

# Study shows, for the first time, that porpoises flee from and stop feeding when disturbed by heavy ship noise

February 21 2018

---



Signe Sveegaard and Siri Elmegaard from the Department of Bioscience, Aarhus University, fit electronic tags on a porpoise caught in a pound net. Credit: Lis Bach, AU

Porpoises communicate with each other using sounds. Therefore, they are highly sensitive to noise, such as ship noise. And the Danish belts and sounds are some of the most heavily trafficked waters in the world.

An international research team led by researchers from Aarhus University successfully fitted [electronic tags](#) on the backs of seven porpoises with the aim to obtain insight into how they react to disturbance of normal [living conditions](#) by ship noise. The groundbreaking data are published today in the journal *Proceedings of the Royal Society B* with post doc Danuta Wisniewska as main author.

## **A swimming employee**

For many years, the research team headed by senior researcher Jonas Teilmann, Department of Bioscience, Aarhus University, has cooperated closely with Danish pound net fishermen as porpoises are sometimes accidentally caught in pound nets. A fast phone call to the researchers and their speedy response ensure that the team can be at the site within a few hours. The [porpoise](#) is lifted out of the net and into the fishing boat where its sex, size and health are determined before the new it is fitted with an electronic tagging device by means of suction cups.

The electronic tags record the sounds from the animals and noise from [ships](#), and allow the researchers to see when the porpoises feed and the depth at which they stay. The extensive data makes it possible, for the first time, to see how ship noise affects the movement and feeding of the porpoises.



The electronic tags, easily fitted on the back of a porpoise by suction cups, fall off after approx. 20-40 hours of use. Credit: Lis Bach, AU

"When the ship noise exceeds a certain level, the porpoises stop feeding. At very high sound levels, the animals dive to the bottom and move quickly along, and they cease emitting the biosonar clicking sounds that they use when searching for food," says Jonas Teilmann.

The porpoise is Denmark's smallest cetacean, and researchers have long been concerned about how its living conditions are influenced by the intensified human activity at sea. "Our measurements show that the porpoises do respond to heavy ship [noise](#). It is still too early to say, though, what this means to the well-being of the porpoises, their production of offspring and, in the long term, their survival," says

Professor Peter Teglberg Madsen, Aarhus University, who is one of the researchers behind the sensational findings.



A porpoise with fitted electronic tags is released after a few minutes on the boat.  
Credit: Lis Bach, AU

**More information:** Danuta Maria Wisniewska et al. High rates of vessel noise disrupt foraging in wild harbour porpoises ( *Phocoena phocoena* ), *Proceedings of the Royal Society B: Biological Sciences* (2018). [DOI: 10.1098/rspb.2017.2314](https://doi.org/10.1098/rspb.2017.2314)

Provided by Aarhus University

Citation: Study shows, for the first time, that porpoises flee from and stop feeding when disturbed by heavy ship noise (2018, February 21) retrieved 27 April 2024 from <https://phys.org/news/2018-02-porpoises-disturbed-heavy-ship-noise.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.