100 Years Ago in The Auk

From "To what extent is it profitable to recognize geographical forms among North American birds?" by J. A. Allen (1889, Auk 7: 6-8)

At this time J. A. Allen, in addition to his responsibilities at the American Museum of Natural History, was President of the AOU, editor of The Auk, *and chaired the committees on publication, on arrangements for the 1890 meeting, and on the Check-list.—Ed.*

"The discoveries made during the last five years show that the subject of North American ornithology is far from exhausted, even in respect to the cataloguing of its numerous forms of bird life, and especially as regards their distribution. To show how much we did not know five years ago of the birds of even our long-settled southeastern States, I have but to instance five or six species—namely, Swainson's Warbler, Bachman's Warbler, Leconte's Sparrow, the Raven, and the Seaside Finches. Add to this the new forms recently brought to light in this supposed well-known area, and we must conclude that we are still only on the threshold of a thorough knowledge of the birds of our South Atlantic and Gulf States. What do we as yet know of the distribution of many of the southern subspecies of this area, and of their lines of inosculation with the northern forms? Nothing, with exactness. What do we yet know of the breeding ranges of the summer birds south of the Ohio Valley? Practically nothing. To how slight an extent are we able to unravel the many perplexing problems of the bird fauna of the great State of Texas, so peculiarly situated in relation to the East and the West, the North and the South, as regards North America at large. The great Southwest and the great Northwest, with their opposite extremes of climatic conditions and peculiarities of environment, as compared with the region to the eastward, still present to us many perplexing problems.

"Under such a condition it is no wonder that the pendulum again tends in the direction of refined subdivision. We are alert for differences, with our wits sharpened to recognize slight variations in size, in form, and in tones of color. Our material is constantly becoming more ample, and the meaning of slight variations is thus more apparent than it otherwise would be. When large series of specimens of any species from distant points are compared, in cases where the environment is more or less diverse, we are accustomed to find appreciable differences—in some cases slight, in others so well-marked as to be obvious at a glance. In many instances, however, the differences are apparent only when large series are available for comparison; the differences being merely average differences; a greater or less proportion of the specimens of the two series are practically indistinguishable, the range of individual variation in either series overlapping the difference characterizing the two slightly differentiated forms. In other cases the occurrence of specimens that cannot be easily referred, without knowing their origin, to one or to the other, is exceptional.

"These being the general facts in the case we are at once confronted with a serious question and a grave danger. The splitters of an earlier time regarded every form, however slightly differentiated, as a species. We arbitrarily define a species as a group of individuals standing out distinct and disconnected from any similar group, within which, though occupying different parts of a common habitat, we recognize other forms characteristic of, and restricted to particular areas. These reach a maximum degree of differentiation at some point in the habitat, and thence gradually shade into other conspecific forms geographically contiguous.

"The distinction we thus make between species and subspecies, though a purely conventional one, forms an indispensable basis for the convenient recognition of the various minor stages in the evolution of organized beings. The serious question is where to draw the line in recognizing local forms in nomenclature. While it is important to discover, and in some way record, even the very slight differences due to peculiarities of environment, there is obviously a reasonable limit to the naming of such forms by the use of the trinominal system of nomenclature. How well-marked then, must be a set of intergrades to entitle them to recognition? On this point no arbitrary hard-and-fast line can be laid down. Much, at least for the present, must be left to the discretion of the investigator. We are still groping in the dark; our steps are, in the main, tentative and provisional. We cannot act decisively in respect to the bird life of North America, or of any large area, till we know thoroughly the phases of variation throughout every nook and corner of the area in question. At present new forms are coming to light, often where least expected; every considerable series of specimens from any locality previously known only superficially presents us with, if not new nameable forms, at least a new set of puzzling intergrades, tending to unsettle opinions we thought were safely grounded, and showing that every question touching the status of species and subspecies is still more or less open to revision. . . ."