

The study of the flight of birds through observation and ordinary slow-motion photography is now well into the period of diminishing returns. Marey photographed gulls at a rate of 50 pictures per second before man could fly and Mr. Storer's pictures were taken only two and one-half times as fast. For further advance in the study of bird flight we need experimentation and new methods such as stroboscopic photographs of birds flying in a wind tunnel where air currents can be controlled.—CARL B. KOFORD.

### COOPER CLUB MEETINGS

#### NORTHERN DIVISION

**JUNE.**—The regular meeting of the Northern Division of the Cooper Ornithological Club was held on Thursday, June 23, 1949, at the University of California, Berkeley, California. The following proposals for membership were read: Mrs. Lucile S. Waite, 342 63rd St., Oakland 9, Calif., and Ethel Bumbaugh, 394 Orange St., Oakland 10, Calif., by Junea W. Kelly; and Mrs. Bertha M. Rice, P. O. Box 1147, San Jose, Calif., by Lois C. Taylor.

The program for the evening was devoted to several extensive field reports from members. Included was a report by Henry Childs on his studies of 30 nesting pairs of Brown Towhees on the University of California campus.—LOIS C. TAYLOR, *Acting Secretary*.

**SEPTEMBER.**—The regular meeting of the Northern Division of the Cooper Ornithological Club was held on Thursday, September 1, 1949, at the University of California, Berkeley, California. The following names were proposed for membership: Miss Louise F. Perring, 4821 Cedar Ave., Philadelphia 43, Pa., by Junea W. Kelly; Philip Hanford Arend, 2399 Prospect Ave., Berkeley 7, Calif., by Paul Covel; Vincent Surr, 64 Panoramic Way, Berkeley 4, Calif., by Wade Fox; William D. Thompson, 541 Wildwood Ave., Jackson, Mich., by Alden H. Miller; and Juan C. Esteban, Instituto Miguel Lillo, Tucumán, Argentina, by Frank A. Pitelka, the last for life membership.

Mr. Childs reported for the conservation committee that Berkeley Aquatic Park is to be maintained and improved. John Davis described the capture of a young Arctic Three-toed Woodpecker in Reds Meadows. John Chatten reported that health conditions for waterfowl in the Tule Lake and Klamath Refuges have greatly improved.

Dr. George A. Bartholomew, Jr., the speaker of the evening, discussed the "Effect of Day-length and Light Intensity on Reproduction in Birds."—LOIS C. TAYLOR, *Acting Secretary*.

#### SOUTHERN DIVISION

**SEPTEMBER.**—The regular meeting of the Southern Division of the Cooper Ornithological Club was held on September 27, 1949, at the University of Southern California. The following names were proposed for membership: Lawrence B. Chapman, 1 Woodridge Rd., Wellesley 81, Mass., and James Henry Bruns, St. Francisville, Louisiana, by W. L. Chambers; Mrs. Herbert C. Judd, 1715 N.E. Buffalo St., Portland 11, Oregon, by Sidney B. Peyton; Dr. Ray C. Erickson, Malheur National Wildlife Refuge, Box 113, Burns, Ore., by S. G. Jewett; Mrs. Ernest Koch, 1188 Dolores St., San Francisco 10, Calif., by Junea W. Kelly; Ronald Arch Ryder, Colorado Cooperative Wildlife Research Unit, Ft. Collins, Colo., by F. A. Pitelka; H. A. Allen, 607 S. Hill St., Los Angeles 14, Calif., Mrs. Ray J. Haley, 950 Leyden St., Denver 7, Colo., and R. D. Sweeney, 460 N. Las Palmas, Los Angeles 4, by W. J. Sheffler; Francis Henry Boynton, 163 State St., Pasadena 2, Calif., J. Fred Denton, 1510 Pendleton Rd., Augusta, Georgia, George J. Dickerson, 6220 Temple Hill Dr., Los Angeles 28, Calif., Mrs. Arthur R. Gunn, 401 E. Sycamore Ave., El Segundo, Calif., Don Johnson, 1435 S. Van Ness, Santa Ana, Calif., James Bradley Nickels, 13157 Valley Vista, North Hollywood, Calif., Robert A. Norris, 165 Wilcox St., Athens, Georgia, and Lorna Weber, 403 S. Sycamore Ave., El Segundo, Calif., all by C. V. Duff. The Southern Division voted unanimously to elect Stanley G. Jewett, J. R. Pemberton and John McB. Robertson to Honorary Membership in the Club. [Similar action in concurrence has been taken by the Northern Division.]

W. N. Jupe presented a colored motion picture, "Desert Birds," which included a life history of a Costa Hummingbird. He also showed a short film on the Great Gray Owl in the Yosemite region.—DOROTHY E. GRONER, *Secretary*.

**OCTOBER.**—A special meeting of the Southern Division of the Cooper Ornithological Club was held on October 4, 1949, at the University of Southern California. The following names were proposed for membership: William N. Jupe, 3450 Primera Ave., Los Angeles 28, Calif., James Black Meyer, Jr., 4523 Firmament Ave., Encino, Calif., and Lewis C. Sommerville, Lodi Academy, Lodi, Calif., all by C. V. Duff.

Jean Delacour, the speaker, compared some European, African and Asiatic forms of birds with certain local western North American species.—DOROTHY E. GRONER, *Secretary*.