BLACK-NAPED TERN STERNA SUMATRANA NESTING ON ILE PA WÉRÉ, NEW CALEDONIA

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The Black-naped Tern Sterna sumatrana can be found at tropical lagoons and coastal waters ranging from the Indian to Western Pacific oceans. This species is an exemplary inshore feeder; its chicks show more rapid growth than do those of offshore- or pelagic-feeding species (Hulsman & Smith 1988), and inshore islets are therefore especially important for its nesting. Breeding populations have been recorded from Aldabra Atoll and the Seychelles in the western Indian Ocean to Fiji and Samoa in the Pacific Ocean (Wanless & White 2001). Robinet et al. (1997) and Benoit and Bretagnolle (2002) provided a detailed account of breeding seabirds on islands north and south of New Caledonia respectively; the latter authors detected an appreciable decline in the number of Black-naped Terns recorded over a period of eight years. With more than 70 islets scattered around southern New Caledonia alone, there is a great need for further investigation and a better understanding of each islet's unique and important ecology.

In January and February 2003, we conducted preliminary biological surveys of 11 islets off Grande Terre. We report herein the first account of a breeding population of Black-naped Tern on 5 February 2003 on Ile Pa Wéré (166°18′E, 21°44′S), in the Baie de Port-Bouquet, Province Sud, New Caledonia (Fig. 1).

Ile Pa Wéré, c. 0.03 km² and c. 5 m above sea level at the highest point, is one of a plethora of small islets surrounding Grand Terre, New Caledonia. The islet is sparsely vegetated with *Pandanus* spp., three coconut palms (*Cocos nucifera*) and some low shrubs. It is oblong in shape: the northwestern end with the *Pandanus* and palms

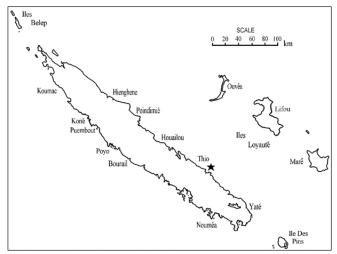


Fig. 1. Location of Ile Pa Wéré relative to Grand Terre, New Caledonia, as marked by the filled star.

is higher and rises to a rocky outcrop (Fig. 2). The southeastern end is a crescent-shaped sand and coral rubble spit. We observed at least eight pairs of Black-naped Terns on the islet and found nests, chicks and eggs among the coral rubble at the southeastern end. The terns were co-nesting with Silver Gulls *Larus novaehollandiae*. There were about 15 nesting pairs of gulls present, and both eggs and chicks (at least 12 eggs and two chicks), with one chick newly hatched. The terns and gulls both nested only on the barren high ground of the coral spit in an area smaller than 50 m². A few parenting terns were alert and moved away from the nests at our approach; others cried loudly and aggressively, flying high and then plunging, apparently in an attempt at deterrence. Wallace (1966) observed similar defensive behavior. We did not extensively survey the area to get an accurate density estimate because of the distress of the birds.

The importance of fully understanding the nesting ecology of seabirds is heightened by a recent increase in tourist traffic to New Caledonia (Benoit & Bretagnolle 2002). For example, our boatman would not normally have visited Ile Pa Wéré in the past, and the eggs might have escaped human predation. The presence of nesting Silver Gulls on the island may suggest a further threat to the nesting terns. There may be a synergistic relationship between human activity and gulls at tern nesting sites: if humans disturb the terns, keeping them off their nests, the gulls may more easily prey on eggs and chicks (Hulsman 1977, Hulsman & Smith 1988). McLean (1996, 1999) and Benoit and Bretagnolle (2002) observed syntopic nesting of Black-naped Terns with Silver Gulls. Similarly, Hulsman and Walker (1996), O'Neill and Channells (1997), Charley (1998)



Fig. 2. Ile Pa Wéré from the northeast, with Grand Terre in the background.

and Fuller and Burbidge (1998a, 1998b) all described syntopic nesting of Silver Gulls with up to six different species of terns. None of these authors reported agonistic interactions between terns and gulls, but it is not clear if all co-nestings were synchronic. However, Egan and Webb (1999) reported a Little Tern *Sterna albifrons* fledgling taken by Silver Gulls while airborne. Food robbing from other birds is common in Silver Gulls (Hulsman 1976, Taylor *et al.* 1996). Protection of small inshore islets from human intrusion during tern nesting season may well be appropriate so as to mitigate Silver Gull and human interference.

REFERENCES

- BENOIT, M.P. & BRETAGNOLLE, V. 2002. Seabirds of the southern lagoon of New Caledonia: distribution, abundance, and threats. *Waterbirds* 25: 202–213.
- CHARLEY, D.L. 1998. Seabird Islands no. 237: Cook Island, New South Wales. *Corella* 22: 67–68.
- EGAN, K. & WEBB, G. 1999. Silver Gull attacking fledged Little Tern. *Australian Birds* 31: 148.
- FULLER, P.J. & BURBIDGE, A.A. 1998a. Seabird Islands no. 239: Bedout Island, Pilbara Region, Western Australia. Corella 22: 113–115.
- FULLER, P.J. & BURBIDGE, A.A. 1998b. Seabird Islands no. 240: North Turtle Island, Pilbara Region, Western Australia. Corella 22: 116–117.
- HULSMAN, K. 1976. Robbing behaviour of terns and gulls. *Emu* 76: 143–149.

- HULSMAN, K. 1977. Breeding success and mortality of terns at One Tree Island, Great Barrier Reef. *Emu* 77:49–60.
- HULSMAN, K. & SMITH, G.C. 1988. Biology and growth of the Black-naped Tern *Sterna sumatrana*: an hypothesis to explain relative growth rates of inshore, offshore and pelagic feeders. *Emu* 88: 234–242.
- HULSMAN, K. & WALKER, T.A. 1996. Seabird Islands no. 231: North West Island, Great Barrier Reef, Queensland. *Corella* 20: 107–110.
- MCLEAN, J.A. 1996. Seabird Islands no. 229: Three Isles, Great Barrier Reef, Queensland. *Corella* 20: 29–31.
- MCLEAN, J.A. 1999. Seabird Islands no. 242: Low Wooded Island, Great Barrier Reef, Queensland. *Corella* 23: 16–17.
- O'NEILL, P. & CHANNELLS, R. 1997. Seabird Islands no. 233: Creek Rock, Great Barrier Reef, Queensland. *Corella* 21: 90–91.
- ROBINET, O., SIRGOUANT, S. & BRETAGNOLLE, V. 1997. Marine birds of d'Entrecasteaux Reefs (New Caledonia, southwestern Pacific): diversity, abundance, trends and threats. *Waterbirds* 20: 282–290.
- TAYLOR, I.R., TAYLOR, S.G. & LARMOUR, G.N. 1996. The effect of food stealing by Silver Gulls *Larus novaehollandiae* on the foraging efficiency of Bar-tailed Godwits *Limosa lapponica*. *Emu* 96: 234–239.
- WALLACE, R.A. 1966. Nesting and defensive behavior of the Black-naped Tern in the Maldive Islands. *Auk* 83: 138.
- WANLESS, R.M. & WHITE, R.W. 2001. Black-naped Tern *Sterna* sumatrana breeding on Cosmoledo Atoll, Seychelles. *Marine* Ornithology 29: 113–114.