

and, he adds, "with the able assistance of Dr. R. Bowdler Sharpe," he no longer hesitated to make a commencement. The work has been carried out on the lines projected by Salvin, and conforms in classification, with slight alterations, to Salvin's Catalogue of the Petrels in the British Museum Catalogue of Birds. His collaborator, Dr. Sharpe, "lived to see the practical conclusion of the Monograph and to revise the proofs of all but the last few pages."

The concluding Part V treats of the Diving Petrels (genus *Pelecanoides*) and the Albatrosses, which number 19 species, referred to the three genera *Diomedea*, *Thalassogeron*, and *Phaethria*,—perhaps the most interesting and in some respects the most difficult group of species to deal with in the whole order Tubinares. As in previous parts, the treatment is technical, historical and biographical, not only the history of each form being given, but also a summary of its life history and distribution, so far as these are known. This part also includes, besides the index and introduction to the whole work, a contribution by W. P. Pycraft 'On the Systematic Position of the Petrels' (pp. xv-xxi), and the 'Classification' (pp. xxxiii-iv), containing the diagnoses of the genera and higher groups, and keys to the species. The number of species recognized is 124, of which 104 are figured. The three largest genera are *Oceanodroma* with 13 species, *Puffinus* with 25, and *Æstrelata* with 32. As the nomenclature is strictly binomial, 'species' here means forms, many of which are apparently reducible to subspecies. The reader may be assured, however, that he will find here the substance of what is known of their status and relationships, given with full references to the original sources of information. It is almost needless to add that the plates are excellent, and that the letter press and general execution are of the high standard well-known to characterize the works of the publishers, Witherby and Co.—J. A. A.

**Coward's 'The Vertebrate Fauna of Cheshire.'**—This work, in two octavo volumes,<sup>1</sup> adds another excellent monograph to the long list of recent contributions to a detailed knowledge of the fauna of the British Islands. Its scope is the whole vertebrate fauna of Cheshire, a county in the north-west of England, bounded on the west by Liverpool Bay and the estuaries

<sup>1</sup> The | Vertebrate Fauna of Cheshire | and Liverpool Bay | Edited by | T. A. Coward, F. Z. S. | Author of "Picturesque Cheshire." | In two Volumes | . . . . | With illustrations from photographs by | Thomas Baddeley | Witherby & Co. | 326 High Holborn | London | 1910.—2 vols. 8vo, 26s. net.

[Vol. I.] The Mammals and Birds of Cheshire | By | T. A. Coward and C. Oldham, F. Z. S., M. B. O. U. | Authors of the "Birds of Cheshire" |— Pp. xxxii + 472, 34 half-tone plates.

[Vol. II.] The Dee as a Wildfowl Resort | By John A. Dockray |— | The Reptiles and Amphibians of Cheshire | By T. A. Coward and C. Oldham, F. Z. S., M. B. O. U. | Authors of "The Birds of Cheshire" |— | The Fishes of Cheshire and Liverpool Bay | By James Johnstone, B. Sc. (Lond.) | Author of "British Fisheries" and "Conditions of Life in the Sea" | Pp. xl + 210, 14 half-tone plates, text illustrations, and map.

of the Dee and Mersey. The extent of the area treated is a little more than one thousand square miles, the greater part of which consists of an undulating plain, ranging in elevation from about 100 to 300 feet, with ridges along the eastern border that attain altitudes of 1650 to about 1900 feet. There are marshy tracts between the estuaries of the Mersey and the Dee, giving considerable diversity to the area as a whole.

The introduction (pp. xi-xxii), besides describing the topography and faunal aspects of the county, summarizes the literature of the subject, and the influence of game preservation, which, "direct and indirect, . . . is great and far-reaching." "Incessant war is waged against predatory mammals and birds, whilst other creatures inimical to game and often of benefit to the agriculturist, are destroyed by biassed and indiscriminating game-keepers. . . . Any creature, therefore, against which there is even traditional suspicion is under their ban." The raptorial birds and mammals have suffered to such an extent that the polecat, marten and otter have become extinct, several of the larger birds of prey are becoming rare or have long since vanished, while the "Magpie, Carrion Crow and Jay are in some districts almost extinct." On the other hand, their destruction contributes materially to the welfare of many passerine birds, as does the preservation of fox and pheasant coverts.

Forty-six species of mammals are recorded (pp. 1-89) as having occurred "within recent years in Cheshire and its territorial waters." The birds, of which "there is satisfactory evidence of their occurrence in a wild state during the present and last centuries," number 231 species (pp. 93-459). Cheshire "lies remote from the great highways of migration, and consequently its avifauna is poor in regard to many of the species which occur frequently on the shores of such counties as Yorkshire, Norfolk, Kent and Sussex."

The nomenclature is that of Howard Saunders's 'Manual of British Birds,' as revised by him in 1907, except that trinomials are used for British races, since "the trinomial system of nomenclature, . . . in addition to other advantages, shows plainly the real affinities of the local races or subspecies." The method of treatment consists in giving the commonly accepted English and technical names of each species, followed by its local names, and a summary statement (in a line or two of small heavy-face type) of its manner of occurrence in Cheshire. No references are given to previous works, general or local, nor any description of the species, these being readily available in numerous recent manuals of British birds. The text is thus mainly biographical, and varies in amount for the commoner resident and breeding species from one to several pages; to the rarer ones less space is given, with references in footnotes to previous records of occurrence.

In addition to the bird matter contained in Volume I, there is an interestingly reminiscent chapter in Volume II (pp. xxi-xl) on 'The Dee as a Wildfowl Resort,' by John A. Dockray. The remainder of Volume II is devoted to the Reptiles (5 species), Amphibians (6 species) and Fishes, the

latter occupying the greater part of the volume, which closes with about thirty pages of bibliography and an index.

Although so many works, general and local, have been published in recent years on the vertebrate animals of the British Islands, there is still room for many more, if of the trustworthy class of this excellent summary of 'The Vertebrate Fauna of Cheshire.' — J. A. A.

**The Beebe's 'Our Search for a Wilderness.'**<sup>1</sup> — We have rarely had the opportunity to read a book of travel so charmingly written or so full of interest as Mr. and Mrs. Beebe's 'Our Search for a Wilderness. It is "the tale of two searches for a wilderness," the first, undertaken in the early part of 1908, was to the country about the Venezuelan Pitch Lake, La Brea; the other, made in the early part of 1909, was to British Guiana, where three excursions were made from Georgetown into the "wilderness." In neither "search" were their travels into the interior very extended, but they succeeded in each instance in reaching a nearly virgin wilderness, where animal and plant life was found in tropical luxuriance, unchanged to any material extent by the hand of man. Their trips into the interior were by water routes, by a small sloop or with a canoe and Indians.

The first hundred and ten pages deal with the Venezuela trip, made from Port of Spain, Trinidad, up the Caño San Juan to the Pitch Lake, sailing and paddling for days "through a land of mangroves and water, where, with the exception of two tiny muddy islets in the forest, there was no solid ground." At last "real earth" was reached, and the foothills of the northern Andes were seen beyond La Brea, the latter in the heart of the forest. "We were at the village of Guanoco, the shipping point of the pitch lake. A few steps beyond the last hut and one was in the primeval forest — so limited is man's influence in this region of rapidly growing plants." With this point as a base, several weeks were spent in exploring the neighboring forests, rich in tropical life and in new experiences for our travellers. This part of the book consists of three chapters, the first, entitled 'The Land of a Single Tree' (the mangrove); the second, 'The Lake of Pitch'; the third, 'A Woman's Experiences in Venezuela', written by Mrs. Beebe. The other two, as is a large part of the book, are written jointly by both authors.

Part II relates to British Guiana, and occupies about three fourths of the volume. The first chapter is devoted to Georgetown, the next two to a steamer and launch trip to Hoorie Creek, and thence a few miles by cart to "a gold mine in the wilderness." Then follows an account of a canoe

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<sup>1</sup> Our Search for a | Wilderness | An Account of two ornithological Expeditions | to Venezuela and to British Guiana. | By | Mary Blair Beebe | and | C. William Beebe | Curator of Ornithology in the New York Zoological Park; | [etc. = 4 lines of titles] Illustrated with Photographs from Life | taken by the Authors | [colophon] | New York | Henry Holt and Company | 1910 — 8vo, pp. xix + 408, frontispiece and 160 half-tone text illustrations. many of them full-page. Published April, 1910.