

and wings was very prominent.

We were unable to gather much information on the prey taken; however there were large grasshoppers scattered all over the plain. On 6 August a bird was seen at close range, clutching a rat by the neck in its talons. On 7 August one bird was observed to dive headfirst into grass and catch a rat. This bird was flushed immediately and flew off with the animal in its beak. After a short flight it transferred the animal to its talons while flying. It was also noticed that birds occasionally alighted on fallen sedge and grass near the roosting areas, where they rested in full sunlight for up to ten minutes. When resting they were forever on the alert. Only one bird was heard to call, a soft high-pitched chirruping trill, repeated several times, as it flew overhead.

In mid-March 1975 AH observed a Grass Owl on several occasions at the 11-mile (17 km) peg

J. A. ESTBERGS, PO Box 5095, Darwin, NT 5794.
R. GARSTONE, PO Box 92, Woodanilling, WA, 6316.
A. HERTOOG, PO Box 38595, Winnellie, NT 5789.
25 August 1977.

ALBATROSS KILLED BY GIANT-PETREL

A white-phased Southern Giant Petrel *Macronectes giganteus* was seen to kill and partly eat an immature Black-browed Albatross *Diomedea melanophrys* about 200 metres offshore from Newland Head, SA (35°40' S, 138°32' E) at 08:00 on 28 July 1977. The sky was overcast, light to moderate south-west wind and the crests of the heavy swell were just breaking. However, on the five previous days strong to gale-force onshore winds occurred. Many seabirds were seen close to shore.

The Albatross, one of several Black-browed on the water and intermittently flying near the shore, was first seen flying and then to land about 150 metres from its congeners. About half an hour later the Giant-Petrel was noticed flying fast, with rapid wingbeats and low above the water from the north-east towards the then apparently sleeping Albatross. The presence of one dark primary in its right wing suggested it was the same bird seen here two days previously by Dr D. H. Close and myself. It approached from behind and when near the Albatross rose slightly as though to fly over it but then suddenly dropped on to the Albatross's back and with one quick movement seized the back of its head with its bill. The Albatross struggled violently and the Petrel was dislodged into the water but maintained its grip on the head. In the course of the struggle the Petrel was seen repeatedly to push the Albatross's head under water. Still gripping the head, it then clambered back on to the Albatross's back from the front and over one shoulder, and forced

south of Darwin on the Stuart Highway. In October 1976 JAE observed one bird hunting on the plains at the crossing of the South Alligator River on the Arnhem Highway. This bird was active at 10:30. On 8 July 1977 some kilometres north of that locality JAE observed one bird standing on the ground in full sunlight at the edge of the black-soil plains and on 24 October 1976, H. A. F. Thompson and P. Rowen observed one Grass Owl at Leanyer Swamp near Darwin. On 19 May 1973 H. A. F. Thompson saw a single bird near Coastal Plains Research Station at Humpty Doo.

We think that the Grass Owl in the top end of the Northern Territory is inclined to have an irruptive migration with fluctuations in population throughout the year, rather similar to the nomadism of Black Falcons *Falco subniger* and Letter-winged Kites *Elanus scriptus* (Thompson in press).

the head, neck and shoulders under the surface. The Albatross continued struggling for several minutes before being drowned but the Petrel remained on top long after movements ceased, mantling it with downturned outspread wings in the posture commonly adopted by raptors over a fresh kill. Eventually it moved off and swam alongside the floating carcass, began pecking at the body and then plucked the lower abdominal feathers. These were pulled out in large tufts and were soon scattered over the water. Shortly after viscera were pulled out and swallowed. All the time it was plucking and eating, the Petrel held its wings outspread. It also frequently pushed its feet against the body when pulling and tearing parts from it. The current gradually drifted the birds to the east and, after about forty-five minutes, out of sight past the headland. Twice while the Petrel was feeding single Black-browed Albatrosses flew towards it but veered away on reaching the scene. A Cape Petrel *Daption capense* once landed briefly near the Giant-Petrel.

Giant-Petrels are notoriously voracious. Johnstone (in press, Proc. 3rd Symp. Antarct. Biol.) said that they feed by scavenging and predation and gave examples of predation on smaller petrels. In boluses of undigested food regurgitated by the Northern Giant-Petrel *M. halli* on Macquarie Island he found large white plumes which most probably came from albatrosses but presumed that most Procellariiformes in the diet of giant-petrels are handicapped adults taken in flight or as carrion. I know of no previous

record of a giant-petrel killing and eating an albatross. This observation is also interesting because the method employed to kill the Albatross was clearly seen. According to Serventy *et al.* (1971, Handb. Aust. Sea-Birds) Black-browed Albatrosses usually are dimensionally larger and of slightly heavier weight than giant-petrels but they and other large seabirds may be killed fairly often by giant-petrels, because, although I was surprised to see the Petrel's attack, in retrospect I believe its actions were deliberate from the time it was first seen. The confident manner in which it immediately

grasped the Albatross's head from behind, pushed it under water, then forced it down with its weight, suggests that this bird and other giant-petrels may have used this method to kill large seabirds on previous occasions. This type of predation may occur only in extreme circumstances. Three weakened giant-petrels were found on nearby beaches during the previous period of strong winds and lack of food could have forced this Petrel to attempt exceptional measures to gain nourishment. The Albatross could also have been weakened but its behaviour seemed no different to that of others nearby.

J. B. Cox, 48 Carter Street, Thorngate, SA 5082.
8 September 1977.

SHORT-TAILED SHEARWATERS *Puffinus tenuirostris* IN THE ANDAMAN SEA AREA, INDIAN OCEAN

The Short-tailed Shearwater *Puffinus tenuirostris* is the only Australian petrel that breeds solely within Australian territory, predominantly on islands of the Bass Strait, and is possibly the most abundant Australian bird species (Serventy *et al.* 1971). The fundamental migration route of this bird about the Pacific Ocean has been quite clearly defined, as a result of observations, collections and banding recoveries (Serventy 1956, 1957); records of birds far from the migration area, particularly westward, are rare. Only two individuals have previously been recorded from the Indian Ocean: one obtained near Ormara on the Makran Coast, Pakistan, in May 1889 and another on the southern coast of Sri Lanka in May 1949 (Jouanin 1957; Ali and Ripley 1968). These two birds are considered to have been 'doubtless blown in by SW Monsoon gales' (Ali and Ripley 1968: 13) but Serventy *et al.* (1971) consider them to be 'first-year birds which had "lost" themselves with migrating flocks of the Flesh-footed Shearwater *Puffinus carneipes*' and Bourne (1976) refers to them as 'a clear example of movement north from the Southern Ocean into the wrong ocean'.

On 2 May 1977 two local fishermen brought me a live Short-tailed Shearwater they had taken by hand from the sea, on which it was floating, apparently resting, during the previous night. On 10 May 1977 a second live bird was caught by two different men who snared its foot with a hook and line while fishing. Both birds were taken from very small canoe-like boats close to the shore of Koh My Thon, a small island very close to Phuket Island, western peninsular Thailand (Fig. 1). The first bird (Specimen 1) was collected at about midnight

and the second (Specimen 2) at 02:00. Specimen 1 was a little weak but otherwise both birds were in good condition and health, although weighing proved them to be considerably lighter than breeding birds (Table I). In view of the remarkable and significant distributional record for the species and also because the find added the species to the list of Thai birds (Deignan 1963; Lekagul and Cronin 1974), I made study skins of both individuals. Both were measured and weighed very shortly after being received; these data and other details appear in Table I. Specimen 1 has been presented to the British Museum of Natural History and it is intended that Specimen 2 will be deposited with the CSIRO Division of Wildlife, Canberra.

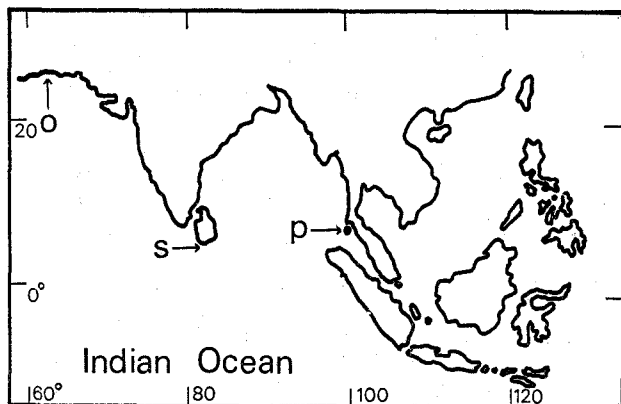


Figure 1. Locations in the Indian Ocean at which *Puffinus tenuirostris* has been recorded. o = Ormara, Pakistan; s = south coast of Sri Lanka; p = Phuket I., Thailand.