

## A new breeding record for the Lesser Crested Tern *Sterna bengalensis* in the Lowendal Islands, northwestern Australia

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To date the only records of the Lesser Crested Tern, *Sterna bengalensis* Lesson, breeding in Western Australia have been on Adele Island (Serventy *et al.* 1971), Ashmore Reef, and on Lacepede, Bedout and Y Islands (Storr 1984 and Burbidge *et al.* 1996). This paper reports a new breeding location for this species, on Beacon Island, within the Lowendal Group of islands (20°39'52"S, 115°34'44"E). Lesser Crested Terns were recorded nesting in conjunction with Crested Terns, *Sterna bergii* Lichtenstein, on two separate occasions in 1997. On 8 March 1997 both Crested and Lesser Crested Terns were incubating eggs within a mixed colony of approximately 1000 nests, on Beacon Island. Lesser Crested Terns made up approximately 15% of the total number of pairs present. Nesting was estimated as having commenced within the previous five days. By 15 March 1997, the number of nests had increased to approximately 5000, with approximately the same proportion of Lesser Crested Tern nests.

On 3 May 1997 approximately 500 nests contained eggs and hatchlings after a second wave of laying, with thousands of 3–14 day old chicks crècheing on the beach. Lesser Crested Terns made up approximately 10% of chicks in the creche and less than 5% of those adults still nesting. The breeding colony was spread along a rocky cliff ledge and low dunes covered by patches of *Spinifex longifolius* R. Br., making access to most parts of the colony difficult without undue disturbance. As a result, estimates of the numbers of breeding terns was based upon counts in those areas easily seen, then extrapolated to areas that could not be seen. However, the numbers of departing and arriving adults indicated similar proportions of the two Crested Tern species.

The breeding colony of Lesser Crested Terns on Beacon Island was estimated to contain approximately 700 pairs, and that of Crested Terns to contain approximately 4500 pairs. Lesser Crested Tern breeding populations which have been estimated elsewhere in Western Australia are

0–500 pairs on Ashmore Reef (east), 2–16 on Bedout Island, and 500–1000 on Lacepede Island (west) (Burbidge and Fuller 1996). No estimates of the breeding populations on Adele and Y Islands have been published.

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### REFERENCES

- Burbidge, A.A. and Fuller, P.J. (1996). The Western Australian Department of Conservation and Land Management seabird breeding islands database. In Ross, G.J.B., Weaver, K. and Greig, J.C. (eds) *The Status of Australia's Seabirds. Proceedings of the National Seabird Workshop, Canberra, 1–2 November 1993*: 73–137. Biodiversity Group, Environment Australia, Canberra.
- Burbidge, A.A., Johnstone, R.E., and Fuller, P.J. (1996). The status of Western Australian seabirds. In Ross, G.J.B., Weaver, K. and Greig, J.C. (eds) *The Status of Australia's Seabirds: Proceedings of the National Seabird Workshop, Canberra, 1–2 November 1993*: 57–71. Biodiversity Group, Environment Australia: Canberra.
- Serventy, D.L., Serventy, V.N. and Warham, J. (1971). *Handbook of Australian Seabirds*. A.H. & A. W. Reed, Sydney, 254 pp.
- Storr, G.M. (1984). Birds of the Pilbara Region, Western Australia. *Rec. West. Aust. Mus. Suppl.* No. 16: 1–63.

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