

sity agonistic or conflict situation. Sooties often give a stare-down almost immediately after landing and then preen their back and wings.

Apparently little displaying occurs in the night clubs (Ashmole, 1963) but generally little is known about the birds' nocturnal activities. I made only one night visit to Bush Key during this period, and I found that most terns were quietly resting on the beaches or in open parts of the island with few in the air. Generally the terns were highly excitable at night so I avoided night work and have little information on their nocturnal activities.

PRE-LAYING ACTIVITIES

All of the displays and activities preceding egg-laying may occur within a few days after the birds first land in daylight. I was marking birds at this time and had few that I could follow through the entire behavioral sequence. I also found that birds were still moving around within the colony, as many color-marked birds immediately left my study plot upon release and never returned. Hence, the sequence of events has been pieced together from the few pairs that I could follow throughout this period and also by noting when various activities were most common on my plot.

AERIAL DISPLAY

Early in the nesting season and to a lesser extent later, aerial displays are a characteristic activity of Sooty Terns. Cullen (1960a) studied aerial activities of the Arctic Tern (*Sterna paradisaea*) in detail and summarized much of the information available on other terns. I follow his terminology for activities he describes that appear homologous to those of the Sooty Tern.

Except for the chases over the colony prior to egg-laying, which may be homologous to the low (fish) flight that is common among *Sterna* terns, aerial display by Sooties seems to consist solely of a high flight similar to that of the Arctic Tern (Cullen, 1960a).

In Sooties the high flight is a slow steady ascent by two or sometimes three terns to a height of several hundred feet and then a rapid gliding descent. I noted two means of ascent. In one the two birds ascended almost vertically in small circles, flapping their wings rapidly as the lower bird chased and occasionally tried to grasp the tail of the upper bird. This seems comparable to the upward flutter, a hostile behavior that Cullen (1960a) describes. I saw the upward flutter at the start of about 36 percent of all aerial displays, but usually it was given only briefly and I may have missed seeing it in other cases. From the upward flutter, the birds changed to seemingly exaggerated deep wing beats that Cullen calls jerk-flying. In many instances the first sign of aerial display was this type of flight, and it was the initial pattern in many high flights.