

## SEABIRD ISLANDS

No. 15

## Heron Island, Queensland

**Location:** 23°26' S., 151°57' E.; 77 km north-east of Gladstone, Qld, in the Capricorn Group of the Great Barrier Reef.

**Status:** National Park and private tourist resort; the entire island is designated a wildlife sanctuary; free public access.

**Description:** 700 m by 300 m; 16 ha, of which 11.5 ha comprises the Heron Island National Park and 4.5 ha are under lease for the tourist resort. The island is elongate west to east and consists entirely of coral sand. Dunes form a ridge on the south side while beachrock borders both the south shore and the western half of the north shore. The resort is located in the north-west sector, and the University of Queensland and Great Barrier Reef Committee Heron Island Research Station occupies the south-west portion within the National Park.

The centre of the island is vegetated with *Pisonia grandis* (8-12 m), with some *Ficus opposita* and *Celtis paniculata*. A stand of *Cordia subcordata* borders the shore east of the resort. *Casuarina equisetifolia*, *Pandanus tectorius*, *Scaevola sericea* and *Messerschmidia argentea* fringe the beach on the north and east sides. Other main plant species include: *Abutilon albescens*, *Wedelia biflora*, *Suriana maritima*, *Cassipoula filiformis* and *Euphorbia cyathophora* (introduced).

**Landing:** Landing facilities are available at the resort on the north-west corner. There are regular trips from Gladstone to the island by boat and helicopter.

**Ornithological History:** In October 1910, the Royal Australasian Ornithologists' Union conducted an expedition to the Capricorn Group including Heron Island. In their summaries of the trip, Barrett<sup>1</sup>, and Campbell and White<sup>3</sup> include Reef Herons, Silver Gulls, Sooty Oystercatchers and White-capped Noddies, but apparently their visit was too early for Wedge-tailed Shearwaters.

Since that time there have been numerous other ornithological studies. MacGillivray visited in 1925<sup>12</sup> and again in 1927<sup>13</sup>, and Cooper in 1946<sup>4</sup>. Booth<sup>2</sup>, Miles<sup>14</sup>, Recher and Recher<sup>20, 21</sup>, Shipway<sup>23</sup>, and Kikkawa<sup>9, 10</sup> are among others who have conducted research on the island.

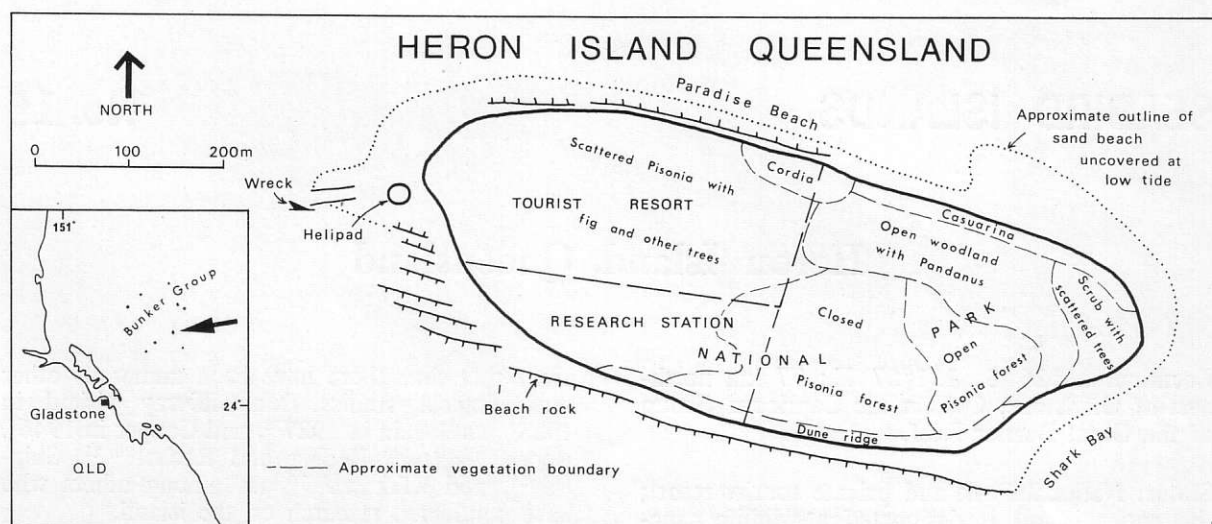
## Breeding Seabirds and Status

*Pterodroma nigripennis* Black-winged Petrel—First recorded in 1962<sup>22</sup>; present in summer, landing nightly on the eastern end of the island. Often found in pairs but breeding has not been confirmed.

*Puffinus pacificus* Wedge-tailed Shearwater—Breeds extensively in burrows in the sandy soil over the entire island except where the ground has been compacted by tourist activities (buildings, roads, rubbish dumps). Arrive during the first week in October and most have departed by May, although juveniles may remain until June. Estimated 8300 breeding pairs in 1965<sup>23</sup>.

*Egretta sacra* Reef Heron—Conspicuous breeding bird after which the island was named. Nests are constructed in *Pisonia* and *Pandanus* trees with 2-3 eggs in a clutch. Recher and Recher<sup>20</sup> reported 160 birds in 1967 of which 35-40 pairs were actually breeding, the remainder being young birds. Eggs are laid from August to February with a peak in September. The ratio of white to dark-phased birds is about 2:1.

*Haematopus fuliginosus* Sooty Oystercatcher—A chipping egg and a hatched chick were reported in 1910<sup>1, 3</sup>, but recorded only as a visitor since that time. Although not explicitly naming Heron Island, Campbell and White<sup>3</sup> implied that the Pied Oystercatcher *Haematopus ostralegus* also bred on the island in 1910.



*Larus novaehollandiae* Silver Gull — First recorded in 1946<sup>4</sup> and later reported to have bred<sup>25</sup>. Numbers have increased greatly in recent years with up to 300 birds present, but little or no breeding has occurred in recent years<sup>9</sup>.

*Sterna sumatrana* Black-naped Tern—Present in small numbers throughout the year but not recorded breeding until a wrecked boat was placed in the surrounding lagoon in recent years. The colony is located on the wreck and nesting starts in August with fledged young occasionally being fed as late as March. Estimated 20 breeding pairs.

*Sterna albifrons* Little Tern — Lavery and Grimes<sup>11</sup> listed this island as a breeding colony of uncertain status without further comment. Kikkawa<sup>9</sup> recorded that these birds were present in small numbers throughout the year but did not breed.

*Anous minutus* White-capped Noddy — The colony appears to have increased over the years; no indication of numbers was given in 1910<sup>3</sup> but in early December 1927 about 50 trees were used for nesting<sup>13</sup>. In 1965 the number of pairs was estimated at 8500<sup>23</sup>. Except for rare occasions these birds are present on the island throughout the year and eggs are found from October to March with a peak in November-December.

### Factors Affecting Status

Green Turtles, and less commonly Loggerheads, nest around almost all the island's edge except where the dunes are too steep. At one stage an attempt was made to establish a turtle soup factory to utilise the presence of these creatures. Sea snakes have been reported but probably have little interaction with the birds. The White-breasted Sea-eagle *Haliaeetus leucogaster* formerly bred on the island and analyses of remains in the nests indicated some predation on birds, including herons<sup>9</sup>. The nests were abandoned and have now disappeared. An Osprey *Pandion haliaetus* stayed on the island for a brief period in December 1974-January 1975.

The presence of man has brought the greatest change to the status of the birds. Shearwaters were formerly used as a food source for sailors, workers at the factory, and other residents of the island. In recent years these birds have lost much of their former breeding areas in the western half of the island as a result of the building construction, rubbish dumping and other tourist-created activities. Increase in the number of Silver Gulls, disappearance of the Pied Currawong *Strepera graculina*, and cessation of breeding by sea-eagles and oystercatchers are almost certainly due to the constant presence of people on the island. A large number of migrating or wintering waders (some 15 species have been recorded) is also disturbed frequently by people walking along the beach. A number of animals