SC/68A/03

Cooperation with Other Organisations

INTERNATIONAL
WHALING COMMISSION

COOPERATION WITH OTHER ORGANISATIONS

The reports of observers representing the Commission at the following meetings are attached as the Appendices indicated:

Appendix	Meeting	IWC Observer(s)
A	Report from the 2018 activities in ICES	*Tore Haug (Norway)*
B	25th Anniversary Meeting of NAMMCO Scientific Committee, November 2018	*Tore Haug (Norway)*
C	2018 Meeting of PICES, Yokohama, Japan, 25 October - 4 November 2018	*Tsutomu Tamura (Japan)*
D	Cooperation with IMO	*Sarah Ferriss (IWC Secretariat)* *Russell Leaper (UK)*

Appendix A

REPORT FROM THE 2018 ACTIVITIES IN ICES

Tore Haug
Institute of Marine Research, Tromsø, Norway

ICES WGMME

The ICES Working Group on Marine Mammal Ecology (WGMME) met in La Rochelle (France), 19–22 February 2018. It reviewed and reported on recent information on cetacean population abundance, population/stock structure, management frameworks, and anthropogenic threats to individual health and population status. Information was provided regarding the passive acoustic monitoring of harbour porpoises in the Baltic Sea as well as updates regarding visual survey monitoring and strandings of several cetacean species. With respect to the development of common indicators and targets for the Marine Strategy Framework Directive, updates from France and the Macaronesian region were provided. A revision of the delineation of assessment units for harbour porpoises in the Belt Sea was discussed. New information on anthropogenic stressors were compiled and a further stressor category "Tourism" was introduced.

ICES WGBYC

The Working Group on Bycatch of Protected Species (WGBYC) met at the Marine and Freshwater Research Institute in Reykjavik, Iceland 1–4 May 2018. Highlights from the meeting include:

- Review of ongoing bycatch mitigation research projects;
- Bycatch risk assessments (BRAs) for harbour porpoise and common dolphin in the Celtic Seas and Bay of Biscay and Iberian Coast Ecoregions;
- Review of the WKPETSAMP (= Joint ICES WGBYC/WGCATCH Workshop on sampling of bycatch and Protected, Endangered and Threatened species) compiled inventory of the various sampling programmes that provide information on bycatch of protected species at the national level;
- Comparison of fishing effort from different sources (ICES Regional Database; WGBYC database; Logbooks);
- Review and application of the fishPi method to inform relative risk of bycatch in different gears.

The working group was also able to deliver responses to recommendations from the joint WGCATCH and WGBYC workshop PETSAMP held the week before WGBYC.

Reviewing and summarizing annual national reports, submitted to the European Commission under Regulation 812/2004, and other published documents and collated bycatch rates and estimates in EU waters occupied a substantial amount of the meeting. The UK is the only member state (MS) with a dedicated PETS (=Protected, Endangered and Threatened Species) observer programme; other MS use non-dedicated observers through the DCF ((EC) No 2017/1004) and DC-MAP (Commission Decision 2016/1251/EU). WGBYC remains concerned about the likely negative bias in PETS data recorded by non-dedicated observers and therefore discussions on training for onboard observers were recommended.

WGBYC continues to incorporate monitoring, effort and bycatch data from non-EU states/countries that have fishing fleets in the North Atlantic and adjoining seas; this will facilitate more robust bycatch estimates for the many wide-ranging species that fall under WGBYCs remint. Bycatch of marine mammals and sea-birds was evident in most ecoregions.

The harbour porpoise BRA highlights the risk to this species in the Celtic Sea Ecoregion from net fishing; mortality may represent 1–2.4% of the best available abundance estimate for the Celtic Sea (CS). The BRA for common dolphin in midwater trawls and nets, suggest that the total mortality in the CS and the Bay of Biscay (BoB) is between 0.53 and 1.57% of the best regional abundance estimate; the mortality is highest in the BoB. However, there are incomplete observation and fishing effort data to inform this approach. The results from the BRA are biased and they should only be considered as indicators of areas and métiers in need of further investigation.

The results from bycatch assessments using cetacean strandings show comparable numbers of bycaught harbour porpoise and common dolphin. The applied stranding analysis is subject to several assumptions that are not yet fully understood and therefore contribute to uncertainty in the estimates derived from strandings data.

Ongoing challenges with the WGBYC data are the basis for a number of recommendations regarding improved onboard sampling protocols, training of bycatch observers and regional design of sampling programmes. The next WGBYC/ICES data call will be improved by providing greater clarity on the species of interest and will increase the number of mandatory data fields to improve data consistency.

ICES ASC

The 2018 ICES Annual Science Conference (ASC) was held in Hamburg, Germany, 24-27 September 2018. The conference included no particular theme session devoterd entirely to marine mammals. Nevertheless, some sessions were designed with marine mammals included as an integral part – of the most relevant sessions were: "Modernizing fisheries stock assessment and monitoring with genetic methods", "The Nordic seas and the Arctic – climatic variability and its impact on marine ecosystems, fisheries and policymaking"and "Technical approaches to reduce the environmental impact of fishing".

More information is available at the ICES web side www.ices.dk

Appendix B

NAMMCO SC 2018 – ISSUES OF RELEVANCE TO IWC

Tore Haug
Institute of Marine Research, Tromsø, Norway

The 25th anniversary meeting of the NAMMCO Scientific Committee (SC) was held 13-16 November 2018 on the "Polarlys" coastal ferry travelling from Bergen to Tromsø, Norway.

Research cooperation within the SC

Possible cooperation among NAMMCO scientists within the SC was discussed for genetic and life history analysis of harbor porpoises and for satellite tagging and tracking of baleen whales in the North Atlantic. The SC agreed that a collaborative project to develop a 'super-tag' (a smaller tag with better ballistic performance, smaller footprint in the whale and improved retention time) for tracking large cetaceans in the North Atlantic would provide important information for understanding ecological interactions and making management decisions. The SC agreed to follow up on this, in particular to see if national funding from the NAMMCO countries would be possible. Japan, who participated at the SC meeting with three observers, also expressed interest in collaborating in the project, both scientifically and financially.

By-catch

The NAMMCO By-Catch Working Group (BYCWG) had a face to face meeting in May 2017 and two conference meetings in April and October 2018. The SC commended the work and endorsed the recommendations given to the various NAMMCO countries about by-catches in gill-net fisheries targeting species such as cod, monkfish and lump-sucker. Among the cetaceans, it is particularly the harbor porpoise that is subject to bycatches.

Cetaceans stocks

The SC reviewed abundance estimates and recent research and developments for all the following species: fin whale, humpback whale, common minke whale, beluga, narwhal, sei whale, bottlenose whale, pilot whale, dolphins, harbor porpoise, sperm whale, bowhead whale and blue whale. The endorsed abundance estimates are given in table 1, with other relevant information presented by some of the species below.

Humpback whale

In 2017, the SC had recommended that the SLAs that are developed in the IWC SC be used for advice for large whales in Greenland and advices that annual strikes of no more than 25 humpback whales off West Greenland are sustainable from 2019 to 2024. Due to the needs statement involved, the NAMMCO Council had some concerns with this advice, and requested the SC to provide further advice on catch levels of humpbacks in West Greenland. In the 2018 meeting the SC provided a more detailed explanation and justification for its advice and the choice of models used. It reiterated its recommendation that the SLAs developed in the IWC provide the best scientific basis for advice on sustainable takes of large whales in Greenland and can be applied without using needs statements.

Future work to bring together and collate results from all humpback tagging activities in the North Atlantic was proposed. The NAMMCO Secretariat was asked to contact groups working in the Caribbean and investigate their interest in a common workshop.

Table 1. Abundance estimates endorsed at SC 25.

SPECIES	SURVEY	YEAR	DESC.	TYPE	EST.	95% CI		BIAS CORR.	
						LCL	UCL	PER	AVAIL
Blue whale	NASS	2015	Iceland/Faroes	Ship	**3,000**	1,377	6,534	Yes	No
Fin whale	NASS	2015	Iceland/Faroes	Ship	**36,773**	25,811	52,392	Yes	No
Minke whale	NASS+NILS2015	2015	CMA	Ship	**48,016**	30,709	75,078	Yes	Partially
Humpback whale	NASS	2015	Iceland/Faroes	Ship	**9,867**	4,854	20,058	Yes	No
Sperm whale	NASS	2007	Iceland/Faroes	Ship	**12,220**	5,807	25,717	Yes	No
	NASS	2015	Iceland/Faroes	Ship	**23,166**	7,699	69,709	Yes	No
Pilot whale	NASS	2015	Iceland/Faroes	Ship	**344,148**	162,795	727,527	Yes	No
White-sided dolphin	NASS	2015	Iceland/Faroes	Ship	**131,022**	35,251	486,981	Yes	No
White-beaked dolphin	NASS	2015	Iceland/Faroes	Ship	**159,000**	49,957	506,054	Yes	No

Beluga and Narwhal
The SC concluded that there is not enough data to carry out an assessment or provide advice for beluga in East Greenland as has been requested. The status of beluga stocks will be reviewed by the next NAMMCO- JCNB Joint WG in 2020. As requested, the SC provided a more detailed justification for its recommendation in 2017 that three rather than two management areas be recognized for narwhal in East Greenland. Emphasizing the decline of narwhal stocks in East Greenland and the possibility that current catch levels are unsustainable the SC reiterated its previous recommendations that catch quotas be reduced and no hunting be permitted south of 68°. They also agreed that the issue was urgent and of high priority and therefore recommended that an *ad hoc* WG be convened to review the information and assess the population.

Killer whale
A contracted review examining all available information and current research activities on abundance, stock structure and movements of killer whales in the North Atlantic was presented to the SC. It revealed an urgent need for research on abundance and population structure off Eastern Canadian Arctic, Newfoundland-Labrador and both West and East Greenland. The SC agreed that there is currently not enough information to perform a sound assessment of the sustainability of the killer whale harvest in Greenland and recommended that existing catch records be validated and reporting improved (e.g. by including killer whales in mandatory reporting schemes). Since it may take several years for a sound assessment to be possible, the SC also recommended that Greenland regulate the hunt and restrict quotas in a precautionary way.

Abundance estimate surveys

NAMMCOs whale sighting surveys in the Northeast Atlantic in 2015 (NASS2015) included an intensive survey with the purpose of estimating the abundance of pilot whales around the Faroe Isles, an aerial survey of the coastal waters in East Greenland and a ship-based survey around Jan Mayen following methods developed for the Norwegian minke whale surveys.

The SC remarked that NASS2015 was successful, and agreed that if this survey series is to be continued, the best next year will be 2023, although it could wait until 2026 to join efforts in the North West Atlantic.

A cooperation between the abundance estimate working groups of NAMMCO and the IWC has begun. As a first step, the Chairs of each WG are now standing invited participants in the meetings of the other. A table presenting the status of analyses from the 2007 and 2015/16 surveys was presented and a plan for completing the remaining analysis agreed by the SC. Furthermore, joint analyses being done in collaboration with St. Andrews University (on oceanographic features driving changes in cetacean abundance and distribution) and Duke University (mapping densities of cetaceans in the north Atlantic at different times of year) were presented and discussed as important ways to maximize outputs from the survey data.

Appendix C

OBSERVER REPORT OF THE 2018 PICES ANNUAL MEETING

OBSERVER: TSUTOMU TAMURA (JAPAN)

The PICES (North Pacific Marine Science Organization) is an inter-governmental organization that includes Canada, China, Japan, Korea, Russia and the United States. PICES has four committees; the Biological Oceanography Committee (BIO), the Fisheries Science Committee (FIS), the Marine Environmental Quality Committee (MEQ), and the Physical Oceanography and Climate Committee (POC). In addition, there is one technical committee for data exchange (TCODE) and one major research project titled FUTURE (Forecasting and Understanding Trends, Uncertainty and Responses of the North Pacific Ecosystems) which was initiated in 2008. PICES meets once a year for its regular business meetings and an associated symposium with over 500 participants. Since 1997, PICES has had an interest in marine birds and mammals as ecosystem components from ecosystem and environmental view points and has a special working group to assess the impact of feeding by marine birds and mammals upon ecosystems (WG11). There was also a marine birds and mammals advisory panel (AP-MBM) under the auspices of the BIO committee to examine coupled climate ecosystem fluctuations etc. in the North Pacific Ocean in collaboration with studies in other areas.

At the 2015 meeting, the BIO committee suggested to change AP-MBM (Future) to a Section-MBM (S-MBM; BIO) since the AP only lives as long as Scientific Program (FUTURE until 2019) while as a, "Section" the work of the AP will remain . As result of a vote, MBM became a "Section" instead of an "Advisory Panel" from 2016.

The 2018 meeting of PICES was held in Yokohama, Japan between 25 October and 4 November 2018. Tamura participated in the meeting of the S-MBM as an IWC observer. The business meeting focused on the current activities of the S-MBM. S-MBM members representing Canada, Japan, Korea and the USA were present. S-MBM members from China and Russia did not attend.

1. Reports from IWC SC at the S-MBM Business meeting

The following short presentations were made at the S-MBM Business meeting on 28 October 2018.

Tamura (Japan) presented the observer report of 2018 IWC/SC and some work regarding cetaceans in the North Pacific (*e.g.* The Proposed Research Plan for IWC/POWER cruise, the results of the *Implementation Review* for the North Pacific Bryde's whales). The S-MBM members discussed some of the related results, particularly in view of recent observations of increased mortality in grey and humpback whales in the eastern Pacific.

2. S-MBM leadership

Dr. Kaoru Hattori (chair) and Dr. William Sydeman (acting co-chair on behalf of Dr. Patrick O'Hara) of S-MBM have been co-chairs of the Section. The business meeting of S-MBM were led by Hattori and Sydeman.

3. Activity in 2018 for Section-MBM

One element of the activity for the S-MBM in 2018, was led by Trites (Canada) and titled "Diets, consumption, and abundance of marine birds and mammals in the North Pacific" in the Workshop. It was a very productive workshop focusing on prey consumption for marine birds and mammals.

4. Activity plan in 2019 for Section-MBM

One element of the activity plan for the S-MBM in 2019, to be led by Trites (Canada) and titled "Implications of prey consumption by marine birds, mammals, and fish in the North Pacific" will be a one-day Topic session. S-MBM reviewed Phase 1 activities and concluded that: 1) Phase 1 is nearing completion, and 2) the topic session proposed for PICES-2019 should focus on the final products and publications. About the potential list of papers for PICES technical report, The marine mammal group will keep the format of Hunt et al. (2000) to be led by Dr. Andrew Trites. It also concluded that Phase 2 would be the next plan for 2020-2023, and there is a need to develop a good plan for how Phase 2 would be valued by the BIO committee, and next stage of FUTURE program. Another potential idea for next project could be to look at the "Interaction between MBMs and other ecosystem components". Ideas for a new project for 2020-2023 will be discussed at PICES-2019.

5. Other matters

The 2019 annual meeting of the PICES will be held at Victoria, BC, Canada from 16 to 27 October, 2019. The details are described at https://meetings.pices.int/meetings/annual/2019/PICES/scope.

Appendix D

COOPERATION WITH IMO

Sarah Ferriss (IWC Secretariat)
Russell Leaper (UK)

The Secretariat and members of the Committee have continued to work with IMO particularly on underwater noise and ship strikes.

Underwater noise

Leaper (Convenor of HIM) attended the IMO Marine Environment Protection Committee (MEPC 73) in October 2018 on behalf of IWC. Underwater noise from shipping is not currently on the MEPC agenda, but was discussed under Any Other Business following a paper by Canada and New Zealand. This paper (MEPC 73-18-4) included a proposal for a ship design and technology workshop in January 2019 as a step towards a new work output for the MEPC which would put noise back on the agenda.

Ferriss and Smith (IWC Secretariat) attended the workshop "Quieting Ships to Protect the Marine Environment" in January 2019, hosted at the IMO and convened by Canada. The workshop aimed to identify the state of knowledge on quiet ship technology, provide an opportunity for international collaboration, and exchange research ideas. A summary of the workshop and its conclusions is provided in IMO paper MEPC74/Inf.36.

MEPC 74 will occur during May 2019 and will be attended by Ferriss. There is no proposal for a new work output on underwater noise but several papers on the issue have been submitted under Any Other Business and discussions will continue on specific actions that could be undertaken by MEPC. In addition, Ferriss will attend a meeting, convened by Canada, in the margins of MEPC74 to discuss next steps on this issue, including the development of a new work output proposal for MEPC75.

Ship strikes

Proposals for ship routing measures are considered by the sub-committee on Navigation, Communications and Search and Rescue (NCSR) which meets once a year. There were no routing proposals specifically related to cetaceans at NCSR 6 in February 2019. The ship strike section of the IWC website contains a list of the measures that have been put in place globally through IMO or national regulations to reduce ship strike risks to whales. This will be updated with measures agreed at NCSR 5.

The south coast of Sri Lanka is one of the high risk areas for ship strikes identified by the Committee and in the IWC Ship Strikes Strategy. The Secretariat has previously written to the Government of Sri Lanka offering the assistance of the Committee in evaluating alternative routing options to reduce ship strike risk to northern Indian Ocean blue whales. Organisations representing the majority of shipping industry using the current route off the southern tip of Sri Lanka at IMO have also written to the Government of Sri Lanka requesting establishment of an offshore route away from whales, whale watching and coastal fishing vessels. Leaper attended a workshop titled 'National Stakeholder Consultation, Maritime Activities off the Coast of Sri Lanka: the case of the blue whale population near Dondra Hd'. It was held on 05/12/18 in Colombo and organised jointly by the Sri Lankan Marine Environment Protection Authority (MEPA) and IMO. This provided an opportunity to present the discussions and recommendations of the Committee to Sri Lankan stakeholders and officials.