

NOTES

“Checklist of Florida’s birds”: corrigenda, addenda, and emendations.—In February 1985 I was commissioned by the Nongame Wildlife Section of the Florida Game and Fresh Water Fish Commission to prepare a list of the accredited species of birds in Florida, showing their months of occurrence and degrees of abundance separately for North Florida and South Florida. Because I was a member of a committee, chaired by William B. Robertson, Jr., working on a checklist of Florida birds, I obtained a verbal agreement from the chairman of the Nongame Wildlife Section to avoid using the term “Checklist” in the title of my publication. Probably through misunderstanding due to changes of personnel within the Commission, the booklet, published in July 1986, carried the title as listed in the first line above. The title first agreed upon and used on the manuscript I submitted was that shown on the first full page, “A list of Florida birds and their status.” In deference to the diligent work of Robertson and others on the official checklist of the Florida Ornithological Society, I urge that this latter title be used for my booklet.

Unfortunately, the year of publication (1986) does not appear in the work, and the three pages preceding the list of species are not numbered. I suggest that they be numbered i, ii, and iii, and that the first page of species be numbered 1. For a large number of species, I could not distinguish between the status in North Florida and that in South Florida; for these (e.g., all shearwaters) “Fla.” was placed in the second column, and all letters and numbers were italicized.

Errata: Page ii, line 14, delete “s” in “abundances.” Page 4, delete asterisk for Masked Duck. Page 8, add asterisk for Budgerigar. Page 11, add asterisk for Cave Swallow. On page 14, following Yellow-breasted Chat, insert “Subfamily?” (Present treatment suggests that chat and Bananaquit belong to the same subfamily other than Parulinae; term originally used in this manuscript was “*Incertae sedis.*”)

Addenda: The following species may now be considered accredited to Florida—Page 3. Ross Goose (*Chen rossii*), follows Snow Goose; page 7, Marbled Murrelet (*Brachyramphus marmoratus*) and Atlantic Puffin (*Fratercula arctica*), follow Razorbill; page 8, Eurasian Collared-Dove (*Streptopelia decaocto*) precedes Ringed Turtle-Dove. On page 12 the Common Myna (*Acridotheres tristis*), based on sight records only, may be added in brackets following European Starling.

Emendations: Place in brackets or delete—Page 11, Black-billed Magpie (escape?); page 14, Cuban Grassquit (sight records only). Other changes of status can await publication of a more exhaustive work.

Henry M. Stevenson, Tall Timbers Research Station, Route 1, Box 678, Tallahassee, Florida 32312.

Florida Field Naturalist 16: 86, 1988.

West Indian Cave Swallows nesting in Florida, with comments on the taxonomy of *Hirundo fulva*.—During the summer of 1986 and again in the spring of 1987, the senior author (hereafter PWS) observed swallows darting under highway bridges in southern Dade County, Florida. On 18 April 1987 PWS discovered the state’s first known nest site of the Cave Swallow (*Hirundo fulva*) on the underside of a highway bridge near Goulds, about 30 km south of Miami. To protect the colony’s welfare, this site hereafter is referred to only as “Site A.” Robertson, who earlier had predicted that this species might colonize the subtropical part of the state from Cuba (Robertson and Kushlan 1974), confirmed the identification. Subsequently Stevenson collected an individual (UF no. 21474) from the vicinity of a nest at this location on 21 June 1987. The adult female of the Cuban population

H. f. "cavicola" (identified by A. R. Phillips) had a left wing chord measurement of 103 mm. This is the first recorded nesting of any West Indian population of the Cave Swallow in the United States.

On subsequent days, PWS investigated other potential nest sites in the vicinity and found another active Cave Swallow nesting location, "Site B" near Modello, about 11 km south of Site A. Two other bridges between Sites A and B showed signs of swallow nests from 1986 or earlier, but other similar intervening bridges did not. Nests at both active sites were located on the underside of highway bridges spanning canals several meters wide. The nests generally were situated on the base of cement I-beams, at the intersection of the braces between I-beams that help support the roadway. Most nests were directly over the middle of the canal, about 3-6 m above the water, but a few were over the shore. With one exception, there was no more than one nest on any section of I-beam face. No nests were found in 1987 under overpasses that do not cross water.

The discovery date (18 April) was in the middle of a dry period that lasted for several weeks. Some nests were apparently complete and occupied, and swallows were observed carrying mud pellets and working on other nests. However, nest-building was not observed again until 10 May, shortly after rain resumed in the area, suggesting that activity may have been limited by the lack of readily available mud. There were 14 active nests on the underside of four bridges along a 300 m stretch of canal at Site A on 2 June. Most first broods fledged here between the middle and the end of June. Nesting activity at Site A was still in progress on 15 August, when over 40 Cave Swallows were present, but most had departed by 9 September. One juvenile continued to roost in one of the nests until at

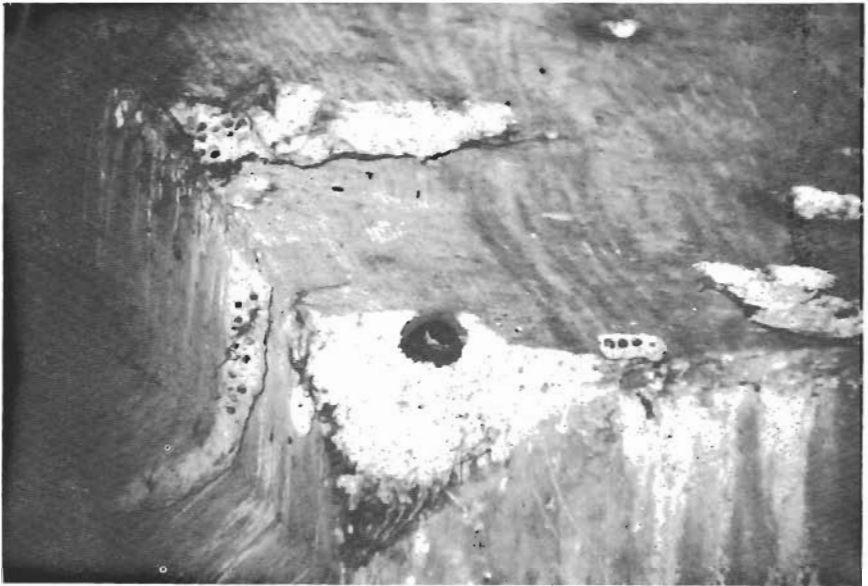


Figure 1. Globular-shaped nest of West Indian Cave Swallow at "Site B," near Modello, Dade Co., Florida 25 April 1987. The nest almost certainly was constructed in a previous year.

least 17 September. In 1988, a total of about 50 Cave Swallows returned to this site (as well as to Site B) seemingly at once sometime between 24 and 27 March.

At Site B only one nest, apparently from a previous year, was in use on 24 May 1987, when a second pair began nest-building. Two other individuals also were present at Site B during the period but were not known to have nested. At least three juveniles successfully fledged from the first nest on 7 June. Incubation for another brood began in the same nest within a few days. No swallows were seen in the vicinity of Site B after 31 July.

Two different basic nest shapes were found in the Dade County Cave Swallow population in 1987. On 2 June, 11 active nests were of the enclosed globular type (Fig. 1), and 5 active nests were of the open half-cup type (Fig. 2). All seven nests observed being built in 1987 were first occupied as half-cups. However, even as incubation or feeding of young was in progress, additional mud pellets were placed on these as well as some previously existing nests, until most were transformed into the enclosed shape. Thus, this population of Cave Swallows apparently preferred enclosed nests but commenced nesting activity in open half-cups. Most of the enclosed nests had projected openings, making them somewhat bottle-shaped like the typical nest of the Cliff Swallow (*Hirundo pyrrhonota*) (Bent 1942).

The Cave Swallow comprises several apparently allopatric populations occurring from the southwestern United States and the West Indies to Peru (Mayr and Greenway 1960). The relationship between these populations is uncertain, and some may deserve specific or allospecific rank (A.O.U. 1983). Ridgely and Tudor (in press), for example, consider the South American *H. f. rufocollaris* to be a full species based on nest shape as well as morphology. In Cave Swallow populations from northern Mexico and the southwestern

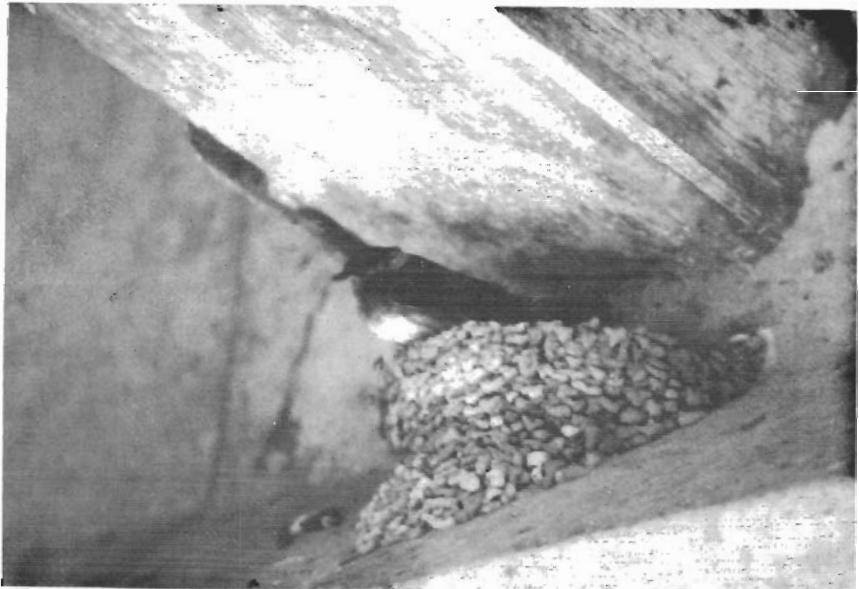


Figure 2. Open half-cup nest of West Indian Cave Swallow at "Site A," near Goulds, Dade Co., Florida, 24 May 1987. Construction of this nest began about two weeks earlier.

United States *H. f. pelodoma* (see Phillips 1986 for the use of this name rather than the former name *pallida*), only half-cup or partially enclosed nests have been found (Selander and Baker 1957, Martin and Martin 1978, R. F. Martin *in litt.*). Enclosed nests are known from West Indian Cave Swallow populations (Wetmore and Swales 1931, Bond 1985), and from Yucatan (Martin 1986) where the poorly-known form *citata* has been described (Van Tyne 1938). Following Mayr and Greenway (1960), we prefer to include the poorly differentiated race *cavicola* (Phillips 1986) within the nominate *fulva*. *H. f. fulva* averages smaller and has much deeper chestnut color on its forehead and rump and cinnamon-colored flanks compared to *pelodoma* (Ridgway 1904, Selander and Baker 1957, Phillips 1986). *Citata*, which is morphologically closer to *fulva* than to *pelodoma* (Van Tyne 1938), has a significantly different nesting facial pattern compared to juvenile *pelodoma*, showing that it comprises a different population (Martin 1986). Unlike *pelodoma*, whose winter range is unknown (Phillips 1986), West Indian Cave Swallows are largely resident (Bond 1985), although the Cuban portion of the population apparently mostly withdraws in autumn and winter (Garrido and Garcia 1975, Bond 1985). Taken together with their allopatry, the differences in nest construction, morphology, kin recognition patterns, and phenology suggest that West Indian Cave Swallows (including those found in Florida and Yucatan) may be sufficiently distinct from *pelodoma* to warrant allospecific treatment. If so, we would suggest retaining the name "Cave Swallow" for *Hirundo [fulva] pelodoma* and would propose the English name "Cinnamon-throated" or "Cinnamon-sided Swallow" for *Hirundo [fulva] fulva*.

Three of the four previously published Cave Swallow specimens from southern Florida, all taken at the Dry Tortugas in March or April (Scott 1890, Dinsmore 1968), are unequivocally *H. f. fulva* and hence of West Indian origin. One found dead 28 February 1965 near Homestead (Cunning and Mann *in* Stevenson 1965, USNM no. 537005) shows coloration close to that of *H. f. pelodoma*, but measurements (wing 104 mm) more typical of *H. f. fulva*. Identified originally by Wetmore as the Cuban *H. f. "cavicola"* and more recently by Phillips (1986) as *H. f. pelodoma*, its origin and affinities are uncertain.

The original color photographs of those reproduced in this paper, plus other photographs and a map showing the specific locations of Sites A and B, have been deposited at the Florida State Museum, Gainesville. We thank Susan A. Smith for assistance in the field, L. Page Brown for taking photographs, and Ralph Browning, Robert Martin, Burt Monroe, Allan Phillips, Robert Ridgely, and Tom Webber for their help.

LITERATURE CITED

- A.O.U. 1983. The A. O. U. Check-List of North American birds. 6th edition. Washington, D.C.: Amer. Ornithologists' Union.
- BENT, A. C. 1942. Life histories of North American flycatchers, larks, swallows, and their allies. U. S. Nat. Mus. Bull. no. 179.
- BOND, J. 1985. Birds of the West Indies. 5th edition. London: Collins.
- DINSMORE, J. I. 1968. Cave Swallow (*Petrochelidon fulva*) from the Dry Tortugas. Fla. Naturalist 41: 170-171.
- GARRIDO, O. H., AND F. GARCIA MONTAÑA. 1975. Catálogo de las aves de Cuba. Havana: Academia de Ciencias de Cuba.
- MARTIN, R. F. 1986. Geographic variation in white facial markings of juvenile Cave Swallows. Southwestern Nat. 31: 402-403.
- MARTIN R. F., AND S. R. MARTIN. 1978. Niche and range expansion of Cave Swallows in Texas. Amer. Birds 32: 941-946.
- MAYR, E., AND J. C. GREENWAY, JR. 1960. Check-list of birds of the world. Vol. IX. Cambridge, Massachusetts: Museum of Comparative Zoology.

- PHILLIPS, A. R. 1986. The known birds of the North and Middle America. Part I. Denver, Colorado: Allan R. Phillips.
- RIDGELY R., AND G. TUDOR. In press. The birds of South America. Vol. 1. Austin, Texas: University of Texas Press.
- RIDGWAY, R. 1904. The Birds of North and Middle America. Part III. U. S. Nat. Mus. Bull. no. 50.
- ROBERTSON, W. B., JR., AND J. A. KUSHLAN. 1974. The southern Florida avifauna. Reprinted 1984 as pp. 219-257 in *Environments of South Florida; present and past II* (Gleason, P. J., ed.). Coral Gables, Florida: Miami Geological Society.
- SCOTT, W. E. D. 1890. Two species of swallow new to North America. *Auk* 7: 264-265.
- SELANDER, R. K., AND J. K. BAKER. 1957. The Cave Swallow in Texas. *Condor* 59: 345-363.
- STEVENSON, H. M. 1965. Florida region—winter 1964-5. *Aud. Field Notes* 19: 370-374.
- VAN TYNE, J. 1938. The Yucatan form of West Indian Cliff Swallow (*Petrochelidon fulva*). *Occ. Papers Mus. Zool. U. Mich.* no. 385.
- WETMORE, A., AND B. H. SWALES. 1931. The birds of Haiti and the Dominican Republic. *U. S. Nat. Mus. Bull.* no. 155.

P. William Smith and William B. Robertson, Jr., South Florida Research Center, Everglades National Park, P. O. Box 279, Homestead, Florida 33030; and **Henry M. Stevenson**, Tall Timbers Research Station, Route 1, Box 678, Tallahassee, Florida 32312.

Florida Field Naturalist 16: 86-90, 1988.

Nuisance alligator food habits in Florida.—Most food habits studies of American alligators (*Alligator mississippiensis*) have sampled hunter-harvested animals (Giles and Childs 1949, Valentine et al. 1972, McNease and Joanen 1977, Delany and Abercrombie 1986). Hence, samples are usually restricted to remote areas and available only during late summer-early autumn (i.e., post-nesting). Stomachs collected from nuisance alligators in Florida provide an opportunity to examine the food habits of alligators from more urban environments during other seasons. This paper describes the diet of nuisance alligators in Florida.

Individual alligators were deemed a nuisance following an investigation by the Florida Game and Fresh Water Fish Commission in response to a public complaint. An alligator was killed if greater than 1.2 m in total length (TL) and considered a threat to personal safety or property (Hines and Woodward 1980). Stomachs were collected from 113 alligators from Duval, St. Johns, Alachua, Marion, Citrus, and Lake counties between 18 March-1 November 1977. Alligators ranged in length from 1.3 to 3.7 m TL and included 69 males, 39 females, and 5 individuals of undetermined sex. Subadults (<1.8 m TL) comprised 23% of the sample. Stomachs were stored in plastic bags at -20°C. After thawing, contents were removed and individual food items were identified to species when possible. Contents were weighed to the nearest gram, and volumes determined by water displacement to the nearest milliliter. For seasonal comparisons, the grouping of samples approximates a change (increase) in average air temperature from spring (March-May, 21.3°C) to summer (June-September, 27.4°C) in north and northcentral Florida in 1977 (NOAA 1977).

One stomach was empty, one contained only rocks, and 111 contained food. Prey items consisted of fish, mammal, bird, reptile, amphibian, and invertebrate species (Table 1). Fish were the most important food group by weight (61%) and volume (60%). Other vertebrates constituted a smaller portion of the diet, accounting for 35% of the total food weight and volume. A juvenile alligator (estimated length < 50 cm) was found in the stomach of a 1.9 m female alligator collected from Lake County. Invertebrate remains occurred frequently (87.6%), but constituted less than 5% of the total food weight and volume. Nonfood items included plant material, rocks, and man-made objects. Parasitic worms (*Dujardinascaris waltoni*) were found in 73% of the stomachs.