

## General Field Notes

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### **First Specimen Record of the Cave Swallow *Petrochelidon fulva pelodoma* in Eastern North America**

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We retrieved an emaciated and moribund Cave Swallow (*Petrochelidon fulva*) from the ground at the sheltered base of a low building at the Old Coast Guard Station at the north end of Folly Beach, Charleston County, South Carolina, at 1500 hr on 31 October 1993. The bird died shortly thereafter and was salvaged (ChM 1993.16.181). This constitutes the first record for South Carolina (McNair and Post 1993).

The light buffy-orange chin and throat distinguish the Cave Swallow from any race of the Cliff Swallow (*P. pyrrhonota*). The light buffy-orange throat, cheeks, and collar, dark gray flanks, pale forehead and chestnut rump, and long wings (chord = 109.5 mm; flattened = 110 mm; see Phillips 1986:37-38) indicate the subspecies of Cave Swallow is *P. f. pelodoma* (= *pallida*), from the southwestern United States and northern Mexico (see Smith and Robertson 1988 for a discussion on Cave Swallow taxonomy; also Phillips 1986 and Rose and Turner 1989; subspecific identification verified by S. Cardiff and J. V. Remsen, *in litt.*). Our verified record is also the first of this subspecies from eastern North America (Phillips 1986, Smith and Robertson 1988, West 1995).

Close examination of the bird does not reveal any indication of hybridization with either the Cliff or Barn (*Hirundo rustica*) swallows (see Martin 1980). The bird was a hatching-year female (skull 15% unossified; see Walters 1983) weighing 14.0 g. The first prebasic molt was suspended

(remiges): old feathers (juvinal) were pp 7-9, sec 5-6, and pp cov 8-9; new feathers (first-basic) were pp 1-6, sec 1-4, 7-9 (terts), sec cov, and pp cov 1-7. The bird had also undergone a more or less complete body molt. No feathers were actively molting.

The Cave Swallow was first seen by McNair at 1300 hr when it was flushed from under another abandoned building at the Old Coast Guard Station. The bird flattened and spread itself out against a warm substrate occasionally, either a rooftop or on the ground in an exposed area, in an apparent attempt to warm itself. The swallow never attempted to feed, but it flew weakly, and repeatedly attempted to find shelter underneath, within, or on top of various abandoned buildings. Some entrances to shelter underneath buildings were as narrow as 4-6 cm in diameter, and some were partially obstructed by vegetation. Nevertheless, the swallow attempted to enter some of these openings. This is consistent with Cave Swallow behavior within its normal range. The species roosts under bridges, culverts, and buildings, or in cave mouths (West 1995).

The occurrence of the Cave Swallow was associated with an unusual composition of other long-distance migrants at our mist-net banding station the same day. An unusually strong cold front arrived after 0100 hr on 31 October. The wind shifted from SW to NW, at 32-40 km, and the temperature dropped precipitously from 18 to 4-6 degrees C. A larger number of species and individuals of long-distance migrants were captured on 31 October, as compared to the four days before and after 31 October on which banding occurred (sign test, two-tailed,  $p < 0.05$ ; Table 1). This difference suggests that the Cave Swallow may have been associated with a large-scale movement of long-distance migrants, in response to adverse weather.

In summary, the first specimen record of the Cave Swallow in South Carolina was the subspecies *P. f. pelodoma* from the southwestern United States and northern Mexico. This is the first verified record of this subspecies from eastern North America.

#### Acknowledgments

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Date	Number of Species		Number of Individuals	
	NeoT	Other	NeoT	Other
24 October	6	7	6	13
25 October	2	5	3	22
27 October	2	14	7	41
28 October	2	6	3	11
<b>31 October</b>	<b>6</b>	<b>3</b>	<b>18</b>	<b>3</b>
1 November	4	11	7	23
2 November	5	13	10	41
7 November	2	11	2	32
8 November	1	10	1	21

**TABLE 1.** Number of Species and Number of Individuals for Species Classified as Neotropical Migrants (NeoT) or All Other Species (Other) Which Were Captured in Mist-Nets During a Portion of Autumn Migration at North Folly Beach, South Carolina (32° 41' N, 79° 53' W), in 1993.