

## General Field Notes

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*General Field Notes* briefly report such items as rare sightings, unusual behaviors, or significant nesting records; or summaries of such items. Submit manuscripts to the appropriate state editor.

*First, second, or third sightings of species in either state must be submitted to the appropriate Bird Records Committee prior to publication in The Chat.*

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### A Probable Case of Facultative Polygyny in the Barn Owl

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Reviews by Marti (1992) and Taylor (1994) state that polygyny is unusual in the Barn Owl (*Tyto alba*). Polygyny has been estimated to occur in less than 2% of matings, and has not yet been documented from eastern North America. We report a probable case of bigamy, in which two females nested close together, both apparently within the territory of one male. On 15 March 2002 (14:00 h) we found two Barn Owl nests in an observation tower on Santee Coastal Reserve, near Cape Romain, Charleston County, South Carolina. The tower is on a 0.5 ha oak-pine hammock surrounded by brackish impoundments and salt marshes. The 17 m high tower has three levels.

One nest was in a Barn Owl box that had been placed on the second level of the tower on the outer NE corner, 11 m above ground. It contained five

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<sup>\*</sup> Outgoing General Field Notes editor Dennis Forsythe acted as editor for notes in this issue authored or co-authored by William Post.

eggs and one 1-2 day old chick. The young and eggs were on a mass of pellets composed of the remains of Meadow Voles (*Microtus pennsylvanicus*) and Rice Rats (*Oryzomys palustris*). Two freshly killed Rice Rats lay next to the chick. The second nest was one story above, on the top level of the tower. This nest was placed on the bare floor in the NW corner of the partially enclosed observation area. It had seven warm eggs. One egg had been damaged, and we opened it. The contents were fresh, with no discernible embryo, indicating that incubation was not advanced. The nests were 4.0 m apart, but their occupants would have been out of view of each other.

On 5 April, Sanders revisited the tower. Two owls flushed from the tower. The nest on the second level contained one large nestling and one that was 12-14 days old. The nest on the third level had one 1-day-old chick and one warm egg. The remaining four eggs were scattered outside the nest and were cold. Two dead Rice Rats were next to the nest, but any pellets that may have been deposited appeared to have been blown away.

The respective hatching dates indicate that the second clutch was initiated 21 days after the first. We did not see any social interactions between the owls, nor did we see more than two owls flush from the tower at one time. Because of this observation, and because of the closeness of the nests and the timing of the clutch starts, we assume that both nests were within the territory of one male. These circumstances provide strong evidence that the male was a bigamist.

Polygamy is rare in this species. In Scotland, Taylor (1994) found bigamy in only 2% of 419 nesting attempts. As described by Taylor (1994), in winter one or more first-year visiting females occasionally roosted together with a resident female. These usually left before the breeding season, but in some cases a second female remained, and even continued to roost alongside the incubating female. The secondary females subsequently mated with the territorial males. Although some cases involved females that nested up to 1 km apart, in one instance two females nested only centimeters apart. In northern Utah, Marti (1990) documented cases in which two females successfully nested together in the same nest.

We conjecture that in the present case the putative multiple pairing may have been a facultative response to a shortage of nest sites. Man-made structures and predator-secure natural cavities are rare in the tidal marsh zone of South Carolina. This scarcity is demonstrated by the fact that in 1991 all 10 barn owl boxes placed in salt marshes in the Cape Romain area were used within one year by nesting Barn Owls. Despite a scarcity of nest sites, Barn Owl density is potentially high, as food does not appear to be limited. Rice Rats and Meadow Voles, the main prey of Barn Owls in the Cape Romain area (Chamberlain 1979), are locally common in salt marshes. Rice Rats, for example, have been found at densities of up to 16 individuals/ha in *Spartina alterniflora*-*Juncus roemerianus* marshes in Charleston County (Post, unpubl.). It is likely that Barn Owls nesting on the southeastern coast will benefit from the continued provision of artificial sites.

### **Literature Cited**

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## **First South Carolina Specimens of the Masked Booby (*Sula dactylatra*)**

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The Masked Booby (*Sula dactylatra*) is a pelagic warm-water species rarely seen near shore (Clapp et al. 1982). On the North American Atlantic coast, seabirds such as boobies are most often found in productive feeding areas far from land. For example, in the South Atlantic Bight, between Cape Hatteras and the Florida peninsula, seabirds aggregate around *Sargassum* reefs associated with the Gulf Stream, which often meanders as far as 100 km from shore (Haney 1986a). Through 2002, only about five credible reports existed for the Masked Booby in South Carolina. The two Masked Boobies reported here constitute the first South Carolina specimens.

The first state specimen of the Masked Booby, a first-year female, was salvaged on 10 August 2003, Folly Beach, Charleston County. An unknown tourist delivered it to Sea Island Veterinary Clinic, where it died. Its physical characteristics were as follows: mass: 965 g; wing: 40 cm (chord), 41.3 cm (flat); span: 157 cm; total length: 76.5 cm. It was not molting. Its stomach was empty. It was prepared as a standard study skin, with the left wing detached and extended. (Charleston Museum 2003.27.071).

I salvaged the second state specimen, which was a subadult female (Fig.1), on the front beach of Sullivan's Island, Charleston County, 11 August 2003 at 20:30 h. The bird was able to walk, but not fly. It died in captivity one day later. Its measurements were: mass: 1126 g; wing: 39.0 (chord); 40.8 cm (flat); wing span: 155 cm; total length: 75.5 cm; tail 14.5 cm. The plumage was worn, with new rectrices emerging. It had no body molt, although wing molt was present. The stomach was empty. The specimen was prepared as a "schmoo" (skull retained with skeleton), and the right wing was detached and spread. (ChM 2003.27.072).