

An Atlantic Petrel *Pterodroma incerta* at Sea off Western Victoria

ROHAN H. CLARKE

School of Life and Environmental Sciences,
Deakin University, Burwood, Victoria 3125
(Email: rohan.clarke@deakin.edu.au)

Summary

An Atlantic Petrel *Pterodroma incerta* was seen and well photographed on 6 February 2005 during a pelagic excursion off western Victoria. The sighting has been accepted by the Birds Australia Rarities Committee as the first confirmed record of the species for Australia.

The sighting

A pelagic excursion aboard the vessel *Michael J W* departed from Port Fairy, western Victoria, with 13 seabird enthusiasts aboard on 6 February 2005 for a day at sea. By late morning we were stationed -52 km south-east of Cape Nelson Lighthouse, Victoria (38°51.62'S, 141°49.45'E), having attracted large numbers of seabirds to the -100-m-long berley trail. Species present included Great-winged Petrels *Pterodroma macroptera*, White-headed Petrels *P. lessonii* and numerous albatrosses. Here the seabed is at 350 fathoms, though, being near to the edge of the continental shelf, the depth increases to 600+ fathoms within 500 m of this position. The weather was fine and mild with high hazy cloud, meaning that viewing conditions were good. The wind had been decreasing through the morning and was blowing at -5 knots; as a result, the sea was slight on a 2-m swell.

At 1117 h (Eastern Summer Time) a large pale-bellied petrel *Pterodroma* sp. flew towards the feeding serum of seabirds directly behind the vessel and promptly alighted on the water within 5 m of the stern. Before taking off and circling the vessel, it made attempts to take pieces of shark liver that were thrown to it. On several passes it flew directly overhead, 3-5 m above the observers, before again alighting on the water behind the boat. This pattern of alighting to take berley, then lifting and circling the boat, was repeated many times during the next 20 minutes, so that all on board obtained excellent and sustained views of the bird. At 1137 h the bird left, only to return at 1145 h for a further 10 minutes. These extended observation periods allowed ample time to note salient features and take numerous photographs. After the bird departed for the second time, we decided to move to another berley point at 38°50.99'S, 141°45.33'E, which we reached at 1220 h. Here, over 290 fathoms of water, we dispensed berley for 45 minutes. Just before we left at 1303 h, -65 minutes since the bird was last seen, it again approached the boat, this time for several minutes. Unique plumage characters (e.g. pattern of fresh and worn secondary coverts) indicated that it was the same individual.

Description

Structurally the bird had the jizz of a large *Pterodroma* petrel, with long wings held slightly forward to the carpal joint then swept back to the primary tips, a



Atlantic Petrel in flight off Port Fairy, Vic., 6 February 2005, showing dark underwing, weak pale collar and dark undertail-coverts

Plate 2

Photo: Rohan H. Clarke



Atlantic Petrel at rest on water off Port Fairy, Vic., 6 February 2005, showing extent of white on breast and foreneck

Plate 3

Photo: David Webb



Atlantic Petrel in flight, off Port Fairy, Vic., 6 February 2005, showing dorsal surface and shape of spread tail

Plate 4

Photo: Rohan H. Clarke

heavy body, thick neck, and chunky, comparatively short, bill. The tail was moderate in length (not short as in many petrels) and the tip appeared rounded or wedge-shaped depending on how it was spread. The flight was fairly typical of a large *Pterodroma* petrel though, compared with the accompanying Great-winged Petrels, it was slightly more buoyant, with shallower wing-beats and a less 'clipped' stroke at the bottom of each wing-beat. Wings were held a little straighter than in the Great-winged Petrels but the difference was subtle; the wingspan of both species was very similar. When on the water the bird appeared slighter bodied, smaller headed and slightly longer necked, and digital images show that the size of the eye relative to the head was larger, than the Great-winged Petrel. In most views the tail appeared to be slightly longer and more rounded than in the Great-winged Petrel; the outermost rectrices were relatively short and presumably contributed much to the tail's more rounded appearance (Plates 2-4).

Plumage was distinctive (Plates 2-4). Dorsally the bird was brown, the shade of individual feathers varying depending on wear. Fresh primaries, secondaries and greater coverts were grey-brown, but the remaining remiges and coverts were a warmer brown, some with paler bleached fringes. Lesser secondary coverts, humerals, rump and tail were darkest, and in combination these feathers gave the appearance of a weak 'V' across the back (but not the complete 'M' extending onto the spread wing typical of many petrels). The back, mantle and hindneck were paler brown, with most feathers here showing narrow cream fringes. An

indistinct pale collar was visible at most angles, especially when the bird was well lit, but occasionally this feature was not apparent.. In flight, the bird appeared to have a fairly uniform dark hood. The demarcation between the dark feathering of the upper breast and the white of the breast and belly looked neat. However, whilst the bird was on the water it clearly showed off-white feathers extending up the centre of the upper breast and foreneck as far as a cream band at the chin. This area of white was irregular in shape and was presumably the result of extreme bleaching of feathers. Images of the bird in flight (Plate 2) and at rest (Plate 3) confirm this feature to be variable, depending on the angle of lighting and the bird's posture. A darker black-brown orbital patch extended from about halfway between the base of the bill and eye to a point just behind the eye. The forehead was heavily scalloped, and perhaps slightly greyer, because of a prominent pale fringe to each feather here. Ventrally the bird showed various shades of brown with a cream-white lower breast and belly. The white of the belly contrasted with the brown feathering that commenced at the vent.. The undertail-coverts and tail were also dark brown. The white of the breast and belly did not extend onto the flanks or underwings, which were dark. The underwing was uniformly dark, except that the fresh primaries appeared paler grey at some angles to the light; no other paler patterns (cream or white feathers) were visible in the wing. The eyes were grey-black, as was the bill. The legs, feet and inner webbing of the toes were flesh-pink, but the distal half of the toes and outer webbing were black.. The bird was in active moult with some obviously fresh primaries, secondaries and wing-coverts. It is likely that the variation in the shade of the ventral body plumage indicates that active moult was under way there as well.

When away from the feeding serum at the stern, flight was effortless with much gliding and few wing-beats. In close, when showing interest in the benley, the bird frequently beat its wings, banked and stalled, at times with its feet hanging down, even when several metres above the sea-surface. On several passes it stalled at a height of 3-4 m and dropped onto the water.. In contrast, in the light breeze Great-winged Petrels were flying in just -1 m above the sea before dropping in to feed.

Identification

The description and digital images (Plates 2-4) clearly identify the bird as an Atlantic Petrel *Pterodroma incerta*. The bird made repeated close approaches in excellent viewing conditions and all diagnostic features were noted. Some initial confusion existed on the day, given the bleached plumage. However, it is now clear that this feature is typical of Atlantic Petrels in very worn plumage. Indeed, Enticott & Tipling (1997) stated for Atlantic Petrel:

Many birds in worn plumage show paler and greyer nape and hindneck, almost forming whitish collar in extreme examples; similarly, some show paler and greyer forehead, chin and throat almost joining white of underparts and enhancing dark suborbital patch, upperparts and upperwing coverts may also show paler edges.

This is a near-perfect match with the bird off Port Fairy.

There are several dark *Pterodroma* species with pale bellies that may be confused with the Atlantic Petrel (Harrison 1987; Enticott & Tipling 1997). Briefly, key features that readily eliminate these species are as follows: Magenta Petrel *P. magentae* has white undertail-coverts; Phoenix Petrel *P. alba* has variable white on leading edge of wing and white undertail-coverts; Trinidad Petrel *P. arminjoniana*, Herald Petrel *P. heraldica* and Kermadec Petrel *P. neglecta* in all phases show distinctive patterns on the underwing that variously include white

leading edge to innerwing and white triangle in inner hand of primaries, and, for Herald and Trinidad Petrels, some white feathering forming a bar on greater secondary coverts; Tahiti Petrel *Pseudobulweria rostrata* has a distinctive long-winged and more thickset jizz, with a stouter, longer bill in addition to white undertail-coverts. The Soft-plumaged Petrel *Pterodroma mollis* has also been suggested as a possibly confusing species and it has been said that numerous claims of the Atlantic Petrel in the Indian Ocean are probably referable to this species (Enticott & Tipling 1997). Based on our experience from this sighting the two species should be readily separable at sea, however, with size, jizz and overall tone of plumage (grey vs brown) all being markedly different. Indeed, the differences are so great that, on the day, the Soft-plumaged Petrel was eliminated as a contender on the first glance.

An aberrant, piebald Great-winged Petrel was also considered on the day. However, this species can be ruled out by subtle differences in structure (especially head size and tail shape) and the flesh-pink legs and feet of the bird: Great-winged Petrels show dark grey-black feet and legs. Digital images show that the size of the eye relative to the head was larger than in the Great-winged Petrel. As the Atlantic Petrel is more strictly nocturnal at its breeding grounds, this feature is consistent with observations by Brooke (1988). Additionally, differences in behaviour and the fact that all plumage characters were entirely consistent with that of the Atlantic Petrel help to rule out an aberrant Great-winged Petrel.

Discussion

This is the first confirmed record of the Atlantic Petrel for Australian waters (BARC Case number 457). There have, however, been several previous claims of the species within Australian waters that have never been assessed by a rarities committee [e.g. Christidis & Boles 1994 (supplementary list); Slater *et al.* 2003; Brandis 2005]. There are also additional sightings of pale-bellied *Pterodroma* petrels not claimed to species level that are most likely referable to this species, including two birds seen by the author south (-39°S , 133°E) of the Great Australian Bight in August 1998.

The Atlantic Petrel breeds on Tristan da Cunha and Gough Islands in the southern Atlantic Ocean. At both these sites it is considered threatened because of evidence for decline attributed to predation by introduced mammals (Birdlife International 2000; Cuthbert 2004). Nevertheless, it remains locally abundant on Gough Island, with an estimated 1.8 million pairs breeding there (Cuthbert 2004). It breeds in winter, with eggs being laid in June-July and chicks fledging in December (Cuthbert 2004). The sighting documented here occurred at a time when this species is not present at its breeding sites. Based on the extent of plumage wear the bird was not a first-year bird fledged 3 months earlier, though whether it was immature or a breeding adult is not known. Presumably it reached Australian waters after crossing the Indian Ocean with the prevailing weather systems, as Atlantic Petrels occur at least occasionally around southern Africa and there are records in the western sector of the southern Indian Ocean (Enticott & Tipling 1997). It is noteworthy that most of the world's breeding population of Great Shearwaters *Puffinus gravis* is also found at Tristan da Cunha (5 million pairs: Williams 1984) and Gough Island (0.98 million pairs: Cuthbert 2004), as three to four vagrant individuals of this species have occurred in south-eastern Australia, and the Atlantic Petrel is likely to have taken the same route to arrive near these shores.

This sighting occurred at a time when the Bonney upwelling is active. This upwelling is seasonal, occurring between November/December and March/April off the coast between Robe, South Australia, and Port Fairy, Victoria (Butler *et al.* 2002). This is not the only upwelling in south-eastern Australia driven by the prevailing south-easterly winds, but it is the most prominent, and the area is highly productive as a result. The presence of large swarms of krill at or near the surface during this period attracts and sustains large numbers of seabirds, as well as other higher-order predators such as fur seals and whales. Other vagrant seabirds to have been recorded in the region during the upwelling season include three or four Great Shearwaters [January and February 1989 (D. Eades and N. Cheshire pers. comm.), April 1999 (BARC Case number 267) and April 2002 (BARC Case number 371)] and a single Barau's Petrel *Pterodroma barauii* [February 1987 (Carter *et al.* 1989)]. As the Spectacled Petrel *Procellaria conspicillata* displays a similar breeding distribution (Inaccessible Island in the Tristan da Cunha group) to both the Atlantic Petrel and the Great Shearwater, this species may also have the potential to occur as a vagrant in the region (though its small population size does make this less likely).

Acknowledgements

I am thankful to have shared this experience with Rob Berry, Peter Bright, Joan Broadberry, Steve Clark, Gail D'Alton, Clive Garland, Tania Ireton, Brian Johnston, Grant Penrhyn, Frank Pierce, Ray Schultz and David Webb. Grant Penrhyn, David Webb, Steve Clark, Rob Berry and Gail D'Alton provided photographs of the bird, and Grant Penrhyn, Steve Clark and Paul Scofield made helpful comments on a draft. I also thank our crew Gary Roberts and Howie Willoughby.

References

- Birdlife International (2000), *Threatened Birds of the World*, Lynx Editions and Birdlife International, Barcelona, and Cambridge, UK.
- Brandis, C. (2005), 'A possible sighting of an Atlantic Petrel *Pterodroma incerta* off Two Peoples Bay National Park, Western Australia', *Australasian Seabird Group Newsletter* 43-44,6.
- Brooke, M. (1988), 'Comparative study of the night vision abilities of Gough Island petrels', *Bulletin of the British Ecological Society* 19, 26-29.
- Butler, A., Althaus, F., Fuflani, D. & Ridgway, K. (2002), Assessment of the Conservation Values of the Bonney Upwelling Area: A Component of the Commonwealth Marine Conservation Assessment Program 2002-2004, Report to Environment Australia, December 2002, CSIRO Marine Research, Hobart.
- Carter, M., Reid, T. & Lansley, P. (1989), 'Barau's Petrel *Pterodroma barauii*: A new species for Australia', *Australian Bird Watcher* 13, 39-43.
- Christidis, L. & Boles, W.E. (1994), *The Taxonomy and Species of Birds of Australia and its Territories*, RAOU Monograph 2, Royal Australasian Ornithologists Union, Melbourne.
- Cuthbert, R. (2004), 'Breeding biology of the Atlantic Petrel, *Pterodroma incerta*, and a population estimate of this and other burrowing petrels on Gough Island, South Atlantic Ocean', *Emu* 104,221-228.
- Enticott, J. & Tipling, D. (1997), *Photographic Handbook of the Seabirds of the World*, New Holland, London.
- Harrison, P. (1987), *Seabirds of the World: A Photographic Guide*, Christopher Helm, London.
- Slater, P., Slater, P. & Slater, R. (2003), *The Slater Field Guide to Australian Birds*, rev. edn, Weldon, Sydney.
- Williams, A.J. (1984), 'Breeding distribution, numbers and conservation of tropical seabirds on oceanic islands in the south Atlantic Ocean', pp. 393-402 in Croxall, J.P., Evans, P.H.G. & Schreiber, R.W (Eds), *Status and Conservation of the World's Seabirds*, ICBP Technical Publication 2.