

OPEN LETTER

30 June 2026

To: Heiko Buch-Illing, Marine Biologist and Head of Research, Fjord&Bælt, Kerteminde

To: Carl Kinze, Whale Expert, Statens Naturhistoriske Museum, Copenhagen

Re: Your Public Statements on the Humpback Whale Hartwin and the Future of Cetacean Strandings in Danish Waters

Dear Dr. Buch-Illing and Dr. Kinze,

We have read your recent public statements regarding the humpback whale Hartwin with a mixture of frustration and genuine bewilderment. In interviews with Newstime, DPA, and Danish radio, you told the public in no uncertain terms that Hartwin will die, that there is no chance, that there will be no rescue, that the whale should be left to strand and decompose so samples can be taken, that more humpback whales will come because the population is growing, and that all of this is simply nature taking its course.

We write this open letter because these statements, coming from scientists at two of Denmark's most prominent marine research institutions, are not just disappointing. They are factually incomplete, scientifically selective, and functionally indistinguishable from the arguments used by commercial whaling nations to justify the killing of cetaceans. The public, the media, and your own institutions deserve to hear the other side.

You Appear Unaware That Large Whales Have Been Successfully Rescued

Dr. Buch-Illing, you told the press there will be no rescue operation like the one for Timmy, describing the German attempt as a mistake in which the animal was tortured, and expressing hope that Hartwin would stay in Denmark so he would not have to go through the same thing.

What you did not tell the press is that large whale rescues have been conducted successfully, repeatedly, across decades, in multiple countries, and documented in peer-reviewed scientific literature that is readily available to anyone working in your field.

Gulland et al. (2008) documented the rescue of two humpback whales in the Sacramento River, California, which included the first successful antibiotic darting of free-swimming humpback whales from a boat. The freshwater skin damage these animals had sustained reversed within 24 hours of returning to salt water, and both survived. Thalmann et al. (2008), published in *Marine Mammal Science*,

documented the successful refloating of stranded sperm whales in Tasmania using a net-tow method after 96 hours of stranding, with animals weighing over 30 tonnes each. Olhasque et al. (2025), published in *Animals* just three months before the German Timmy case began, documented the rescue of a juvenile humpback trapped behind a tidal power station in Brittany using non-invasive methods, completed within approximately two days. The Humphrey cases in San Francisco Bay in 1985 and 1990 demonstrated that a humpback whale deep inside an enclosed waterway can be guided over 130 kilometres back to open sea using underwater acoustic playback, and Humphrey was resighted alive and healthy in subsequent years. The NRE Tasmania 2022 Cetacean Incident Manual remains the most comprehensive published rescue protocol in the world, and the Sharp et al. (WHOI-2024-05) workshop report from Woods Hole documents the strap method for refloating large cetaceans.

None of this appeared in your public statements. You offered the public a single option: death. When scientists with your platforms tell the press that rescue is impossible while omitting an entire body of published evidence to the contrary, the public is receiving an incomplete picture. We find it difficult to believe you are unaware of all of this literature, which raises the question of why it was not mentioned.

For Marine Scientists, You Seem Remarkably Unaware of What a Living Whale Is Worth

Dr. Buch-Illing, your recommendation that the whale should be left to decompose so experts can take samples reflects a perspective that places zero value on a living whale beyond its eventual carcass. We understand the scientific value of necropsy data, but we are genuinely surprised that scientists at institutions like Fjord&Bælt and the Natural History Museum would present that as the only consideration worth mentioning.

A comprehensive valuation framework built on peer-reviewed research by Chami et al. at the IMF (2022), Roman et al. (2016, 2025), Freitas et al. (2025), Lavery et al. (2010, 2014), Gilbert et al. (2023), and Monreal et al. (2024) estimates that a single living humpback whale provides over \$8.6 million in ecosystem services at the social cost of carbon, and over \$670,000 even at the conservative EU ETS market price. A rescued female humpback, including her reproductive value, represents over \$83 million in lifetime ecosystem services. These figures account for phytoplankton-mediated carbon capture through the whale pump mechanism, ocean nutrient cycling of nitrogen, phosphorus, iron, and trace metals, fisheries productivity, and ecotourism revenue.

To put a finer point on it: one humpback whale facilitates the capture of approximately 446 tonnes of CO₂ per year through phytoplankton fertilisation, at zero operating cost. The equivalent direct air capture technology would cost between \$111,500 and \$267,600 annually. A whale rescue typically costs \$10,000 to \$100,000, which means the return on investment exceeds 7 to 1 at market carbon prices and 86 to 1 at the social cost of carbon.

Denmark invests billions in carbon capture and green technology. Your recommendation, in effect, is to let one of the most efficient natural carbon sequestration systems on the planet wash up on a beach so you can collect tissue

samples. That is not a scientifically balanced position; it is a preference for necropsy over conservation, and the public should hear it described that way.

You Are Using the Same Logic as Whaling Nations

Dr. Kinze, you told Danish radio that the humpback whale population in the North Atlantic is steadily growing, that Denmark is seeing more and more humpback whales, and that young animals searching for food are straying into unfamiliar waters. We would like you to consider how closely this framing mirrors the arguments used by Iceland and the Faroe Islands to justify commercial whaling and drive hunts.

Iceland's official position, stated in its 2011 response to the US Pelly Amendment certification, is that North Atlantic whale stocks are "abundant and in very good health" and that harvesting them is "clearly sustainable." The Faroese position on pilot whale drive hunts rests on the same foundation: the population is large, therefore removals are acceptable. Your public statements use the identical logic, only in reverse. Instead of arguing that abundance justifies killing, you are arguing that abundance justifies inaction. The population is growing, therefore we do not need to help this animal. More will come. This one can die.

The scientific structure of the argument is the same, and it is just as flawed coming from a conservation institution as it is coming from a whaling ministry.

What you also did not tell the public is that the increasing appearance of humpback whales and other large cetaceans in the Baltic and North Sea is not purely a sign of population recovery. It is also a potential indicator of shifting prey distribution driven by climate change, ocean warming, and anthropogenic disruption of migratory routes. When young whales end up in the Baltic, that is not necessarily because there are too many of them. It may be because their traditional feeding grounds are changing, because prey species are moving, or because oceanographic conditions are pushing them into waters they would not normally enter. Framing these events as simply nature taking its course glosses over the anthropogenic drivers that may well be contributing to them, and a marine biologist of your standing should be the first person making that point, not the last.

Increasing Numbers Do Not Mean the Population Is Safe

This is perhaps the most troubling gap in your public statements, and frankly the hardest to understand coming from scientists at your level.

Mitchell and Young (2026), published this month in *Frontiers in Marine Science*, demonstrate that broad abundance estimates can mask the vulnerability of distinct sub-populations. Their review establishes that species assessed as abundant at the regional level may contain demographically independent populations (DIPs) whose survival depends entirely on internal recruitment rather than immigration from the wider population. They cite humpback whales explicitly as a species where individuals can share the same geographic waters while remaining demographically and genetically distinct, because of site fidelity and migratory connectivity. Hartwin may belong to a specific DIP whose loss would not be compensated by the overall recovery of the species, and you cannot know whether that is the case without the

kind of genetic and diagnostic assessment that the Danish protocol does not provide for.

Denmark saw this principle demonstrated in the worst possible way in February, when an entire pod of six juvenile male sperm whales stranded and died off Fanø. Under the framework Mitchell and Young describe, that was not simply the loss of six animals from a large population. It was potentially the loss of an entire social unit from a specific demographically independent population, carrying unique genetic lineages and possibly socially learned behaviours that cannot be replaced by the existence of other sperm whales elsewhere in the North Atlantic. The Beredskabsplan made no attempt to save them, the published peer-reviewed precedent for sperm whale refloating (Thalmann et al. 2008) was not applied, and nobody from Fjord&Bælt or the Natural History Museum told the press that rescue was even possible.

For scientists who work daily with marine mammals, the finding that total abundance does not guarantee long-term sustainability should not come as a surprise. It is a foundational concept in population biology, so its absence from your public statements is concerning.

We are not asking you to guarantee that Hartwin can be saved, because rescue is uncertain by nature. What we are asking is that you stop telling the public it is impossible when the published literature says otherwise, that you acknowledge the ecosystem value of living whales alongside the scientific value of dead ones, that you stop using population recovery as a reason to do nothing when the peer-reviewed evidence says abundance alone cannot assess sustainability, and that you consider whether your public role as Denmark's go-to whale experts carries a responsibility to present the full scientific picture rather than only the part that aligns with the existing policy of non-intervention.

The Frankfurter Rundschau quoted you, Dr. Buch-Illing, as saying you do not think Hartwin will be the last humpback whale Denmark sees this year. We suspect you are right. Denmark will face this situation again, and again, and the question is whether Danish marine science will meet it with the full range of evidence-based options or whether the answer will always be the same: there is no chance, he is going to die, leave him to decompose.

We believe Denmark's whales, and Denmark's public, deserve better than that.

Respectfully but firmly,

StrandedNoMore

strandednomore.org

References

- Chami, R., Cosimano, T., Fullenkamp, C., Berzaghi, F., Español-Jiménez, S., Marcondes, M., & Palazzo, J. (2022). The Value of Nature to Our Health and Economic Well-Being: A Framework with Application to Elephants and Whales. In *Economic Challenges for Europe After the Pandemic*, Springer.
- Freitas, C., et al. (2025). Impact of baleen whales on ocean primary production across space and time. *PNAS*, 122(43), e2505563122.
- Gilbert, L., Jeanniard-du-Dot, T., Authier, M., Chouvelon, T., & Spitz, J. (2023). Composition of cetacean communities worldwide shapes their contribution to ocean nutrient cycling. *Nature Communications*, 14, 5823.
- Gulland, F.M.D., et al. (2008). Eastern Pacific gray whale unusual mortality event, 1999-2000, and Sacramento River humpback whale intervention. NOAA Technical Memorandum.
- Lavery, T.J., et al. (2010). Iron defecation by sperm whales stimulates carbon export in the Southern Ocean. *Proceedings of the Royal Society B*, 277, 3527-3531.
- Lavery, T.J., et al. (2014). Whales sustain fisheries: Blue whales stimulate primary production in the Southern Ocean. *Marine Mammal Science*, 30(3), 888-904.
- Ministry of Fisheries and Agriculture of Iceland (2011). Response to Pelly Amendment Certification. Reykjavik, 8 September 2011.
- Mitchell, L. and Young, N.M. (2026). Why abundance alone cannot assess sustainability in long-finned pilot whales (*Globicephala melas*): population structure, genetic uncertainty, and management implications. *Frontiers in Marine Science*, 13:1859950.
- Monreal, P.J., et al. (2024). Organic ligands in whale excrement support iron availability and reduce copper toxicity to the surface ocean. *Communications Earth & Environment*, 5, 526.
- NRE Tasmania (2022). Cetacean Incident Manual. Department of Natural Resources and Environment, Tasmania, Australia.
- Olhasque, A., et al. (2025). Rescue of a juvenile humpback whale from the Rance Estuary, Brittany, France. *Animals*.
- Roman, J., et al. (2016). Endangered Right Whales Enhance Primary Productivity in the Bay of Fundy. *PLoS ONE*, 11(6), e0156553.
- Roman, J., et al. (2025). Migrating baleen whales transport high-latitude nutrients to tropical and subtropical ecosystems. *Nature Communications*, 16.
- Sharp, S.M., et al. (2024). Large Whale Stranding Response Workshop Report. WHOI-2024-05. Woods Hole Oceanographic Institution.
- StrandedNoMore (2026). The Economic Value of Stranded Cetaceans: A Comprehensive Valuation Framework. White paper, June 2026.
- Thalmann, S., Gales, N., Greenwood, A., and Gedamke, J. (2008). Refloating stranded sperm whales in Tasmania, 2007. *Marine Mammal Science*.