

RECENT LITERATURE.

Swarth on the Birds and Mammals of the 1909 Alexander Alaska Expedition.¹—The 1909 Alexander Expedition to parts of the Sitkan district of Alaska not visited by the expedition of 1907 was made by the author of the present paper, assisted by Allen E. Hasselborg of Juneau, during the period from April 1 to October 1, 1909, their means of transportation being a gasoline launch. Sixteen islands and six mainland localities were visited. The report contains a detailed itinerary and a large-scale map of the whole Sitkan district, as now commonly restricted. The material collected consists of 604 bird skins, and nearly as many specimens of mammals. The localities visited are described in detail, followed by a report on the birds (pp. 26–112), another on the mammals (pp. 113–151), and several pages entitled 'Distributional Considerations' (pp. 151–159). The list of birds numbers 137 species and subspecies, the mammals, 27 species and subspecies.

The report on the birds relates to "distribution, moult, variation, and biographical notes." The notes on habits and on the local distribution of the forms in the Sitkan district are often quite extended, as are frequently the notes on individual and seasonal variation. The report is thus an important contribution to the ornithology of the region. While no new forms are described, the material obtained is considered, as far as it goes, as generally confirmatory of the new local forms described by Grinnell in 1910, gathered during the Alexander expedition of 1908 to this same region. The conspecific relationship of *Macrorhamphus griseus* and *M. scolopaceus* is discussed at some length, the conclusion reached being that the two forms are only subspecifically distinct, as given in the last edition of the A. O. U. Check-List (not, however, cited in this connection). *Sphyrapicus ruber* is given as *S. varius ruber*. *Picoides americanus fumifrons* Grinnell is referred to *P. americanus americanus*, the second specimen of this supposed race having "not a trace of the smoky suffusion beneath" shown by the type. The breeding form of *Passerculus* is referred to *P. sandwichensis savanna*, "as a matter of convenience," since it more nearly resembles this eastern form than it does *P. s. alaudinus*. As Mr. Swarth has himself "seen no conclusive evidence" of the intergradation of *Junco hyemalis* and *J. hyemalis oregonus* (the "occasional specimens" combining the characters of both forms he would consider as hybrids), *oregonus* is given full specific rank. The long discredited *Hirundo erythrogaster 'palmeri'* and *Dendroica coronata 'hooveri'* are here revived, and the doubtfully identifiable name *gracilis* is given preference over *striata* for the western form of *Melospiza lincolni*.

¹ Birds and Mammals of the 1909 Alexander Alaska Expedition. By Harry S. Swarth. University of California Publications in Zoölogy, Vol. VII, No. 2, pp. 9–172, pls. i–vi, 3 text-figs. January 12, 1911.

The climatic and physiographic conditions are said to be quite uniform throughout the area under consideration, and, with the exception of the grouse, "the avian fauna is everywhere much alike." In the case of the mammals, however, "it is interesting to note that with one or two possible exceptions there is no species of mammal that ranges unchanged throughout the whole of the region."—J. A. A.

Tracy's 'Significance of White Markings in Birds of the Order Passeriformes.'—The subject¹ is considered under the following captions: Intrinsic factors in the evolution of color; white markings as visual clues; the problem discussed for birds in the open; the problem discussed for arboreal species; special study of the Mniotiltidae; sexual selection as affecting white patterns; directive markings outside the order Passeriformes; conclusions. The author has here assembled an interesting array of facts, and has discussed them in a liberal spirit. The Passeriform birds of North America are listed in groups with regard to whether they are birds of the open-ground or are arboreal, and are further subdivided with regard to their having or not having concealed white, or white wing and tail markings, etc. In birds of the open, nearly all those with white markings are "to be classed as flocking birds," while those without white marking do not flock, with a few exceptions, for which special explanations are offered.

"Coloration in birds," says the author, "whatever its cause or the mechanism of its production, is conceded to be adaptive; it responds to their needs, forms a part of their life adjustments. Concealment from its enemies is not the only need in a bird's life, not the only adjustment that affects color-patterns. The bird also needs to be made known to other individuals of its kind, and to other species associated with it; and this need has certainly been met. . . . The number and variety of perils that daily surround our smaller land-birds, and the extent to which these may be diminished by the birds' keeping in touch with one another, point to the need of something more than concealing coloration, and admit of special adaptations that shall act in harmony with it and yet serve to reveal the bird to its kind. . . ."

"Starting out with a presumption in favor of some form of revealing clues among the higher land-birds, and eliminating a terminology [banner-marks, etc.] which has been misleading, it remains for us to determine, if possible, what these clues are, and whether color features form a part of them; if so, how this harmonizes with the function of the same or similar color features as concealing. . . . But *general* coloration is seen to be normally protective, for birds that need protection; and as for special patterns, even a satisfactory demonstration of their 'obliterative' effect does not

¹ Significance of White Markings in Birds of the Order Passeriformes. By Henry Chester Tracy. University of California Publ., Zool., VI, No. 13, pp. 285-312. Dec. 28, 1910.