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Notes on Antarctic Terns at Marion Island

Two species of terns breed at Marion Island (46 54S, 37 45E), the Antarctic Tern Sterna vittata and the Kerguelen Tern S. virgata. Both species have very small populations at the island and details of their habits there are sparse (Berruti & Harris 1976). Recently, several non-breeding Arctic Terns S. paradisaea have been seen at Marion Island (Williams & Burger in prep., J.C. Sinclair pers.comm.).

This note reports incidental observations of Antarctic Terns made while doing routine field work between April 1976 and May 1977 and in April and May 1978.

Seasonal occurrence

Although previous estimates of tern numbers at Marion Island

indicate that Kerguelen Terns (150 individuals, Van Zinderen Bakker, Jr. 1971) are more common than Antarctic Terns (10-30 pairs, Berruti & Harris 1976), during the present study I recorded 126 sightings of Antarctic Terns, 22 sightings of Kerguelen Terns and 40 sightings of terns which were not identified. Antarctic Terns were seen in every month except July, August and October (Table 1). In July and October, however, unidentified terns were seen which are believed to be most likely Antarctic Terns. Thus although some winter emmigration is apparent, there seem to be some Antarctic Terns present at the island throughout the year. It is not known whether birds from Marion Island occur amongst the wintering Antarctic Terns on the South African coast (Cooper 1976).

Foraging behaviour

Antarctic Terns were seen to forage by hovering two to fifteen metres above the sea and dipping to catch small prey items near the surface. Seventy-four per cent of the birds seen to feed (49 birds on 23 occasions) foraged thus over the belts of floating kelp Macrocystis pyifera, 20 - 200 m offshore. Occasionally these birds were seen to catch small red fish less than 50 mm long, possibly Harpagifer bispinis. The remaining twenty-six per cent of the foraging birds (17 birds on nine occasions) foraged in a similar manner close inshore from the surf zone. This occurred when heavy seas washed the rocky beaches. These beaches harbour large populations of kelp flies Paractora dreuxi and their larvae. The terns, often accompanied by Kelp Gulls Larus dominicanus, appear to have been taking those insects which were washed to sea. The average group size of terns foraging at both sites was two and ranged between one and nine birds, including adults and immatures.

Antarctic Terns at Marion Island appear to be inshore feeders, although there have been few opportunities to look for birds further offshore. No Antarctic Terns were seen to forage from brackish ponds on the island, as reported by Berruti & Harris (1976).

Display flights

On eight occasions apparent display flights were seen, involving two or three birds. The birds rose high in the sky, flying swiftly in an apparent random fashion while calling loudly, "chit . . . chit . . . chit . . . chirr, chirrr, chirrr . . .". On four occasions one of the birds involved was carrying a small fish in its bill. These flights were seen between December and May and all birds were in breeding plumage.

Breeding

Three Antarctic Tern nests with eggs were found in 1977, on 5 February (c/1), 7 February (c/2) and in early February (c/2). The laying dates and the fate of these eggs are not known. The first two nests were scrapes on black lava platforms within 10 m of the sea and the third was a scrape situated about 1 km inland on a vegetated grey-basalt ridge. One egg measured 47,2 x 32,7 mm with a mass of 29 g.

All Antarctic Tern nests with eggs have previously also been found in February (Berruti & Harris 1976).

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References

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Table 1
Numbers of Antarctic and unidentified Terns seen monthly at Marion Island in 1976-1977

Month	Antarctic Terns	Unidentified Terns
April	0	6
May	5	2
June	3	6
July	0	9
August	0	0
September	7	0
October	0	2
November	5	1
December	20	6
January	20	0
February	13	2
March	14	3
April	3	0
May	5	1
Total	95	38

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