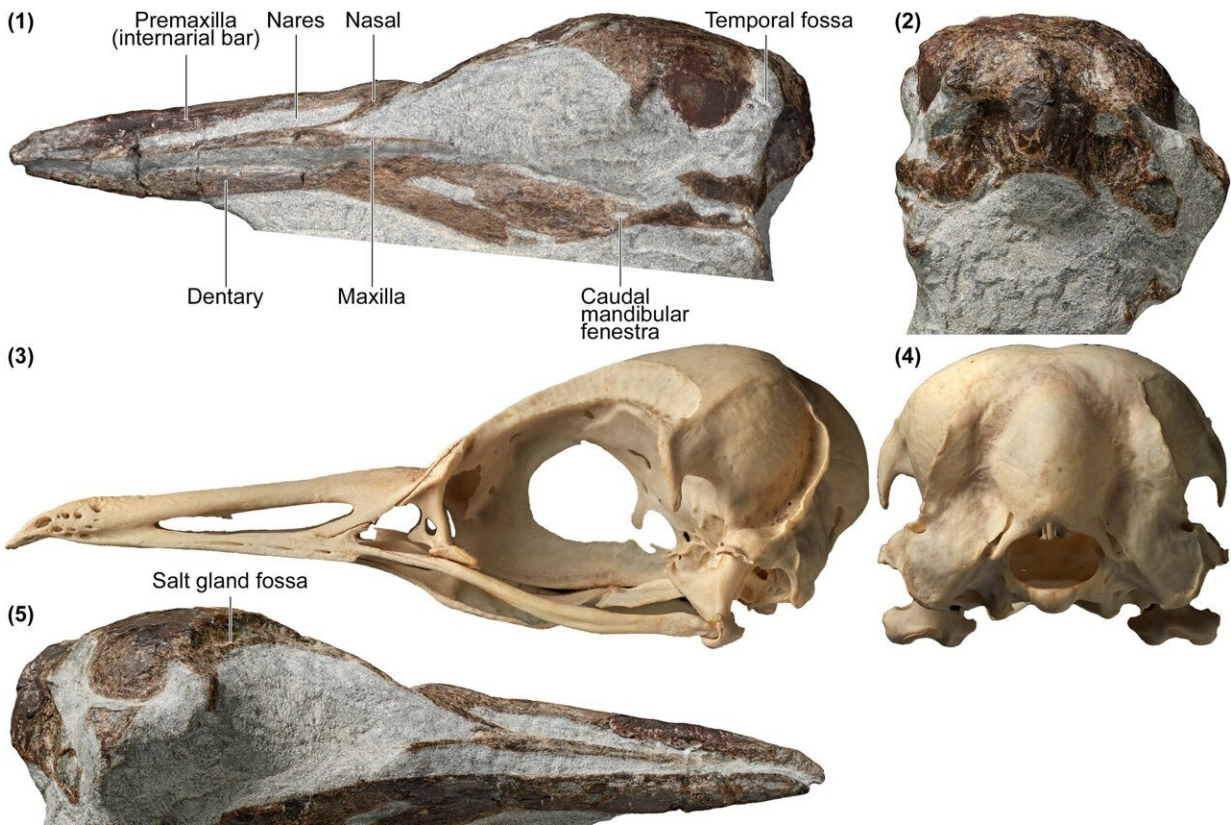


Oldest known extinct little penguin fossil skull found in New Zealand

July 7 2023, by Bob Yirka



Skull of *Eudyptula wilsonae* n. sp., specimen NMNZ S.048854, presented alongside a skull from *Eudyptula m. minor* Forster, Reference Forster1781, specimen NMNZ S.000863, for comparison. Left lateral view: (1) NMNZ S.048854; (3) NMNZ S.000863. Caudal view: (2) NMNZ S.048854; (4) NMNZ S.000863. Right lateral view: (5) NMNZ S.048854. Dorsal view: (6) NMNZ S.048854; (8) NMNZ S.000863. (7) Detail of nasal region of NMNZ S.048854 identifying fused frontal-nasal suture. Credit: *Journal of Paleontology* (2023). DOI: 10.1017/jpa.2023.30

A group of paleontologists, one with Massey University, two with the Museum of New Zealand Te Papa Tongarewa and the fourth from the Bruce Museum, has found the fossilized remains of the oldest known extinct little penguin. In their paper published in the *Journal of Paleontology*, the group describes where and how the fossils were found and how the little birds fit in with modern little penguins.

The two fossilized skulls were found by the team in the southern Taranaki region of New Zealand's North Island, in the Tangahoe Formation. Testing showed both were of the same [ancient species](#) and were the first of their kind to be found. The team named them *Eudyptula wilsonae*, which translates to Wilson's little penguin. One of the skulls was from an adult, while the other was from a juvenile. Both were in good enough condition to allow for comparison with modern little penguins (*kororā*), the smallest extant species of penguin.

The research team admits that they were not able to say for sure how big the ancient species might have been, but by comparing to their modern ancestors, they guess they were likely approximately 35 centimeters tall and likely weighed just under a kilogram.

In [modern times](#), multiple species of little penguins live in Australia, New Zealand and Tasmania. Little work has been done, however, to trace their lineage. So it is not known if the newly found species is a direct descendant. Due to their similarities, the research team suspects they likely are.

They also suggest it is a testament to the remarkable ability of the birds to adapt to a changing world without having to undergo much change themselves—the [environment](#) around them has changed dramatically over the years, the team notes. Also, modern little penguins now occupy

the broadest range of territory of any penguin.

The newly found [species](#), they note, was alive approximately 3 million years ago and dispersed over the course of the Pleistocene—the find also confirms the little penguins were alive during the Neogen period. The research team suggests that their find also shows a Zealandian origin for little penguins in general.

More information: Daniel B. Thomas et al, Pliocene fossils support a New Zealand origin for the smallest extant penguins, *Journal of Paleontology* (2023). [DOI: 10.1017/jpa.2023.30](https://doi.org/10.1017/jpa.2023.30)

© 2023 Science X Network

Citation: Oldest known extinct little penguin fossil skull found in New Zealand (2023, July 7) retrieved 3 May 2024 from <https://phys.org/news/2023-07-oldest-extinct-penguin-fossil-skull.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.