

ARE NEW ZEALAND STORM PETREL NUMBERS ON TE HAUTURU-O-TOI / LITTLE BARRIER ISLAND INCREASING?

The New Zealand storm petrel (*Fregatta maoriana*) (NZSP) is a bird that skipped in from extinction in 2003, known previously only from three museum specimens collected in the 19th century. In 2013 NZSP were found breeding on Hauturu / Little Barrier Island. This remains the only known breeding site for this enigmatic species, defying the odds, hanging on just long enough in the presence of cats and rats to be detected. In 2006 predators were finally confirmed eradicated.

Using mark-recapture methods – from both captures on land and observations of banded birds at sea in 2014 and 2015 we have estimated the population of NZSP on Hauturu to be approximately 1600 individuals. Though anecdotal evidence suggests this population may be increasing accurate data are yet to be obtained and are critical for accurate conservation designations for the species. With funding from the Birds NZ Research Fund we will provide the first solid data to assess the population trajectory of NZSP.

Our proposal is to repeat the island-based mark-recaptures on Hauturu in February and March 2023, by adhering to our established and published protocols. This will be our first chance to confirm the population trajectory of the NZSP which is critical for informed conservation status designation. The Hauturu survey provides a consistent technique to monitor any population changes. This is especially relevant, considering the soon to be released results from the NZSP genomics study (also funded through the Birds NZ Research Fund), relating to the importance of Hauturu breeding population.

Also, while on Hauturu we aim to follow up on work conducted in previous seasons with the deployment of acoustic recorders in Parihakoakoa Valley to try and obtain new recordings of NZSP calls and conduct night searches at sites where NZSP calls were recorded in January 2020. To date, NZSP appear to have a very narrow calling period (mid-January to early-February).

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Light attraction © Edin Whitehead



Nest box entrance - image from trail camera