48. Audubon Water Bird Guide. Richard H. Pough. 1951. Doubleday & Co., Inc., Garden City, Long Island, New York. xxviii + 352 pp., 48 color plates, 138 black and white drawings. \$3.50. This companion volume to the author's "Audubon Bird Guide" (1946) treats 258 species included in the first half of the A. O. U. "Check-List," from loons through doves. The area covered is continental North America north of Mexico and east of the semi-arid Great Plains, plus western Greenland. Since waterfowl and shorebirds tend to be cosmopolitan many species found in the western United States are included. In the text each species is listed by vernacular and scientific names, which in some cases will be unfamiliar to the reader. Through the cooperation of the A. O. U., Mr. Pough has been able to use the names tentatively selected for the forthcoming fifth edition of the "Check-List," which will give each species a vernacular as well as a scientific species name, in some cases altogether new and in other cases differing somewhat from the one previously accepted. All of these and various local names are cross-referenced in the index. Average physical dimensions, and often average weight, are listed for each spcies, and tables comparing the sizes of related species are presented at appropriate points. For each species there is a short paragraph on identification; however, the identification notes are inadequate for difficult discriminations. The main sections discuss many important phases of life history, with management notes on game birds and emphasis on conservation where applicable. There are short paragraphs on voice, nest and eggs, and geographic range. The color plates are a special feature of the guide. Don Eckelberry has done a fine job of illustrating all the significant plumages (except downy and juvenal) of all the species. In the reviewer's copy the color registry is excellent. The economic limitations of presenting 458 fullcolor figures in a reasonably priced book have made it necessary to crowd quite a few pictures onto each plate, and to use mainly white backgrounds. Black and white line drawings by Earl Poole illustrate 138 birds in flight. The end plates present ecological maps of North America and the Atlantic Ocean. An amazing amount of information is packed into this splendid book. In view of the species covered it will appeal less to backyard birders than the companion land-bird volume, but will be of greater interest to sportsmen and game managers. Although there are noticeable typographical errors, the number is perhaps not excessive for a first edition. Certainly every bird student who has progressed beyond the merest rudiments and whose interest is not restricted to technical treatises will wish to own a copy.-Hustace H. Poor.

## LETTER TO THE EDITOR

The editors of Bird-Banding have kindly invited us to reply to Mr. Wolfson's criticism of our paper on the cycle in the Gambel Sparrow, Zonotrichia leucophrys gambel (Nuttall). While we have no intention of indulging in polemics, which can throw no light on the problem, we are happy to reiterate our point-of-view which we had thought was made abundantly clear in our paper.

On two points we agree with the reviewer: first, that more original data should have been included and second, that further investigation is necessary to sub-

stantiate our tentative conclusions.

As to the first point,—our manuscript as first submitted for publication contained substantially more original data. Editorial policy, however, was ruthless in its insistence that even material we considered essential should be cut out, and no amount of persuasion on our part could change it. This we regret, needless to say, even more than does the reviewer. The daylight curves (in figures for the periods from the beginning of twilight to the end of twilight rather than from sunrise to sunset, since the former correspond more closely to the periods when the birds are active.

As to the second point,—we have emphasized again and again the necessary tentativeness of our conclusions. (Those who know our work and the point-of-view which has guided it the past eighteen years will hardly be likely to take seriously Mr. Wolfson's contention that we "state causation." Of course we do not, nor do we intend even to imply it.) Where we disagree with the reviewer is as to the nature of the test to which our hypothesis should be subjected. Mr.

Wolfson considers experimentation a valid test. We reiterate our conviction that since we are concerned with possible dynamic factors operative under natural conditions, it seems extremely doubtful whether the abundant means which have been discovered for upsetting the physiological balance of captive birds should be accepted as possessing any direct bearing on the factors which control the cycle in nature. In the analysis of the complex relations of an organism to its environment experimentation can be a highly useful tool. It cannot provide the ultimate test of validity for hypotheses based upon field data. The experimentalist and the field worker are concerned with different aspects of the same complex and many-sided phenomena. Their divergent points-of-view must inevitably be resolved as the truth is approached more closely from all sides. Meanwhile each will do well to recognize the limitations of his approach. We hope we have adequately expressed our consciousness of the limitations of our approach to the problem. Whether or not we have done so rests with our readers.

The reviewer's task was a hard one. We want to compliment him on his sum-

The reviewer's task was a hard one. We want to compliment him on his summary of our factual material. Unfortunately, our discussions of possible implications of the data do not lend themselves to review by quotations taken out of context, and we can only request those interested to read both our recent paper and the earlier one' on which it is based (for it is impossible fully to understand the later work without thorough knowledge of the earlier one) and judge for them-

selves whether or not our tentative conclusions are justified.

Barbara D. Blanchard and Mary M. Erickson Santa Barbara, California

<sup>1</sup>Blanchard, B. D.

1941 The white-crowned sparrows (Zonotrichia leucophrys) of the Pacific seaboard: environment and annual cycle. Univ. Calif. Publ. in Zool. 46, No. 1, pp. 1-178.

## Notes and News

The Massachusetts Audubon Society (155 Newbury St., Boston 16, Mass.) has added another size of colored aluminum bands to its stock. This is equivalent to size eight of the Fish and Wildlife Service bands, and is available in red, blue, green or yellow, at \$2 per hundred. The minimum order of any one color is 25 bands. Mr. C. R. Mason, Executive Director of the Society, believes the new bands may prove very useful for species such as the cormorants or pelicans, where a high percentage of returns and recoveries may be expected.

Erratum: Doctor E. Schüz has drawn the attention of the editors to an error in Review No. 4, Bird-Banding, 22(2): 83-84 (April, 1951). The review states that the Gibraltar route is not used by German storks whereas actually this route is used by the southwest German storks, as well as those from Hessen and Rheinland, and to some extent by those of Westfalen and Niedersachsen; it is not used by the east German storks.

In common with most other journals, Bird-Banding has faced substantial increases in printing costs over the past few years. Because of increases in the cost of paper, wages, and other items, a further increase has now been announced. Our regular income is not adequate to meet this without reducing the number of pages or the number of illustrations or both. It is probable that some reductions will be necessary, starting with the January issue; each reader who can get a new member or subscriber would help substantially in maintaining the present size of issues. A considerable increase in circulation could be handled without increasing many elements of printing cost, particularly setting type.