dividual bird goes through the changes indicated. What reason is there for believing that goshawks with heavier markings are younger than those with finer vermiculations—since the transversely barred plumage, coarsely or finely marked, is the only test we now know for distinguishing old from young? The author may be perfectly correct in refusing recognition to the western subspecies, striatulus, but a casual statement of his belief, such as is cited above, cannot by itself be expected to convince others.

At just one point in the paper is a trinomial used: "Hybrid Flicker, Colaptes auritus [sic] cafer". As no comments are made it is not clear what inference is to be drawn from this manner of entry.

The bird report by Anderson (pp. 376-381) lists species collected by the Canadian Arctic Expedition on the coast of extreme northwestern British America and northern Alaska. Sixty-one species are listed, mostly without comment. Mr. Taverner's peculiar usage of names is not adopted, the more generally accepted classification of the A. O. U. Check-List being followed throughout.—H. S. SWARTH.

THE GEOGRAPHICAL DISTRIBUTION OF COLOR AND OF OTHER VABIABLE CHARACTERS IN THE GENUS JUNCO: A NEW ASPECT OF SPECIFIC AND SUBSPECIFIC VALUES. By JONATHAN DWIGHT, M. D. Bulletin of the American Museum of Natural History, vol. xxxvIII, June 1, 1918, pp. 269-309, plates xI-XIII, 5 figs. (maps) in text.

Dr. Dwight's previous studies of plumage variation, together with his known interest in the group of birds here discussed, render this publication one deserving of more than ordinary attention. The problem concerned is the classification of the juncos so that names may be applied to the various groups of species and subspecies, the method employed is somewhat novel, and the resulting systematic treatment of the genus is radically different from that adopted in the A. O. U. Check-List. While, however, the arrangement of species and subspecies here given may be taken as the author's conception of their proper relationships, the outcome of the careful study of a large amount of material, the treatise itself is more in the nature of an essay on a method of research, rather than the detailed exposition of accumulated data bearing upon this particular problem. Thus, in the author's own words, it is not so much his purpose "to attempt a complete revision as it is to focus attention upon them [the juncos] from a new angle:" and "the winter ranges are not given and other matters of indirect interest are not taken up because they scarcely come within the scope of this particular study of the Juncos."

As a result the reader is confronted with many sweeping statements, rather dogmat-

ically uttered, on points regarding which he might wish to weigh the evidence for himself before accepting the author's classification of the genus as final.

Characters of the juncos are found to be "of two kinds, qualitative and quantitative, which include all differences of structure. size, proportions, pattern, and coloration. In structure . . . . they are all practically alike; in size and proportions, their differences are quantitative; but, in pattern and coloration, the variations are both quantitative and qualitative." Color characters alone are here considered. Nine areas on the bird's body are differentiated (head, breast, back, sides, wing-coverts, tail, lores, iris, and bill), and each part considered by itself. The geographical distribution of the types of coloration on the several parts is separately platted, and species and subspecies determined according to the extent of coördination in the several maps. In a general way, of course, this (barring the maps) is very similar to what has been done by most monographers of bird groups, though not usually with the different parts of the bird so rigidly defined, nor with such absolute disregard for other modifying factors. Some of the results attained by Dr. Dwight are more or less in accordance with those of one or another of previous authorities on this group, but the allocation of some forms is so widely at variance with all prior classifications, that, before arriving at a final conclusion, it would seem desirable to give some consideration to factors other than those of color characters, so arbitrarily de-

Several forms in good standing in the Check-List are here regarded as hybrids, annectens, ridgwayi, montanus, and dorsalis being disposed of in this way. The specimens serving as types of annectens and ridgwayi had already been shown to be clearly of such character by Ridgway, but that montanus and dorsalis are of the same category is a new idea. The contention appears to be well founded, and is a point of some importance in the author's argument. The occurrence of individual birds apparently of hybrid origin and in sufficient numbers to have long been regarded as representative of distinct forms, is, of course, a feature deserving of most careful consideration in any systematic treatment of the group.

A new name is provided Junco nomenclature, Junco oregonus couesi, proposed for the race called connectens in the Check-List, and shufeldti by Ridgway. Connectens is regarded as a synonym of hyemalis (in accordance with Ridgway's previous contention), and shufeldti as a synonym of oregonus. The type specimen of shufeldti is a winter collected bird from Fort Wingate, New Mexico, and if this individual is actually an example of the Alaskan Junco o.

oreganus that has wandered to this southern point it is a fact in migration worthy of more emphasis than it has received. It is a pity that in this case at least the author did not discuss more in detail the migration and winter habitat of these particular subspecies, for unquestionably New Mexico is far beyond the normal winter range of oreganus. In one place the statement is made that "it is easy to realize that the naming of winter specimens taken perhaps far from their breeding range involves careful matching and measuring of skins and, in a good many doubtful cases, merely clever guessing at the name most applicable." As the type specimen of shufeldti may be admitted to be one of the "doubtful" cases it is questionable if the substitution of the name couesi on the above basis will be at once accepted as a final settlement of the connectens-shufeldti problem.

Under Junco oregonus (pp. 293-294) there is a discussion of certain nomenclatural principles (applied in particular to the classification of a large series of breeding birds from Eldorado County, California), in which the author clearly states his attitude toward the naming of individual specimens. In the series in question, taken well within the range of Junco o. thurberi, certain percentages are declared to be indistinguishable from oregonus and couesi. As the conclusion of a discussion "whether the name we are using applies to the bird or to the locality," the statement is made that "I do not see how we can escape the necessity of calling a specimen oregonus or thurberi, or any other name, if it shows the characters of the form, no matter where it is taken. We must name a bird by the plumage it is wearing not by the one that it ought to be wearing because it has been captured within the bounds assigned to another geographical race." There is room for argument here (personally the reviewer does not agree with the statement made), and apparently in the case in question the author has not had the courage of his convictions to quite a sufficient degree to follow them to a logical conclusion, for the ranges of oreganus and couesi are not defined by him so as to include the point from which these specimens were collected.

In the Junco oregonus group the range of couesi is given as including Vancouver Island. On the map (page 304) showing the distribution of species and subspecies, the dividing line between oregonus and couesi crosses the center of Vancouver Island, an impossible line of demarcation. (Incidentally it may be pointed out that there is no explanatory caption attached to this map, and that the labels affixed to the ranges of couesi, thurberi and pinosus [3b, 3c, 3d] do not correspond with the lettering used on page 292, which is again different from that near the head of page 291.) Extensive se-

ries of juncos in the California Museum of Vertebrate Zoology from Alaska, Vancouver Island, California and Arizona do not bear out the idea of a race on Vancouver Island different from the Alaska bird and wintering in Arizona.

After the protest in the introduction that ornithology is "suffering from an indigestion of names," the genus Junco in particular having endured much from the prevalent "tendency hastily to apply names to every sort of variation, letting the facts catch up with the names as best they may", it is a little surprising to find farther on in the paper not only the description of "Junco oregonus couesi" (which seems to require some additional support beside that here given it) but also the terms "cismontanus" and "transmontanus" (page 295), casually introduced but applied to recognizable birds from specified localities, and hence certainly to be taken into consideration in any study of the nomenclature of the juncos of the regions involved!

The foregoing comments are all made from the point of view of one turning to this paper partly to obtain specific information, partly from a feeling of interest in the author's viewpoint, and finding, as above specified, various points open to discussion. Of the excellence of the contribution from a philosophic standpoint it is hardly necessary to speak, but a quotation from a review by Edgar Allan Poe on a quite different sort of publication may be taken as expressing the present reviewer's attitude: that excellence "is not excellence if it need to be demonstrated as such. To point out too particularly the beauties of a work, is to admit, tacitly, that these beauties are not wholly admirable. Regarding, then, excellence as that which is capable of self-manifestation, it but remains for the critic to show when, where, and how it fails in becoming manifest; and, in this showing, it will be the fault of the book itself if what of beauty it contains be not, at least, placed in the fairest light."-H. S. SWARTH.

CATALOGUE | OF | BIRDS OF THE AMERICAS AND THE ADJACENT ISLANDS | IN FIELD MUSE-UM OF NATURAL HISTORY | (six lines) | By | CHARLES B. CORY | CURATOR OF DEPARTMENT OF ZOOLOGY. | Part II, no. 1, March, 1918, pp. 1-315, 1 plate (colored).

When completed this work will supply bird students for the first time with a complete catalogue in check-list form of the birds of the western hemisphere. The species are listed in the following manner: Scientific name first, with authority, followed by the English name; citations, the original description with the type locality, and of a few of the more important references—to works of monographic character, with colored plates, or with important distributional or nomenclatural subject-matter; ge-