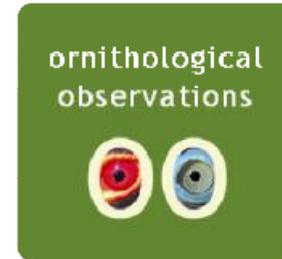


# Ornithological Observations



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Ornithological Observations accepts papers containing faunistic information about birds. This includes descriptions of distribution, behaviour, breeding, foraging, food, movement, measurements, habitat and plumage. It will also consider for publication a variety of other interesting or relevant ornithological material: reports of projects and conferences, annotated checklists for a site or region, specialist bibliographies, and any other interesting or relevant material.

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## **LIVING ON THE EDGE: SOOTY ALBATROSS CHICK KILLED BY A NORTHERN GIANT PETREL**

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## LIVING ON THE EDGE: SOOTY ALBATROSS CHICK KILLED BY A NORTHERN GIANT PETREL

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Giant petrels *Macronectes* spp. are large procellariiforms which breed on sub-Antarctic islands and are generally considered as the principal scavenging birds of the Southern Oceans. Marion Island S46°45' E37°45' is a volcanic island of 290 km<sup>2</sup>, situated c.1 800 km south-east of Cape Town. During austral summer months c. 400 pairs of Northern Giant Petrel *Macronectes halli* and c. 1 450 pairs of Southern Giant Petrel *M. giganteus* breed on this remote island (Ryan *et al.* 2009).

Although giant petrels are largely scavenging species they have developed the ability to exploit other food sources, especially in the winter months when penguin and seal carrion is less abundant (Hunter 1983), but are not thought to be important predators of albatross chicks (Tickell 2000). On Marion Island there are three reports of suspected predation by giant petrels on sooty albatross *Phoebastria* spp. Berruti (1979) reported having seen giant petrels feeding on freshly dead sooty albatross chicks below their nesting sites on three occasions in May 1975. John Cooper flushed a giant petrel feeding on the freshly dead carcass of a large sooty albatross chick above Crawford Bay on 29 April 2006 (cf. Dilley *et al.* 2013) and Marianne de Villiers observed an adult northern giant petrel feeding on a freshly dead sooty albatross chick below the breeding cliffs at Ship's Cove at 11:30 on 2 May 2006 (cf. Dilley *et al.* 2013).



**Fig 1** - The Northern Giant Petrel lands on the narrow ledge with two Sooty Albatross chicks in the background

I report how a Northern Giant Petrel killed a Dark-mantled Sooty Albatross *P. fusca* chick above Ship's Cove S46°51,4', E37°50,6' at 10:56 on 4 March 2013.

Sooty albatrosses favour the steep exposed slopes and narrow ledges of Ship's Cove as nesting sites, however on this day the adult sooty albatross were having difficulty landing on their nesting ledges, mainly due to the strong onshore (north-easterly) wind blowing directly up the steep slope, preventing the birds from flying directly onto their nest sites. One adult albatross tried repeatedly to hover and manoeuvre backwards onto the ledge from 10:35 to 10:55, but kept missing the ledge and swooping off before trying again (Fig 4).



**Fig 2** - The giant petrel grasps the chick by the bill (8 seconds after Fig 1). Note the regurgitated oil on the chick's head.

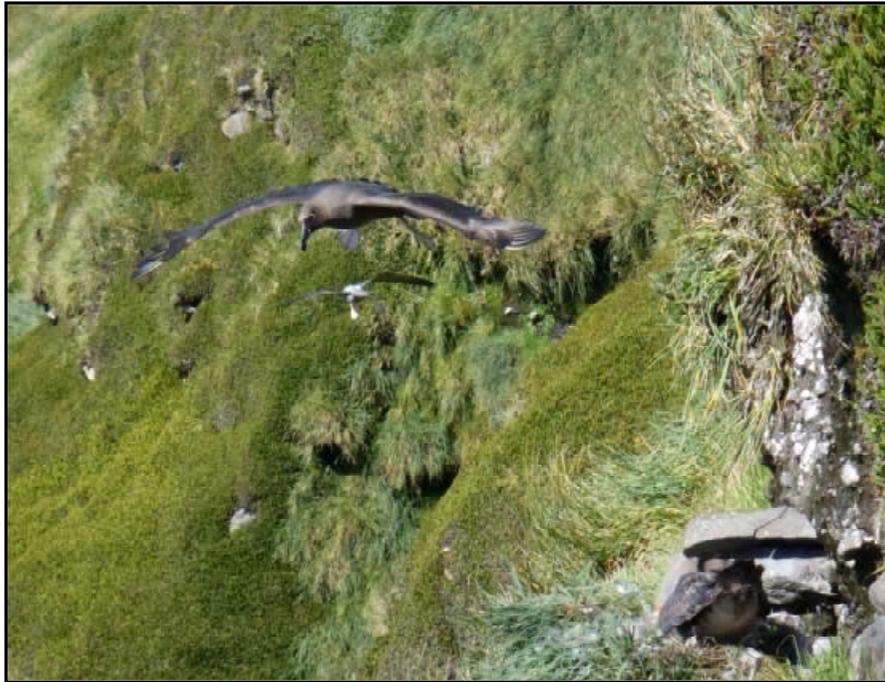


**Fig 3** - The giant petrel grasps the chick by the back of its head (14 seconds after Fig 2), and the chick dies within 1 minute.

Meanwhile the giant petrels were also observed to be taking advantage of this wind to access the sooty chicks. Four giant petrels (two *M. halli* and two *M. giganteus*) were observed using the wind to either hover downwards and attempt to 'drop' onto the exposed ledges, or were using the wind to enable them to 'walk' down the very steep *Blechnum penna-marina* slopes above the nest ledges (see Figs 6a, 6b and 6c). When the giant petrels hovered really close to the ledges the chicks would bill-snap and some even vomited oil. The adults that were on the ledges with chicks would also bill-snap violently to discourage the giant petrels. Adult sooty albatross trying to land were using an antagonistic dive bomb tactic to protect their

chicks, flying close to the giant petrels which were hovering a few meters from their nesting ledges.

At 10:56 an adult male Northern Giant Petrel (with a metal band on the right leg) managed to 'hover and drop' onto a ledge with Sooty Albatross chicks. The giant petrel immediately walked the 3 m to the first chick (Fig 1) and seized it by the bill (within 7 seconds of landing on the ledge, see Fig 2), then by the back of the head (Fig 3). Two giant petrels were observed above the ledge on the steep *Blechnum* slope trying to join the kill, spreading their wings, splaying their tails and making loud gurgling noises. One Southern Giant Petrel



**Fig 4** - An adult Sooty Albatross continued to hover nearby and attempted to land on the ledge while the Northern Giant Petrel fed on the chick.

managed to 'walk' down the slope using the wind as a brake, displaying the second technique the giant petrels have developed to access the nesting ledges. The original giant petrel was ousted by this new arrival, which fed off the kill for 4 minutes (Fig 5) before flying down to the sandy beach to join 6 other giant petrels feeding on a King Penguin *Aptenodytes patagonicus* carcass. Interestingly, a group of giant petrels had been feeding on this King Penguin before the Sooty Albatross chick was killed, suggesting a preference for the albatross chick.

The confidence and lack of hesitation displayed by the northern giant petrel in killing this sooty albatross chick and in gaining access to the



**Fig 5** - The Northern Giant Petrel (foreground) is displaced from its kill, with the Southern Giant Petrel feeding on the remains of the albatross chick. The neighbouring Sooty Albatross chick (background) was not attacked.

ledge suggests this is a practiced skill. Given the rapid decrease of Sooty Albatrosses on Marion Island (Ryan *et al.* 2009), this is of some concern and is worthy of further investigation.

#### **Acknowledgements**

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**Fig 6** - A Southern Giant Petrel 'walking' down the steep slope using the wind resistance as a brake (a and b), then drops onto the breeding ledge (c). Images are snapshots from a video clip.



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