucalyptus. California Jays and Coast Bush-tits have appeared. The Dwarf Cowbird first appeared in 1923 and is now common, parasitizing California Linnets. Burrowing Owls roost in irrigation standpipes and occasionally attempt nesting in such places. J. M. Linsdale reported on "Activities of Yellow-billed Magpies during the incubation period", which is of 18 days duration. The unit of organization is the pair, which is believed to remain together throughout the year. The nesting program in 1931

was a month earlier than in 1930. The song is audible up to 100 yards. The male forages as far as one-half mile from the nest and provides food for the incubating female. John G. Tyler read a number of "Natural history notes from early California newspapers", especially from the Mariposa Gazette. Ben H. Thompson gave a "Census of nesting birds on a small lake in Yellowstone National Park" near Lamar River. Yellow-headed Blackbirds, Mud-hens and Pied-billed Grebes constituted the dominant species.

At four o'clock the group adjourned to the new quarters of the Museum of Vertebrate Zoology on the west side of the Life Sciences Building where a series of exhibits was provided as follows: Birds in general, in charge of Miss M. W. Wythe; Woodpecker work, demonstrated by W. E. Ritter; Birds' nests and eggs, in charge of Miss M. M. Erickson; Shrikes of North America, demonstrated by A. H. Miller; Song Sparrows of the Pacific Coast, demonstrated by J. Grinnell; Bird-banding matériel, provided by the Western Bird-banding Association, in charge of T. T. McCabe and E. L. Sumner, Sr.; Reptile room, in charge of J. M. Linsdale; Perognathus, demonstrated by S. B. Benson; The Weasels of the Americas, demonstrated by E. R. Hall; The fur room, shown by A. E. Borell.

On Friday evening the Club members and their guests assembled in the auditorium of International House at Bancroft Way and Piedmont Avenue where a program of motion pictures on bird life was given. These included "Incidents in the life history of the Trumpeter Swan", in Yellowstone National Park, by Joseph Dixon, and "The life story of the House Wren in field and laboratory", by S. Prentiss Baldwin of Cleveland, Ohio, presented by E. Lowell Sumner, Jr.

On Saturday morning the session began at nine a. m. with J. G. Tyler presiding. Joseph Grinnell discussed "The type locality of the Verdin" and exhibited the original specimen used by Sundevall. By careful historical research and correspondence with European ornithologists, rather complete details concerning the type locality and original description of this species have been established. H. S. Swarth discussed "The tyranny of the trinomial", showing the difficulty involved in attempts to segregate rigidly in some cases between species and subspecies. A paper by L. B. Bishop on "Sexual dichro-

matism in the Pygmy Owl" was read by George Willett, showing that grayness of males and brownness of females are pronounced upon the borders of subspecific ranges. L. V. Compton presented a paper on "Valley Quail and the water problem", giving a résumé of earlier beliefs on this topic and a report of efforts to improve the opportunities for quail on the R. W. Hanna ranch at Payne Creek in Tehama County by supplying water from tanks, springs and seepage places and protecting this from livestock, together with furnishing brush cover appropriate for quail coming to drink. The "Acclimatization of alien birds in California" was presented in historical summary by T. I. Storer. Efforts in this direction began as early as 1860 and more than \$200,000 of state funds have been expended in efforts to establish alien game species, besides numerous private attempts with song birds. Mrs. M. E. McLellan Davidson described and illustrated the "Birds of a coffee finca", and R. H. Beck presented an illustrated account of some of his experiences in "Bird collecting south of the equator" where he spent a number of years on various oceanic islands, chiefly in the interests of the American Museum of Natural History.

At the afternoon session E. L. Sumner, Sr., gave "Notes on the longevity of some passerine birds". (Details are published in *The Condor*, xxxiii, 1931, p. 128.) G. M. Wright described "A bat-eating Sparrow Hawk" observed in the southwest. G. B. Pickwell presented "Some observations upon the Texas Nighthawk", dealing with habits of nesting adults in a small "island" of Lower Sonoran Zone near San Jose. An analysis of the behavior based on principles of recent development in the study of animal psychology was given. F. H. Fowler described his experiences on "Six week-ends with a family of Prairie Falcons", studied in the arid foothills of the central Coast Ranges, where by lowering a metal cage over a cliff to the vicinity of a nest he was able to obtain excellent close-up motion pictures of both young and adults during the growth period of the former. Both birds and mammals were fed to the young. This was followed by "Some Prairie Falcon studies", in motion pictures, made by W. M. Pierce on the Mojave Desert. The general character of the habitat, the manner of flight of the adults, and behavior of the young were illustrated. Food

there consisted largely of lizards. The afternoon program closed with a series of motion pictures and comments on the "Birds of the southern California Channel Islands" by J. R. Pemberton. The general character of the various islands, some of the changes in bird population which have been observed by various naturalists, and close views of various colonial species were included.

On Saturday evening Mr. and Mrs. George M. Wright entertained the members and guests at their residence, 1936 Thousand Oaks Boulevard, Berkeley, with a buffet supper. Following the supper, L. H. Miller gave a talk on "Rhythm in bird song", illustrating his thesis with imitations of the voices of various birds. —TRACY I. STORER, *Secretary*.

GOVERNORS' MEETING

The Tenth Annual Meeting of the Board of Governors of the Cooper Ornithological Club was held at Berkeley, California, on May 17, 1931. The Board was entertained at breakfast at the residence of Professor and Mrs. James T. Allen, 37 Mosswood Road, by Mrs. Allen and Mrs. Grinnell. The business session convened at 10 a. m. with President L. H. Miller in the chair, and the following members present: Mrs. A. S. Allen, Mrs. H. W. Grinnell, Messrs. J. S. Appleton, Henry W. Carriger, W. Lee Chambers, J. S. Cooper, J. S. Dixon, Joseph Grinnell, C. B. Lastreto, J. M. Linsdale, Joseph Mailliard, Harold Michener, J. R. Pemberton, W. M. Pierce, G. C. Rich, J. McB. Robertson, T. I. Storer, J. G. Tyler, H. S. Swarth, George Willett, and G. M. Wright. The following members were represented by proxies: D. R. Dickey and Harry Harris by W. L. Chambers; H. C. Bryant by L. H. Miller; Ralph Arnold, H. L. Coggins, J. E. Law, G. F. Morcom and W. H. Osgood by T. I. Storer; W. B. Judson by H. S. Swarth; and L. B. Bishop by George Willett.

The minutes of the Ninth Annual Meeting were read and approved.

Report of the Business Managers was read and commented upon by J. McB. Robertson. January 1, 1930, the Club had 905 members; on January 1, 1931, 903 members. The Business Managers requested that the report be audited. A motion by Dixon, seconded by Mailliard, was passed authorizing the chair to appoint an auditing committee. The following committee was named: Lastreto, chairman; Cooper, G. M. Wright. On motion