

TWENTY FIFTH MEETING OF THE COUNCIL 5-6 April 2017, Nuuk, Greenland

DOCUMENT 09 REPORT OF THE MANAGEMENT COMMITTEE FOR CETACEANS

Submitted by: Management Committee for cetaceans

Action requested:

Review and adopt possible new requests





MEETING OF THE MANAGEMENT COMMITTEE FOR CETACEANS

REPORT

4 APRIL 2017

@ North Atlantic Marine Mammal Commission

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1. **OPENING REMARKS**

The Chair, Ulla Svarrer Wang (Faroe Islands), welcomed the members and observers to the Management Committee for Cetaceans. Wang drew the attention of the MCC to the documents that were available for review: NAMMCO/25/MC/06, the table of active requests; NAMMCO/25/MC/05, the past proposals for conservation and management, and NAMMCO/25/07, the report of the 23rd Scientific Committee.

2. ADOPTION OF AGENDA

The agenda (Appendix 1) was adopted without revisions.

3. NASS 2015

Bjarni Mikkelsen, from the Faroe Islands, and the vice-chair of the SC, gave a presentation of the status of the analyses related to NASS2015.

Fifteen abundance estimates have been completed from NASS2015 and the associated surveys. There are plans for at least 8 additional abundance estimates to be completed, and the SC recommended a next AEWG in early 2018.

A new NASS volume is underway which will include the new abundance estimates from NASS2015, and any previous estimates not previously published, including Canada. More information on this volume can be found in Item 15.4 of the NAMMCO-25 report.

The SC also is planning to organise a workshop, "Cetacean distribution and abundance in the North Atlantic" at the Society for Marine Mammalogy conference (23-27 October 2017 in Halifax, Nova Scotia, Canada). This workshop will involve participants from NASS2015 (and other NAMMCO associated surveys), SCANS-III, Canadian, and USA surveys in the past few years to discuss cetacean distributions and abundance in the North Atlantic. The organizing committee will be comprised of Gisli Vikingsson (Iceland), Nils Øien (Norway), Rikke Hansen (Greenland), and Bjarni Mikkelsen (Faroe Islands) from the NAMMCO countries and Jill Prewitt from the NAMMCO Secretariat. In addition, Jack Lawson (Canada), Phil Hammond (UK) and Debi Palka (USA) have agreed to be part of the organizing committee.

Comments

The MCC noted that the NASS series of cetacean surveys is unique on a global scale. These surveys are not only useful for generating quota advice, but is the best dataset in the world for showing the effects of global warming and large-scale ecosystem changes on cetaceans.

The MCC was pleased to receive this information on the status of the results and plans for future analyses and workshops.

4. CONSERVATION AND MANAGEMENT MEASURES FOR WHALE STOCKS

- Report from the Scientific Committee
- Requests by Council for advice from the Scientific Committee
- Proposals for Conservation and Management
- Updates

Mikkelsen presented the updates from the SC for each species.

4.2 Fin whales

Report from the SC

Abundance estimates

Iceland/Faroe Islands shipboard survey

The SC/23 adopted the estimate of 40,788 (cv 0.17, 95% CI: 28,476 - 58,423) as the most appropriate to use in the assessment, and the estimate of 35,605 (cv 0.18, 95% CI: 24,615 - 51,505) for comparison to the 2007 survey.

Norwegian shipboard survey

The Norwegian surveys are conducted in a mosaic design, with different areas surveyed in each year across a 6-year cycle. The current cycle ends in 2019, and therefore a new abundance estimate from this cycle is not available yet. A new abundance estimate will be presented after 2019.

West and East Greenland aerial surveys

The SC accepted the advice of the AEWG of the estimates corrected for perception bias of 465 (95% CI: 233-929) in West Greenland and 1,932 (95% CI: 1,204-3,100) in East Greenland.

The 2015 survey in East Greenland was the first in this area, and therefore there are no previous estimates to compare with the 2015 estimate.

For West Greenland, the 2015 estimate is lower than the previous estimate, but the decrease appears to be real, and not an artefact of survey methodology. The decrease cannot be explained by the catches, which are too low to have caused the decline. There is currently not enough information to given a reason for the decline, however it is likely that there are ongoing large scale ecosystem changes.

Combining estimates

The SC noted that it should be possible to produce a combined estimate for North Atlantic fin whales, including estimates from NASS2015 and the additional Norwegian mosaic surveys 2014-2019.

The SC **recommended** that all the parties involved in fin whale estimation (NASS, Americans, Canadians, etc.) should cooperate to be able to work towards combining the estimates from different areas and different years. This would likely increase the current total abundance for the North Atlantic of 53,000 fin whales (IUCN 2013).

New advice for Iceland

The Large Whale Assessment WG met in January 2017, and the SC held an intersessional meeting on 2 March 2017 to review the advice for Iceland from that meeting.

This meeting provided a response to **R-3.1.7**. The SC **endorsed** the work of the WG and the recommended that a catch limit of 161 fin whales in the WI area and 48 in EI/F area (based on application of the RMP to the EG+WI+EI/F region) is safe and precautionary, and that this advice should be considered valid for a maximum of 8 years (2018 to 2025).

Recommendations for research

As noted above, the SC **recommended** that all the parties involved in fin whale estimation (NASS, Americans, Canadians, etc.) should cooperate to be able to work towards combining the estimates from different areas and different years.

Research to inform a future assessment:

- Information on stock identity: Incorporating samples from a wider geographical area into an existing study on close-kin relationship of whales caught off Iceland and Greenland, e.g. using biopsies.
- Gathering information on the annual cycle of fin whales including overall movements and indications of possible breeding areas (e.g. applying satellite telemetry).
- Continued collection of biological samples for age, reproduction, etc. from whales caught off Iceland.

Comments by the MCC to the SC report

Abundance estimates

The MC noted the abundance estimates from the Iceland/Faroe Islands shipboard surveys, and the aerial surveys in East and West Greenland.

Iceland noted that the fin whale abundance estimate from the Iceland-Faroe Islands shipboard survey is the highest that has been seen in all previous NASS.

Hunters from Greenland noted that they have observed many changes in habitat and fin whale distributions probably due to climate change. Fin whales were not previously seen in the high north, but recently fin whales have been observed as far north as Upernavik. In the Thule area, fish species such as capelin, a prey item for fin whales have been observed in Qaanaaq and they can expect to see whales further north in the future.

Updated advice for Iceland

The MC accepted the advice of the SC and endorsed the annual catch limits of 161 fin whales in the West Iceland area and 48 in East Iceland/Faroese for a maximum of 8 years (2018 to 2025).

The MC noted that the next IWC *Implementation Review* will begin around 2022, and should be completed by the time this advice expires.

Recommendations for Research

Regarding collection of samples for genetics/stock identity, Greenland informed the MCC that the samples from catches are from West Greenland. Mikkelsen informed the MCC that the advice is to obtain samples from the largest geographical area, possibly using biopsies from areas where there are no catches.

Requests by Council for advice from the Scientific Committee

R-1.7.11 (ongoing): ...estimates of abundance and trends

R-1.7.12 (ongoing): Greenland requests the SC to give information on sustainable yield based on new abundance estimates expected from TNASS2015 for all large baleen whales in West Greenland waters **R-3.1.7 amended** (ongoing): complete an assessment of fin whales in the North Atlantic and also to include an estimation of sustainable catch levels in the Central North Atlantic. While long-term advice based on the outcome of the RMP Implementation Reviews (with 0.60 tuning level) is desirable, shorter term, interim advice may be necessary, depending on the progress within the IWC. This work should be completed before the annual meeting of the SC in 2015. Amended at NAMMCO/24: The new amendment replaces the NAMMCO/23 amendment and reads: The SC is requested to complete an assessment of fin whales in the North Atlantic. A long-term advice based on the new NASS2015 abundance estimate and the available results from the RMP Implementation Reviews (with 0.60 tuning level) is needed in 2016.

The MCC considered requests R-1.7.11 (re: abundance estimates) and R-3.1.7 (re: catch advice for Iceland) have been completed.

Status of past proposals for conservation and management

The past proposal **3.1.4** Iceland: catch limit of **146** in the EG+WI; valid for a maximum of 2 years (2016 and 2017; NAMMCO/24). The MCC noted that there is now updated advice for Iceland, and considers that this proposal is completed. The new advice endorsed at this meeting replaces this proposal (3.1.5).

Recommendations for Research to inform management

The MCC endorsed the recommendations for research and looks forward to the results from the SC at future MCC meetings.

Updates from Member Countries

Greenland informed the MCC that the quota from the IWC for West Greenland in 2016 was 19, and the catch in 2016 was 10.

4.3 Humpback whales

Report from the Scientific Committee

Abundance estimates in West and East Greenland

The SC accepted the abundance estimate of 1,321 humpback whales (cv=0.44; 95% CI= 578-3,022) in West Greenland and 4,012 whales (cv=0.35; 95% CI= 2,044-7,873) in East Greenland.

Abundance estimates were not available from Iceland-Faroe Islands or Norway but it may be possible to get an estimate in the future.

Large Whale Assessment WG

Humpback whales were discussed at the Large Whale Assessment WG in January, however this section of the report will be discussed at the next SC meeting, and will be presented at NAMMCO-26. This work addressed both R-1.7.12 and parts of R-3.2.4.

Comments by the MCC on the SC Report

The MCC discussed whether it was expected to have so few sightings in Norway. Haug informed the MCC that Norway will need to complete the mosaic cycle first, but the plan is to develop an abundance estimate after the completion of that cycle of surveys.

The MCC **noted** the new abundance estimates for East and West Greenland, and looks forward to the results from the Large Whale Assessment WG that will be presented to the SC in November 2017.

Requests by Council for advice from the Scientific Committee

R-1.7.12 (ongoing): Greenland requests the SC to give information on sustainable yield based on new abundance estimates expected from TNASS2015 for all large baleen whales in West Greenland waters **R-3.2.4 (ongoing):** conduct a formal assessment following the completion of the T-NASS...In addition the Scientific Committee is requested to investigate the relationship between the humpback whales summering in West Greenland and other areas and incorporate this knowledge into their estimate of sustainable yields of West Greenland humpback whales. **Amendment (NAMMCO/24):** adds the following text: "The SC is further asked to provide advice on future catch levels of humpback whales in West Greenland at different probability levels for a non-declining population evaluated over a 5 year period, similar to the procedure for the advice generated for beluga, narwhal and walrus. The advice should include the latest abundance estimate."

The MCC noted that R-1.7.12 and the assessment part of R-3.2.4 will be discussed in connection with the Large Whale Assessment WG report at the next SC meeting.

Greenland, Iceland and Norway are collecting photo ID pictures to look at possible movements between the areas.

Proposals for Conservation and Management

There were no new proposals for conservation and management.

Updates from Member Countries

Greenland informed the MCC that the national quotas for large whales in 2015-2018 is based on the advice from the IWC Scientific Committee and approved by the IWC Commission in 2014. For humpback whale the quota from the IWC for West Greenland in 2016 was 10 with a carryover of 2, and 5 whales were caught in 2016.

4.4 Minke whales

<u>Report from the Scientific Committee</u> *Abundance estimates- Icelandic shipboard* The SC accepted the total estimate of 36,185 (cv 0.31, 95% CI 19,942 to 65,658) for the total survey area, and the corrected estimate for Icelandic coastal waters (IC or CIC in RMP terms) of 12,710 (cv 0.52, 95% CI 4,498 to 35,912) for generating management advice.

Abundance estimates- Icelandic coastal aerial

The 2016 aerial survey, similar to the 2015 survey, had poor weather and low covereage. At the time of the SC meeting, Iceland informed the SC that it will be possible to get an abundance estimate.

Abundance estimate- Norway

No finalized abundance estimate was presented to the SC. A preliminary estimate of common minke whale abundance show a considerable decrease in the Svalbard area (2014), a relatively stable situation in the Norwegian Sea (2015) and a considerable increase in the Jan Mayen area (2015 and 2016). Full variance estimates for the preliminary estimates have not yet been calculated. Norway plans to survey in the Barents Sea in 2017, and will finish the cycle with the North Sea, after which abundance estimates will be calculated.

Abundance estimates- West and East Greenland

The SC accepted abundance estimates of 4,204 whales (cv=0.47; 95% CI= 1,753-10,085) in West Greenland and 2,681 whales (cv=0.45; 95% CI= 1,153-6,235) in East Greenland.

As seen in other species in NASS2015 surveys, the 2015 estimate is lower than the 2007 estimate.

Advice for Iceland

The Large Whale Assessment WG provided new advice for Iceland, which was reviewed by the SC in an intersessional videoconference meeting. The SC **endorsed** the advice of the WG that an annual catch of about 360 minke whales is a lower bound for the sustainable catch for the Central North Atlantic medium area, and the advice of the WG of catch levels of 217 common minke whales from the CIC sub-area.

The assessment is valid for the same time period as fin whales (until 2025), but the SC noted that the advice may be updated with new abundance estimates estimates and that this would not require a new formal assessment by the WG.

Comments by the MCC on the SC Report

Abundance estimates

The MC **noted** the completed abundance estimates from the Iceland shipboard survey and the aerial surveys from West and East Greenland.

Greenland noted that the 2015 estimate for West Greenland is lower than the 2007 estimate, which could impact the quotas from the IWC. Greenland updated the MCC that at a recent IWC working group meeting, updated abundance estimates with new correction factors applied have been accepted at a recent IWC meeting. The MC asks the SC to review these new estimates.

Iceland updated the MCC that an abundance estimate has now been completed from the 2016 aerial survey, but this survey experienced poor weather conditions and low realized effort, therefore the abundance estimate has wide confidence intervals. The abundance estimate will be presented to the next SC meeting and/or the planned AEWG in early 2018. Iceland is working on plans for minke whale surveys in the future.

New advice

The MC **endorsed** the catch advice recommended by the SC for Iceland that an annual catch of 360 minke whales is a lower bound for the sustainable catch for the Central North Atlantic medium area, and the advice of the WG of catch levels of 217 common minke whales from the CIC sub-area.

The SC also discussed the paper by Solvang et al 2017 which provided informaon on the location of catches from the Norwegian area, and described the observed decreases in body condition of minke

whales from ca 2000 to 2013. These decreases in body condition may be related to changes in the ecosystem.

Requests by Council for advice from the Scientific Committee

R-1.7.11 (ongoing): develop estimates of abundance and trends as soon as possible

R-1.7.12 (ongoing): Greenland requests the SC to give information on sustainable yield based on new abundance estimates expected from TNASS2015 for all large baleen whales in West Greenland waters **R-3.3.4 amended(ongoing):** full assessment, including long-term sustainability of catches, of common minke whales in the Central North Atlantic... assess the short-term (2-5 year) effects of the following total annual catches: 0, 100, 200 and 400. **Amended NAMMCO/24:** The SC is requested to complete assessments of common minke whales in the North Atlantic and include estimation of sustainable catch levels in the Central North Atlantic.

The MCC noted that the new catch advice fulfils **R-3.3.4** and considers this request to be completed.

Proposals for Conservation and Management

The MCC noted that proposal **3.2.4** contained the previous catch advice, and the MCC now considers this proposal completed.

The new advice endorsed at this meeting will now become proposal 3.2.5.

New recommendations for research to inform management

- Update after RMP Implementation Review, use this to provide long-term advice
- MSY rate re-evaluated, determine more appropriate MSY rate
- collection of age/sex/reproductive data (existing information is outdated, low sample sizes) (New proposal 3.2.6)

The MC agreed with these recommendations for future research.

Updates from Member Countries

Norway informed the MCC that the 2016 quota was 880, and the catch was 591, with 16 vessels participating in the hunt.

Greenland informed the MCC that the quota for West Greenland in 2016 was 164, with a carryover of 15, and a catch of 148 whales. For East Greenland, the quota was 12, with a carryover of 3, and a catch of 15 whales.

Greenland also shared an animation video created by Henriksen A/S on the whale grenade-99. The narration of the video is in English, but the text will be made available to the Hunting Committee so audio can be made available in the language of the relevant member countries. The video will also be shown to Council. The MCC noted that the video is a good development for training the hunters.

4.5 Beluga

<u>Report from the Scientific Committee</u>

The SC was presented to a new paper, Heide-Jørgensen et al 2016, "Rebuilding beluga stocks in West Greenland" which, based on 40 years of catches and 30 years of surveys and the introduction of quotas, show that management measure have revearsed the down-ward trend in the stock. This paper is a good example of a NAMMCO success story. The paper states: "It can therefore be concluded that the advice on sustainable harvest levels provided by NAMMCO and the implementation of catch limits in communities that were unfamiliar with restrictions on beluga hunting have enabled the stock to rebuild."

Regarding **R-3.4.14** which concerns an assessment for belugas in East Greenland, the SC noted that there have not been enough sightings in East Greenland to do an assessment, and that the few sightings are likely stragglers from Svalbard.

Regarding **R-3.4.9** the SC noted that these requests have been answered as far as is possible with the information that is currently available. However, this request remains ongoing, and should be considered again when additional specific information is available.

Regarding **R-1.5.3**, the SC recommended that:

- Issues of disturbance should be discussed at the NAMMCO-JCNB JWG
- Detailed information on the Mary River Project should be made available to the JWG
- JWG should routinely include information sharing on projects that would affect belugas and narwhals in Baffin Bay
- There is a need for a formalized mechanism for cross-border assessment for how these shared stocks are dealt with.
- The SC recommends that GINR is consulted when projects are in development, before final approval, or if the project plans change and/or develop further.

Recommendations for research

The SC recommended additional satellite tagging to get information on movements and distribution.

The SC also heard updates on the effects of satellite tags on belugas and narwhals. Animals that were previously tagged have been recaptured, and investigations of the satellite tag site do not show any detrimental effects of the tags. The recapture of these whales many months after the tagging indicates that survival and mortality are not affected by the satellite tagging process.

Requests by Council for advice from the Scientific Committee

R-1.5.3 (new at NAMMCO-24) The Council requests the SC to monitor the development of the Mary River Project and assess qualitatively or if possible quantitatively the likely impact and consequences on marine mammals in the area.

This MCC noted that this item was discussed during the JMC under Item 3.1.

R-3.4.9 (ongoing): provide advice on the effects of human disturbance, including noise and shipping activities, on the distribution, behaviour and conservation status of belugas, particularly in West Greenland; narwhal added at NAMMCO 23

The MCC **noted** the reponse from the SC.

R-3.4.11 (standing): update the assessment of both narwhal and beluga

The MCC noted that the NAMMCO-JCNB JWG met a few weeks prior to the MCC meeting, and the report will be discussed at the next SC meeting. The MCC looks forward to these results.

R-3.4.14 (new at NAMMCO-24) The Council requests the SC to examine the data existing on beluga in East Greenland (sightings, strandings, by-catch and catch) and examine how this material can be used in an assessment process and advice on how this data can be improved.

The MCC **noted** the response of the SC.

Comments by the MCC on the report of the SC

The MCC noted the report of the SC and looks forward to the results that will be presented at the next MCC.

Proposals for Conservation and Management

There were no new proposals for conservation and management.

Updates from Member Countries

Greenland informed the MCC that 201 belugas were caught in 2016, which was 120 less than the quota.

Greenland also noted that it is likely that narwhals and belugas experience some pain from the satellite tagging. Greenland expressed that they were glad to hear of the higher abundance estimates, and are hopeful that these increases continue into the future. The previous hunting methods of drive hunts, where over 100 whales were taken at a time has stopped, and the numbers have increased. Greenland noted that it is difficult to understand how the abundance estimates are developed, and the hunters believe there are many whales.

4.6 Narwhal

Report from the Scientific Committee

A new abundance estimate for East Greenland was presented at the recent NAMMCO-JCNB JWG meeting, and will be discussed at the next SC meeting.

Requests by Council for advice from the Scientific Committee

R-3.4.9 (ongoing): provide advice on the effects of human disturbance, including noise and shipping activities, on the distribution, behaviour and conservation status of belugas, particularly in West Greenland; narwhal added at NAMMCO 23

R-3.4.11 (standing): update the assessment of both narwhal and beluga

The MCC noted that the NAMMCO-JCNB JWG met a few weeks prior to the MCC meeting and the report will be discussed at the next SC meeting.

Comments by the MCC on the SC Report

The MCC noted the SC report, and looks forward to the results that will be presented at the next MCC.

Proposals for Conservation and Management

Past proposals

3.3.6 "struck and lost" data be collected from all areas and types of hunt; all "struck and lost" animals be included in the advice (NAMMCO 19).

The MCC noted that this issue was discussed during the JMC.

3.3.7: no more than 50 for the Ittoqqortoormiit area and 16 for the Tasiilaq/ Kangerlussuaq (NAMMCO/24)

Recommendations for research to inform management

3.3.8 New surveys in the two stocks where recommended catch levels has decreased, i.e. East Greenland and Melville Bay (NAMMCO/24)

Updates

Greenland updated the MCC that the entire quotas in both West Greenland and East Greenland was not taken in 2016. The changes observed due to climate change are making the hunting situation difficult. The winter ice is further north than in the past, and hunting is more difficult around Sisimiut, making it difficult to get the whole quota. Greenland is pleased to hear the abundance of narwhals has increased in recent years.

Greenland updated the MCC on New Executive Order- Changes in the Executive Order are as follows:

- The introduction of a definition clause.
- Determination of quotas for hunting and establish hunting areas, separation of chapters.
- Clarification of the rules regarding the establishment of hunting areas based on stock boundaries.
- Give the municipalities power to issue more than one license at a time.
- Clarification of the rules for joint hunting.
- All towns and settlements in all areas of management to be given a part of the quota.
- Clarifying the rules for hunting in Melville Bay reserve's protected areas.
- Changing the maximum vessel length of 14 meters to 15 meters.
- Up to 15% of the quota may be allocated to recreational hunters in East Greenland.
- Specifying rules for licensing and joint hunting.
- Editorial and technical changes.

4.7 Sei whales

Report from the Scientific Committee

The SC discussed that sei whales usually arrive around Iceland later in the season than the target species of NASS, and thus these surveys do not coincide with peak abundance of the species. Like in most previous surveys there were not enough sightings in NASS2015 to develop any abundance estimates. This information is in response to R-1.7.12 and R-3.5.3.

Comments by the MCC on the SC report

The MCC noted the report of the SC.

Requests by Council for advice from the Scientific Committee

R-1.7.12 (ongoing): Greenland requests the SC to give information on sustainable yield based on new abundance estimates expected from TNASS2015 for all large baleen whales in West Greenland waters **R-3.5.3 amended** (ongoing): assess the status of sei whales in West Greenland waters and the Central North Atlantic and provide minimum estimates of sustainable yield

The MCC noted that there were no new abundance estimates from NASS2015, and recommended to keep these requests as ongoing, especially in light of the ecosystem changes and observed distributional shifts seen in other species.

Updates by member countries

There was no new information from member countries.

4.8 Northern bottlenose whales

Report from the Scientific Committee

There were some sightings during NASS2015 in the central Norwegian Sea, Jan Mayen area, and central Atlantic, especially in the Faroe Islands survey. However, this species is a low priority to develop an abundance estimate. There were also some sightings during the Greenlandic surveys, but there are no plans to generate an abundance estimate.

Requests by Council for advice from the Scientific Committee

There are no active requests for advice.

Proposals for Conservation and Management

There were no new proposals for conservation and management.

Updates by member countries

No new information was available to the MCC.

4.9 Killer whales

Report from the Scientific Committee

Catches in Greenland have not been validated by the Ministry. The catches are now starting to be too old to be validated and the SC **recommends** that catch validation should be done on an annual basis. In response to R-3.7.2, this is a species that is hunted in Greenland, with uncertain catch statistics, and no abundance estimate. Work is ongoing that will help in answering this request, and the SC **recommends** that this information is gathered with more speed in order for the SC to be able to monitor the hunt.

The SC recommended that abundance estimates should be produced if the data permits.

Comments by the MCC on the SC report

Greenland updated the MCC that the process of validating the catch data has begun.

Greenland noted that killer whales are not a target species and asked for clarification on the recommendations by the SC. The SC stressed the importance in obtaining reliable catch statistics.

Requests by Council for advice from the Scientific Committee

R-3.7.2 (ongoing): review the knowledge on the abundance, stock structure, migration and feeding ecology of killer whales in the North Atlantic, and to provide advice on research needs to improve this knowledge. Priority should be given to killer whales in the West Greenland – Eastern Canada area.

The MCC noted the SC response to this request.

Proposals for Conservation and Management

There were no proposals for conservation and management.

Updates by member countries

There was no new information presented to the MCC by the member countries.

4.10 Long-finned pilot whales

Report from the Scientific Committee

Abundance estimate- Iceland-Faroe Islands

No abundance estimate from the NASS 2015 survey was available to the SC as the data had not been fully explored for duplicate sightings in advance of the AEWG meeting.

The SC recommended that the analysis of the pilot whale data should be completed within the next few months.

Abundance estimates- West and East Greenland

The SC accepted abundance estimates of 11,993 whales (cv=0.52; 95% CI= 4,575-31,438) in West Greenland and 338 whales (cv=1.01; 95% CI= 65-1,749) in East Greenland. These should be considered minimum estimates as the survey is only capturing a fraction of the population in Baffin Bay.

Requests for advice

In response to R-3.8.6: a full assessment is planned once the abundance estimate from the Faroe Islands is complete (recommended to be completed within the next few months), and the information from samples for biological information is available. Estimates from East and West Greenland were accepted by the SC. The SC will discuss the timing of a future assessment working group at the next SC meeting.

Comments by the MCC on the SC report

The MCC noted the abundance estimates from West and East Greenland.

Requests by Council for advice from the Scientific Committee

R-1.7.11 (ongoing): develop estimates of abundance and trends as soon as possible

R-3.8.6 (ongoing): complete a full assessment of pilot whales in the North Atlantic and provide advice on the sustainability of catches...with particular emphasis on the Faroese area and East and West Greenland. In the short term...provide a general indication of the level of abundance of pilot whales required to sustain an annual catch equivalent to the annual average of the Faroese catch in the years since 1997

The MCC noted the response of the SC to these requests, and looks forward to the results of a future pilot whale assessment working group.

Proposals for Conservation and Management

There were no new proposals for conservation and management.

Updates from member countries

Greenland informed the MCC that the 5 year average for catches in the period 2011-2015 was 350/year. For the previous 5 year period (2006-2010), the average catch was 220/year. It is unclear why there has been an increase in the catches.

4.11 White-beaked, white-sided and bottlenose dolphins **Report from the Scientific Committee**

Abundance Estimates

The SC accepted the abundance estimates of 2,747 white-beaked dolphins (95% CI: 1,257-6,002) in West Greenland and 2,140 (95% CI: 825-5,547) in East Greenland.

The SC noted that the West Greenland estimate is a decline from the 2007 estimate, however it is not significant.

Requests for advice

In response to R-3.9.6, the SC noted that abundance estimates from East and West Greenland from NASS2015 were accepted by the SC. There were enough sightings that estimates can be developed by Iceland and Norway in the future. The analysis of the biological sampling from the 2007 catch in the Faroe Islands is still in progress.

Comments by the MCC on the SC report

The MCC noted these abundance estimates from East and West Greenland.

Requests by Council for advice from the Scientific Committee

R-3.9.6 (ongoing): assessments of dolphin species

The MCC noted the response of the SC on this request.

Proposals for Conservation and Management

There were no new proposals for conservation and management.

Updates by the member countries

Greenland updated the MCC that average catches of dolphins the last 5 years (2011-2015) was 160/year. For the previous 5 years (2006-2010) the average was 115/year. The cause of increase in catches is unknown.

Iceland updated the MCC that they have recently finalized an abundance estimate for dolphins around Iceland, and this estimate will be presented at the next meeting of the AEWG.

4.12 Harbour porpoise

<u>Report from the Scientific Committee</u>

An increased research effort (aerial surveys, sampling from by-caught porpoises, etc.) on harbour porpoises in Norway is being driven by the concerns regarding the by-catch.

The SC also discussed genetics research in Iceland that may allow for abundance estimates to be calculated from genetics in the future.

Abundance estimates- Greenland

The SC accepated an abundance estimate of 83,321 harbour porpoises (cv= 0.34; 95% CI=43,377-160,047) in West Greenland and 1,642 harbour porpoises (cv= 1.00; 95% CI= 318-8,464) in East Greenland. This is an increase in West Greenland from the 2007 estimate.

Catch reporting in Greenland

There have been previous recommendations from HPWG and the SC to validate the catches. The SC discussed whether it is possible to have catches validated and suggested that an alternative method could be to use a trend of the catches in the assessment. Another option would be to survey hunters. The SC also noted that the Ministry should figure out how to assess whether by-catches are being reported either as direct catch or by-catch.

Future HPWG

Regarding R-3.10.1, the SC discussed a possible future HPWG. Norway and Iceland both stated that they will likely not have the information ready for a meeting until 2018 and Greenland is also fine with waiting until 2018 for the next HPWG. The SC also supported the idea that a future meeting should include participants from ASCOBANS and other EU scientists.

Comments by the MCC on the SC report

The MCC noted the abundance estimates from West and East Greenland.

Requests by Council for advice from the Scientific Committee

R-3.10.1 (ongoing): comprehensive assessment of the species throughout its range

The MCC noted the response of the SC Comments on this request, and the plans for HPWG in 2018.

Proposals for Conservation and Management

There were no new proposals for conservation and management.

Updates by member countries

Greenland updated the MCC that in the period 2011-2015, the annual catch was 2,500/year, which was the same as previous 5 years (2006-2010).

Norway informed the MCC that there were updated calculations for by-caught harbour porpoises, as the previous estimations that were presented were based on incorrect landings data. The new estimate, valid for the period 2006-2014, is around 2,900/year, which is still high, but considerably lower than the previous estimate. This new estimate will be presented at the upcoming WGBYC. The MCC noted this by-catch estimate, and acknowledged the increased research effort in Norway, including an expected new abundance estimate in the near future. The MCC looks forward to the outcome of the research efforts in Norway, and the planned HPWG in 2018.

Iceland updated the MCC that a new by-catch estimate for harbour porpoises will be presented at the WGBYC. A new abundance estimate is also ready to be presented at the next AEWG.

4.13 Sperm whale

Report from the Scientific Committee

No new abundance estimates were presented at the AEWG, however data are available from Iceland and Norway to develop an abundance estimate.

Requests by Council for advice from the Scientific Committee

There were no requests for advice.

Proposals for Conservation and Management

There were no new proposals for conservation and management.

Updates from Member Countries

No updates were given to the MCC.

4.14 Bowhead whale

Report from the Scientific Committee

A new abundance from the Svalbard area will be presented next year.

Greenland are conducting an in-depth analysis of 140 tags that have been deployed from 2004-2011. The SC awaits these results at a future meeting.

Requests by Council for advice from the Scientific Committee

R-1.7.12 (ongoing): Greenland requests the SC to give information on sustainable yield based on new abundance estimates expected from TNASS2015 for all large baleen whales in West Greenland waters

The MCC recommended that this request remains ongoing.

Proposals for Conservation and Management

There were no new proposals for conservation and management.

Updates from the member countries

Greenland informed the MCC that the West Greenland quota was 2, with a carryover of 4, and there were 0 whales caught in 2016.

4.15 Blue Whale

Report from the Scientific Committee

There were some sightings of blue whales during the NASS2015 on the East Greenland shelf break. It is unlikely that an abundance estimate will be developed. There was 1 sighting in East Greenland and none in West Greenland.

Requests by Council for advice from the Scientific Committee

There are no requests for advice from the Scientific Committee for blue whales.

Proposals for Conservation and Management

There are no proposals for conservation and management.

Updates from member countries

There were no updates from member countries.

5. ELECTION OF OFFICERS

Election of officers was discussed in the Council meeting and Nette Levermann (GL) was elected chair for 2017 and 2018.

6. ANY OTHER BUSINESS

There was no items under this agenda item.

Appendix 1 – Agenda

AGENDA ITEMS	DOCUMENT REFERENCE	
1. CHAIRMAN'S OPENING REMARKS		
2. ADOPTION OF AGENDA		
3. NASS 2015	NAMMCO/25/07, Item 9, ANNEX 3	
4. CONSERVATION AND MANAGEMENT MEASURES FOR WHALE STOCKS		
4.1. Fin whale	NAMMCO/25/07, Item 8.1 NAMMCO/25/MC/05 NAMMCO/25/MC/06 (R-1.7.11, R-1.7.12, R-3.1.7)	
4.2. Humpback whales	NAMMCO/25/07, Item 8.2 NAMMCO/25/MC/05 NAMMCO/25/MC/06 (R-1.7.12, R-3.2.4)	
4.3. Minke whales	NAMMCO/25/07, Item 8.3 NAMMCO/25/MC/05 NAMMCO/25/MC/06 (R-1.7.11, R-1.7.12, R-3.3.4)	
4.4. Beluga	NAMMCO/25/07, Item 8.4 NAMMCO/25/MC/05 NAMMCO/25/MC/06 (R-3.4.9, R-3.4.11, R-3.4.14)	
4.5. Narwhal	NAMMCO/25/07, Item 8.5 NAMMCO/25/MC/05 NAMMCO/25/MC/06 (R-3.4.9, 3.4.11)	
4.6. Sei whales	NAMMCO/25/07, Item 8.6 NAMMCO/25/MC/05 NAMMCO/25/MC/06 (R-3.5.3 amended, R-1.7.12)	
4.7. Northern bottlenose whales	NAMMCO/25/07, Item 8.7 NAMMCO/25/MC/05 NAMMCO/25/MC/06	
4.8. Killer whales	NAMMCO/25/07, Item 8.8 NAMMCO/25/MC/05 NAMMCO/25/MC/06 (R-3.7.2)	
4.9. Long-finned pilot whales	NAMMCO/25/07, Item 8.9	
4.10. White-beaked, white-sided and	NAMMCO/25/MC/05 NAMMCO/25/MC/06 (R-3.8.6, 1.7.11)	
bottlenose dolphins	NAMMCO/25/07, Item 8.10 NAMMCO/25/MC/05	
	NAMMCO/25/MC/06 (R-3.9.6)	

4.11. Harbour porpoise	
	NAMMCO/25/07, Item 8.11
	NAMMCO/25/MC/05
	NAMMCO/25/MC/06 (R-3.10.1)
4.12. Sperm whale	
	NAMMCO/25/07, Item 8.12
	NAMMCO/25/MC/05
	NAMMCO/25/MC/06
4.13. Bowhead whale	
	NAMMCO/25/07, Item 8.13
	NAMMCO/25/MC/05
4.14. Blue Whale	NAMMCO/25/MC/06 (R-1.7.12)
	NAMMCO/25/07, Item 8.14
	NAMMCO/25/MC/05
	NAMMCO/25/MC/06
5. ELECTION OF OFFICERS	
6. ANY OTHER BUSINESS	

Appendix 2 – List of documents

Document no	Title	Agenda item
NAMMCO/25/MC/01	Joint List of Documents for the Management Committees	
NAMMCO/25/MC/02	Draft Agenda MCJ	
NAMMCO/25/MC/03	Draft Agenda MCSW	
NAMMCO/25/MC/04	Draft Agenda MCC	
NAMMCO/25/MC/05	Status of Past Proposals for Conservation and Management	MCC, MCSW
NAMMCO/25/MC/06	Summary of Requests by NAMMCO Council to the Scientific Committee, and Responses by the Scientific Committee	MCJ, MCC, MCSW
NAMMCO/25/MC/07	Recent proposals for Conservation and Management and research recommendations - Cetaceans	МСС
NAMMCO/25/MC/08	Recent proposals for Conservation and Management and research recommendations – Seals and Walruses	MCSW
NAMMCO/25/07	Report of the 23 rd meeting of the Scientific Committee	MCJ, MCC, MCSW
NAMMCO/25/28	Report of the intersessional Scientific Committee meeting 2 March 2017	MCC