

at an early period, and the proportionally few remaining individuals and extremely limited area of today. In 1790-1805 they ranged at times as far north as Albany and Lake Ontario, New York, and as late as 1869 were known in the East in southern Pennsylvania. Another decade (1878) saw stragglers in the Mississippi Valley as far north as the junction of the Ohio and Mississippi Rivers, while the past ten years has witnessed their being driven almost exclusively to southern Florida and the Indian Territory. So scarce have they become within this latter period, that it would appear safe to give as their present habitat the minimum areas represented in black, which cover the localities of capture or observation for the last five years.

In concluding, I wish to express my gratitude for the kindness shown me in compiling the present paper. More especially am I indebted to my friend, Mr. Robert Ridgway, and to the Assistant Secretary of the Smithsonian Institution, Dr. G. Brown Goode, for the use of the Museum material, and to Mr. A. W. Butler for valuable information from his own still unpublished notes on the same subject. To these gentlemen I wish to express my warmest thanks and appreciation.

RECENT LITERATURE.

Sharpe's 'Review of Recent Attempts to Classify Birds.'*—Of the many important addresses, memoirs, and reports read before the Second International Ornithological Congress held at Budapest in May last, we have space to notice at present only Dr. Sharpe's notable address on the Classification of Birds. Only the first 55 pages, or a little more than one half of the address, is devoted to a review of previous work, the remainder being given to a formal exposition of the author's own views on the subject. The review practically begins with Huxley's 'Classification of Birds,' published in 1867, and thus relates to the work of the last twenty-five years. An epitome, with some critical comment, is given of Huxley's system, of Garrod's scheme (published in 1874), of Forbes's (1884), of Scater's (1880), of Newton's views (1884), Reichenow's system (1882),

*A Review of Recent Attempts to Classify Birds; an Address delivered before the Second International Ornithological Congress on the 18th of May, 1891. By R. Bowdler Sharpe, LL.D., F. L. S., etc. (Zoological Department British Museum.) Budapest, 1891. (Published at the Office of the Congress.) Roy. 8vo. pp. 90, pll. xii.

of Stejneger's scheme (1885), of Fürbringer's (1888), of Seebohm's (1890), Shufeldt's Classification of the Passeres (1889), Heine and Reichenow's (1882-90), and various other special works and papers bearing on the subject. The various schemes are discussed and compared at some length *passim*, and presented in tabular form for ready comparison. Fürbringer's diagrams are reproduced, and similar ones presented of other systems to further facilitate comparison. In respect to American workers, Mr. Sharpe makes pleasing references to the labors of Coues, Shufeldt, Lucas, and Jeffries, and especially to Stejneger, of whose work he says: ". . . and I must emphatically state my conviction that, with the exception of some of Professor Elliott Coues's essays, there never has been a popular work on birds so well conceived as the 'Aves' volume of the 'Standard Natural History,' or one which, professedly popular in its aims, contains such an amount of sterling new and original work."

Dr. Sharpe prefaces his own scheme with some well-considered remarks on the slow process of building up a natural classification of birds, which he compares to the construction of a building to which each laborer in the field contributes his quota. "Sometimes the structure has to be altered and amended but it is seldom that a labourer, whose soul is in his work, retires without having added something in the shape of useful materials. It takes a long time—it may be years of study—before a sound brick is baked. . . . It is certain, however, that by this 'brick'-making materials for the structure of the Classification of Birds will be slowly gathered." He has also a word for the critic, who pulls down but never builds up. This is followed by some practical and very sensible remarks upon the exhibition of bird material in museums, and on the general subject of the study of birds. He says: "If the system of teaching by artistic groups be adopted, then only the principal forms would require illustration, and a representation of the leading type of each order or sub-order would suffice. A supplementary gallery might be provided, in which types of each family, subfamily, and genus of birds would be exhibited, but lower than genera I would never descend in a public exhibition. The student of species should find his material in the 'study' series, . . . and there each species should be amply illustrated by actual specimens showing the plumage of both sexes at all times of the year, young birds in all stages, moulting individuals, and a full series exhibiting geographical distribution and variation in the species, even if it requires a series of specimens. The days have gone by when the description of a new species was the be-all and end-all of an ornithologist's hopes. The warfare over priority of nomenclature is fast showing signs of waning. . . . It is time, however, that by some such means as an International Congress of Ornithologists the names of the species of birds were settled once and for all, in order that we may turn our attention to the far more important facts of geographical distribution and life-history of species. We are approaching a time when the study of rainfall and climate, of altitude and locality, and even the conditions of weather under which a specimen was procured, will be considered indis-

pensible for the minute study which is to be our portion in the not very distant future." (Doubtless Dr. Sharpe is not unaware that these important factors have already received much attention in some quarters, having in fact been uppermost in the minds of many American students for the last two decades at least.)

Dr. Sharpe then proceeds to develop and illustrate his own ideas of the classification of birds and their arrangement by means of his "ideal museum," in elaborating which he has frequent recourse to habits, manner of nesting, character of the eggs, mode of roosting, the character of the nestling in respect to clothing, etc., in deciding points of affinity and relationship as well as to strictly anatomical characters. Each leading group of the non-Passerine birds is in turn reviewed and located; the Passeres, having been recently treated by him in a special paper, are briefly disposed of by the correction of the position of a few genera and families in the light of later discoveries. His views of the relationships of the various subdivisions of the Oscines is, however, diagrammatically expressed in Plate XI.

Then follows in linear sequence a tabular list of the higher groups and their families, with diagnoses in footnotes, illustrated by a diagram showing comparatively the system of the author and those of Fürbringer and Seebohm. He puts forward his scheme as of course a tentative one, in the hope of being able to renew the attack at some future time. It differs at many points from any of its predecessors, whether for the better or for the worse is beyond the scope of the present notice to inquire. The number of orders is 34, and of suborders 78. He concludes this masterly address — in which throughout he skilfully imparts a certain charm to a strictly technical subject — with a few personal reminiscences of interest to the systematic ornithologist. — J. A. A.

Hornaday's Handbook of Taxidermy and Zoölogical Collecting.* — Taxidermy, the handmaid of Zoölogy, has already become one of the fine arts, requiring the skill and other qualities of both the sculptor and the painter, and capable of yielding results comparable with the masterpieces of either. The expert collector, and still more the skilled taxidermist, is the indispensable ally of the professional naturalist and the museum-builder. On the intelligence and alertness of the former and

*Taxidermy | and | Zoological Collecting | A Complete Handbook for the Amateur Taxidermist, | Collector, Osteologist, Museum Builder, | Sportsman and Traveller | By | William T. Hornaday | For eight years Chief Taxidermist of the U. S. National Museum; for seven years | Zoological Collector and Taxidermist for Ward's Natural Science Establish- | ment; late Superintendent of the National Zoological Park; | author of 'Two Years in the Jungle,' etc. | With Chapters on | Collecting and Preserving Insects | By W. J. Holland, Ph.D., D.D. | Chancellor Western University of Pennsylvania; . . . [= 3 lines titles.] | Illustrated by Charles Bradford Hudson | and other Artists | 24 Plates and 85 Text Illustrations | New York | Charles Scribner's Sons | 1891.—8 vo. pp. xix+362.