

winter when the terns leave the island. Thus, despite similarities such as original vast numbers and social breeding behaviour, the Sooty Terns on Raoul Island are probably much more vulnerable to mammalian predation than are those at Ascension.

What is urgently needed is a yearly count of Sooty Tern chicks at Denham Bay comparable to the one carried out in February 1978, so that the annual fluctuations and long-term trends in breeding success can be monitored. Also of great interest would be a detailed study of breeding success at the Denham Bay colony and of the relative effects of cat, Norway rat, and kiore predation on the terns, along with comparative observations at colonies on Raoul's off-shore Herald Islets, where introduced predators are absent.

If the Denham Bay Sooty Tern colony is being destroyed by predation, then intensified control of cats and rats in the area will be required urgently.

LITERATURE CITED

- ASHMOLE, N. P. 1963. The biology of the Wideawake or Sooty Tern *Sterna fuscata* on Ascension Island. *Ibis* 103b: 297-364.
- GUTHRIE-SMITH, H. 1936. Sorrows and joys of a New Zealand naturalist. Coulls, Somerville, Wilkie, Dunedin.
- MERTON, D. V. 1970. Kermadec Islands Expedition reports: A general account of birdlife. *Notornis* 17: 147-199.
- OLIVER, W. R. B. 1910. Notes on reptiles and mammals in the Kermadec Islands. *Trans. N.Z. Inst.* 43: 535-539.
- OLIVER, W. R. B. 1955. *New Zealand birds*. 2nd ed. Wellington: A. H. & A. W. Reed.
- STONEHOUSE, B. 1962. Ascension Island and the British Ornithologists' Union Centenary Expedition 1957-59. *Ibis* 103b: 107-123.
- WATSON, J. S. 1961. Rats in New Zealand: A problem of interspecific competition. *Proc. Ninth Pacific Sci. Cong.* 19 (Zoology): 15-16.

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SHORT NOTE

DUNLIN IN THE FIRTH OF THAMES

Further to the record of a Dunlin (*Calidris alpina*) at Taporā, Kaipara Harbour (Brown 1974, *Notornis* 22: 241), birds seen at Taramaire and Miranda in the Firth of Thames provide more records of this species in New Zealand.

J. H. Seddon wrote to me after seeing a puzzling small wader at Taramaire on 12 March 1977, asking that South Auckland members be alerted to look for it as he thought that it might be a Dunlin. His notes read: "Noticed when looking at Curlew Sandpiper, a very similar bird but with a straighter bill. In fact, bill black and about the same length but heavier and only slightly downcurved near tip, twice as thick at base. Bird Curlew Sandpiper size but stocky, short-necked and with more horizontal attitude. Black rump and upper tail surfaces. Dark legs. Upperparts grey-brown, with fawn-edged feathers. Superciliary line white. Neck and breast grey, upper breast with fine rufous striations like shallow V's on grey streaks."

On 29 March 1977 Joan Trollope and I were joined at Miranda

by Sylvia Reed, Mrs M. Levick, Douglas Haddow from Vancouver in Canada, Einar Rogge from Sweden and Mr & Mrs G. Haines. In a flock of about 500 Wrybills (*Anarhynchus frontalis*), 14 Curlew Sandpipers (*C. ferruginea*) and 4 Red-necked Stints (*C. ruficollis*), I saw a bird with a black belly-patch. After I had confirmed this with a x 15-60 telescope, other members of the party were directed to its position and the bird was watched through a similar telescope and binoculars at distances of 12 to 15 m for about 20 minutes.

All following comparisons were made with Curlew Sandpipers. Body size a little slighter; stance somewhat unnatural, slightly lopsided to left with right leg suspended and foot hanging limp just off ground. Later seen to be lame. Bird mainly sleeping but sometimes as head was brought round from rest position it would be dropped and held well forward. Neck shorter and thicker. Bill broader at base; a little heavier and shorter, tapering rapidly to end, no pronounced droop, though downcurved. Crown browner, pale at nape. Upper surfaces grey-brown. Face greyish. Underparts white, with small black patch on lower breast irregular but distinct, its size varying with stance and possibly affected by a light wind, but larger and most evident in flight (DH, who sees this species regularly in Canada). Faint superciliary. Upper breast with some vertical streaking (unlike the lateral scalloping or smudging of Curlew Sandpiper at the start of breeding plumage), markings bigger, stripy, giving somewhat darker, more suffused effect. Legs shorter, dull grey. Rump imperfectly seen during brief preening but dark centred. Curlew Sandpipers on either side showed white rumps between folded wings as their bodies swung gently sideways in the one-legged resting stance. A detailed examination of the colour of the lower-breast patch was prompted by DH who at first thought that it might be dark grey, but all agreed that it was indeed black.

The fawn-edged feathers of the upper surfaces and some colour showing on the streaked breast cast some doubt on the bird seen by JHS on 12 March but it may have been in its first year. The Miranda one, seen 17 days later, seemed to be in winter plumage apart from the small black belly patch. The two birds were therefore different individuals.

The Miranda bird seemed to me to be smaller than the Tapora one. In a packed resting flock its lesser height and quieter behaviour among the more excitable Curlew Sandpipers (which in autumn in New Zealand indulge in chivvying, chasing and sudden flights), plus the problems of identification when the black patch is absent, could all too easily cause a Dunlin to be overlooked completely.

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