

Jersey, illustrating his report with cuts from Fisher's 'Hawks and Owls' and other Government publications besides some original photographs and drawings.

We cannot have too many publications like this if we are to save our birds of prey as only by educational methods can we make the public at large realize what is in store for them if these natural checks on the increase of rats and mice are destroyed—not to mention the loss that nature suffers in the elimination of these splendid picturesque birds. Dr. Hausman deserves our gratitude for his admirable report.—W. S.

**Robinson's 'Birds of the Malay Peninsula.'**—The second volume<sup>1</sup> of Mr. Robinson's 'Birds of the Malay Peninsula,' the first part of which was reviewed in 'The Auk' for April 1928, has recently appeared and is devoted to the birds of the "hill stations."

It is similar in all respects to the preceding volume and fully maintains the high standard both as to method of treatment and printing that was established by its predecessor.

The region covered in this volume is the mountainous region above 2500 feet. An outline map shows the extent of this area in the British portion of the Peninsula although the data on the Siamese portion is so inadequate that no attempt to delimit it has been attempted. While most of the species now considered are different from those described in Part I, some occur in both regions and in such cases only a brief description is given with reference to the fuller account previously published. In this way unnecessary duplication is avoided and yet each volume is complete in itself.

There are twenty-five excellent plates by Grönvold all but two of them in colors. Among others such striking Malayan birds as the Long-tailed Broadbill (*Psarismomus*), the White-headed Babbler (*Gampsorhynchus*), the curious Liothrichine birds *Mesia* and *Siva*, Green Bulbuls and Blue Flycatchers are figured.

One plate depicts the heads and enormous casques of the several species of Hornbills found in this region and, in describing the habits of the helmeted species (*Rhinoplax vigil*), the author says that in flight its action is very similar to the other large Hornbills—"three or four beats of the wings in rapid succession being followed by a period in which they are held rigid, the rattling sound made by the air against the primaries being audible at a very great distance. The call of the bird is equally characteristic being a series of single whoops at decreasing intervals . . . representing the ringing note of the axe against timber."

<sup>1</sup> The Birds of the Malay Peninsula. A General Account of the Birds Inhabiting the Region from the Isthmus of Kra to Singapore with the Adjacent Islands. By Herbert C. Robinson, F. Z. S., M. B. O. U., C. M. Amer. O. U., Late Director of Museums, F. M. S. Volume II: The Birds of the Hill Stations, with twenty-five full-page plates. Issued by Authority of the Federated Malay States Government. H. F. & G. Witherby, 326 High Holborn, London, W. C. 1. 1928. pp. i-xxii + 1-310, pls. 1-25, 1 map. Price 35 shillings.

The value of this series of volumes as works of reference and as beautiful illustrated books for the ornithological library cannot be overstated. We congratulate Mr. Robinson for placing within our reach such an admirable review of the avifauna of a remote but fascinating region which but few of us can hope to visit in person.—W. S.

**Grinnell on the Birds of Lower California.**—Dr. Joseph Grinnell has presented in this well gotten-up publication<sup>1</sup> another of his excellent distributional lists and one that is particularly welcome since it treats of Lower California, the avifauna of which has been sadly in need of revision. Through the generosity of Miss Annie Alexander the Museum of Vertebrate Zoology was enabled to carry on field work in the Peninsula for the greater part of three years, especially in the San Pedro Martir Section, and valuable collections were obtained. Upon this material, as well as upon earlier collections in various museums and upon the extensive literature of Lower California ornithology, the present report is based. The study was beset with many difficulties due to the constant duplication of locality names and the uncertainty as to which one the earlier writers referred to; to the careless or incompetence of certain writers in identifying their material; and to the loss of the valuable Bryant collections in the San Francisco fire. Nevertheless Dr. Grinnell has turned out an exceedingly accurate and valuable piece of work.

He recognizes in Lower California several "differentiation areas," as he terms them, in which the differentiation of species or subspecies appears to be directly correlated with conditions having to do with the degree and duration of isolation together with peculiarities of climate, shelter and food. These districts are the Cape, San Pedro Martir (including San Quentin), San Ignacio, the Colorado Desert, San Diegan, Sierra Juarez, Guadeloupe Island, San Bonito Islands, Los Coronados Islands, and Santa Barbara Islands; the peculiar forms differentiated in each ranging from one in the Los Coronados to forty-six in the Cape San Lucas district.

Dr. Grinnell agrees with previous writers that the fauna of the entire Peninsula has been derived from the north and even in the farthest remote Cape district forty-three of the forty-six peculiar forms are apparently so derived, only three, *Crotophaga sulcirostris pallidula*, *Basilinna xantusi* and *Dendroica erithachorides castaneiceps*, having been derived from the tropical coast of Mexico immediately across the Gulf of California.

Dr. Grinnell's chapter on the "Significance of Faunal Analysis for General Biology" is of sufficient importance to have been published separately and will, we fear, be overlooked by many, buried as it is in a work of very different title. He says in introducing his subject that "the importance of carefully differentiating species and subspecies and tracing

<sup>1</sup> A Distributional Summation of the Ornithology of Lower California. By Joseph Grinnell. Univ. Calif. Publ. in Zool. Vol. 32, No. 1, pp. 1-300, figg. 24. University of California Press, Berkeley, Calif. 1928.