

# FIRST RECORD OF COMMON DIVING PETRELS *Pelecanoides urinatrix* BREEDING ON ALBATROSS ISLAND

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## INTRODUCTION

Albatross Island is situated in western Bass Strait between Hunter and King Islands. The island is best known for its breeding population of Shy Albatrosses *Thalassarche cauta*, of which there are currently 5 000 breeding pairs (Brothers *et al.* 2001). Albatross Island has been visited annually by Department of Primary Industries, Water and Environment staff since 1981 to conduct seabird research and albatross population monitoring. Low numbers of Common Diving Petrels *Pelecanoides urinatrix* have been heard calling in flight and from burrows on Albatross Island but there have been no records of birds breeding. The remains of several diving petrels have also been found on the island (Green 1973; Brothers and Davis 1985).

## METHODS

During June, September and October 2001, surveys were conducted on the northern end of Albatross Island to try and locate any diving petrels on the ground and record any aerial activity. A torch was used after dusk to locate any birds on the surface. Most survey work was conducted by listening from vantage points for any birds calling from the air or ground. Any burrows that were suspected to contain diving petrels were inspected and their contents recorded.

## RESULTS AND DISCUSSION

On 23 June 2001 one pair and two single Common Diving Petrels were located in burrows amongst a flat area of tussock grass *Poa poiiformis* at the northern end of Albatross Island. All four birds had fully feathered brood patches and no eggs were present in the burrows. Between 18 September and 9 October 2001 four diving petrel nests, each with a single egg, were located on the northern end of the island. The details of each of the four nests are shown in Table 1.

The next visit to Albatross Island was on 17 December 2001. This was approximately 70 days since the estimated hatching date for two of the eggs. The average nestling period for Common Diving Petrels is 53 days (Marchant and Higgins 1990). Therefore any chicks that survived to fledging would have already departed the island.

There is an estimated 30–50 000 pairs of Fairy Prions *Pachyptila turtur* breeding on Albatross Island as well as 350 pairs of Little Penguins *Eudyptula minor* and 1 720 pairs of Short-tailed Shearwaters *Puffinus tenuirostris* (Brothers *et al.* 2001). It is possible that low numbers of diving petrels have been breeding on Albatross Island for sometime but, due to the large population of Fairy Prions and other seabirds, have remained undetected.

The closest known breeding population of Common Diving Petrels is on Steep Island which is approximately 20 kilometres to the south of Albatross Island. There are an estimated 23–25 000 breeding pairs of Common Diving Petrels on Steep Island and no record of Fairy Prions breeding. It is possible that the small population of diving petrels on Albatross Island may be an overflow from Steep Island and they have not been able to increase due to direct competition for burrowing habitat with Fairy Prions. The habitat that the diving petrels were using on Albatross Island was not suitable for shearwaters or penguins, as the soil depth was too shallow. However, the habitat is the same as that used by many Fairy Prions. Common Diving Petrels begin laying in August whereas Fairy Prions begin laying in October (Marchant and Higgins 1990). Therefore, Common Diving Petrels may possibly be forced from their burrows when the prions start breeding.

TABLE 1  
Common Diving Petrel nest contents and description of habitat.

Date	Nest No.	Nest contents	Description of habitat
18/9/01	1	Adult on egg	Steep rocky area. Vegetation — Rounded noon-flower ( <i>Disphyma crassifolium</i> )
9/10/01		Adult with small chick (approx. 2 days old)	
27/9/01	2	Adult on egg	Sloping area close to cliff edge. Vegetation — Tussock ( <i>Poa poiiformis</i> )
6/10/01	3	Adult on egg	Steep rock crack. Short burrow. Vegetation — single tussock.
9/10/01		Pair of adults with small chick (approx. 2 days old)	
9/10/01	4	Adult on egg	Flat area. Vegetation — tussock

Brothers (1981) recorded the establishment and demise of a population of White-faced Storm Petrels *Pelagodroma marina* on Fisher Island in eastern Bass Strait. On Fisher Island, storm petrels were present in 1973 but no eggs were laid. In 1974, six chicks possibly fledged and in 1975, 64 eggs were laid but no chicks survived to fledging. During 1976, storm petrels were present but no eggs were found and during the 1977 season, no storm petrels were recorded. Brothers concluded that the storm-petrels came to Fisher Island from neighbouring colonies that had reached saturation point. The possible causes of failure and total desertion were direct competition for burrowing habitat with Short-tailed Shearwaters, possible interference by Silver Gulls *Larus novaehollandiae* and predation by Water Rats *Hydromys chrysogaster* and Black Rats *Rattus rattus*.

It is possible that a similar situation is occurring on Albatross Island and that from time to time seabirds attempt to establish new colonies on nearby islands. These breeding attempts may generally go undetected and the establishment of a new and viable population may be

unsuccessful when there are large resident populations of other seabirds.

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