

SEABIRD ISLANDS

No. 258

South Island, Lord Howe Group, New South Wales

Location: 31°30'08"S, 159°04'22"E; one kilometre to the north of Lord Howe Island, 580 kilometres east of Port Macquarie, New South Wales, in the South Pacific Ocean; 50 metres southwest of Roach Island, the largest of the Admiralty Islands.

Status: The entire Lord Howe Group is inscribed on the World Heritage List. South Island is part of the Permanent Park Preserve administered by the Lord Howe Island Board. Permission from the Board is required to land.

Description: South Island (1.4 ha) is a sharply elevated, circular landmass with a north-east ridge extending, like a handle, down to sea level. The area of elevated land (0.8 ha) rises to a plateau (0.4 ha) 38 metres above sea level, before sloping away to the south. The island is composed of volcanic tuff, and the vegetation is dominated by Coast Tussock-grass *Poa poiformis* with patches of Saltwater Couch *Sporobolus virginicus* and Leafy Flat Sedge *Cyperus lucidus*. No shrubs occur on the island but other vegetation, including exotic (*) species, comprised:

Achyranthes aspera, *Carpobrotus glaucescens*, *Commelina cyanea*, *Lepidium howei-insulae*, **Polycarpon tetraphyllum*, **Portulaca oleracea*, *Senecio howeanus*, *Sesuvium portulacastrum*, **Sonchus oleraceus*, *Sporobolus virginicus* and *Tetragonia tetragonoides*.

Landing: In favourable seas, onto rocks on the northern shore mid-way along the north-east ridge, the exact location dependant on sea conditions. Access to the plateau is via the north-eastern tip.

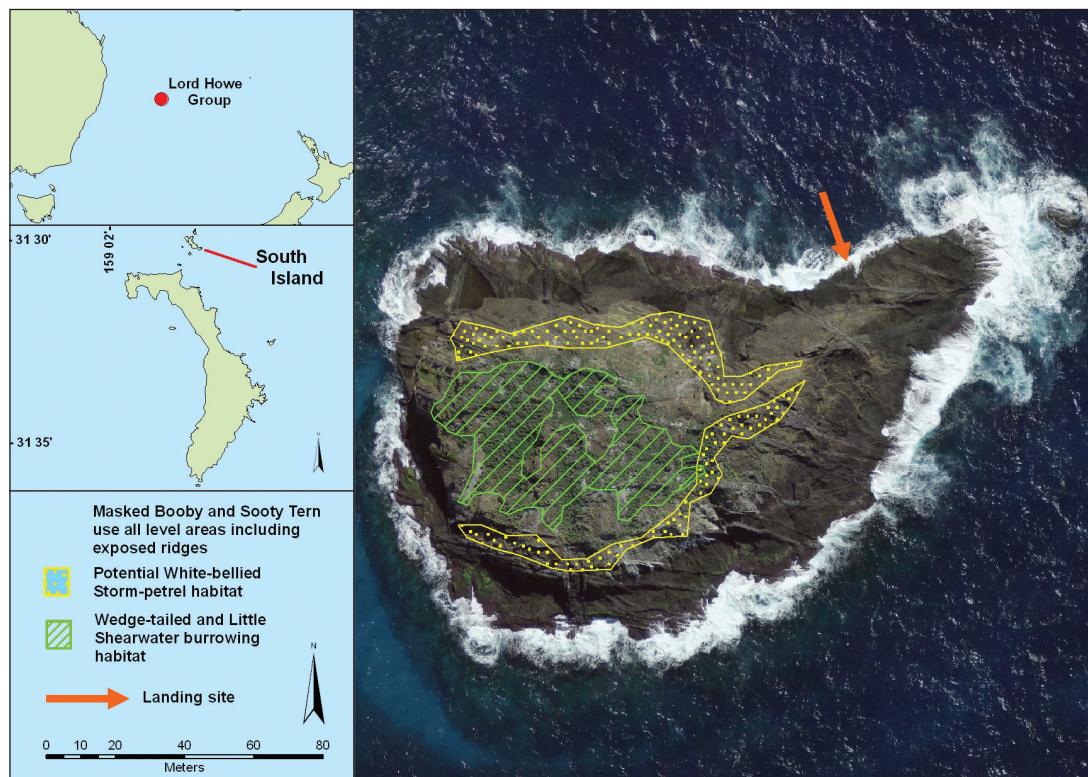
Ornithological History: There are no recorded visits to this island until Carlile and others made two brief daytime visits, of one hour each, on 13 December 2009 and 18 May 2010.

Breeding Seabirds and Status

Fregetta grallaria White-bellied Storm-petrel—In May 2010, a single fledgling was located in a rock crevice. This diminutive seabird is restricted to nesting in rocky habitat containing cavities that are inaccessible by larger species. From the extent of potential habitat it is unlikely that the population exceeds more than a few breeding pairs.

Ardenna pacifica Wedge-tailed Shearwater—This species prefers to nest in deep burrows but will nest in the open when the soil is too shallow to excavate burrows. In December 2009, a survey of the entire island found 177 incubating birds, none of which were in deep burrows.

Puffinus assimilis Little Shearwater—In May 2010, individuals of this species were engaged in nocturnal courtship flights over



• South Island, Lord Howe Group, NSW.



• South Island from the north. Lord Howe Island is in the background, with Mount Lidgbird and Mount Gower on the left and the Northern Hills on the right.

the island, and several birds were found in burrows. The extent of potential nesting habitat is estimated at approximately 0.3 hectares.

Sula dactylatra Masked Booby—This species nests on open flat areas, preferring elevated sites for take-offs and landings. In December 2009, we counted 20 active nests. The Masked Booby has a protracted breeding season with laying documented from May¹ to January². Weekly data on the number of active nests from a previous study of Masked Booby on Lord Howe Island¹ was used to determine the proportion of the total nests present during the breeding season. In mid-December only 11.5 percent of the nests expected in a season are occupied. Using this figure, we estimated that approximately 170 pairs may have bred on South Island in 2009/10.

Procelsterna cerulea Grey Ternlet—Adults of this species were seen roosting on the island in December 2009 but their breeding season had already concluded, so breeding was not confirmed.

Onychoprion fuscata Sooty Tern—This was the most numerous seabird breeding on South Island. In December 2009, we counted 360 young of all ages. No incubating birds were observed. We estimated the minimum total population for the island, based on a single chick representing a breeding pair, to be 360 pairs.

Factors Affecting Status

South Island is occasionally visited by residents of Lord Howe Island arriving by sea kayak, but disturbance of seabirds is unlikely. The remains of a Buff-banded Rail *Gallirallus philippensis* were found during the December 2009 survey indicating that some egg predation is likely, but this would be limited mostly to abandoned eggs.

Other Seabirds Recorded

No other seabirds were observed.



• South Island from the north-northwest showing the entire vegetated section of the island. Viewed from Roach Island.

Other Vertebrates Recorded

Both the Lord Howe Island Skink *Oligosoma lichenigera* and Lord Howe Island Gecko *Christinus guentheri* were recorded. No alien vertebrates were detected.

Banding

No banding has been attempted on this island.

Bibliography

- Priddel, D., Hutton, I., Olson, S. and Wheeler, R. (2005). Breeding biology of Masked Boobies (*Sula dactylatra tasmani*) on Lord Howe Island, Australia. *Emu* **105**: 105–113.
- Hutton, I. (1991). ‘Birds of Lord Howe Island: Past and Present’. (Ian Hutton: Coffs Harbour).

Acknowledgements

The surveys of this island would not have been possible without the co-operation and assistance of the Lord Howe Island Board, Lord Howe Island Environmental Tours and BirdLife Australia. Alison Derry, Sarah Jacob and Martin Schulz (Australasian Seabird Group) participated in the surveys. Sue Bower, Lord Howe Island Board, participated in the December 2009 survey and provided details of the vegetation of the island. The surveys were funded by the Commonwealth Government Threatened Species Recovery Implementation Program.

Date compiled: 26 August 2011.

Nicholas Carlile and David Priddel, Office of Environment and Heritage, 43 Bridge Street, Hurstville, New South Wales 2220, Australia.

Email: Nicholas.Carlile@environment.nsw.gov.au