

## SEABIRD ISLANDS

## No. 152

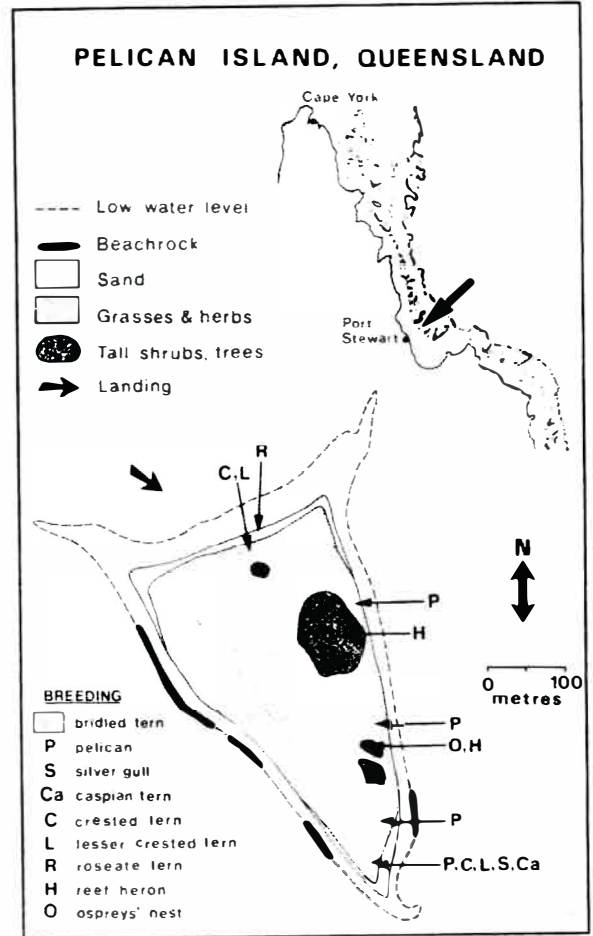
## Pelican Island, Great Barrier Reef, Queensland

**Location:** 13° 55' S., 143° 50' E.: 52 kilometres north-west of Bathurst Head and 20 kilometres north-east of Port Stewart, Cape York Peninsula, Qld.

**Status:** Vacant Crown land: Queensland Fauna Sanctuary.

**Description:** 8.0 ha; 450 m by 250 m, rising to 6 m high. It is a low sand cay of the inner complex of reefs of the northern Great Barrier Reef Province, situated at the western end of an oval coral reef. The cay is roughly triangular in shape, with intertidal sandspits at the apices. There are outcrops of intertidal beachrock on two sides. The cay is composed of sand and reef sediments and is generally flat with a slight depression in the central part towards its southern end. Lower ground at the corners supports a typical open strandline assemblage: *Sesuvium portulacastrum*, *Salsola kali*, *Tribulus cistoides*, *Chamaesyce atoto*, *Euphorbia tannensis*, *Portulaca australis* and *Ipomoea pes-caprae*, with patches of *Cyperus stoloniferus*. The rest of the cay is covered mostly by a mixed grass and herb flat with dominant *Lepturus repens* and associated *Dactyloctenium aegyptiacum*, *Merremia hastata*, *Boerhavia repens*, *Cleome viscosa* and *Achyranthes aspera*, together with *Digitaria ctenantha* in the southern part of the island. This grass/herb flat is broken by isolated individuals and small patches of *Abuilton indicum*. There are also some small clumps of *Clerodendrum inerme* and a single clump of *Caesalpinia bonduc*. The highest part is covered by a dense shrub stand dominated by *Premna corymbosa* and a *Breynia* or *Phyllanthus* sp., and festooned by *Ipomoea nil*, *I. tuba* and *Passiflora foetida*. The vegetation is relatively diverse compared with many cays and a total of 23 plant species were recorded in 1979.

**Landing:** From a dinghy, normally on the northern or western beach, from an anchorage in deeper water.



**Ornithological History:** P. P. King<sup>3</sup> landed on Pelican Island on 10 August, 1820, and remained overnight. He recorded (I: 379-380) pelicans breeding with a creche of 18-20 downy chicks (all of which were killed for their skins). On 25 June, 1821, King sailed past the island and recorded that "large flights of pelicans were to be seen, and upon the sand-bank to the southward of it, there was a flock of two or three



• *Pelican Island* (looking south-west).

hundred young birds"<sup>3</sup> (II: 28). On 28-29 August, 1848, J. MacGillivray<sup>5</sup> on HMS *Rattlesnake* landed and recorded "great numbers of birds", including breeding pelicans and a number of waders. On 23 October, 1910, W. MacGillivray and W. McLennan made a short visit. MacGillivray<sup>6</sup> briefly described vegetation and recorded Bridled Terns breeding and Reef Herons with inactive nests.

The cay was briefly described and mapped on a visit of 25 June, 1936, by J. A. Steers<sup>8</sup> but there are no published bird records. J. Warham<sup>10</sup> reported pelicans breeding on 20 October, 1958 and J. Kikkawa<sup>1</sup> reported the presence of pelicans in May, 1969. In 1973, D. R. Stoddart<sup>9</sup> and others visited the island and made maps, checked vegetation and noted bird species (unpublished). Recent visitors include: C. J. Limpus who landed on 28 November, 1976 (for mapping; turtle and bird records) and made observations (of turtles and birds) from the air on 8 April, 1980; R. C. Buckley, who landed on 3 June, 1979 and 9 December, 1979 (to check vegetation and birds); B. R. King, who landed on 26 June, 1981, 19 December, 1981 (for mapping; to check vegetation, turtles and birds) and recorded breeding pelicans from a passing vessel on 7 November, 1982.

#### Breeding Seabirds and Status

*Pelecanus conspicillatus* Australian Pelican — Breeds most of the year, but mainly in summer, in colonies on the dune crest around the edges of the cay. Nesting colonies are situated on the vegetated dune on the eastern side and southern apex. Nesting was in progress in June, 1979 (eggs present) and groups of birds were on the

island in November, 1976, April, 1980 and November, 1982. In November, 1976, there were two abandoned colonies, one of over 20 sites, with a number of abandoned eggs. In June, 1981, there were the remains of two former colonies, one containing over 30 deserted clutches, and a visitor reported a colony of deserted eggs in December, 1982. The nest is a small depression in the ground in which one or two eggs are laid.

*Egretta sacra* Eastern Reef Egret — Breeds in summer. The colony is situated in the thickest of tall shrubs, except for one nest; this nest, with two chicks in June, 1981, was located 1 m below a large nest of Ospreys *Pandion haliaetus* with two chicks, in a shrub near the thicket.

The nest is a large structure constructed of twigs and other vegetation and is placed in the outer branches of the supporting tree or shrub. One to three eggs are laid.

*Larus novaehollandiae* Silver Gull — Breeding in December, 1979 and June, 1981 (one nest). Birds are present throughout the year in variable numbers (up to 40 birds). The nest is constructed of grass and plant material and is placed on the ground, under the cover of vegetation.

*Hydroprogne caspia* Caspian Tern — Breeds in winter. A single pair with two chicks was present in June, 1981.

*Sterna dougallii* Roseate Tern — Breeding in November, 1976, when a colony of 43 nests with eggs was present. The colony was situated on the northern beach, in the wash zone just above the spring high tide level, in the area of wave-washed pumice and other flotsam. One or two eggs are laid directly on the sand and are very difficult to detect among the beach litter. Nests are placed close together at spacing of about 60 cm.

*Sterna anaethetus* Bridled Tern — Breeds in summer. Nests are on the ground, well concealed under vegetation or some other form of cover. Nesting occurs throughout the grass and herb flat. Up to 500 nests have been estimated.

*Sterna bergii* Crested Tern — Breeding only in November, 1976 (51 nests with eggs) and in June, 1981 (60 runner chicks and juveniles and 200 adults). Both colonies were at the southern

end. The colonies were situated on the vegetated dune behind the beach. All nests contained a single egg in the small depression in the ground and, as usual, were spaced 50-70 cm apart.

*Sterna bengalensis* Lesser Crested Tern — Breeds in summer. In November, 1976, three colony sites were located — one of over 2000 nests (see photograph), one of 383 nests and the other of 488 nests. Each nest contained a single egg. Nesting is similar to the Crested Tern.

### Factors Affecting Status

Pelican Island is regarded as a traditional breeding site for pelicans (e.g. <sup>1,2</sup>), with records dating back to 1820<sup>3</sup>, but the size and importance of the colony today are uncertain. Fishermen have reported that a large colony of "hundreds" nested on the island in the 1950's and 1960's. If so, it has declined greatly since then.

In the past the island was used by aboriginals as a hunting area and temporary dwelling place<sup>4</sup>, probably for a long time. The slaughter of pelican chicks for their down<sup>5</sup> no longer occurs, but today the coastal shipping channel runs by the island. Visitors from passing vessels subject the breeding birds to frequent disturbance. In June, 1981, a number of discharged shotgun cartridges were found near the deserted pelican colony.

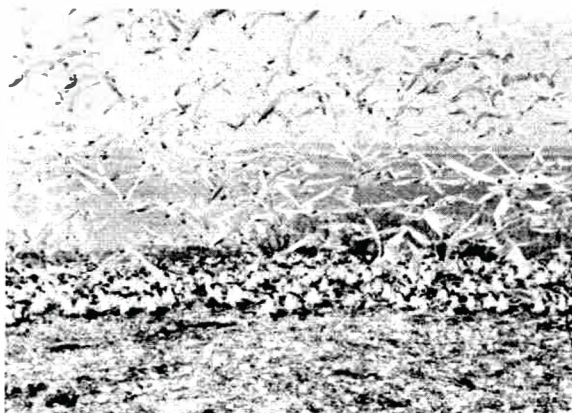
Silver Gulls, Buff-banded Rails *Rallus philippensis* and possibly Rufous Night Herons *Nycticorax caledonicus* take some unprotected eggs and small chicks. Hawksbill Turtles *Eretmochelys imbricata* and some Flatback Turtles *Chelonia depressa* nest on the island, mainly in summer, and their activities may disturb some ground-nesting seabirds.

### Other Seabirds Recorded

<i>Puffinus pacificus</i>	Wedge-tailed Shearwater (beachwashed)
<i>Gelochelidon nilotica</i>	Gull-billed Tern
<i>Sterna sumatrana</i>	Black-naped Tern
<i>Anous stolidus</i>	Common Noddy
<i>Anous minutus</i>	Black Noddy

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• Part of the Lesser Crested Tern colony

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### Acknowledgements

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