

bill along the surface and that the peculiar bill has developed in some way to aid such feeding! Dr. Murphy suggests that the brightly colored bill is skimmed along the surface as a lure, somewhat like a trout fly, and that curious fish rise to see what it may be and the bird retracing its course snaps them up.

These life histories are full of interesting reading and abound with original information.

The work is illustrated by 16 colored plates by Francis L. Jacques who visited the coast of Peru and the South Pacific to obtain sketches for his backgrounds and to see many of the birds in life. They form a beautiful series of pictures and, like others of the artist's paintings, are all group compositions usually with many birds often of several species, rather than individual portraits.

There are also 72 beautifully printed halftone plates, from photographs, covering both sides of extra heavy coated paper, and 80 text figures. A well prepared bibliography and an adequate index complete this notable work of which all concerned in its production may well be proud.

While the proof-reading seems to have been very well done there are a half dozen errata listed on p. xxiv and apparently there is another error on p. 472 where it is stated that "the Puffininae make up the bulk of the family Hydrobatidae." Family "Procellariidae" is apparently intended.—W. S.

Swann's Monograph of the Birds of Prey.—Another part of this notable work¹ appeared in December, 1935, carrying us through the Kites and their allies and the genus *Falco*, leaving only the remainder of the Falcons and the Ospreys to be treated. It seems likely therefore that it will be completed during the present year. Colored plates of the Battelaur and the Sea Eagle and a photogravure of a Kite's nest are the illustrations accompanying this part.—W. S.

Aymar's 'Bird Flight.'—The basis of this interesting volume² is the two hundred photographs of flying birds and as the author says, while there have been many books treating of the flight of birds there has been none "devoted exclusively to allowing the infallible camera to state what actually happens in the many different types of flight of the various species. That is the real justification for this book," and he adds that "the book belongs to the men whose perseverance and skill have produced the photographs of which it is composed."

At the same time the author is responsible for the conception of such a work, for the selection of the pictures and for the discussion of the published information on the several phases of bird flight. He has had before him practically all of the important works dealing with flight and his chapters on Evolution, Biology, Migration, and Aerodynamics present an excellent summary of the latest views on these subjects. At the end of each chapter, and sometimes scattered through it, are photographs illustrating points connected with its subject matter with explanatory text below or on adjacent pages. Owing to the fact that the type used in the main text and in these explanatory paragraphs is of nearly the same size, we sometimes find it difficult to see where one stops and the other begins. Under the picture of the Black Skimmer we note the old belief that the bird "scoops up" its food from the surface of the water and that the peculiar bill is in some way an adaptation for this sort of feeding. This has been questioned by several authors in 'The Auk' (Arthur, Stone, etc.) and es-

¹ A Monograph of the Birds of Prey. Part XIII, December, 1935. By H. Kirk Swann, edited by Alexander Wetmore. Wheldon and Wesley, Ltd. 2, 3 & 4 Arthur St., New Oxford Street, W. C. 2, London. Pp. 257-352, 3 plates.

² Bird Flight. Written and Designed by Gordon C. Aymar. A Collection of 200 Action Photographs. Dodd, Mead & Co. 1935. Pp. i-xii + 1-234. Price \$4.00

pecially by Murphy in his 'Oceanic Birds of South America.' It is also stated that the Swift uses its wings alternately in flight, a theory that has not yet been proven. There are a few other ornithological misstatements or assumptions but they are not important.

The series of photographs which the author has brought together is truly remarkable: the frontispiece of an Egret taking off, by Middleton; Arthur's diving Coot; his own flying Mallard; Bailey's flying Snowy Owl; and Schroder's diving Pelican are among the more notable, though it is hard to make selections. There is also an astonishing photograph of a Mourning Dove with wing feathers fully expanded, taken by H. E. Edgerton and Kenneth Germeshausen in one 75,000th of a second. These pictures are worthy of very careful study as they throw much light on all phases of bird flight especially the position of individual feathers in various sorts of wing action.

The presentation of the theories of Curry and Lilienthal on soaring are interesting and illustrate the many factors that must be considered in such discussions. Mr. Aymar has given us a popular book that presents one of the most attractive and puzzling of the bird's activities in a way that can be understood by all, while the illustrations will be of the greatest interest to photographers as showing once more the possibilities of their craft, while the artist should find much of value to him in his efforts to portray accurately the bird in flight. The chapter on aerodynamics covers a phase of the subject about which ornithologists know but little. It is extremely interesting but we are not competent to discuss it. Apparently the author is thoroughly familiar with this phase of flight. There is a good bibliography but unfortunately it is arranged alphabetically by titles instead of by authors so that it is difficult to find a given work.—W. S.

Brooks and Wetmore on the Auks and their Allies.—The 'National Geographic Magazine' continues its series of illustrations and accounts of North American Birds¹ with an admirable sketch of the Alcidae. Brooks depicts the various species on eight colored plates, most interesting of which is his conception of the Great Auk. While it resembles to some extent Fuytes's drawing used on the 'Auk' cover in 1913 and 1914, both bill and wing are relatively smaller and the same is true when compared with the present 'Auk' design prepared by Fuytes at the request of the A. O. U. Council which was dissatisfied with his first effort and desired a more "conventional" Auk.

It is interesting to have the ideas of different artists as to what the bird really looked like for as the lovable and versatile Fuytes wrote upon submitting his second attempt: "nobody lives who knew the beast and there are so more to see!" (cf. Auk, 1915, p. 144).

The text by Dr. Alexander Wetmore is fully up to his previous contributions to this series and is fully illustrated with photographic reproductions. The 'Geographic' is doing a splendid service in furnishing this series of papers, which will eventually form a standard 'American Ornithology' for general readers.—W. S.

Linsdale's 'The Birds of Nevada.'—This publication,² like preceding 'Pacific Coast Avifaunas' emanating from the Museum of Vertebrate Zoology of the University of California, constitutes a painstaking and reliable summary of the region of

¹ Birds of the Northern Seas. By Alexander Wetmore. Auks and their Northland Neighbors. By Maj. Allan Brooks.

² Cooper Ornithological Club | Pacific Coast Avifauna | Number 23 | The Birds of Nevada | By | Jean M. Linsdale | Contribution from the California Museum of Vertebrate Zoology | Berkeley, California | Published by the Club | February 7, 1936. Pp. 1-145. Price \$4.00. W. Lee Chambers, Bus. Manager, 2068 Escarpa Drive, Eagle Rock, Los Angeles, California.