

and the scrub—and comments on the characteristic birds inhabiting each. The paper will be interesting to the ecologist and invaluable to those studying at the station.—W. S.

Bannerman's 'Birds of Southern Nigeria.'¹—The first part of this paper was reviewed in 'The Auk' for July, 1922. The present installment completes the report and covers the families from Picidae to Phasianidae in the reverse order of Sharpe's 'Hand-List,' with a short supplement to the Passeres. There are apparently no new forms proposed in this part. We congratulate the author upon the completion of what will prove an important work of reference to the student of African birds. In a prefatory note the author explains that the paper is based mainly upon the collections of Mr. Willoughby Lowe at Lagos and Mr. Kemp at several localities, as well as some smaller collections made by others. He has not attempted to list all of the species recorded from within the boundaries of Southern Nigeria as formerly laid down, and states that the species enumerated are "only a tithe of the birds which inhabit that country."—W. S.

Bannerman on African Cuckoos.²—Mr. Bannerman presents a lengthy discussion of the much involved nomenclature of the Emerald and Golden Cuckoos of Africa and confirms Mr. Claude Grant's findings as to their specific names. He places them in different genera however so that the correct names, following his views, will be *Chrysococcyx cupreus* (Shaw) for the yellow-bellied, Emerald, and *Lampromorpha caprius* (Bodd.) for the white-bellied, Golden Cuckoo.

With the latter he associates *L. klassi* (Steph.) and *L. flavigularis* (Shelley) while he recognizes three geographical races of the Emerald Cuckoo.

The problem here discussed is one of those perplexing nomenclatural tangles which can only be settled by adhering strictly to the rules no matter what changes in current usage ensue. So far as we can see from the evidence, Mr. Bannerman's views should be followed.—W. S.

Aves for 1920.³—Ornithologists of the world are once more indebted to Mr. W. L. Slater for compiling the invaluable list of papers and descriptions of new species which constitute the 'Aves' of the 'Zoological Record' for 1920, which has just appeared.

The bird titles this year number 832 and the treatment follows the usual plan; first, a list of the papers by authors; second, a subject index

¹ The Birds of Southern Nigeria. By David A. Bannerman with notes on the Topography of the Country. By Robin Kemp and Willoughby P. Lowe. Revue Zoologique Africaine. Vol. X, Fasc. 2. 1922.

² On the Emerald and Golden Cuckoos of Africa. By David A. Bannerman. Novitates Zoologicae. Vol. XXIX, pp. 413-420, October, 1922.

³ Zoological Record. Vol. LVII, 1920. Aves. By W. L. Slater, August, 1922, pp. 1-66. Price 6 shillings. Printed for the Zoological Society of London, sold at their house in Regents Park, London, N. W. S.

by topic and country; and third, a systematic index by orders and families. We cannot too strongly endorse the importance of this work and the duty of ornithologists to subscribe for it, while every research institution in the country and every library should have the 'Zoological Record' complete. Should this work be allowed to lapse for lack of financial support systematic zoology would be thrown into a state of chaos which it would take years to straighten out. No one would know what was being done in his branch of science in other countries, research would be needlessly duplicated, identical names would be employed for different species and other complications would follow.—W. S.

Forbush on Some Under-water Activities of Waterfowl.¹—This paper consists of a rather lengthy compilation of observations by a large number of persons as to whether the wings are used by diving birds in travelling under the water. The birds considered are Grebes, Loons, Cormorants and Water Turkeys. The testimony is directly contradictory in the case of nearly every species, some observers asserting that the wings are used while others have never seen them in action. The author very rightly contends that it is not justifiable to make a positive statement that a bird does *not* do a certain thing because we have not been able to see it done, and the evidence presented here certainly shows that the birds sometimes use their wings and sometimes do not.

The unfortunate part of such compilations is that all evidence is given the same weight while unquestionably some observers are more reliable than others and the testimony of some is valueless. The impossibility of separating the data on any such basis is as obviously impossible, so we are forced to read the evidence and draw our own conclusions. One point that does not seem to be mentioned is the physical question of the possibility of "flight" under water. The conditions surrounding flight through a medium such as air and through a much heavier medium such as water are quite different and the possibility of the return of the wing after the stroke in the heavier medium is worthy of serious consideration as also the availability of the flight feathers for propulsion after they have been thoroughly saturated, as they would be if the wing were opened under water. These matters would seem to deserve consideration in a scientific treatment of the subject. Considerable testimony is also presented on the question whether "diving birds commit suicide," i. e., the alleged habit of ducks, etc., when wounded of clinging to plants at the bottom of bodies of water and drowning.—W. S.

¹Some Under-water Activities of Certain Waterfowl. By Edward Howe Forbush. Dept. Bull. No. 8, Mass. Dept. Agr. February, 1922, pp. 1-49, numerous text figures.