

# Scientists find that dolphin in Australian waters is a new species

October 29 2013

---



Two individual animals from an as-of-yet unnamed species of humpback dolphin are shown in the waters off northern Australia. Credit: Guido Parra

A species of humpback dolphin previously unknown to science is swimming in the waters off northern Australia, according to a team of researchers working for the Wildlife Conservation Society, the American Museum of Natural History, and numerous other groups that contributed to the study.

To determine the number of [distinct species](#) in the family of humpback dolphins (animals named for a peculiar hump just below the dorsal fin), the research team examined the evolutionary history of this family of

marine mammals using both physical features and genetic data. While the Atlantic humpback dolphin is a recognized species, this work provides the best evidence to date to split the Indo-Pacific humpback dolphin into three species, one of which is completely new to science.

"Based on the findings of our combined morphological and genetic analyses, we can suggest that the humpback dolphin genus includes at least four member species," said Dr. Martin Mendez, Assistant Director of WCS's Latin America and the Caribbean Program and lead author of the study. "This discovery helps our understanding of the [evolutionary history](#) of this group and informs conservation policies to help safeguard each of the species."

The authors propose recognition of at least four species in the humpback dolphin family: the Atlantic humpback dolphin (*Sousa teuszii*), which occurs in the eastern Atlantic off West Africa; the Indo-Pacific humpback dolphin (*Sousa plumbea*), which ranges from the central to the western Indian Ocean; another species of Indo-Pacific humpback dolphin (*Sousa chinensis*), which inhabits the eastern Indian and western Pacific Oceans; and a fourth *Sousa* species found off northern Australia yet to be named (the formal adjustment of the naming and number of species occurs through a separate and complementary process based on these findings).



A new as-of-yet unnamed species of humpback dolphin is shown off the coast of northern Australia. Credit: Guido Parra

"New information about distinct species across the entire range of humpback dolphins will increase the number of recognized [species](#), and provides the needed scientific evidence for management decisions aimed at protecting their unique genetic diversity and associated important habitats," said Dr. Howard Rosenbaum, Director of WCS's Ocean Giants Program and senior author on the paper.

Working to bring taxonomic clarity to a widespread yet poorly known group of dolphins, the authors assembled a large collection of physical data gathered mostly from beached dolphins and museum specimens. Specifically, the team examined features from 180 skulls covering most of the distribution area of the group in order to compare morphological characters across this region.



Two dolphins from the as-of-yet unnamed species of humpback dolphin are shown off northern Australia. The discovery will help conservationists and decision makers to formulate new policies to safeguard these marine mammals. Credit: Guido Parra

The researchers also collected 235 tissue samples from animals in the same areas, stretching from the eastern Atlantic to the western Pacific Oceans, analyzing both mitochondrial and nuclear DNA for significant variations between populations.

Provided by Wildlife Conservation Society

Citation: Scientists find that dolphin in Australian waters is a new species (2013, October 29) retrieved 20 March 2024 from <https://phys.org/news/2013-10-scientists-dolphin-australian-species.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.