

ADDENDUM 1**SCIENTIFIC COUNCIL COMMENTS**

(arising from ScC-SC8)

BYCATCH AND OTHER FISHERIES-INDUCED MORTALITY

UNEP/CMS/COP15/Doc.25.1.1

RECOMMENDATIONS TO COP15

The Scientific Council recommends adopting the draft Resolution and Decisions with amendments as specified below.

GENERAL COMMENTS ON THE DOCUMENT

The Sessional Committee welcomed the paper *A review of technical and operational measures to mitigate bycatch of marine turtles in commercial fisheries*, by Breimann and Baker.

The Sessional Committee made the following comments on the Draft Resolution on *Bycatch and Other Fisheries-Induced Mortality*:

- It was noted that bycatch is not just an aquatic issue, but rather crosscutting, and might therefore benefit from a wider discussion where all Sessional Committee members can be present in future.
- It was noted that the use of the word “aquatic” can be problematic in the Resolution text and the proposed definition of bycatch, as this could suggest that seabirds are not addressed, although others felt that “aquatic” clearly includes seabirds. Within the definition of bycatch, it was agreed to use the word “migratory” instead of “aquatic”.
- It was agreed to recommend adding more references to Annex 1 of the Resolution.
- Concerns were noted about the mention of “sustainable bycatch levels” in the Resolution and how to determine what sustainable levels are for many of the CMS-listed species including sharks and rays.
- It was agreed to recommend amendments to the Resolution to make sure the Resolution addresses bycatch of all taxa, including seabirds.
- Different views were expressed on whether a CMS-specific definition of bycatch was needed in the Resolution or whether a definition as used by fisheries fora could be used instead. Some Sessional Committee members expressed that a definition of bycatch was necessary for the purpose of the Resolution and to support implementation.
- Different views were expressed regarding the definition of bycatch. Some Sessional Committee members thought it important to include a reference to cryptic mortality, injury, or harm in the bycatch definition. Other members questioned whether it was necessary to include such a reference.
- Some Sessional Committee members expressed that they did not consider bycatch to be take.
- Different views were expressed as to whether bycatch is considered inherently incidental.
- Following extensive discussions, a majority of WG members agreed that operative paragraphs 3 and 4 should remain separate. This is because of the different legal obligations of Parties under CMS for Appendix I and II listed species. Paragraph 3 addresses Appendix I-listed species, for which taking is prohibited, while paragraph 4 addresses Appendix II-listed species, for which taking is not prohibited under CMS.

- The Sessional Committee agreed on the following interim definition of bycatch for the purpose of the Resolution, until such time as the COP decides that a permanent definition is needed:
“Bycatch refers to the incidental capture of or other interactions with non-target migratory species during fishing operations, whether harmed, escaped, retained, discarded, or released.”
- The Sessional Committee recommended to COP15 to determine whether a CMS-specific definition was needed.
- If parties determine that a definition is needed the Sessional Committee recommended that an Intersessional Working Group should be set up to undertake further work on the scientific aspects of a definition; and
- The Sessional Committee recommended to COP15 to determine whether this interim definition should be used to progress implementation of this Resolution in the meantime.

The Sessional Committee welcomed the draft Decisions on fish maw.

COMMENTS ON SPECIFIC SECTIONS/ INCLUDING POSSIBLE PROPOSALS FOR TEXT REVISION

The following amendments are proposed to operative paragraphs in the draft Resolution (Annex 2, pages 31 and 32 of the document):

- ~~1. Agrees that, for the purposes of the Convention, “bycatch” shall be defined as the capture of non-target aquatic species in fishing gear; Proposes that for the purpose of this Resolution the following interim definition should be applied “Bycatch refers to the incidental capture of or other interactions with non-target migratory species during fishing operations, whether harmed, escaped, retained, discarded, or released.”~~
- ~~2. Encourages Parties to apply a mitigation hierarchy framework, with avoidance as the preferred option followed by minimization, remediation, compensation and research to identify and implement effective bycatch mitigation measures;~~
3. Further agrees recommends that for Appendix I-listed species, Parties ~~shall~~ should implement measures to actively prevent, mitigate and where possible ultimately eliminate bycatch, and ensure that any specimens of such species that are caught are recorded, reported, handled safely and released immediately if alive; and that no specimens are retained on board, transshipped or landed, except for the purpose of research relevant to the conservation of the species and consistent with domestic legislation, if dead specimens are retained they should not be utilized commercially.
4. Further agrees recommends that for Appendix II-listed species, ~~bycatch actions should be taken to reduce bycatch to its lowest feasible level and where possible eliminate it, and Parties should take all precautionary measures where bycatch is poorly known or levels are unquantified not exceed sustainable levels, taking into account different life history characteristics of some taxa that can only sustain low fishing pressure;~~
- ~~6. Encourages Parties to apply a mitigation hierarchy framework, with avoidance as the preferred option followed by minimization, remediation, compensation and research to identify and implement effective bycatch mitigation measures;~~
8. Further urges Parties, and encourages non-Parties, the FAO, RFBs, other relevant organizations, and the private sector, to simultaneously implement effective bycatch mitigation measures, while strengthening monitoring, data collection and research on bycatch of CMS-listed species, and to apply results to continuously improve implementation of bycatch mitigation measures, including by:
 - a) assessing risk and implementing monitoring schemes, including, where appropriate, on-board observers or electronic monitoring, to determine and address the impact of fisheries bycatch,

- b) applying best practice mitigation measures informed by monitoring results, and regularly reviewing and refining their effectiveness,
- c) facilitating collection and sharing of species-specific bycatch data, including information on injuries caused by fisheries activities, to support the development of technical tools and management approaches to reduce post-release mortality,
- d) evaluating and minimizing adverse effects of bycatch on welfare, including sub-lethal effects of injury and stress, and their conservation implications, and
- e) funding, supporting and undertaking independent research to identify, assess and improve bycatch mitigation measures, including the development and promotion of alternative fishing gear and methods, particularly in respect to non-selective gear such as gillnets, which pose a particularly high risk to several CMS-listed species;

The following amendments are proposed to the draft Decisions (Annex 3, pages 35 and 36 of the document):

Directed to Parties

15.AA Parties are requested to:

- a) apply the recommendations by Breimann and Baker (2025) on marine turtle bycatch mitigation provided in Annex 1, and
- b) encourage Regional Fishery Bodies (RFBs), such as the main tuna-Regional Fisheries Management Organisations (RFMOs) and other relevant bodies, to prioritise population assessments for species that are included in the Appendices of CMS so as to facilitate a more robust understanding of the current status and population trends of these taxa. Such analyses should be conducted at the species-level where practical for defined areas of study. If there are insufficient species-specific data for any given area, then analyses could be conducted at the genus-level. If analyses are conducted at the genus-level, then relevant datasets that can be used to inform on the species composition in the area (or for the fleet(s) of interest) could usefully be provided.

Directed to the Scientific Council

15.BB The Scientific Council is requested to, subject to the availability of resources:

- a) regarding bycatch of CMS-listed marine mammals and marine turtles:
 - i. identify regions where reviews of relative levels of bycatch in commercial and artisanal fisheries would be a priority and/or beneficial,
 - ii. collaborate with all relevant organizations, including fisheries management bodies, to develop regional reviews with a view to reducing the levels of bycatch in commercial and artisanal fisheries,
 - iii. identify and prioritize fisheries and areas in which adverse impacts of bycatch are most severe,
 - iv. cooperate with the relevant organizations, including fisheries bodies, to develop the most appropriate bycatch mitigation measures for fisheries of highest priority, and

- v. develop appropriate bycatch mitigation measures, including spatial-temporal closures with associated time-bound action plans;
- b) in collaboration with the Advisory Committee of the Sharks MOU, continue the ongoing review and appraisal of current data and knowledge regarding the levels of fisheries-induced mortality of CMS- and Sharks MOU-listed shark and ray species, and prepare recommendations on reducing fisheries-induced mortality;
- c) develop a report to quantify the contribution of bycatch and other fisheries-related mortalities of CMS-listed cetaceans to trophic downgrading and the health and function of marine ecosystems, and make recommendations to Parties;
- d) review current knowledge on existing measures to reduce and mitigate bycatch of freshwater fish for both commercial and artisanal fisheries, and make recommendations to Parties on the most effective and appropriate measures to mitigate bycatch, while ensuring that recommended measures do not act to the disadvantage of other CMS-listed species;
- e) in collaboration with other relevant stakeholders, ensure cross-referencing with seabird bycatch work, to ensure consideration of cross-taxa implications, and identify opportunities for further collaboration on addressing fisheries-induced mortality across taxa;
- f) review and appraise, in collaboration with CMS's daughter Agreements, current data and knowledge regarding the impact (and potential impact) of maw fisheries on marine mammal, marine turtle, and shark and ray species; and
- g) in conjunction with the International Whaling Commission Bycatch Mitigation Initiative, develop recommendations on the most effective and appropriate measures to reduce and mitigate bycatch in maw fisheries.

The following additional references are proposed for inclusion in Annex 1 to the draft Resolution GUIDANCE ON MITIGATION AND MANAGEMENT OF BYCATCH IN FISHERIES (Annex 2 of the document, page 33):

Hamer, D.J., Minton, G., 2020. Guidelines for the safe and humane handling and release of bycaught small cetaceans from fishing gear, In: Secretariat, U.C. (Ed.), CMS Technical series, Bonn, Germany, p. 50. Available here: <https://www.cms.int/publication/guidelines-safe-and-humane-handling-and-release-bycaught-small-cetaceans-fishing-gear>

International Whaling Commission, 2024, Best Practices for the Disentanglement of Free Swimming Cetaceans. Adapted from practices developed for the United States National Oceanographic and Atmospheric Association, and endorsed by the International Whaling Commission's Scientific Committee. Available here: https://iwc.int/public/documents/v4UwJ/Adaptation-of-NOAA-Best-practices-for-disentanglement-of-free-swimming-small-cetaceans_IWC-SC-Endorsed.pdf

IWC Large Whale entanglement response network: <https://iwc.int/management-and-conservation/bycatch-and-entanglement-of-cetaceans-in-fishing/entanglement>