Correction.— In mentioning the 'Preliminary List of the Birds of Tennessee' in the January 'Auk,' p. 103, Mr. W. D. Howser was credited with the compilation and editing. We now learn that this labor was performed by Mr. A. F. Ganier, Curator of the Tennessee Ornithological Society.—WITMER STONE.

RECENT LITERATURE.

Chapman's 'Distribution of Bird-Life in Colombia.'— The appearance of Dr. Chapman's report on the 'Distribution of Bird-Life in Colombia' more than meets our expectations. We realize at once that it is the most important contribution ever made to the subject of which it treats but we further recognize in it the completion of a definite plan, clearly conceived and carefully carried out—an accomplishment that must be as much of a gratification to the author as it is to those who consult the volume. Too often, especially in America, important explorations have been made and extensive collections obtained which through force of circumstances remain unreported, except in so far as a series of 'pre-liminary descriptions' of new forms may be regarded as a report, which in their brevity, are often as much of a hindrance as they are a help to science.

Dr. Chapman assembled his collections, published his descriptions of new species with praiseworthy detail and now presents us with a comprehensive report of the entire investigation, with discussions, not only of the relationship of the birds but of the varied characters of the country they inhabit its forests, rainfall and other environmental conditions, and finally his deductions as to the limits of the present day life zones of Colombia, their history and the probable origin of the bird-life of the country. Needless to say this is no small task especially when we read that: "so indefinitely is the physiography of the country diversified that our entire time in Colombia might have been devoted to a single mountain range and still not have given us the information needed to map its zones and faunas with a thoroughness which would begin to express all the facts and factors involved," and the author modestly adds: "we must therefore, leave to future workers the task of filling in the details....with a hope that they will find the zonal and faunal boundaries here proposed at least fundamentally correct." This hope we are sure will be more than realized.

¹ The Distribution of Bird-Life in Colombia. A Contribution to a Biological Survey of South America. By Frank M. Chapman. Bull. Amer. Mus. Nat. Hist., Vol. XXXVI, 1917. pp. i-x, 1-729; plates I-XLI; text figures, 1-21. New York, 1917.

Up to this time the writers on Colombian ornithology have based their studies almost entirely upon the collections of others, mainly natives, who furnished no information regarding the country in which the specimens. were obtained — usually not even definite localities, so that no intelligent consideration of the range or distribution of the species was possible. Chapman began his investigation in 1911 with a personal trip from Buenaventura on the Pacific coast to Baranquilla on the Caribbean Sea, traversing nearly the whole length of the country down the Cauca and Magdalena Valleys, and crossing two of the three ranges of the Colombian Andes, while two years later he made another trip to the Bogota region, crossing the third range to Villavicencio at its eastern base. He thus obtained an intimate personal knowledge of the country as well as of its most characteristic birds, and was able to direct intelligently the operations of his assistants on the six additional expeditions which they conducted, so as to secure the most important returns; while by his personal association with his men in the field on the two trips above mentioned, he was able to instruct them in the object of the explorations and the best methods by which they might be attained.

Bogota, as is well known, has been since about 1838 a shipping point for bird skins. While these were primarily intended for millinery purposes many found their way into the hands of ornithologists in France and England and hundreds of new species were described with Bogota as their type locality. Of later years it has become evident that most of these specimens did not come from the immediate vicinity of Bogota at all but were brought there by natives who secured them at various more or less remote spots often in quite different life zones or faunas. The determination of the actual habitat of such species became, therefore, a primary necessity in working out the distribution of bird-life in Colombia, and in ascertaining the proper relationship of the species and subspecies, and this led to Dr. Chapman's careful investigation of this critical region — a piece of work which in itself is a contribution of the first importance to neotropical orni-We cannot within the limits of this notice consider in detail the numerous interesting problems of local distribution presented by Dr. Chapman, but a few of his more general conclusions may be stated. In the first place he considers that the remarkable similarity in the fauna of the Pacific Tropical zone in Colombia and Ecuador, and that of the Amazonian forest, indicates that these regions, now totally separated, are parts of a formerly continuous area and that their fauna is pre-Andean. The evolution of new forms has here, he contends, been practically at a standstill and therefore many species occur on both sides of the mountains today showing no differentiation. The tremendous upheaval of the Andean chain on the other hand has been responsible for the rapid evolution of a host of new forms in accordance with the great changes in topography in the area affected.

Above the tropics Dr. Chapman recognizes three zones: the Subtropical; the Temperate; and the Paramo. The fauna of the first has been derived

from the Tropical zone immediately below while the species characteristic of the last two have originated in the same zones at sea-level farther south. Many of these species moreover range north over the entire temperate zone with little or no modification which should be expected, since they have nowhere left the peculiar environment of their original zone. Species of the Subtropical zone on the other hand have pushed up from their original Tropical zone into an entirely different environment with the result that they have in nearly every instance been materially modified. Or as Dr. Chapman puts it: "Uniformity of life increases with altitude." The Cauca Valley, the fauna of which differs decidedly from that of the humid Pacific coast, Dr. Chapman considers to have been under water until post-tertiary time so that its bird-life is of comparatively recent origin.

Another interesting fact brought out in the work before us is the curious break in the Subtropical forest zone, which extends along the Andes to northern Colombia and is then lacking until we reach the high mountains of western Panama and Costa Rica, where the same types, sometimes the very same species, reappear. This break Dr. Chapman calls the "Panama fault," and cites evidence to show that a former connecting range of high mountains, which carried the Subtropical zone over the present tropical interval, has been entirely reduced by erosion and subsidence in comparatively recent geological time.

The chapters treating of these and other distributional problems, with their host of original facts and faunal lists of species will be studied with the deepest interest by all zoögeographers, while the itineraries of the eight expeditions, illustrated as they are by numerous admirable photographs, are fascinating reading for anyone interested in travel and exploration.

The systematic portion of the report based upon the collection of 15,775 skins secured by Dr. Chapman and his assistants, treats of 1285 species and subspecies of which 22 new species and 115 new subspecies have been described by the author in the course of his studies of this extensive material. Most of these were described in previous papers but eleven appear in the present volume for the first time, while for convenience the earlier diagnoses are all reprinted here. One of the novelties discovered by the expeditions is named Troglodytes musculus neglectus (p. 520). This name, as has been pointed out to us by Dr. Charles W. Richmond, is preoccupied by Troglodytes neglectus Brooks, an Old World form of Winter Wren, and it becomes desirable to give it a new name. It seems to us that Troglodytes musculus chapmani would be a fitting name for this Wren and we therefore propose this as a substitute for T. m. neglectus Chapman.

The various species in Chapman's report are numbered in accordance with Brabourne and Chubb's 'Birds of South America.' The synonymy includes a reference to the original description of the species with type locality, and other references to its occurrence in Colombia. This is followed by critical remarks upon range and relationship and a list of localities from which specimens were secured. Dr. Chapman estimates that the whole number of Colombian birds would be about 1700. While we fully

appreciate his motives in limiting his list strictly to species which were encountered by his expeditions, we cannot but regret — even though our attitude be admittedly selfish — that he did not in some way include at least the land birds reported by others from Colombia, thus making his report monographic. The knowledge of the relationships of such forms, which he must have acquired in working up his collections, would have been of the greatest value to others.

The best test of a work of this kind is the actual use of the volume and having had occasion recently to study two neotropical collections, from adjacent areas, in which study Dr. Chapman's work was extensively used, the writer can testify to the admirable style of its arrangement and to its thorough accuracy.

As regards nomenclature, Dr. Chapman adopts subspecies rather more liberally than most recent writers — that is to say, he treats certain forms as subspecies which others would regard as of full specific rank. This is a practice of which we thoroughly approve, since to our mind a name should be made to express as much as possible, and if one form is clearly a derivative of another, the trinomial appellation showing this relation carries more information than would the binomial, while the fact that actual intergradation between the two has not been proven is not of sufficient importance to warrant an expression in nomenclature. In regard to genera, Dr. Chapman expresses himself at some length against their undue multiplication and rejects Eupsychortyx as not separable from Colinus; and Dictiopicus as not distinct from Dryobates. While here again we are in sympathy with our author's attitude it seems that while sacrificing the above mentioned genera, he retains quite a number apparently not any better differentiated. This question must probably be settled by convention as genera are matters of opinion and their relative importance cannot be settled by any criterion or rule. The opinion of one author is probably as good as that of another and all will differ to some extent.

There are many other portions of this admirable work upon which we are unable here to comment — the discussion of climate and precipitation and their influence on the formation of life zones; the formation of the cloud forests; the various faunas into which the zones are divided, etc. Enough has been said however, to show the comprehensive character of the work, and the broad way in which the subject is handled.

Mention must however, be made of the numerous excellent maps and distributional charts and the four attractive colored plates from paintings by Louis Agassiz Fuertes, who accompanied Dr. Chapman upon the two expeditions in which he took part—also the energy and ability of the corps of collectors to whose efforts the success of the several expeditions was largely due: W. B. Richardson, Leo E. Miller, Arthur A. Allen, Geo. K. Cherrie, Paul G. Howes, Geoffroy O'Connell, Thos. M. Ring, and Howarth Boyle.

This volume is entitled "A Contribution to a Biological Survey of South America." We feel sure that it will be the wish of every naturalist who reads it, that when this terrible war is over and Dr. Chapman resumes his ornithological work, he may be able to prepare other similar contributions for which much material is already available at the American Museum. Surely no one today is better equipped for the task.— W. S.

Gee and Moffett's 'Birds of the Lower Yangtse Valley.' — This little volume,¹ apparently reprinted from the columns of a newspaper, is a well prepared account of the more common birds of the region of which it treats, intended to meet the needs of those who wish to become familiar with the wild bird life of China. There is a good description of each species with an outline of its general distribution, an account of its nest and eggs and some general notes on its habits and history. The material is compiled from various reliable sources and includes as well the observations of the authors and those of the late Dr. Paul D. Bergen.

"The greatest lack in ornithological literature of China," say the authors, "is not the scientific descriptions of species — perhaps few remain yet to be described — but the sort of careful popular study that has taught us so much of the intimate ways of the birds of America and England." As an attempt to fill this want the present work is a very praiseworthy effort, and will be welcomed alike by those who are able to study Chinese birds on the spot and those in far away lands, who wish to know something of the everyday familiar birds of this interesting country.— W. S.

Mathews' 'Birds of Australia.' — Part six ² of volume six of this notable work is now before us, completing the treatment of the Parrots. Eight species of the genera Neonannodes, Neophema, Lathamus, Melopsittacus, Pezoporus and Geopsittacus are figured and described. There is also an appendix giving the description of Platycercus elegans fleuriensis Ashby, already published in 'The Emu,' and some supplementary notes by the describer. Also a correction in which the generic name Suavipsitta (p. xix) is proposed for Nannopsittacus Matthews, preoccupied by Nannopsittaca Ridgway.

In the main text of this part we find the following new name proposed: Neonannodes chrysostomus cyanopterus (p. 446), Victoria.— W. S.

Kalmbach on the Crow and its Relation to Man. — The continued demand for information regarding the economic value of the Crow and the exhaustion of the supply of previous bulletins on the subject, have resulted

¹ A Key to the Birds of the Lower Yangtse Valley with Popular Descriptions of the Species Commonly Seen. By N. Gist Gee, Soochow University and Lacy I. Moffett, Kiangyin. Shanghai: Shanghai Mercury Limited, Print. 1917. pp. 1–221, with index (i–xix) and errata (iii–iv).

² The Birds of Australia. By Gregory M. Mathews. Vol. VI, Part VI. December 11, 1917.