

# General Field Notes

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## Status of the Cave Swallow in North Carolina

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Two subspecies of Cave Swallow (*Petrochelidon fulva*) have been documented to occur in the United States – the West Indies race (*P. f. fulva*), a rare breeder in southern Florida (Smith and Robertson 1988, Webber 1996), and the southwestern United States/Mexico race (*P. f. pallida*, formerly *P. f. pelodoma*), which is expanding its breeding range in Texas, where it is locally common (West 1995).

The Cave Swallow has been admitted to the Carolina Bird Club Official List of North Carolina birds on the basis of four accepted records (North Carolina Bird Records Committee (1993, 1994, 1996). In addition, the N.C. Bird Records Committee accepted photographs for one of the reports. (In this paper, a “report” is a written description or other documentation not yet accepted by a records committee, whereas a “record” is such material that has been accepted by a committee.) However, none of the four records has had full details submitted for publication. This paper documents these four records, providing descriptions of the birds and other significant details. LeGrand has summarized field notes and/or Rare Bird Sighting Report forms written by Fussell (Records 1 and 2), Wright (Record 3), and Brinkley (Record 4).

### Record No. 1

On 17 December 1987, Fussell observed a *Petrochelidon* swallow (either a Cave Swallow or a Cliff Swallow [*P. pyrrhonota*]) at Duncan’s Landing, near the Mill Creek community in Carteret County (LeGrand 1988). The swallow was studied for about 30 minutes with 9x binoculars in excellent light, as close as 50 feet, as it flew about while feeding. Fussell believed that the bird was a bit bulkier than a Tree Swallow (*Tachycineta bicolor*), although no individuals of that species were present for comparison.

Fussell believed that it was likely a first-winter bird because the plumage was not crisp-looking (like that of an adult). The back and wings were a dark color, between bluish and brownish. Some light streaking on the back was evident. The squarish tail was also dark. The rump was a light buffy color, and this color stood out for a great distance. The throat/upper breast area was a similar light buffy color, and this color extended around the nape to form a collar. This buffy collar stood out at a distance about as prominently as did the rump patch. The belly was whitish. The transition from the buffy color of the throat/upper breast to the whitish of the belly was gradual. The crown, at least the rear portion, was dark. The forehead was definitely not very light in color, but it must have been somewhat lighter than the crown, as Fussell recalled that the bird had a somewhat masked look, with a noticeably dark line through the eye to the bill.

Fussell believed that the bird was a Cave Swallow, but as he had never seen that species, he wanted to rule out the possibility of Cliff Swallow, especially a faded first-winter Cliff. Thus, at the time he considered the bird as a Cave/Cliff Swallow. On 5 August 1988, he was able to study both immature and adult Cliff Swallows, at a breeding colony at Jordan Lake, NC. After this study, he was sure the December 1987 bird was, indeed, a Cave Swallow. It was not until after the following observation, however, that Fussell submitted the 1987 record for consideration by the Records Committee.

## Record No. 2

A large concentration of swallows was observed by Fussell, Larry Crawford, and Bob Holmes at the Martin-Marietta quarry in New Bern, Craven County, on 16 December 1991 (LeGrand 1992). All of the birds were studied at leisure for about 45 minutes and as close as 75 feet. Fussell used 9x binoculars for the observation.

Two Cave Swallows were identified by the three observers, among a large aggregation of Tree Swallows, one Northern Rough-winged Swallow (*Stelgidopteryx serripennis*), and one Bank Swallow (*Riparia riparia*). The latter two species are very rare in December along the southeastern Atlantic coast north of southern Florida. The swallows were concentrated in a warmer section of the quarry that was protected from the northwest wind and was exposed to the morning sun. The birds were evidently feeding on insects. The Cave Swallows typically fed higher than most of the Tree Swallow flock. The Cave Swallows fed primarily just below the crest of a high bank. They were continually being harassed by Tree Swallows during the entire period of observation.

The Cave Swallows had a squarish tail and bold, relatively light, rump patch. The birds were very slightly smaller than Tree Swallows, noted in direct comparison. The back, upper surface of the wings, and tail were dark; color was not discerned. Whitish stripes on the upper back were quite pronounced. At a distance, the birds did not have the hooded look of a Cliff Swallow. The pattern of the underparts suggested a Northern Rough-winged Swallow, with whitish belly and slightly darker upper breast and throat, which were buff-colored. This buffy color extended around to the nape to form a collar. This collar was very noticeable at a great distance. The crown was dark. The birds did not have a

pale forehead, but the forehead was evidently slightly lighter than the crown because it emphasized a dark, thin mask from the eye to the bill.

### Record No. 3

On 5 February 1995, John and Paula Wright, and Nell and Jimi Moore, observed a Cave Swallow in flight at a sewage treatment area near the intersection of NC 210 and Folkstone Road, about 2 miles north of the NC 210 bridge to Topsail Island in Onslow County (Davis 1995a). The bird flew mostly low, back and forth, apparently feeding on small insects over an extensive wet grassy area where sewage effluent is sprayed onto the ground. The swallow was briefly in the company of three adult Tree Swallows.

The swallow had a square tail with a large, buffy-light orange rump patch. The face was buffy, with light buff-tan extending onto and around the nape. The forehead, studied at close range, was a slightly darker burnt-orange in color. The remainder of the upperparts were a mostly dull slaty-brown. The underparts were creamy-white to tan, with a hint of light buff working its way onto the chin/neck area from the face. The predominant pattern of the underparts was its uniformity of color.

### Record No. 4

On 19 May 1995, Edward Brinkley and Randy Moore observed a Cave Swallow feeding on insects over the Bodie Island Lighthouse Pond, on the Dare County coast (Davis 1995b). The bird was seen for 5 minutes in good light as close as 75-80 feet (25 m).

The dorsal surface was dark with rufous uppertail coverts and lower back, and it had an indistinct gray hind-collar. It was strikingly pale below, with faint orange wash on the throat and side of the face (auriculars). A darkish cap with intense orange forehead was noted. There was no dark coloration on the chin, throat, or breast, ruling out Cliff Swallow. The bill and eye were dark. Faintly stippled pale streaking was observed on the mantle.

### Discussion

Because of the possibility that the two subspecies of Cave Swallow will be split into separate species (as suggested by Garrido *et al.* (1999)), observers should note the flank color and the color of the rump. The race *fulva* has buff-to rust-colored flanks and a darker rust-colored rump than does *pallida*, which has little or no buff or rust color on the flanks (Garrido *et al.* 1999, National Geographic Society 1999). Thus, observers should not only be looking for Cave Swallows, but they should also study all marks carefully once a Cave Swallow is seen, especially the coloration of the flanks.

Wright noted that the bird he observed (Record No. 3) appeared to be of the southwestern *pallida* race, based on pale underparts and the light buffy-orange rump patch. None of the observers of the four records mentions buff- or rust-colored flanks, although several observers were consciously looking for this field mark. Because the southwestern U.S. race is expanding its breeding range in Texas and is also wintering regularly there (National Geographic Society 1999), most if not all of the North Carolina records likely refer to *P. f.*

*pallida*. The only record (specimen) of Cave Swallow in South Carolina was an individual at Folly Beach, Charleston County, on 31 October 1993 that was determined to be *P. f. pallida* (McNair and Post 1999).

Three of the four occurrences of Cave Swallow for North Carolina are from December through February. Perhaps surprisingly, there are no reports for the fall season, when the Cave Swallow might be most likely to occur in the state, based on numerous reports published in *American Birds* and *North American Birds* that summarize important bird observations across the North American continent. Although the Cliff Swallow migrates through the state in the fall, it tends to migrate early (generally from July into September) and is quite rare along the coast. Thus, observers are probably not overlooking Cave Swallows as Cliff Swallows.

Observers might also be overlooking Cave Swallows if they occur in very large flocks of Tree Swallows, which may occur by the thousands in fall and in winter near and along the coast, where Cave Swallows (and other strays) typically are encountered.

### Acknowledgments

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## Active Ruffed Grouse Nest Found in South Carolina

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The Ruffed Grouse (*Bonasa umbellus*) is an uncommon resident of the Appalachian Mountains, with the lower altitudinal limit of its range being 300m (McNair and Post 1993). Late May and early June are the usual months that eggs are laid (Sprunt and Chamberlain 1970). Post and Gauthreaux (1989) describe the status of the species as "poorly known," so all sightings in South Carolina should be reported. This is the first photographic evidence of the nesting of this species in South Carolina.

On 5 May 2000, while conducting point counts, I found an active Ruffed Grouse nest with 7 eggs. The nest was beneath a 38 cm stump that was 1 m uphill of the Foothills Trail in Pickens County, South Carolina, and only about 250 m from F. Van Clayton Highway at Chimney Top Gap (35° 03' 43.9" N, 082° 47' 49.8" W). The nest was constructed out of hardwood leaves and 2 contour feathers (fig. 1). The site was a mature oak-hickory forest on a southwest slope of 240° and at an altitude of 805 m. Groundcover consisted of canopy species seedlings, sparse ferns, and forbs.

The nest was reinspected on the morning of 26 May 2000. The female was flushed and the eggs were inspected for signs of life. I heard one of the chicks peeping within its egg, and some eggs were pipped.

On 29 May 2000, Stanlee Miller from Clemson University reinspected the nest and found that 6 of the 7 eggs had hatched. The shells and the addled egg were taken back to Clemson University, where they were catalogued (CUSC#3787) along with copies of my photographs of the site and nest.

This finding demonstrates that a Ruffed Grouse had laid eggs in April and that they had hatched in May, earlier than what Sprunt and Chamberlain (1970) report as the normal time frame. The altitude was within the known range according to McNair and Post (1993), however. In an investigation on Ruffed Grouse habitat use by Hein (1970), mature, xeric communities dominated by Pignut Hickory (*Carya glabra*) and White Oak (*Quercus alba*) were the sites of most brood reports. This is the same forest type in which I found this active Ruffed Grouse nest.