

CAVE SWALLOW (*Petrochelidon fulva*), SECOND NEW YORK STATE RECORD

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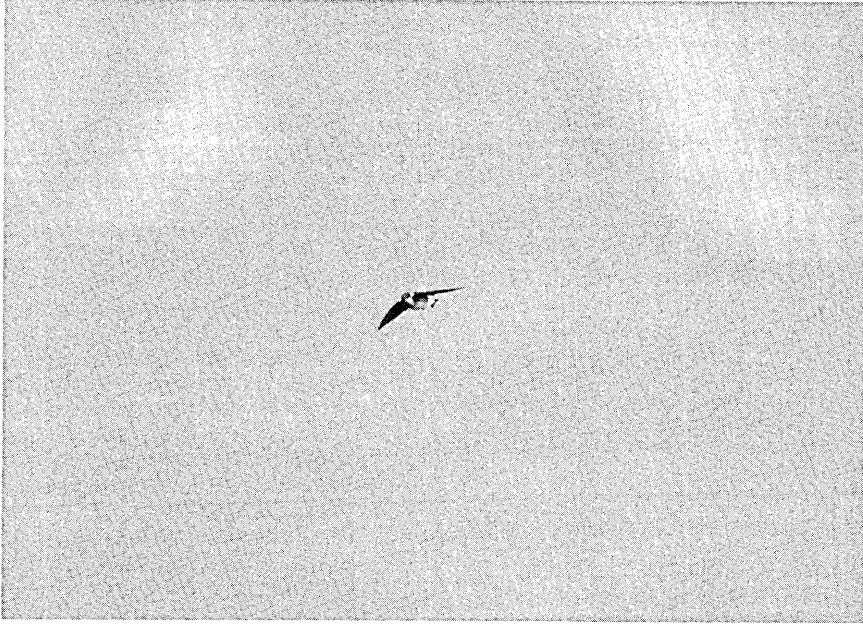
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ABSTRACT

The Cave Swallow (*Petrochelidon fulva*) is a polytypic species with a disjunct breeding range with populations restricted to southern North America and Mexico, the Greater Antilles, and Ecuador and Peru. In recent years, Cave Swallows have been recorded with increasing regularity in the northeastern United States, principally Cape May, New Jersey, where the species is now annual in late fall. On Saturday, 28 Nov 1998, the authors observed and photographed two Cave Swallows at Riis Park, Queens Co., New York. At least one bird of this species, and possibly one of these individuals, is likely to have been present at this location on the previous day. The Riis Park birds represent the second record for New York State, and represent the first record supported by physical documentation. The first record for the state was a single bird seen at Jamaica Bay on 23 May 1990. In this article, we discuss the circumstances of our sighting and our identification of the birds as belonging to the southwestern subspecies *P. f. pallida*. Recent analysis of the taxonomic nomenclature of the species indicates that the subspecific designation *pallida* has precedence over *pelodoma* (Gosselin, 2000), and therefore the authors use *pallida* throughout.

EVENTS OF THE SIGHTING

On Saturday, 28 Nov 1998, as part of our regular circuit covering Jamaica Bay Wildlife Refuge, Riis Park, Fort Tilden and Floyd Bennett Field, we stopped to check a traditionally productive area of scrub separating the Riis Park golf course and the beach front. As we walked along the perimeter fence, through some disused handball courts, Wilson sighted a swallow flying over the golf course. We both located the bird in our binoculars and realized immediately, based on the dark bluish upperparts and obviously contrasting reddish rump, that it was not the swallow expected in late November in New York, the Tree Swallow (*Tachycineta bicolor*). Knowing that there had been recent reports of Cave Swallows in New Jersey, we suspected (and hoped!) we might be looking



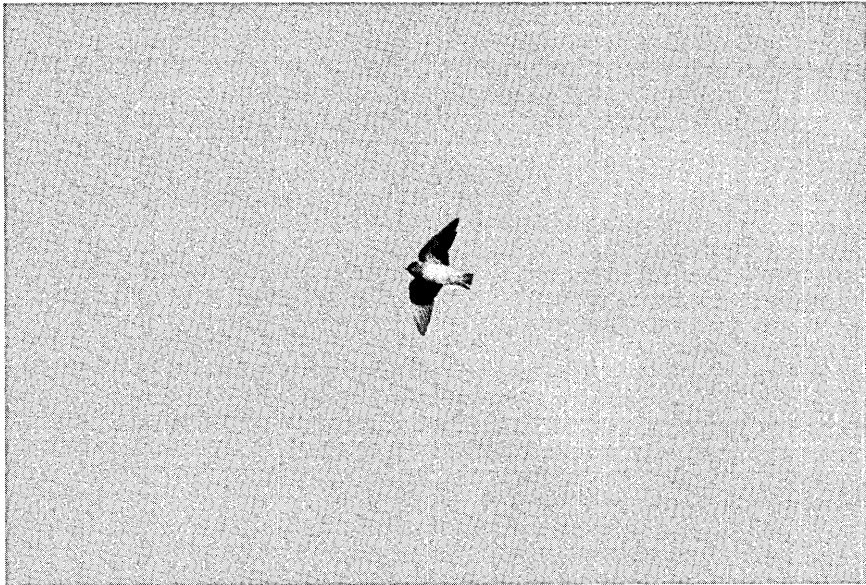
Head on view showing the pale (cinnamon in original color slide) throat extending across lower nape as a collar. The dark (red) forehead is clearly darker than the throat. These two features are important in eliminating Cliff Swallow. Photo by Angus Wilson

at one which had made its way further north. As the bird banked we could see that the underparts were pale, including a pale throat offset by a weak reddish breast band. The combination of the pale throat and relatively dark forehead eliminated the other pale-rumped possibility, the Cliff Swallow (*P. pyrrhonota*). We knew at this point we were indeed looking at a Cave Swallow!

We raced back to the car to get our photographic equipment with hopes of fully documenting the record. Returning to the spot, we soon relocated the swallow as it coursed over the small stands of pines dotted around the center of the golf course. The swallow spent most of this time foraging fifteen to fifty feet above the western end of the golf course. Since the course is surrounded by a chain link fence that prevents access, we stationed ourselves near the southwest corner where we were able to get good views of the swallow as it flew along the southern edge of the course and once or twice over our heads. For the next hour we studied the bird, taking notes and a number of photographs. Several attempts to video the bird proved futile.

Eventually the swallow flew to the northwestern corner of the course, about one-quarter of a mile away, where we lost sight of it. At this point we got brief glimpses of another swallow, flying over the firehouse near the northwest corner, which could not be identified to species because of the distance. We assumed that the second bird was most likely a Tree Swallow. After waiting a short while for the reappearance of the swallows, we walked west toward the Fort Tilden park headquarters, where there is a public telephone, in order to try and contact other birders. On our way there, we ran into Dorothy Poole and Gaye Fugate and told them about the Cave Swallow. They informed us that they had just seen an entry by Isaac Grant and Gene Herskovics in the Fort Tilden log book reporting a single Cave Swallow seen the day before, Friday, 27 Nov 1998. Like us, Poole and Fugate had not otherwise been aware of this previous sighting.

At Fort Tilden, Guthrie stationed himself at the pay phone near the headquarters building and proceeded to call various local birders. Unfortunately, most of our regular contacts had made an out-of-state Thanksgiving weekend birding trip! Reached via cellular phone, they could only share the experience vicariously. At around 11 a.m., during



Ventral view showing the rather square tail. Note the missing or displaced primary, a feature noted on one of the two Cave Swallows seen earlier the same week at Cape May, NJ. Photo by Angus Wilson.

the course of placing the calls, Guthrie spotted a Cave Swallow flying over the open areas between Beach Channel Drive to the north and the administration building. At one point, two swallows were visible about one-quarter mile to the west, too far away to be identified. When the birds eventually flew closer, both were seen to be Cave Swallows. We observed the two birds sporadically for the next 45 minutes as they circled high over the large area of lawns at Fort Tilden. The birds were often visible at the same time but were in close proximity on only two or three occasions, preventing documentation of the two together in a single photograph. The very mobile behavior and wide separation of the two conspecifics suggested there were few aerial insects available for them to feed on. We speculated that it paid for the two birds to stay well apart to minimize competition. At no time during our observations did we hear the birds call. During this period the swallows began to forage much higher than the initial observations and by the time we left they were flying at a height of about 100 yards.

Just as we were preparing to leave, John Bull and party pulled into the Fort Tilden parking lot. We alerted them to our exciting finds which were still circling very high overhead. We left around noon, but later learned that other observers, including Robert Kurtz, Max and Nellie Larsen, saw the birds during the afternoon. The following day, Sun 29 Nov, scores of birders assembled on the Riis Park boardwalk, near the location of our initial sighting the previous day. Unfortunately, patient waiting here and at Fort Tilden did not result in either of the swallows being relocated.

IDENTIFICATION; WHICH SUBSPECIES IS INVOLVED?

The short, squared off tail and pale brick-red rump patch eliminate all other hirundines except for the closely related Cliff Swallow (*P. pyrrhonota*). That species could be positively ruled out by virtue of the pale throat, relatively light rump patch and the dark forehead noted on the Riis Park birds.

Perhaps the more interesting identification problem with Cave Swallows in northeastern North America is at a subspecific level. Up to eight forms have been proposed, although Garrido, et al. (1999) are the only authors to recognize more than five subspecies in a single treatment (Kirchman, et al., 2000). The most likely sources of vagrant birds to the Northeast appear to be nominate *P. f. fulva*, which breeds in the Caribbean, and in Florida in small numbers, or *P. f. pallida* which breeds

in the southwestern United States and northern Mexico. Review of the literature and discussion with others who have wrestled with the problem revealed widespread uncertainty about the subspecific identity of vagrant Cave Swallows and the validity of the accepted criteria for separation. As David Sibley (Frontiers of Identification) has put it, "the differences are matters of degree".

The most commonly discussed differences between *fulva* and *pallida* are the rump and forehead colors, the color of the underparts, and size. *P. f. pallida* is described as having a relatively pale cinnamon-rufous rump, as opposed to chestnut or cinnamon-rufous in *fulva*; paler undertail coverts than *fulva*; and pale gray-brown sides and flanks (Turner and Rose, 1989).

Unfortunately this may be an oversimplification as an examination by the authors of specimens in the American Museum of Natural History revealed a troubling degree of overlap in the rump and forehead colors of specimens collected in the Caribbean (presumed to be nominate *fulva*) and those from northeastern Mexico (presumed to be *pallida*). While it is clear that the Riis Park birds fall comfortably within the range of the specimens from northeastern Mexico, a sizable fraction (perhaps a quarter) of Caribbean specimens showed similarly pale foreheads and rumps, to a degree that we feel field separation would be difficult. In accordance with published measurements, we noted a consistent size difference between the two subspecies, *pallida* being uniformly larger than *fulva*. Although no other swallow species were available for direct comparison, we did not get the impression that the Riis Park birds were particularly small.

Although the true color of the forehead can be difficult to see in the field (G. Lasley, pers. comm.), the contrast between the paler forehead of *pallida* and the dark crown shows up well in the photographs, and also contributes to the 'raccoon-mask' appearance of southwestern Cave Swallows, which we had noted at the time of our observations. This fact, plus additional plumage details such as the apparent grayish color of the flanks, without any obvious warm buffy tones, as well as our impressions of the size of the birds, lead us to believe that the Cave Swallows at Riis Park were most likely *pallida*.

OCCURRENCE IN NORTHEASTERN NORTH AMERICA

This identification corresponds with the current understanding of Cave Swallow occurrences in northeastern North America. Once an extreme vagrant to the northeastern North America, Cave Swallow has become an annual late fall occurrence at Cape May Point, New Jersey

(Mlodinow and O'Brien, 1996). There were records from the seven seasons prior to 1999, with a maximum during this period of five there between the 7 and 16 November 1997 (Paxton et al., 1998). Prior to 1999, there were four records from Canada - two spring records from Nova Scotia and two from Point Pelee in Ontario (Wormington, 1992). This species was recorded several times from Cape May during the 1998 fall season, with two birds over the Cape May National Golf Course on 23 Nov 1998 (Cape May RBA). Given the similarity in timing, we speculate that the same mechanism is responsible for these now regular New Jersey occurrences and the two Riis Park birds. It is even possible that sightings in the two locations in November, 1998 involved the same individuals. There is only one previous record of Cave Swallow from New York State, a one-day bird observed at Jamaica Bay National Wildlife Refuge on 23 May 1990 by Kenn Kaufman, Geoff LeBaron and Susan Drennan (Levine, 1998). Although no photographs were obtained, the description is consistent with *fulva*, and the observers believed the bird was this subspecies. Previous spring records in the northeast (e.g., the Nova Scotia sightings) were also believed to be *fulva*.

Prior to the Riis Park sightings, two Cave Swallows were present at Cape May, New Jersey and it is possible that the same individuals are involved. Although not noted in the field, photographs of one of the Riis Park birds showed an apparent missing or misplaced primary - a feature which had been described on one of the individuals seen earlier in Cape May. Interestingly, on 13 Dec 1998, a Cave Swallow seen at Cape May struck a window. Although momentarily stunned, the bird could not be captured, thus perhaps missing a unique opportunity to answer the subspecies question (P. Lehman, pers. com.).

LESSONS LEARNED FROM THE 1999 CAVE SWALLOW INVASION

Early November of the following year (1999), saw an unprecedented push of Cave Swallows into central and northeastern North America. Cave Swallows were recorded in multiple states and provinces including Quebec, Ontario, Virginia, New Jersey, Pennsylvania, Michigan, Rhode Island, North Carolina, Connecticut and New York. At least 80 birds were recorded in southern Ontario and as many as 35 Cave Swallows were reported from Cape May, New Jersey. This broad movement was associated with two low pressure systems, one centered over Texas and the other northern Ontario. A cold front, with associated southerly winds, connected the two systems driving birds from the southern United State northwards. Detailed descriptions and photographs of Cave Swallows

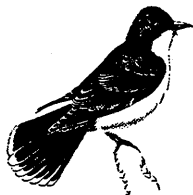
from Melocheville, Quebec and from Point Pelee, Ontario argue that this major influx involves the expected southwestern form, *P. f. pallida*. Importantly, at least two specimens were obtained, one from North Carolina (John Gerwin *fide* Harry LeGrand, pers.comm.) and one from Ontario (*fide* Michael Patten and Paul Lehman). Both have been identified by museum experts as belonging to the southwestern race *pallida*.

THE COMPLEX SYSTEMATICS OF CAVE SWALLOWS

Cave Swallow taxonomy at both the species and subspecies level has been subject to a number of revisions (discussed in Garrido et al., 1999; Kirchman et al., 2000). Indeed, there are more Cave Swallow races than any other group of New World swallows. One source of difficulty is the extensive geographical variation in size and plumage between populations, and in the case of West Indian forms, even within populations. While there is an emerging consensus that the Ecuadorian form (*P. f. rufocollaris*) should be treated as a separate species ('Chestnut-collared Swallow'), splitting of other populations remains controversial. Although the Texas and West Indian forms differ in a number of characters, recent microsatellite analysis suggests high levels of gene flow still occur (Kirchman et al., 2000). More definitive research will be needed before the AOU is likely to consider splitting *pallida* and *fulva*. However, it remains critical that observers try to document all future sightings of Cave Swallows in New York carefully. After all, both forms may already have occurred in the state.

ACKNOWLEDGEMENTS

Many thanks to Paul Sweet and Emanuel Levine for arranging access the AMNH collection and to Jim Lowe for providing specific details of the previous New York record. Thanks also to Greg Lasley, David Sibley, Noel Wamer, Harry LeGrand, Julian Hough and Paul Lehman for discussion of subspecific identification and thoughts on the occurrence of Cave Swallows in the Northeast.



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