"multitude" of Ruby-throated Hummingbirds migrating together across the sky while the Rose-breasted Grosbeak whose "rose stain" was entirely lost in the autumn had more likely never yet acquired it.—W. S.

Taverner's 'Birds of Eastern Canada.''—A second edition of this valuable work is before us, which presents a very creditable appearance with its excellently printed letter press and attractive plates from color sketches by Hennessey. It will prove of inestimable value in providing those interested in the avifauna of eastern Canada, with just the information they desire and should be instrumental in developing many a young bird-lover into an ornithologist.

We have fully reviewed the first edition so that the generally excellent character and scope of the work is already familiar to our readers.

From a purely technical standpoint we fail to grasp the author's object in granting distinctive headings to certain genera, while others are lumped together, as for instance "Genus Thryothorus" and "Genus Thryomanes" but "Genera Cistothorus and Telmatodytes." If he does not regard the last two as separable, why does he not live up to his convictions and unite them instead of adopting this misleading and inconsistent practice? English names for genera are also rather unfortunate and can prove of little use: i. e. "Ground Warblers for a group including the Chat; "Grosbeaks" for the Rose-breast but "Blue Grosbeaks" for Guiraca; and "Yellow-bellied Flycatchers" for all the Empidonaces. It is difficult also to see why some of these names should be singular and others plural.

Errors in the systematic index still place almost all the Sparrows in the genus *Acanthis*; the Parula and Worm-eating Warblers in *Vermivora*, etc.

These are purely technical points, however, and will not detract from the great usefulness of Mr. Taverner's book. It seems to us, however, that in a popular work some definite and generally accepted scheme of arrangement should be rigidly adhered to; such publications are hardly the place for exploiting original schemes. We notice incidentally that *Linnodromus* is consistently mispelled.—W. S.

Swarth on 'Birds and Mammals of the Stikine River Region.'<sup>2</sup>— This important contribution covering Mr. Swarth's explorations in British Columbia and Alaska, May to September 1919, has been prepared with the care and thoroughness that characterize all of his publications. The collection made by the author and his associate Mr. Joseph Dixon, comprised 534 mammals and 638 birds as well as other material, including

<sup>&</sup>lt;sup>1</sup>Birds of Eastern Canada (Second Edition). By P. A. Taverner. Memoir 104, No. 3, Biological Series. Dept. of Mus. Geol. Survey, Canada. Ottawa, 1922, pp. i-iv+1-290 with 50 colored plates (included in pagination).

<sup>&</sup>lt;sup>2</sup> Birds and Mammals of the Stikine River Region of Northern British Columbia and South-eastern Alaska. By H. S. Swarth, Univ. of Calif. Publ. in Zool. Vol. 24, No. 2, pp. 125–314. Plates 8 and 24 text figs. (Issued June 7, 1922.) Price \$2.50.

photographs which are used liberally throughout the text and give one a good idea of the country traversed.

The report consists of: (1) Itinerary and Descriptions of Localities; (2) Topography of the Region and its Bearing upon Animal Life; (3) Zonal and Faunal Position of the Stikine Valley; (4) General Accounts of the Mammals (34 species); (5) General Accounts of the Birds (127 species); (6) Literature Cited.

The Stikine valley, which cuts directly through the Coast Range, connects two wholly different areas—the humid Sitkan region of the coast, with its equable temperature, and the much dryer interior with its wide range of seasonal climate. This river valley, while very old, was choked with ice at no very remote period and with the retreat of the glaciers was again opened up. The advance of the animal life northward again has however, been mainly east and west of the Coast Range, and while various species have extended their range from the interior coastwise down the Stikine Valley and vice versa it has not proven an important channel either from the viewpoint of range extension or migration so far as Mr. Swarth's studies indicate.

The account of the relationship, distribution and habits of the various birds are replete with valuable and interesting data. Most important is that of the Bohemian Waxwing which was found nesting in the vicinity of Telegraph and Doch-da-on Creeks, and eggs and young secured. A beautiful colored plate of the young birds from a painting by Allan Brooks forms a frontispiece to the report.

The account of the Olive-backed Thrush (Hylocichla u. swainsoni) is particularly interesting in its bearing on the subspecies problem. Mr. Swarth found this eastern form ranging down to within thirty miles of the coast—the habitat of ustulata —and yet showing no trace of intergradation, in fact the specimens were more extreme in the characters of swainsoni than examples from the eastern United States! If they are to be regarded as subspecies he says, "it must be on the criterion of individual variation rather than that of gradual blending through the population of contiguous areas." Yet Mr. Taverner in his 'Birds of Eastern Canada' distinguishes a species and subspecies as two different things, saying, "It [the subspecies] differs essentially from a full species by showing intergradations with allied races of equal rank." It seems to us in the face of evidence presented by Mr. Swarth and others, that it is foolish to establish any difference except one of degree between the two, and the rank of many a form will always be a matter of personal opinion. Mr. Swarth maintains his admirable attitude on nomenclature, following the A. O. U. 'Check-List' except where he has evidence which seems to him to warrant the recognition of forms as yet not accepted by the A. O. U. Committee. "I have made no attempt," he writes "to be 'up to date' in the adoption of the scores of changes proposed in recent years, not yet acted on by the Committee, and regarding which I have no new facts to offer or upon which I cannot form an independent opinion." If others would adopt such a common sense attitude our nomenclature would be far more stable and understandable.

Forms the recognition of which he advocates, and which are not yet on the A. O. U. List, are *Dendragapus obscurus flemingi*, D. o. sitkensis, Canachites canadensis atratus, Loxia curvirostra bendirei, L. c. sitkensis, Vermivora celata orestera, Dendroica coronata hooveri, Penthestes gambeli abbreviatus, and Planesticus migratorius caurinus. Junco hyemalis connectens of Coues is resurrected as applying to the form breeding in the Stikine Valley with an exhaustive discussion of the case, and of the relegation of this and other puzzling forms to hybrid origin.

Mr. Swarth is to be congratulated upon another notable contribution to the zoology of the north-west.—W. S.

Lönnberg and Rendahl on the Ornithology of Ecuador<sup>1</sup>.—This paper is based on collections presented at different times to the Royal National History Museum at Stokholm by Mr. L. Söderström, Swedish Consul at Quito. There is, first, a list of the characteristic species of each zone with a comparison with Chapman's lists for Colombia, and then an annotated list of all the species contained in the collections, with notes on several by Mr. Söderström. The following are named as new: Nothocercus plumbeiceps (p. 13) Baeza; Odontophorus söderströmii (p. 16) Napo; Momotus lessoni gualeae (p. 51) Gualea; Oreotrochilus chimborazo söderströmi (p. 56) Quillotoa; Heliothrix auritus, major (p. 61) Pisagua; Pseudocolaptes johnsoni (p. 69) Baeza; Tityra nigriceps gualeae (p. 75) Gualea; Iridophanes pulcherrima gualeae (p. 83) Gualea, and Pyranga rubriceps rufistigmata (p. 86) Baeza.—W. S.

Wetmore on Bird Remains from the Caves of Porto Rico.<sup>2</sup>—This is a final report on the bird bones collected in the caves of Porto Rico by Mr. H. E. Anthony in connection with his well known researches on the extinct mammalian fauna of the island.

Forty-two species are represented of which all but seven are birds now living on the island, bodies of many of which were doubtless carried into the caves by two species of owls which frequent them and whose skeletons were also found there. The seven extinct species were previously described and named by Dr. Wetmore, and in the present paper the bones upon which the diagnoses were based are figured.—W. S.

<sup>&</sup>lt;sup>1</sup> A contribution to the Ornithology of Ecuador. By Einar Lönnberg and Halmar Rendahl. Arkiv. F. Zoologi. K. Svensk. Vetsakad. Band 14, No. 25, pp.1– 87. May 11, 1922.

<sup>&</sup>lt;sup>2</sup> Bird Remains from the Caves of Porto Rico. By Alexander Wetmore, Bull. Amer. Mus. Nat. Hist. XLVI, Art. IV, pp. 297-333. May 22, 1922.