

Notes on seabirds at Gough Island

P.D. Shaughnessy and N. Fairall

Sea Fisheries Branch, Private Bag, Sea Point, 8060 and
Department of Nature and Environmental Conservation, Box 659, Cape Town, 8000.

Observations on seabirds at Gough Island (40°21'S, 9°53'W) were made from 13 October to 11 November, 1973. A chick of the Atlantic Petrel, *Pterodroma incerta*, was collected and is described. Chicks of this species have not been reported previously. A nest of the Giant-petrel was found at which an adult male was guarding a chick. Giant-petrels at Gough Island combine characteristics of *Macronectes giganteus* (green bill tips) and *M. halli* (breeding relatively early in sheltered localities and attending ships at anchor). The head and nape of nesting Yellow-nosed Albatrosses, *Diomedea chlororhynchos*, appeared darker than indicated by most descriptions of the bird. Cape Pigeons, *Daption capense*, were seen on eight occasions from M.V. RSA near the island. Evidence is provided for a pre-egg-laying exodus of the Greater Shearwater, *Puffinus gravis*. Incidental observations are included on Rockhopper Penguins, *Eudyptes chrysocome*, Sooty Albatrosses, *Phoebastria fusca*, Broad-billed Prions, *Pachyptila vittata*, and Southern Skuas, *Stercorarius skua*.

Waarnemings van seevoëls is op Gough-eiland (40°21'S, 9°53'W) gemaak in die periode tussen 13 Oktober en 11 November 1973. Die kuiken van 'n Atlantiese Stormvoël, *Pterodroma incerta*, is versamel en word beskryf. Kuikens van dié voëlsoort is nog nie voorheen aangemeld nie. Die nes van 'n Nellie waar 'n mannetjie sy kuiken opgepas het is gevind. Die Nellie by Gough-eiland het die eienskappe van beide *Macronectes giganteus* (groen snawelspits) en *M. halli* (wat relatief vroeg in beskutte plekke broei en skepe besoek wat voor anker lê). Die kop en skof van Geelbekmalmokke, *Diomedea chlororhynchos*, wat broei is heelwat donkerder as wat meeste beskrywings van dié voël meld. Seeduiwe, *Daption capense*, is agt maal vanaf die M.S.RSA naby die eiland waargeneem. Getuienis word gelewer dat die Groot Pylstormvoël, *Puffinus gravis*, die eiland verlaat kort voor eierlegging plaasvind. Toevallige waarnemings van die Geelkuifpikkewyn, *Eudyptes chrysocome*, Bruin Malmok, *Phoebastria fusca*, Dikbekprion, *Pachyptila vittata*, en die Roofmeu, *Stercorarius skua*, word ook ingesluit.

Gough Island (40°21'S, 9°53'W) is an emergent peak on the mid-Atlantic Ridge 400 km south-east of the island of Tristan da Cunha. Little is known of the seabirds at Gough. They were studied from mid-November 1955 to mid-May 1956 by Swales (1965), who reviewed observations of earlier visitors, and Elliott (1970) made ornithological observations there during May 1968. This paper reports on observations made while the authors were ashore at Gough from 16 October–8 November, 1973, and aboard M.V. RSA in the near vicinity of the island, during 13–15 October and 9–11 November, 1973.

Trips were made on foot from the meteorological station 'Gough House' in Transvaal Bay to Snug Harbour, South Peak, Edinburgh Peak and to the bay between South East Point and Luff Point (Fig. 1). Landings were made on the east coast at The Glen, Sophora Glen, and Long Beach on an inflatable rubber pontoon from the RSA.

Relative abundance of nocturnal burrowing petrels

Some of the nocturnal burrowing petrels that collided with the buildings of the meteorological station on the misty evenings of 17 and 25 October were picked up and identified.

The relative abundance of the 8 species represented (Table 1) indicates that the Broad-billed Prion, *Pachyptila vittata*, is one of the more common birds at Gough, as Swales (1965) suggested.

Notes on seabird species

Rockhopper Penguin, *Eudyptes chrysocome*

Rockhopper Penguin breeding colonies were visited in Transvaal Bay (three colonies) and in the bay between Luff Point and South East Point (three colonies). These colonies appeared to contain a much lower density of nests than colonies of Rockhopper Penguins at Macquarie Island visited by one of us (P.D.S.). Penguins in these colonies were often seen in close company with subadult Subantarctic fur seals.

Arctocephalus tropicalis.

The first chicks were noted on 5 November at the colony near the mouth of the stream in Transvaal Bay, almost a week earlier than the date (11 November) for the start of hatching reported by Swales (1965). Most nests contained only one egg at first inspection on 5 November, but several containing two newly hatched chicks and others with two eggs were also seen. No 3-egg clutches were seen. Both Gwynn (1953) and Warham (1963) noted that usually one, but occasionally two, chicks hatched in Rockhopper Penguin nests at Macquarie Island.

The colony situated 150 m inland at The Glen contained only 250 pairs, far fewer than Swales' (1965) estimate of 1 000 pairs. The density of nests in this colony was sparser than that observed in other colonies on the island, and Southern Skuas, *Stercorarius skua*, appeared to be harassing penguins more actively than in other colonies.

Yellow-nosed Albatross, *Diomedea chlororhynchos*

Nesting Yellow-nosed Albatrosses were common in the area between Snug Harbour and Luff Point. The nests contained single eggs. They were located on the ground among island trees (*Phyllica arborea*) and tree ferns (*Blechnum palmiforme*), from within a few metres of the tops of the sea-cliffs to an elevation of about 400 m above sea level.

Most birds were nesting either singly, as reported by

Table 1

Relative abundance of nocturnal burrowing petrels at 'Gough House' on the evenings of 17 and 25 October, 1973

Species	17 Oct. 73†	25 Oct. 73
Broad-billed Prion, <i>Pachyptila vittata</i>	***	49
Common Diving Petrel, <i>Pelecanoides urinatrix</i>	**	27
Kerguelen Petrel, <i>Pterodroma brevirostris</i>	*	5
Soft-plumaged Petrel, <i>Pterodroma mollis</i>	0	5
Atlantic Petrel, <i>Pterodroma incerta</i>	*	2
White-faced Storm Petrel, <i>Pelagodroma marina</i>	0	1
Little Shearwater, <i>Puffinus assimilis</i>	0	1
White-bellied Storm Petrel, <i>Fregatta grallaria</i>	1	0

†From a sample of approximately 150 birds; *indicates 2–10 birds; **indicates 11–50 birds; ***indicates 51–100 birds.

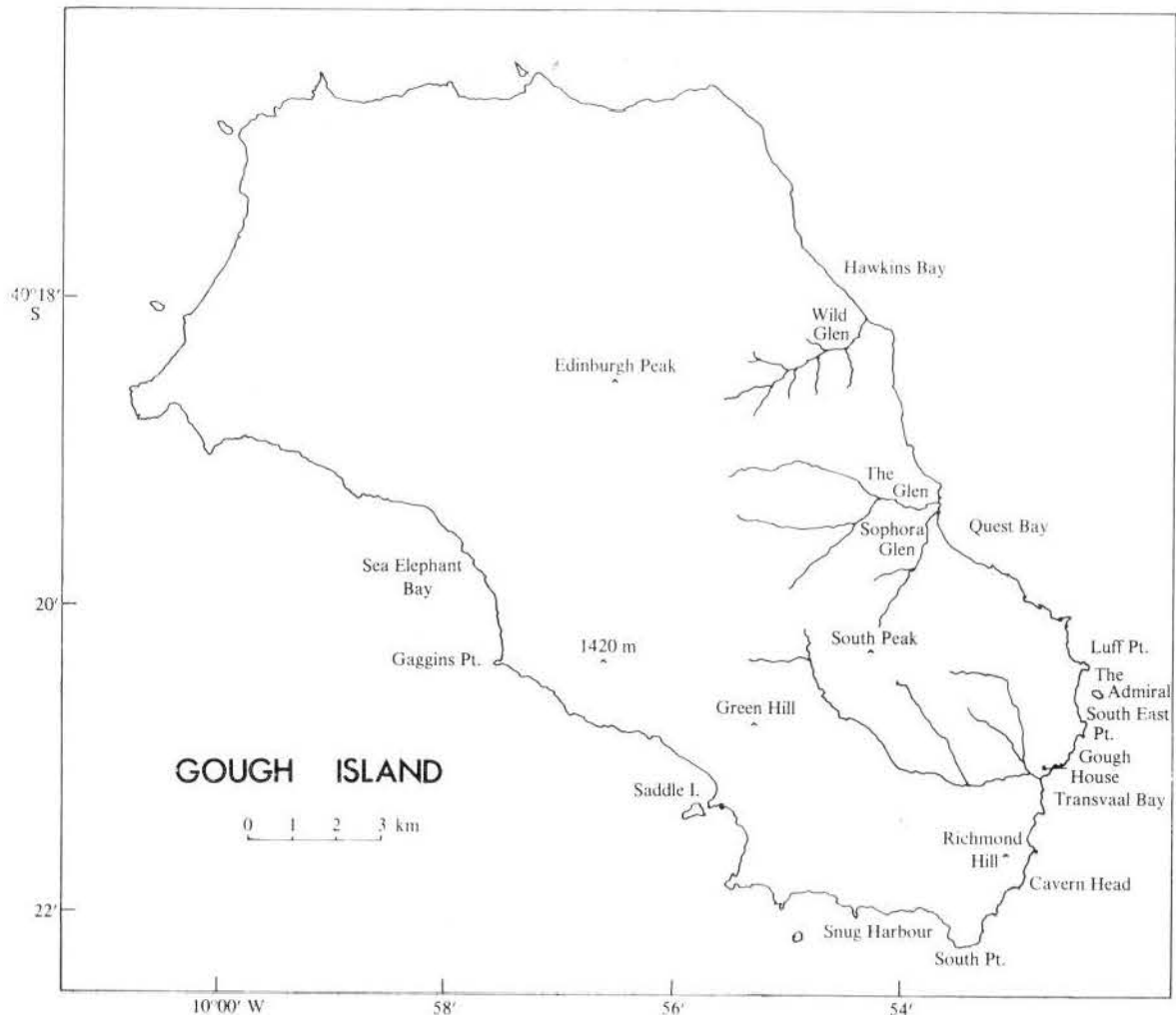


Fig. 1. Map of Gough Island showing localities mentioned in the text.

Verrill (1895) and Swales (1965), or in concentrations of up to 10 nests in an area of about 20-m diameter. However, we did not see such dense concentrations as occur at some places on Nightingale and Inaccessible Islands (Rowan, 1951) and at New Amsterdam Island (Segonzac, 1972).

Nesting birds had considerably darker heads and napes than described by, for example, Falla *et al.* (1966), Watson (1966), Prévost & Mougouin (1970), and Serventy *et al.* (1971), and illustrated for nesting birds at New Amsterdam by Segonzac (1972). Nesting birds at Tristan da Cunha also appear to be relatively dark on the head and nape, according to descriptions and photographs in Rowan (1951) and Hagen (1952). Verrill (1895) was also impressed by the grey features of the 'Blue-headed Molly Moke' breeding on Gough. On the basis of comparisons of the colour of the head and nape between six birds from Tristan da Cunha and 38 from 'Australian seas', Lowe & Kinnear (1930) recognised two subspecies of Yellow-nosed Albatross: *D.c. chlororhynchos* from the Atlantic Ocean, and *D.c. bassi* from the Australian region. On the other hand, Murphy (1936) and Falla (1937) have suggested that the head and neck plumage of Yellow-nosed Albatrosses is dark in freshly moulted adults only and gradually whitens, but neither of these authors had the opportunity of examining birds at breeding stations. No differences in measurements of wing, culmen and tarsus of birds from New Amsterdam and St. Paul, Tristan da Cunha, the Atlantic Ocean and 'Australian seas' were found by Segonzac (1972). Thus a large number of adults from each breeding station would have to be examined before the value of head and nape colour as a taxonomic character could be judged.

Courtship displays by Yellow-nosed Albatrosses breeding on the Tristan da Cunha Islands have been described by Rowan (1951). Our observations were made when most birds were in the incubation stage of their breeding cycle, and commonly included an aerial display not mentioned by Rowan. As the displaying bird flew over incubating birds, it was observed to arch its back, raise its head and fanned tail, and to utter the same rattling cry as is often given by birds at their nests. Elliott (1957) also referred to a vocalisation by the birds in flight, but did not describe it as part of a display.

Sooty Albatross, *Phoebastria fusca*

Sooty Albatrosses were almost as abundant as Yellow-nosed Albatrosses in the area between Snug Harbour and Luff Point. They were found commonly nesting among tussock grass (*Poa flabellata*) on cliffs overlooking the sea and also among tussock grass and small tree ferns 400 to 500 m above sea level on the steep south-eastern slopes of South Peak. Nests of the Yellow-nosed Albatross occurred between these two areas. Nests of the Sooty Albatross contained single eggs.

Giant-petrel, *Macronectes* sp.

A single Giant-petrel nest was located on Long Beach, 0.5 km north-west of Wild Glen under a 2-m high tussock of *Spartina arundinacea*, on 8 November. The nest contained an adult male guarding a chick. Both birds were collected. Many Giant-petrels attended the *RSA* while it was anchored at the island. A pale-coloured bird of the dark phase that was feeding on garbage jettisoned from the ship in Sea Elephant Bay was also collected. According to Johnstone *et al.* (in press), Giant-petrels at Gough combine characteristics of

both the Southern Giant-petrel, *M. giganteus*, notably the green bill tips, and the Northern Giant-petrel, *M. halli*, breeding relatively early in sheltered localities and attending ships at rest.

Cape Pigeon, *Daption capense*

We sighted Cape Pigeons from the *RSA* on 8 occasions between 12 and 16 October: while approaching Gough (within 120 km); at anchor in Transvaal Bay and in Quest Bay; and about 5 km off the south and west coasts during a north-westerly gale. The maximum number of birds seen together on a single occasion was three. They were reported as common in the near vicinity of the island on 16 October 1976 (N.M. Wace, pers. comm.). This species has been recorded only once previously at Gough (Ripley, 1954).

Greater Shearwater, *Puffinus gravis*

No Greater Shearwaters were seen at sea in the near vicinity of Gough between 13 and 16 October. None was seen in the lights of 'Gough House' during the evenings of 17 and 25 October (Table 1), nor were any sighted at dusk on other evenings when we were at 'Gough House'. On the night of 5 November, one Greater Shearwater was dug out of a 1.3-m long burrow which contained a little grass, but no egg. Another bird was found in the grass nearby. Both birds were about 50 m from 'Gough House'. Subsequently, many birds were seen from the *RSA*: hundreds were seen over South Point at dusk on 6 November; thousands were seen over Cavern Head, and 80 were observed in a 'raft' 1.5 km south of South Point at dusk on 9 November.

Greater Shearwaters are known to breed in large numbers on Gough (Swales, 1965). Birds arrive to breed at Nightingale Island in late August and in September, and egg-laying occurs in early November (Rowan, 1952). The medical officer at Tristan da Cunha, Dr M. E. Richardson (pers. comm.), believes that Greater Shearwaters are absent from the breeding grounds at Nightingale for several weeks prior to the egg-laying period in early November. The observations recorded here suggest that a pre-egg-laying exodus also occurs in these birds at Gough. Similar breeding behaviour has been reported for other species of *Puffinus*, for example, *P. puffinus* (Harris, 1966).

Broad-billed Prion, *Pachyptila vittata*

Broad-billed Prions were the most numerous of the nocturnal burrowing petrels that collided with the meteorological station in October (Table 1). Regurgitations collected from three birds on the evening of 25 October contained predominantly copepods and a few hyperiid amphipods. Serventy *et al.* (1971) also noted that these birds feed on copepods.

Atlantic Petrel, *Pterodroma incerta*

A single downy Atlantic Petrel chick was collected on 2 November. It was sitting at the entrance of a horizontal burrow 1 km inland from 'Gough House' at an elevation of 150 m above sea level. This nest was located at a much lower altitude than those recorded by Elliott (1957) on Tristan da Cunha. When caught, the chick regurgitated remains of euphausiids and cephalopods.

The light down of the chick had been shed from the head, nape and part of the upper wing coverts when it was collected. Underneath the down, feathers were conspicuous on the dorsal surface (grey), upper wing (darker grey), throat (grey), chest and abdomen (white). The measurements (in mm) of the specimen were: tarsus 40.0; exposed culmen 34.2; maximum bill depth 14.5. Its bill is black, the nape, legs and webs of the feet are yellow, and the toes and claws are black.

This species nests during winter on Tristan da Cunha and Gough (Elliott, 1957; Swales, 1965). However, chicks have not been reported previously, although Swales did observe three juveniles with down in their plumage on 11 January.

Southern Skua, *Stercorarius skua*

Skua chicks were first seen on 21 October. Thereafter, newly hatched chicks were seen frequently. From an examination of chicks, Swales (1965) considered that they hatched at the beginning of November, although he did note the earlier hatching date of 30 September in 1961 reported by Van der Merwe (in Swales, 1965).

Territories of Skuas in the vicinity of Richmond Hill, Transvaal Bay and South East Point were littered with the skeletons of nocturnal burrowing petrels, mainly Broad-billed Prions. Members of the meteorological team informed us that tame Skuas readily ate mice (*Mus musculus*).

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