



Basic Facts About Tawaki (Fiordland penguin)

The Fiordland penguin or Tawaki is one of four penguin species unique to New Zealand and the only crested penguin to live and breed on the New Zealand mainland. Its distinctive, thick and pale-yellow crest, its robust orange bill and the white feather stripes on its cheeks distinguish Tawaki from the other penguin species that occur on the mainland. It is also one of the least known and studied species of penguins world-wide.

Population

With an estimated 5,500-7,000 mature birds, Tawaki are considered to be the third rarest penguin species world-wide; only the Yellow-eyed penguin (3,400 birds) and the Galapagos penguin (1,200 birds) have smaller populations. But Tawaki are notoriously difficult to survey as they live and breed in hard to access regions that make finding and counting them a challenge. In fact, there may be more Tawaki around than currently thought.

NEW FACTS: A survey conducted by the Tawaki Project in Milford Sound in 2016 puts the local breeding population between 240-300 penguins while official figures see penguin numbers in the fjord at 20 birds.



Breeding Range

Tawaki breed only along the south-western coastlines of New Zealand's South Island – from Haretaniwha Point in Westland down to southern Fiordland – as well as on Solander Island, Stewart Island and Codfish Island / Whenua Hou. Fossil records suggest that Tawaki also used to breed along the southern coast of New Zealand's North Island as well. But the arrival of humans likely drove the species back to less accessible habitats where it was not as easy to take the penguins for food.



Foraging behaviour

Until recently nothing was known about the behaviour of Tawaki at sea. At the same time, the penguins spend up to 80% of their lives at sea, highlighting how important it is to know more about their marine ecology.

NEW FACTS: Since 2014, the Tawaki Project is studying the penguins' at-sea movements and dive behaviour with GPS dive loggers and found that the birds' foraging ranges vary greatly depending on where they breed. While raising chicks, penguins from the West Coast generally forage between 20 and 40 km offshore, while in Milford Sound the birds stay within the fjord and very close to their nest sites. The deepest dive recorded in tawaki so far is 100 m although the birds likely can go deeper than that.



Diet

There is only limited information about what Tawaki eat. A diet study conducted in the late 1980s found that the birds were mainly eating squid (85%), followed by krill (13%), and fish (2%).

NEW FACTS: More recently the Tawaki Project conducted an analysis of prey DNA in penguin scats and found that **fish dominated the penguins' diet** (60%), while squid (15%), krill (13%) and, surprisingly, jellyfish (8%) made up the rest of the penguins' food load.

Reproduction

Tawaki return from their winter migration in June and July to pair up and establish nests in dense forest habitat, rock crevices or caves. Two eggs are laid in late July and early August each year. Chicks hatch in September. Like all crested penguins, Tawaki usually lose one of their eggs or chicks early on and raise only one chick per pair.

NEW FACTS: While working in Milford Sound, the Tawaki Project documented several cases where the penguins indeed raised both of their chicks which suggests excellent foraging conditions for the birds and may explain why there are many more penguins than previously thought.

