tween them; but I am induced to think that they keep apart from the old birds during the first winter, when I have thought I could yet perceive an inferiority in their flight, as well as in the loudness of their notes.

This species has no song, properly so called, but merely a twitter of short lisping notes. In autumn it at times alights on trees preparatory to its departure. On such occasions the individuals, often collected in great numbers, take up the time chiefly in pluming themselves, in which occupation they continue for hours.

I must conclude with assuring you that in my opinion, no difference whatever exists between the Bank Swallow of America and that of Europe. The birds from which I made the drawing for my plate were procured on the banks of the Schuylkill river in 1824.

Bank Swallow or Sand Martin, *Hirundo riparia*, Wils. Amer. Orn., vol. v. p. 46. Hirundo riparia, Bonap. Syn., p. 65. Hirundo riparia, Sand Martin, Swains. and Rich. F. Bor. Amer., vol. ii. p. 333. Bank Swallow or Sand Martin, *Hirundo riparia*, Nutt. Man., vol. i. p. 607.

BANK SWALLOW OF SAND MARTIN, Hirundo riparia, Aud. Orn. Biog., vol. iv. p. 584.

Tail slightly forked, margin of first quill smooth, tarsus with a tuft of feathers behind; upper parts greyish-brown, lower whitish, with a dusky band across the fore part of the neck. Young with the feathers of the upper parts margined with reddish-white.

Male, 5, 11. Female, 47.

ROUGH-WINGED SWALLOW.

+HIRUNDO SERRIPENNIS, Aud.

PLATE LI.

On the afternoon of the 20th of October, 1819, I was walking along the shores of a forest-margined lake, a few miles from Bayou Sara, in pursuit of some Ibises, when I observed a flock of small Swallows bearing so great a resemblance to our common Sand Martin, that I at first paid little attention to them. The Ibises proving too wild to be approached, I relinquished the pursuit, and being fatigued by a long day's exertion, I leaned against a tree, and gazed on the Swallows, wishing that I could travel with as much ease and rapidity as they, and thus return to my family as readily as they could

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to their winter quarters. How it happened I cannot now recollect, but I thought of shooting some of them, perhaps to see how expert I might prove on other occasions. Off went a shot, and down came one of the birds, which my dog brought to me between his lips. Another, a third, a fourth, and at last a fifth were procured. The ever-continuing desire of comparing one bird with another led me to take them up. I thought them rather large, and therefore placed them in my bag, and proceeded slowly towards the plantation of William Perry, Esq., with whom I had for a time taken up my residence.

The bill and feet of the Swallows were pure black, and both, I thought, were larger than in the Sand Martin; but differences like these I seldom hold in much estimation, well knowing from long experience, that individuals of any species may vary in these respects. I was more startled when I saw not a vestige of the short feathers usually found near the junction of the hind toe with the tarsus in the common species, and equally so when I observed that the bird in my hand had a nearly even tail, with broad rounded feathers, the outer destitute of the narrow margin of white. At this time my observations went no farther.

I perhaps should never have discovered the differences existing between these species had I not been spurred by the remarks of VIEILLOT, who, in expressing his doubts as to their identity, and perhaps holding in his hand the bird here described, says that the tarsus is much larger than in the European Sand Martin. I have been surprised that these doubts did not awaken in others a desire to inquire into the subject. Had this been done, however, I should probably have lost an opportunity of adding another new species to those to whose nomination I can lay claim, not to speak of such as, although well known to me previous to their having been published by others, I have lost the right of naming because I had imparted my knowledge of them to those who were more anxious of obtaining this sort of celebrity. I have now in my possession one pair of these Swallows procured by myself in South Carolina during my last visit to that State. Of their peculiar habits I can say nothing; but, owing to their being less frequent than the Sand Martin, I am inclined to believe that their most habitual residence may prove to be far to the westward, perhaps in the valleys of the Columbia river.

ROUGH-WINGED SWALLOW, Hirundo serripennis, Aud. Orn. Biog., vol. iv. p. 593.

Tail slightly emarginate, margin of the first quill rough with the strong decurved tips of the filaments, tarsus bare; upper parts greyish-brown, lower pale greyish-brown, white behind. Very nearly allied to the last in form

and colour, but readily distinguishable by drawing the finger along the edge of the wing, when the stiff projecting tips of the filaments are felt like the edge of a fine saw.

Male, $5\frac{3}{4}$, $12\frac{1}{2}$, in extent.

FAMILY VII. MUSCICAPINÆ. FLYCATCHERS.

Bill depressed, triangular, compressed at the end, upper mandible notched, lower with the point slightly ascending. Head rather large, depressed; neck short; body rather slender. Feet generally short; tarsus short, slender, with very broad scutella; toes four, free; the hind toe not proportionally large; claws arched, compressed, acute. Plumage, soft and blended. Wings long, with the first quill generally long, the outer three longest. Tail various. Tongue flattened, sagittate, bristly at the tip; esophagus wide, without crop; stomach elliptical, moderately muscular, with the lateral muscles distinct; the epithelium thin, dense, longitudinally rugous; intestine short; ceca extremely small; cloaca globular. Trachea simple; inferior laryngeal muscles forming on each side a large pad, but not divisible into several portions as in the singing birds. Nests regularly formed, cup-shaped. Eggs from four to six.

GENUS I.—MILVULUS, Swains. SWALLOW-TAIL.

Bill moderate, rather stout, straight, broad at the base, gradually compressed toward the end; upper mandible with the dorsal outline a little convex, the edges sharp and nearly perpendicular, with a very small notch close to the small deflected tip; lower mandible with the ridge very broad at the base, the sides rounded, the tip minute and ascending. Nostrils basal, broadly elliptical. Head rather large, depressed; neck short; body rather slender. Feet rather short; tarsus short, slender, compressed, with very broad scutella, some of which almost meet behind; toes free, the hind toe not proportionally larger, all scutellate above; claws of moderate size, arched, compressed, acute. Plumage soft and blended. Wings long, second quill longest, first almost as long as third, the three outer abruptly notched near the attenuated tip. Tail extremely elongated and forked, the middle feathers being of ordinary length, the lateral longest.

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Rough - winged Swallow!



Audubon, John James. 1840. "Rough-Winged Swallow, Hirundo serripennis, Aud. [Pl. 51]." *The birds of America : from drawings made in the United States and their territories* 1, 193–195. https://doi.org/10.5962/p.319164.

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