

Has a Warming Ocean Caused a shift in the diet of the NZ sea lion / Pakake

The New Zealand sea lion is one of the rarest sea lions in the world!

THE QUESTION:

Over the past decade, have New Zealand sea lions transitioned from feeding on coastal, kelp-associated species to more pelagic prey associated with warming waters?

WHY SEA LION DIETS ?

Pakake numbers are increasing since their recolonisation back to mainland NZ, its important for us to understand what and where they're foraging to support their return and aid in an increasing population

HOW?

Analysing Pakake scats and regurgitates allows us to see which species they have been eating. Using the isotopes $\delta^{15}\text{N}$ and $\delta^{13}\text{C}$ allows us to see where sea lions are foraging (coastal/kelp forests vs. pelagic/deep ocean) and the trophic level of their prey.

After being hunted to near extinction, Pakake are slowly recolonising parts of the mainland coast. Small breeding populations have begun returning to areas of the South Island and Otago Peninsula.



**Pakake Breeding
locations circled in red**



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