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Review of New Information on Threats to  
Small Cetaceans

Pollution

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**Some thoughts on the consideration  
of marine debris in the context of  
the International Whaling  
Commission**

Action Requested

- Take note

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INTERNATIONAL  
WHALING COMMISSION

# Some thoughts on the consideration of marine debris in the context of the International Whaling Commission.

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## Abstract

Marine debris – especially in the form of plastics - has now been widely recognised as a threat of international concern. This has created significant interest in many international fora, which have developed a range of actions in response. Liaison between the IWC and these fora is advocated and this should include the Global Partnership on Marine Litter, the Food and Agriculture Organization of the United Nations (i.e. via the Committee on Fisheries), the International Maritime Organization (i.e. via the Marine Environment Protection Committee) and the Global Ghost Gear Initiative.

## Background

The threat posed by marine debris, and especially plastics, to marine life has become increasingly apparent in recent years. This threat extends to both ingestion and entanglement of marine mammals including cetaceans, although the precise nature of the threat and its conservation significance remain poorly characterised (Simmonds, 2012; Baulch & Perry, 2014; Browne et al., 2015). At its 65<sup>th</sup> meeting in 2014 the International Whaling Commission (IWC) agreed to add marine debris as a standing agenda item for its Scientific Committee (SC), and marine debris was also identified as a possible topic for an IWC ‘Conservation Management Plan’. To assist in consideration of how the IWC might take work on this topic forward, we provide here an overview of some of the key international work streams.

## The International Context

### The United Nations

In recent years there has been growing recognition of the threat posed to marine organisms and ecosystems by marine debris and this has provoked action in a variety of international fora. Marine litter was recognised by the UN General Assembly (UNGA) in resolution A/60/L/22 of November 2005. This called for national, regional and global actions to address the problem. At its 65<sup>th</sup> Session in 2010, the UNGA again urged States to cooperate regionally and sub-regionally on this issue and to support measures aimed at preventing, reducing and controlling sources of marine debris (STAP, 2011). More recently, at the 69<sup>th</sup> Session, action being undertaken to address marine litter by UNEP, FAO and IMO was acknowledged and welcomed by resolution A/69/245 (December 2014). The work of the International Whaling Commission (IWC) on assessing the impacts of marine debris on cetaceans was also noted in this resolution. A separate resolution (A/69/109) relating to Abandoned, Lost or otherwise Discarded Fishing Gear (ALDFG) was also adopted and this acknowledged the serious impacts on the marine environment caused by ALDFG and encouraged Member States to accelerate action to reduce ALDFG and other fishing related litter<sup>1</sup>.

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<sup>1</sup><http://www.un.org/en/ga/69/resolutions.shtml>

At the UN Conference for Sustainable Development (Rio +20) in 2012, reducing ocean pollution (and plastic marine debris in particular) was identified as a global priority for sustainable development. Since then, the UN has agreed “to conserve and sustainably use the oceans, seas and marine resources for sustainable development” (i.e. Sustainable Development Goal 14) and this includes a target to “by 2025, prevent and significantly reduce marine pollution of all kinds”. All countries are expected to contribute towards the targets under Goal 14 from 2016 onwards. In addition, the United Nations Convention on the Law of the Sea (UNCLOS)<sup>2</sup> represents an overarching legal framework for addressing the issue of marine debris.

### The United Nations Environment Programme (UNEP)

A number of relevant initiatives have resulted from action by UNEP:

- The UNEP Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) was created in 1995<sup>3</sup>. It provides a framework for action to mitigate and prevent the degradation of the coastal and marine environment by land-based activities. One of its objectives is to “reduce significantly the amount of litter reaching the marine and coastal environment by the prevention or reduction of the generation of solid waste and improvements in its management, including collection and recycling of litter.” The GPA assists states, individually and/or jointly, in taking concrete action that generates tangible results with respect to policies, priorities and resources. The implementation of the GPA is primarily the responsibility of governments, in close partnerships with all stakeholders, including local communities, public organizations, NGOs and the private sector.
- The UNEP Global Partnership on Waste Management (GPWM) was established in 2010 and is an open-ended partnership for international agencies, governments, businesses, academia, local authorities and NGOs<sup>4</sup>. It facilitates implementation of integrated solid waste management at a national/local level, facilitating exchange of experiences and practices.
- The ‘Honolulu Strategy’ is a global framework for prevention and management of marine debris and was developed from the Fifth International Marine Debris Conference (5IMDC) in 2011, organised by NOAA and UNEP.
- In UNEP’s ‘Manila Declaration’ of 2011, representatives from 65 countries agreed to step up efforts to protect the world’s oceans from land-based activities, with marine litter highlighted as a priority for 2012-2016 and the relevance of the Honolulu Strategy emphasised. Following on from this, UNEP and NOAA launched the Global Partnership on Marine Litter (GPML) in June 2012 at Rio +20. The GPML is a global partnership of international agencies, Governments, Non-Governmental Organisations, academia, the private sector and individuals. Its specific objectives include reducing the impacts of marine litter worldwide on economies, ecosystem, animal welfare and human health, alongside promotion and implementation of the Honolulu Strategy and promoting knowledge management, information sharing and progress monitoring<sup>56</sup>.

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<sup>2</sup>[http://www.un.org/depts/los/convention\\_agreements/texts/unclos/unclos\\_e.pdf](http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf)

<sup>3</sup><http://unep.org/gpa/About/about.asp>

<sup>4</sup><http://www.unep.org/gpwm/AbouttheGPWM/tabid/56300/Default.aspx>

<sup>5</sup><http://www.unep.org/newscentre/default.aspx?DocumentID=2666&ArticleID=9012>

<sup>6</sup><http://www.unep.org/gpa/gpml/>

## The International Maritime Organization (IMO)

In 1973, the IMO adopted the International Convention for the Prevention of Pollution from Ships (MARPOL). This is the primary convention covering prevention of pollution of the marine environment by ships from operational or accidental causes. MARPOL Annex V has been recently revised (2013) with strengthened requirements for preventing marine litter originating from ships. It prohibits the discharge of all waste into the sea, with exception for special circumstances of items not harmful to the marine environment. It prohibits the disposal of any waste that poses an entanglement risk to animals.

## The Food and Agriculture Organization of the United Nations (FAO)

The FAO's Committee on Fisheries (COFI) is the only intergovernmental forum on fisheries and it looks at fisheries-specific marine debris issues such as ALDFG. The FAO's Code of Conduct for Responsible Fisheries encourages Member States to fulfil the requirements of MARPOL.

Section eight of the FAO's International Guidelines on Bycatch Management and Reduction of Discards<sup>7</sup> refers to ALDFG and requests Member States and Regional Fishery Management Organisations (RFMOs) to consider actions to assess and mitigate such impacts, including the collection of data, development of mitigating technologies and measures to quantify and reduce mortalities and other impacts. Specific mentions are given to modification of fishing gears and fishing methods, identification of gear ownership, reduction of gear losses and development of gear retrieval procedures and programs.

At the 31<sup>st</sup> Session of COFI (June 2014), members expressed particular concern about ALDFG and it was proposed that greater attention should be paid by Members and RFBs/ RFMOs to the mitigation of ALDFG impacts. It was also emphasised that there is a need for further work on this issue<sup>8</sup>.

## The European Union

The new policy initiative "Towards a circular economy: A zero waste programme for Europe"<sup>9</sup> includes proposals for revising EU waste legislation and for an aspirational target to reduce marine litter by 30% by 2020. This target is providing guidance to Member States currently developing measures to achieve 'good environmental status' for marine waters by the 2020 deadline under the Marine Strategy Framework Directive, and also provides an impetus for the development of marine litter action plans within the four Regional Sea Conventions. Other EU-level measures, incorporating *inter alia* the results of the ongoing evaluation of the Port Reception Facilities Directive, will also contribute to the achievement of the target. A second stage of the reduction target will be developed in due course, based on further analysis of the reduction potential from other land- and sea-based sources, and taking into account the commitment made at Rio+20 to achieve significant marine litter reductions by 2025.

The 7th Environment Action Programme (EAP)<sup>10</sup> requires, by 2020, the establishing of a Union-wide quantitative reduction headline target for marine litter supported by source-based measures and taking into account the marine strategies established by Member States.

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<sup>7</sup><http://www.fao.org/fishery/nems/40157/en>

<sup>8</sup><http://www.fao.org/3/a-ML770e.pdf>

<sup>9</sup> <http://ec.europa.eu/environment/circular-economy/>

<sup>10</sup><http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:354:0171:0200:EN:PDF>

## The Regional Fishery Management Organisations (RFMOs)

Several Regional Fisheries Management Organisations have adopted resolutions or recommendations that relate to marine debris. These include the Ocean Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean<sup>11</sup> (WCPFC) and the Inter American Tropical Tuna Convention (IATTC)<sup>12</sup>. In addition, the Indian Ocean Tuna Commission (IOTC) has passed a resolution on Fisheries Aggregation Devices<sup>13</sup> which may pose a threat of entanglement and can become marine debris.

## The Convention on Biological Diversity (CBD)

In 2013, the Convention on Biological Diversity (CBD) adopted a decision to include marine debris in their working portfolio. The CBD subsidiary body on scientific, technical and technological advice (SBSTTA) now states that “marine debris is an increasing threat to marine and coastal biodiversity, with potential deleterious implications for marine biodiversity and ecosystems. Entanglement or ingestion by birds, turtles, fish and marine mammals is well documented and has shown to be fatal to a number of species. Analysis of best practices and experiences in mitigating the impacts of marine debris on biodiversity would serve to better inform the development and implementation of necessary policy measures and appropriate responses to this growing threat”<sup>14</sup>. In 2012, CBD also published a substantive review on marine debris and how it might be addressed (CBD, 2012).

In 2014, CBD held a conference entitled “Expert Workshop to Prepare Practical Guidance on Preventing and Mitigating the Significant Adverse Impacts of Marine Debris on Marine and Coastal Biodiversity”. The workshop aimed to prepare guidance, and to inform a background study through the compilation of information from Parties, other Governments, relevant organisations and indigenous and local communities on the impacts of marine debris. One of the recommendations that arose from this workshop was that there was a need for, “enhancing synergies and promoting collaboration on the prevention and mitigation of the impacts of marine debris on marine and coastal biodiversity and habitats between biodiversity-related conventions and other relevant international and regional agreements and organizations”<sup>15</sup>.

## The Convention on the Conservation of migratory species of Wild Animals (CMS)

In 2012, CMS adopted a resolution on marine debris; Resolution 10.4 highlighted the negative impacts of marine debris on migratory species and recommended that the Parties identify geographical hotspots, collaboratively assess the impacts, develop and implement national plans of action, and produce national reports on amounts, impacts and sources of debris within their waters. At its most recent Conference of Parties, in 2014, CMS revisited the issue and passed another marine debris-focused resolution (11.30), which called for further action, including addressing knowledge gaps and in terms of outreach<sup>16</sup>. CMS has also commissioned and published three comprehensive research studies regarding the impact of marine debris on migratory species and prevention and mitigation strategies<sup>17</sup>.

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<sup>11</sup>[http://www.cites.org/eng/cop/16/E-CoP16\\_side\\_events.pdf](http://www.cites.org/eng/cop/16/E-CoP16_side_events.pdf)

<sup>12</sup><http://www.iatcc.org/ResolutionsActiveENG.htm>

<sup>13</sup><http://www.iotc.org/cmm/resolution-1308-procedures-fish-aggregating-devices-fads-management-plan-including-more-detailed>

<sup>14</sup><https://www.cbd.int/doc/meetings/sbstta/sbstta-18/.../sbstta-18-05-en.doc>

<sup>15</sup><https://www.cbd.int/doc/?meeting=MCBEM-2014-03>

<sup>16</sup>[http://www.cms.int/sites/default/files/document/Res\\_11\\_30\\_Management\\_Marine\\_Debris\\_E.pdf](http://www.cms.int/sites/default/files/document/Res_11_30_Management_Marine_Debris_E.pdf)

<sup>17</sup><http://www.cms.int/en/meeting/eleventh-meeting-conference-parties-cms>

## The Global Ghost Gear Initiative (GGGI)

The Global Ghost Gear Initiative (GGGI) is a cross-sectorial alliance committed to driving solutions to the problem of lost and abandoned fishing gear worldwide. It aims to improve the health of marine ecosystems, protect marine animals and safeguard human health and livelihoods. It is the first initiative dedicated to tackling the problem of ghost fishing gear at a global scale, and seeks to maintain a diversity of members including fishing industry, the private sector, academia, governments, intergovernmental and non-governmental organisations<sup>18</sup>. The GGGI contributes to the framework of UNEP's GPML.

## The Role of the IWC

To date the IWC has run two workshops on this topic (IWC 2013, 2014): the first focused on evaluating the threat to cetaceans and the second focused on addressing it. With these as a starting point, providing a comprehensive platform of knowledge, the question for the IWC is what work streams it might usefully now follow. The importance of liaison with other international fora was emphasised by both workshops but the detail of this remain to be addressed and actioned.

The IWC has recently developed a programme of work to enable the effective and safe rescue of entangled large whales<sup>19</sup>, a matter that also poses a major welfare concern. The majority of entanglements are caused by fishing gear and it has been recognised that active gear is largely responsible for these incidents (as for example expressed in the report of the 2014 IWC workshop on marine debris; IWC, 2014). However, ALDFG also poses a significant entanglement threat, although the significance of this, which will likely vary regionally and between populations, remains difficult to assess<sup>20</sup>.

Further to the review of this matter by the IWC's Conservation Committee last year, the Commission endorsed its recommendations that (i) marine debris should be a standing item on the Scientific Committee agenda; (ii) the IWC and its Secretariat work together with the Secretariats of the other IGOS and RMFOs relevant to this issue; (iii) the IWC Scientific Committee should explore ways of combining estimates of oceanic debris and information on cetaceans to identify priorities for mitigating and managing the impacts of marine debris on cetaceans; and (iv) marine debris might be considered as an IWC 'Conservation Management Plan topic. (As such it would be the first threats-based CMP.)

As a Scientific Committee standing agenda item it would benefit from having a strategy for data collection and the encouragement of key lines of research associated with it. Suitable research priorities are considered in the submission by Baulch and Simmonds to this Scientific Committee meeting, but could include, in brief,; identification and dissemination of necropsy protocols; the addition of information to suitable national and international databases covering entanglement and ingestion; forensic investigations retrieved fishing gear to determine if it was active at the time of entanglement; modelling and mapping to pin-point 'hot-spots'; and further research on impacts, including by microplastics.

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<sup>18</sup> [www.ghostgear.org](http://www.ghostgear.org)

<sup>19</sup> <https://iwc.int/entanglement-response-network>

<sup>20</sup> The authors wish to stress that we are not trying to promote marine debris as a priority over other threats or activities, but facilitate progress on this matter in line with the IWC's work on other environmental threats.

In addition, and as recommended by its workshops, the IWC could seek to recognise existing international efforts to tackle the problem and commit to contributing to these efforts via collaborations with relevant bodies and organisations. This should include:

- Liaison with the Global Partnership on Marine Litter (GPML), including by potentially signing on to the Honolulu Commitment, joining the GPML and contributing to and sharing information with the Partnership on the relevant focal areas, in particular land-based and sea-based sources of marine litter;
- Developing a robust relationship with the FAO that includes identifying areas for collaborative working on the issue of ALDFG (and probably other fisheries issues), and including participation in COFI as an observer and following the FAO's work on relevant issues such as gear marking, in order to provide recommendations to the IWC on best practice mitigation measures;
- Applying for observer status with IMO and participating in the Marine Environment Protection Committee; and
- Joining the Global Ghost Gear Initiative (GGGI) - and/or delegating members of the IWC Secretariat and/or Scientific Committee to contribute via its Advisory Committee - and contributing to the development of the GGGI's data portal by provision of data in order to further global efforts on the collection of data on ghost gear abundance and trends.

Finally, IWC member States could also give consideration to:

- i. Committing to collecting information on marine litter occurrence, quantities, types and trends that can be shared with the GPML and contributing to data bases such as the one on ghost gear being developed by the GGGI;
- ii. Setting up a fund which can be used to contribute to marine litter solution projects run by partners in hotspot areas for cetacean entanglement/debris ingestion; and
- iii. Taking note of relevant reduction targets for marine litter that have been set nationally, regionally and internationally, including – where relevant – to the EU's target for 30% reduction by 2020 and the Rio+20 2025 commitments.

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