

Louder petrol engine noise disrupts whale resting and nursing

November 11 2021



Credit: CC0 Public Domain

Whale-watch vessels with louder petrol engines significantly disrupt short-finned pilot whale resting and nursing, according to a study published in *Scientific Reports*.



Previous research has found that <u>noise</u> produced by whale-watch vessels can affect whale behavior. However, the impact of engine noise levels on toothed whale behavior has been unclear and whale-watch <u>vessel</u> noise levels are not currently regulated.

Patricia Arranz and colleagues used drones to observe the behavior of short-finned pilot whale mother and calf pairs off the coast of Tenerife, Spain. 13 pairs were observed without a vessel present while 23 were observed as a whale-watch vessel with either a louder <u>petrol engine</u> or a quieter electric engine slowly passed them from 60 meters away, in compliance with Canary Islands whale-watching guidelines. The researchers found that compared to those not approached by a vessel, mothers who were approached by the vessel with the petrol engine spent on average 29% less time resting and 81% less time nursing their calves. No significant reductions in resting or nursing were observed among whales approached the vessel with the quieter electric engine, compared to those not approached by a vessel. The researchers suggest that decreases in resting and nursing could increase the energy consumption of mothers and reduce calf energy intake, with potential negative implications for calf survival.

The findings demonstrate that, even if whale-watch vessels comply with current guidelines, louder engines can have a greater impact on whale <u>behavior</u>. The authors suggest that the noise produced by whale-watch vessels be minimized and that whale-watch guidelines specify maximum <u>engine</u> noise levels, in order to limit disturbance to whales.

More information: Patricia Arranz, Decreased resting and nursing in short-finned pilot whales when exposed to louder petrol engine noise of a hybrid whale-watch vessel, *Scientific Reports* (2021). DOI: 10.1038/s41598-021-00487-0. www.nature.com/articles/s41598-021-00487-0



Provided by Nature Publishing Group

Citation: Louder petrol engine noise disrupts whale resting and nursing (2021, November 11) retrieved 12 May 2024 from <u>https://phys.org/news/2021-11-louder-petrol-noise-disrupts-whale.html</u>

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.