

Barbet we are told nests in burrows with a vertical shaft and the natives secure them by pouring water in the holes and drowning them out. Speaking of the birds of the vicinity of Bahi in May, Mr. Loveridge says: "familiar as I have been with large numbers of water fowl on East African lakes I have never seen anything quite so staggering as the flocks which were encountered here. I approached within a hundred yards of a flock of Pelican numbering between two and three thousand. Palm trees in the distance were white with wood Ibis and smaller flocks of sacred and glossy Ibis, open-bill and Spoon-bill were put up." No nests were to be found in the immediate neighborhood as the provincial commissioner was reported to have ordered all nests destroyed as the presence of the birds interfered with the local industry in dried catfish. So even in such remote localities does wild life have to give way before the commercial pursuits of man!

A number of interesting photographs taken on the expedition are presented as illustrations.—W. S.

Bergtold's 'Guide to Colorado Birds.'¹—The stated object of this little book is to answer questions regarding Colorado birds and to "help beginners and the uninitiated to make a good start in Colorado Ornithology."

The method employed is to present a systematic list of the birds of the state with brief descriptions and measurements of all but those of unusual occurrence, while numerous keys of purely artificial arrangement and based upon obvious color or structural characters are presented to aid the student to trace out the name of any bird that he may come across. Special attention is given to the Ducks and tables of characters are drawn up to further facilitate their identification, so also in the case of the Hawks, Sparrows, and other groups, additional groupings of the species emphasize other striking characters which may aid in naming them.

A table of spring migration dates for Fort Lyons, Denver, Loveland, Idaho Springs and Fruita is presented, those from the second locality from the author's records the others from other sources, while there is a bibliography of articles and books relating to Colorado birds; published since 1909.

Dr. Bergtold has certainly presented a vast amount of information which cannot help but be of assistance to the beginner in Colorado ornithology while those desiring the detailed records of rarities etc., will naturally turn to the works of Cooke and Selater, as it is useless to complicate an elementary work with republication of such data.

It is difficult to judge of the merits of artificial keys as their utility can only be determined by usage. Personally we feel that the divisions of a key should be exclusive, that is to say, there should be only two alterna-

¹ A Guide to Colorado Birds. By William Harry Bergtold. Fellow of the American Ornithologists' Union. [No place, no date = Smith-Brooks, P. O. Box 540, Denver, Colo. August 10, 1928], pp. 1-207. Price \$2.25.

tives in every choice of characters. This is not the plan followed in the present work and we find birds grouped under such primary headings as "slate or gray"; "head blackish or dark gray"; "wing spots or bars"; "rump white"; and "legs long." It is obvious that some species will fit under four or five of such classes and it takes some time to run them down in each until you find which one is the right one. Of course such species are usually repeated in each class so that this trouble is often avoided but not always.

The most serious criticism that can be brought against Dr. Bergtold's book is the carelessness in the use of common names in the keys and the unfamiliarity of the proof reader with ornithological names. In a hurried perusal of the text and index we note upwards of sixty misspelled names while such a well known name as Bonaparte is consistently spelled "Bonepart" while Wheatear everywhere appears as "Wheateater" etc.

In the keys there is no consistency as to the possessive, the apostrophe being retained or omitted on succeeding lines, while many names such as Butcherbird, "Orange-shafter [sic] Flicker," etc. are used in the key but are not to be found in either the text or the index, which must be a serious hindrance to the beginner. We earnestly hope that Dr. Bergtold, when another edition is to be printed, will see that the printer secures a competent proof reader which will vastly enhance the practical value of his little book.—W. S.

Holt on the Birds of Itatiaya Mountain, Brazil.¹—From December 12, 1921, to April 30, 1922, Mr. Holt was engaged on an ornithological survey of the Serra do Itatiaya for the American Museum of Natural History, and in the paper before us he presents the results of his work, including an annotated list of the 559 specimens secured.

The peak towers 7800 feet above the plains and is in reality a volcanic eruption superimposed on the more ancient Serra da Mantiqueira range. Geographically it is located near to the juncture of the three states of Rio de Janeiro, Sao Paulo, and Minas Geraes, although practically all of Mr. Holt's work, as well as that of previous ornithologists, has been in the first.

He finds three life zones represented on the mountain: the Tropical, Subtropical and Temperate, practically coextensive with the plant zones delimited by the botanists. While Dr. F. M. Chapman in his studies of Andean bird life, has expressed the opinion that the Subtropical Zone never reaches sea level Mr. Holt thinks that this probably does not hold good for Brazil and that a study of conditions on the coast between the southern border of Sao Paulo and the southern end of the Serra do Mar, would show this zone meeting the sea.

Tabulating the 187 species of birds found on the mountain, the author

¹ An Ornithological Survey of the Serra Do Itatiaya, Brazil. By Ernest G. Holt. Bull. Amer. Museum Nat. Hist., Vol. LVII, Art. V., pp. 251-326, June 7, 1928.