

NOTES

Black Skimmers nesting on roofs in northwestern Florida.—Black Skimmers (*Rynchops niger*) previously have been found nesting on roofs of buildings, but only in southeastern Florida (Greene and Kale 1976, Fisk 1978). In July and August 1986, I observed Black Skimmers nesting on gravel-covered roofs of three large buildings in Pensacola (Escambia County) in northwestern Florida. Skimmers nested on the roof of the Pensacola Municipal Auditorium, where Least Terns (*Sterna antillarum*) have long maintained a nesting colony (Goodnight 1957), and about 400 m east of the auditorium on two adjoining warehouses of the Pensacola Port Authority. Each of the three buildings is taller than 10 m and borders Pensacola Bay. One warehouse roof is flat and has a short wall along its edge. The other roofs have a slight slope and no wall.

I observed Black Skimmers on nests on my first visit to the roofs on 2 July. Nesting on the auditorium roof was interrupted in early July when the gravel-covered roof was replaced with smooth plastic. One chick was seen before the roof was replaced, but it was later found dead on a small side-roof a few meters below the main roof.

The warehouse roofs were visited 13 times to observe certain Least Tern nests. All visits occurred in early morning and lasted about one half hour; no other disturbance of the colonies by humans was apparent. During six of the visits, the number of Black Skimmer nests, eggs, and chicks was recorded (Table 1). In order to minimize disturbance to the skimmer colony, neither eggs nor chicks were marked for individual identification.

A maximum of 25% of the eggs on the warehouse roofs hatched. Maximum hatching success was determined using the maximum number of chicks observed (10) during the study and the maximum number of eggs and chicks observed (40) during a single visit to the colony (Table 1). The actual hatching rate likely was much lower because some eggs were laid after 16 July and some chicks probably were observed repeatedly. No juvenile skimmers were seen flying during any of the visits to the warehouse. One chick was found dead on the warehouse roof, but the fate of the other chicks is unknown.

Few or no eggs have hatched in other Black Skimmer colonies on roofs (Green and Kale 1976, Fisk 1978) or at inland sites (Langridge and Hunter 1986). This contrasts with hatching rates of 76–93% for colonies on beaches (Erwin 1977, Safina and Burger 1983). Human disturbance may account for some loss of eggs on roofs, but the high loss I observed is unexpected. On beaches in New Jersey, 76% of Black Skimmer eggs hatched even though colonies were visited daily by humans (Safina and Burger 1983).

I found many cracked or punctured Black Skimmer eggs and many eggs lying up to 2 m outside the nest scrape. In contrast, among the more than 100 Least Tern nests on the roofs, no eggs were found punctured or lying outside the nest, and only a few tern eggs were found cracked. Fisk (1978) also reported broken and scattered skimmer eggs on roofs. She suggested that eggs were crushed by incubating adults because the thin layer of gravel on roofs prevented skimmers from making a deep nest scrape. Greene and Kale (1976) hypothesized that eggs broke after contacting the tar under the gravel.

Another cause of broken skimmer eggs may be the wind. I observed one egg being blown about 40 cm across the roof. Windblown eggs might crack on the sharp gravel of the roof, especially if pushed back toward the nest by adults. Slightly cracked eggs could be punctured by the slender bills of adult Black Skimmers (Grant and Hogg 1976). This might explain why some eggs appear punctured, as if by predators, but are uneaten (Fisk 1978, this study).

Eggs on roofs may be more susceptible to being windblown than eggs on beaches. The shallow nest scrapes made on roofs do not have sides high enough to shield eggs from the wind or to prevent eggs from rolling out. Slanted roofs may amplify this problem. In

Table 1. Number of Black Skimmer nests, eggs, and young on two adjacent roofs in Pensacola, Florida, 1986.

Date	Nests ¹	Eggs		Young
		Normal	Broken	
16 July	15	31	7	2
31 July	17	11	15	2
5 August	3	5	12	2
13 August	2	0	4	3
21 August	0	0	— ²	1
4 September	0	0	— ²	0

¹Only nests with eggs or chicks in or near them were recorded.

²Number of broken eggs was not recorded.

addition, nests on high roofs may be exposed to greater or more frequent winds than nests at ground level.

Burger (1982) found that Black Skimmers tended not to nest at beaches where nesting had been unsuccessful throughout the previous season. However, Greene and Kale (1976) observed skimmers using roofs even after an unsuccessful year. More observations are needed to assess the success of roof-nesting skimmer colonies and their importance to local populations. In particular, information is needed on early-season nesting on roofs.

My observations and those from southeastern Florida (Greene and Kale 1976, Fisk 1978) show that Black Skimmers nesting on roofs routinely fail to fledge young. Because of this loss of reproductive effort, roofs can be considered as ecological sinks to local skimmer populations. Fortunately, few skimmers select roofs as nesting sites, and the effect on local populations is probably minor. However, if roof-nesting becomes common among skimmers, as it has with Least Terns, productivity of colonies on roofs should be further investigated.

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Prairie Falcon sighting in Florida.—On 8 October 1986 I observed a large falcon I believe was a Prairie Falcon (*Falco mexicanus*) in eastern Sarasota County, Florida, along the unpaved road leading to the Longino Ranch, 1.1 km south of State Highway 72 and 6.0 km west of the DeSoto County line (Sec 9, T38S, R22E). The bird, judged to be a female on the basis of size, was perched conspicuously in the top of a large dead pine in an area of extensive open pasture with scattered clumps of brush and cabbage palm (*Sabal palmetto*) and live oak (*Quercus virginiana*) hammocks. I studied it from the open window of my vehicle for about 10 min at a distance of approximately 60 m with 7×35 binoculars and a 20-45× spotting scope. The bird paid no attention to the vehicle or my movements inside. In response to high air temperature at the time (1615 hr), the falcon perched with plumage tightly compressed and the wings held slightly away from the body.

When I first saw the bird, I assumed it was an unusually light-colored Peregrine (*F. peregrinus*). However, on closer inspection it agreed with the Prairie Falcon in all details in addition to its overall pale coloration. The upperparts were relatively light brown and the venter was creamy-white with rich brown streaks. It had prominent narrow malar stripes bordered behind by pale cheeks, broad eye stripes, whitish forehead and upper nape, and brownish crown. The eye stripes were more pronounced and the white forehead extended farther back, resulting in a more restricted crown patch than in most photographs and paintings of the species. The cere, orbital skin, and feet and legs were gray rather than yellow, indicating that the bird was an immature (Brown and Amadon 1968, Eagles, hawks and falcons of the world, New York: McGraw-Hill Book Co.). As the bird remained perched during the time I watched it, I did not have an opportunity to check for the dark axillary areas characteristic of the Prairie Falcon.

Although I have observed Prairie Falcons in the West (Layne 1946, Illinois Aud. Soc. Bull. 57: 9-11) and am confident of the identification, I did consider the possibility that the specimen might have been some species of exotic pallid falcon, such as the Lagger (*F. jugger*) or Saker (*F. cherrug*), that had escaped from captivity. However, comparison with the descriptions and illustrations of other pale-colored falcon species in Brown and Amadon (1968) and Cade (1982, The falcons of the world, Ithaca, New York: Cornell Univ. Press) further confirmed the identification as a Prairie Falcon.

It appears to be the first record of the Prairie Falcon in Florida, although accidental occurrences, perhaps representing escaped individuals, have been reported previously from Alabama, Georgia, and South Carolina (Amer. Ornithologists' Union 1983, Check-list of North American birds, 6th ed.). While there seems to be no doubt as to the identification, the lack of a voucher specimen, satisfactory photograph, or corroboration by other observers might require that the record be considered hypothetical. As is the case with any unusual raptor appearing in an area, there is a question of whether the falcon was an escapee or wild individual. I carefully examined the bird for some indication that it might have escaped from a zoo or a falconer. The cere was undamaged, the body plumage was bright and unworn, and the tips of the rectrices and primaries were not frayed or broken, suggesting that the bird had not previously been caged. There also was no indication that the bird had been used in falconry, as there were no bands or jesses on the legs or evidence,