

Digital Resurrection of the New Zealand Storm Petrel

In this the modern day and age, what birder honestly would think that they might resurrect from presumed extinction a species of New Zealand bird? Surely, the heroic era of G.B.Orbell and the Takahe rediscovery is gone? In fact, this assumption may be true for land birds, but look to the oceans and the potential, albeit slim, is still there for seabirds. Seabird research continues to find out how much remains unknown.

One New Zealand seabird presumed extinct is the barely known black-and-white New Zealand Storm Petrel. Evidence of this form of storm petrel is restricted to just three skins collected in the 1800s: one preserved at the British Museum of Natural History, Tring, and two at the Museum d'Histoire Naturelle, Paris. Recent studies of these skins categorise them in the family *Oceanites*, with species status under the provisional scientific name *O. maorianus*. It is interesting to note that storm petrel bones unearthed by workers researching New Zealand's fossil birds also have been ascribed to the family *Oceanites* and are tentatively being ascribed to the New Zealand Storm Petrel. These bones may be further evidence of the species. One thing is for certain though, 150 years or thereabouts is a very long time for a species to be missing.

On 25 January 2003, a Wrybill Birding Tours pelagic trip with 12 participants led by Brent Stephenson and Sav Saville encountered a black-and-white storm petrel near the Mercury Islands, off the Coromandel Peninsula. The bird circled the boat for about one minute. Brent hastily ran off a short series of photographs. Three out of four observers who got onto the bird thought they saw a black belly stripe. The feet projected beyond the tail tip. The only reasonable conclusion on identification at the time was Black-bellied Storm Petrel and it was logged as such.

After the event, Brent's digital images revealed information about the storm petrel not seen in the field. Most surprising was the lack of a black central belly stripe. With the central belly an unmarked white. Furthermore, the undertail coverts were white, not black. There were streaks on the flanks and undertail coverts. The breast band was not clear-cut, but had black-brown 'bleeding' projections onto the white belly. These characteristics are nothing like those of Black-bellied Storm Petrel.

Not surprisingly there was growing debate about the identity of the 25 January storm petrel. Possibilities seemed to be a white-bellied form of Wilson's Storm Petrel, a White-bellied Storm Petrel, or a subspecies or an aberrant form of Black-bellied Storm Petrel. None of these fitted the photographic evidence. At one stage Alan Tennyson introduced the 'crazy idea' that the bird might have been a New Zealand Storm Petrel. This 'crazy idea' slowly became the preferred one, as Brent's images of the live bird were repeatedly compared to Ian's images of the three skins. Eventually, it was decided to widen the debate through the web and raise the flabbergasting possibility in Saville *et al* (2003) that their bird may have been the first known sighting for about 150 years of the presumed extinct New Zealand Storm Petrel.

Initially, opinions amongst Australian and New Zealand seabirders about the validity of the proposed identification ranged the spectrum from dismissive to confident. After months of Internet discussion more seabirders were persuaded toward the confident camp, or at least away from the dismissive camp. Yet, everything hinged on one sighting and a few understandably hurried photographs. Ultimately, nothing would be resolved without a future well-documented sighting incorporating quality photographs. How long might this take? Would there ever be another sighting? The standing of the defiant observers hung on chance. Their painful wait, however, was to be a surprisingly short one.

On 17 November 2003, two visiting seabird enthusiasts from the UK, Bob Flood and Bryan Thomas, chartered a boat from Sandspit, near Warkworth and steamed out to two kilometres north of Little Barrier Island. Their main purpose was to watch close-up and photograph the grey-brown White-faced Storm Petrel. They chummed whilst drifting in a brisk westerly wind, waiting for storm petrels to be drawn in by smell. Storm petrels soon arrived as expected, but surprisingly they were all black-and-white.

At least ten and possibly 20 of these black-and-white storm petrels were seen in a period of an hour and a half. Many of them fed over the oily slick created by the chum, but this formed up-wind and directly into the sunlight. Nevertheless, Bryan shot a series of photographs as the storm petrels approached the boat and Bob took some video footage.



Photo by Bryan Thomas

Dark markings were seen on the belly although they were hard to position, and the feet projected well beyond the tail tip. These and other features excluded identification as White-bellied Storm Petrel. Thus, the birds were assumed to be Black-bellied Storm Petrels. There was no other option according to the field guides. The wings were narrower and more pointed than expected and a clear view of a black belly stripe was not attained, but these apparent and surprising anomalies were put down to lack of observer experience with Black-bellied Storm Petrel.

That evening back at the digs Bryan downloaded his digital images to laptop. He noticed that the dark markings on the bellies of the storm petrels were in fact streaks and called to Bob to take a look. With a series of digital images and a laptop fully equipped with software to explore them, the two soon realised that the storm petrels were not Black-bellied.

Luckily, both had read in passing Saville *et al*'s (2003) article about the putative New Zealand Storm Petrel seen in January 2003 and the skins collected in the 1800s. As far as Bob and Bryan could remember, their storm petrels looked just like the photographs of the live bird and the skins. A web version of the article was consulted next day and vague memories became hardened facts. They found themselves having to believe the unbelievable. There could be no doubt. The New Zealand Storm Petrel is not extinct!

Bob and Bryan immediately emailed Brent, Ian and Sav with the dramatic news. Many more emails were exchanged full of expletives and superlatives best not repeated here. Celebrations ensued as if all five were party to a syndicate lottery win.

A full account including five quality photographs of the 17 November sightings was documented in Flood (2003). This published confirmation swung opinion amongst seabirders across the globe and now there is a near international consensus view that supports our conclusion. BirdLife International has recategorised the New Zealand Storm Petrel from extinct to critically endangered. A major monograph on Albatrosses and Petrels by Dr Michael Brookes (curator at the University of Cambridge) due out this year will now include the New Zealand Storm Petrel as probably a full species, and another such monograph in preparation by Hadoram Shirihai will include it as a full species. We hope that the New Zealand Rare Birds Committee will formally accept our records and that subsequently the Department of Conservation will embrace a project to establish the status of the New Zealand Storm Petrel and to preserve it.

This amazing story is not complete, however, without a final word about the means of our rediscovery. Digital camerawork in the field captured details of our storm petrels that the eye could not make out; or perhaps the mind found impossible to believe. Whichever, there is no doubt that our rediscovery of the New Zealand Storm Petrel is nothing other than a digital resurrection.

References

- Saville, S., Stephenson, B., & Southey, I. 2003. A possible sighting of an 'extinct' bird – the New Zealand Storm-petrel. *Birding World* 16: 173-75.
Flood, R.L. 2003. The New Zealand Storm-petrel is not extinct. *Birding World* 16: 479-482.

BOB FLOOD, SAV SAVILLE, IAN SOUTHEY, BRENT STEPHENSON, and BRYAN THOMAS

