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 Birds[1] 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 Fuertes'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 Fuertes 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 Fuertes 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.

which it treats. There is a brief sketch of physiography, an historical summary, a list of eighty "field workers," a map, and descriptive list of localities and a nominal list of the bird forms found in the state and following these the main text presenting a condensed statement of the character of occurrence of each form (or "kind" as the author prefers) in Nevada, followed usually by more details as to dates and localities. The A. O. U. 'Check-List' is followed for sequence but changes in the names or distribution of the Nevada forms are made in many cases, as a result of more accurate information. No synonymy or reference to place of publication of names are given, as the work is essentially geographic not systematic. There is a full bibliography, and we realize the relief that the author must have experienced when we find only about a dozen faunal papers published on the birds of the state! He has, however, taken the pains to examine all recorded specimens possible where identification in terms of modern knowledge was desirable and has thus eliminated many misidentifications. Three hundred and fifteen forms of which specimens have been procured are treated, as well as 23 others based upon sight identifications while a "hypothetical" list of 14 is appended.

Dr. Linsdale is to be congratulated upon an excellent piece of work adding as it does one more state list to the modern publications of this kind. While admittedly not complete it brings the subject up to date and makes it possible for others to carry on work intelligently.—W. S.

**Griscom on Problems of Field Identification.**—In this paper[1] Mr. Griscom has presented an interesting sketch of the development of ornithology and its present day tendencies which all should read. He compares the early days of discovery and description, the collecting period, the rise of field identification and the present era of specialization when "the living bird is more than ever the subject for both research interest and amusement, not the dead stuffed one," and the old time museum ornithologist has had to "retire to equatorial Africa, the wilds of South America or the mountains of New Guinea" as there is nothing left for *him* to do with North American birds. Likewise our author considers the making of big May lists useless from a scientific standpoint, as the results can be predicted in advance with an accuracy of 98%. Such work he regards as a hobby or outdoor pastime and not to be abandoned, but it is not scientific research, so far as well known regions are concerned.

As to the scientific value of sight records he says "No one sight record can ever be absolute proof" but a series may be, or a sight record by a series of competent observers. The present day arguments on the possibility of identifying closely related species in the field is of no scientific consequence in the region where the status of each has been accurately determined. "The real reason for such debate is that the present day enthusiasts wish to count both birds in their yearly list!"

With most of Mr. Griscom's conclusions and predictions we are in entire accord though there are doubtless many who will not agree. However, while it is true that the "old fashioned museum ornithologist is being replaced by the modern biologist" it seems to us that there will always be a need for the former. The collections in the museums must be intelligently cared for and after systematic study of skins has reached the limit of refinement—and it is rapidly approaching that goal—there are countless problems still to be solved from a study of skins and skeletons just as there are from field observation or aviary experiments. And furthermore there will probably always be those fitted for just this sort of work and no other.

We agree that the number of persons seriously interested in ornithology is increasing by leaps and bounds but we feel that there will be various limits beyond which

[1] Bird-Lore, January–February, 1936, pp. 12–18.