

## GPS tracking of kororā/little penguins in the wider Hauraki Gulf – Summary Article

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In October and November 2020, two 10-14 days trips were undertaken to Motuihe and Lady Alice Islands in the wider Hauraki Gulf to perform GPS tracking on little penguins. Of the eight GPS trackers deployed on little penguins from Motuihe in October, only three were retrieved. Tracking little penguins on Motuihe proved incredibly difficult. This was mainly due to the small population of little penguins on the island and the difficulty in accessing birds in deep sandstone burrows. Additionally, most little penguins had to be intercepted between the sea and their burrows which meant that we were limited by the tide. Of the 19x GPS trackers deployed on little penguins from Lady Alice Island in November, 10x were retrieved. The number of marked birds observed after dusk and before dawn indicated that a number of the GPS trackers that were not retrieved had fallen off at sea. This indicates that either the quality or quantity of superglue used to attach the trackers was insufficient and a better adhesive should be sought in future studies. Feather samples were obtained from all individuals for future stable isotope and physiological analyses.

Little penguins from Motuihe travelled in a north-easterly direction to the northern side of Waiheke. The maximum distance tracked was approximately 15km from the colony and only one of the three tracks captured a complete foraging trip. Little penguins from Lady Alice Island travelled in a westerly direction toward the mainland and foraging was concentrated between Lady Alice Island and Bream Bay, although a few individuals travelled north of Whangārei Heads or south toward Leigh. Foraging trips lasted between 1-5 days.

This data is in preparation for publication, awaiting analysis of the useable GPS tracks, and will be compared to little penguin GPS tracking data from Lady Alice Island (2018) and Burgess Island (2014).

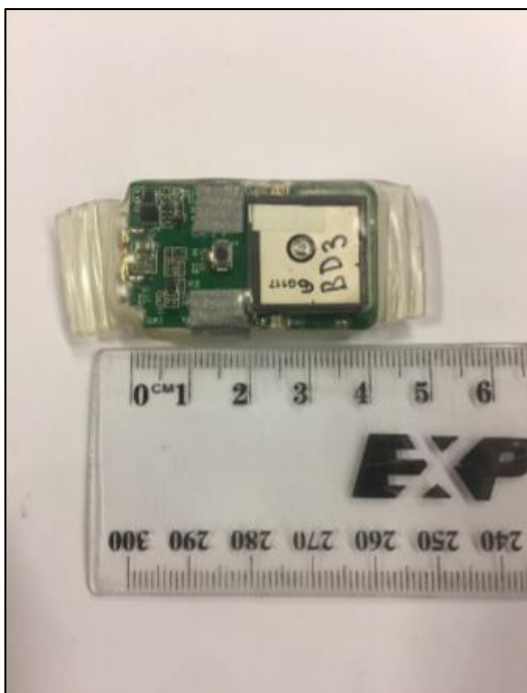


Figure 1. An I-GotU GT12 GPS tracker attached to 25.4mm heatshrink tubing.  
Figure 2. An I-GotU GT120 GPS tracker attached to the lower back of a little penguin on Lady Alice Island, 2018. Devices were attached using waterproof TESA tape and superglue.