

**Pycroft's Petrel *Pterodroma pycrofti***  
**Newcastle pelagic, NSW 2002**  
**New record for Australia and its territories**

**Submission to Birdlife Australia Rarities Committee (BARC)**

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**Fig.1** Pycroft's Petrel, Newcastle OCT 2002- Richard Baxter

**Introduction:**

A single Pycroft's Petrel *Pterodroma pycrofti* was seen by those on board the Newcastle, NSW pelagic trip organised by Richard Baxter in October 2002. This submission is to seek approval from the Birds Australia Rarities Commission (BARC) as a first ever record for this species in Australian territory.

The bird was first called as a Cook's Petrel by Damian Baxter but upon later investigation of photos by Phil Hansbro and Richard Baxter along with consultation with experts at the time deemed to be a Pycroft's Petrel.

The photos aren't great, digital photography wasn't what it is now, but enough evidence can be extracted from these three images to confirm ID.

This bird was initially turned down at the time of sighting due to lack of knowledge known in separating from Cook's petrel, along with apparently, knowledge at the time was that Pycroft's always forage east of the breeding islands of NZ. Now, after consultation with Rob Morris who recently spent extensive time studying the two species at the breeding islands along with tracking data and in hand captures of the species in Australian east coast waters, we believe there is more than enough evidence to support this 2002 sighting. It's worth noting that Rob Morris has spent some time looking at these photos and believes this bird to be Pycroft's Petrel.

**Behaviour:**

It was a hot day with very little to no wind. The bird flew in toward the boat from the 10 O'clock direction, to within about 10m of the vessel. With a combination of casual glides and fluttering wingbeats always staying low to the water, with seemingly not enough wind for any high arcing flight. The bird continued past the vessel and flew 50m down the slick before coming about and returning back towards the observers, before leaving in the direction from which it came. The bird was witnessed for around one-minute total.

Being so long ago very few on board carried SLR cameras and those who did failed to achieve photographs. Richard Baxter managed the photos shown in this report, using a basic camera.

**Description:**

A small Pterodroma Petrel with a distinct medium grey head and neck and distinct dark grey neck sides. The grey patch on the side of the neck fell down below the level of the eye, and then cut back toward the front of the wing. The grey patch did not extend past the angle of the fore wing. Medium grey with a dark 'M' pattern on the upper wing and a dark tail tip. The bird appears thick chested, and with relatively short neck (fig 2), lacks any sign of a supercilium and has the overall body/ wing shape consistent with Pycroft's Petrel. A dark triangular eye patch is noticeable but not bold against the medium grey hood. Bill length and shape suit Pycroft's seen as quite compact in fig.1, another feature of Pycroft's is the longer tapered tail, seen clearly in fig.2 as longer than the head/neck length from the wings. Not distinguishable in these photos, but a known feature of Pycroft's is slightly shorter, more rounded wings than Cook's.

**A study of the 3 included photographs along with direct comparison against the accompanying article passages and photographs (Morris, Shirahai) focusing on 4 main identifying features; Hood, eye patch, shoulder patch, and supercilium:**

**Hood:**

Rob Morris recently spent time studying the comparisons between the two species on mercury Islands, NZ and states that in all cases Cook's show a pale grey hood and an obvious white supercilium of varying lengths, and that "overall the head of Cook's appears quite pale compared to Pycroft's".

Although both species show grey hoods with a darker eye patch, Shirahai claims that the overall plumage including the hood of the Pycroft's is a darker more dusky grey, and less heavily contrasting with the darker eye patch. Morris makes a similar statement.

**Eye patch:**

"Dark ear coverts patch usually appears to merge with crown or often relatively darker and appears as a large oval or triangular patch (with Cook's Petrel this patch is usually smaller but bolder and enhanced by longer and thicker whitish supercilium" (Shirahai, 2005). In figure 2 below the Newcastle bird shows a large triangular shaped eye patch contrasting onto a dusky grey hood.



**Fig 2.** Pycroft's Petrel, Newcastle 2002. Showing triangular shape to large dark eye patch and distinctive dark grey sides to the neck. No sign of supercilium and a rounded looking head with minimal neck.

**Shoulder patch:**

"Most of the Pycroft's Petrels show distinctive dark grey sides to the neck sometimes giving them an almost hooded appearance like a Gould' Petrel (*P.leucoptera*), with some birds showing a partial collar" Morris (2009). Morris goes on to say that "by contrast, the Cook's petrel showed very little pale grey on the sides of the neck, with less contrast and less of an angled cut-off back up to the base of the forewing".

Shown well in figure 1, the obviously dark sides down the side of the neck forming an almost partial collar in the Newcastle bird rule out Cook's Petrel. Furthermore, the aggressively angled cut back to the forewing with no grey plumage extending along the

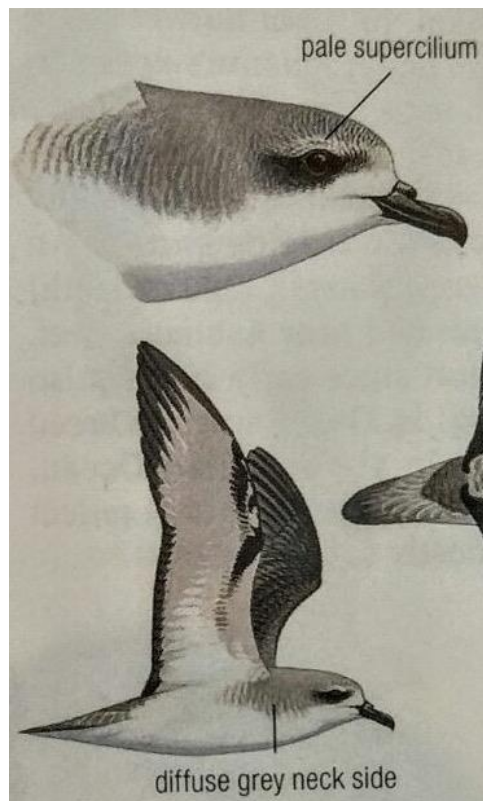
flanks under the wing provide evidence of distinctively Pycroft's plumage. This feature is pointed out clearly in Jeff Davies plate (Australian Bird Guide) shown in figures 3/4.

**Supercilium:**

Although hard to ascertain with low quality of the photos, it does not appear that the Petrel seen off Newcastle shows any sign of an obvious supercilium. One of the diagnostic traits often discussed between the two species is the lack of obvious supercilium in Pycroft's Petrel. This lack of white supercilium is quite easy to discern even with the low image quality in Figure 2.



**Fig 3.** Pycroft's Petrel, Australian Bird Guide. Illustration by Jeff Davies



**Fig 4.** Cook's Petrel, Australian Bird Guide. Illustration by Jeff Davies



**Fig 5.** Pycroft's Petrel, Newcastle 2002. Photo by Richard Baxter.



3. Pycroft's Petrel - Mercury Islands, NI New Zealand, December 2009 (Rob Morris) – note the almost hooded appearance with a partial collar and short, rounded wings.



4. Cook's Petrel - Mercury Islands, NI New Zealand, December 2009 (Rob Morris) – note the white supercilium, black eye patch, lack of dark sides to the neck and longer looking wings.

Fig 6/7. Comparison of grey neck/collar in Pycroft's (above) and Cook's (below). Photos by Rob Morris 2009, NZ.



1. Pycroft's Petrel - Mercury Islands, NI New Zealand, December 2009 (Rob Morris) – note the short bill, dark head with little contrast with the dark eye patch and ear coverts, and the dark sides to the neck. Overall, Pycroft's is a more compact looking bird.



2. Cook's Petrel - Hauraki Gulf, NI New Zealand, December 2009 (Rob Morris) - note the longer looking bill, pale grey head which contrasts with the dark eye patch. The sides of the neck are pale grey and do not form an abrupt angle back to the base of the fore-wing.

Fig 8. Another comparison of the neck, head, eye patch. Photos by Rob Morris 2009, NZ

### Summary:

The combination of the discussed ID features combined with more knowledge nowadays in regards to the separation of Pycroft's Petrel prove this Newcastle bird to be a Pycroft's.

### Other species confusion risks:

**Mottled Petrel, Black-winged Petrel, Bonin's Petrel**- Ruled out due to obvious plumage differences

**Gould's Petrel**- Head and collar plumage differences

**Collared Petrel**- Obvious plumage differences around the face neck and collar rule out Collared Petrel. Collared Petrels exhibit far more grey down the side of the neck creating that collared appearance when seen side on. Also, they have much thicker black lines under the wings than Pycroft's.

**Stejneger's Petrel**- Distinct head/ facial pattern differences, including an obvious white cheek notch when seen side-on. All three of the photos from Newcastle are presented on angles where the white notch of a Stejneger's petrel would be obvious. Also, Stejneger's Petrels dark neck patch extends down a lot further below the level of the grey plumage of the face, creating a double patched appearance, often extending down to nearly a half collar. The Newcastle Pycroft's grey side neck does not extend far enough down for Stejnegers.

Stejnegers also show a much thicker and heavily demarcated black tail tip, extending half the tail length. The Newcastle Pycroft's shows a much thinner and less obvious tail tip. The dark patch of the eye also stands out less against the very dark hood of Stejnegers petrel. The photos (fig1/2) show the eye patch is fairly easily discernible within the medium grey hood.



**Cooks Petrel-** Discussed in detail above, namely head, face and shoulder/ neck sides plumage differences. Along with lighter upper body.

**White-necked Petrel/ Vanuatu Petrel-** Obvious size and plumage differences

**Zino's/ Fea's Petrel-** Distinct underwing pattern differences

**De Filippi's Petrel-** De Filippi's Petrel has a larger more robust bill than the Cook's/ Pycroft's complex, and also exhibits an obvious white supercilium extending from above the eye to the forehead. They also lack the dark tail tip seen in the Newcastle bird.

## Other data



PHOTO

## Pycrofts Petrel

SUPPLIED: BIRDLIFE AUSTRALIA

Recently a Pycroft's Petrel was caught in a nest box on Broughton Island off the coast of Newcastle. In hand measurements and observations proved the species on this occasion. This account proves that Pycroft's DO travel west of NZ, into Australian Waters, and more specifically even, into the water off Newcastle. There's every chance this is a semi-regular occurrence.

## References:

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**Special thanks to Rob Morris for providing his insight, along with comparison photos of his personal studies into the two species at their breeding islands in New Zealand.**