Twenty-first in the Fuertes print series

[The original painting by Louis Agassiz Fuertes was reproduced in *Bird-Lore*, Vol. XVII, No. 5, September-October, 1915. The accompanying text, written by Frank M. Chapman is reprinted here with minor updating.]

Notes on the Plumage of North American Birds Frank M. Chapman

Tufted Titmouse (Baeolophus bicolor — presently Parus bicolor, Figs. 1,2). — Few birds show less variation with age, sex, or season than do our titmice of this genus as well as of the genus Penthestes (presently Parus), which contains the chickadees. The Tufted Titmouse in nestling or juvenal plumage closely resembles its parents, but its forehead lacks the black frontlet. It has but little crest, and the gray of the plumage is washed with brownish.

At the postjuvenal, or first fall molt the tail feathers and wingquills are retained, the rest of the plumage being molted. The new plumage (first-winter) then acquired resembles that of the adult, but in some specimens the crest and black frontlet are not so fully developed.

There appears to be no spring molt, and the slight difference between winter and summer plumage is occasioned by wear and fading.

After the breeding season there is the usual complete molt, and if the full crest and black forehead have not already been acquired, they are obtained now.

Resident through the eastern United States from the southern tip of Maine south to southern Florida, west through the southern tip of Ontario through the southern part of the lower peninsula of Michigan, west through the northern two-thirds of Wisconsin, south through the southeastern tip of Minnesota, south and slightly west to the eastern one-third of Kansas, through Oklahoma and the eastern half of Texas. No other titmouse occurs east of Texas.

Black-Crested Titmouse (Baeolophus atricristatus atricristatus — presently Black-crested Titmouse, Parus atricristatus, Figs. 3,4). — The whitish or rusty forehead and long, black crest at once distinguish this bird from the Tufted Titmouse, although aside from the characters mentioned, the birds are surprisingly alike. The sexes usually resemble each other, although the crest is sometimes duller in the female.

In nestling plumage, the forehead as well as crown is gray, somewhat darker than the back or blackish, and the crest is much shorter than in the adult. At the postjuvenal molt this plumage is changed for one like that of the adult, although in some individuals the black crest is not so highly developed. Until the postnuptial molt the slight changes which occur in the plumage of this species are due to wear and fading.

Sennett's Titmouse (Baeolophus atricristatus sennetti — presently Parus atricristatus sennetti) is a nearly related race of the preceding from which it differs, according to Ridgway, in being larger, clearer gray above, in having the crest feathers in the female more often tipped with gray, while the forehead in both sexes is more often tinged with brown or rusty. This is the more northern of the two forms.

According to the 5th edition of the A.O.U. Check-List, Atricristatus has four races: P.a. paloduro, resident in the drainage of the South Fork of the Red River in Randall and Armstrong counties, Texas; *P.a. dysleptus*, resident in Jeff Davies and Brewster counties, Texas south to the Sierra del Carmen, Coahuila; *P.a. atricristatus* resident from extreme southern Texas south through eastern Coahuila, Nuevo Leon, and Tamaulipas to eastern San Luis Potosi, Hidalgo and northern Veracruz; *P a sennetti*, resident in central and central southern Texas.

According to the 6th edition of the A.O.U. Check-List, Black-crested Titmouse is merged with Tufted Titmouse and becomes Parus bicolor atricristatus.

Plain Titmouse (Baeolophus inornatus — presently Parus inornatus, Fig. 5). — This well-named species is 'plain' throughout its life. Its small crest is its one adornment. This is worn by both sexes, but is much shorter, indeed almost lacking in juvenal plumage. Aside from this difference, and the greater softness of its plumage, the young bird resembles its parent, and after the postjuvenal molt they are indistinguishable.

If the Plain Titmouse does not vary appreciably with age, sex, or season, it does geographically. A number of races have been described; ten of them are recognized in the 5th edition of the A.O.U. Check-List. P.i. sequestratus, resident in the interior coast ranges of southwestern Oregon and northwestern California; P.i. inornatus, resident in central western California, P.i. transpositus, is resident in southwestern California south to the Mexican boundary; P.i. mohavensis, resident in the mountains of southeastern California; P.i. kernensis, resident in southeastern California; P.i. affabilis, resident in northern Baja California; P.i. cineraceus, resident in southernmost Baja California; P.i. zaleptus, resident from central southern Oregon, northeastern California, and western Nevada south to central eastern California; P.i. ridgwayi, resident from northeastern Nevada, southeastern Idaho, southwestern Wyoming, southcentral Colorado and western Oklahoma, south to southeastern California, central and central southern Utah, northeastern Arizona, central Mexico, and western Texas; P.i plumbescens, resident from northwestern to southeastern Arizona and in southwestern New Mexico.

Bridled Titmouse (Baeolophus wollweberi — presently Parus wollweberi, Fig. 6). — In juvenal plumage the markings about the head from which this species is named are less distinct; the young birds are therefore comparatively 'unbridled', the throat is grayish and the crest has developed. These differences disappear at the postjuvenal molt when the young birds usually acquire a plumage like that of the adult, from which thereafter they cannot be distinguished. The female resembles the male. Three races, one in the U.S.

Parus wollweberi phillipsi is resident from central and southeastern Arizona and southwestern New Mexico, south through central and eastern Sonora and Chihuahua to northwestern Durango.

