

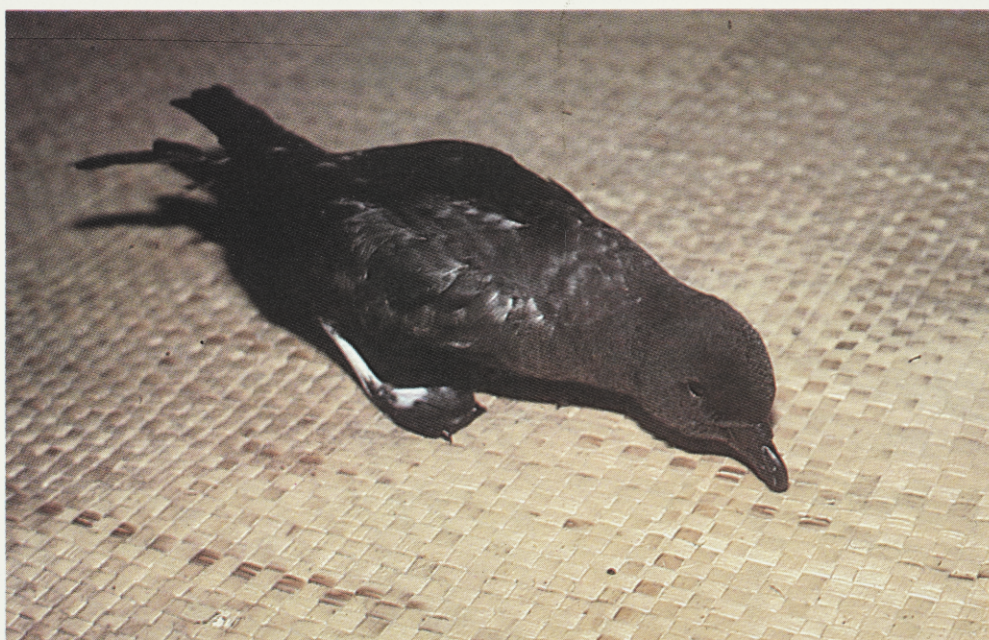
FOUND

the elusive Fiji petrel

by Dick Watling

Last recorded being seen in 1855, the Fiji petrel was re-discovered last year.

Photo: D. Watling



For many ornithologists, the Fiji petrel (*Thalassidroma (Bulweria) macgillivrayi*) has long had the status of “missing, believed extinct.”

Between 1855, when the bird was described by a British Museum scientist from a specimen taken off the Fijian island of Gau (pronounced ngau with a soft ng), until 1984, the petrel was never officially sighted.

Its existence during that time was questioned, debated, shuffled. Some authorities considered it extinct, others merely “lost or missing.”

In May 1983 a search was begun of the rugged, 140 km² island, where 54 percent of the land area supports dense rain forest. Formerly there were walking tracks across the island, but these are no longer in use, and today all the islanders live on the coast, very much oriented towards the sea. They rarely, if ever, enter the forest interior.

During the first two visits (seven were made in all) extensive discussions were held with villagers, skins of a black-winged petrel and a wedge-tailed shearwater were shown and a reward offered for information about the Fiji petrel. Potential nesting sites were assessed, and trails cut to the

summit and across the northern ridge.

Nesting burrows of suspected collared petrels (*Pterodroma brevipes*) were found during a search on the first visit and the identification confirmed when villagers subsequently collected a young bird about to leave the nesting burrow in August 1983. Evidence that wild cats preyed on the petrels was soon found, and trap lines for cats and rats were laid. No Fiji petrel remains were found, however.

On the fifth visit, in February 1984, spotlighting was tried for the first time. In April-May spotlighting was augmented by the use of amplified collared petrel calls. During four nights of poor weather with continuous light rain and cloud, spotlighting attracted more than 165 collared petrels into a site near the summit.

Among those, on April 30, a single Fiji petrel flew into the light! It was examined, weighed and measured. The next day the petrel was photographed before being shown to villagers and then released by the Paramount Chief of Gau.

A later attempt to capture a Fiji petrel failed. Although the search has revealed that it survives on Gau, nothing more is known about it. While its numbers cannot

be estimated, the fact that this distinctive petrel has not been seen at sea indicates the population must be small. There are records of “dark” petrels from Fiji waters but large numbers of migrating shearwaters pass through Fiji every year, the melanistic individuals of the collared petrel are almost black and other dark petrels have been recorded in Fiji waters, so confusion abounds.

The Fiji petrel’s status must be considered precarious, although it appears to be under no new threats. Breeding conditions on Gau appear favourable, with approximately 75 km² of densely forested and rugged terrain. It may be that the Fiji petrel nests only on the high, cloud-covered ridges; on the other hand the collared petrel nests lower down.

Three main predators are a danger: the Polynesian rat (*Rattus exulans*), the house rat (*R. norvegicus*) and wild cats. Surprisingly and fortunately there are no wild pigs on Gau, although domestic pigs roam free around villages and plantations. The mongoose is not found on Gau.

Although the collared petrel seems to be nesting successfully, its seasonal breeding in the first half of the year may swamp wild cat predation. If, as is possible, the Fiji petrel has a more prolonged breeding season later in the year, the species may suffer disproportionately.

Historical conditions on Gau may have been different. Even the highest ridges presently cloaked in undisturbed mature forest bear evidence of extensive earthworks — fortified refuges which would have been used in times of tribal warfare. Large areas of grassland and reeds not used today possibly indicate a larger and more industrious population that once existed. All these factors may have affected the Fiji petrel in former times.

If, as proposed by New Zealander Mike Imber, the Fiji petrel is a relic species derived from petrel ancestors, those ancestors may have spread north during a colder epoch. The return of tropical conditions may now account for a small surviving population.

The apparent restriction of the bird to Gau is, perhaps, puzzling. The island differs from other Fijian islands in that it does not have wild pigs. However, we do not know if pigs have always been missing from Gau, and nor do we know if the petrel is restricted to the island.

Research on of the Fiji petrel will continue, but Gau’s isolation, its extensive and rugged forests will make it difficult and expensive. New Zealand’s efforts with the Taiko will be watched with keen interest; perhaps Chatham’s techniques will be applied on Gau.

Acknowledgements

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