

Submission to Bird Australia Rarities Committee

Submission No. 689
Species: South Polar Skua *Stercorarius maccormicki*
Location: Brown's Sea Mount, 22 nm east of Sydney Heads
Observation Date: 09 April 2011
Submission Date 26 April 2011
Submitted by: David James, Raja W. Stephenson, Nikolas K. Haass and Roger McGovern
Address: 1/519 Pacific Hwy, Killara NSW, 2071
Email: burunglaut07@yahoo.com

Circumstances

This submission concerns a South Polar Skua *Stercorarius (Catharacta) maccormicki* that was seen and photographed on the regular (monthly) pelagic trip off Sydney on 9 April 2011. Two photographs by RWS are included in the submission that have been enlarged and cropped, but not otherwise enhanced. More images are available on RWS' website (<http://www.adarman.com/Pelagics>, click on the [2011 April 09 Sydney Pelagic](#) link). The bird was identified instantly in the field as an adult South Polar Skua, pale to intermediate morph.

The bird was first seen at about 11:08 am, perhaps a kilometre or so beyond Browns Mountain (approximately 34° 02' S, 151° 38 E). It was flying steadily northwards, passed about 100 m behind (inshore of) the boat and was viewed in excellent light for about a minute and a half until it was lost to view to the north.

Browns Mountain is a submerged seamount roughly 41 km (22 nautical miles) ESE of Sydney Heads and 9 km beyond the shelf break. It rises to a depth of about 400 m from a sea floor roughly 600 to 800 m deep. The associated upwellings are well known to attract large numbers of seabirds. On this day, the surface water temperature beyond the shelf break was 23.5°C to 24.0°C. This is exceptionally high for the time of year and a full 2°C higher than on 12 March 2011. Sea conditions were reasonably benign with a north easterly swell of less than 1 m and hardly any chop. Sea conditions were force 3 on the Beaufort scale for most of the day. The weather was mostly sunny and warm, with strong light tending to show up the pale plumage features on birds quite strongly. Large schools of bait fish were encountered frequently throughout the day. There were very few birds inshore but large flocks of shearwaters beyond the shelf with an interesting variety of species present. Other rare birds seen on the day included a Great Shearwater *Ardenna gravis* and a White-tailed Tropicbird *Phaethon lepturus*. A fairly light Brown Skua *Stercorarius antarcticus lonnbergi* was observed further inshore about an hour earlier. See McGovern (2011) for a detailed trip report (<http://bioacoustics.cse.unsw.edu.au/archives/html/birding-aus/2011-04/msg00182.html>).

There were 21 observers and two crew members on the boat. Observers ranged from very experienced to beginners and non-birders. At least 15 birders saw the South Polar Skua and

agreed with the identification. As well as the authors, other observers included Hal Epstein, Robert Hynson, Rohit Jain, Ian McAllan, Brook Whyllie and Tom Wilson.

Description

The following description is based on a composite of field notes recorded from memory (by DJ) in the evening after the trip, and from analysis of photographs taken by RWS, of which Plates 1-3 are the most informative.

Behaviour

The bird was flying purposefully northwards during the entire period of observation. It was mostly flying quite high, perhaps 5 m or so above the water surface. However, every 100 m or so it would drop to the water and dip its feet or vent momentarily, then fly on without landing. This may have been a strategy to lose heat by evaporation off the feet. It showed no interest in the boat, our berley trail, schools of baitfish, or swarms of shearwaters in the vicinity.

Structure

It was a robust seabird with heavy shoulders, a thick chest, broad wings and a short tail. The wings were broad, fairly straight (not very pushed forward at the carpal or swept back at the hand). The tail was short but broad, and there were no elongated central tail feathers visible. It was a much larger and heavier bird than Wedge-tailed Shearwater *Puffinus (Ardenna) pacificus*, many of which were present in the vicinity. At the distance of 100 m plus, there was no conspicuous difference in size or structure to the adult Brown Skua seen slightly earlier in the day.

Plumage

The head, neck, mantle and underbody were a distinctive pale fawn-buff colour with an unusual 'milky' characteristic. The head was slightly darker than the neck. Some photos suggest the presence of a subtly darker eye-patch (Plates 1 and 2), but not all do (Plate 3). The back, scapulars, rump and upper tail were dark brown, contrasting clearly with the mantle and head. The upperwings were mostly dark brown with a conspicuous white patch across the base of the primaries. The remiges were slightly darker than the coverts. The underwing and underside of the tail were mostly very dark brown, contrasting strongly with the pale underbody. There was a large and conspicuous white patch at the base of the primaries on the underwing.

Moult

The bird was missing an inner primary covert on each upperwing (Plates 1 and 2).



Plate 1. South Polar Skua, Browns Mountain, Sydney, 9 April 2011 (Raja W. Stephenson)



Plate 2. South Polar Skua, Browns Mountain, Sydney, 9 April 2011 (Raja W. Stephenson)



Plate 3. South Polar Skua, Browns Mountain, Sydney, 9 April 2011 (Raja W. Stephenson)

Identification and Ageing

The following analysis is based on accounts in Higgins & Davies (1996) and Malling Olsen & Larsson (1997), and extensive personal experience. While preparing the plumages accounts for South Polar and Great (Brown) Skuas in Higgins & Davies (1996), DJ examined several hundred specimens from Australian and New Zealand Museums, and made two voyages to Antarctica that included visits to three breeding colonies of South Polar Skua. NKH has extensive experience with skuas and jaegers, having been a pelagic trip leader on many trips off California, New Jersey, New York, Delaware and Maryland. He has also participated on many pelagic trips off North Carolina, the Galapagos, NSW, Queensland and New Zealand. NKH and RWS have seen many South Polar Skuas on pelagic trips off California, New Jersey, Delaware and one off Wollongong, NSW (25 October 2009; BARC Case 688). We also have extensive experience with Great and Brown Skuas and all three jaegers.

The bold and conspicuous white wing flashes and robust build of the bird indicate that it was a skua (*Streptopariinae*). The general bulk of the bird with its broad, rounded wings, heavy chest and short, broad tail indicate it is a member of the subgenus *Catharacta*, and not a jaeger (subgenus *Streptoparia*). Jaegers have a narrow, pointed hand unlike the broad, rounded hand of the subject bird. The broad and continuous white crescent on the upperwing at the base of the primaries is also a feature of *Catharacta* skuas that is not present in jaegers. On the upperwing of jaegers the white flash is formed by white primary quills only, (unless the bases of the primaries are exposed by moult). Pale morph jaegers do show strong plumage

contrasts, but the underparts are either white or conspicuously barred white and brown (never uniform fawn-buff).

The strong contrast between the pale head and mantle, and the dark remainder of the dorsum is instantly recognizable and completely diagnostic of South Polar Skua. Likewise, the strong contrast between the pale underbody and blackish underwings is completely diagnostic of South Polar Skua. No other *Catharacta* shows such clear and conspicuous contrast. The milky fawn-buff colouration of the body and head is unique to South Polar Skua.

The bird is an adult. Juveniles are not polymorphic (Higgins & Davies 1996; Malling Olsen & Larsson 1997). They are very cold leaden grey, dark and uniform birds. They show very little contrast between the head and body, and the wings (Harrison 1987; Marchant & Higgins 1996; Malling Olsen & Larsson 1997; contra Harrison 1983; Enticott & Tipling 1997; Beaman & Madge 1999). They also have much reduced white wing flashes.

Adult South Polar Skuas have three morphs: pale, intermediate and dark. The dark morph is discreet but pale and intermediate morphs vary continuously from pale creamy blonde to cold dark brown on the head, mantle and underbody. This bird is close to the pale end of that continuum. It probably qualifies as a pale morph individual, despite a slightly darker head, and some birds are paler still.

The photos indicate that the bird was moulting (or missing) an inner primary covert on each upperwing. This is earlier after departure from the breeding grounds than any record of adult wing moult recorded in Higgins & Davies (1996). Nevertheless, it is probably consistent with the start of the rapid, complete, post-breeding moult that begins during the northward migration from Antarctica to the Northern Hemisphere in the Austral autumn. (Note that this missing primary covert is not responsible for the presence of the large white crescent on the upperwing, which is visible irrespective of the moulting feather).

Status

South Polar Skua has a circumpolar breeding distribution in the Antarctic. It is a long distance migrant moving to the Northern Hemisphere for the Austral winter. There are a large number of reports of this species from Australian seas, but only 10 records have been confirmed by BARC (Table 1).

There is one previous record for NSW accepted by BARC from Wollongong in 1990. Barton (1978) collected a specimen south-east of Tarthra on the NSW South Coast on 13 November 1977. A picture of a bird 4.5 km east of Sydney Heads in October 1983 was published in Pringle (1987) and recently has been submitted to BARC (Case 690). A South Polar Skua seen and photographed off Wollongong, NSW on 25 October 2009 recently has been submitted to BARC (Case 688).

In the summary for BARC Case 272 it was observed that the dark morph of South Polar Skua has not yet been confirmed for Australia. We do not think that this is surprising. Dark morphs do not breed in the Australian Antarctic Territories or the eastern Ross Sea (Higgins & Davies 1996). It is not clear exactly where their western limits are, but they are essentially a western hemisphere bird. It is highly unlikely that this morph would migrate along the western side of the South Pacific Ocean or enter the Indian Ocean.

Table 1. Summary of records of South Polar Skua considered by BARC

Case no.	Location	Date	Verdict	Details	Reference
71	S of Cape Otway TAS	9 April 1984	Accepted	Pale morph	Anon. 1988
72	Off King Island TAS	17 April 1984	Accepted	Pale morph	Anon. 1988
112	Albany WA	9-12 May 1986	Accepted	Up to 10 pale and intermediate morphs.	Patterson 1991
144	Wollongong NSW	24 June 1990	Accepted	Intermediate morph	Patterson 1996
146	Eagle Hawk Neck TAS	1 Feb 1992	Not accepted		Patterson 1996
152	Off Storm Bay TAS	20 Dec 1992	Accepted		Patterson 1996
272	Off Portland VIC.	21 Feb 1999	Accepted	Pale morph	BARC website
322	Off Port Fairy VIC.	22 July 2001	Not accepted		BARC website
394	Off Southport QLD.	20 April 2002	Accepted (as 2 records)	2 birds, intermediate morph	BARC website
417	Off Southport QLD.	18 Oct 2003	Accepted	Intermediate morph	BARC website
440	Rottneest Island WA.	8 Aug 2004	Not accepted		BARC website
575	Off Port Fairy VIC	11 May 2008	Accepted	Pale morph	BARC website
690	Off Sydney NSW	22 Oct 1983	Under Review	Pale morph	BARC website
688	Off Wollongong, NSW	25 Oct 2009	Under Review	Pale morph	BARC website

Acknowledgements

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References

- Anonymous (1988) 'RAOU Records Appraisal Committee: Fifty Opinions', *RAOU Report 44*, Royal Australasian Ornithologist's Union, Melbourne.
- Barton, D. (1978), 'Birds seen at sea odd southern NSW and eastern Victoria', *Australasian Seabird Group Newsletter* **10**, 14-19.
- Beaman, M. & Madge S. (1998), *The Handbook of Bird Identification for Europe and the Western Palearctic*, Princeton University Press, New Jersey.
- Enticott, J. & Tipling, D., (1997), *Photographic Handbook of Seabirds of the World*, New Holland, London.
- Harrison, P., (1983), *Seabirds: An Identification Guide*, Croom Helm, London.
- Harrison, P., (1987), *Seabirds of the World: a Photographic Guide*, Christopher Helm, London.
- Higgins, P.J. & Davies, S.J.J.F., (1996), *Handbook of Australian, New Zealand & Antarctic Birds, Vol. 3, Snipe to Pigeons*, Oxford, Melbourne.

- Malling Olsen, K. & Larsson, H. (1997), *Skuas and Jaegers, a Guide to the Skuas and Jaegers of the World*, Pica Press, Sussex.
- McGovern, R. (2011), 'Sydney Pelagic Trip Report - Saturday April 9, 2011', unpublished posting to Birding-Aus Listserv (11 April 2011).
- Patterson, R.J. (Ed.) (1991), 'RAOU Records Appraisal Committee: Opinions and Case Summaries 1988-1991', *RAOU Report 80*, Royal Australasian Ornithologist's Union, Melbourne.
- Patterson, R.J. (Ed.) (1996), 'RAOU Records Appraisal Committee: Opinions and Case Summaries 1992-1995', *RAOU Report 101*, Royal Australasian Ornithologist's Union, Melbourne.
- Pringle, J.D. (1987), *The Shorebirds of Australia*, Angus and Robertson, Sydney.