

Blainville's beaked whales go silent at the surface

July 27 2011, by Deborah Braconnier

A new study published in the journal *Marine Mammal Science* revealed how Blainville's beaked whales go completely silent in an apparent stealth mode when they near the surface in an effort to avoid predators.

Very little was known about the beaked whales and how they communicated with each other as these whales spend most of their time deep below the ocean. Natacha Aguilar from La Laguna University and his team from the Woods Hole Oceanographic Institution and Aarhus University took the first steps in discovering more about these whales.

The research team attached suction cups fitted with electronic listening devices to eight beaked whales and recorded their communication and sounds for a total of 102 hours. This is the first study to record the sounds of beaked whales but it also led to another first.

Because these whales spend most of their time in the ocean depths, the researchers recorded communication between the whales at a depth of 900m. This is the deepest that communication recordings have ever been captured for a mammal.

What they discovered was that the Blainville's beaked whale goes silent when it reaches 170m or above. Even though a climb to the surface from this depth can take as long as 19 minutes, the whales do not communicate with each other at all. However, once they descend and pass that 170m mark, they are once again full of chatter.

At depths of 450m, the researchers recorded a series of echolocation

clicks that were interspersed with buzzes, tonal whistles and repeated clicks. These whistles and repeated clicks, which the researchers called ‘rasps,’ are something that has never been recorded prior to this study and the researchers believe the whales use them to help coordinate their movements while they hunt.

The apparent communication silence, or stealth mode, the Blainville’s beaked whales use seems to be a way to avoid predators. Orcas, or killer whales, stay near the surface and prey on smaller [whales](#) so this act of silence is a way to stay undetected as the [beaked whales](#) are unable to outswim orcas.

More information: [DOI: 10.1111/j.1748-7692.2011.00495.x](https://doi.org/10.1111/j.1748-7692.2011.00495.x)

© 2010 PhysOrg.com

Citation: Blainville’s beaked whales go silent at the surface (2011, July 27) retrieved 20 March 2024 from <https://phys.org/news/2011-07-blainvilles-beaked-whales-silent-surface.html>

<p>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.</p>
--