

## SOOTY TERN BEHAVIOR

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**SYNOPSIS:** A 4-year study of the breeding behavior of Sooty Terns (*Sterna fuscata*) was made at Bush Key, Dry Tortugas in the southeastern Gulf of Mexico. The results are compared with the behavior of other terns and the differences discussed, particularly in regard to the pelagic environment the Sooty Tern inhabits.

Sooty Terns arrive at the Dry Tortugas some 2 months before eggs are first laid. At first they circle Bush Key at night only, but eventually land and extend the time they spend on the ground, arriving earlier in the evening and leaving later in the morning. After the first eggs are laid, flocking subsides. Aerial display by Sooty Terns consists mainly of the high flight in which two birds ascend, usually by jerk-flying, circle, and then descend together in a coordinated glide. Sooty Terns may have a poorly developed low flight display. On the ground the major display is the parade, similar to that of other *Sterna* terns. Courtship feeding is rare. Terns often interfere with pairs attempting to copulate.

The single egg is incubated about 29.5 days with the male caring for it somewhat more than the female. The birds are attentive over 95 per cent of the time, incubating when it is cool, shading when it is hot, and engaging in other activities such as preening, fighting, and loafing most commonly when they change between incubating and shading. Nest relief usually occurs in the evening after 24 or 48 hours of care. Dipping, in which adults dip their feet, bill and/or breast feathers in the ocean, is common during incubation and may cool the egg or provide it with needed moisture.

Chicks are closely brooded for 4 or 5 days, after which adults seem to recognize them individually and spend progressively less time with them. By the end of the third week, chicks are alone much of the time except when fed. Adults feed the chick by regurgitation, spend about 3.5 hours per foraging trip, and often feed a chick several times after one trip. Males feed the chick somewhat more than females do. Vocal exchanges between parent and chick

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Dinsmore, James J. 1971. Sooty Tern Behavior. Bull. Florida State Mus., Biol. Sci., Vol. 16, No. 3, pp. 129-179.