

## Pakahā Fluttering shearwater research – Edin Whitehead

In December 2019 we successfully tracked 10 fluttering shearwaters from Pokohinu (Burgess island) in the Mokohinau group. Tracking occurred during the chick-rearing period and captured foraging trips of between 1 and 5 days. Most birds returned to the colony nightly to feed their chick, which enabled us to capture two complete foraging trips from the same birds. The map below displays all foraging trips, coloured by the individual birds.

While detailed analysis of these tracks is currently underway to profile how environmental variables such as sea surface temperature, productivity (chlorophyll-a) and bathymetry relate to foraging behaviours, these tracks indicate that fluttering shearwaters are commonly inshore foragers who frequent shallower waters to feed. Rough ‘hotspot’ areas have been generated based on cumulative point density from all tracks (in red). These indicate areas of high activity around Bream Tail, north of the Marotere (Chickens) group, off Simpson’s Rock, and in the inner Gulf around Kawau Island.

This project will span three breeding seasons, and the second field season of work has just begun. A repeat of this tracking will be done in December 2020 and 2021 to enable a multi-year comparison of foraging behaviours in relation to different environmental conditions.

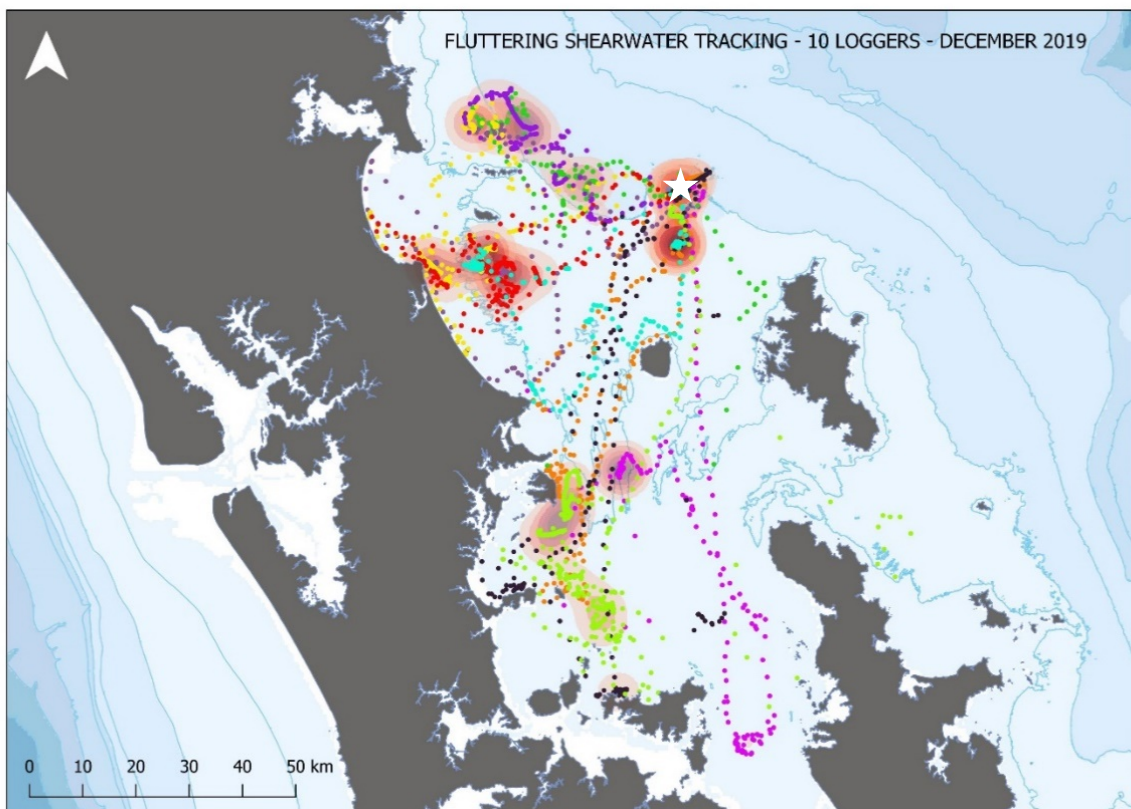


Figure 1: Foraging trips of ten fluttering shearwaters during the chick-rearing period. Tracks are coloured by individual bird, points are successful GPS fixes at 5-minute frequency. Colony site (Pokohinu) denoted by the white star.