

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

Migratory Fish Stocks

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.

Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10

Migratory Fish Stocks, and related instruments" (UNGA 2019) and in particular paragraphs

anthropogenic underwater noise ... and to address and mitigate such impacts taking into account the best available scientific evidence, the environmental approach and ecosystem approaches as appropriate.

26. Encouraging governments to conduct further studies, including by the United Nations, on the impacts of underwater noise on fish stocks and fishing catch rates, as well as associated ecological effects

environmental factors affecting marine ecosystems..." (Section (i), d) of the 23 Jan. 2020 invitation letter.

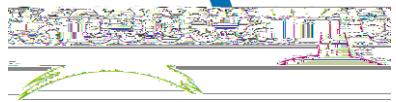
[REDACTED] FAO and the GFCM report has assessed trends in pollution and plastic pollution since 2004, 2000 and 2015, respectively. While fisheries practices

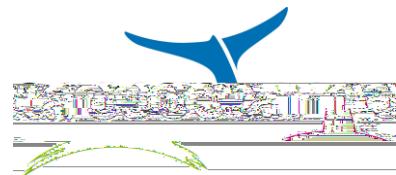
ecosystem productivity, and marine biodiversity have been shown to be effective in conserving

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

malfunction, and settling, and slower growth rates.

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





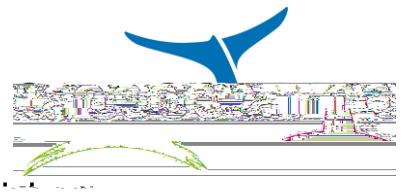
5. ~~Proposed strict restrictions on noise-piercing drives such as Arneson during recessions. Two-stroke outboard engines appear less impactful to some marine species compared with two-stroke engines.~~
6. ~~Prohibited uses of underwater noise in multi-sectoral supply ships, among other vessels. Alternative operation or technologies should be promoted.~~
7. All sonars, echosounders, and multibeams should use frequencies above at least 200 kHz.
8. ~~Proposed strict restrictions on recreational boats upon turning on the engine should be abolished. This proposal is to allow for more boats under the GFCM immediate~~
9. ~~and 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. ~~Geographical surveys of all kinds (including seabed mapping) should be required to use the lowest~~
13. possible source level.
14. ~~be in the most stable, non-volatile areas after impact and fused in multiple areas to be included.~~
15. ~~Marine Protected Areas should be expanded to include quiet, undisturbed marine 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 costly behavior in terms of a) increased energetic costs of transiting and interrupted feeding; and c) increased predation and less efficient foraging in areas that are not a

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 underwater noise, could impact fisheries; and iii) explore socio-economic

implications of potential changes in management requirements within UNCLOS in connection

noise in the context of a study on socio-economic impacts on Mediterranean fish stocks.

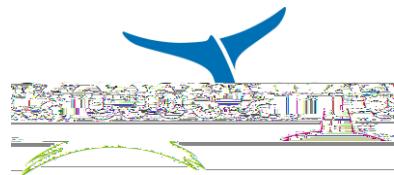
GFCM-MC-2019



## Conclusion

The Multidimensional nature of organizational learning

1.



## References

GFCM/OceanCare 2010. List GFCM/OceanCare Workshops Authors and include documents. Noise and Impacts on Fish, Invertebrates and Fish Resources. 510 pages, Rome, Italy, 21-22 February. Available at: <https://www.oceancare.org/meetings/detail/en/c/1194253/>

UNICA 2012. UNICA Resolution 7.4 (1.2) Sustainable fisheries, including through the 1995  
Agreement on the Conservation of Highly Migratory Fish Stocks in the Central and Eastern Atlantic Ocean and the 1992 Agreement on the Conservation of Highly Migratory Fish Stocks in the Mediterranean Sea and the 1997 Agreement on the Conservation and Highly Migratory Fish Stocks, and related instruments. Available at: <http://www.unica.org/Resolutions/7.4%20-%20Sustainable%20fisheries,%20including%20through%20the%201995%20Agreement%20on%20the%20Conservation%20of%20Highly%20Migratory%20Fish%20Stocks%20in%20the%20Central%20and%20Eastern%20Atlantic%20Ocean%20and%20the%201992%20Agreement%20on%20the%20Conservation%20of%20Highly%20Migratory%20Fish%20Stocks%20in%20the%20Mediterranean%20Sea%20and%20the%201997%20Agreement%20on%20the%20Conservation%20and%20Management%20of%20Highly%20Migratory%20Fish%20Stocks%20in%20the%20Central%20and%20Eastern%20Atlantic%20Ocean%20and%20the%20Mediterranean%20Sea>

Hydrophone Report for Wadden 2008 - no impact of ocean noise pollution on fish stock  
<https://www.oceancare.org/wadden-noise-pollution-report>

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## About OceanCare:

OceanCare is a Swiss non-governmental organization working in the fields of sea areas of marine pollution, environmental changes, fisheries, whaling, sealing, captivity of marine mammals and trade in skins.

OceanCare is a member of the Scientific Committee on Oceanic Research (SCOR) 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

UNEP/MAP. OceanCare has also been accredited as a Major Group to the United Nations Environment Assembly (UNEA), which is the highest decision-making body of the UN Environment Programme.

<http://www.oceancare.org>