

technical remarks, that Mr. Richmond's well-annotated paper is doubly welcome. His collections and observations were made between Feb. 1, 1892, and Jan. 19, 1893, all but three months of this time being passed in Nicaragua on the Escondido River, fifty miles from Bluefields.

The results of a study of his specimens, in connection with the collections of the United States National Museum, as set forth in this paper, are as follows: *Trogon chrysomelas*, a form allied to *Trogon atricollis tenellus*, is described as new; *Eleopicus* Bp. is substituted for *Dendrobates Swains.*, 1831, preoccupied by *Dendrobates* Wagler, 1830 (Batrachia). A series of 17 specimens of *Porzana cinereiceps* Lawr. apparently shows that *Porzana leucogaster* Ridgw. is founded on individual variation in that species. No reason is given for relegating the Tinamous to their ancient position between the Quails and Plovers, while *Tanagra palmarum* is presumably a slip for *Tanagra palmarum melanoptera*.

The results of Mr. Richmond's studies of living birds are too numerous to be mentioned within the limits of a brief review. His list includes 242 species of land-birds, and 39 species of water-birds. Concerning the habits of many of these he makes numerous interesting and valuable observations. He considerably extends the range of several species, e. g., *Progne subis hesperia*, *Myrmelastes lawrencii*, and *Panyptila cayennensis*; gives the dates of arrival of many species of North American migrants, and makes some suggestive remarks on the movements of tropical birds. Being present during the breeding season he had an opportunity to study the nesting habits of some species, and he remarks (p. 482) "it is interesting to note that in the tropics many species lay but two eggs," a statement supported by his experience with *Merula grayi*, *Rhamphocelus passerinii*, *Oryzoborus furnereus*, *Embernagra striaticeps*, *Glyphorhynchus cuneatus*, and other species.

The biographical notes are evidently based on the careful observations of a skilled observer, and the paper is therefore an important contribution to our limited knowledge of the life-histories of tropical birds.—F. M. C.

Ogilvie-Grant's 'Catalogue of the Game Birds.'¹—In Volume XXII of the British Museum Catalogue of Birds Mr. Ogilvie-Grant gives us a most welcome contribution to the history of the Game Birds of the World. As here treated they constitute four 'orders', namely, (1) the Pterocletes or 'Pigeon-Grouse,' more commonly known as Sand-Grouse, comprising 3 genera and 17 species; (2) the Gallinæ, divided into two suborders, the first, Alectoropodes, including all of the true gallinaceous birds, and the

¹ Catalogue | of the | Game Birds | (Pterocletes, Gallinæ, Opisthocomi, Hemipodii) | in the | Collection | of the | British Museum. | By | W. R. Ogilvie-Grant. | London: | Printed by order of the Trustees. | Sold by | Longmans & Co., 39 Paternoster Row; | B. Quaritch, 15 Piccadilly; Dulau & Co., 37 Soho Square, W.; | Kegan Paul & Co., Paternoster House, Charing Cross Road; | and at the | British Museum (Natural History), Cromwell Road, S. W. | 1893. = Catalogue of the Birds in the British Museum, Volume XXII. 8vo., pp. xvi + 585, pl. viii.

second, Peristeropodes, consisting of the Megapodes, the Curassows, and Guans; (3) Opisthocomi, with the Hoatzin as its sole representative; (4) the Hemipodii, composed of the Bush-Quails or Hemipods. The number of species recognized is 426, besides 25 additional subspecies, the true Gallinaceous Birds alone (that is, excluding the 25 Megapodes) numbering about 360 species. These last are referred to the two families Tetraonidæ and Phasianidæ, the former with 11 genera and 26 species, the latter with 59 genera and about 260 species. Says Mr. Grant, "There appears to be no real line of demarcation between the true Pheasants (Phasianidæ) and the Partridges (Perdiciæ), the two groups merging gradually into one another in such forms as *Bambusicola*, *Ptilopachys*, and *Galloperdix*." Resort is made to the shape of the wing, and especially the length of the first primary as compared with the tenth, but even this usually "well-marked character breaks down, and in order to artificially separate these two groups it is necessary to have recourse to secondary or supplementary characters, such as the length of the tail."

The present volume compares favorably with the preceding volumes of the series, and is of course executed after the same general plan, the use of the trinomial form of nomenclature being excluded, and also specific names published prior to Linnæus's 12th edition. The treatment of various North American forms is amusing rather than irritating, though it seems about time to expect a more intelligent conception of the subject of subspecies and "climatic variation" than is shown in the present volume. In some instances forms that American writers regard as merely subspecies, and sometimes rather poor ones at that, are given the rank of full species, while in other cases they are reduced to synonyms, or allowed to stand as subspecies, as the author's comparatively limited material and lack of information as to the physiographic relations of localities seem to indicate. The author's standpoint and line of reasoning can be made clear to American readers by the following quotation from his footnote (p. 87) under *Bonasa umbellus*: "This species is subject to great climatic variation. . . . The various varieties have been catalogued under no less than four different names, either as species or subspecies, by the latest American authors; but as all these varieties are to be found among a series of specimens from New York alone and are, therefore, not even dependent on locality, we consider it needless to employ more than one name for all, especially as the four recognized forms grade imperceptibly into one another."

We are surprised to find the term *Ortyx* used for our Bob-whites in place of *Colinus*, and without a word of comment, after it has been so clearly shown by Dr. Stejneger (Auk, II, Jan. 1885, p. 44) that *Ortyx* was employed by Oken in 1816 for the genus *Turnix*, and also by Illiger, in a slightly different form, in the same sense as early as 1811. *Ortyx* is, therefore, clearly a synonym of *Turnix*, and is untenable as used by Stephens in 1819, leaving *Colinus* as the proper name of the genus for which Mr. Grant still retains the name *Ortyx*.—J. A. A.