30 June 2026

To:

Martin Nielsen
Havbiolog | Havnatur og Vandkemi
Miljøstyrelsen (MST)
Tolderlundsvej 3, 5000 Odense C
Denmark

Re: Humpback Whale Hartwin - Your Response Does Not Address the Substance of Our Letter

Dear Mr. Nielsen,

Thank you for taking the time to reply. We appreciate the acknowledgement. However, we have to be direct: your response does not engage with any of the substantive points we raised, and we are writing again because the situation with Hartwin is getting worse, not better.

Our original letter cited six peer-reviewed publications that document successful large whale rescues. It identified six concrete deficiencies in the Beredskabsplan for Havpattedyr (2024). It requested both immediate veterinary attention for Hartwin and a timeline for revising the protocol. Your reply restates the existing policy of non-intervention. It does not explain why Denmark maintains this position when the published scientific evidence contradicts it. We asked why the protocol has no provision for remote drug delivery, no acoustic herding capability, no refloating methodology, and no framework for cross-border coordination. None of these questions were addressed.

We would like to raise two further points that go to the heart of Denmark's broader environmental commitments.

Denmark Invests in Climate Action but Discards One of Nature's Best Carbon Solutions

Denmark is rightly recognised as a global leader in sustainability. The country invests billions in renewable energy, carbon capture technology, and green transition. So it is difficult to understand why Denmark's marine mammal policy treats distressed whales as disposable, when the peer-reviewed literature now quantifies just how much each living whale contributes to the climate system.

A valuation framework built on research by Chami et al. (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 baleen 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. These services include phytoplankton-mediated carbon capture through the whale pump, ocean nutrient cycling of nitrogen, phosphorus, iron, and trace metals, fisheries productivity, and ecotourism revenue.

To make this concrete: one humpback whale facilitates the capture of roughly 446 tonnes of CO_2 per year through phytoplankton fertilisation. It does this at zero operating cost. The equivalent direct air capture technology would cost between $111,500 and $267,600 annually. The whale does it for free, while simultaneously recycling nutrients, supporting fisheries, generating tourism value, and producing offspring. A rescued female humpback, including her reproductive value, represents over $83 million in lifetime ecosystem services.

Meanwhile, a whale rescue operation typically costs between $10,000 and $100,000. Even at the conservative market carbon price, the return on investment exceeds 7 to 1. At the social cost of carbon, it exceeds 86 to 1.

We respectfully ask: how does discarding these animals square with Denmark's climate commitments? A country that leads the world in green transition should not be actively wasting one of the most efficient natural carbon sequestration systems in the ocean.

Abundance Does Not Mean the Population Is Safe

Your policy of letting nature take its course seems to rest on the idea that species like humpback whales are recovering, and therefore individual animals are, in effect, expendable. The science does not support this.

Mitchell and Young (2026), published in Frontiers in Marine Science this month, show that broad abundance estimates can hide the vulnerability of distinct sub-populations. Their review establishes that species assessed as abundant at the regional level may contain demographically independent populations, or DIPs, whose survival depends entirely on internal recruitment rather than immigration from the wider population.

This applies directly to humpback whales. Mitchell and Young cite humpbacks explicitly as a species where individuals can share the same waters while remaining demographically and genetically distinct, because of site fidelity and migratory connectivity. The humpback whale Hartwin, currently moving through your waters, may belong to a specific DIP whose loss would not be offset by the recovery of the broader species. You cannot know this without the kind of genetic and diagnostic assessment that your protocol currently makes no provision for.

Denmark saw this principle play out in the worst possible way earlier this year. In February, an entire pod of six juvenile male sperm whales stranded and died off Fanø. Under the framework Mitchell and Young describe, that was not just 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 somewhere else in the North Atlantic.

The Beredskabsplan made no attempt to rescue them. The published, peer-reviewed precedent for sperm whale refloating (Thalmann et al. 2008) was not considered. The protocol treated them as expendable individuals from an abundant species. The science says they were not.

We are not asking Denmark to override natural processes. We are asking Denmark to bring its marine mammal policy into line with what the science actually says. That means alignment with:

- The peer-reviewed evidence on cetacean rescue feasibility (Gulland et al. 2008, Thalmann et al. 2008, Olhasque et al. 2025, Sharp et al. WHOI-2024-05)

- The peer-reviewed evidence on cetacean ecosystem services (Chami et al. 2022, Freitas et al. 2025, Roman et al. 2025, Gilbert et al. 2023)

- The peer-reviewed evidence on population structure and sustainability (Mitchell and Young 2026)

- Denmark's own commitments under the EU Habitats Directive, ASCOBANS, and the Paris Agreement

Specifically, we repeat our requests:

1. Deploy a qualified marine mammal veterinarian to assess Hartwin, who was last sighted on 29 June in Sønderborg Bay heading towards the Flensburg Fjord.

2. Prepare a pharmaceutical protocol for remote antibiotic delivery following the methodology of Gulland et al. (2008).

3. Establish continuous monitoring and, if the whale's trajectory warrants it, acoustic escort operations.

4. Provide a timeline for a comprehensive revision of the Beredskabsplan.

We look forward to a substantive response that engages with the scientific evidence we have cited, both in this letter and in our original correspondence. Denmark leads the world in climate action. It should not be trailing the world in protecting one of the most powerful natural climate solutions swimming through its own waters.

Respectfully,

StrandedNoMore
strandednomore.org