

## SEABIRD ISLANDS

No. 262

## Blackburn Island, Lord Howe Group, New South Wales

**Location:** 31°32'05"S, 159°03'35"E; 710 metres off the western shore of Lord Howe Island, 580 kilometres east of Port Macquarie, New South Wales, in the South Pacific Ocean.

**Status:** The entire Lord Howe Group is inscribed on the World Heritage List. Blackburn Island is part of the Permanent Park Preserve administered by the Lord Howe Island Board. Landing is allowed, but permission from the Board is required to stay overnight on the island.

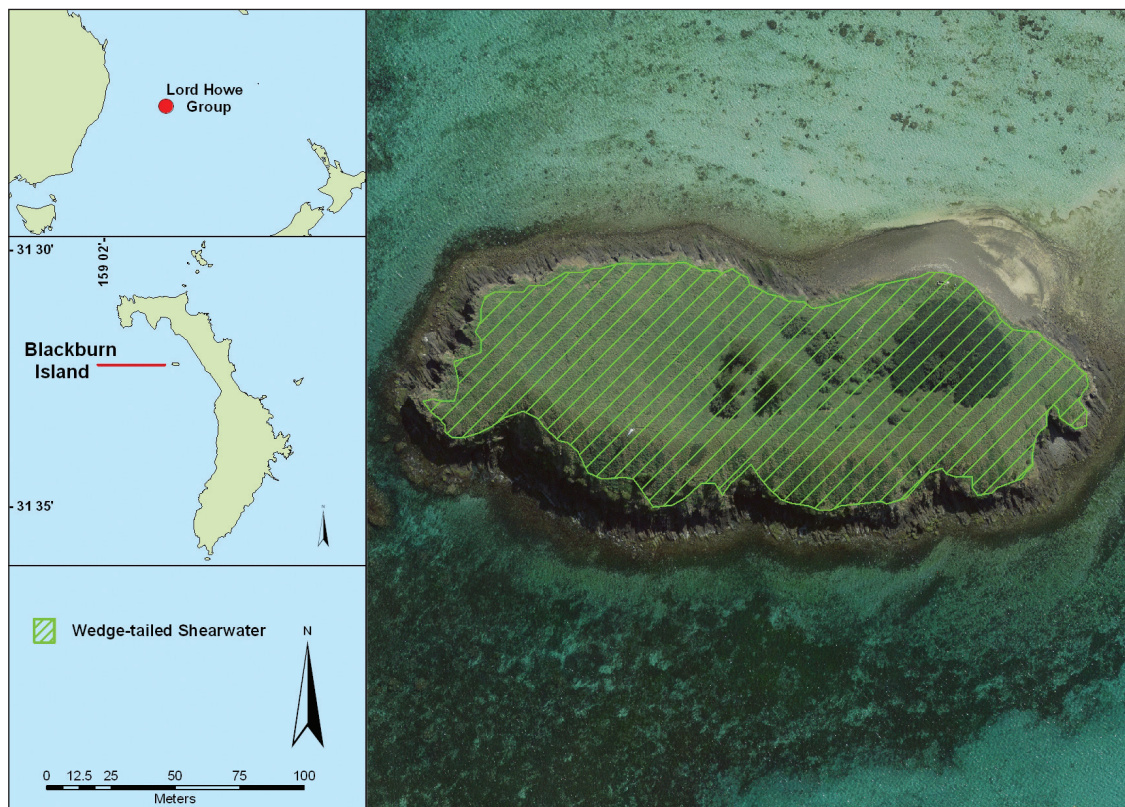
**Other Names:** Rabbit Island, Goat Island.

**Description:** Blackburn Island (2.4 ha) is sheltered within the lagoon on the western side of Lord Howe Island. The island is aligned east-west and rises to a height of 32 metres. It is comprised of basalt rock with skeletal soil. The elevated portion of the island (1.9 ha) is dominated by the introduced Rhodes Grass *Chloris gayana*. The island supports a number of canopy species including a large Banyan Fig *Ficus macrophylla* (0.1 ha), Sallywood *Lagunaria patersonia*, Kentia Palm *Howea forsteriana* and introduced Norfolk Island Pine *Araucaria heterophylla*. Additionally, Bullybush *Cassinia tenuifolia* and Hopbush *Dodonaea viscosa* survive from a planting of 100 seedlings in 2001 (Christopher Haselden pers. comm.). Other vegetation, including exotic (\*) species, comprised:

*Achyranthes aspera*, *Commelina cyanea*, \**Portulaca oleracea*, \**Solanum nigrum*, \**Bromus catharticus*, *Cynodon dactylon*, *Poa poiformis*, *Sporobolus virginicus*, *Melaleuca howeana*, \**Ipomoea cairica*, *Canavalia rosea* and *Tylophora biglandulosa*.

**Landing:** Landing is onto a sandy beach at the north-east end of the island.

**Ornithological History:** Blackburn Island is easily accessible from Lord Howe Island and has had numerous visits by ornithologists. The first published visit was in 1907 by Hull<sup>1</sup>, who found Wedge-tailed Shearwaters *Ardenna pacifica* clearing out their burrows. Hindwood visited on 12 November 1936<sup>2</sup> to collect Wedge-tailed Shearwaters. In August 1957, Pizzey found a single Little Shearwater *Puffinus assimilis* on an egg<sup>3</sup>. Fullagar and others visited in February 1971 and captured a Little Shearwater ashore by day, but an evening visit on 5 August 1971 found no evidence of the species breeding here<sup>4</sup>. Records from the Australian Bird and Bat Banding Scheme (ABBBS) of visits not recorded elsewhere are: McKean in December 1959, Hitchcock in February 1961, Swanson in October 1973 and Hutton in April 1994. Carlile and others sampled Wedge-tailed Shearwaters here on the 29 April 2005 as part of a study into plastic ingestion in seabirds<sup>5</sup>.



• Blackburn Island, Lord Howe Group, NSW



• Blackburn Island from the east. Viewed from Windy Point, Lord Howe Island.

Carlile and others visited the island for 18 hours on 10–11 December 2009, two hours on both 20 February and 17 May 2010, and 17 hours on 4–5 August 2010.

### Breeding Seabirds and Status

*Ardenna pacifica* Wedge-tailed Shearwater—This species nests in all vegetated areas of the island. During much of the breeding season it can be seen from Lord Howe Island circling and landing on Blackburn Island from mid-afternoon onwards. In December 2009, three transects (total length 256 m) were laid running north-south across the vegetated portion of the island. Incubating birds were counted within two metres either side of the centre line (total area surveyed 1024 m<sup>2</sup>); 418 were recorded, nesting either in burrows (16%), under shrubs and grass tussocks (20%), or in the open (61%). A further 19 nests, all on the surface, were counted from a transect under the Banyan Fig (140 m<sup>2</sup>). In total, we estimate the breeding population ( $\pm$  s.e) to be 7517 pairs ( $\pm$  649). Based on the density of chicks, Fullagar<sup>4</sup> estimated the population to be 3000 pairs, less than half the current estimate.



• Wedge-tailed Shearwater surface nesting on Blackburn Island.

*Puffinus assimilis* Little Shearwater—This species was recorded incubating an egg on Blackburn Island in mid-August 1957<sup>3</sup>. We found no evidence of their presence during a day visit in May or during an overnight visit in August 2010. From surveys on Roach Island<sup>6</sup> it is known that the Little Shearwater is restricted to burrowing sites where the larger Wedge-tailed Shearwater cannot gain access. Such habitat could not be found during our surveys.

### Factors Affecting Status

Blackburn Island is subject to both regulated and unregulated visits by tourists and island residents. A track from the beach to the summit, with a diversion through the Banyan Fig, is regularly traversed by tourists. The absence of unformed tracks suggests that visitors largely keep to the track provided, ensuring minimal disturbance to breeding birds.

Previously, damage to nesting sites by goats may have detrimentally affected seabird populations<sup>4</sup>. The thick cover of exotic Rhodes Grass supports the highest density of nesting Wedge-tailed Shearwaters known from any of the smaller islands within the Lord Howe Group<sup>6, 7, 8</sup>. However, fire from a lightning strike could devastate seabird populations were it to occur during the breeding season. Within the Permanent Park Reserve the use of fire is restricted to fuel stoves.

Buff-banded Rails *Gallirallus philippensis* are present but their impact is probably limited to scavenging abandoned eggs.

### Other Seabirds Recorded

Nocturnal surveys, comprising 10-minute periods of searching with a spotlight interspersed with five minutes of listening in darkness, were conducted in December 2009 (2.5 hours) and August 2010 (1.5 hours). We recorded two White-bellied Storm-petrels *Fregatta grallaria*, five Black-winged Petrels *Pterodroma nigripennis* and numerous Sooty Terns *Onychoprion fuscatus* in the air. None appeared to land.



• Blackburn Island from the north. Viewed from Signal Point, Lord Howe Island

### Other Vertebrates Recorded

The Lord Howe Island Skink *Oligosoma lichenigera* and Lord Howe Island Gecko *Christinus guentheri* were present on the island. An Anabat™ survey overnight in December 2009 failed to record any microbat activity<sup>9</sup>. No alien vertebrates were detected.

### Banding

First banding—9 December 1959.

*A. pacifica*—184 adults and 272 nestlings with two recoveries from breeding along the Lord Howe Island lagoon foreshore 11 and 14 years later.

*P. assimilis*—one adult with no recoveries.

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