## GENERAL NOTES

The juvenal plumage and distribution of Cassidix palustris (Swainson).— The Slender-billed, or Marsh, Grackle (Cassidix palustris), whose range, according to the recent literature (Hellmayr, Field Mus. Nat. Hist., Zool. Ser., vol. 13, pt. 10, p. 93, 1937; Blake, Birds of Mexico, Chicago, Univ. Chicago Press, p. 509, 1953; Miller, Friedmann, Griscom, and Moore, Pacific Coast Avif., no. 33, p. 280, 1957), is restricted to "marshes near Mexico City," has long been considered extinct. Ornithologists have frequently and unsuccessfully searched for it in the Valley of Mexico.

When investigating the localities from which Song Sparrows (*Melospiza melodia*) had been collected in Mexico, I became involved with the problem of locating the "San Mateo" at which Wilmot Wood Brown, Jr., collected *Cassidix palustris* as well as *Melospiza melodia* in November and early December, 1910. While working on this problem, I checked the collections of the United States National Museum and there found a hitherto unreported series of *Cassidix palustris* taken by E. A. Goldman at Lerma, State of Mexico, 5 July 1904. This series contains two males and one female in worn adult plumage and five young birds in juvenal plumage.

These five young birds are, I think, the only ones known for Cassidix palustris. The juvenal plumage, therefore, has not previously been described. It is, in general, similar to that of the adult female in coloration both dorsally and ventrally but is somewhat paler and more buffy, less cinnamon in tone. There is evidence of much foxing, with a browning of the gray colors, in juvenal-plumaged Cassidix mexicanus (Boat-tailed Grackle) taken in 1892 when compared with juvenals taken in 1961. Similar changes have probably occurred in the juvenal C. palustris, but the extent of these cannot now be evaluated. The juvenal plumage of C. palustris differs from that of most populations of C. mexicanus of comparable age in lacking the dark shaft streaks on the undersides of both sexes (Figure 1). In juvenals of mexicanus there appears to be much individual, as well as subspecific, variation in the extent and distinctness of ventral streaks, with the streaking of the young of C. m. major being obsolescent (Kenneth Parkes, letter). The juvenal plumage fades and wears rapidly (cf. worn juvenals shown in illustration by Selander, Condor, 60: 358, 359, 1958) and extremely faded individuals of *mexicanus* approach the young of *palustris* in lacking the streaking. The juvenal mexicanus in Figure 1 has ventral streakings slightly heavier than average.

One of the puzzling questions in the study of Mexican ornithology has been the location of the particular "San Mateo" at which W. W. Brown collected and, related to this, the true range of *Cassidix palustris*. The birds from this locality were labeled "Mexico, San Mateo" or "Mexico (San Mateo)." Oberholser, in his revision of the Great Blue Herons (*Proc. U. S. Natl. Mus.*, 43: 535-539, 1912), referred one of Brown's specimens of that species taken at San Mateo in 1910 to the State of Mexico, consistent with Brown's method of placing the state name before the specific locality on his labels. Oberholser did not define the locality more closely, and in subsequent literature there has been much confusion as to the provenience of Brown's collection. For example, Hellmayr (*op. cit.*) cited a specimen of *Geothlypis speciosa* (Black-polled Yellowthroat) taken at San Mateo as being from the State of Veracruz.

Lea and Edwards (*Condor*, 52: 268, 1950) were able to establish definitely, through correspondence with Brown himself, that the locality in question was the town near Lerma in the State of Mexico. In spite of this, Brown's San Mateo records were divided among the states of Mexico, Morelos, Oaxaca, and the Distrito Federal in the second part of the "Check-list of the birds of Mexico" (Miller *et al.*, *op. cit.*).

To verify this location further, Frances L. Burnett kindly checked the archives of



Figure 1. Adult (top) and juvenal (middle) plumages of *Cassidix palustris* and juvenal plumage of *Cassidix mexicanus* (bottom).

the Museum of Comparative Zoology and found correspondence between Brown and John E. Thayer which confirms the Lerma Marshes as the location where Brown collected. On 25 August 1910, he wrote Thayer from Mexico City: "Have just received a letter from Dr. Phillips... he wishes me to spend a month collecting at Lerma. Will do my best to get the species he wants. But I sincerely hope the land owners there are more obliging than they are around Mexico City."

I had independently located San Mateo in the Lerma Valley through the examination of five Song Sparrows Brown had collected at San Mateo. It was immediately clear upon measuring these specimens that they were taken in the Lerma Valley; their measurements match those of the local race M. m. villai rather than the smaller birds of the Valley of Mexico population called azteca (see Dickerman, Occas. Papers Univ. Minnesota Mus. Nat. Hist., no. 9, 1963). Color characters, although badly obscured by foxing, tend to confirm the same identification.

The San Mateo of Brown, also known as San Mateo Atenco, is therefore located at lat. 19° 16' N, and long. 99° 35' W, 13.5 km east-southeast of Toluca. Because of reduction in size of the marshes, the village is now several miles from habitat suitable for some of the species collected by Brown in 1916, such as King and Virginia rails (*Rallus elegans, R. limicola*), Long-billed Marsh Wrens (*Telmatodytes palustris*), or Black-polled Yellowthroats. Song Sparrows, however, still occur along ditches between fields throughout the region.

The clarification of Brown's collecting locality and the additional specimens collected by Goldman at Lerma permit the definition of the range of *Cassidix palustris* as the marshes of the headwaters of the Rio Lerma. It should be noted that *palustris*  was described from birds taken by William Bullock, whose main collecting area was near Temascaltepec, west of Mexico City, and that the Lerma marshes transect the road between the capital and Temascaltepec. According to the practice of that time, the birds were labeled with the locality at which they were prepared. Thus, in the literature they became associated with the marshes of the Valley of Mexico rather than those of their origin in the Lerma Valley.

Robert K. Selander has informed me that there is a series of C. mexicanus labeled as taken at Careaga, near Azcapotzalco, Distrito Federal. However, specimens of *Centurus hypopolius* and *Campylorhynchus jocosus*, neither of which occurs in or near the Distrito Federal, are also reported in the literature as taken at Careaga (see Miller *et al., op. cit.*). Within the past few years, that is, since 1957, and probably within the last two or three years, a breeding colony of *Cassidix mexicanus* has invaded Xochimilco. Specimens from this colony represent the nominate form and provide, I believe, the only acceptable records of any *Cassidix* for the Valley of Mexico.

The type locality of *Cassidix palustris* should be corrected to the marshes of the headwaters of the Río Lerma, State of Mexico.

I think that the form is in fact extinct, having failed to find it in several seasons of field work throughout the upper Río Lerma drainage basin.

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**Falco sparverius in western arctic Alaska.**—McLenegan (*in M. A. Healy, Report of the cruise of the revenue marine steamer Corwin in the arctic ocean in the year 1884,* 1889) reported seeing Sparrow Hawks while travelling up the Noatak River. But in a fall, winter, and spring residence on the wooded central part of the Kobuk River, Joseph Grinnell (*Pacific Coast Avif.*, no. 1: 1–80, 1900) found only Pigeon Hawks (*Falco columbarius*) among the small falcons. Mr. Wilfred Zibel (letter, 1964) kindly sent me a dessicated adult male Sparrow Hawk that he found above the ceiling of his cabin as he was improving its insulation in November, 1963. His cabin is in the recently settled small village of Ambler at the confluence of the Ambler River with the Kobuk River.

Since I reported (U. S. Natl. Mus., Bull. 217, 1960, p. 53) a female Sparrow Hawk shot near Anaktuvuk Pass on 25 August 1948, Dr. Jack Campbell informed me that he took a specimen 50 miles south of this point on the John River at Hunt Fork on 24 July 1959. Simon Paneak reported that his father told him that many years ago he had seen a Sparrow Hawk on the Colville River and Paneak saw another one at Anaktuvuk Pass on 7 June 1960. A. M. Bailey (Birds of arctic Alaska, Denver, Colorado Mus. Nat. Hist., 1948; see p. 186) reported on one specimen taken by C. D. Brower at Barrow, Alaska, and on a sighting of another bird. It is evident that Sparrow Hawks have occasionally moved into western arctic Alaska. Since they are not shy and are easily recognized, it seems likely that these ventures northwestward beyond the usual range into arctic Alaska are unusual. This is Publication no. 13, Laboratory of Zoophysiology.—LAURENCE IRVING, Laboratory of Zoophysiology, Institute of Arctic Biology, University of Alaska, College, Alaska.