Number 385

# OCCASIONAL PAPERS OF THE MUSEUM OF ZOOLOGY

## UNIVERSITY OF MICHIGAN

ANN ARBOR, MICHIGAN

UNIVERSITY OF MICHIGAN PRESS

## THE YUCATAN FORM OF WEST INDIAN CLIFF SWALLOW (PETROCHELIDON FULVA)

### By Josselyn Van Tyne

IT has been known for at least fifty-five years<sup>1</sup> that *Petrocheli*don fulva occurs in Yucatán. A colored picture of such a specimen was published as early as 1887,<sup>2</sup> but specimens have been few and poorly prepared, and the taxonomic position of the Yucatán form has been left in doubt by all students of the group from Sharpe and Wyatt<sup>3</sup> to Ridgway<sup>4</sup> and Hellmayr.<sup>5</sup> In 1936 I had the good fortune to secure fresh material at Chichen Itzá; subsequently I was permitted to borrow the Yucatán material contained in the collections of the American Museum of Natural History and Field Museum of Natural History and to compare these specimens with the large series of the known forms of the species in those collections and in the <sup>1</sup>O. Salvin and F. D. Godman, "Aves," Biologia Centrali-Americana, Zool. Sec. 3, 1 (1883): 228.

<sup>2</sup> R. Bowder Sharp and Claude W. Wyatt, *A Monograph of the Hirundinidae* (London, 1887), Pts. V-VI, Pl. 107 (the plate shows the brown of the head and underparts much darker than in any Yucatán specimen I have seen).

3 Ibid.

<sup>4</sup> Robert Ridgway, Birds of North and Middle America, U. S. Nat. Mus. Bull., 50, Pt. 3 (1904): 55, footnote b.

<sup>5</sup> Charles E. Hellmayr, Catalogue of Birds of the Americas, Field Mus. Nat. Hist. Zool. Ser., 13 (1935), Pt. 8: 34, footnote 2. Museum of Comparative Zoology, the Carnegie Museum, and the United States National Museum. The study has shown that Yucatán specimens represent a very distinct form which may be known as:

### Petrochelidon fulva citata n. subsp.

TYPE.—U.M.M.Z. No. 95001; adult male; Yucatán, Chichen Itzá, Ixil Cenote; March 31, 1936; collected by J. Van Tyne.

CHARACTERS.—Size very small (see Table I); plumage color differing in distribution and degree from all previously known subspecies.

Petrochelidon fulva citata is distinguished from P. f. pallidaNelson of Coahuila, Tamaulipas, and southern Texas by its much smaller size; its darker and more richly colored sides of head, chin, throat, breast, sides, rump, and crissum; and its paler, grayer, and more restricted brown area on the nape.

It differs from P. f. fulva (Vieillot) of Hispaniola and Cuba<sup>6</sup> in its smaller size; its paler forehead and rump; its greenish rather than purplish blue back; its more richly colored brown sides of head, chin, throat, sides, and crissum; and its usually grayer and more restricted brown patch on the nape.

It differs from P. f. poeciloma (Gosse) of Jamaica and Puerto Rico in its slightly smaller size, its paler forehead and rump, its more extensively white belly, and its grayer and more restricted brown nape.

Extensive series of measurements of the previously known

<sup>6</sup> Alexander Wetmore and Bradshaw H. Swales (*The Birds of Haiti* and the Dominican Republic, U. S. Nat. Mus. Bull., 155, 1931: 322) pub-. lished additional evidence of the distinctness of the Cuban form, first separated under the name cavicola by Thomas Barbour and Winthrop S. Brooks ("Two New West Indian Birds," Proc. New England Zool. Club, 6, 1917: 52). Hellmayr (loc. cit.) has agreed in this but states that the name coronata (Lembeye) should be used. My own studies indicate that such a separation must be based mainly on the somewhat larger size of Cuban specimens. J. Bond (Birds of the West Indies, Philadelphia: Acad. Nat. Sci. Phila., 1936: 264) maintains that Cuban specimens cannot be distinguished from typical fulva of Hispaniola.

MALES			FEMALES		
Wing	Tail	Weight	Wing	Tail	Weight
103.0	44.0	18.3	100.0	44.0	17.7
102.0	46.5		99.5	46.0	
101.0	45.0	18.5	99.0	45.0	
100.0	45.0		98.5	44.0	·
99.5	45.5		96.0	43.5	
99.0	44.0	20.2 (type)	95.5	43.0	
99.0	43.5		95.0	45.0	17.0
98.0	42.5		94.0	42.0	18.5

#### TABLE I

MEASUREMENTS IN MILLIMETERS AND GRAMS OF ADULT YUCATÁN SPECIMENS

forms of this species have been published by Ridgway,<sup>7</sup> Wetmore and Swales,<sup>8</sup> and others.

SPECIMENS EXAMINED.—Petrochelidon fulva pallida: Texas, 27. Petrochelidon fulva fulva: Cuba, 48 (including the type of cavicola); Florida, 2; Dominican Republic, 26; Haiti, 17. Petrochelidon fulva poeciloma: Jamaica, 88; Puerto Rico, 35. Petrochelidon fulva citata: Yucatán, Chichen Itzá, 13; Izamal, 4.

The Yucatán specimens examined were collected between March 26 and July 3. Twelve of them are March specimens.

REMARKS.—Subspecific characters in this species are usually best developed in male specimens, and poorly prepared specimens or those in excessively worn plumage may be difficult to identify.

The field work in connection with this study was made possible by a grant from the University of Michigan Faculty Research Fund and by the assistance of the Carnegie Institution of Washington whose guest I was at their Chichen Itzá headquarters. I am much indebted to my friend Angel Chang of Chichen Itzá for collecting valuable specimens for me after my departure from Yucatán.

7 Op. cit., pp. 53-56.

<sup>8</sup> Loc. cit.