

Now, well attested, often accurately measured, observations are accumulating. A valuable summary of these is presented in a paper in the *Ibis* for April, 1921 (pp. 228-238), contributed by Colonel Richard Meinertzhagen, D. S. O., M. B. O. U. Much of the exact data was secured during the war when instruments of observation at anti-aircraft stations were employed and birds in flight used as objectives on which to practice. In conclusion, from all the data at hand, this author places the normal and migratory rates of flight, in miles per hour, of certain birds as follows: Corvidae, 31-45; smaller Passeres, 20-37; Starlings, 38-49; Falcons, 40-48; Geese, 42-55; Ducks, 44-59; tame Pigeons, 30-36; Waders, 34-51, but mostly 40-51. When pressed (aeroplane in pursuit), Golden Plover attained to 60 miles per hour; a Lammergeier (nose-diving) to 110 miles per hour.

MINUTES OF COOPER CLUB MEETINGS

NORTHERN DIVISION

SEPTEMBER.—The regular meeting of the Northern Division of the Cooper Ornithological Club was held at the Museum of Vertebrate Zoology, September 22 at 8 P. M. President Wright presided and those in attendance were: Mesdames Allen, Bamford, Burk, Flinn, Grinnell, Mead, and Schlesinger; Messrs. Bell, Cooper, Evermann, Grinnell, Hunt, Johnston, McLean, Palmer, Storer, Taylor and Wright; visitors: Mrs. Bogle, Mrs. Evermann, Mrs. Hunt and Mr. Stow.

August minutes for Northern and Southern Divisions were read, the former being approved. Names proposed were Mrs. Sara S. Bogle, Berkeley, by Tracy I. Storer, and Miss Clare E. Johnson, San Francisco, by Mrs. E. D. Roe. Among the reports from the members who had spent vacation time in the open were: Notes on the Olympic Mountains by Dr. Walter P. Taylor; observations in southern Oregon, by Mr. R. H. Palmer; in Alpine County, by Mr. Richard Hunt; in the Tahoe region, by Mr. Storer and Mrs. Mead; at Cisco, by Mrs. Schlesinger; on Tuolumne Meadows, by Miss Flinn; in the Coulterville region, by Mrs. Grinnell; and in the Chiricahua Mountains, Arizona, by Mr. Donald McLean. Adjourned.—AMELIA S. ALLEN, *Secretary*.

OCTOBER.—The regular meeting of the Northern Division of the Cooper Ornithological Club for October was held on the evening of the 27th at 8 P. M. at the Museum of Vertebrate Zoology. President Wright

was in the chair and the following members were in attendance: Mesdames Allen, Bamford, Bennet, Blake, Bogle, Burk, Flinn, G. T. Roe, Schlesinger and Wythe; Messrs. Carriger, Dixon, Evermann, Grinnell, Jos. Mailliard, McLean, Storer, Stow, Swarth, White, and Wright; visitors: Miss Davenport, Mrs. Evermann, Mrs. Storer, Mrs. Swarth, Mrs. White and Mr. Bunker. The minutes of the September meeting of the Northern Division were read and approved and the minutes of the meetings of the Southern Division in August and September were read. The following names were presented: Willard Fordyce Grinnell, Berkeley, by J. Eugene Law; Frederic C. Torrey, Berkeley, and Harry P. Stow, Alameda, by J. Grinnell; Dr. Robert Dill, Reno, Nevada, and Zola Zinn, Seattle, Washington, by R. H. Palmer.

The program for the evening was given by Mr. H. S. Swarth, who recounted many interesting ornithological experiences in British Columbia. Adjourned.—AMELIA S. ALLEN, *Secretary*.

NOVEMBER.—The November meeting of the Northern Division of the Cooper Ornithological Club was held on the 17th at the usual time and place. President Wright was in the chair, and the following members were present: Mesdames Allen, Boyle, Burk, Flinn, Grinnell, E. T. Mead, C. Meade, G. T. Roe, and Schlesinger; Messrs. Gignoux, J. Grinnell, W. F. Grinnell, Joseph Mailliard, McLean, Storer, Swarth, and Wright. Visitors: Mrs. Calder, Mrs. Evermann, Mrs. Fredericks, and Miss Sherman.

The minutes of the October meeting were read and approved, and the following names were presented for membership: Dr. G. Dallas Hanna, San Francisco, by Dr. Barton W. Evermann; Emily Dolores Laloge, Alameda, by Margaret W. Wythe, and Paul Fredericks Bunker, Berkeley, by H. C. Bryant.

Mrs. Fredericks of the California Botanical Society brought to the notice of the Club the law, recently passed, relating to the gathering and sale of toyon berries. Mr. Storer revived the question of the possibility of securing the adoption by the Berkeley City Council of an ordinance relating to the licensing of cats. It was decided to review the situation at the next meeting. Business concluded, Mr. Joseph Mailliard told of his experiences with birds in Humboldt County during the fall migration. Adjourned.—AMELIA S. ALLEN, *Secretary*.