

reference in the synonymy. Then again it would have been of the greatest assistance to those interested in the work of Mr. Carriker and his predecessors to have had a map with their routes indicated. It is however ungracious to criticize so admirable a work and we find here what was lacking in Dr. Chapman's volume—mention of all species recorded from the region whether taken by Mr. Carriker or not, those which seem of rather doubtful authenticity as regards locality being printed in smaller type. The clearly defined area which the authors are considering and the length of time that they have devoted to the work makes this exhaustive treatment possible, which was not the case in Chapman's study.

Messrs. Todd and Carriker are to be congratulated upon having produced one of the most important works ever published on the neotropical avifauna and the most important intensive study of a limited neotropical area. Taken in conjunction with Dr. Chapman's volume we now have the complex and puzzling bird life of Colombia placed upon a sound basis so that we are able to understand it and conduct our future studies in an intelligent manner. The work is admirably printed and while the errata are not numerous they have been carefully collected by the authors and published in two lists, one in the work itself, the other on an inserted slip.—W. S.

Beebe's 'A Monograph of the Pheasants.'¹—The fourth and concluding volume of this splendid work was distributed shortly after the first of the year and in every way conforms to the high standard of the preceding parts. For those who delight in the author's vivid word pictures of the Malay jungle and the mountain heights of the Himalayas there is an abundance of entertaining writing, while the more serious ornithologist will find as heretofore full descriptions of the beautiful birds of which the work treats, in all their plumages, with accounts of their habits and habitats, and much regarding their breeding and life in captivity.

The genera covered in the present volume are the Golden Pheasants (*Chrysolophus*), the Bronze-tailed Peacock Pheasants (*Chalcurus*), the Peacock Pheasants (*Polyplectron*), the Ocellated Pheasants (*Rheinhardius*), the Argus Pheasants (*Argusianus*) and the Peafowl (*Pavo*). The first is found in China and eastern Tibet and Burma; the second restricted to the Malay Peninsula and Sumatra; the third covering a wide range from Burma and eastern India to Indo-China and the lowlands of the Malay

¹ A Monograph of the Pheasants by William Beebe, Curator of Birds in the New York Zoological Park; Fellow of the New York Zoological Society and Director of the Tropical Research Station in British Guiana; Fellow of the American Ornithologists' Union and of the New York Academy of Sciences; Member of the British Ornithologists' Union; Corresponding Member of the Zoological Society of London, etc. In Four Volumes Volume IV, published under the auspices of the New York Zoological Society by H. F. & G. Witherby, 326 High Holborn, London, England 1922, pp. i-xv and 1-242. pl. LXIX-XC and XV [omitted from Vol. 1.], photogravures 61-87, maps XV-XX. Price \$62.50 per volume in subscription for the four volumes.

Peninsula, Sumatra and Borneo. The Ocelated Pheasants are restricted to Siam and part of the Malay region while the Argus group extends to Sumatra and Borneo and the Peafowl cover practically all of India, and range from Burma to the Malay States and Java.

The Golden and Lady Amhearst Pheasants, the two species of *Chrysolophus*, are the last of the subfamily Phasianinae, the others here treated being separated into two other subfamilies, the Argusianinae, comprising the Peacock Pheasants, and the Argus Pheasants, and the Pavoninae containing the Peafowl. These groups are differentiated largely by the method of molt, the Peacock Pheasants beginning the tail molt with the third pair of rectrices from the center and progressing inward and outward, while the Peafowl begin with the sixth pair from the center. Of course the wonderful ocellations also distinguish these groups from the other Pheasants.

Of the colored plates in this volume seven are by Lodge, three by Fuertes, two by Thorburn, four by Knight, and seven, representing immature plumages, feathers, etc., by Grönvold. As heretofore Knight's paintings from which the reproductions were made are apparently all oils while all of the others are water-colors, the reproduction of the oil paintings have however produced more satisfactory results than previously, though in our opinion Lodge's water-color portrait of the Green Peafowl is far more effective, especially for a work of this kind, than Knight's representation of the Indian species. Between the three water-color artists there is little to choose. Thorburn had perhaps the advantage in having been allotted the two species of Argus Pheasants and his plates are really exquisite. The 27 plates of photogravures, all but two by the author, contain some wonderfully beautiful pictures of scenery in this fascinating home-land of the Pheasants. The two by Mr. D. Seth-Smith showing the lateral and frontal courtship of the Peacock Pheasant in captivity are of great interest, and a word of praise must be said for the admirable paintings of the feathers of the Peafowl and Argus Pheasants by Grönvold showing the evolution of the ocelli. It is interesting too to note that one of the Argus feathers here figured, from the British Museum collection, is so different from those of either of the well known species that it was used as the basis of a description of a third form *Argusianus bipunctatus* described by T. W. Wood in 1871, but up to the present time no additional specimen has come to light nor any information concerning where the feather in question really came from. Many a species has been described from a single specimen but here is one from a single feather!

There is much information of interest concerning the early history of several of the best known species notably of the Peafowl, which is a sacred bird over most of India and is of course closely associated with legends and stories. Curiously enough Mr. Beebe was unable to find any definite origin for the popular superstition that the Peafowl brings bad luck, a belief prevalent through England and America, Germany and France, but not found at all in the Asiatic countries, the true home of the birds. The

only suggestion that he can make is of a legend that the seven deadly sins complained to the Creator that he had been unfair in lavishing beauty on the Peafowl, whereupon he said that he had already given them more ornamentation than they should have had, and plucked out the yellow eye from Envy, the red eye from Murder, the green eye from Jealousy and placed them all on the plumage of the Peafowl and the sins have been following the bird ever since in an effort to regain their eyes.

From the geneticists' standpoint the discussion of the Black-throated Golden Pheasant and the Black-shouldered Peafowl, apparent sports which crop out in normal broods of the species, is of interest, as also the discussion of crosses between the Golden and Amherst Pheasants.

The work however, must be read by those who desire to appreciate fully the varied information which it contains and lack of space prevents us from making further comment. It only remains for us to congratulate the author, artists and publishers and all others who have been connected with this monumental work upon having brought the undertaking to a successful completion and having produced what will stand for all time as one of the most notable of ornithological works.—W. S.

Phillips' 'Natural History of the Ducks.' Just as Beebe's 'Monograph of the Pheasants' is completed the first volume of another illustrated monograph appears—'A Natural History of the Ducks'¹ by Dr. John C. Phillips. This is a large quarto but not so large as the Pheasant volumes, measuring 9 by 12 ins. as against 12 by 16 ins. It is beautifully printed on heavy paper and illustrated by full page plates by Fuertes, seven being in color and nine in black and white. There is also a plate of the downy young by Allan Brooks, a color plate 'The Duck Marsh' from a painting by F. W. Benson and outline maps to show the distribution of the species. These latter we think would have been more effective if the areas had been cross-lined or dotted instead of being surrounded by heavy lines. The plates are excellent and most of the poses of the birds admirable, although the artist in this volume is dealing for the most part with species with which he is unfamiliar in life. The alternation of colored and plain plates is of course always disturbing and most persons naturally find it difficult to judge the latter on their merits when contrasted with the brilliant colored plates, so that there will doubtless be criticism on this point. The present volume, one of four, covers the Plectropterinae or Spur-wing Ducks; the Dendrocygnae or Tree Ducks; and four genera of the Anatinae or True Ducks; including twelve genera and twenty-nine species. The treatment of the first group follows Salvadori's scheme (Brit. Mus. Cat. of Birds, Vol. XXVII) except that the several races of the Spur-

¹A Natural History of the Ducks | By | John C. Phillips | Associate Curator of Birds in the Museum | of Comparative Zoölogy at Harvard College | with Plates in Color and in Black and White | from Drawings by | Frank W. Benson, Allan Brooks | and | Louis Agassiz Fuertes | Volume I | Plectropterinae, Dendrocygnae, Anatinae (in part) | [vignette] | Boston and New York | Houghton Mifflin Company | The Riverside Press Cambridge | 1922 | pp. i-viii + 1-264, pl. 1-18, maps 1-27. Price \$50.00 per volume.