

egg hatches and the chick must be fed. At Ascension Island adults change from 5.5-day-incubation shifts to feeding their chick about once a day (Ashmole, 1963), but detailed information on the rate of feeding is lacking. As the breeding cycle at that colony is nonannual (9.5 months), it seems unlikely that a regular change in food abundance could occur and thus account for the differences in foraging between incubation and fledging periods. On Bush Key adults change from 1- or 2-day incubation shifts to feeding the chick several times a day. As the breeding cycle there is annual, perhaps food is more plentiful, closer to the island, or the adults forage more diligently when chicks are present. The meager evidence available indicates that terns do not tend to capture smaller fish when they are feeding chicks as might be expected (Potthoff and Richards, 1970) but little is known about the food supply. However the many terns loafing on the beaches and soaring in flocks during the time when chicks are being fed suggest that food supply is not limiting the adults' activities even in that crucial period.

Table 7 gives some information on the breeding biology of several representative tern species. I have selected one species each from the genera *Chlidonias*, *Thalasseus*, and *Anous* and three from *Sterna*, picking species for which information is available and that seem to be representative of other similar species. This table is similar to one in Lack (1968: 262). Clutch size or other aspects of the breeding biology of a species may vary from colony to colony and from year to year within a colony, but this does not negate the comparisons to be made here. The purpose of the table is to try to compare some general features of the breeding biology of marsh and coastal feeding terns with those that feed offshore or pelagically.

On Bush Key, as at other Sooty Tern colonies, a scrape occasionally contains two eggs, but by far the usual clutch is one egg. Single egg clutches are common among marine birds (Lack, 1968) and seem to imply that something about the oceanic habitat limits their clutch size.

In contrast, coastal and freshwater feeding terns commonly lay more than one egg (Table 7). Besides *fuscata*, only *Anous*, *Gygis*, and a few other *Sterna* terns (e.g. *S. anaethetus* and *lmata*) have a usual clutch of one. A clutch of two or more presumably is the ancestral condition in Sooties and Brown Noddies, as they both have two brood patches. *Gygis* lays one egg and has only a single brood patch, but its unusual nesting habits may explain this (Dorward, 1963).

With the smaller clutch size, pelagic terns must have either a high nesting success, a long life span, or some combination of the two to maintain their populations. With a clutch of one, partial nesting success does not exist. Pairs either fledge an offspring or they fail. Among Sooties, a maximum of 50 percent may renest if the first attempt fails, and the percentage declines as the breeding season advances (Ridley and Percy, 1958; Ashmole, 1963).

The single egg of *fuscata* is incubated longer and the chick is cared