

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

The wider Hauraki Gulf is in a poor state ecologically, with sedimentation, noise pollution, and overfishing among the threats contributing to the decline of marine biodiversity. Twenty-two percent of seabirds in the region are now classed as threatened, an 18% increase over the past 20 years (Hauraki Gulf Forum, 2020). Kororā/little penguins (*Eudyptula minor*) are inshore foragers that are resident in the Hauraki Gulf year-round, thus they are subject to any decline in marine ecosystem health and the local population appears to be decreasing.

This study aims to compare foraging patterns of penguins from two spatially segregated penguin colonies in the wider Hauraki Gulf region: Te Motu-a-Ihenga/Motuihe Island in the inner Hauraki Gulf and Motu Muka/Lady Alice Island which is further offshore. This will determine whether spatial differences in foraging patterns are observed between the two colonies, indicating differences in marine resource availability. Tracking data will also provide a temporal comparison of the foraging locations used by penguins from Motu Muka in 2020 vs. 2018 (Lukies, 2019; <https://researchspace.auckland.ac.nz/handle/2292/48715>).

Understanding the foraging patterns of little penguins over space and time is key to protecting them at sea and the results of this study will be used to inform at-sea conservation measures for little penguins in the wider Hauraki Gulf.

Funds provided from the BNZRF will facilitate island visits to undertake tracking work.

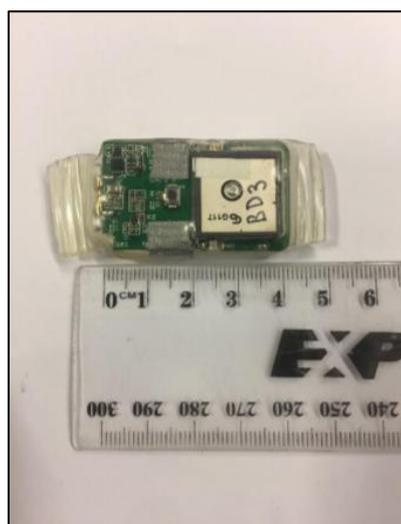


Figure 2. An I-GotU GT120 GPS logger sealed in heatshrink.



Figure 1. An I-GotU GT120 GPS logger attached to the lower back feathers of a little penguin using waterproof TESA tape and superglue