

mounted without trying to copulate. More commonly (89 times, 39.4 percent), another bird interfered and either knocked the male off the female or the male dismounted and fought with the intruder. Interference from other birds was especially common from 11-20 April. Then almost half of the attempted copulations ended with interference by another bird and few pairs could copulate without other birds interfering. Several times I saw two to six males try to mount one female.

ESTABLISHING TERRITORIES

Sooty Terns apparently do not establish territories until after copulation. Even then the territory is not permanent until they dig a scrape and the female lays an egg. Normally Sooties claim an area spanning little more than what they can reach while sitting on their egg. The scrape itself is a shallow hollow some 3 to 4 inches in diameter and about an inch deep. Although Sooty Tern nest throughout Bush Key, they nest in greatest concentration outside the bay cedar thickets and mangroves of the central part of the island.

SCRAPE-BUILDING.—By 10 April scrape-building was common on my plot and from then until 16 April it was the bird's most conspicuous activity. Although scrape-building obviously provides a site for the egg, the incipient scrape-building behavior associated with it often occurs before copulation and seems to be part of courtship in Sooties, much as it is in Common Terns (Palmer, 1941).

Pairs of Sooties usually spend some time selecting a site and may make several false starts over a period of several days. While selecting a site they walk together, poke at the ground, pick up bits of gravel, shell, or vegetation and then drop them, start work at one site only to abandon it shortly, and continuously give low "puck puck" calls.

Nearly always a pair works together to dig the scrape. Typically they stand close together, point their bills toward the ground, then lower their bodies, and kick dirt back with their feet. They often give low "puck puck" notes as they poke at the ground. Usually the male does most of the digging but the female helps at least occasionally. As they work at the scrape, they pick up small pebbles, shells, twigs, or other small objects and sometimes drop them into the scrape.

Scrape-building generally stops once the female lays her egg, but the birds occasionally work on the scrape after it contains an egg. Several pairs that lost their chick shortly after it hatched began work on new scrapes, but I did not see any bird lay again.

FIGHTING.—Conspicuous fighting started around 11 April when scrapes were being dug. In fighting, two birds face each other, sometimes approaching each other with their heads and bodies held low and forward or else upright, the head erect and the crown feathers raised. The two hold their wings out from the body and usually hold the tail up. Usually each jabs at the head and bill of the other bird or grips the other bird's bill and then both shake their heads vigorously. Occasion-