

Australian blue whales now call Antarctica home

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(Phys.org)—New findings suggest that the ecology of blue whales (*Balaenoptera musculus*) – the largest living animal – has recently

changed due to human activities. A team lead by researchers at Macquarie University and Flinders University unexpectedly found, in the Antarctic, individuals from the pygmy blue whale subspecies (*B. m. breviceauda*) that inhabits Australian waters, and hybrids between Australian blue whales and the Antarctic blue whale subspecies (*B. m. intermedia*).

Catherine Attard, a PhD candidate at Macquarie University researching blue whale genetics explains, "Our genetic analyses are based on samples collected since 1990. Previous analyses are based on non-genetic, biological data from historical whaling records, which span from 1913 to 1973. Our [genetic data](#) unexpectedly found a higher proportion of pygmy [blue whales](#) in the Antarctic than the whaling catch data."

"This suggests either that climate change has recently pushed Australian whales to colder climates, or that decreases in population size from historical whaling has changed the ecology of the subspecies," says Dr Luciana Möller of Flinders University.

"It could also be due to differences in the methods used to analyse genetic and non-genetic data. However, impacts from climate change or whaling are corroborated by our other genetics analyses that examine evolutionary, rather than recent, timescales", adds Prof Luciano Beheregaray of Flinders University.

Blue whales are currently endangered because of 20th century whaling. These new findings provide crucial information for their conservation. For example, monitoring of [population numbers](#) should now consider that not all blue whales in the Antarctic are Antarctic blue whales. These findings are reported in a paper published in the prestigious journal [Molecular Ecology](#).

More information: The paper has been published online (ahead of

print publication) and is accessible at [onlinelibrary.wiley.com/doi/10...
1/mec.12025/abstract](https://onlinelibrary.wiley.com/doi/10.1111/mec.12025/abstract)

Provided by Macquarie University

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