

## SEABIRD ISLANDS

No. 191

## Wallace Island, Great Barrier Reef, Queensland

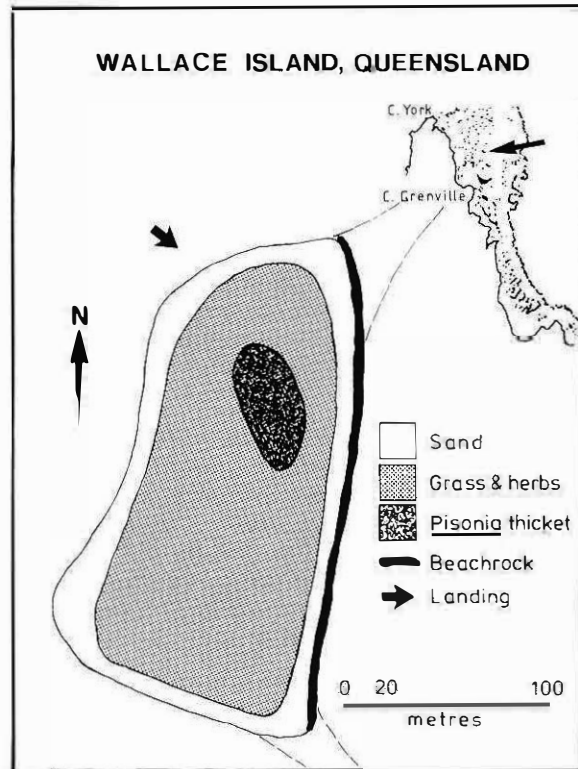
**Location:** 11°27'S., 143°02'E.; 60 kilometres north-north-west from Cape Grenville and 20 kilometres east-south-east from Cape False Oxford Ness, Queensland.

**Status:** Queensland National Park (declared April 1989).

**Description:** 2.2 ha; 235 m long by 125 m wide; height about 3 m, it is a vegetated sand cay on one of the inner reefs of the far northern Great Barrier Reef. The cay is roughly oval in shape and is composed of coral sand and reef rubble, with a line of intertidal coralline beachrock along its eastern side. Above the outer sand beach are areas of sand partly covered with colonizing species, including the vine *Ipomea pes-caprae* and the shrub *Salsola kali*. Most of the upper surface of the cay is covered with a low, fairly dense mat of grasses, herbs and shrubs that rarely exceed 0.5 m in height and includes grasses *Lepturus repens* and *Spinifex hisuta*, herbs *Boerhavia tetrandra* and *Portulaca oleracea*, and shrubs *Thespea populnea*, *Cordia subcordata*, *Abutilon indicum*, *Vitex ovata*, *Triumfetta procumbens*, *Achyranthes aspera* and *Phyllanthus* sp. In the centre of the northern end of the island is a small (about 200 m<sup>2</sup>), dense thicket of *Pisonia* sp. trees, with some shrubs *Manilkara kauki* around the edge. A large nest of the White-bellied Sea-Eagle *Haliaeetus leucogaster*, over 1.2 m high, is situated on the ground near the south-western end.

**Landing:** By dinghy onto the western side, from a vessel anchored in the lee of the cay and reef. Local knowledge is essential for safe navigation among the reefs of this area.

**Ornithological History:** There are no published accounts of this island. C. J. Limpus and P. Ogilvie landed for two hours on 8 December 1976 to record turtles and seabirds. R. C. Buckley recorded vegetation and seabirds in December 1979. B. R. King and G. M. Dunnett landed for two hours on 2 August 1982. A. Taplin was on



the cay for two hours on 9 December 1985, both to map it and to record vegetation and seabirds for B. R. King, J. Hicks and A. Oldroyd landed for one hour on 30 March 1986 to observe seabirds while F. Muir and J. Cornelius made observations on 2 December 1987 and 10 July 1988.

## Breeding Seabirds and Status

*Egretta sacra* Eastern Reef Egret — Breeds in summer in a small colony in the *Pisonia* thicket. In December 1976 there were 10 active nests, and in August 1982 there were 36 empty nests of the previous season. Nests were built of sticks and other vegetation and placed in the *Pisonia* trees.

*Sterna sumatrana* Black-naped Tern — Breeding in December 1985, with 36 nests near the high water line at the north-western end; 28 nests con-

tained one or two eggs and eight contained newly-hatched chicks. They were also breeding in December 1987, with 55 pairs, five with eggs. Nests were unlined scrapes in the sand among the tidal rubble and were difficult to see.

*Sterna dougallii* Roseate Tern — In December 1976, over 1 000 dead fledglings and chicks were found on the beach and in the grassflat. In March 1986, over 5 000 pairs were breeding in a huge colony that occupied about 90% of the vegetated area; about 50% of pairs were at empty nest sites and the other 50% had eggs. There were no chicks. Nests were scrapes in the sand.

*Sterna anaethetus* Bridled Tern — Breeds all the year in small numbers. In August 1982 three nests were located; in December 1985 there were over 100 birds flying and three nests were located. Nests are solitary and are concealed in the shelter of overhanging grasses or shrubs; a single egg is laid.

*Anous stolidus* Common Noddy — Breeds in mid-year according to fishermen's reports. However, no breeding was recorded in August 1982, though 160 birds were present, nor in December 1985 when about 300 birds were present. In July 1988 there were 30 pairs in the grass but no eggs were found. Nesting would occur on the low vegetation throughout the grass/herb flat.

*Anous minutus* Black Noddy — Breeds all the year round, with the greatest numbers so far recorded in the winter. In December 1976 there were 150 nests, all with eggs; in December 1985 there were 35 nests and about 200 birds flying. In August 1982 there were 634 nests, mostly with one or occasionally two eggs, and some with chicks. In March 1986 four birds were present but none breeding. All nesting takes place in the *Pisonia* thicket. Nests are platforms of *Pisonia* leaves cemented with guano and attached to *Pisonia* or *Manilkara* branches. This is one of the most northerly colonies of this species on the Great Barrier Reef.

#### Factors Affecting Status

Human disturbance is not thought to be common as the cay is remote from shipping and trawling areas. Silver Gulls take some unattended eggs and chicks. Hawksbill Turtles *Eretmochelys imbricata* and Green Turtles *Chelonia mydas* nest in small numbers, mostly in summer, and may



● Roseate Terns flying over part of the breeding colony in April 1986; the *Pisonia* thicket is in the background. Photo: J. Hicks.

disturb some ground-nesting birds. Cyclones and periods of rough weather may cause catastrophic losses of young terns from exposure and starvation.

#### OTHER VERTEBRATES

Estuarine Crocodile *Crocodylus porosus*.

#### Other Seabirds Recorded

<i>Fregata minor</i>	Great Frigatebird
<i>Fregata ariel</i>	Least Frigatebird
<i>Larus novaehollandiae</i>	Silver Gull
<i>Sterna bergii</i>	Crested Tern

#### Banding

Nil. However, a Common Noddy banded on Raine island (110 km E.) in December 1981, was found dead on Wallace Island in August 1982.

#### Acknowledgements

Support was provided by the Raine Island Corporation and the Queensland National Parks and Wildlife Service. A. Taplin, G. M. Dunnett and others assisted in field operations. Queensland N.P.W.S. Officers J. Cornelius and F. Muir made their records available.

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B. R. King, CI- Queensland Museum, Flinders Street, Townsville, Qld 4810.

C. J. Limpus, J. Hicks and A. Oldroyd, Queensland National Parks and Wildlife Service, Northern Regional Centre, Pallarenda, Qld 4810.