



Wall Island Survey

31 December 2015

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Wall Island was visited on the morning of 31 December 2015 by kayak during a period of calm sea conditions and fine dry weather. The aim was to assess the breeding population of fairy prion (*Pachyptila turtur*) and sooty shearwater (*Puffinus griseus*) on the island. The approach aimed to replicate the previous survey of 2013 (Charteris and Lane) although with more emphasis on flat and easy/safe ground (rather than sloping or steep) and using 6m diameter circular plots.

Three hours were spent on the Island. Landing was on the south eastern side of the island and access onto the upper vegetated part of the island was via a tongue of taupata scrub, which extends down this side. A rope was placed here in 2013 to help scale the steepest part of the climb.

A total of five circular plots with a radius of 3m were surveyed. Sites were chosen randomly but limited to the flat to moderately sloping land mostly on the top of the island. All burrows within 3m of a peg were counted. Rather than scope every burrow, a selection of 10 apparently active prion burrows from the 70-80 burrows found in each plot were chosen, along with all shearwater sized burrows (0-2 per plot) to estimate the percentage occupied by breeding birds. Prion burrows were easily distinguished from those used by sooty shearwaters due to their small entrance.

Due to the small sample size of sooty shearwater burrows and the fact that in several cases eggs may have been present but could not be seen, it is difficult to estimate the number of sooty shearwaters breeding on the island, however, it appears likely the total is between 39-69 pairs for the whole island.

The number of fairy prions on Wall Island in 2013 was wrongly calculated. Revised estimates are of about 1255 fairy prion burrows on Wall Island in 2013 and about 1400 in 2015. Given the small number of plots it was possible to do in the time available and the variation from plot to plot, these figures suggest little if any change in numbers over this two year period.

Summary

This survey gives a rough estimate of the prion and shearwater population of Wall Island but due to the difficulty of moving around it is probably the most practical method to detect any large change in their populations. Crucially no sign of predation of eggs, chicks or adult birds was found and the island appears to remain free of stoats and rats. The differences in population estimates for the two years when surveys have been carried out do not indicate any significant changes in population numbers. Differences between years are more likely due to plots randomly selected for sampling rather than an actual population change. In 2013 three plots were surveyed totalling 85m², and in 2015 a total of 141m² was surveyed of the estimated 1400m² of the area where soil depth is sufficient for petrels to burrow. Before the next survey it would be good to refine techniques based on the most likely methods to be both accurate and reproducible.



Prion burrows and scratched sandstone



Prion chick removed from burrow to check identification. No sooty shearwaters were handled during the survey to avoid unnecessary disturbance.



Taupata scrub with a good covering of guano.