

Seabird restoration in the Waitākere Ranges

Michael Fox, University of Auckland



The introduction of invasive mammalian predators to New Zealand has resulted in the widespread reduction of ground and burrow nesting seabird colonies across the New Zealand mainland. However, some species, such as the grey-faced petrel or ōi (*Pterodroma gouldi*) have managed to hold on and are now being rediscovered in small, isolated colonies across areas of the New Zealand mainland. At these sites' colonies are vulnerable to predation from invasive mammals (rats, mustelids, feral cats), with colonies believed to be sustained from immigrating birds from predator-free island colonies and protection from community groups involved in predator control. The exact mechanism that allows grey-faced petrel to breed successfully on these mainland colonies is not well understood, but an aspect of their success has been attributed to increased fledging success due to the proximity to the richer west coast waters, although this research focussed on an inshore "predator resistant" island (Russell, unpub.).

This project seeks to understand the effects of varying levels of predator control and predator abundance on the breeding success of grey-faced petrel in the Waitākere Ranges. This information will not only ensure the persistence of grey-faced petrel breeding on the mainland but will also underpin work on attracting rarer and more vulnerable seabird species to breed on the mainland. For example, Cook's petrel, diving petrel, and fluttering shearwater have been recorded in the Waitākere Ranges but have struggled to establish in the area. Further support to community groups and iwi (Te Kawerau a Maki, mana whenua of West Auckland) will ensure predator control approaches are appropriate and future-proofed to allow the recolonisation of multiple seabirds to the area.

The proposed study has three broad aims:

1. Determine the most effective predator control operations that will allow grey-faced petrel populations and other seabird species to persist/establish and grow on mainland New Zealand.
2. Support community groups and iwi in the development and implementation of effective predator control to promote restoration of seabird habitat in the Waitākere Ranges.
3. Facilitate the establishment of a long-term monitoring programme of grey-faced petrel ensuring the inclusion of key stakeholders such as local community groups, Auckland Council, and BirdsNZ members.



A grey-faced petrel from the Tāwharanui colony. Image by Edin Whitehead