

## Fourteenth in the Fuertes print series

[The original painting was reproduced in *Bird-Lore*, Vol. XIV, March-April, 1912, No. 2. Taxonomic notes have been abridged from the A.O.U. Check-List Fifth Edition (1957). But the Chapman text has been augmented by more recent distributional information.]

### Notes on the Plumage of North American Birds

By FRANK M. CHAPMAN

**White-throated Sparrow** (*Zonotrichia albicollis*, Figs. 1-2). In juvenal (nestling) plumage, the White-throated Sparrow is heavily streaked below, the underparts at this age closely resembling those of a young Song Sparrow. The back, however, is of about the same color as that of the first winter plumage (Fig. 2), which, in late July and August, is acquired by molt of all the feathers except the tail and wing quills. Some birds of this age more closely resemble the adult below than the one figured, while in others, particularly females, there is no trace of a white throat, this part, with the breast, being gray, with a somewhat obscure spot on the center of the breast. This plumage has puzzled many bird students. In it, the underparts more nearly resemble those of a winter Swamp Sparrow than they do those of an adult White-throat. In April, both immature and adults undergo a partial molt and pass into adult summer plumage (Fig. 1). Adults, in winter, resemble Figure 2 above, but have the white throat about as well defined as in Figure 1.

Monotypic. Breeds from s. Yukon, Mackenzie, n. Ontario, c. Quebec, s. Labrador and Newfoundland s. to the n. United States from North Dakota to New York and Rhode Island. Winters mainly in the United States s. to n. Mexico, Texas, the Gulf Coast and Florida

**Black-chinned Sparrow** (*Spizella atrogularis*, Figs. 3-4) This southwestern relative of the Field Sparrow is the only sexually dimorphic *Spizella*. The female has less black on the throat. The nestling plumage resembles the first winter (Fig 4), and unlike the corresponding plumage of *S. pusilla*, is not streaked below. Three races have been described. *S. c. cana* is smaller, with slightly darker and less pure gray as compared to *evura*. The characteristics are more pronounced southerly *S. c. caurina* differs from *cana* . . . "in a general lack of brown and buff colors on the body plumage and a smaller area of white on the belly; the immature contrasting with *cana* in somewhat more distinctive ways."

*Spizella atrogularis evura*, (Arizona) **Black-chinned Sparrow**.—Breeds e. of the Sierra Nevada in c.e. California, s. Nevada, s.w. Utah, c. and s.e. Arizona, n.e. Sonora, s. New Mexico and w. Texas. Winters n. to s. Arizona and w. Texas.

*S.a. cana*, (California) **Black-chinned Sparrow**.—Breeds in mountains of s.c. and s.w. California s. to n. Baja California. Winters from s.w. California s. to s. Baja California.

*S.a. caurina*, (San Francisco) **Black-chinned Sparrow**.—Breeds in coastal ranges of c.w. California; one winter record from Santa Cruz I., California.

**White-crowned Sparrow** (*Zonotrichia leucophrys*, Figs. 5-6). The juvenal plumage of the White-crowned Sparrow differs much more from the first winter plumage than does that of the White-throat. So far as the underparts are concerned, they are both streaked and not unlike, but while the dorsal plumage of the White-throat resembles in color that of the winter plumage, which soon replaces it, the back of the nestling White-crowned is as strongly streaked with black as that of a young Song Sparrow, for which, indeed, it might easily be mistaken.

First winter plumage (Fig. 5) is apparently gained by molt of the body feathers and wing-coverts, and varies comparatively little. The adult plumage (Fig. 6) is acquired by partial molt the first spring, and thereafter the bird shows no color change, the adult in winter being like the adult in summer.

Five races of *Zonotrichia leucophrys* appear in the A.O.U. Check-List, Fifth Edition, all of which are presently considered [by most] valid.

*Zonotrichia leucophrys leucophrys*, (Eastern) **White-crowned Sparrow**.—Manitoba e. to Labrador, Quebec and n. Newfoundland S in winter from Kansas and (rarely) New York to Mexico, Louisiana, and n.w. Florida.

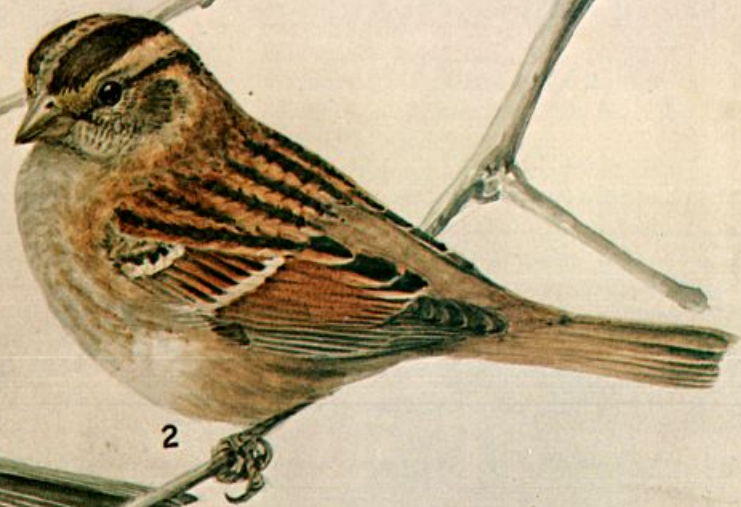
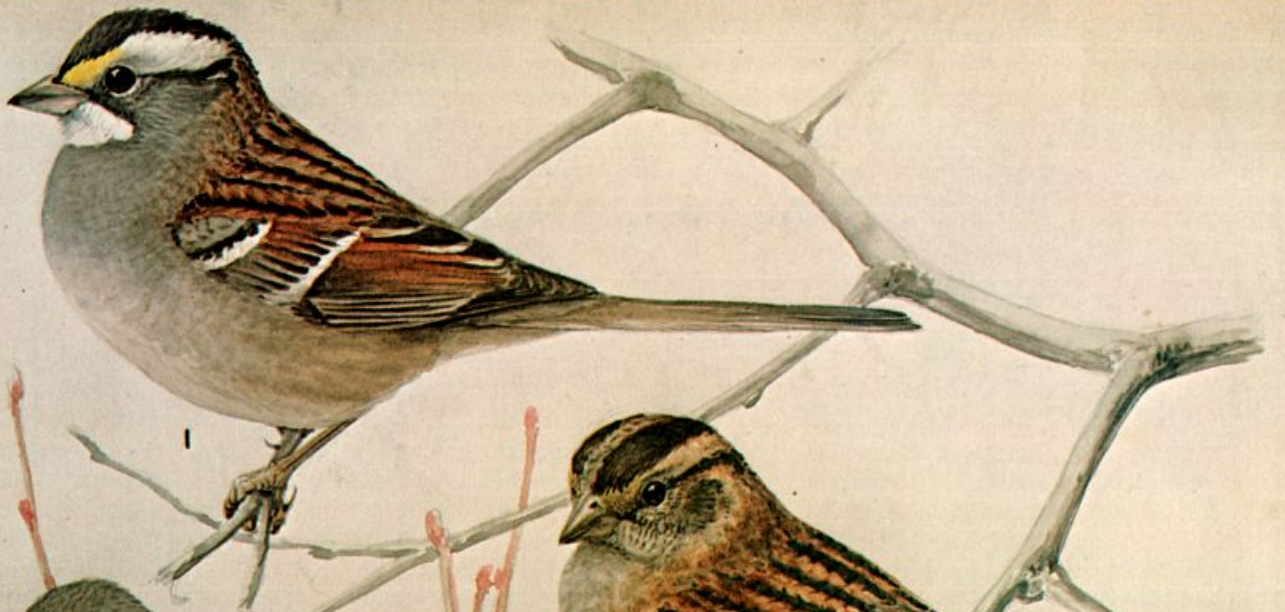
*Z. l. gambelii*, (Gambel's) **White-crowned Sparrow**.—Breeds from n.c. Alaska e. to w. Keewatin, s. to s. Alaska, s.w. Yukon, c. s. British Columbia, Alberta, n. Saskatchewan and Manitoba. Winters across w. United States to n.c. Mexico, occasionally eastward

*Z. l. oriantha*, (Mountain) **White-crowned Sparrow**.—Breeds from s. Alberta and Saskatchewan through mountains of Oregon, California, Nevada, Utah, Arizona, Colorado and New Mexico. Winters from s. California, Arizona, New Mexico and Texas s. into Mexico

*Z. l. pugetensis*, (Puget Sound) **White-crowned Sparrow**.—Breeds from s.w. British Columbia s., w. of the Cascade Range in Washington and Oregon, to n.w. California. Winters s. to s. California

*Z. l. nuttalli*, (Nuttall's) **White-crowned Sparrow**.—Resident along the narrow coastal strip of c. w. California from Mendocino County to Santa Barbara County.

Positive identification of the different races of this species is difficult from morphological characters alone. Song is often the most helpful clue to racial identity, but some intergrades defy positive separation even with all characters carefully studied. We refer the reader to the fascinating studies of Barbara Blanchard DeWolfe, in Bent, A.C., *Life Histories of North American Cardinals, Grosbeaks, Buntings, etc.*, 1968, Smithsonian Institution Bull. 237, Part 3, p.1312 ff.



Robis Agassiz Cuertes.