## Fifth in Fuertes print series

Notes on the Plumage of North American Sparrows

By Frank M. Chapman

The following text is reprinted almost verbatim from *Bird-Lore*, XVI, May-June, 1914, pp.178-9. The reader should remember that all five species are now considered congeneric in *Aimophila*, and that the races mentioned by vernacular names in the text have all been stripped of these names.—Ed].

Both range and habit tend to prevent the Sparrows figured in this issue of BIRD-LORE from being widely known. Confined for the greater part to our southern border states, they do not, as a rule, enter the region where bird students most abound, while their retiring habits and generally elusive ways make them far from conspicuous, even in localities where they are common. I have no personal knowledge of the more western species, but, if any of them sing as sweetly as does our Pinewoods Sparrow (and its northern race, Bachman's Sparrow) [now both Bachman's Sparrow-Ed.], it is indeed a pity that their voices should so rarely fall on appreciative ears.

As the frontispiece shows, even those birds of this group which ranked as species bear a close general resemblance to one another. The 'Check-List' of the American Ornithologists' Union places them in two genera, *Peucaea* and *Aimophila*, but Mr. Ridgway, in his great work on the 'Birds of North and Middle America,' includes them all in *Aimophila*, proof that the exact degree of their relationships is largely a matter of opinion. [Check-list, 5th Ed., 1957, specifies *Aimophila*-Ed.].

The molts of these birds have not, so far as I am aware, been minutely studied, nor have we at this time sufficient material to go thoroughly into this subject. It may be said, however, that in all the species the sexes are alike, and there are no marked seasonal changes in color.

The nestling always has the underparts more or less distinctly streaked. These streaks are lost at the post-juvenal molt, and in our eastern species (and doubtless also others) the young birds pass into a plumage (first winter) which cannot be distinguished from that of the adult of the same season. The differences between winter and summer plumage are largely due to wear

To this brief outline may be added a list of the species and races, with the characters by which they may be distinguished.

**Pine-woods Sparrow** (*Peucaea aestivalis aestivalis, Fig.* 2).—All three species of Peucaea agree in having the bend of the wing yellow, a mark which is wanting in our species of Aumophila. In addition to this feature, the heavily washed

chest, in connection with the absence of maxillary streaks, distinguishes this species. Its northern form, Bachman's Sparrow (*Peucaea ae. bachmani*), has much less black on the upperparts, which are sometimes only bay and gray.

**Cassin's Sparrow** (*Peucaea cassini, Fig. 1*).—The spotted or barred appearance of the back is the diagnostic character of Cassin's Sparrow. Instead of being centrally streaked, the feathers of the back have a narrow black bar near the end. The general color of the plumage is decidedly paler than that of the other birds having the bend of the wing yellow (*Peucaea*).

Botteri's Sparrow (*Peucaea botteri*, Fig. 3).—This species most nearly resembles the Pine-woods Sparrow, but is larger, pale above, and the breast is less heavily washed.

**Rufous-winged Sparrow** (Aimophila carpalis, Fig. 4).— The chestnut-rufous lesser wing-coverts, and the similarly colored, gray striped crown will serve to identify this species, which bears a singularly close resemblance to a Western Chipping Sparrow in winter plumage.

Rufous-crowned Sparrow (Aimophila ruficeps ruficeps, Fig. 5).—This species may be known by its rufous cap, wellmarked maxillary streaks, and absence of black markings (less than Fig. 5 shows) in the back, together with the lack of yellow on the bend of the wing. This is the California form. In southern Lower California it is represented by the Laguna Sparrow (A. r. sororia), a nearly related race, somewhat brighter above and with a slightly larger bill. In Arizona there is a third form, Scott's Sparrow (A. r. scottii), which has the underparts decidedly paler, the back with grayer margins; and in Texas a fourth form, the Rock Sparrow (A. r. eremoeca) has the crown darker, more chestnut than in Scott's Sparrow, and the back still grayer. These races, however, can be satisfactorily identified only on comparison of specimens, but since, during the nesting season, one is unlikely to find any two of them at the same place, the locality at which a bird is found will, at this season, go a long way toward determining to which particular race it belongs.

The original plate, the Frontispiece of Vol. XVI, No. 3, appeared lighter, with more emphasis on the tans and browns, and with much less blue than our plate. The pine needles and the cactus were pale green. Our plate, however, is a faithful reproduction of the original painting in its present state. Either the reds and greens have faded over the years, or the *Bird-Lore* original was not an accurate copy. The former is more likely to be the explanation.—Ed.].

