



Tawaki Project – Year 4, field season 2017/18

The current breeding season of Fiordland penguins / tawaki proves to be a very productive one, both for the penguins as well as the Tawaki Project, which has been studying the at-sea ecology of this rare and enigmatic species since four years now. This year, the penguins appear to be doing exceptionally well in terms of their breeding success. At all three sites the project operates at - Jackson Head, Harrison Cove in Milford Sound / Piopiotahi, and Codfish Island / Whenua Hou – several nests raised both chicks to the crèching stage. Considering that crested penguins generally lose one of their eggs or chicks early in the breeding season, this observation not only overthrows a popular generalization of *Eudyptes* as ‘obligate brood reducers’ but also indicates that the foraging conditions currently seem to be exceptional. Foraging ranges of birds from the West Coast are largely in line with what was observed in 2014, another good breeding year for tawaki. Penguins from Jackson Head generally stayed within 60 km of their breeding colonies, returning on a daily basis to feed small chicks, and every second day during crèching. In Milford Sound / Piopiotahi, penguins foraged seldom further than 4 km from their nest sites, staying in the fjord throughout the chick rearing period. On Codfish Island, the penguins either proved to be coast huggers, following the eastern coastlines of the island on their daily foraging trips, or foraged some 20 km to the west. With one exception, the birds tended to stay away from Foveaux Strait and, thus, out of harm’s way with regards to the heavy set-net fishing presence in the region which is known substantial impact on Yellow-eyed penguins. However, observer data suggests that tawaki breeding along the southern Fiordland coast sadly share this fate.

Earlier this year, a satellite telemetry study conducted on tawaki from Gorge River during their pre-moult journeys concluded successfully. It showed that compared to other crested penguins, tawaki travel far greater distances during this crucial stage of their annual life cycle. Some of the birds went all the way to the sub-Antarctic Front an oceanographic feature some 2,000 km south of the New Zealand mainland. Others ‘only’ travelled to the South Tasman Rise about 1,000 km south of Tasmania and 1,500 km from their home colonies. Paradoxically, birds leaving their colonies later would also cover greater distances. This season, the project will furthermore deploy tiny GLS loggers on penguins from all our study sites which will allow us to track their at-sea movements over the course of the next year to get new insights into the species’ winter migration.

The invaluable ongoing support of Birds NZ allowed the Tawaki Project to advance our knowledge of tawaki significantly. And the project will continue its work during the ongoing as well as next year’s breeding season. For further information, please visit our website www.tawaki-project.org where we publish annual field reports.



One of many double chick nests at Harrison Cove, Milford Sound / Piopiotahi.