

Gordon's 'Hill Birds of Scotland.'¹ — Well written popular biographies of birds are always interesting reading and when both the birds and their surroundings have figured so frequently in literature — both history and fiction — as have those of Scotland, an additional measure of interest is present. Such are the features which characterize Mr. Seton Gordon's 'Hill Birds of Scotland.'

He treats of two dozen of the more familiar birds of the Scottish highlands, drawing upon his own experience, which has evidently been extensive, and quoting appropriate information from various historic sources. "The hills" he says in his preface "do not yield the store of their knowledge easily; it is only to him who knows them in storm as in fine weather, and in the dead of winter as well as during long days of June sunlight, that they give a measure of their wisdom." The author is evidently of these fortunate ones, and his appreciation of nature and of his bird friends particularly is well brought out in the pages of his book. His general picture of the high hill country is particularly characteristic — "The mists curling smoke-like in the deep glens before the hour of sunrise, the distant hills, heavily snow-flecked, standing sharply against the horizon, the croaking of the Ptarmigan and the flute-like song of the Snow Bunting, all these things are among the priceless memories given by the Spirit of the Great Hills."

The species treated are the Golden Eagle, White-tailed Eagle, Osprey, Peregrine Falcon, Kestrel, Raven, Grey Crow, Ptarmigan, Black Grouse, Red Grouse, Capercaillie, Woodcock, Snipe, Goosander, Curlew, Greenshank, Golden Plover, Dotterel, Oyster Catcher, Snow Bunting, Dipper, Crested Titmouse, Sandpiper and Dunlin. Nine of these are identical or only racially different from North American species, and their biographies are well worthy of study by the more serious American ornithologist who is seeking data on habits and behavior as well as the pleasure which is offered by an entertaining book.

It is regrettable to read under the head of the Osprey: "To give an account of the history of the Osprey in these islands is to chronicle a succession of regrettable events, events which are responsible for the loss to us of a noble bird, that in former days added a great charm to many a lonely loch hidden away amongst the Scottish hills. . . . These factors [in its extermination] are, the migratory instinct of the birds, and the large remuneration given by misguided collectors for British-taken eggs." The same causes apparently are responsible for the disappearance of the bird from much of the New Jersey seaboard where it was formerly abundant; fortunately, however, enough remain in this State to reestablish the old breeding localities if proper encouragement be given.

¹ Hill Birds of Scotland. By Seton Gordon, F. Z. S., M. B. O. U. Author of "The Charm of the Hills" and "Birds of the Loch and Mountain." Illustrated. 1915, Longmans, Green, and Co., N. Y., London. Edward Arnold. 8vo., pp. i-xii + 1-300. \$3. net.

The history of the Capercaillie is particularly interesting. This bird became extinct in Scotland in the eighteenth century apparently owing to the destruction of the ancient Caledonian forest. In 1837 however, a number were brought from Sweden and liberated, which have increased and repopulated a large part of Scotland.

Thirty-five excellent plates of birds and their haunts from photographs illustrate this attractive book.—W. S.

Job's 'The Propagation of Wild Birds.'¹—The rearing of wild birds, both upland game birds and waterfowl, has been making great headway during the past few years, until now an occupation which was almost unknown a decade ago is demanding literature and information for its guidance. In answer to this call the National Association of Audubon Societies has established a 'Department of Applied Ornithology' and the head of this department, Mr. Herbert K. Job, issues under this title the first 'Manual of Applied Ornithology.'

Those who have read Mr. Job's bulletins upon the rearing of wild birds issued by the National Association of Audubon Societies will understand the character of the present volume—a concise presentation of facts covering all phases of the subject. These are conveniently assembled and each topic conspicuously indicated by heavy-faced type, while a general index helps one to find the information which he desires. Numerous good half-tones from photographs illustrate the work.

The volume is divided into three parts devoted respectively to 'Gallinaceous Birds,' 'Waterfowl' and 'Smaller Land-birds.'

Under Part I. the Chapter headings are: 'General Methods'; 'Quail Propagation Method as a Basis'; 'The Grouse Family'; 'The Wild Turkey'; 'Pheasant Rearing'; 'Other Foreign Gallinaceous Species'; 'Pigeons and Doves'; 'Control of Vermin.' Under Part II: 'Wild Ducks'; 'Wild Geese'; 'Swans'; 'Wading Birds'; 'Refuges and Protected Colonies.'

These two parts are largely elaborations of the two bulletins above referred to which have already been noticed in these columns.

Part III which appeals more directly to the ornithologist and bird-lover comprises four chapters: 'Preliminary Matters'; 'Aids to Nesting'; 'Making Surroundings Attractive'; and 'Artificial Feeding.' These deal with helping birds to breed in a wild state rather than rearing them in captivity although the line between the two methods is perhaps more imaginary than real. Practical advice as to nesting boxes is given—how to build them, where to place them, etc., also how to provide nesting

¹ *The Propagation of Wild Birds. Manual of Applied Ornithology. Treating of Practical Methods of Propagation of Quails, Grouse, Wild Turkey, Pheasants, Partridges, Pigeons and Doves, and Waterfowl, in America, and of Attracting and Increasing Wild Birds in General, Including Song-Birds.* By Herbert K. Job. Illustrated from Photographs Mostly by the Author. Doubleday, Page & Company, Garden City, New York, 1915. Svo., pp. i-xxvii + 1-276.