

to it and its offspring. It is generalized in structure and easily adaptable, but has as yet shown no specialization to a marsh environment. He thinks on this latter account that the bird may have only recently deserted the grassland for the marsh and this view is further strengthened by the fact that it reverts readily to nesting in the grassland and deserts the marsh almost as soon as the young are reared. There are many other important points in Dr. Allen's admirable monograph which cannot be touched upon here, but the work is well worthy of the careful perusal of every ornithologist. Twenty-two half-tone plates illustrate the habits, nests, birds, etc.—W. S.

Beebe's Preliminary Pheasant Studies and Other Papers. — Mr. Beebe presents in a recent paper¹ some of the results of his study of the pheasants preparatory to issuing his monograph of these beautiful birds. The most important point brought out is the possibility of dividing the family into apparently natural subordinate groups according to the method of moult of the tail feathers. In the *Percidinæ* the moult begins with the innermost feathers, while in the *Phasianinæ* it begins with the outermost. In *Polyplectron*, *Chalcurus*, *Argusianus* and *Rheinardius* (*Argusianinæ* of Beebe) it begins with the third pair from the center, and proceeds both ways, while in *Pavo* (*Pavoninæ*) it begins with the next to the outermost. This character forces *Itaginis* and *Tragopan* into the *Percidinæ* which is quite likely their true position.

In another recent paper² Mr. Beebe describes the development and plumage changes of the White Ibises basing his studies on the birds in the large flying cage at the New York Zoological Park. In conjunction with Mr. L. S. Crandall³ he calls attention to the stiffness in the down feathers representing the tail of young ducks and their persistence on the tips of the juvenal rectrices. This condition is particularly noticeable in the Torrent Ducks of the Andes, *Merganetta*. Mr. Beebe has also republished⁴ with additions an interesting paper on the 'Effect of a Postponed Moult upon the Sequence of Plumage in Certain Passerine Birds,' which appeared in the *American Naturalist* for 1908.—W. S.

Chandler on the Feathers of *Circus hudsonius*.⁵ — In this paper the author describes in great detail the structure of the feathers of the Marsh

¹ Preliminary Pheasant Studies. By C. William Beebe, *Zoologica*, Scientific Contributions of the New York Zoological Society, Vol. I, No. 15, pp. 261-285. April, 1914.

² The Ontogeny of the White Ibis. By C. William Beebe, do., No. 12, pp. 241-248. February, 1914.

³ Specialization of Tail Down in Ducks. By C. William Beebe, and L. S. Crandall, do., No. 13, pp. 249-252. February, 1914.

⁴ Effect of Postponed Moult in Certain Passerine Birds. By C. William Beebe, do., No. 14, pp. 253-258. February, 1914.

⁵ Modifications and Adaptations to Function in the Feathers of *Circus hudsonius*. By Asa C. Chandler. Univ. of Cal. Publ. in Zool., Vol. 11, No. 13, pp. 329-376, pls. 16-20. March 21, 1914.