

Dear Minister

In February 2021, our three organisations each wrote to Ole Aamodt at the Mattilsynet, raising strong concerns relating to the permit issued for the capture of 12 minke whales for auditory evoked potential (AEP) hearing tests at Vestfjord.

In June 2021, a further statement of concern, signed by 54 marine mammal scientists and veterinarians, was submitted to then-prime minister, Erna Solberg and copied to the environment minister and the Mattilsynet. (Appendix 1)

Following an incident when a minke whale, which had been caught in the nets, escaped without a trace during the night of Wednesday 16th June 2021, we posed the following questions as we were concerned that this whale might have been injured:

1. Can you please provide an update on the status of the escaped whale? Is anyone aware of this whale's welfare and is there any chance the whale may have become entangled in the nets deep underwater?
2. Will this escaped whale count as one of the 12 permitted to be caught over the test period? If not, can you please explain why not?
3. We are aware that the researchers requested a diver and ROV to examine the nets in an attempt to find out what had happened to this individual whale. Was such an inspection carried out and, if so, were any Mattilsynet personnel able to oversee it?
4. We support calls for a full site inspection and would also like to know whether the veterinarian in attendance has relevant experience handling wild cetaceans. Are they on site at all times?
5. Will the nets be retrieved, and, if so, when? The longer a net remains in the water, the greater the likelihood of entanglement of fish, bird and other marine mammal species. Further, if a net breaks apart, or comes loose from its moorings, what is the plan for addressing this? According to the *Forskrift om utøvelse av fisket i sjøen*, §78, anyone who loses or has to cut free fishing gear has a duty to search for the gear, and, if it is unable to be found, the loss must be immediately reported to the Coast Guard.

We have yet to receive a satisfactory reply and therefore, the concerns expressed last season regarding the safety and welfare of the whales targeted - as well as that of other marine life in the vicinity - remain. Indeed, we note that last season a member of a 'non-target' species, a humpback whale, found its way into the catch basin. Following confirmation that the AEP tests will resume from 18th May and run until 1st July and in light of the recent article in Fiskeribladet (attached) we would like to pose the following additional questions:

6. Following Petter Kvadsheim's recent confirmation that 'If the animal shows signs of being stressed, we will cancel the experiment'¹, we would like to ask how you propose to measure stress and at what stages in the process? We note that, in a video posted to the FFI's website, co-lead of the project Dr. Dorian Hauser admits that 'anyone who has worked with wild animals knows that when they are handled by humans, they will be stressed'.

Some whales may be stressed from an early stage simply by being trapped in the nets.



7. Will blood samples be drawn from the whales? Drawing blood is an added stressor because it requires extra handling of the whale and more needle injections apart from the AEP-testing. To our knowledge analyzing blood for any meaningful parameters regarding the whale's stress levels will take time, and will not be useful for live monitoring of the welfare of the whale. Is drawing blood approved by Mattilsynet as a part of the experiment? If yes, what parameters will be measured and why?

8. Will the other whales - including a humpback whale - that were also noted as having entered the netted off area¹ be counted against the 12?

9. Has there been an assessment of the likelihood of non-target bycatch (e.g. seabirds, fish, other marine mammals) happening and what action to take if it occurs? How will the researchers ensure that all relevant regulations on bycatch are being complied with?

10. What regulations apply to other effects on surrounding nature and other wildlife and has there been any assessment of this aspect? If any fish species are caught in the net, are the incidents and quantities being reported to the Fisheries Directorate as bycatch? We are aware that in an email from Petter Kvadsheim to the Kystverket dated 2 February 2022, it was stated that there were 'a number of curious local recreational fishermen who wanted to fish for humpback salmon along our nets, and they were allowed to do so'. Can you confirm that this take of humpback salmon (pukkellaks) complied with all fishing and environmental regulations?

11. When an unexpected situation arises (such as bycatch, or loss of gear), will this be formally reported to all relevant authorities such as the Mattilsynet, the Fisheries Directorate and Coast Guard?

¹ <https://www.ffi.no/aktuelt/nyheter/forste-sesong-med-horselsforsok-pa-vagehval-er-avsluttet>

12. Is there a full report available covering last year's season as we have only seen a brief summary?

We call for answers to these questions and for this year's experiments to be halted before any minke whales or other marine life are harmed.

Yours sincerely

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APPENDIX 1

Erna Solberg
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Ingunn Midttun Godal, CEO, Mattilsynet
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21st May 2021

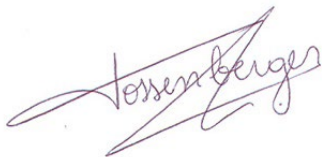
Dear Prime Minister Solberg

I write on behalf of over 50 scientists and veterinarians who have signed the below statement. We wish to express our deep concerns relating to the permit issued by the Mattilsynet for the capture of 12 minke whales for auditory evoked potential (AEP) hearing tests in Vestfjord this month.

The researchers acknowledge that this type of experiment has never previously been attempted. As detailed below, our grave concern is that the capture of minke whales and experimentation for up to 6 hours at a time has significant potential for causing injury and stress, potentially resulting in capture myopathy.

If allowed to proceed, these experiments could lead to considerable suffering for the individual whales and risk undermining Norway's reputation. If something goes wrong, questions will be asked as to why consent was granted in the first place. We strongly urge you to call for a cancellation of these trials, as they are completely unacceptable from a conservation, scientific and animal welfare point of view.

Yours sincerely



Vanesa Tossenberger
WDC Director of Policy and Science
Statement of concern

We, the undersigned, call for the planned capture and auditory evoked potential (AEP) hearing tests on minke whales off Lofoten, Norway, due to start in May 2021 to be cancelled on safety and welfare grounds.

We understand that a permit (FOTS ID: 19536) has been issued by the Norwegian Food Safety Authority for the deliberate capture of up to 12 juvenile minke whales as they migrate through this area on their way north to foraging grounds in the Barents Sea.¹

We understand that the research team plans to set a net measuring 1,300m across the strait at Vestfjord. As a whale moves into the netted area, the exit is sealed and the whale will be channelled into an enclosure, 280m long, 150m wide and 27m deep. The trapped whale will then be assessed by a veterinarian before being moved into a modified salmon cage, where it will be held fast between two rafts, with researchers both in the water and on the rafts.

The researchers estimate that the whale may be held in this position for up to six hours whilst its hearing is measured by mapping AEP via electrodes attached under the skin.

The researchers acknowledge that the whale will likely experience 'moderate distress and discomfort'. We believe this is an understatement. This process risks causing the whale considerable stress leading to panic, creating a dangerous situation for both whales and humans. The researchers plan to attach a satellite tag to each whale before release and they have permission to hold each whale in the enclosure for up to four days.

Previous attempts to catch minke whales for similar experiments have failed². There are also accounts of minke whales reacting with great force after breaking into aquaculture pens³, so it is hard to imagine how the safety of researchers can be guaranteed. We note also the recent instance of a juvenile minke whale that stranded in shallow water in the River Thames in London on the 10th May. Rescuers relocated the whale to specially designed whale re-flotation pontoons; however, the whale became distressed and managed to free itself.

The project includes provision for sedation to be used in an emergency. However, if the situation escalates to the point where a whale does require sedation, this is a risky process which is rarely attempted in cetaceans as these taxa are highly adapted for hypoxia. The use of sedation in larger, free swimming whale species is limited. It is also important to note that attempted sedation does not necessarily result in the desired effect. For example, the initial drug cocktail used in the attempted sedation at sea of a North Atlantic right whale, resulted in an increase in swim speed and boat avoidance.⁴ Our view is that it is not acceptable to consider exposing juvenile minke whales (which, in this case, are research subjects rather than facing genuine danger in the open ocean) to the risks associated with sedation.

We note that there is only provision for a single veterinarian (from Dyreparken in Kristiansand) to be present, rather than a team of vets, as would be preferable. Further, it is unclear as to what level of experience in cetacean biology and live cetacean capture is being required? We are concerned that the protocol does not require that the attending veterinarian must have specific experience in handling whales.

Our concern is that the capture of juvenile minke whales, forcible restraint and experimentation upon them for a period of up to six hours, has significant potential for causing injury and stress, potentially resulting in long-term impacts or even capture myopathy.

We understand that this study aims to learn more precisely what sounds minke whales can hear and at which frequencies, including those pertaining to seismic testing and naval sonar. The researchers acknowledge that this project is 'high risk' as AEP mapping has never been attempted on captured minke whales and certainly not on juveniles of this species. We believe there is a reason for this: the safety and welfare risks (for both humans and whales) are too great: it is simply not possible to guarantee that entrapped minke whales can be handled in a manner which is safe for all those involved.

Further, the context in which this proposed research will take place is unnatural since the subtle ecological as well as biological factors which govern the response of free-ranging minke whales to noise in the open ocean are stripped away. Thus, it is difficult to see how it can provide the researchers with meaningful data with which to make robust policy recommendations regarding exposure of this species to anthropogenic noise.

We urge this project to be stopped as it may lead to considerable trauma for the whales targeted, without contributing to useful science.

Signed by the following (alphabetical order):

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References

1. Decision regarding the use of animals in procedures - FOTS ID 19536 Establishment number 053: Forsvarets forskningsinstitutt. Processed by the Norwegian Food Safety Authority (NFSA), 21.05.2019.
2. <https://www.soundandmarinelife.org/research-categories/physical-and-physiological-effects-and-hearing/aep-audiogram-seasonal-movement-measurements-and-vocalisation-of-individual-minke-whales-in-icelandic-waters.aspx>
3. Hatlem, T. (2009, August 16). Vågehval sprenge oppdrettsmerd. Fisk. <https://fisk.no/oppdrett/476-vagehvalsprenge-oppdrettsmerd>
4. Berge, A. (2015, May 1) <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0009597>

Selected bibliography

Erbe, C., Dunlop, R., and Dolman, S. (2018a). "Effects of noise on marine mammals," in *Effects of Anthropogenic Noise on Animals*, eds H. Slabbekoorn, R. J. Dooling, A. N. Popper, and R. R. Fay (New York, NY: Springer), 277–309.

Oliver Boisseau, Tessa McGarry, Simon Stephenson, Ross Compton, Anna Christina Cucknell, Conor Ryan, Richard McLanaghan, Anna Moscrop. "Minke whales avoid a 15 kHz acoustic deterrent device." (2021) Marine Ecology Progress Series. DOI:[10.3354/meps13690](https://doi.org/10.3354/meps13690)