

proportion of the species is being caught and banded.

To the keen leadership of S. Prentiss Baldwin and Frederick C. Lincoln, more than to any other factors, must we attribute the substantial advances in method and interest that have followed Mr. Baldwin's epochal revelation in 1919. And nothing they have done will, perhaps, be of greater value to ornithologists than their recent compendium under the title "Manual for Bird Banders".

Distributed by the Biological Survey in December, 1929, this comprehensive manual provides the banding contingent with detailed descriptions of 35 or more of the best bird traps so far devised, and adds all the information of one kind and another that one about to undertake banding activities would need, provided he is already familiar with the names of the birds. Under appropriate subtitles are described tools, baits, technique of operating traps, methods of holding birds, of attaching bands, of keeping records, and investigations that banders may undertake. Meticulous care has been given to the line drawings and the detailed descriptions, and where photographs are used most of them serve the purpose well. We note that the artist in drawing the Potter Trap (page 22) has placed the "trip-door-step" wrongly. This trap is only practical when the trip-door-step is given one-quarter turn to the left from the position in which it is shown. The lip of the gooseneck should stand at right angles to the wire of the door which it supports.

Throughout the manual the authors stress the importance of releasing banded birds unhandicapped by trap injuries, and many of the traps shown have been designed with this thought uppermost. Visiting traps "every hour or two" would better have been "every half hour or less", at least for some western stations where many species and individuals are present. Thrashers, towhees, quail, and molting birds require immediate release. We believe, too, that it is precarious to attempt to band most nestlings after their pin feathers begin to burst. But since, as the authors point out, "data obtained from birds banded as fledglings have certain obvious values that are not represented in the records of those fully adult at the time of banding", it is of the utmost importance that, wherever it can be safely done, nestlings be banded. The destruction of nestlings is a fertile field

for observation. How many people have actually seen cats and weasels follow human trails to nests? Is not most of our knowledge (?) on this subject presumptive? We have no check on the unfound nests destroyed by these animals, without the assistance of human trails. Snakes and jays deliberately hunt the trees over for nests. Why should not cats and weasels do the same? This point is emphasized, because, in the reviewer's opinion, neither observed mortality nor consequent waste of bands constitutes a valid reason for not banding all nestlings young enough to be willing to remain in the nest. The very fact that there is a larger mortality among young birds and fewer recoveries calls for increased banding of nestlings.

We are glad that the authors recommend trapping and banding troublesome predators and carrying them to a distance from the station for releasing. Aside from the fact that the distributional movements of predators are of as much interest scientifically and economically as are those of the birds they try to destroy, their function in Nature's scheme may well be that of eliminating sick and wounded individuals. Healthy birds when free seem to have little trouble escaping from the smaller hawks.

This manual comes appropriately at the end of a decade in which our thought has been occupied with methods of catching the birds. With a quantitative program assured, we can now turn to the qualitative effort which is bound to yield abundant dividends.—J. EUGENE LAW, *January 30, 1930.*

MINUTES OF COOPER CLUB MEETINGS

SOUTHERN DIVISION

JANUARY.—The regular meeting of the Southern Division of the Cooper Ornithological Club was called to order at 8:15 p. m., January 28, 1930, by President Harry Harris at the Los Angeles Museum. In the absence of the regular secretary, Wright M. Pierce was appointed Secretary *pro tem*. The minutes of the December meeting were not read.

New names as follows were proposed for membership:

Jack D. Baker, 435 First St., Santa Rosa, Calif., Phillips Kloss, 3420 Webster St., Oakland, Calif., Frances H. Allen, 215 La Grange St., West Roxbury, Mass.,

Carey E. Gregory, Box 215, Morganton, N. C.; Bertram William Cartwright, 392 Woodlawn St., St. James, Man., Canada, John T. Emlen, Jr., 36 West School Lane, Germantown, Phila., Pa., all by W. Lee Chambers; Laura Ethel Mills, Fallon, Nev., by Florence Merriam Bailey; E. W. Barton, Jr., R.F.D. 1, Box 1015, San Gabriel, Calif., by S. A. Watson; Berry Campbell, 138 N. Poppy St., Monrovia, Calif., by Raymond B. Cowles; Lydia Spencer Bowen, 841 Earllham St., Pasadena, Calif., by Hildegard Howard.

The following were nominated for officers in 1930: for President, George Willett; for Vice-President, J. R. Pemberton; for Secretary, Harold Michener. Since the above were the only nominees, these officers were, by simple procedure, elected for the current year. At this time Mr. Harris requested the newly elected President to take the chair.

The death of Mr. A. W. Hanaford, a Club member, was announced and the time of the funeral stated as 2:30 the following Thursday. It was regularly moved by Mr. Law, seconded by Mr. Reis, that the President appoint a committee to draw up a resolution of condolence for the Club, the same to appear on the minutes, and that a copy be sent to Mrs. Hanaford. Carried. The Chair appointed Mr. Harris and Mr. Law.

The President announced that plans for the Annual Meeting to be held in Los Angeles on April 11 and 12 were under way.

Dr. Bishop told of his experiences with Glaucous-winged Gulls on Bare Island, B. C., especially mentioning the white specimen of this gull that he saw there. Mr. Willett added that birds of this color among this species were quite rare. Perhaps one in a thousand are of this type.

Mr. Law gave an interesting account of his trip east this fall and told of meeting many of the prominent ornithologists while there, also of seeing the Snowy Owl and Purple Sandpiper on Cape Cod Bay. He also mentioned and told in detail of the feeding habits of a Sharp-shinned Hawk that he had held captive for several days.

Mr. Willett spoke of the occurrence of Spotted Towhees at Coachella, and Miss Vignos mentioned the capture of a white-tailed Gambel Sparrow at a banding station in the same locality.

The Chairman adjourned the meeting at 10 p. m.—WRIGHT M. PIERCE, *Secretary pro tem.*

FEBRUARY.—The regular monthly meeting of the Southern Division of the Cooper Ornithological Club was held on Tuesday evening, February 25, 1930, at the Los Angeles Museum, Exposition Park, Los Angeles, with about fifty members and friends present and President Willett in the chair. The minutes of the Southern Division January meeting were read and approved. The minutes of the January meeting of the Northern Division were read by title only.

The following applications for membership were read: Mr. C. L. Snyder, Fort Bayard, New Mexico, proposed by John McB. Robertson; Mr. Edward F. G. White, 185 Wurtemberg St., Ottawa, Canada, and Mr. Lincoln Bryant, Jr., 149 Randolph Ave., Milton, Mass., both proposed by W. Lee Chambers; and Mr. Sidney A. Liddell, R. R. No. 1, Summerland, British Columbia, Canada, proposed by Eric M. Tait.

Mr. Chambers announced that the Cooper Club had received its first bequest in the amount of \$500.00, from Mrs. Edward A. Kuegel, who had been a member of the Club residing at Carmel for a number of years. Dr. Bishop spoke of meeting Mrs. Kuegel at Carmel some years ago.

Mr. R. T. Woodlaw, of the Eastman Kodak Company, was the speaker of the evening. He showed many beautiful motion pictures, reproducing on the screen the natural color of the objects photographed. Some of these pictures were of the brightly colored foreign birds in the aviary on Catalina Island. Mr. Woodlaw explained the process by which these colored movies are made. Adjourned.—HAROLD MICHENER, *Secretary.*

NORTHERN DIVISION

JANUARY.—The January meeting of the Northern Division of the Cooper Ornithological Club was held on January 23, 1930, in Room 101, Zoology Building, University of California, at 8:00 p. m., with about eighty-five members and guests present. At the request of Vice-president Clabaugh, Mr. Joseph S. Dixon presided. Reading of minutes of both divisions was omitted.

Proposals for membership were: Daniel Axelrod, 3039 Seminary Ave., Oakland; Robert Delareuelle, 1136 East 33rd St., Oakland; Cranson Hopkins, 920 McKinley Ave., Oakland; Robert Taylor, 4030

Coolidge Ave., Oakland, by Brighton C. Cain; Chester W. Edge, R. R. No. 3, Box 21, Healdsburg, Calif., by J. Grinnell; Leslie Gilman Hawkins, 157 Frisbie St., Oakland, by L. Ph. Bolander; Curtis Hesse, Paleontology Dept., University of California, Berkeley, by Adrey E. Borell; Miss Barbara Norris, 2326 Warring St., Berkeley, by Miss Emily Smith; and Mr. Laurence Stevens, 918 East Haley St., Santa Barbara, by Henry W. Carriger.

At the invitation of the chair, Mr. James Moffitt read a letter which he had indited to Dr. John C. Phillips, outlining the present status of geese and ducks in California and stating his personal recommendations as to their future conservation. Because of Mr. Moffitt's deep interest in game birds and his intimate knowledge of their numbers and distribution in California he was requested to file a copy of his letter with the Chairman of the Conservation Committee of the Northern Division.

Mr. Brighton C. Cain reported that a count of votes taken in the campaign to determine the most popular candidate for State Bird of California has resulted in an overwhelming victory for the California Valley Quail, with a total of 100,000 votes in its favor. Mr. Cain spoke also of the meetings of the Audubon Association of the Pacific on the second Thursday evening of each month in the San Francisco Ferry Bldg., and invited Cooper Club members to attend.

Mr. Grinnell reported the receipt at the Museum of fragments of an Emperor Goose sent in from the Fall River High School. The bird had been found with other geese frozen in the ice on the Pit River. Mr. Moffitt stated that two Emperor Geese have just now been reported from Tomales Bay where they may be seen by observers. Mr. Leslie Hawkins told of seeing a Pigeon Hawk in pursuit of a Duck Hawk at Lake Lagunitas on January 11, and of the presence of Western Gnatcatchers near Lake Temescal; also of noting three male and four female American Mergansers near the Key Route mole on January 18. Mr. C. A. Bryant told of observing a male Wood Duck on Phoenix Lake on December 29.

The secretary read a letter from the nominating committee appointed by President Tyler at the December meeting and signed by the Chairman, Mr. Joseph Mailliard, offering the following nominations for officers of the Northern

Division for 1930: President, Mr. Tracy I. Storer; Vice-president, Mr. George M. Wright; Secretary, Mrs. Hilda W. Grinnell. Mr. Adrey Borell moved that the report be accepted and the secretary instructed to cast a ballot electing these persons. It was so voted.

Mr. H. S. Swarth then gave an illustrated talk upon "A Subarctic Summer," this being a report of four months spent enroute to, and at, Atlin, British Columbia. Mr. Swarth's talk was in the form of an interesting travelogue which divided matters ornithological quite evenly with the history of the country and the habits of the natives. He reminded his hearers that Atlin, while only 100 miles inland from Juneau, as the crow flies, has a very different avifauna, a large percentage of the birds being eastern forms such as the Golden-shafted Flicker, whereas on the coast the Red-shafted Flicker occurs.

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

FEBRUARY.—The regular monthly meeting of the Northern Division of the Cooper Ornithological Club was held on February 27, 1930, at 8:00 p. m., in Room 101, Zoology Building, University of California, Berkeley, with Mr. Storer presiding. About 140 members and guests were present.

Reading of the minutes of both divisions was omitted. Miss Alice J. Swasey, 2626 Benvenue Avenue, Berkeley, was proposed for membership by Miss Margaret W. Wythe. Mr. Taylor of Atlin, B. C., was present and showed some beautiful photographs of the region which was the subject of Mr. Swarth's talk in January.

A list of birds seen in Mosswood Park, Oakland, was presented by Marshall Jencks and Phillips Kloss. Mr. Leslie Hawkins reported many occurrences of interest; and Mr. Laurence Huey, of San Diego, reported, with visitor's luck, having seen two Prairie Falcons chasing pigeons about the top of the University Campanile.

The evening's talk was by Mr. Thomas T. McCabe, of Barkerville, British Columbia, upon "The Cariboo Mountains of British Columbia." The lay of the land, the habits of moose, caribou and the lesser mammals, learned during a sojourn of eight summers and five winters, were spoken of, as well as the birds of the region. Mr. McCabe's lecture together

with a fascinating series of slides thrown on the screen by Mrs. McCabe made us all wonder why the rush to Barkerville stopped in '59 when gold gave out!

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

FIFTH ANNUAL MEETING.—The Fifth Annual Meeting of the Cooper Ornithological Club was held at Los Angeles, Friday and Saturday, April 11 and 12, 1930. The session was opened in the Los Angeles Museum by George Willett, President of the Southern Division. Dr. W. A. Bryan, Director of the Los Angeles Museum, extended greetings from the Museum to the Club and its members. He pointed out that the Cooper Ornithological Club was one of the organizations vitally concerned in the establishment of the Museum. President L. H. Miller of the Board of Governors replied to Director Bryan's welcome and offered congratulations on the splendid recent development of the Museum. Dr. Barton Warren Evermann was then called to preside.

H. S. Swarth described "A Northern Summer", a travelogue of his 1929 expedition to Atlin, British Columbia. By word and lantern slide he portrayed the local conditions rather fully and touched briefly on the local distribution of birds in the region. Mrs. M. E. McLellan Davidson gave "A Samoan Malanga", an illustrated account of a recent trip to Samoa, with mention of a few birds. "The New Check-list" was discussed by L. B. Bishop, and some of the difficulties in the statement of ranges and concerning acceptance and rejection of subspecies were touched upon. Excerpts from a letter by Witmer Stone on difficulties of the revision committee were read.

The session adjourned and lunch was had at a nearby restaurant where the visitors were guests of the southern members. Upon reconvening, at 1:30 p. m., S. G. Jewett presided. "The A.O.U. Check-list" provided for further discussion by Joseph Grinnell, now president of the A.O.U. and member of the committee concerned with the check-list revision. "Mutation in the Varied Thrush", as suggested by a specimen lacking the red coloration, was dealt with by J. E. Law. Factors involved in differential distribution of melanin and lipochrome pigments were touched upon. "Fossil Birds from Conklin Cavern, New Mexico", were described by Hildegard Howard (Mrs.

Henry) Wylde. Of twenty-seven species recorded, the raptorial forms are predominant, with gallinaceous species next in numbers. The fauna is Pleistocene presumably, and does not indicate any climatic changes from that obtaining in the region at the present time. Fifteen millimeters of a foot bone afforded discussion of "A Pliocene Goose from Ricardo" by L. H. Miller. This carries the geese to a total of six fossil species in the genus *Branta*. The genus in both past and present time has exhibited a variety of sizes. The mammalian fauna of the Ricardo Pliocene suggests grazing conditions with broad-leaved trees in nearby areas and thus was probably suited for occupation by geese such as obtains in the moister portions of interior California at the present time. "Systematics of some Western Birds", presented by Joseph Grinnell, involved a plea for more and more careful systematic study of western species and subspecies and suggested the need for additional workers in this field. *Picoides a. tenuirostris* is too slightly differentiated for separation in the Sierra Nevada; the Lead-colored and Coast bush-tits prove, on the basis of material from eastern California, to be but subspecies of one species. The "Development and Behavior of Young Golden Eagles" as studied by E. L. Sumner, was discussed and illustrated in an excellent series of studies on young birds near Claremont, California.

About 60 persons were in attendance at the morning and afternoon sessions.

In the evening the guests were entertained in a party at the Biltmore Theatre, where movietone films by Mr. and Mrs. Martin Johnson were shown.

The sessions on Saturday were held on the new Westwood Campus of the University of California at Los Angeles, in Room 29 of the Physics-Biology Building. In the name of the Director, L. H. Miller extended a greeting and welcome to the new headquarters of the University, and then took the chair for the morning session. "Field Observations on the Osprey", an excellently illustrated study by Miss Caroline P. Canby, of the bird at Eagle Lake and on the coast of Maine, was presented showing the manner of nesting, types of sites chosen, habits of the birds, and growth of the young. "The Status of Some Alaskan Birds", discussed by George Willett, was a critical study based on his long residence in Alaska and first-hand information on the avifauna,

and included discussion of the Kittiwake, White-cheeked Goose, Sooty Grouse, Bald Eagle, Raven, Crow, Hairy and Downy woodpeckers, Crossbill, and Robin. Discussion of the eagle situation in Alaska brought the statement from Mr. Willett that he had seen 47 Bald Eagles in one tree and 700 along five miles of beach, and had found bones of deer fawns in nests, and fawn hair on claws of eagles. Alaska, as a frontier country, forces some of the inhabitants to depend upon game for meat, and the eagles in exceeding abundance are a competing factor. Mr. Willett expressed the opinion that the eagle is not in any danger of extermination in Alaska. "Some African Notes", by R. B. Cowles, involved a comparison of some families of South African birds with local families in western America, and discussion of feeding habits, especially as related to termites. "Twenty-five Minutes in the Life of a *Selasphorus* Hummingbird", by T. I. Storer, presented a record of the activities of a single individual in Humboldt County, while defending its forage range on a late summer afternoon. The following papers were read by title: "The Ravens of the State of Washington", by J. H. Bowles, and "Notes on the Nomenclature of North American Shrikes", by A. H. Miller. About 50 persons were present.

After luncheon at the Y. W. C. A. building, the session reconvened with T. I. Storer as chairman. The relations between "Birds and Eucalyptus Trees" were discussed and illustrated by J. McB. Robertson, who showed the facilities afforded many native species, by the planting and growth of eucalyptus trees. Under the simple title "Notes from Oregon" S. G. Jewett gave an excellent resumé of the zonal distribution of birds in the state of Oregon and made comments on the relative population of certain species. "Photographs of Alberta Birds" were presented by S. S. Stansell, with running comments. Mrs. F. T. Bicknell reported upon "The California State Bird Campaign". The campaign opened formally with an announcement in the November-December, 1927, Condor. Twenty-two bird candidates were selected for the balloting, which extended from February 3, 1928, to December 31, 1929. A total of 135,600 votes included 61,559 for the California Quail, 18,966 for the Bluebird, and 12,776 for the Bullock Oriole. The campaign cost \$511.64, of which \$134.09 for postage was

borne by the chairman, Mrs. Bicknell, and 28,895 pieces of literature were distributed by her. California is the nineteenth state to select a state bird. The following papers were read by title: "The Farm Game Problem" by Mrs. A. J. French, "Field Notes on the Geese of Central California" by James Moffitt, and "The Problem of Damage to Agriculture in California by Birds" by Stanley E. Piper. About 70 persons were present.

In the evening the Annual Dinner, with 79 persons in attendance, was held at the "Mary Louise", West 7th at Lake. L. H. Miller was toastmaster and many of those present responded to his witty solicitations for comments on matters ornithological.—TRACY I. STORER, *Secretary*.

BOARD OF GOVERNORS.—The ninth annual meeting of the Board of Governors of the Cooper Ornithological Club was held at Hollywood, California, on April 13, 1930. The members gathered at breakfast as guests of Dr. and Mrs. Guy C. Rich at their residence, 1820 El Cerrito Place. At 10:30 a. m. President Miller called the meeting to order with the following members present: Mrs. H. W. Grinnell, Messrs. J. S. Appleton, L. B. Bishop, W. L. Chambers, Joseph Dixon, B. W. Evermann, J. Grinnell, C. B. Lastreto, J. E. Law, Joseph Mailliard, Harold Michener, W. M. Pierce, G. C. Rich, Howard Robertson, J. McB. Robertson, T. I. Storer, George Willett and George M. Wright. J. G. Taylor was also present for a brief period. By invitation S. G. Jewett sat with the Board. The following members were represented by proxies: Donald R. Dickey by W. L. Chambers; W. K. Fisher and F. N. Bassett by Joseph Grinnell; Ralph Arnold, J. G. Tyler, H. S. Swarth, H. C. Bryant and G. F. Morcom by L. H. Miller; Amelia S. Allen, H. W. Carriger and J. S. Cooper by T. I. Storer.

Minutes of the eighth annual meeting were read and approved.

Those present signed a letter of greeting and good cheer for our fellow-member, Mrs. Amelia S. Allen, who is recovering slowly from injuries received in an accident last winter.

The report of the Business Managers, in the form of an audit of the Club's accounts by Waldrof J. Boland, was presented, commented upon by J. E. Law and W. L. Chambers, and accepted by unanimous vote.

A letter was read from the Secretary of the Seventh International Ornithological Congress inviting the Club to designate a Committee of Delegates. The President was empowered to appoint delegates. Mr. H. Van Straaten, H. S. Swarth, Alexander Wetmore and Casey A. Wood were designated.

Matters of editorial policy and action were presented by Joseph Grinnell. Four major items were commented upon and received attention of the Board, as follows:

1. The Mailliard Prize in Ornithology, offered by Joseph Mailliard, evoked a considerable amount of interest. From fifteen articles meeting the conditions, that by J. M. Edson which is appearing in the current issue of *The Condor* has been awarded the prize.

2. *The Condor* has been criticised for not offering a greater amount of more popular material. The editorial policy has been to print only those offerings which make sound additions to ornithological knowledge, eliminating mere duplications and items which afford nothing more than easy reading. The Board voted an expression of satisfaction with the present character of *The Condor* and approved the current policy of the editors.

3. A request for volunteers to compile the third ten-year index to *The Condor* was responded to by Messrs. Griffing Bancroft, L. P. Bolander, M. P. Skinner and George Willett. The last named was selected and has completed the index of 400 typewritten pages, ready for the printer. Authorization for publication of the index as a Pacific Coast Avifauna was given, and a vote of thanks was tendered George Willett for his services to the Club.

4. The biennial roster, now appearing with separate lists for honorary, life and active members, has been criticised as to form. It was decided to resolve the roster into two lists, one for honorary members, the other for all others, with suitable designation of life members.

Joseph Dixon then reported as Club representative on the council of the Associated Sportsmen's Clubs. Some progress has been made, though consistent and well-balanced action is difficult to achieve. The Board voted to continue Joseph Dixon as its representative in this position.

Discussion of incorporation proceedings was initiated by Howard Robertson, followed by J. E. Law and others. Completion was urged by all present. A motion

was passed, reappointing the President, Secretary and Howard Robertson as a special committee to continue activity. Upon receipt of corrections from D. R. Dickey, early completion was urged, and the President was given power to discharge the original incorporation committee.

A rising vote of thanks was tendered Dr. and Mrs. Rich for their hospitality to the Board.

Under new business, J. E. Law discussed tendencies in Club activities. Originally, collecting of eggs and skins was a prime topic of discussion; later, recording of natural (life) history data became an important objective; at present a very great breadth of subjects is being covered, some having but minor relation to ornithology. Chairman Miller stated that all members should assist in the production and promotion of real scientific work. Several members commented on difficulties in obtaining topics. George Willett pointed out that the persons who attend Division meetings regularly, but who do not participate in programs, represent a type of member constituting a certain part of the Club membership and responsive to the present variety in programs.

The matter of legal designation of the California Quail as the state bird was discussed. The President suggested that members might volunteer for service in advancing the matter. C. B. Lastreto thought that the Club should endorse it. The Board of Governors, on behalf of the Club then unanimously voted to endorse the action of the California Audubon Society and the Audubon Association of the Pacific in their efforts which led to selecting the California Quail as the state bird. The Board members discussed generally the matter of encouraging younger students in ornithology.

Upon motion of W. L. Chambers, seconded by George Willett, duly passed, the Secretary cast a ballot re-electing the present officers, with the exception that J. McB. Robertson replaces Harry Harris as one of the Business Managers. The officers for the ensuing year are: Board of Governors: President, L. H. Miller; Vice-President, Joseph Mailliard; Secretary, T. I. Storer. Editor, J. Grinnell; Associate Editor, J. M. Linsdale; Business Managers, W. L. Chambers and J. McB. Robertson.

Adjourned, 1:25 p. m. — TRACY I. STORER, *Secretary*.