

NOTES ON THE FORMS OF *SPIZELLA ATROGULARIS*

By A. J. VAN ROSSEM

Among the bird types which it was my privilege to examine when at the University Museum in Berlin in August, 1933, was Cabanis' type of *Spinites atrogularis*. It is an adult in abraded plumage, as though taken in late summer or early fall before the molt and, though not marked as to sex, is obviously a male. Like most of the older types in the Berlin institution it is mounted and is in very fair condition. Data on the side of the stand (aside from the type tag) are rather meager: "F. atrogularis n [obis] | *Emberiza Shattucki* Audub.? | Mexico 6141 Aschenborn." The name unquestionably originated with Lichtenstein, though I can find no trace of it in Lichtenstein's works, even as a *nomen nudum*. Since Aschenborn is known to have collected in the vicinity of Mexico City, it is likely that the locality given refers, specifically, to that place rather than to the country as a whole.

Even though no comparative material was available at the time, the type was at once recognized as a "new" bird in my experience. The general coloration was dark, the back distinctly reddish brown, the chin patch velvety black and more extensive than in northern birds, and, as a very distinct feature, the anterior part of the face including the lores was black, concolor with the chin. Careful notes for future reference were made at the time of examination.

Thanks to the Bureau of Biological Survey, the Dickey collection at the California Institute of Technology, the Alden Miller collection, the Museum of Vertebrate Zoology, and the United States National Museum, I have been able to assemble a fairly representative series which, combined with the adequate Lower California and southern California material in the collection of the San Diego Society of Natural History, shows that there are certain racial variations which should be awarded recognition.

Nine specimens in the Biological Survey collection from the southern plateau states of Tlaxcala, Hidalgo, Jalisco, Puebla, and Michoacan agree in characters with the type of *Spinites atrogularis*. They are all relatively dark, richly colored birds with distinctly reddish backs and, in fresh plumage, with the underparts and wings washed with brown. Couch's type of *Struthus atrimentalis* (no. 4335, U. S. Nat. Mus.) from Agua Nueva in extreme southern Coahuila has been examined and found to be of this same race, though Couch's mention of the black lores and narrow frontal line made such examination scarcely necessary.

Eleven specimens from Paradise on the eastern side of the Chiricahua Mountains, Arizona (very close to the New Mexico line), Fort Whipple, Arizona, the Charleston Mountains in southern Nevada, the Providence Mountains in extreme southeastern California, and Oposura, Sonora, differ from the southern Mexico birds in their definitely paler and grayer general coloration, more sandy or clay-colored backs and, in adult summer males, more restricted and distinctly grayish black chin patch and gray or slaty (not velvety black) lores. Size in these two races is very similar, though the bills of the northern birds seem to be a little larger.

As a name for this northern race it appears to me, in spite of the comment by Ridgway (*Birds N. and Mid. Amer.*, 1, 1901, p. 323, footnote), that *Spizella evvura* Coues is valid. This name is accompanied by a bibliographic reference to specimens described (in the *Ibis*, 1865, p. 118) and hence is certainly *not a nomen*

nudum; furthermore an additional line of description is appended to the name on its first appearance. I may add that Dr. H. C. Oberholser and Mr. J. L. Peters concur as to the availability of this name. The United States National Museum has kindly forwarded for examination the specimen which Ridgway (*op. cit.*, p. 324) has (inferentially) designated as the type. It is no. 83567 U. S. Nat. Mus., a young bird of unknown sex, changing from juvenal to postjuvenal plumage, collected at Fort Whipple, Arizona, on August 10, 1864, by Dr. Elliot Coues. The original field tag is missing, although the writing on the Ridgway collection tag, which is now attached, appears to be that of Dr. Coues. On the reverse appears, in the same handwriting: "Typical of '*evura*' Coues." Whether this specimen can be considered a holotype appears doubtful, since Coues himself did not designate one and certainly had several specimens at the time his brief comments (*Ibis*, 1865, p. 118, and *Proc. Acad. Nat. Sci. Phila.*, 1866, p. 87) were made. At any rate it is certainly a cotype.

Spizella atrogularis cana of southern California and northern Lower California is currently recognized. Its status has been adequately discussed by Grinnell and Swarth (*Auk*, 43, 1926, pp. 475-478) and there is no need for further detailed remarks here. Briefly, it is a small race with a slightly darker and less purely gray coloration as compared with *evura*. The characters are most pronounced southerly. From Ventura County northward there are slight but definite tendencies toward *caurina* of the San Francisco Bay region.

Not only are the Black-chinned Sparrows from the San Francisco Bay region larger than *cana* (almost as large as *atrogularis* and *evura*) but they possess a distinctly darker and grayer coloration. In depth of color they approximate *atrogularis*, but the tones are gray or slaty, not brownish gray, the back is not nearly so reddish as in *atrogularis* and the lores and chin patch, while darker than in *cana* and *evura*, are slaty or slaty black, not velvety black as in *atrogularis*. I have examined the type and the type series (7 specimens), and have no reason to suspect that "sooting" is responsible for the dark coloration. Contributory evidence that the darkness is *not* of an adventitious nature is shown by the Mount Pinos series which shows a slight approach to the bay birds in color. *Spizella atrogularis caurina* appears to be an easily distinguishable subspecies.

To summarize briefly the foregoing remarks: there appear to be four principal geographic variations of the species *Spizella atrogularis*. Their nomenclature, and their ranges in so far as it is now possible to determine them, are as follows:

Spizella atrogularis caurina A. H. Miller

Spizella atrogularis caurina Miller, *Condor*, 31, No. 5, September 16, 1929, p. 206 (Las Trampas Peak, Contra Costa County, California).

Range.—Coast range foothills of Contra Costa and Alameda counties, California. Winter home unknown.

Spizella atrogularis cana Coues

Spizella cana Coues, *Proc. Acad. Nat. Sci. Phila.* [18] 1866, No. 1, January-March, [June 11], p. 88 (Cape San Lucas [Lower California]).

Range.—Foothills of California from Monterey and Inyo counties south to about Lat. 30° N. in Lower California. Winter range from Los Angeles County south to Cape San Lucas.

Spizella atrogularis evura Coues

Spizella evura Coues, *Proc. Acad. Nat. Sci. Phila.*, [18], 1866, No. 1, January-March, [June 11], p. 87 (Fort Whipple, Arizona).

Range.—Upper Sonoran zones of extreme southern Nevada, southeastern California, southern Arizona, and southwestern New Mexico, south to east central Sonora. Winter range unknown, but probably in northwestern Mexico.

Spizella atrogularis atrogularis Cabanis

Spinites atrogularis Cabanis, Mus. Hein., 1, sig. 17, April [Oct.?), 1851, p. 133, footnote (Mexico[Mexico, D. F.]).

Struthus atrimentalis Couch, Proc. Acad. Nat. Sci. Phila., [7] "April," 1854, p. 67 (Agua Nueva, Coahuila).

Range.—Southern portions of Mexican plateau, north to southern Coahuila. Apparently resident.

MEASUREMENTS OF MALES IN MILLIMETERS

	Wing	Tail
4 <i>caurina</i>	64-65	66-68
3 <i>cana</i> (Ventura County).....	61-64	62-67
7 <i>cana</i> (southern California).....	60-63	62-64
8 <i>cana</i> (Lower California).....	60-63	61-65
6 <i>evura</i>	64-67	68-74
5 <i>atrogularis</i>	63-68	67-74

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FROM FIELD AND STUDY

A Food Habit of the English Sparrow.—Early on the morning of June 1 an interesting and to me unusual food habit of the English Sparrow (*Passer domesticus*) was observed. Harry Logan, Customs Inspector, called my attention to a nest of ants he had uncovered while cleaning up a pile of trash, before going off duty. The nest was located under a half page of newspaper which had fallen directly under the International fence. A large quantity of eggs had been laid on top of the concrete pavement and under the paper. The ant adults, a large, dark, reddish species, were thickly clustered around and on the eggs.

While I was discussing this phenomenon, an adult male English Sparrow appeared and took cognizance of the situation. He began circling the exposed nest and started robbing the ants, which by this time were carrying their eggs to a safer place. Seizing an egg the bird would, with a shake of the head, disengage the attendant ant. He was soon joined in the sport by a female. Gathering a mouthful of eggs each would leave for its respective nest. Apparently they were from two different nests, located approximately 150 yards away.

After several trips the ants were fairly well scattered, and the male sparrow began hopping into the midst of the crawling mass. He would just about gather a mouthful of eggs when he would be obliged to take time out to free himself of clinging ants. Sometimes a fluttering hop would do it. Sometimes he would have to pull them loose. Several times he was noticed leaning back on his tail and bracing himself with one leg, as he vigorously pulled an enterprising ant loose from the upper part of the other leg. The female did not brave the dangers of the middle of the nest until the ants were so scattered as to make the dangers negligible. Once she was noted having a struggle with an ant in her mouth, which she loosened with a toe of the left foot. When an ant with a pair of extra strong jaws got a strong hold, a weak, plaintive note was heard accompanied by a fluttering hop. A strand of barbed wire an inch or two above the concrete and traversing the diameter of the nest furnished an excellent sniping post for the two birds, now joined by a third male sparrow from Mexico. The three effectively robbed the nest of a majority of the