

living in the northwestern United States will find this book, we think, quite the best single volume to own as a guide to their local bird-life. General topics and questions of the day are dealt with in



Fig. 34. P. A. Taverner, author of the "Birds of Canada," Ornithologist in the National Museum of Canada, and for twenty-six years Member of the Cooper Ornithological Club.

Taverner's well-known common-sense way; and they apply south of "the line," as well as north. The book was written with the aim of stimulating "an interest, both esthetic and practical, in the study of Canadian birds." It must surely fulfill this aim.—J.G.

To our notion, the best handling of the subject of birds' voices yet to appear is Aretas A. Saunders' "A Guide to Bird Songs" (Appleton-Century Co., New York, 1935 [our copy received March 4], pp. xvii + 285, 163 figs.; price \$2.50). The method of record used takes into account time, pitch, loudness, quality and phonetics. By combinations of these features, form, rhythm, accent, and other attributes can be expressed. The graphic method of representation consists of a series of lines,

chiefly horizontal, each standing for one note of the song. The length of each of these lines indicates the relative time occupied in the utterance of the note. Its position vertically indicates relative pitch; its heaviness indicates loudness or intensity. Then the phonetic representations and other devices supplement the system, until even complicated songs like those of the song sparrow are quite satisfactorily rendered. We are reminded of the beginnings in this direction made by the late Richard Hunt, whose studies were based upon Californian birds ("The Phonetics of Bird-sound," *Condor*, 25, 1923, pp. 202-208). While Saunders' new book deals with northeastern species (nearly 150 of them), a goodly number of these are transcontinental in range, so that the book can be used with direct profit by westerners. The methods described might well be adopted by field students generally. Someone in California, with "good ear," should make it his steadfast aim for fifteen years or so, as Saunders has done on the Atlantic side, to collect records of birds' voices and then to present the results in the admirable form illustrated in the book now under notice.—J.G.

MINUTES OF COOPER CLUB MEETINGS

SOUTHERN DIVISION

JANUARY.—The regular monthly meeting of the Southern Division of the Cooper Ornithological Club was held at 8 p. m. Tuesday, January 29, 1935, at the Los Angeles Museum, Exposition Park, Los Angeles, with President Abbott in the Chair and forty members and guests present. Minutes of the Southern Division for December were read and approved. Minutes of the Northern Division were read.

Applications for membership were presented as follows: Mr. Kenneth E. Stager, 4300 Budlong Ave., Los Angeles, proposed by George Willett; Mr. B. A. Moeller, 2525 East 37th St., Los Angeles, by Charles A. Warmer; Mr. L. F. Keller, National Park Service, Springdale, Utah, by John McB. Robertson; Mr. James A. Macnab, Linfield College, McMinnville, Oregon, by Stanley G. Jewett; and Mr. Ralph E. Dixon, Star Route, Escondido, California, by Joseph Grinnell.

Commenting on the copy of the minutes of the Affiliation Committee, submitted by secretary Luck of the Pacific Division of the American Association for the Ad-

vancement of Science, president Abbott called particular attention to minute no. 6 pertaining to the organization of the programs of participating societies. On his suggestion, it was moved by Dr. Miller, seconded by Dr. Glassell, and duly carried, that the Southern Division endorse its satisfaction of the program plan for participating societies, and recommend that the California Academy of Sciences and the Southern California Academy of Sciences be included in the same segregation as the Cooper Ornithological Club.

Mr. Willett, as chairman of the nominating committee, presented the following for officers of the Southern Division during 1935: President, Dr. Raymond B. Cowles; vice-president, Mr. Luther Little; secretary, Mrs. J. Eugene Law. No other nominations being offered, Dr. Miller moved that the names suggested by the nominating committee be accepted and the nominations closed. The motion was seconded by Dr. Rich and duly carried. Mr. Pemberton proposed that the Southern Division go on record as having very greatly enjoyed the presidency of Mr. Abbott, and extend to him a vote of thanks for the effort he made in coming up from San Diego to preside at the monthly meetings. This proposal was seconded by Mr. Willett and heartily accepted by all members present.

Mr. Laidlaw Williams, of Pacific Grove, was introduced and spoke briefly of his recent visit to La Jolla where he has been studying the courting activities of the Brandt Cormorant. Dr. Miller told of finding two individuals of the Ancient Murrelet within a week, one at Point Mugu and the other at Hyperion. Mr. John McB. Robertson reported the Chinese Spotted Dove as having arrived in western Orange County. Two of the birds were noted in early January—the first for that vicinity. Tree Swallows, at Lake Hodges, flying in and out of Cliff Swallow nests were recently seen by Miss Faddis.

Mr. Frank Richardson displayed a set of 32 colored prints of Abyssinian birds and mammals, drawn by Louis Agassiz Fuertes. Mr. Abbott said he had seen the originals of these prints when in Chicago last fall and they were considered to be the best of Fuertes' work. The set can be purchased for \$1.50 from the director of the Field Museum of Natural History, of Chicago, Illinois.

Calling attention to a letter received from Warren F. Eaton, in charge, Hawk and Owl Protection, National Association

of Audubon Societies, Dr. Bishop read the Association's policy on hawk and owl protection and outlined what is being attempted in the way of protective legislation for the persecuted birds, and the intention of the Association to secure, if possible, similar protection for both Bald Eagles and Golden Eagles. Dr. Bishop also made available for interested members a list of the books and the educational leaflets that are for sale to secure funds for furthering the protection campaign.

Mr. Kenneth C. Alexander, connected with the Canadian Game Conservation Bureau, was introduced by Mr. Willett. Mr. Alexander has made an extensive study of charted air currents over land and sea and has applied this knowledge to what is now known of the various routes taken by migrating birds. His theory on bird migration to the effect that air currents form barriers which guide the birds was presented in a very logical way and the discussion that followed his short talk was filled with interest.

Adjourned.—LAURA B. LAW, *Secretary*.

FEBRUARY.—The regular monthly meeting of the Southern Division of the Cooper Ornithological Club was held at 8 p. m., Tuesday, February 26, 1935, at the Los Angeles Museum, Exposition Park, Los Angeles, with President Cowles in the Chair and forty members and guests present. Minutes of the Southern Division for January were read and, with corrections noted, were approved. Minutes of the Northern Division for January were read.

Applications for membership were presented, as follows: Miss Charlotte E. Dancy, Utah Agricultural College, Logan, Utah, by W. Lee Chambers; Mr. Harold Merrill Hill, 329 Summit Avenue, Redlands, California, by Roland Case Ross; and Mr. Leslie Wheeler, Lake Forest, Illinois, by H. B. Conover.

The secretary read an invitation extended by "The Peytons" to the Southern Division to again hold its April meeting at Henley's Camp in Sespe Canyon, and on motion by Dr. Warmer, seconded by Mr. Reis, the invitation was accepted and April 28, the fourth Sunday in the month, was chosen as the meeting date. Dr. Miller announced that May 24, 25, and 26 had been selected for the Tenth Annual Meeting of the Cooper Ornithological Club to be held this year at Berkeley.

From a letter written by John H. Baker, executive director, National Association of Audubon Societies, Mr. Willett read a

statement with relation to water fowl hunting regulations in 1935, and said that while members of the Cooper Ornithological Club, as individuals, had written to Washington recommending the protection and conservation of wild water fowl, he thought it might be in order for the Southern Division of the Cooper Club to go on record as sponsoring the recommendations suggested in the statement just read. After an animated discussion which covered many points, the motion was made by Mr. Pemberton that the Southern Division of the Club go on record as favoring a closed season on the shooting of ducks and other wild fowl for the period of one year. This motion was seconded by Dr. Warmer and unanimously carried. A further motion was then made by Mr. Ross, that the president of the Southern Division of the Club communicate to the Advisory Board on Wild Life Protection, at Washington, the temper and mind of this meeting with regard to conservation of wild water fowl and a closed hunting season. After discussion, the motion was seconded by Mr. Willett and unanimously carried.

Some of the field observations reported by members were: A large flock of Brewer Blackbirds seen in Oregon by Dr. Warmer contained a completely white bird, apparently an albino. The question was asked if this was at all common. Mr. Willett replied that partial albinism was not unusual but that a pure albino is rarely seen. Dr. Miller commented on the fact that the White Pelican is commonly considered a bird of the interior and yet he had twice seen one or two at Point Mugu, and that in mid-February he had seen four or five at Bolsa Chica. Mr. Meadows said that a few White Pelicans had been at Bolsa Chica since Christmas. A crested Jay collected at Blythe by Mr. Reis was shown but was not identified subspecifically. Mr. Michener reported the banding in February of an Arizona Hooded Oriole, which rounded out their record for having banded this species every month in the year in their yard at Pasadena. Mr. Richardson reported a nest of Anna Hummer with two young in it, found in Westwood in early February. Dr. Parsons told of having found fledglings in an Anna Hummer's nest, that must have been hatched in January.

Mr. Kenneth C. Alexander, of Vancouver, was again present as a guest, and when called upon by the Chair spoke briefly about some British Columbia birds.

He told of the Glaucous-winged Gull seeming to prefer to nest on the islands where the wild green onions grow; the Western Grebes' preference for fresh water in which to nest; the fine stream-line design of the Green-winged Teal; the swift flight of the Gray Falcon, surpassed only by that of the Hoary Bat; how the Blue Grouse has held its own in spite of hunters. These were only a few of many interesting natural history comments made by Mr. Alexander. In conclusion he referred to the necessity for conservation and protection of our wild life and suggested that perhaps the only way to get nation-conscious in protecting game was to instruct the young in the schools and to keep in touch with youthful organizations such as the Boy Scouts.

Adjourned.—LAURA B. LAW, *Secretary*.

NORTHERN DIVISION

JANUARY.—The regular monthly meeting of the Northern Division of the Cooper Ornithological Club was held on Thursday, January 24, 1935, at 8:00 p. m., in Room 2003, Life Sciences Building, Berkeley, with President Pickwell in the Chair and about sixty members and guests present. Minutes of the Northern Division for December were read and approved. Minutes of the Stanford Chapter for December were read. Proposals for membership were: Elmer C. Aldrich, 2079 39th Ave., Oakland, Calif., by Gayle B. Pickwell; E. A. Kitchen, 4014 North 35th St., Tacoma, Washington, by J. Grinnell; Finn Theodore Malm, 2924 Deakin St., Berkeley, Calif., by Brighton C. Cain; Ben Clifford Gerwick, Jr., 721 San Luis Road, Berkeley, Calif., by Jean M. Linsdale; and Charles Goodwin Thompson, 587 Arlington Ave., Berkeley, Calif., by S. G. Morley.

The nominating committee appointed at the December meeting to name officers for the Northern Division for 1935 reported through the chairman, Mrs. Amelia S. Allen, the selection of the following: President, Alden H. Miller; Vice-president, Donald D. McLean; Secretary, Hilda W. Grinnell. Mr. Joseph Dixon moved that the report of the nominating committee be accepted and that the secretary be instructed to cast a ballot electing the above-named candidates. The motion was duly seconded, unanimously passed, and the secretary reported the ballot cast.

Mrs. G. E. Kelly suggested that anyone wishing to see shore birds should duplicate the trip which she took on January 21, driving to Palo Alto via Dumbarton

Bridge and returning via San Mateo Bridge. About one-half mile north of Alvarado was an excellent place for observing the birds, literally thousands being in sight, among them Wilson Snipe, killdeer, eared grebes, godwits, yellow-legs, three kinds of sandpipers, three of plover, and dowitchers. Near Dumbarton Bridge thirty-six American Egrets were seen. On her way to Stockton on December 27, Mrs. Kelly saw 250 Little Brown Cranes at King Island.

Mrs. Allen reported that during the third week in January two Band-tailed Pigeons were several times seen in the tops of the oak trees at her home. Mr. Sumner Brooks told of seeing two White Pelicans in Wildcat Canyon early in December and of noting a Rhinoceros Auklet at Asilomar in January. Miss Sherman told of seeing a Red-tailed Hawk near her home, with a bird in its claws. On December 19 Mr. Alden Miller visited the camp site near Coalinga where Mr. Grinnell in 1932 found LeConte Thrashers with eggs and young in February. At the time of Mr. Miller's visit these birds were paired, were making courtship displays, and were in full song in the early morning. Miss Wythe announced that the White-throated Sparrow first noted on January 11 on the north side of the Life Sciences Building by Mr. Grinnell had been seen by other observers three times during the third week of January.

Miss Barbara Blanchard was the speaker of the evening and from her studies of the White-crowned Sparrows on the Berkeley Campus she contributed a wealth of interesting material. Beginning her study of the white-crowns early in the spring of 1934, Miss Blanchard quickly realized that there were two differing groups of these birds in her area. One group was of about sixteen pairs, the males of which had definite singing posts. The second category consisted of flocks, each of about twenty individuals; each flock kept for the most part to the higher shrubbery and trees, and none of these birds had definite singing posts. The collection and dissection of a few birds from each group showed that the internal, morphological differences bore out the conclusion already reached from plumage analysis, namely, that the two groups represented different subspecies, resident *nutalli* and wintering *pugetensis*. Miss Blanchard suggested that in the differentiation of species, differences in behavior may precede morphological differences.

Her talk included an account of the nesting, the rearing of the young, and the territoriality of the resident subspecies.

Adjourned.—HILDA W. GRINNELL, Secretary.

FEBRUARY.—The regular monthly meeting of the Northern Division of the Cooper Ornithological Club was held on Thursday, February 28, 1935, at 8:00 p. m. in Room 2003 Life Sciences Building, Berkeley, with President Miller in the Chair and about fifty members and guests present. Minutes of the Northern Division for January were read and approved. Minutes of the Southern Division for January were read in part. Mr. Douglas Lawrence Kraus, 2708 Haste St., Berkeley, Calif., was proposed for membership by Miss Margaret W. Wythe.

President Miller announced that the Tenth Annual Meeting of the Cooper Club will be held in Berkeley from May 24 to May 26, inclusive; also, that the Club's incorporation papers are now filed with the Secretary of State.

Mrs. Allen reported the presence of a Lutescent Warbler at her home on February 28, and that Allen Hummingbirds had been seen in the vicinity for the past week. Mr. Fitch told of hearing the song of a Lutescent Warbler in Strawberry Canyon on February 24. Mrs. Hillebrand found a Song Sparrow nest-building on February 16, and Ted Malm reported that Bush-tits had been constructing a nest in his garden during the past week. Mrs. Kelley told of seeing two flights of Little Brown Cranes near Stockton, one of 250 individuals, the other of 125; of seeing about 300 Egrets on Borden highway near Alameda; and of finding a Clapper Rail in the marsh near there on the morning of February 28. Miss Rinehart compared the feeding habits of a Great Blue Heron and an Egret seen on the northern end of Richardson Bay.

Mr. Clifford Presnall of Zion National Park was a visitor at the meeting and spoke inviting members to visit Zion, Bryce Canyon and Cedar Breaks. He suggested that Zion be visited if possible in May or early June, the other localities later, because of their higher altitudes.

Mr. Donald D. McLean of the California Division of Fish and Game was the evening's speaker; his topic, "The Effects of Civilization upon the Birds of Northeastern California." The speaker's work often takes him into the high volcanic plateaus of Modoc and Lassen counties, in north-

eastern California. There he finds that man's activity has brought about many changes in avian modes of life. Among the numerous instances cited by Mr. McLean were the following: During a period of deep snow he found flocks of Horned Larks aggregating about 15,000 individuals coming in from the snow-covered prairie to seek food and shelter among the tops of the alien Russian thistles which projected above the snow. At this same time birds were following the snow plough for the gravel exposed along roads, their usual source of this necessary material being covered. Each ranch house has its flock of English Sparrows about the barns and these birds fall easy prey to the Northern Shrikes. Reclamation projects on the upper Pit River, at Honey Lake and at Eagle Lake have obliterated marshes where ducks and geese nested formerly. Canada Geese have taken advantage of the safe nesting sites offered by stacks of alfalfa hay and there hatch their young above the reach of predators. All through the region sheep grazing has damaged nesting sites of Sage Hens, Sharp-tailed Grouse, Horned Larks and Western Meadowlarks, and many eggs are crushed by being stepped on. Sharp-tailed Grouse, supposed to be extinct in California, have been reported in small numbers either "re-discovered" or as re-invading Modoc County from outside the state. An Arctic Horned Lark secured by Mr. McLean brings the list of birds recorded from California up to a total of 609.

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

STANFORD CHAPTER

FEBRUARY.—The monthly meeting of the Stanford Chapter of the Cooper Ornithological Club was called to order by President Willis H. Rich on the evening of February 7. The minutes of the previous meeting were accepted as read. The receipt of a letter from Mr. W. I. Follett, Chairman of the Conservation Committee of the Northern Division, was acknowledged by President Rich, who asked if the committee on the Bay Shore Refuge, consisting of Dr. Isabel McCracken, Mr. John Price, and Mrs. Sadie G. Hackley, had anything to report. The committee announced that matters were at present at a standstill. Dr. Rich urged that the committee set to work to clear up the matter before the time of the next meeting, in order that a complete case may be presented at an early date to the State Fish and Game

Commission and to the Board of Directors of the Cooper Club.

The secretary reminded members of the local dues of twenty-five cents payable at the next meeting, which are necessary for the printing and mailing of announcement cards.

In the field of literature, Dr. Rich mentioned the availability of Grinnell's new "Life-zone Map of California," published by the University of California Press. Mr. Lastreto called attention to a publication by Milton S. Ray on the Farallon Islands; he elaborated on the contents of this book, adding that it was a worthwhile addition to the library of anyone interested in California history or in birds. He protested the elimination of the mention of work done by a committee, of which he and the late Dr. Barton W. Evermann were members, on the prevention of waste oil dumping at sea in the vicinity of the Farallon rookeries. A discussion arose upon this serious problem, which evidently still exists according to Dr. Pickwell.

The only field observation reported was made by Dr. Rich, who said that he had noticed some Golden-crowned Sparrows in his garden at home, and that he hoped to trap them in order to identify them.

President Rich then introduced the speaker for the evening, Dr. Gayle B. Pickwell of the San Jose State Teachers College, who spoke on "The Arctic Birds of Mt. Rainier." Dr. Pickwell declared that his principal interest in ornithology has always been in "marginal" birds, that is, birds which occur in a marginal position between conditions which will support bird-life and those which will not. This, primarily, led him to a study of those birds which live above timber-line in the Arctic zone as it occurs on Mt. Rainier in the State of Washington. The bird population in this zone includes the Hepburn Rosy Finch, the Pallid Horned Lark, the American Pipit, and the White-tailed Ptarmigan. As a peculiarity of the rapid changing of seasons at this life level, the lengthy breeding season and season of song as it occurs in most birds at lower levels is here reduced to a period of about three weeks. Illustrating his lecture with a selection of tinted slides, Dr. Pickwell discussed the interesting facts brought to his mind by the various pictures; these included some rare views of nesting pipits and ptarmigan coveys together with illustrations of the arctic flora.

Adjourned.—WILBUR V. HENRY, *Secretary*.