



UN Division for Ocean Affairs and the Law of the Sea
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**ASCOBANS' Contribution on the Topic of Focus of the Fifteenth Round of Informal Consultations to the United Nations Fish Stocks Agreement (ICSP-15):
"Implementation of an Ecosystem Approach to Fisheries Management"**

Cetaceans are top predators and changes in their abundance could have implications for ecosystem dynamics. Because of changes in ecosystem dynamics due to climate change for example, the distribution, abundance, and life history parameters of cetaceans may also change.

Fisheries bycatch is the key conservation issue for cetaceans at the global scale. In addition, prey depletion – not simply reducing the abundance of key prey species but changes in the spectrum of prey species and size classes available – is also a matter of concern. Less obvious but still relevant to fishing are negative impacts associated with pollution (in the sense of discarding fishing gear, litter and waste fuel for example), noise and collisions.

UNGA Resolution 74/19 states that ecosystem approaches to ocean management should focus on managing human activities and encourages incorporating an ecosystem approach into mandates of competent organizations and bodies. Essentially, this means that countries need to manage the use of oceans in a way that is not harmful to ocean ecosystems, including cetaceans.

In the field of cetacean conservation, an ecosystem or ecosystem-based approach is perhaps best known in the context of fisheries management, where it implies, minimally, accounting for the effects of fisheries on the whole ecosystem and not only on the stocks fished (e.g. under the EU Common Fisheries Policy). Fisheries' policymakers / managers, fisheries scientists, conservationists and ecologists often have very different opinions on how to define and implement ecosystem-based fisheries management (EBFM). Updating FAO guidelines and criteria to assess EBFM would be useful, as well as introducing FAO supplementary advice on marine mammal bycatch. There is already FAO guidance in place for sharks and seabirds which has resulted in EU and various national action plans leading to improved implementation within fisheries.

The distribution of small cetaceans is influenced by the distribution of their main prey species and prey diversity, and the health of small cetaceans is influenced by the quality of prey. Resource depletion may represent a significant threat to populations of small cetaceans within the ASCOBANS Agreement Area, as evidenced by:

- the poor status of some commercially important fish stocks that are also important prey for small cetaceans (e.g. Iberian sardine, western Baltic spring spawning herring; historically, North Sea Sand Eel);
- the general deteriorated status of the Baltic ecosystem);
- poor condition and/or starvation in some stranded animals;
- range shifts (for example in North Sea porpoises) thought to be linked to prey availability, and the known susceptibility of small cetaceans to prey depletion, particularly those with high metabolic rates (for example Common Dolphins) and limited fat reserves (such as Harbour Porpoises).

Within the ASCOBANS Agreement Area, fisheries management is applied through the EU Common Fisheries Policy (CFP, EU Regulation 1380/2013), which strives towards management based on Maximum Sustainable Yield (MSY). There are also commitments to ensure that fishing activities are environmentally sustainable in the long-term and managed in a way that is consistent with the objectives of achieving economic, social and employment benefits. There are further commitments to implement an ecosystem-based approach to fisheries management to ensure that negative impacts of fishing activities on the marine ecosystem are minimized. If both of these types of measure are implemented properly, small cetaceans can benefit in terms of availability of prey.

In principle, the EU is moving towards an ecosystem-based approach to fishery management (EBFM), i.e. a holistic management approach that recognizes all the interactions within an ecosystem rather than considering a single species or issue in isolation. EBFM aims to account for effects of fishing on non-target stocks and ecosystem health, as well as its social and economic consequences. In principle, adverse effects of prey depletion on protected top predators such as cetaceans should be avoided under EBFM, provided that an effective means can be found to implement the management approach.

EBFM is not a 'one size fits all' approach – it needs to be scaled appropriately so that it is meaningful also locally. Stakeholder participation in fisheries management is important: fishermen need to understand why particular decisions have been made and what the benefits of this will be to them in the longer term.

It should be noted that:

- Fisheries issues are to a large extent handled separately from nature conservation / ecosystem issues, even though they are not separate in reality. This has been a long-standing challenge not just at international level but also within national government departments.
- For Europe at least, there are many organizations/agreements requiring similar commitments. This helps drive implementation forward. For example:
 - ASCOBANS action plans for Harbour Porpoise and Common Dolphin¹
 - EU Marine Strategy Framework Directive and use of GES indicators as a start towards the application of EBFM, including use of wider ecosystem indicators for habitats and species (including harbour porpoise bycatch)
 - OSPAR work ongoing for indicators of other marine mammal bycatch, and similarly for seabirds.
- In terms of prey depletion and top predators, consideration could be given to applying simple metrics as a way of taking wider ecosystem requirements into account in the absence of better information.
- It should be acknowledged that managing fisheries in a warming world is going to be increasingly problematic (e.g. changes in species distributions, and a reduction in size of shoals and individuals as a result of environmental changes). Management approaches therefore need to be flexible, adaptable and holistic.
- It is important to improve estimates of bycatch rates to support development of conservation strategies, to implement and assess gear modifications and mitigation measures to reduce bycatch and to preserve the nutritional quality of preys (copepods,

¹ <https://www.ascobans.org/en/documents/action-plans>

small pelagic fish etc) in marine mammal networks and monitor it through a functional view of biomass available for and required by these top predators.

- It is worth keeping in mind that the associated issues are not all related to large-scale fisheries. Small-scale fisheries can be problematic, sometimes recreational fisheries as well.

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