

en] serve to show us what enormous numbers of wild-fowl actually exist, and can continue to do so provided they have the proper places to live and breed in and are given reasonable protection. We must remember that they withstood the most persistent and destructive methods of hunting, such as the decoy systems of England and Holland, so long as their feeding grounds remained intact, but just as soon as these were reduced beyond a certain point, the numbers which were annually taken fell away rapidly" (p. 37).

Turning now to the illustrational features of the work in hand, I can simply say that, aside from the maps, they are admirable both from the standpoint of art and of ornithological delineation. Nearly all the colored drawings reproduced in this volume are from the brush of Fuertes and are, I believe, his "best yet". The processes of reproduction, by many impressions on a high-grade, non-glazed paper, have brought remarkably satisfactory and lasting results. As to the maps, however, the mechanical style in which they are handled does not appeal to me. Much more delicate lines could have been employed, and each map could have been run in the text on distribution (instead of on one side of a whole separate sheet).

The one, and outstanding, drawback to Phillips' "Natural History of the Ducks" is its expensiveness—fifty dollars per volume, I hear. This puts it out of reach of practically all beginning bird students, just those who should profit by having high standards of ornithological literature before them, and probably beyond the reach of a large proportion of advanced students as well. Furthermore, the size of the edition, I understand, is just 400 copies, this small number prescribing a deplorable limitation in distribution.

I wonder if it might not have been possible to issue a special edition *minus* the plates, and on inexpensive paper, so that the text alone would have been available widely to students. After all, does not the kernel of ornithological record lie in *text*, rather than in illustration? Carefully couched descriptions and statements can take the place in large measure of even the best type of illustration. From a strictly scientific point of view, when the factor of expense must be weighed, text is more to be desired than pictures, and the latter must in extremity be dispensed with altogether.

Finally, be it known, the enthusiastic approval of Phillips' "Natural History of the Ducks" here expressed has not been induced by the receipt of a complimentary copy "for the favor of review"! None has been received, nor is one expected. The copy we have studied was loaned us by a fortunate friend.—J. GRINNELL, *Museum of Vertebrate Zoology, Berkeley, February 18, 1923.*

## MINUTES OF COOPER CLUB MEETINGS

### NORTHERN DIVISION

DECEMBER.—The regular meeting of the Northern Division of the Cooper Ornithological Club was held at the Museum of Vertebrate Zoology, Berkeley, December 28, 1922, at 8 p. m. President Swarth was in the chair with the following in attendance: Mesdames Allen, Delport, Calvert Mead, and Schlesinger; the Misses Burk and Flinn; Messrs. Bryant, Bunker, Carriger, Cooper, Evermann, Gignoux, Grinnell, Hudson, Labarthe, LaJeunesse, Mailliard, Miller, Storer, Tyler, and Wright. Among the visitors present were Mrs. Cooper, Mrs. Swarth, Mr. Labarthe, Jr., and Mr. Wilson.

The minutes of the November meeting of the Northern Division were read and approved followed by the reading of the minutes of the Southern Division for November. Mr. and Mrs. H. C. Cantelow were proposed for membership by Mrs. J. T. Allen, and Miss Susan T. Mackey, Cloyne Court, Berkeley, by Mrs. Edwin Mead. Dr. Evermann reported for the committee appointed to consider the Public Shooting Grounds Bill that no more definite information had been obtained as yet through correspondence with headquarters at Washington. He offered the motion that the club give approval to the bill as adopted by the Fish and Game Commission of California. His motion was seconded by Mr. Wright. An amendment was offered by Dr. Grinnell, striking out the amendments proposed by the Fish and Game Commission. This amendment was duly seconded but lost. Mr. Storer then offered an amendment that the club approve the bill except the clause which permits the owner of property to hunt on his own premises without a hunter's license. The amendment was accepted by the original movers and was carried.

Nominations for officers for the coming year were then called for. Mr. Cooper was nominated for president by Evermann, seconded by Grinnell; Mr. Cooper nominated

Mr. Swarth, but there was no second and the nominations were closed. Mr. Dixon was nominated for vice-president by Mailliard, seconded by Wright. Nominations were closed. Mrs. Allen was nominated for secretary by Miller, seconded by Wright. Nominations were closed.

Business completed, the club listened to a very interesting talk by Mr. Swarth on the Birds of San Francisco Mountain, Arizona.

Adjourned.—AMELIA S. ALLEN, *Secretary*.

JANUARY.—With about sixty members present, a short business meeting of the Northern Division of the Cooper Ornithological Club was held at the Museum of Vertebrate Zoology at the close of the preview of Mr. Donald R. Dickey's motion pictures on the evening of January 25, 1923.

The minutes of the December meeting of the Northern Division were read and approved, followed by the reading of those of the Southern Division. Mr. Granville E. Thomas, 1533 Spruce St., Berkeley, was proposed for membership by Mr. Paul F. Bunker, and Miss M. Pamela Clough, 844 Arlington Road, Berkeley, by Mrs. J. T. Allen.

A communication from Representative Julius Kahn promising to give careful consideration to the recommendation of the club when the Public Shooting Grounds Bill, H. R. 5825, comes up in the House was read by the secretary.

On motion of Dr. Bryant, duly seconded, the Secretary was instructed to cast the ballot for the officers nominated at the December meeting. Business completed the club adjourned to give the members an opportunity to meet Mr. Dickey and Major Brooks.—AMELIA S. ALLEN, *Secretary*.

#### SOUTHERN DIVISION

NOVEMBER.—The regular monthly meeting of the Southern Division, Cooper Ornithological Club, was held the evening of the 30th at the Los Angeles Museum. Mr. Law was acclaimed chairman of the evening. Members present were: Misses Brown, Burnell, and Potter; Mrs. Law; Messrs. Allen, Barnes, Bishop, Cantwell, Chambers, Colburn, Cookman, Hill, Lamb, Law, Mailliard, Miller, Reis, van Rossem, and Wyman. Visitors were: Mesdames Bishop, Cookman, Hill, van Rossem, and Wyman.

Minutes of October meeting were read and approved. Proposals for membership were: Edwin R. Kalmbach, Biological Survey, Washington, D. C., by A. Wetmore; Levi A.

Giddings, 437 Douglas Ave., Salt Lake City, Utah, by John Sugden; and from the Northern Division, Carl P. Russell, Reno, Nevada.

On motion of Dr. Miller, the members voted unanimously to add the name of G. Freaun Morcom to the honorary list.

The question of holding meetings at the Southwest Museum was brought up, and on motion of Mr. van Rossem, amended by Dr. Miller, it was voted to hold three meetings yearly at that Museum, dates to be determined by the Entertainment Committee.

A letter was read from the head of the City Library, promising efforts to provide better accommodations for bird study.

Mr. Mailliard spoke briefly on the activities of the California Academy of Sciences, after which Mr. van Rossem gave an interesting talk on "Plumage Changes of the Black Tern."

Adjourned.—L. E. WYMAN, *Secretary*.

DECEMBER.—The regular meeting of the Southern Division of the Cooper Ornithological Club was held at the Los Angeles Museum on the 28th at 8 p. m. Members present were: Mesdames Anthony, Schneider, and Warmer; Misses Burnell, Palmer, and Pratt; Messrs. Appleton, Bishop, Bryan, Chambers, Cookman, Lamb, Lelande, Little, Miller, Pierce, Reis, Rich, Warmer, Wood, and Wyman. Visitors were Mrs. Bishop, Mrs. Cookman, Miss Creager, and Miss Preisman.

Minutes of the November meeting were read and approved, and those from the Northern Division for October and November were read. Alden Holmes Miller, 6066 Hayes Ave., Los Angeles, was proposed for membership by L. H. Miller; and the Northern Division sent the names of Mrs. Mary E. Delpport and Miss Susan E. Beaman.

Dr. Warmer moved that a committee of three be appointed to draft resolutions on the death of Mr. Millard; seconded by Mr. Miller and carried, whereupon President Rich appointed Messrs. Law, Chambers, and Bishop.

On motion of Dr. Miller that a committee be appointed to select candidates for the coming election, the chair named Messrs. Miller, Chambers, and Lamb.

The paper of the evening was by Dr. Miller, who ably presented the subject, "The Study of Fossil Birds."

The following half-hour of informal discussion developed some unusually interesting observations on birds.

Adjourned.—L. E. WYMAN, *Secretary*.