

**OceanCare contribution on the topic of focus of the fifteenth round of Informal Consultations of States Parties to the United Nations Fish Stocks Agreement: Implementation of an Ecosystem Approach to Fisheries**



February 24, 2020

We thank you for the invitation to contribute on the topic of focus of the 15th round of Informal Consultations of States Parties to the United Nations Fish Stocks Agreement.

Our contribution focuses on the topic of focus of the 15th round of Informal Consultations of States Parties to the United Nations Fish Stocks Agreement, "Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the High Seas, the United Nations Fish Stocks Agreement of 1995, and related instruments" (UNGA 2019) and in particular paragraphs

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160. The Agreement encourages the United States to encourage further studies, including by the Nations, on the impacts of underwater noise on fish stocks and fishing catch rates, as well as associated socio-economic effects.

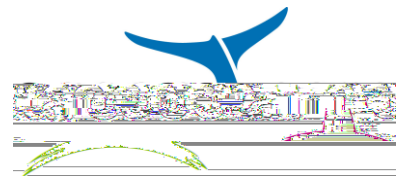
OceanCare would like to address under paragraph 10 of the invitation "in cooperation environmental factors affecting marine ecosystems..." (Section (i. d) of the 23 Jan. 2020 invitation letter).

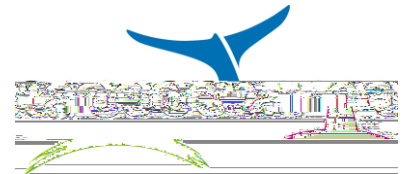
[redacted] FAO and the GFCM on the issues of ocean noise pollution and plastic pollution since 2004, 2009 and 2015, respectively. While fisheries practices have been shown to contribute to noise pollution, the impact of noise on ecosystem productivity and functioning is not well understood.

In a report commissioned by OceanCare, 115 primary scientific studies, encompassing various human-impacted marine ecosystems, including 66 invertebrates, were reviewed (Weilgart 2018).

[redacted] malformations, and slower growth rates.

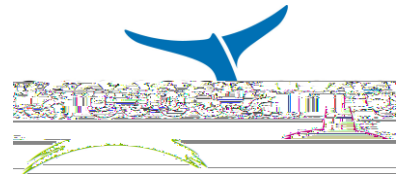
Zooplankton suffered high mortality in the presence of noise. Anatomical impacts from noise involve massive internal injuries.





5. ~~Proposed criteria for non-piercing drives such as Arneson~~  
during inappropriate four-stroke outboard engines appear less impactful to some marine species compared with two-stroke engines.
6. ~~Disorient used by st.~~ Dynamic positioning (DP) is extremely loud apply ships, among other vessels. Alternative operation or technologies should be promoted.
7. All sonars, echosounders, and multibeam should use frequencies above at least 200 kHz.
8. ~~DP~~ ~~on recreational boats upon turning on the engine should be abolished. This appears to be the case for most boats where the GPS~~  
immediate
9. ~~nd vibration through the seabed.~~  
Alternative foundations such as suction caissons or gravity-based foundations may effectively eliminate noise during construction. Quieter, new installation methods should be explored and promoted.
10. Naval sonar should also be kept away from biologically rich and productive areas. Dipping sonar seems to be particularly problematic for marine mammals and may also be for fish and invertebrates as there is no possibility of habituation.
11. Noise impacts should be incorporated into population modelling for fish and invertebrates.
12. ~~Graph~~ ~~risk~~ ~~run~~ ~~own~~ ~~of~~ ~~all~~ ~~kind~~ ~~s~~ ~~(~~ ~~including~~ ~~can~~ ~~boat~~ ~~manning~~ ~~)~~ ~~should~~ ~~be~~ ~~required~~ ~~to~~ ~~use~~ ~~the~~  
lowest
13. possible source level.
14. ~~be~~ ~~in~~ ~~the~~ ~~most~~ ~~critical~~ ~~no~~ ~~ise~~ ~~impact~~ ~~areas~~ ~~and~~ ~~to~~ ~~assess~~ ~~the~~ ~~impacts~~ ~~and~~ ~~types~~ ~~of~~ ~~mitigation~~ ~~measures~~  
to be included.
15. ~~Marine Protected Areas~~ ~~should~~ ~~be~~ ~~designated~~ ~~with~~ ~~noise~~ ~~sensitive~~ ~~buffer~~ ~~zones~~ ~~and~~ ~~buffer~~ ~~zones~~.
16. Acoustic refuges of still-quiet biologically important areas for noise-sensitive marine life should be safeguarded and protected from noise.
17. The unproven assumption that all marine life will avoid noise must be jettisoned. Many species and individuals do not consistently avoid even damaging noise if the area is important to them. Even if animals avoid noise, this is a costly behavior in terms of: a) lost foraging time; b) the energetic costs of transiting and interrupted feeding; and c) increased predation and less efficient foraging in areas that are not a small haven.

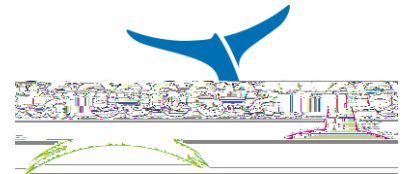
11. ~~ICCAT~~ ~~Workshop~~ ~~on~~ ~~the~~ ~~Impacts~~ ~~of~~ ~~Underwater~~ ~~Noise~~ ~~on~~ ~~Marine~~ ~~Life~~ ~~in~~ ~~the~~ ~~Atlantic~~ ~~Ocean~~ ~~and~~ ~~the~~ ~~Mediterranean~~ ~~Sea~~ ~~was~~ ~~held~~ ~~at~~ ~~FAO~~ ~~Headquarters~~ ~~in~~ ~~Rome~~ ~~(Italy)~~ ~~on~~ ~~21-25~~ ~~January~~ ~~2019~~. The main objectives of the workshop were to: i) review reported anthropogenic underwater noise effects on fish and invertebrates; ii) identify areas in the GFCM area of application where fishing is restricted but other human activities, in particular anthropogenic noise, could impact fish stocks with respective socio-economic consequences; iii) address the cooperation of the various parties on fish and fisheries, including through Environmental Impact Assessments; iv) discuss recent developments within UNCLOS in connection with noise in the context of a study on socio-economic impacts on Mediterranean fish stocks (GFCM/OceanCare 2019).



## Conclusion

The study has shown that the following are the main findings:

- 1.



## References

GFCM/OceanCare, 2019. Joint GFCM/OceanCare Workshop on Anthropogenic Underwater Noise and Impacts on Fish, Invertebrates, and Fish Resources. FAO headquarters, Rome, Italy, 21-22 February. Available at: <https://www.fao.org/faoorg/technical-meetings/detail/en/c/1194253/>

UNGA, 2010. UNGA Declaration 74/186 on sustainable fisheries, including through the 1995 Agreement for the High Seas of the United Nations Convention on the Law of the Sea, and the Group of 10 Declaration 1992 on the High Seas Convention, the 1995 Agreement on Highly Migratory Fish Stocks, and related instruments. Available at: [https://www.un.org/Depts/los/convention\\_agreements/convention\\_declarations.htm](https://www.un.org/Depts/los/convention_agreements/convention_declarations.htm)

Hydrobiological Station for Wädert, 2018. No impact of ocean noise pollution on fish and invertebrates. Available at: <https://www.oceancare.org/wp-content/uploads/2017/10/No-impact-of-ocean-noise-pollution-on-fish-and-invertebrates-2018-10-16.pdf>

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## About OceanCare:

OceanCare is a Swiss non-profit, government-independent organisation of 500 was founded in 1989 and has a strong focus on marine pollution, environmental changes, fisheries, whaling, sealing, captivity of marine mammals and public education.

OceanCare is a member of the Swiss Society for Environmental and Conservation of the United Nations (ECOSOC) and is a partner of the General Fisheries Commission for the Mediterranean (GFCM), the Convention on Migratory Species (CMS), and the UNEP/CMS Agreement on the Conservation of Migratory Species of Wild Animals (CMS/Agreement).

UNEP/MAP. OceanCare has also been accredited as a Major Group to the United Nations Environment Assembly (UNEA), which is the highest level of UNEP governance.

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