Report from the International Whaling Commission on progress relevant to the Resolution adopted by the General Assembly on 10 December 2019. 74/19 Oceans and Law of the Sea

June 2020

Summary

The IWC was set up in 1946 as an international agreement to regulate whaling and to provide for conservation of whale stocks. The Commission has a membership of 88 Contracting Governments. The International Convention for the Regulation of Whaling contains an integral Schedule which sets out specific measures that the IWC has collectively decided are necessary in order to regulate whaling and conserve whale stocks. In addition, the IWC co-ordinates and funds conservation work on many species of cetacean. Through its Scientific Committee it undertakes extensive study and research on cetacean populations, develops and maintains scientific databases, and publishes its own peer reviewed scientific journal, the *Journal of Cetacean Research and Management*.

The biggest threats to the conservation and welfare of cetaceans are not under the regulatory authority of the IWC and, as such the IWC places a high value on co-operation with other intergovernmental organizations, industry (including the fishing and shipping industries) and the wider non-governmental and research community, as well as on the development of regional approaches to conservation and management. The IWC is mandated, on many issues, to co-operate with other intergovernmental organisations including the International Maritime Organisation (IMO), the Food and Agricultural Organization of the United Nations (FAO), Regional Marine Fisheries Organisations (RFMOs), UN Environment and the Biodiversity-related MEAs (particularly the Convention on Biological Diversity (CBD), Convention on Migratory Species (CMS) and Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)). The IWC co-operates with the Biodiversity-related Conventions through membership of the Liaison Group of Biodiversity-related Conventions (BLG) and the IWC is actively inputting to the development of the Post 2020 Framework for Biodiversity.

The work of the Commission and its sub-groups has increasingly considered a wide range of issues that are also addressed by UNCLOS and by the UN General Assembly resolution 74/19 including:

- Capacity building an increasingly important aspect of IWC work, ranging from work of the
 Global Whale Entanglement Resource Network to create a global network of professionally
 trained and equipped responders to whale entanglements; work through the Bycatch
 Mitigation initiative (BMI) to build capacity within national governments and fisheries
 management bodies, and to assist decision makers in understanding and selecting the most
 appropriate tools for bycatch assessment and management; supporting the development of
 cetacean strandings response and investigation through the IWC Strandings Initiative;
 supporting the development of a responsible whale watching industry; allocation of funds to
 priority projects on small cetacean conservation; and provision of scientific advice on
 research projects and publication of papers.
- Sustainable fishing the IWC'S Bycatch Mitigation Initiative (BMI) addresses the critical need
 to monitor and mitigate cetacean bycatch in fisheries around the world. The BMI approach is
 to foster collaboration with global, regional and community fisheries in fostering an
 ecosystem approach to ensuring viable fisheries. As the greatest direct cause of cetacean
 mortality, this is one of the most critically important issues for the IWC.

- Marine safety collisions between cetaceans and vessels can have negative consequences
 for both humans and cetaceans, and the IWC has focussed on collaborative ways to
 minimise such occurrences including work with IMO, governments and regional
 organisations (e.g. on shipping lanes, speed reductions, guidance to marine users).
- *Climate change* this continues to be considered by the IWC's Scientific and Conservation Committees and a new programme of work is being developed for 2021-2022.
- Marine debris the third in a series of IWC workshops was held in December 2019. This
 reviewed the latest evidence on marine debris interactions with cetaceans and considered
 evidence for associated toxicology. The workshop identified best protocols for gross
 pathology, pathology for microdebris and the standardised classification of recovered
 plastics and other debris and developed liaison with other relevant expert bodies.
- Pollution- in response to the impacts of chemical pollutants on cetacean populations, the IWC Scientific Committee has initiated four comprehensive research programmes: Pollution 2000, Pollution 2000+ and Pollution 2020 which recently concluded its work. A new Pollution 2025 programme is the most recent and is under development.
- Marine Protected Areas including engagement with the CBD process on scientific criteria for ecologically or biologically significant marine areas (EBSAs) the IUCN Important Marine Mammal Areas (IMMAS) and aspects of the IMO Particularly Sensitive Sea Areas.
- Underwater noise—including assisting with IMO initiatives, the development of guidelines
 for responsible seismic surveys and the minimisation of the impacts of marine renewable
 resource developments on cetaceans. Recent work focuses on engagement with IMO and
 efforts to address underwater noise from shipping.
- Marine Science the IWC is a leading exponent of many aspects of cetacean research in coastal areas and upon the high seas including that related to biodiversity, sustainability and the precautionary approach, quantitative incorporation of ecosystem considerations, threats to cetaceans and their mitigation.

Like all organisations across the world IWC has been operating in very difference circumstances recently due to the COVID-19 pandemic. This has not just affected the scope and format of our meetings (our most recent Scientific Committee meeting was held virtually, plans are under development for a virtual Conservation Committee meeting in September and the Commission meeting has been postponed until Autumn 2021) but also presents a number of challenges to our scientific research, capacity building and implementation of our work programmes. However, as well as the many and serious problems presented by COVID-19, opportunities have also arisen as a result of the reduction in human activities. Reports of cetaceans returning to areas where they have previously been excluded (e.g. due to high vessel traffic), quieter oceans potentially allowing animals to communicate more easily, and a potential reduction in overall stress for ocean dwellers are all scenarios that offer a glimpse into how cetaceans may respond in times of rapid environmental change. And our enforced move to virtual meetings allows a glimpse into how we might achieve long term reductions in our carbon footprint overall.

As a global community it is important that we can identify the lessons we might learn from COVID-19 and move forward with a socially and environmentally responsible recovery. The recent Scientific Committee of the IWC recognised the importance of the 'One Health' approach which recognises that the health of people is closely connected to the health of animals and our shared environment (https://www.cdc.gov/onehealth/basics/index.html).

Detailed progress report relevant to sections of the General Assembly Resolution 74/19

1. Capacity building

Section II of resolution 74/19 addresses the need for capacity building and paragraph 11 "Emphasizes that capacity-building is essential to ensure that States, especially developing countries, in particular the least developed countries, landlocked developing countries and small island developing States, as well as coastal African States, are able to fully implement the Convention, benefit from the sustainable development of the oceans and seas and participate fully in global and regional forums on ocean affairs and the law of the sea". The IWC contributes to such capacity building efforts through a number of programmes.

The IWC entanglement programme was established in 2011 to address the growing problem of whale entanglement in fishing gear and marine debris by building a global network of professionally trained and equipped entanglement responders. Since its first training workshop in 2012 this initiative has provided IWC consensus training to 1,293 participants from 34 countries. In addition, it has hosted apprentices from Argentina, Brazil, Chile, Mexico, Norway and Oman, with apprentices scheduled for this year from Kenya and Russia. The programme now has eight trainers from North, Central and South America, as well as the Pacific Islands and Africa, with the capacity to deliver training in English, Spanish and Portuguese.

The IWC Bycatch Mitigation Initiative (BMI) was established in 2016 in recognition of the major conservation issue posed to cetaceans by fisheries bycatch. The initiative aims to raise awareness at national and international levels of the need to address cetacean bycatch and the tools available to understand and mitigate the issue. It aims to promote existing solutions for monitoring and management and promote collaborative, multi-disciplinary and inclusive approaches to bring about lasting change. The BMI is collaborating with partners to build capacity within national governments and fisheries management bodies, to support decision makers in the most appropriate tools for bycatch assessment and management. This includes training workshops on bycatch management methodologies, collaboration on pilot projects to test and demonstrate solutions and working on novel approaches to sustainable financing for bycatch research and management implementation. The initiative's Expert Panel also provides multi-disciplinary expertise and provides technical advice upon request.

The IWC *Strandings Initiative* Aims to build capacity of countries to respond to and investigate cetacean strandings including through the provision of virtual, real-time advice during ongoing strandings events, allocation of funding for emergency response and investigations, support for the development of strandings networks and training in "on the beach 'response and necropsy.

The IWC Small Cetacean Conservation Research Fund supports high priority research and capacity building that improve conservation outcomes for populations of small cetaceans, particularly those that are threatened or especially vulnerable to human activities.

Ongoing research led the IWC to develop *principles and guidelines for whalewatching* which have helped guide the development of whale watching regulations around the world. The IWC Whale Watching Strategic Plan (2018-2024) and related work of the IWC Scientific and Conservation Committees includes a significant component on capacity building to facilitate cooperation and information/expertise sharing between Contracting Parties and others to support the development of a responsible whale watching sector and the provision of benefits to local

communities. The IWC Whale Watching Handbook is a comprehensive online tool for regulators, industry and the general public to support the development of responsible whale watching.

The Commission *Voluntary Assistance Fund* provides support for countries of limited means to participate in the work of the Commission.

2. Marine environment and marine resources

Section IX of Resolution 74/19 addresses the Marine environment and marine resources and the need to protect and preserve the marine environment and its living marine resources against pollution and physical degradation. This reflects key priorities for the IWC which is active in several areas addressed in this section including:

2.1 Climate change

Paragraph 213 of the Resolution "Encourages States, individually or in collaboration with relevant international organizations and bodies, to enhance their scientific activity to better understand the effects of climate change on the marine environment and marine biodiversity".

IWC'S current work on climate change is primarily undertaken by the IWC's Scientific Committee. This has been and continues to be considered through a range of scientific and technical workshops and has included work focussed on biological, socio-economic and development effects on the Arctic. The Scientific Committee recognises that climate change has a bearing on work across its entire agenda, given the far-reaching implications to cetaceans of observed and predicted changes in the marine environment and associated changes in human behaviour.

The IWC is currently planning work (including a workshop) in 2021 to selectively review and consolidate conclusions and recommendations from previous IWC work in light of recent new information and developments related to climate science and modelling predictions, direct and indirect effects on cetaceans, cetacean ecology and ecological population modelling incorporating habitat related changes. The focus will be on how to better integrate this issue into IWC's work programmes, identification of research programme areas to fill priority gaps and identifying priority mitigation and management issues for the IWC and other international and national authorities.

2.2 Marine pollution

Paragraph 215 of the Resolution recalls that in "The future we want", States noted with concern that the health of oceans and marine biodiversity are negatively affected by marine pollution, including marine debris, especially plastic, persistent organic pollutants, heavy metals and nitrogen-based compounds, from a number of marine and land-based sources.

Marine debris

Paragraph 222 (*inter alia*) notes the work of the International Whaling Commission on assessing the impacts of marine debris on cetaceans. The IWC has undertaken extensive work on this issue to understand and mitigate potential threats from a range of different types of debris. Its previous work was summarised in the contribution from the IWC Secretariat to a contribution from the IWC Secretariat to a report of the UN Secretary General on marine debris to the Open Ended Consultative Process on Oceans and Law of the Sea (International Whaling Commission, 2016).

In December 2019 the IWC held a further workshop aiming to progress IWC's work on this threat by (i) reviewing the latest evidence on interactions with cetaceans (both ingestion and entanglement) and considering evidence for associated toxicology; (ii) identifying best protocols

for gross pathology, pathology for microdebris and the standardised classification of recovered plastics and other debris; and (iii) developing liaison with other relevant expert bodies. Based on its discussions, the workshop made a series of detailed recommendations, emphasising the importance of long-term studies; the need for standardised approaches to post-mortem studies; the importance of strandings networks; the assessment of floating debris during aerial surveys and the integration of marine debris concerns into the IWC's Conservation Management Plans, where appropriate. The vulnerability of some species was highlighted and the potential of some to be used as indicator species. Other recommendations covered engagement with international bodies, the development of a marine debris database of information from post-mortem examinations and communications. Please see the report (IWC, 2020) here for its full recommendations.

Chemical pollution

The IWC has been concerned about the impact that chemical pollutants may have on cetacean populations since the early 1980s. Many of chemical pollutants, particularly the persistent organic pollutants are 'endocrine disrupters' and as such they can increase susceptibility to disease and reduce reproductive success. This is a complex issue given the huge number of synthetic chemicals introduced into the environment, the ways in which they may interact with each other, the difficulty in establishing whether they cause adverse health effects, and the difficulty quantifying any potential impacts on whale populations.

In response to this challenge, the IWC Scientific Committee has initiated four comprehensive research programmes: Pollution 2000, Pollution 2000+, Pollution 2020 which recently concluded its work, and a new Pollution 2025 programme which is under development. These initiatives progressed from examining tissue concentrations for priority pollutants in key cetacean species, through to determining toxicological markers and health assessment endpoints that could be used to determine adverse health effects, culminating in the development of tools and techniques to estimate population level effects.

A summary of the major activities that have occurred during the first three phases of the IWC Environmental Concerns Pollution Initiative (2000,2000+, 2020) was recently presented to the IWC Scientific Committee (Hall, 2020)) and is available here. Among other important outcomes, an individual based model to assess risks to cetacean populations was developed and is now available as open source model through the IWC website which also includes a contaminant mapping tool (https://iwc.int/chemical-pollution).

3. Marine biodiversity

Section X of resolution 74/19 addresses the conservation and sustainable use of Marine Biodiversity. Ongoing IWC work directly to contributes to priorities in this section including:

3.1 Area based management

Paragraphs 263-273 of Resolution 74/19 address area based management including marine protected areas. Paragraph 268 notes the work of States, relevant intergovernmental organizations and bodies, including the Convention on Biological Diversity, in the assessment of scientific information on and compilation of ecological criteria for the identification of marine areas that may require protection. The IWC has actively engaged in CBD work on the application of scientific criteria for ecologically or biologically significant marine areas (EBSAs) and aspects of the IMO Particularly Sensitive Sea Areas. In addition, IWC collaborates with the IUCN led

programme for the development of Important Marine Mammal Protected Areas (IMMAs). In 2019, the IWC held a joint workshop with the International Union for the Conservation of Nature (IUCN) and the Agreement for the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS). The workshop looked at how the IUCN's programme to systematically identify Important Marine Mammal Areas (IMMAs) might be overlaid with shipping information and used to help pinpoint ship strike 'hotspots'. The workshop report (IWC, 2019)can be found <a href="heterogeneering-neeri

Two Sanctuaries are currently designated by the International Whaling Commission. The Indian Ocean Sanctuary, was established in 1979 and covers the whole of the Indian Ocean south to 55°S.The second was adopted in 1994 and covers the waters of the Southern Ocean around Antarctica. A revised Southern Ocean Sanctuary Management Plan was endorsed by the Commission in 2018.

3.3 Ocean noise

Paragraph 279 notes (*inter alia*) the potential significant adverse impacts of ocean noise on living marine resources, affirms the importance of sound scientific studies in addressing this matter, and encourages further research, studies and consideration of the impacts of ocean noise on living marine resources.

The IWC has been considering anthropogenic noise since 2014. Previous IWC work on ocean noise is summarised in the Contribution from the Secretariat of the International Whaling Commission to Part 1 of the Report of the UN Secretary General on Oceans and Law of the Sea on Anthropogenic Underwater noise (IWC, 2018). The IWC Executive Secretary was delighted to participate as a panellist in the meeting of the Open Ended Informal Consultative Process on Oceans and Law of the Sea focused on Anthropogenic Underwater noise and to provide delegations with a presentation on the IWC's work in respect to anthropogenic underwater noise and its effect on cetaceans.

In May 2020 the IWC Scientific Committee held a virtual workshop on noise to discuss advancing efforts to address underwater noise from shipping (IWC, 2020). The presentations and discussion focused on ambient noise, noise budgets and indicators in addition to collaboration with the IMO. The IWC Conservation Committee is planning a further workshop to develop a new work programme focused on management and mitigation of underwater noise.

References

Hall, A.J. 2020 The History of IWC Pollution Initiatives. Paper SC/68b/E/02 presented to the IWC Scientific Committee, May 2020, Cambridge, UK (unpublished). [Paper available from the Office of this Journal].

International Whaling Commission. 2016. Contribution from the Secretariat of the International Whaling Commission to Part I of the report from the UN Secretary-General to the seventeenth meeting of the United Nations Open-Ended Informal Consultative Process on Oceans and the Law of the Sea: Marine debris, including plastics and microplastics. Paper SC/66b/E10 presented to the IWC Scientific Committee, June 2016, Bled, Slovenia (unpublished). 80pp. [Paper available from the Office of this Journal].

International Whaling Commission, 2018. Contribution from the Secretariat of the International Whaling Commission to Part 1 of the report from the UN Secretary-General to the nineteenth meeting of the United Nations Open-Ended Informal Consultative Process on Oceans and the Law of the Sea: Anthropogenic Underwater Noise. [Paper available from the Office of this Journal]. International Whaling Commission. 2019. Report of the Joint IUCN-IWC-ACCOBAMS workshop to evaluate how the data and process used to identify Important Marine Mammal Areas (IMMAs) can assist the IWC to identify areas of high risk for ship strike. Paper SC/68a/HIM07 presented to the IWC Scientific Committee, May 2019, Nairobi, Kenya (unpublished). 31pp. [Paper available from the Office of this Journal].

International Whaling Commission. 2020a. Report of the IWC Workshop on Marine Debris: The Way Forward, 3-5 December, La Garriga, Spain. Paper SC/68b/REP/03 presented to the IWC Scientific Committee, May 2020, Cambridge, UK (unpublished). 38pp. [Paper available from the Office of this Journal].

International Whaling Commission, 2020b. Report of the pre-meeting on advancing efforts to address underwater noise from shipping, Virtual meeting, 11 May 2020. Paper SC/68b/REP06 presented to the IWC Scientific Committee, May 2020, Cambridge, UK (unpublished). 38pp. [Paper available from the Office of this Journal].