

form, while such well known western birds as the Plumbeous and Cassin's Vireos are those discussed, is further confusing to the lay reader.

Keys to the orders, families and species, a hypothetical list and an index bring the work to a close.

It is obvious that the reviewer though he may have indulged in a few expressions of personal preference has but little criticism to make of 'The Birds of California.' It is not only like its predecessors the most pretentious work on the birds of a single state that has yet appeared, but one of the most notable of our bird books, and a lasting credit to all who have had a hand in its making.—W. S.

Dr. Phillips' 'Natural History of the Ducks.'—The second volume of Dr. Phillips' notable monograph of the Ducks¹ will make a still stronger appeal to those interested in this group of birds—both sportsmen and ornithologists—than did the first, partly because of the greater number of colored plates but mainly, we think, because it deals with so many more of the familiar American species in which we are mainly interested.

There are twenty-six full page plates, all but six in colors, twenty being from paintings by Allan Brooks, four by Louis A. Fuertes, one by H. Grönvold and a frontispiece of Mallards by F. W. Benson. Some of the plates represent more than one species although they are never crowded so as to affect the artistic beauty of the picture, while three of Brooks' plates consist of two drawings each of Ducks in the act of display during the mating season. There are also 38 outline maps showing the distribution of the species. The plates are very satisfactory, the figures being large, from two to five on a plate so that they show the details of coloring with great fidelity while their artistic character is guaranteed when we glance at the names of the artists.

As we read the text we marvel at the completeness of the author's mastery of the literature, and wonder if there is anything that he has overlooked. The account of the Mallard which comes first is virtually a scientific monograph of that species. In its synonymy, after the technical names, come the numerous vernaculars of English, French and German speaking peoples and one or more names in forty-two other languages. Then follow brief accounts of the haunts of the bird, its wariness, daily movements, gait, swimming and diving, perching, flight, sense organs, hearing, sight, touch, association with other species, voice, food, courtship, nesting status, enemies, damage, food value, domestication, hybrids and geographic races. The detailed descriptions cover all seasonal, sexual, and age conditions of plumage from downy young to adults. The

¹ A Natural History of | the Ducks | By | John C. Phillips | Associate Curator of Birds in the Museum | of comparative Zoology at Harvard College | with plates in color and in black and white | from drawings by | Frank W. Benson, Allan Brooks | Louis Agassiz Fuertes | and | Henrik Grönvold | Volume II | The Genus Anas | (vignette) | Boston and New York | Houghton Mifflin Company | The Riverside Press, Cambridge | 1923. Quarto pp. i-xii + 1-409, pls. 19-44; maps 28-65. Price \$50.00 per volume.

distribution of the species is given in most elaborate detail, first the breeding area, then the winter range and finally its occurrence in the "passage area," with a full discussion of its migration in various parts of the world. Its occurrence and relative abundance in every state, province or country is given with due mention of authority, while the major geographical divisions are carried as inserts in heavy faced type, to aid one in making use of the data. We have commented elsewhere on the use of the term "complete scientific account" but however we may regard it in other connections we think that it may safely be used in describing Dr. Phillips' work.

These large sumptuous bird books may be prepared in a variety of ways and for different classes, and the best sellers will naturally be those which aim to entertain the popular readers which constitute the great army of bird students today. Dr. Phillips makes no particular effort in this direction, stating his facts as briefly and concisely as possible in clear, plain language, ideal for a work of reference, and anyone interested in the Ducks must needs make *this* work his work of reference.

To illustrate the accuracy of its information and the need of consulting it the writer may state that he recently had occasion to look up the status of the European Widgeon in North Carolina and in the latest work on the birds of that state found but two records. Dr. Phillips, however, tells us that the species was not uncommon on Currituck Sound from 1897-1912 and that it was known from there as long ago as 1880.

This entire volume is devoted to the genus *Anas* which as conceived by the author includes the genera *Chaulelasmus*, *Eunetta*, *Mareca*, *Polionetta*, *Poecilonetta*, *Nettion*, *Dafila*, *Dafilula*, and *Querquedula*. It is refreshing, in these days of hair splitting in genera, to find someone working in the other direction. It is interesting to see, moreover, that Dr. Phillips adheres for the most part to the sequence of species in Sharpe's 'Hand-List,' showing that no great violence is done by uniting these so-called genera; but the species of "*Polionetta*" are widely separated, showing that this group apparently was not a natural one.

The Texan Black Duck (*A. maculosa*) he regards as identical with the Florida bird (*A. fulvigula*) while Abert's Duck (*A. aberti*) he shows clearly is based on a female *A. wyvilliana*. One new name is proposed *Anas gibberifrons mathewsi* (p. 266) for *Nettion castaneum rogersi* preoccupied in *Anas*.

Compared with Sharpe's 'Hand-List' one species *A. drygalskii* is added and twelve subspecies, some tentatively, while all the forms in that work are recognized with the exception of the two above mentioned. "*Nettion salvadorii*" we presume is to be included elsewhere as we find no mention of it in the present volume.

Dr. Phillips' admirable work is one that should be in every Duck Club, in every museum, and in the library of every collector of notable bird books. It has the stamp of authority throughout, both as to text and plates.—W. S.