

Proposals Relative to Certain Subspecific Groups of *Carpodacus Mexicanus*

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A study of the house finches found east of the continental divide reveals differences which place them in two distinct groups. And when these groups are compared with specimens from the west slope; they bring to light variations which point to the necessity of recognizing them as subspecific races of *Carpodacus mexicanus*.

That these differences have not been overlooked by earlier writers is illustrated in McCall's*¹ description of the Santa Fe, New Mexico, birds as *obscurus*, and Aiken and Warren's**² comments regarding the birds found at Colorado Springs, El Paso County, Colorado. The brevity of the latter writers is doubtless traceable to the fact that Dr. Say's type of *frontalis***³ was taken but a short distance south of Colorado Springs.

On the basis of the present writer's studies, however, it is possible that Say's type belonged to the light group of birds, found south of the Arkansas River valley; or, what is more probable, it may have been an intermediate between the light form to the south and the dark race to the north. If the former, it was more nearly related to McCall's *obscurus* than *frontalis*, of the areas west of the continental divide, but this must remain problematical, as the type of *frontalis* was long since destroyed.

In reviewing the literature pertaining to the house finches in Colorado, the writer was surprised to find that their status was questionable, in the area north of the Arkansas River, during the early 70's of the last century. Attention was drawn to this through Allen's**⁴ omission of *frontalis* in his list of birds found east of the divide. Henshaw*⁵ likewise failed to record this finch from the foothills region. Dr. Allen in particular covered a large area where the bird is now abundant and it is scarcely probable that he would have failed to note it, had it been present.

That it was rare or had not reached the vicinity of Denver, prior to the late 70's, is borne out by the accounts of Mr. Horace G. Smith. Mr. Smith became a resident of Denver in 1872 and for several years thereafter was associated with Mr. A. W. Anthony, one of the pioneer ornithologists of Colorado. He states that he was well acquainted with the birds of Denver by 1880 and his notebooks substantiate his assertion that he did not observe the house finch until April 4, 1882. He further states that from that period the house finch gradually became numerous. This, then, appears to be the first authentic record of the occurrence of the house finch at Denver.

*¹Proceedings Academy Natural Sciences, Phila. Vol. V, P. 220, June, 1851.

**²The Birds of El Paso County, Colorado, Part 11.

**³Longs Expedition, Part 11.

**⁴Ornithological Notes from the West, Am. Naturalist, Vol. 6, PP. 342-351.

**⁵Report Upon and List of Birds Collected by the Expedition for Geographical and Geological Explorations and Surveys West of the One Hundredth Meridian: Engineer Dept., U. S. Army.

Reference to Aiken and Warren's list of the birds of El Paso County, Colorado, reveals a similar appearance of this finch at Colorado Springs. Mr. Aiken states that he first met the bird at Canon City, Fremont County, on April 26, 1871, and found nests in the nearby hills the following May. He also found nests at Trinidad, Las Animas County, as early as July, 1871, but not at Pueblo, Pueblo County, Colorado Springs and Denver. When he returned to Colorado in 1895, however, he found them frequenting the city (presumably Colorado Springs).

As has been pointed out by Aiken and Warren, the birds of Colorado Springs are darker and that also applies to the specimens taken at points to the north. They are grayer and due to the greater width of the stripes on the underparts, they are much darker. This, coupled with other distinguishing characters, warrants their recognition as a subspecific race and it is proposed that they be designated: *Carpodacus mexicanus smithi**⁶ New subspecies.

Type:—adult male: Colorado Museum Natural History No. 6444; collected by Frederic C. Lincoln, near Aurora, Arapahoe County, Colorado, March 5, 1917.*⁷

Common characters:—Darker than in other North American races of *Carpodacus mexicanus*: In both sexes the stripes on the underparts are much darker (Choetura Drab)*⁸ and broader than in *frontalis* from southern Colorado and westward, these characters being markedly prominent. The ground color of the underparts of *smithi* is gray and not buffy as in *frontalis*. Equally distinctive are the red markings on the head, throat, breast and back of the males: it is darker than in *frontalis* and southern birds: it tends strongly to purple: and is most nearly expressed by Ridgways Acoujou Red, Pompeian Red and Dragon's-blood Red: the red on the rump differs little from that of *frontalis* except that it is darker.

Measurements:—In the series of specimens at hand are 33 examples of *smithi*, in breeding plumage, from Denver and vicinity: Below is a table of their average measurements, together with the average of southern birds and like measurements of *frontalis*, as compiled by Ridgway.*⁹

Average measurements of *smithi*.

Sex	Wing	culmen	tarsus	tail
♂.....	78.83	10.17	17.63	60.57
♀.....	76.32	10.13	17.45	58.18

Average measurements of Southern Colorado birds.

♂.....	79.83	10.83	18.00	62.60
♀.....	76.66	10.50	17.33	58.00

Average measurements of Western birds.

♂.....	78.49	10.41	17.78	56.39
♀.....	74.93	10.41	17.53	56.90

*⁶Named in honor of Mr. Horace G. Smith of Denver, Colorado. Modest and retiring to a degree that must be regarded as a fault, Mr. Smith has devoted the greater part of his life to a study of the birds of Colorado, notably of the Denver area. That he has published so little regarding the subject he knows so well, is a misfortune. The author takes pleasure in giving this form of recognition to the painstaking excellence of Mr. Smith's work.

*⁷It occurred to the writer that a part of the dark coloration of *smithi* might be traceable to soot and other stains. A thorough washing of a few specimens in water and soap merely emphasizes the characters described. An outlying district was selected as the type locality as a means of avoiding the possible effects of discoloration.

*⁸Color Standards and Nomenclature: Ridgway.

*⁹The Birds of North and Middle America.

Distribution:—Examples intermediate between southern Colorado birds and *smithi* are occasionally taken as far north as Denver and an adult male taken at Trinidad must be so recognized. There are no specimens at hand from southeast Wyoming but since *smithi* ranges northward into north-central Colorado it is presumed that the Wyoming birds are referable to that race. So far as known at the present time, *smithi* is restricted to the east slope of the continental divide, north of the Arkansas River valley.

There are before the writer Colorado specimens of house finches from the Arkansas River valley as far east as Lamar, Prowers County: the extreme southeast corner of the state, in Baca County: Trinidad, Las Animas County: the extreme southwest corner of the state, in Montezuma County, and Granby, Grand County. The last two localities are west of the continental divide and the specimens taken there closely resemble examples from points to the westward. The underparts are distinctly buffy. On the other hand the specimens from points in southeast Colorado are lighter and much less buffy. The red of the males is lighter and more consistent in shade than is found in *frontalis* from western points. This applies equally well to the birds of New Mexico.

They are separable from *frontalis* of the west and it is proposed that McCall's *obscurus* be revived, to apply to the birds of southeast Colorado, New Mexico, Kansas, Oklahoma, Texas and perhaps eastern Arizona.

We now have to consider the birds of the west slope. Were it still in existence Say's type might be helpful, but in the circumstances the writer is of the opinion that the west slope birds should be treated quite independent of it, and, since Oberholser^{*10} has justly questioned the name *frontalis* it is proposed that the west slope birds be designated *sayi*, in recognition of Dr. Say's work.

*¹⁰The Auk, Vol. 16, P. 186.

Denver, Colorado, April 22, 1930.