

BARC SUBMISSION

Barau's Petrel – Bremer Canyon, Western Australia, 21st February, 2020.

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Submission note: although still a rare bird in Australia, Barau's Petrels have been recorded annually (during summer) since 2015, off the southern coast of Western Australia. Tracking data also suggests they are likely regular off the NW of Western Australia.

Circumstances of sighting: a single Barau's Petrel *Pterodroma barau* was spotted and photographed at 3.03 pm on the 21st February 2020 during the Naturaliste Charters' Orca tour to the Bremer Canyon, southern coast of Western Australia. Billy Thom initially spotted this bird approaching the stern of the boat, before it spent the next two minutes lapping the vessel and even approaching within 20 m at times. It disappeared for about 5 minutes before making a final, very short and rather more distant pass of the boat.

Description: A long and slender-winged, medium-sized *Pterodroma* with mostly white underparts with a black carpal bar, grey upperparts with a dark 'M-pattern' across the upperwings, a longish dark tail, and a darker cap. The bird was longer winged than a 'cookilaria' petrel, and appeared marginally smaller than nearby Flesh-footed Shearwaters (certainly narrower-winged).

Upperparts: The upper wings are mostly darker charcoal grey that contrast with the mid grey mantle, scapulars and innermost lesser secondary coverts. The tail and uppertail coverts are dark grey/black with limited or no contrast.

Underparts: The underwings are mostly white, framed by a well-defined black trailing edge, mostly black primaries (with minor white tongues extending into the 'hand') and with a substantial black carpal bar that runs from the base of the primaries to the carpal joint and then diagonally back towards the body. The undertail coverts are clean white and the undertail feathers are dark charcoal grey.

Head: A noticeably darker grey cap, extending below the eye, and kinking sharply upwards behind the eye. This dark cap merges with the marginally paler grey nape and neck sides. These mid grey tones also extend across the upper breast/lower throat as an indistinct, partial collar. The throat and chin are white, as are the lores and lower forehead and this contrasts markedly with the darker grey cap.

Bare parts: moderate-sized, all dark bill. Feet and legs not apparent in photos.

Distinguishing similar species:

White-necked Petrel *Pterodroma cervicalis*: the wings were perhaps marginally narrower than a typical White-necked Petrel and the flight jizz was also perhaps marginally more dynamic (however, note that the winds were moderately strong and gusty during the short viewing period). The lack of a white hind neck and the substantially thicker black carpal bar (particularly the long and thick diagonal carpal bar extending towards the body) and thicker dark trailing edge to the underwing of the submitted bird all help to rule out White-necked Petrel.

Vanuatu Petrel *Pterodroma occulta*: Vanuatu Petrel is marginally smaller and slighter than White-necked Petrel and is thus also very difficult to separate structurally from Barau's Petrel. However, it is distinguished herein for the same reasons as White-necked Petrel—principally the lack of a white hind collar, and the longer, thicker carpal bar and the broader dark trailing edge to the underwing of the submitted bird.

Juan Fernandez Petrel *Pterodroma externa*: again, structurally quite similar but perhaps slightly broader winged. However, distinctive plumage differences include the much-reduced black carpal bar and thinner black trailing edge that would be expected for a Juan Fernandez Petrel.

All similar mid-large *Pterodroma* with white underparts, grey to greyish-brown upperparts and darker 'M pattern' across the upperwing, can be separated by substantial underwing differences; this includes various Atlantic and Pacific taxa that are not dealt with in detail here as they would also be very unlikely confusion species in this part of the world (but they are all distinctive in their own right).

All the smaller cookilaria petrels can be separated on structural jizz alone, even from these photographs. They are all substantially smaller with shorter, broader wings with more rounded hands. The thick black carpal bar also eliminates many of the cookilaria with reduced carpal ticks (e.g. Cook's and Stejneger's Petrel) whilst other regular Australian cookilaria such as Gould's and Black-winged Petrel may both be distinguished by differing head/neck patterns (Gould's is distinctively 'hooded', whilst Black-winged typically lacks the dark cap and has a more pronounced grey half collar). The latter also has notably thicker black carpal bars and trailing edge to the underwings.

Observer's experience: Plaxy and Daniel have seen most of the regular Australian petrel species including the somewhat similar White-necked Petrel on many occasions. Billy Thom has seen several Barau's Petrels in the Bremer Canyon.

References:

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Figure 1. Barau's Petrel *Pterodroma barau* at the Bremer Canyon, Western Australia on the 21st February 2020 (Plaxy Barratt). Note the thick dark trailing edge to the underwing, the extensive dark carpal bar, and the dark cap with notable kink behind the eye and then merging into a mid-grey nape and neck sides. Note also the extension of the mid grey feathers at the side of the neck and the white throat, lores and forehead.



Figure 2. Barau's Petrel *Pterodroma barau* at the Bremer Canyon, Western Australia on the 21st February 2020 (Plaxy Barratt). Note the mostly dark grey/black upperwings that contrast with the mid grey mantle and adjoining secondary coverts, the dark cap, mid grey neck sides, and uniform dark grey/black uppertail coverts and rectrices.