A NEW HOUSE FINCH FROM CENTRAL MEXICO

By ROBERT T. MOORE

For some time the author has been convinced that the large House Finches of Guanajuato represent a new form, differing not only from the described forms to the east and south but also from the birds of the Central Plateau to the west, formerly known as *rhodocolpus*. It seemed better to hold description in abeyance until the accumulation of additional specimens from southwestern Chihuahua might determine whether the Jalisco-Durango plateau birds are closer to *frontalis* of New Mexico and Texas or to so-called *sonoriensis* of Sonora. Fourteen fresh specimens from localities in southwestern Chihuahua and ten from northeastern Sinaloa have simplified the problem. I am therefore describing below the form from Guanajuato.

Carpodacus mexicanus centralis, new subspecies. Guanajuato House Finch.

Type.—Male adult in worn breeding plumage; no. 105265, coll. U. S. Nat. Mus.; Guanajuato, Mexico; collected by Prof. Alfredo Dugés.

Subspecific characters.—Largest of all races of Carpodacus mexicanus; differs from C. m. potosinus, C. m. nigrescens and C. mexicanus mexicanus not only in this respect but also in greater extension of red on underparts of breeding males; differs from the former two, in addition, by less heavy, and lighter-colored, streaks below.

Its great size and much heavier streaking distinguish *centralis* at a glance from *rhodopnus*, as well as from so-called *sonoriensis* and *ruberrimus*. It is closer to the large birds of southwest Texas (*frontalis?*), but from them it is distinguished by greater extension of red on the underparts and by larger size.

Range.—Vicinity of Guanajuato City, probably extending over the adjacent mountains and plateaus above 6000 feet.

AVERAGE MEASUREMENTS OF MEXICAN RACES OF CARPODACUS MEXICANUS

					Exposed
	Males		Wing	Tail	culmen
6	adults, Guanajuato (centralis).		82.2	63.6	10,5
7	adults, San Luis Potosi (potosinus).		80.4	60.6	10.0
11	adults, Mexico, Morelos, Puebla (mexicanus mexicanus)	•	80.3	63.9	10.2
17	adults, Guerrero (mexicanus mexicanus)		77.2	60.2	10.8
12	adults, Durango, Jalisco, Nayarit, Colima (frontalis?) .		79.5	60,3	10.6
4	nesting adults, near Parral, Chihuahua		79.8	60.2	10.1
-5	adults, southwestern Texas (frontalis)		78.6	59.8	10.2
7	spring adults, Guaymas (sonoriensis?)		74.7	57.1	10.0
3	spring adults, Batomotal, Sonora (sonoriensis?) .		75.3	55.8	9.5
4	spring adults, Alamos, Sonora (sonoriensis?)		74.4	57.1	9.9
3	fall adults, Batopilas, Chihuahua		74.3	57.1	9.9
4	(August) San Feliz, Chihuahua		72.8	55.1	10.3
11	spring adults, Sinaloa (rhodopnus)		71.1	55.23	9.55
11	winter adults, Sinaloa (rhodopnus)		71.2	54.8	9.51

The type of *Carpodacus rhodocolpus* Cabanis, collected by Deppe at Cuernavaca, Morelos, has proved to be an example of *C. mexicanus mexicanus* (van Rossem, Bull. Mus. Comp. Zool., vol. 77, 1934, pp. 419–420). Having confirmed this by my series of eight fresh specimens from an area within ten miles of Cuernavaca (Ocotepec, Tres Marias, Atlacomulco), I do not, however, agree with van Rossem that *sonoriensis* could "be stretched to cover the house finches of central western Mexico." Whatever the final decision as to the validity of Ridgway's name *sonoriensis*, both the winter individual from Alamos marked as the type, and all of the large series of spring specimens, known from the localities of his so-called "cotypes", Alamos, Guaymas, Batomotal and Batopilas (October specimens), are less heavily streaked and obviously smaller (wing 74.6 mm.) than the birds of the plateau region (wing 79.5 mm.). The contrast with *centralis* of Guanajuato (wing 82.2 mm.) is much greater.

It is clear that the birds of this high plateau region (Durango-Jalisco-Colima) have their affinities with the medium-sized and streaked *frontalis* of the plateau area of Colorado-New Mexico rather than with the small and little-streaked birds of the sea-level deserts of Sonora and northern Sinaloa. This is confirmed by the large size of the author's series (wing of males 79.8 mm.) from the San Francisco Mine, southern Chihuahua, which series connects the Durango birds with *frontalis*. Two birds from El Carmen and Durasno, Chihuahua, have the heavy streaking but smaller size of *frontalis*. Starting with birds of practically the same size in eastern Oregon and Colorado, House Finches on the arid west side of the Rocky Mountains become smaller toward the south until they acquire the smallest size in Sinaloa, whereas those on the east side become larger until they attain the largest size in Jalisco and Guanajuato. Eventually the Transition Zone birds of Jalisco and Colima may have to be separated from *frontalis*, but they can well endure that name until the present gaps are bridged by series from the Transition and Austral zones of Chihuahua.

The series from San Feliz, 125 miles southwest of Parral and 85 miles south of Batopilas, may be classed tentatively as intergrades between *rhodopnus* and *frontalis* (?) of Durango. They are only slightly larger than the former, but have the restricted red coloration of the plateau birds. The streaking of underparts is extraordinarily wide and black, recalling *potosinus* and *nigrescens*, and is much more prominent than in either *frontalis* or *sinaloensis*. The high altitude (7500 feet) of this western slope of the range places San Feliz in the area subject to heavy local rainfall, probably more than forty inches annually, contrasting sharply with the aridity of the Barranca del Cobre at Batopilas or the eighteen inches annual rainfall at Parral. The immatures of this series have just completed their postjuvenal molt and two adults are in the middle of their postnuptial molt.

The Goldman series from Batopilas, whose "smaller size" van Rossem (Condor, vol. 39, 1937, p. 38) indicated as ground for invalidating *rhodopnus*, proves on remeasurement to be of almost identically the same size as breeding adults from Alamos and *larger* than the average of nineteen winter adults from southern Sonora. Van Rossem entirely overlooked Ridgway's table of measurements (Birds N. and Mid. Amer., Part I, 1901, p. 136) where the slight differences between birds of Batopilas and Alamos forecasted their similarity. Freshly-molted fall males are somewhat less extensively red on the underparts than are those of the Alamos series and are plainly, though narrowly, streaked, thus differing markedly from *rhodopnus*. Coming from near the bottom of the enormous arid canyon, whose river system cuts a tremendous gouge a mile deep and many miles wide into the face of the Mexican Plateau, these specimens have the appearance of the desert birds of Guaymas, one group of Ridgway's cotypes of *sonoriensis*.

Anyone who reads the author's paper (Condor, vol. 38, 1936, pp. 203-208) with care and who studies the tables will realize that the discussion there given of the validity of Ridgway's "marked," migrant type of *sonoriensis* was concerned solely with the relation of southern Sonora birds to *ruberrimus* and not to *rhodopnus*. The author admits

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he overlooked publishing his comparison of the Batopilas series of cotypes, but he erred because he failed to realize that the purport of his paper might be twisted into a mere attempt to prepare a safe bed for a new race and believed the synonymic identity of *sonorensis* and *ruberrimus* had been proved. The criterion of the true scientific approach is an ardor for all the facts, not merely a zest for nomenclatural niceties, which easily can be overemphasized to conceal really important problems of distribution. The criterion of the "approach" of this criticism is its author's failure to examine a single one of the thirty-three specimens (Moore Collection) of *rhodopnus* and on this failure to obtain essential facts rests his "emphatic opinion" that "sonoriensis will easily include *rhodopnus*"! I am heartily in accord with the claim that the matter is still "open" for a reviewer. Certainly the status of sonoriensis is not a simple problem, as it involves discontinuous distribution. I do not believe the final decision one way or the other will affect the validity of *rhodopnus*.

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THE SWALLOWS AT THE LIFE SCIENCES BUILDING By JOSEPH GRINNELL

Our campus list of birds has from the start included the Cliff Swallow (*Petrochelidon albifrons*), even though whole years have passed without report of even one individual of this species within our area. Back in 1909, and maybe previously, there was a nesting colony on an old barn up Strawberry Canyon; but with the wrecking of that building there could be no return of the swallows there. Also, from time to time, nesting groups of cliff swallows have been seen or reported on buildings within or close to the city limits of Berkeley.

The Life Sciences Building was carried through to completion in the year 1929; but not until 1935 was any notice of its presence taken by any swallow, to my knowledge. In that year, on or about June 1 (note the lateness of the date) cliff swallows first appeared about this building, and at once they began nesting activities. On June 23, I saw several nearly or quite completed nests in the little niches of the walls, high up, at the southeast and southwest corners of the building. On that date I judged there were about 20 pairs of the birds about, all told. The nests were much scattered, and some of them may not have been completed, or at least not occupied to the stage of bringing off broods.

The point I make here is that in 1935, a small group first selected our cement walls, which are cliffs to them. I might speculate that this initial group was comprised of yearling individuals that had tried to nest elsewhere earlier the same season and met with disaster.

It was in 1936 that the story of the Life Sciences swallows developed in truly interesting manner. On April 16, I saw my first birds, at the southeast corner of the building, and other campus bird-watchers reported having seen them a day or two previously. There were at the outset but few. My next notebook entry is dated April 25; then "at least a dozen" cliff swallows were actively constructing nests, wet mud in evidence, at the southeast corner of the building above the main entrance. The sites chosen were all in the duplicated squarish niches in the frieze or molding that extends almost continuously clear around the building. Note that this structural pattern is repeated on all four sides of the building, but that the first-arriving swallows chose the south side of the building, at the east end of that side.