

World's rarest whale may have washed up on New Zealand beach, possibly shedding clues on species

July 16 2024, by CHARLOTTE GRAHAM-McLAY



In this photo provided by the Department of Conservation rangers Jim Fyfe and Tūmai Cassidy walk alongside what is believed to be a rare spade-toothed whale, on July 5, 2024, after its was found washed ashore on a beach near Otago, New Zealand. Credit: Department of Conservation via AP

Spade-toothed whales are the world's rarest, with no live sightings ever recorded. No one knows how many there are, what they eat, or even where they live in the vast expanse of the southern Pacific Ocean. However, scientists in New Zealand may have finally caught a break.

The country's conservation agency said Monday a creature that washed up on a South Island beach this month is believed to be a spade-toothed whale. The five-meter-long creature, a type of beaked whale, was identified after it washed ashore on an Otago beach from its color patterns and the shape of its skull, beak and teeth.

"We know very little, practically nothing" about the creatures, Hannah Hendriks, marine technical adviser for the Department of Conservation, said. "This is going to lead to some amazing science and world-first information."

If the cetacean is confirmed to be the elusive spade-toothed whale, it would be the first specimen found in a state that would permit scientists to dissect it, allowing them to map the relationship of the whale to the few others of the species found, learn what it eats and perhaps lead to clues about where they live.

Only six other spade-toothed whales have ever been pinpointed, and those found intact on New Zealand's North Island beaches were buried before DNA testing could verify their identification, Hendriks said, thwarting any chance to study them.

This time, the beached whale was quickly transported to [cold storage](#) and researchers will work with local Māori iwi (tribes) to plan how it will be examined, the conservation agency said.

New Zealand's Indigenous people consider whales a taonga—a sacred treasure—of cultural significance. In April, Pacific Indigenous leaders

signed a treaty recognizing whales as "legal persons," although such a declaration is not reflected in the laws of participating nations.



In this photo provided by the Department of Conservation, rangers inspect what is believed to be a rare spade-toothed whale on July 5, 2024, after it was found washed ashore on a beach near Otago, New Zealand. Credit: Department of Conservation via AP

Nothing is currently known about the whales' habitat. The creatures deep-dive for food and likely surface so rarely that it has been impossible to narrow their location further than the southern Pacific Ocean, home to some of the world's deepest ocean trenches, Hendriks said.

"It's very hard to do research on marine mammals if you don't see them at sea," she said. "It's a bit of a needle in a haystack. You don't know where to look."

The conservation agency said the [genetic testing](#) to confirm the whale's identification could take months.

It took "many years and a mammoth amount of effort by researchers and local people" to identify the "incredibly cryptic" mammals, Kirsten Young, a senior lecturer at the University of Exeter who has studied spade-toothed whales, said in emailed remarks.

The fresh discovery "makes me wonder—how many are out in the deep ocean and how do they live?" Young said.

The first spade-toothed whale bones were found in 1872 on New Zealand's Pitt Island. Another discovery was made at an offshore island in the 1950s, and the bones of a third were found on Chile's Robinson Crusoe Island in 1986. DNA sequencing in 2002 proved that all three specimens were of the same species—and that it was one distinct from other beaked whales.

Researchers studying the mammal couldn't confirm if the species went extinct. Then in 2010, two whole spade-toothed whales, both dead, washed up on a New Zealand beach. Firstly mistaken for one of New Zealand's 13 other more common types of beaked whale, [tissue samples](#)—taken before they were buried—later revealed them as the enigmatic species.

New Zealand is a whale-stranding hotspot, with more than 5,000 episodes recorded since 1840, according to the Department of Conservation.

© 2024 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.

Citation: World's rarest whale may have washed up on New Zealand beach, possibly shedding clues on species (2024, July 16) retrieved 16 July 2024 from <https://phys.org/news/2024-07-world-rarest-whale-zealand-beach.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.