

FROM FIELD AND STUDY

Salt Feeding Habits of the House Finch.—House Finches (*Carpodacus mexicanus*), Lawrence Goldfinches (*Spinus lawrencei*) and Arkansas Goldfinches (*Spinus psaltria*) may be added to the list of birds that eat salt. Others include Red Crossbill, Cassin Purple Finch, and Pine Siskins, as noted by Aldrich (Condor, 41, 1939:172-173). Marshall added the Evening Grosbeak to the list (Condor, 42, 1940:218-219).

Salt was offered continuously in a partly wooded pasture at 900 feet elevation on the side of Mount Diablo, Contra Costa County, California. A near-by watering trough attracted seventy species during the year, of which four were seen to eat salt.

Direct feeding from the five-inch block was characteristic only of the House Finches. If the block was rain-softened, the birds might stand directly on top and bite off chunks. In dry weather the block was soft only underneath, and the birds then reached under to bite off pieces. Heavy dew induced a growth of crystals on the block. These the finches removed by using the beak sideways as a scraper. The average feeding time of individual birds was two minutes in dry weather, less in wet. Flocks of thirty to fifty House Finches would approach the block, but actual feeding was done alone or in pairs.

Pine Siskins and goldfinches were seen to pick at crystals occasionally, but most of their feeding was from the dirt within a foot of the block. These birds came in flocks and covered the salt-saturated ground. Eventually the blocks would be supported only by a tiny pedestal of dry earth, partly because of the salt dissolving at points of contact and partly due to the birds eating dirt and salt from underneath. Domestic animals were not using this salt and it thus was possible to ascertain accurately the effect of the birds' activities.

Siskins left the area with the passing of winter and Arkansas Goldfinches became less numerous. Lawrence Goldfinches used the salt through part of the mating and nesting seasons, but by June even these birds stopped coming.

House Finches definitely continued salt eating through the courting and mating seasons. If anything, there was an increased use of the salt. During the nesting season half of all birds trapped were taken with salt: total trapped, 60 males, 32 females; salt eaters, 35 males, 19 females. Three traps were used with equal results. Pairs were sometimes taken, one bird acting as decoy for the mate. Some of the birds taken were nesting on the house, most came from elsewhere, with salt as the main attraction.—JAMES G. PETERSON, *Diablo, California, January 2, 1942.*

The Lower California Nighthawk Not a Recognizable Race.—First doubts concerning the tenability of *Chordeiles acutipennis inferior* Oberholser were entertained some years ago (Birds of El Salvador, 1938:244-245) when certain Salvadorian specimens, identified by Oberholser himself as *Chordeiles acutipennis micromeris*, were seen to be indistinguishable from our series of *inferior* from Lower California. However, because the ranges of the two supposed races presumably were separated in northwestern Mexico by the larger *texensis*, the question remained quiescent. A reappraisal is now necessary.

To begin with, Oberholser (Bull. U. S. Nat. Mus., 86, 1914:100) recognized *micromeris* as extending north in western Mexico into Jalisco. He evidently included Sinaloa in the range of *texensis* on the basis of a single midwinter bird from Esquinapa and another, undated, from Mazatlan. His Sonora material seemingly also consisted of two birds, one from San Marcial in November, and another from the Colorado River in March. A series of 17 skins from the Tropical Zone of southern Sonora shows that *micromeris* actually extends northward to that point. In characters this series is rather uniform in color and seems to be indistinguishable in this respect from Central American birds. Compared with *texensis* they are darker and grayer dorsally, with more black on the pileum. Ventrally they are darker buff and have more prominent barring. In a series of 13 breeding birds from southern Lower California the darker extremes are completely lost in the Sonora group, although as a whole they are a little paler and more like *texensis*. On the other hand the pale extremes of *micromeris* from El Salvador are just the same as the average of birds from Lower California. As to measurements, the Sonora males are similar to *texensis*, the females to *micromeris*. Much more material is needed, however, to compile reasonably accurate averages, for individual variation is very great, even among birds from the same locality.

To summarize, I can see no reason for the recognition of a Lower California race as distinct from *Chordeiles acutipennis micromeris* Oberholser. In fairness to Dr. Oberholser it is proper to state that I do not believe he would ever have proposed *inferior* had breeding birds from northwestern Mexico been available to him at the time.