

Studying the marine ecology of New Zealand's enigmatic Tawaki/Fiordland penguin

The enigmatic Fiordland penguin (*Eudyptes pachyrhynchus*) or tawaki is one of the rarest penguins worldwide. It is also one of the penguin species we know the least about. Only a handful of studies have been conducted so far, the majority of which focussed on aspects of the penguins' terrestrial biology such as breeding behaviour and population counts. To understand which factors are driving population developments it is vital to examine the penguins' behaviour at sea: where do the birds go to find food, how deep do they have to dive to catch their prey, and what prey species do the penguins rely on, especially when rearing chicks.

Over the course of five years the Tawaki Project will investigate the Fiordland penguin's foraging behaviour across the species entire breeding range. Using cutting-edge miniature data loggers which combine GPS, dive and temperature sensors, the penguins' at-sea movements will be tracked, while simultaneously recording physical properties of their marine environment in three dimensions. In 2016, the project will be carried out at three sites simultaneously, namely Jackson Head/West Coast, Harrison Cove/Milford Sound, and Codfish Island. The Birds New Zealand Research Fund (BNZRF) contributes significantly to the cost of logistics required to study the penguins at the three sites.

