

# Grey seals discovered clapping underwater to communicate

February 3 2020, by Silvia Dropulich

---



Wild grey seal. Credit: Dr Ben Burville

Marine mammals like whales and seals usually communicate vocally

using calls and whistles.

But now a Monash University-led international study has discovered that wild grey seals can also clap their flippers underwater during the [breeding season](#), as a show of strength that warns off competitors and advertises to potential mates.

This is the first time a seal has been seen clapping completely underwater using its front flippers.

"The discovery of 'clapping seals' might not seem that surprising, after all, they're famous for clapping in zoos and aquaria," said lead study author Dr. David Hocking from Monash University's School of Biological Sciences.

"But where [zoo animals](#) are often trained to clap for our entertainment—these grey seals are doing it in the wild of their own accord."

The research, published today in the journal *Marine Mammal Science*, is based on [video footage](#) collected by naturalist Dr. Ben Burville, a Visiting Researcher with Newcastle University, UK.

The footage—which took Dr. Burville 17 years of diving to catch on film—shows a male grey seal clapping its paw-like flippers to produce a gunshot-like 'crack!' sound.

"The clap was incredibly loud and at first I found it hard to believe what I had seen," Dr. Burville said.

"How could a seal make such a loud clap underwater with no air to compress between its flippers?"

"Other marine mammal species can produce similar types of percussive sound by slapping the water with their body or tail," said Associate Professor Alistair Evans from Monash University, who was also involved in the study.

The loud high-frequency noise produced by clapping cuts through background noise, sending out a clear signal to any other seals in the area.

"Depending on the context, the claps may help to ward off competitors and/or attract potential mates," Dr. Hocking said.

"Think of a chest-beating male gorilla, for example. Like seal claps, those chest beats carry two messages: I am strong, stay away; and I am strong, my genes are good."

Dr. Hocking said clapping seals demonstrates just how much there still is to learn about the animals living around us.

Clapping appears to be an important social behaviour for grey [seals](#), so anything that disturbed it could impact breeding success and survival for this species.

"Human noise pollution is known to interfere with other forms of [marine mammal](#) communication, including whale song," Dr. Hocking said.

"But if we do not know a behaviour exists, we cannot easily act to protect it."

Understanding the animals around us better may just help us to protect them, and their way of life.

**More information:** David P. Hocking et al, Percussive underwater

signaling in wild gray seals, *Marine Mammal Science* (2020). [DOI: 10.1111/mms.12666](https://doi.org/10.1111/mms.12666)

Provided by Monash University

Citation: Grey seals discovered clapping underwater to communicate (2020, February 3)  
retrieved 9 April 2024 from <https://phys.org/news/2020-02-grey-underwater.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>
--