## DETERMINING THE POPULATION STATUS OF BLACK PETREL (*PROCELLARIA PARKINSONI*) ON TE HAUTURU-O-TOI/LITTLE BARRIER ISLAND



Endemic to New Zealand, the black petrel (*Procellaria parkinsoni*) is a globally vulnerable seabird that breeds on just two islands, Te Hauturu-o-Toi/Little Barrier Island and Great Barrier Island (Aotea) in the Hauraki Gulf of northern New Zealand. Black petrels are killed in long-line and trawl fisheries within the New Zealand EEZ and overseas, with birds being caught on both recreational and commercial vessels, particularly in northern New Zealand and the Hauraki Gulf. The black petrel is recognised as the seabird species most at risk from commercial fishing activities.

Along with a number of collaborators and able field assistants (many from Birds NZ) and funding support from Department of Conservation, Ministry for Primary Industries, Guardians of the Sea Charitable Trust and Birds NZ, I have had a successful season working with black petrels on Hauturu as well as Great Barrier Island/Aotea.

With the assistance from the Hauturu DOC rangers Leigh Joyce and Richard Walle and their children Mahina and Liam as well as volunteers and collaborators Paul Garner-Richards, Katherine Clements, Katie Clemens-Seely, Jacob Hore, Adam Clow, Neil Fitzgerald, Simon Stoddard, Will Whittington and Ian Flux we made four visits to Hauturu over the 2014/15 black petrel breeding season.

We searched for and located 90 out of the 97 historic Mike Imber black petrel study burrows on Hauturu. Only 27 of these burrows were being used by breeding black petrels. We found an additional 25 burrows along the main track bringing the number of study burrows now to 122. Of these, 50 were being used by breeding birds and another 18 were being used by non-breeding birds this season. There were 56 chicks present in either the study or random burrows across the island and all of these chicks were banded.



We also deployed 27 acoustic monitoring devices in different locations across Hauturu in December 2014. These devices were checked twice and recordings were retrieved in January and April 2015. These devices recorded black petrels calling along many of the ridgelines of the island. Now we have the long task of listening to over 4200 hours of recordings to confirm locations and numbers of black petrels at each recording site.

In addition to random ground surveys by the team, Joanna Sim from DabChick NZ and her seabird detector dogs Rua and Maddi found black petrel burrows were generally over 500 m above sea level on Hauturu. Black petrel chicks were found in all sorts of burrows – in the bases of trees, in rotten logs and in rock crevices as well as in the 'classic' burrows dug into the ground.

All of this information will be used to determine the current status and population trend of black petrels on Hauturu. This is the first year of the five-year project and I look forward to being able to update Birds NZ, DOC, MPI, Guardians of the Sea Charitable Trust and the wider scientific community as the project progresses.

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