

the interplay of external and internal causal factors underlying behavior patterns, such as nest-building and mating, each with subordinate components and each in turn part of a total of behavior patterns that function in satisfying a basic drive, as that of reproduction. There are important theoretical discussions of "innate releasing mechanisms" and of a "center theory" of instincts; but the parts of the text that will help the field worker right now in sharpening his thinking on behavior and in focussing attention on elusive points are the chapters dealing with internal and external factors and the one dealing with adaptiveness of behavior. There are excellent ink drawings scattered throughout the text, and the frontispiece photograph of a threatening stickle-back fish helps to open the text in an effective manner. Perhaps the only serious complaint about the book is its price, which for so small a book is unreasonably high.

There are two other recent books on behavior which should be mentioned here. The first is Lorenz's "King Solomon's Ring," a popular account of some of the author's researches on a variety of animals, but particularly birds. Humanistic, warm, and entertainingly written, this book appeals to a wide range of readers. It was a non-fiction choice of a book-club in England, where the book was published in 1952 by Methuen and sold for \$2.25. In the United States, it is distributed by Crowell Press and sold for \$3.50.

The second book is a symposium collection of papers entitled "Methodology and Techniques for the Study of Animal Societies" (Annals of the New York Academy of Sciences, 51:1001-1122, 1950). There are eleven papers dealing with various aspects of research procedure in the field of behavior. Included are papers by J. T. Emlen on techniques of observing bird behavior, one by N. E. Collias on social life, and one by John W. Scott on comparative studies of three species of grouse. The price is \$2.50. This group of papers provides a very useful guide for students of behavior.—FRANK A. PITELKA.

**BETWEEN PACIFIC TIDES.** By Edward F. Ricketts and Jack Calvin. Third edition; revised by Joel W. Hedgpeth. Stanford Univ. Press, xiv + 502 pp. 1952. \$6.00.

This excellent book on the invertebrate animals of the intertidal zone along the Pacific Coast, particularly the Californian coast, should be known to all ornithologists interested in the ecological settings in which they observe birds of beaches, rocky coasts, mudflats, bays, and inshore

waters. The latest edition of this book, well-known among marine zoologists, was prepared by Dr. Hedgpeth of the Scripps Institution of Oceanography at La Jolla, California. It retains all the good features of previous editions and also provides a new chapter on intertidal zonation and a thoroughly re-worked, and interestingly annotated bibliography. The latter is in effect a guide to literature on marine life of the Pacific Coast. There are about 200 illustrations, mostly of invertebrate animals and their habitats. About birds *per se* this book says very little, but it is an invaluable source of information on bird habitats of the coast proper, on the food resources and conditions in these habitats, and on the geography of the coast line generally.—F.A.P.

## COOPER SOCIETY MEETINGS

### NORTHERN DIVISION

**NOVEMBER.**—The monthly meeting of the Northern Division of the Cooper Ornithological Society was held on November 6 at the University of California, Berkeley.

The speaker of the evening, Mr. Merton N. Rosen, Parasitologist with the California Department of Fish and Game, presented a survey of Progress in Wildlife Disease Control.—ROBERT K. SELANDER, *Acting Secretary*.

**DECEMBER.**—The monthly meeting of the Northern Division of the Cooper Ornithological Society was held on December 4 at the University of California, Berkeley. Mr. Elmer E. Highley, Monterey Union High School, Larkin Street, Monterey, California, was proposed for membership by Mr. Laidlaw Williams.

A committee to nominate officers of the Northern Division was appointed consisting of Mrs. Harold C. Austin (chairman), Dr. A. Starker Leopold, and Mr. Paul F. Covel.

Oliver P. Pearson narrated a colored motion picture on The Animal Life of the Altiplano of Peru.—ROBERT K. SELANDER, *Acting Secretary*.

**JANUARY.**—The monthly meeting of the Northern Division of the Cooper Ornithological Society was held January 8, 1953, at the University of California, Berkeley. Mr. Donald W. Humphrey, Box 664, St. Maries, Idaho, was proposed for membership by Frank A. Pitelka.

The Nominating Committee presented the following slate of officers for 1953: Robert T. Orr, president, Charles G. Sibley, first vice-president, T. Eric Reynolds, second vice-president, and Robert K. Selander, secretary. There being no

further nominations, on a motion from the floor the slate of officers was accepted and an unanimous ballot cast.

Mrs. T. Eric Reynolds presented a colored movie, "Western Discovery: A Nature Travelog from the West Coast of Mexico to Puget Sound."—ROBERT K. SELANDER, *Secretary*.

FEBRUARY.—The monthly meeting of the Northern Division of the Cooper Ornithological Society was held February 5, 1953, at the University of California, Berkeley. Richard E. Warner, Rt. 2, Box 502, Morgan Hill, Calif., was proposed for membership by Charles G. Sibley.

Mr. Wallace G. MacGregor discussed "Recent Developments in California Quail Management."—ROBERT K. SELANDER, *Secretary*.

MARCH.—The monthly meeting of the Northern Division of the Cooper Ornithological Society was held on March 5, 1953, at the University of California, Berkeley. The following memberships were proposed: Monte O. Cheney, Route 3, 2218 Linden, Caldwell, Idaho, by A. H. Miller; and George F. Townes, 500 Summer St., Greenville, South Carolina, by F. A. Pitelka.

Dr. Robert T. Orr presented an illustrated talk on "Summer Observations in Northern Baja California."—ROBERT K. SELANDER, *Secretary*.

APRIL.—The monthly meeting of the Northern Division of the Cooper Ornithological Society was held on April 2, 1953, at the University of California, Berkeley.

Dr. Carl B. Koford spoke on "Tinamous and Other Birds of the Central Andes."—ROBERT K. SELANDER, *Secretary*.

#### SOUTHERN DIVISION

NOVEMBER.—The monthly meeting of the Southern Division of the Cooper Ornithological Society was held November 25, 1952, at the University of Southern California. The following names were proposed for membership: C. Mortimer Palmer, Jr., P. O. Box 414, Tombstone, Ariz., by J. W. Wright; S. S. Whitehead, Box 393, Corcoran, Calif., by C. H. Anderson; Robert E. Blackstone, 8572 Holloway Dr., Los Angeles 46, Calif., Norman H. Mellor, M.D., 2724 Garretson, Corona, Calif., and Harry Yurick, 948 W. 4th St., Hazelton, Pa., all by J. C. von Bloeker, Jr.; Theodore Downs, L. A. County Museum, Exposition Park, Los Angeles 7, Calif., William J. Evans, 541 N. Citrus Ave., Covina, Calif., John H. Foster, Box 204, Wayne, Pa., Mrs. Harry B. Humphrey, 715 West Fremont Ave., Mountain

View, Calif., Ralph A. MacMullen, Box 97, The Heights, Mich., John J. Morony, Jr., P. O. Box 1114, Alamo, Texas, Miss Hattie K. Milner, 331 E. Gowen Ave., Mt. Airy, Phila. 19, Pa., J. E. Retief, 56 Lincoln St., Bellville, Cape Province, South Africa, Dr. Maurice A. Shellim, 7 Middleton Mansions, Calcutta 16, India, Alexander Sprunt IV, 1051 Cragmont Ave., Berkeley, Calif., Harry Madison Smith, Dept. of Zoology and Physiology, University of Wyoming, Laramie, Wyoming, and Raymond Russell Super, 164 Maple Ave., W. Marrayunk, Phila. 27, Pa., all by C. V. Duff.

At the request of the president, the following Nominating Committee was appointed: C. V. Duff, J. R. Pemberton and Ed N. Harrison.

Dr. Jean Delacour, speaker of the evening, and President of The International Committee for Bird Preservation, described the meeting held by that body in Caracas, Venezuela, last summer.—DOROTHY E. GRONER, *Secretary*.

JANUARY.—The monthly meeting of the Southern Division of the Cooper Ornithological Society was held January 27, 1953, at the University of Southern California. The following names were proposed for membership: Barbara Ellen Huber, 1753 Correa Way, Los Angeles 49, Calif., by Wade Fox; James Roger King, Dept. of Zoology, State College of Washington, Pullman, Wash., by Donald S. Farner; Ray B. Lyon, 1290 Foothill Blvd., San Luis Obispo, Calif., by Ian I. McMillan; William Winston Mair, Canadian Wildlife Service, Dept. of Resource and Development, Ottawa, Ontario, Canada, and Ray Thomas, 600 Sarbonne Rd., Los Angeles 24, Calif., by W. J. Sheffler; Wesley B. Fleming, Arizona Game & Fish Commission, Phoenix, Ariz., Leo Pinkas, 632 S. Meyler St., San Pedro, Calif., and Mrs. H. K. Trousdale, 5932 La Salle Ave., Oakland 11, Calif., by F. H. Boynton; Wayne H. Bohl, 210 Agr. Eng. Bldg., Oregon State College, Corvallis, Ore., Herbert Hughes, 8622 W. Adams Blvd., Los Angeles 34, Calif., R. Wayne Nunes, 520 Oatman Ave., Sanger, Calif., Peter C. Petersen, Jr., 620 E. 30th St., Davenport, Iowa, Dorothy E. Snyder, The Peabody Museum, 161 Essex St., Salem, Mass., Frank E. Snyder, 4206 Newdale Dr., Los Angeles 37, Calif., and Don Spencer, Berkshire Game Farm, 271 Madison Ave., New York 16, N.Y., by Jack von Bloeker; Mrs. Harriet Price Craven, 2724 Fourth Ave., Sacramento 18, Calif., Hans Ragnar Edberg, Ekersgatan 38A, n.b., Orebro 4, Sweden, Mrs. Xenia Erickson, 5615 Harcross Dr., Los Angeles 43, Calif., J. Bernard

Gollop, Canadian Wildlife Service, University of Saskatchewan, Saskatoon, Sask., Canada, Charles F. Lambert, 444 W. Sycamore St., Willows, Calif., John L. Miller, 3310 W. Washington Blvd., Los Angeles 18, Calif., Reginald Cecil Miller, Standard Bank of So. Africa Ltd., 70 Stott Rd., Pietermeritzburg, Natal, So. Africa, J. G. Nicollaud, 48 Rue Descartes, Chinon, France, Brendan M. O'Malley, Anchor Buildings, Westport, County Mayo, Republic of Ireland, Miss Lotta Vesta Parsons, 1311½ Twenty-seventh St., Sacramento, Calif., Edwin R. Pickett, 3940 "N" St., Sacramento 19, Calif., Yvareg Shri Virbhadrasinghji Saheb of Bhavnagar, Nilambag Palace, Bhavnagar (Saurashtra, India), E. W. Sawyer, 425 N. June St., Los Angeles 4, Calif., Durward Bruce Swinehart, Jr., 2109 Juanita Lane, Sacramento 21, Calif., Trevenen Johns Taylor, 301 6th St., Davis, Calif., William Lay Thompson, Dept. of Zoology, University of California, Berkeley 4, Calif., and Thomas B. Thorson, Division of Natural Sciences, San Francisco State College, San Francisco 2, Calif., and Harold A. Zimmerman, 2218 N. Linden St., Muncie, Indiana, all by C. V. Duff.

The Nominating Committee presented the names of Wade Fox, Jr., for president, Jean Delacour for first vice-president, John Davis for second vice-president, and Dorothy E. Groner for secretary; these persons were unanimously elected.

"My Five Years in Patagonia" was the subject of a talk given by J. R. Pemberton.—DOROTHY E. GRONER, *Secretary*.

FEBRUARY.—The monthly meeting of the Southern Division of the Cooper Ornithological Society was held February 24 at the University of Southern California. The following names were proposed for membership: Joel S. Newman, Jr., 10619 S. Paramount Blvd., Downey, Calif., by Wade Fox; John S. Stanton, Box 2495, Carmel, Calif., by Charles Anderson; J. William Hardy, 2015 McCord St., Murphysboro, Ill., and Mrs. Elizabeth D. Hodges, 6210 Paseo, Kansas City 4, Missouri, by J. C. von Bloeker; Mrs. Evelyn Barr, 362 N. Rexford Dr., Beverly Hills, Calif., Julian J. Baumel, Dept. of Biology, University of Florida, Gainesville, Fla., J. O. Clay, 169 Beach Drive, Victoria, B.C., Canada, Herbert Hamilton Frost, Ricks College, Rexburg, Idaho, Leon L. Gardner, M.D., 3129 Freeman St., San Diego 6, Calif., F. Nowell Jones, 14635 Whitfield Ave., Pacific Palisades, Calif., Edward Dunster Kremers, M.D., 2125 Mar Vista Ave., Atascadero, Calif., and Dr. A. C. Polak, Spoorstraat 15, Amersfoort, Netherlands, by C. V. Duff.

Dr. William R. Dawson discussed "Responses of Birds to Climatic Extremes."—DOROTHY E. GRONER, *Secretary*.