

gation. The survey here presented will aid in orienting and correlating such special studies in the problem of bird temperature."

Eastern House Wrens supplied most of the records and these were obtained mainly during the breeding season. This species is considered typical of small passerine birds in its temperature reactions. Various types of thermocouples used in connection with indicator and recording potentiometer pyrometers were the chief instruments. Perfecting the adaptation of these for the measurement of avian temperatures probably constitutes the most important part of the work of the present authors.

The twenty-three tables and forty-one figures, mostly charts, are models of clear presentation of facts. Nearly one hundred bibliographic references include practically all papers which have a direct bearing on the physiology of temperature in birds. All temperature records are given in both Fahrenheit and Centigrade scales.

A standard temperature was determined (104.4° F. in the male house wren) and used as a basis for comparing factors which influence body temperature. It would seem particularly desirable that this constant be based on records taken at seasons other than the breeding time, for with the varied physiological changes that are known to occur seasonally the standard temperature of non-breeding birds would surely be more characteristic of the species. These workers indicate (p. 28) that they suspect this, but of course such measurements could not be made.

A few points selected from the many lines of evidence considered will indicate the importance of such studies for interpreting the normal activities of birds. First, it must be recalled that mechanisms regulating heat production and heat loss determine the actual temperature. The ingestion of food into the body is associated with a rise in the bird's temperature. Death in the smaller passeriform birds from lack of food at ordinary air temperatures occurs within a very few hours, possibly from some defect caused by undernourishment. Moderate fluctuations in the normal air temperature have little or no effect on the bird's temperature. The peripheral circulation of blood is so rapid and perfect, and the skin is so well insulated with feathers, that variations in air temperature to which birds are exposed do not greatly affect the relation between skin and body temperatures. Greater amount of activity of birds in

summer probably accounts for higher daily temperature in summer. Muscular activity is mainly responsible for the regular daily rhythm in body temperature. Feathers may furnish as much protection against direct solar radiation as they do against intense cold. In the house wren the optimum incubation temperature is probably below 100° F., and a fluctuating temperature may be more favorable than a constant one.

It is not possible to pronounce the book absolutely free of error although it misses this distinction by a narrow margin. No indication is given the reader that the "crow" mentioned (p. 97) in a reference to an American writer is not the common species in the United States, but it is the carrion crow (*Corvus corone*) of Europe. It has not yet been demonstrated that the seasonal variation in the thyroid gland referred to occurs in our crow. The bibliographical reference (p. 166) to Groebels (1928a) should have been to Pflügers Archiv für die gesamte Physiologie des Menschen und der Tiere, not to Zeitschrift für Biologie. The name of the publication, Anatomical Record, is misspelled in two places in the book. However, minor slips of this nature are so infrequent that they should be ignored in considering the usefulness of the volume.

A more serious objection may be found in giving almost one-eighth of the book to an index. While it may be better to make an index too complete than too scant, no doubt many readers would prefer to have had at least fifteen of those pages devoted to the application and interpretation of the findings, mentioned on page 6.

Final appraisal of this publication involves an appreciation of it as an indicator of the growing tendency to employ the tools and suggestions of the laboratory in analyzing purely out-door problems of natural history. Wider adoption of this viewpoint may bring a surprising acceleration of progress in solving these problems.—JEAN M. LINSDALE.

DESCRIPTIONS OF NEW BIRDS FROM THE MOUNTAINS OF SOUTHERN NEVADA. By A. J. van Rossem. Trans. San Diego Soc. Nat. Hist., vol. 6, no. 22, June 5, 1931, pp. 325-332.

A PARTIAL STUDY OF THE CANADIAN SAVANNA [*sic*] SPARROWS, WITH DESCRIPTION OF *Passerculus sandwichensis campestris*, SUBSP. NOV. THE PRAIRIE SAVANNAH SPARROW. By P. A. TAVERNER. Proc. Biol. Soc. Wash., vol. 45, Nov. 10, 1932, pp. 201-206.

DESCRIPTIONS OF NEW BIRDS FROM OREGON, CHIEFLY FROM THE WARNER VALLEY REGION. By Harry C. Oberholser. Scientific Publications, Cleveland Mus. Nat. Hist., vol. 4, no. 1, Sept. 19, 1932, pp. 1-12.

"Outstanding contributions to the study of western birds"—perhaps, but depressing leaflets to one who, like myself, is striving to retain interest in systematic ornithology. Fifty or sixty years ago the study of mammals was emerging from a phase comparable to these present day taxonomic researches in ornithology and it is hard to see why we should lag so far behind. My mind reverts to certain writings of Osgood, in the introduction of his revision of the genus *Peromyscus*, where he gives an illuminating account of the slow development of ideas that preceded his final masterly treatment of an exceedingly difficult group, an account that can be paraphrased to cover the whole study of American mammalogy. Species had been named, here, there and elsewhere, on all sorts of bases and all as distinct entities, an extraordinary patch-work that was beautifully illustrated, both pictorially and as regards "system," in Audubon and Bachman's "Quadrupeds of North America." This patch-work quilt was torn apart by later workers and painstakingly reassembled again and again, in part and as a whole, until finally the real harmonious pattern began to emerge; in some sections, as in *Peromyscus*, with abundant corroborative detail. All this can be paralleled in ornithology, and it was inevitable in both studies that development should have taken the course it did. But there is little excuse today in North America for the addition of more patch-work names; attached with the flimsiest of "basting" and superimposed with little regard for the underlying pattern; and we naturally look for substantial reasons when a new name is inserted into an extremely narrow margin or hem.

To drop the sartorial simile and come to the matters in hand: In van Rossem's paper four "new" birds are named, the Steller Jay, Pygmy Nuthatch, Brown Creeper and Oregon Junco of the locality. It appears to an outsider that the scattered mountain ranges of Nevada, such as supplied these types, might afford just the subject matter needed for studies upon the relationships of the faunas of the Rocky Mountains and the California ranges, a task for some one of ability, possessed of exactitude, and—a discouraging proviso—

some one with patience that sees no need of haste. Whether that student will be grateful for a few miscellaneous names to be juggled about is a question. I should think not. As it happened, I had opportunity to examine the series of juncos, which Mr. van Rossem showed and explained to me, a series conducive to all sorts of speculative surmise undoubtedly, and to be studied carefully in connection with the surrounding forms. Personally, I would not myself have felt justified in coining a name with which to label this little assemblage of variants, nor do I now believe that a name serves any useful purpose. The describer himself says "I do not see how such a case can be handled adequately by our present system of names"! The two pages of comment upon the Junco do not seem to me to have been inspired by much real study. Consider such a statement as this: "Probably no widely distributed genus exists in which the chief divisions are more clearly the result of mutation than in the case of *Junco*." Have we any bird species at all that is "clearly" the result of mutation? And should the glib use of such "tags" and stock phrases be accepted without protest as a satisfactory substitute for carefully considered regional and systematic studies?

Mr. Taverner's contribution, I should say, is condemned at the outset in the unhappy choice of a title, for a *partial* study of the Canadian Savannah Sparrows is not justified. The gist of my whole appeal here is for more nearly *completed* studies. I have myself given a good deal of attention to the western Savannah Sparrows, including personal field work in many regions. I believe that Taverner's conclusions are wrong, but this is not so much to the point here as the demonstrable fact that his comparisons were inadequate. His "*campestris*" with scarcely a doubt is the same as *nevadensis*, a race of which apparently he had no specimens available, but which assuredly should have been taken into account. All the evidence thus far seems to me to indicate that the form we have been calling *alaudinus* (common in winter south to southern California and Arizona) occupies in summer a vast area including interior Alaska and eastward, south to that undetermined region where it meets with *nevadensis*. Any correction of this concept necessarily calls for comparisons with *nevadensis*.

No, I have *not* made careful comparisons of Dr. Oberholser's eighteen new subspecies from central Oregon with re-

lated forms in adjoining valleys, and so, I suppose, any criticisms I might make should be thrown out of court. The point at issue, though, is not so much whether or not there is perceptible in these several series the nice shades or trends that Dr. Oberholser describes. No one, I think, will claim that these new names represent concepts that are comparable with, say, the "subspecies" that were painstakingly admitted by the A. O. U. Committee to the 1910 edition of the Check-list. No curator, I think, but would throw up his hands in despair at the suggestion that he should put his collection and catalogues in order, to accord with these and similar "descriptions." All these recent names, implying a comparison of characters as nebulous and fleeting as melting snowflakes, tend to make our delicate structure of nomenclatural conventions more and more top-heavy and unworkable. They will, so far as is humanly possible, be ignored by the real students of the questions involved. And now, having said my nasty say, let me add that, judging from other publications of the authors here reviewed, I have no reason to question their own ability to deal with those same questions, could they but forget the hunger for mere names and "types."—H. S. SWARTH.

#### MINUTES OF COOPER CLUB MEETINGS

##### SOUTHERN DIVISION

**AUGUST.**—The August meeting of the Southern Division of the Cooper Ornithological Club was held on Tuesday, August 30, 1932, at 8 p. m., in the Los Angeles Museum, Exposition Park, Los Angeles, with Vice-president J. McB. Robertson in the Chair and twenty members and guests present. Minutes of the Southern Division were read and a correction noted. Minutes approved. Minutes of the Northern Division were read.

Chester Lamb reported the presence of the Mexican Ground Dove at San Ysidro, California, and mentioned that another record had been noted for Escondido, California. He also reported the presence of English Sparrows in Mazatlan and four to six hundred miles south in Lower California. Mr. Willett noted the presence of various species of migratory birds now in southern California waters, mentioning the Pink-footed Shearwater in flocks of about a dozen, and much larger flocks of Sooty Shearwater, the Black-vented being conspicuous by their absence. Common

Terns were present and one jaeger. Curlews and godwits were seen five to six miles off-shore, and murrelets seemed to be particularly numerous. Mr. Willett also pointed out that information on the migration of orioles in the fall is exceedingly scanty and suggested that the subject is worthy of more attention, especially as to the difference in time at which the sexes migrate. He also raised the question as to when the English Sparrow first reached the borders of the state and requested information on the nesting season of this species in southern California, mentioning that no records seem to be available on the subject. J. McB. Robertson responded with the information that he had seen young English Sparrows during the latter part of July and again in August. The sparrows select as their nesting sites the spaces between the roofing tiles and the eaves. Dr. Rich described the nests of the English Sparrows in New York State, upon their first appearance in that section, as being built in hardwood trees, domed, and with a side entrance. Later the species took up the present habit of nesting in holes and crevices. Mr. McCoy reported English Sparrows utilizing the nests of Cliff Swallows in April. Mr. Little reported that the sparrows nest in the machine-shops of the industrial section of Los Angeles, in spite of the loud and incessant noises.

Mr. Glassell described some of his recent observations in British Columbia, stating that the Bald Eagles appear to be holding their own in that territory. Miss Hager mentioned the presence of three gulls, species not definitely known, on top of Mt. San Antonio during a high wind, and three or four Cedar Waxwings in Big Pines on August 19. Dr. Rich inquired as to whether any one had knowledge of Mockingbirds rearing three broods of young during a summer, stating that this might be possible judging from recent observations. Raisins had proved an attractive food for the species. Mr. Appleton mentioned the use of the same food for attracting bluebirds in the San Fernando Valley and stated that the species had been induced to nest in bird boxes there.

Adjourned.—R. B. COWLES, *Secretary*.

**SEPTEMBER.**—The regular monthly meeting of the Southern Division of the Cooper Ornithological Club was held on Tuesday, September 27, 1932, at 8 p. m., in the Los Angeles Museum, Exposition Park, Los Angeles, with President Michener in the