

# New research reveals giant squid exist as a single species

March 21 2013

---



Credit: Mark Norman

New research published today in *Proceedings of the Royal Society B* reveals that the giant squid exists as a single species, containing almost no genetic variation – an observation unique among studied marine organisms.

An international team of researchers led by the University of

Copenhagen have discovered that no matter where in the world they are found, and despite differing in appearance, the fabled animals are so closely related that they represent a single, [global population](#).

Little was previously known about the 10 armed invertebrate, believed to grow up to 13 metres long and weigh over 900kg. The [giant squid](#) is extremely rarely seen except when its remains are washed ashore.

In 1857, Japetus Steenstrup realised that it was this beast that had given rise to centuries of sailors' tales, and become immortalized by writers such as Jules Verne.

Less than a year ago the researchers captured the first ever film of a giant squid in the wild. After 100 missions and 400 hours of filming, the footage was taken from a small submarine off the Japanese island of Chichi Jima, at a depth of 630m.

One of the authors, PhD student Inger Winkelmann, said; "We have analysed DNA from the remains of 43 giant squid collected from all over the world. The results show, that the animal is nearly genetically identical all over the planet, and shows no evidence of living in geographically structured populations.

"One possible explanation for this is that although evidence suggests the adults remain in relatively restricted geographic regions, the young that live on the oceans' surfaces must drift in the currents globally. Once they reach a large enough size to survive the depths, we believe they dive to the nearest suitable [deep waters](#), and begin the cycle again.

"Nevertheless, we still lack a huge amount of knowledge about these creatures. How big a range do they really inhabit as adults? Have they been threatened by things such as [climate change](#), and the populations of their natural enemies, such as the sperm whale? And at an even more

basic level... how long do they live and how quickly do they grow?"

Professor Tom Gilbert, who led the research, said: "It's been a fantastic experience to work with the giant squid because of its legendary status as a sea monster. But despite our findings I have no doubt that the myths and legends will continue."

**More information:** Winkelmann, I. et al. Mitogenome diversity and population structure of giant squid *Architeuthis*: genetics sheds light on one of the most enigmatic marine species, *Proceedings of the Royal Society B*. [dx.doi.org/10.1098/rspb.2013.0273](https://doi.org/10.1098/rspb.2013.0273)

Provided by The Royal Society

Citation: New research reveals giant squid exist as a single species (2013, March 21) retrieved 28 April 2024 from <https://phys.org/news/2013-03-reveals-giant-squid-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.