

has published two accounts of his experiences which fully support the reputation of the country for difficulty of travel and inhospitality. One of these constitutes the November-December issue of the 'Bulletin of the N. Y. Zoological Society' while the other appears in the corresponding number of 'Natural History.' Both are illustrated by an abundance of photographs including portraits of the birds themselves taken in captivity but showing their characteristic attitudes and actions.

Mr. and Mrs. Rollo H. Beck also visited New Guinea in 1928 to secure specimens for the American Museum and an interesting account of their experiences appears in the same number of 'Natural History,' the illustrations including a colored plate of the new Bower Bird (*Xanthomelas bakeri*) discovered by Beck.—W. S.

Shoffner's 'Bird Book.'—This little volume,¹ by the organizer of the 'Farm Journal's' Liberty Bell Bird Club, is designed to furnish in compact form information desired by the school clubs and teachers all over the country, who apply to the 'Journal' for help in organizing and conducting bird clubs.

The topics covered in the forty odd chapters include, Migration, Mating, Nest and Eggs, Growth of Young, Structure, Color, Molts, Food, Sanctuaries, Bird Clubs, etc. Each topic is discussed in a separate chapter following which is another chapter containing questions and answers bearing upon it.

Mr. Shoffner has had much personal experience in stimulating popular bird study and in conducting bird sanctuaries and his little book should meet a general need. There are a number of half-tone illustrations.—W. S.

Boas on the Structure of the Bird's Wing.²—This is a detailed "biological-anatomical" study, with tables and comparisons, of the skeletal and muscular structure of the wing in the principal groups of birds. There are also twenty-four large plates showing different types of cervical vertebrae and the method of attachment of the cervical muscles in the various families. Text figures show the position and convolutions of the neck in several types of birds in performing characteristic actions and the relative position and movement of the vertebrae.

The paper is a most valuable contribution to avian anatomy.—W. S.

Rowan on Manipulation of the Reproductive Cycle.—It has long been realized that when we seek information on the stimulus to migration we must go deeper than the observation of the time of arrival and departure

¹ The Bird Book. A new book for bird-lovers, teachers and students, with more than 500 questions and answers. By Charles P. Shoffner. Richard Manson, Publisher. New York, pp. i-xi+1-335. Price \$2.00.

² Biologisch-Anatomische Studien über den Hals der Vögel, von J. E. V. Boas. Mit 23 Tafeln und 20 figuren im Text. Mem. del'Acad. Royal des Sci. et des Lettres de Danemark, Copenhagen, Sect. des Sci., 9me. serie t. I. No. 3., Kobenhavn, 1929.

of the transient bird. It has generally been recognized in recent years that the state of development of the sexual organs was intimately associated with migratory movements and it has been this phase of the subject, as well as the possible part that duration of light plays in stimulating migration, that has occupied the attention of Prof. Rowan and upon which he reports in the publication before us.¹

He has for several years kept Juncos in open air aviaries at Edmonton, Alberta, fitted out with electric lights which enabled him to continue a brilliant illumination night after night, after sunset. Birds subjected to this additional period of light were killed at different stages of the experiments and microscopic examination of the testes made. It was shown that the normal rhythm of the reproductive organs could be interrupted almost at will by appropriate manipulation of lighting conditions, and the maximum development of the gonads was thus obtained three times and the minimum development twice, during a period of twelve months. However it was also shown that increase in activity, which accompanied increase in the period of illumination, was probably the real cause of development of the sexual organs, as the same results were obtained by compulsory activity of birds kept in the dark.

Birds liberated in a state of recrudescence or regression in the reproductive organs, departed from the neighborhood at once while those in a maximum or minimum condition showed no inclination to migrate and remained throughout the winter many hundreds of miles north of their normal wintering grounds. It is therefore suggested by Prof. Rowan that the stimulus to migration regularly lapses with the disappearance of the interstitial tissue. The details of the various experiments are exceedingly interesting and we shall look forward to the results of Prof. Rowan's further studies.—W. S.

Hellmayr on Birds from Central Asia.—In the paper² before us Dr. Hellmayr has reported on the collection of birds made by George K. Cherrie who accompanied Theodore and Kermit Roosevelt on their trip through Kashmir, Ladak and eastern Turkestan (Sinkiang) in 1925. Apparently no new forms are proposed but there is very full and helpful discussion of the relationship of the various species obtained, and a full review of the Himalayan Horned Larks for which the generic name *Chionophilos* is used in place of *Otocoris* on grounds of priority.

The paper is a valuable contribution to the bird literature of this remote country in which apparently only one American ornithologist, Dr. Wm. Louis Abbott, has previously collected.—W. S.

¹ Experiments in Bird Migration. I. Manipulation of the Reproductive Cycle: Seasonal Histological Changes in the Gonads. By William Rowan. University of Alberta, Edmonton, Alberta. With eleven plates. Proc. Boston Society of Natural History. Vol. 39, No. 5., pp. 151-203, pll. 22-32. October, 1929. Printed from the William Brewster Fund.

² Birds of the James Simpson-Roosevelts Asiatic Expedition. By Charles E. Hellmayr. Field Museum of Natural History Publ. 263. Zool. Series XVII, No. 3. Chicago, U. S. A., October 18, 1929, pp. 27-144.