

**NAMMCO SCIENTIFIC COMMITTEE
24th MEETING
Reykjavik, Iceland
14-17 November 2017**

Draft Agenda

Paper numbers in []. Grey shading = text from previous reports. Green shading indicates work/notes for this meeting.

1. CHAIRMAN'S WELCOME AND OPENING REMARKS
2. ADOPTION OF AGENDA
3. APPOINTMENT OF RAPPORTEUR
4. REVIEW OF AVAILABLE DOCUMENTS AND REPORTS

4.1. National Progress Reports [SC/24/NPR-F, -G, -I, -N, -C, -J, -R]

- Note the new deadline for NPRs, which will be in effect in 2018 (so NPRs will be due 1 March 2018; NAMMCO/25)

4.2. Working Group Reports

4.2.1. Large Whale Assessment WG [SC/24/11]

- Minke and fin for Iceland already dealt with/endorsed by Intersessional SC [SC/24/XX], and Council (NAMMCO/25).
- Still have to discuss humpback whale Greenland.

4.2.2. NAMMCO-JCNB JWG [SC/24/13]

4.2.3. By-catch WG [SC/24/12]

4.3. Other reports and documents

4.3.1. Global Review of Monodontids [SC/24/14]

4.3.2. SC Intersessional Report [SC/24/11]

4.3.3. SMM Workshop Report [SC/24/15]

5. WORK PROCEDURES IN THE SC

5.1. Updates from Council: NAMMCO/25

5.1.1. External experts – participation and funding

5.1.2. Confidentiality of reports and documents

5.1.3. New requests

These are just FYI items

5.2. Abundance [SC/24/05a,b]

Any updates to the abundance table? Keep this item open, as SC to check and update during meeting

5.3. Catches

5.3.1. Struck and Lost (R-1.6.4)

R-1.6.4 The SC has recommended that catch statistics include correction for struck but lost animals for different seasons, areas, and catch operations. Council requested the SC and the Committee on Hunting Methods to provide advice on the best methods for collection of the desired statistics on losses. Council noted that this request, although brought up regarding walrus, not only pertains to walrus but to all species.

5.4. Ideas for future meetings/furthering cooperation in SC

5.4.1. Presentation

5.4.2. Development of a “super-tag”

5.4.3. Genetics collaboration

5.5. Guidelines for development of management advice in SC/WGs [SC/24/16]

Document summarising working procedures various WGs

6. COOPERATION WITH OTHER ORGANISATIONS

6.1. IWC [SC/24/07]

6.2. ASCOBANS [SC/24/06]

Update from GD on HP cooperation

6.3. ICES [SC/24/08]

6.3.1. Joint ICES/NAFO/NAMMCO WGHARP

- WGHARP meeting in Sept 2018, likely in Tromsø
- Chair – Mike Hammill?

6.4. JCNB

- Commission report?
- NAMMCO-JCNB JWG report will be discussed under belugas and narwhals.

6.5. Arctic Council [SC/24/09]

- SAMBR Report
- Update from CAFF Board and WG meetings

6.6. Other

7. ENVIRONMENTAL / ECOSYSTEM ISSUES

7.1. Marine mammals-fisheries interactions (R-1.1.5, 1.1.8)

7.1.1. Review of active requests

R-1.1.5 (standing): The Council encourages scientific work that leads to a better understanding of interactions between marine mammals and commercially exploited marine resources, and requested the Scientific Committee to periodically review and update available knowledge in this field.

7.1.2. Consumption of resources by marine mammals

- Mette Mauritzen’s work

7.1.3. By-catch [SC/24/12]

For SC/24:

- By-catch WG report
 - Presented by GD?
 - Some details under the relevant species (harbour porpoise, harbour seal, grey seals)

- Work needs to be done by Norway and Iceland before numbers can be used in assessments (particularly HP and Coastal Seals, scheduled to have WG meetings in 2018 and 2019, respectively)

7.2. Multispecies approaches to management/Ecosystem Modelling (R- 1.1.8, 1.2.1, 1.2.2, 1.4.7)

7.2.1. Review of active requests

R-1.1.8 (ongoing): In addressing the standing requests on ecosystem modelling and marine mammal fisheries interaction, the SC is requested to extend the focus to include all areas under NAMMCO jurisdiction. In the light of the distributional shifts seen under T-NASS 2007, the SC should investigate dynamic changes in spatial distribution due to ecosystem changes and functional responses. See also 1.1.6 and 1.4.6.

SMM Workshop report may address request R-1.1.8 (will not be available until just before SC meeting)

R-1.2.1 (ongoing): consider whether multispecies models for management purposes can be established for the North Atlantic ecosystems and whether such models could include the marine mammals compartment. If such models and the required data are not available then identify the knowledge lacking for such an enterprise to be beneficial to proper scientific management and suggest scientific projects which would be required for obtaining this knowledge.

R-1.2.2 (standing): In relation to the importance of the further development of multispecies approaches to the management of marine resources, the Scientific Committee was requested to monitor stock levels and trends in stocks of all marine mammals in the North Atlantic.

R-1.4.7 (ongoing): The Scientific Committee is requested to review the results of the MAREFRAME ecosystem management project when these become available. In particular, the results should be reviewed with respect to the ongoing and standing requests on marine mammal interactions (R-1.1.0) and multispecies approaches to management (R-1.2.0).

From SC/24:

A potential for defining a joint project based on the output from the MareFrame and REDUS projects was discussed and it was **agreed** that the secretariat would initiate discussions between the MFRI, IMR, UI and UiT.

The Secretariat had some discussions (via email) with Bjarki and Lyne Morisette, but the timing was difficult to submit for funding for such a project. If there is still interest, especially from Bjarki or others in the SC, then the Secretariat can help facilitate further discussions.

From NAMMCO/25:

Iceland commented that the MareFrame is on scheduled with a final meeting to be held in 2017 so it would be possible for the SC to review the results in line with the standing request at its meeting in 2018.

Update from Iceland at NAMMCO/25 was that MAREFRAME is on schedule to finish this year. Any update from Bjarki?

7.2.2. Updates

7.2.3. Future work

7.3. Environmental issues (R-1.5.3, R-1.5.4)

7.3.1. Review of active requests

R-1.5.3 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.

From NAMMCO/25:

Canada intervention- “The Nunavut Impact Review Board had not yet received the revised proposal so no substantiated assessment has begun. It is however anticipated that the Proponent will optimize the open water season and would not pursue year-round shipping. Once final details are submitted to the Nunavut Impact Review Board, Fisheries and Oceans Canada (DFO) will be providing expert advice to the Board in relation to potential project impacts to fish (including marine mammals) and their habitats. Should the environmental assessment result in a determination that the project can proceed to regulatory decision making, DFO would be in a position to contemplate issuing any necessary authorizations under the Fisheries Act.”

From NAMMCO-JCNB JWG report [SC/24/XX]

Baffinland Mary River Mine

The JWG expressed concern regarding development of mining activities and associated ship traffic on the Eclipse Sound narwhal stock. No similar example of such a high level of shipping and development has occurred in a high density narwhal habitat so there is little precedent to inform an assessment of the impacts. Of particular concern are:

1. Narwhal response to shipping activities is not well understood and may include threshold responses in which the narwhals abandon the disturbance area rather than habituate to the disturbance. In this case an irreversible loss of habitat may occur if the narwhals leave and do not re-inhabit the area even in the absence of shipping activity.
2. Ship strikes, lethal and sub-lethal effects of shipping activity may take significant numbers of narwhals. DFO (2014) estimated as many as 123 narwhal would be in the path of ships each year and be at risk of ship strike. Sub-lethal effects include disruption of feeding and communication, with potential consequences to energetics and reproduction. These impacts may negatively affect the sustainable removal levels of the Eclipse Sound stock which is shared between Greenland and Canada.
3. Risk of an oil or toxic spill in a high latitude area is compounded by the presence of ice and the remoteness from the necessary facilities and personnel for cleanup. It is poorly understood how a high arctic ecosystem would respond to an oil spill, the effects of which are likely detrimental and possibly irreversible.

Shipping/Icebreaking in Baffin Bay

The JWG expressed concern regarding shipping and icebreaking activities in the wintering grounds of narwhal and beluga in Baffin Bay where winter time shipping is unprecedented. Ship noise and icebreaking activities will disturb deep diving narwhal during a critical feeding period and may result in unpredictable response and displacement from preferred habitat of both species. Ice breaking will disrupt the distribution and condition of sea ice which may lead to ice entrapments. The risk from oil spill discussed above applies here as well and the JWG noted that there is no available method for cleaning up an oil spill in ice covered waters. A recent gas leak in Cook Inlet, Alaska has demonstrated the difficulties of responding to such an event.

The JWG also expressed concern that cumulative effects should be considered when new shipping and icebreaking activities are proposed for narwhal and beluga habitat areas.

R-1.5.4 (NEW): *Committed to furthering its ecosystem approach to the management of marine mammals, and recognising the range of anthropogenic pressures facing North Atlantic marine mammals associated with the climate and environmental changes taking place, the Council requests the SC to advise on the best process to investigate the effects of non-hunting related anthropogenic stressors on marine mammal populations, including the cumulative impacts of global warming, by-catch, pollution and disturbance.*

From NAMMCO-JCNB JWG [SC/24/13] relevant to this request:

(item 13.1) Climate change impact on management advice

Workshop

Various aspects of climate change may be impacting certain populations of belugas and narwhals. One example is the lack of sightings of narwhals in the southern areas in East Greenland, which may indicate a shift in distribution and/or loss of range. The JWG recommends a workshop to address concerns over changes in management advice in response to the non-hunting takes and changes in distribution resulting from development and warming of the arctic. This workshop would take place over 1-2 days and could be joined with the next JWG (in 2019). The workshop will focus on the populations in West Greenland and Canada, but should include experts involved with changes in marine ecosystems and higher trophic animals in relation to climate change in the North Atlantic and Canadian Arctic (polar bears, walrus, etc.)

The Terms of Reference for the workshop will be to:

- Identify specific effects of climate change on belugas and narwhals
 - Request papers on changes in distribution, population dynamics, etc. resulting from climate change in Canada/Greenland waters
 - The focus will be less on the mechanism of the effects, and more on identifying simple predictors and possible consequences
- Identify specific ways that the JWG's advice may be informed by these effects
 - Climate change may affect timing and distribution of hunted populations.
 - Climate change may affect population model parameters used for assessment.
 - Development in the arctic may result in changes in habitat and carrying capacity as well as increased anthropogenic disturbance which may require changes in assessment models.

7.3.2. Global review of monodontids [SC/24/14]**7.3.3. Updates****7.3.4. Future work****8. SEALS AND WALRUS STOCKS - STATUS AND ADVICE TO THE COUNCIL****8.1. Harp Seal****8.1.1. Review of active requests (R-2.1.4, 2.1.10)**

R-2.1.4 (standing): update the stock status of North Atlantic harp and hooded seals as new information becomes available.

R-2.1.10 (standing): provide advice on Total Allowable Catches for the management of harp seals and the establishment of a quota system for the common stocks between Norway and the Russian Federation

8.1.2. Update**8.1.3. Future Work**

As above, next meeting September 2018, likely Tromsø, chair still TBD (Hammill?)

8.2. Hooded seal**8.2.1. Review of active requests (R-2.1.4 , 2.1.9)**

R-2.1.4 (standing): update the stock status of North Atlantic harp and hooded seals as new information becomes available.

From SC/23: waiting on 2018 survey results (will those be ready by a Sept 2018 WGHARP meeting? Short timeframe between survey and meeting)

R-2.1.9 (ongoing): investigate possible reasons for the apparent decline of Greenland Sea stock of hooded seals; and assess the status of the stock

From SC/23: ...data analysis is ongoing and several publications will come out soon on these data.

Note from NAMMCO/25: Greenland noted that the 2007 advice of no catch still allowed for some small subsistence hunt in East Greenland villages and should be reflected in text referring to this advice from the SC.

8.2.2. Update

8.2.3. Future work

8.3. Ringed seal

8.3.1. Review of active requests (R-2.3.1, 2.3.2)

R-2.3.1 (ongoing): *stock identity, abundance estimate, etc.*

R-2.3.2 (ongoing): *effects of removals of ringed seals in Greenland*

From SC/23: ...new abundance estimates and information on stock structure that have been previously recommended would be the most helpful in answering these requests.

Regarding the recent movement studies suggesting possible stock structure, the SC **recommends** more satellite telemetry and collection of samples for genetics to inform on possible stock structure in Greenland, and across the Arctic.

For the Ilulissat seals, the recommended protection awaits the planned survey.

The SC reiterates the previous recommendations that a WG awaits more info on genetics and satellite tagging. Possible issues to be discussed by a WG could be:

- 1) Stock structure
- 2) Abundance
- 3) Effect of polar bears

From NAMMCO/25: The hunters from Greenland informed of observed decline in seals and that this was probably due to declining ice and the presence of more polar bears closer to the coast.

Haug noted that this information corresponded to what has been reported from Svalbard.

8.3.2. Update

8.3.3. Future work

8.4. Grey seal

8.4.1. Review of active requests (R-2.4.2)

R-2.4.2 (ongoing): *abundance estimates all areas*

8.4.2. Coastal Seals WG

Next meeting tentatively scheduled for 2019. Need updates on recommendations to see if we are on track for that meeting. **From SC/23:** The SC **recommended** that the CSWG should plan to meet again in 2018, pending progress on the recommendations, and new information becoming available. This will be evaluated at the next SC meeting.

Updates on Recommendations from 2016 CSWG:

Recommendations for Norway

- Development of the model to see if it can be modified to account for the observed changes in pup production
- More frequent surveys, particularly in the areas of decline
- Tagging of grey seal pups
- Age-structure of the hunt assumed to be the same as for the by-catch, and this assumption needs to be tested
- Complete the genetics study within this year
- Increase the number of vessels in the reference fleet in the areas of high by-catch (especially Nordland)
- Reporting of all removals. Currently there is little to no reporting of removals around fish farms and from both commercial gill net fisheries and recreational fisheries

Recommendations for the Norwegian Harbour and Grey Seal Management Plans

- The target population levels for both species should be evaluated as the levels are not based on any biological assessment
- To recommend that the quota is set to 0 when the population is at 70% of the target level instead of 50%
- Management plans should include all sources of mortality, not just the hunt
- A mechanism for consulting IMR on for example seal distribution when fish farms are being built should be required when management plans are revised

Recommendations for Iceland

Primary

- A Management Plan should be developed including: the frequency of surveys, legislation of seal hunting and re-evaluation of the target population level objective with the new level being based on biological criteria
- A complete survey should be conducted to obtain a full, reliable abundance estimate
- Reporting of all removals (e.g., by-catches, hunted seals, any other removals)

Next steps

- Pup production surveys at least 3 times to make sure that the peak pupping period is covered
 - Iceland should also consider tagging pups for staging
 - Iceland should also investigate whether the peaks in pupping differ in different areas around the country
- Genetics samples should be collected and analysed to explore stock structure

The need for a reporting system for direct catches was underlined to be able to model the status of the population.

Faroe Islands

An estimated 150-250 grey seals are shot at fish farms annually, based on reports from 40% of the fish farms. Without information on abundance, it is impossible to determine whether this level of removals is sustainable.

Recommendations for the Faroe Islands

- Develop a monitoring plan that includes regular assessments.
- Based on exiting data analyse population viability (population size necessary to sustain the levels of removals)
- Analyse existing UK telemetry data for possible migration between the UK and the Faroes.
- New research to be undertaken

First Priorities

- Obtain minimum population estimates via haulout counts.
- Obtain reliable and complete reporting of all removals (e.g., all companies operating fish farms need to report).

Secondary Priorities

- Telemetry tagging studies to develop correction factors for the haulout counts and also obtain information on movements and distribution
- Samples should be collected from animals shot at farms (e.g., jaws to obtain information on age, sex, genetics etc.).
- A study using cameras to observe animals going in and out of caves
- Photo-ID study for a mark-recapture based population size

Pending progress on the recommendations, and new information becoming available the WG should meet again. This will be evaluated at the next SC meeting.

From NAMMCO/25:

Iceland noted that the recent surveys on seal species in Iceland indicate a severe drop in abundance and it welcomes the recommendations put forward by the SC. Iceland further noted that re-evaluation of the seal management is under consideration in Iceland and that harbour seal surveys will be conducted every other year. The Faroe Islands informed that the plan is to start in 2017 with obtaining minimum population estimates followed up by reliable reporting of all removals and tagging animals, something that would lead to develop a monitoring plan.

Norway welcomed the evaluation and recommendations pertaining to the management plan and informed that these would be taken into considerations by the managers. Norway informed further that the reported catch in 2016 was 33 of a quota of 210 animals.

8.4.3. Update**8.4.4. Future work****8.5. Harbour seal****8.5.1. Review of active requests (R-2.5.2)**

R-2.5.2: conduct a formal assessment of the status of harbour seals around Iceland and Norway as soon as feasible

8.5.2. Coastal Seals WG (2019)**From SC/23:****Recommendations for Norway**

- Increase the number of vessels in the reference fleet in the areas of high by-catch (especially Nordland that has a long coastline)
- Increase survey effort. Important areas could be identified to be surveyed in between other full-coast surveys.
- Management by county should be re-examined, as these management units do not always follow the population structure of harbour seals, especially Nordland county. This is discussed further under Item 6 (Review of the Norwegian management plan)
- Reporting of all removals. Currently there is little to no reporting of removals around fish farms, or of by-catches in commercial gill net fisheries and recreational fisheries.
- Collect data from by-catches (age, sex, etc.). It would be ideal to collect jaws from bycaught seals which will provide information on age, sex and species. It would be particularly helpful to have samples from the reference fleet.

Recommendations for Iceland

- An assessment survey of the entire population should be conducted as soon as possible

- Surveys should then be conducted every 2 years while the population is lower than the target level
- All removals should be reported (e.g., hunting, by-catch, etc.)
- A Management Plan should be developed including outlining the frequency of surveys and legislation of seal hunting
- The target population level objective should be re-evaluated and be based on biological criteria.
- Reproductive rates should be collected
- The effects of disturbance from tourism should continue to be investigated
 - Develop mitigation measures
- The method of catching pups in nets should be investigated. In NAMMCO, killing methods should be immediate. This issue should be referred to the NAMMCO Hunting Committee.

The SC **endorsed** the recommendations of the WG and stressed the need for obtaining catch statistics.

The SC **recommended** that a future CSWG should identify a level of sustainable removals in all areas, particularly in Iceland where the decline has been observed.

8.5.3. Update

8.5.4. Future work

8.6. Bearded seal

8.6.1. Bearded Seal WG (2019)

BSWG 2019 (agreed at NAMMCO/25)

From SC/23:

The SC **recommended** a future working group on bearded seals with the following information. This WG should involve the CAFF group.

Chair: Christian Lydersen

Possible Participants: Aqqalu Rosing-Asvid, Mads Peter Heide-Jørgensen, Kit Kovacs, and participants from Russia, Canada, and possibly Alaska.

The Terms of Reference for the bearded seal WG will be to:

- 1) assess the global distribution and possible population delineations
- 2) evaluate available information on biology including reproduction and feeding habits
- 3) assess the exploitation and other anthropogenic effects incl. climate changes on bearded seals
- 4) suggest populations and areas in the North Atlantic where sufficient data are available for assessing the effects of exploitation and reductions in habitats

The timing of this WG will be discussed further at SC24.

8.6.2. Update

8.6.3. Future work

8.7. Walrus

8.7.1. Review of active requests (R-2.6.3, **R-2.6.7**, R-1.6.4, R-1.6.5)

R-2.6.3 (ongoing): *effects of human disturbance, including fishing and shipping activities, in particular scallop fishing, on the distribution, behaviour and conservation status of walrus in West Greenland.*

R-2.6.7 (NEW-NAMMCO 25): *The SC is requested to provide assessments of, and advice on sustainable removals from, all stocks of walrus in Greenland covering the period from 2019 to 2023, with the advice for Qaanaaq starting in 2021.*

R-1.6.4 (ongoing): *The SC has recommended that catch statistics include correction for struck but lost animals for different seasons, areas, and catch operations. Council requested the SC and the Committee on Hunting Methods to provide advice on the best methods for collection of the desired statistics on losses.*

R-1.6.5 (NEW-NAMMCO 25): *Greenland requests that struck and loss rates are subtracted from future advice on sustainable removals in Greenland, with the advice being given as total allowable landings.*

8.7.2. Walrus Working Group (2018)

Fall (Greenland requested fall)

Likely chair is Rob Stewart, retired from DFO

What new/updated data will be available?

8.7.3. Updates

8.7.4. Future Work

9. CETACEANS STOCKS - STATUS AND ADVICE TO THE COUNCIL

9.1. Fin whale

9.1.1. Review of active requests (R-3.1.7, 1.7.11, 1.7.12)

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-3.1.7 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 and also to include an estimation of sustainable catch levels in the Central 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.*

Check if fin whale advice was long-term, is 3.1.7 completed?

9.1.2. Update

Anything from SMM workshop? Combined estimate?

Anything from recommendations from LWAWG?

9.1.3. Future work

9.2. Humpback whale

9.2.1. Review of active requests (R-3.2.4, 1.7.12)

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-amended (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.”

9.2.2. Large Whale Assessment WG [SC/24/XX]

Abundance estimate: Re-analysis of 2007(?) estimate in west Greenland accepted at LWAWG Greenland assessment

9.2.3. Update

9.2.4. Future work

9.3. Common minke whale

9.3.1. Review of active requests (R-3.3.4, 1.7.11, 1.7.12)

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.

Check if minke whale advice was long-term, is 3.3.4 completed?

9.3.2. Update

Anything from SMM workshop?

Abundance estimate from 2016 aerial survey in Iceland?

9.3.3. Future work

9.4. Beluga

9.4.1. Review of active requests (R-3.4.9, 3.4.11, R-3.4.14)

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

R-3.4.14 (ongoing): 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.

9.4.2. NAMMCO-JCNB JWG March 2017 [SC/24/13]

9.4.3. Global Review of Monodontids [SC/24/14]

9.4.4. Update**9.4.5. Future work****9.5. Narwhal****9.5.1. Review of active requests (R-3.4.9, 3.4.11)**

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

9.5.2. NAMMCO-JCNB JWG March 2017 [SC/24/13]**9.5.3. Global Review of Monodontids [SC/24/14]****9.5.4. Update****9.5.5. Future work****9.6. Sei whale****9.6.1. Review of active requests (R-3.5.3 amended, 1.7.12)**

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

9.6.2. Update**9.6.3. Future work****9.7. Bottlenose whale****9.7.1. Update**

Paper from CODA published?

9.7.2. Future work**9.8. Killer whale****9.8.1. Review of active requests (R-3.7.2)**

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.

From SC/23:

The SC noted that in answer 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.

From NAMMCO/25:

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.

Note COSEWIC 2008 “threatened” status for Eastern Canada killer whales, with hunting in Greenland being named as a threat to this stock.

9.8.2. Update

9.8.3. Future work

9.9. Pilot whale

9.9.1. Review of active requests (R-1.7.11, 3.8.6)

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

From SC/23:

In response to R-3.8.6- a full assessment is planned once the abundance estimate is complete, and the information from samples for biological information is available.

Abundance Estimate- when is it ready for AEWG?

9.9.2. Update

From NAMMCO/25:

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.

9.9.3. Future work

9.9.3.1. Pilot Whale WG (2019)

Are we on track for this for 1) Faroe Islands and 2) Greenland?

9.10. Dolphins

9.10.1. Review of active requests (R-3.9.6)

R-3.9.6 (ongoing): assessments of dolphin species

9.10.2. Update

9.10.3. Future work

9.11. Harbour porpoise

9.11.1. Review of active requests (R-3.10.1)

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

9.11.2. Updates

9.11.3. By-Catch WG [SC/24/12]

9.11.4. HPWG 2018

- ASCOBANS, IMR – joint workshop

- Status of past recommendations – are we on track for the next meeting? The ones completed are not listed here:
 - Norway- update on reference fleet and bycatch estimates
 - Re-analysis completed – but not accepted by BYCWG – re-re-analysis needs to be done
 - Norway- update on survey for HP in 2016 – abundance est. ready for AEWG?
 - Norway- update on pinger experiments on monkfish gillnets
 - Greenland- update on catch history validation

9.11.5. Future work

9.12. Sperm whale

9.12.1. Update

9.12.2. Future work

9.13. Bowhead whale

9.13.1. Review of active requests (R-1.7.12)

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

9.13.2. Updates

9.13.3. Future work

9.14. Blue Whales

9.14.1. Update

9.14.2. Future work

10. SURVEYS (R-1.7.11, 1.7.12)

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

10.1. Abundance Estimates WG (2018)

10.2. Plans for future surveys

11. NAMMCO SCIENTIFIC PUBLICATIONS

11.1. Monodontid age estimation

11.2. NASS and Beyond...

Eds: Daniel Pike, Rikke Hansen and Geneviève Desportes.

Updates on papers

11.3. Animal Welfare Protocols

Many other journals have requirements that authors have followed any institutional animal welfare protocols -

12. FUTURE WORK PLANS

12.1. Scientific Committee

12.1.1. 2018 Meeting

12.1.1.1. 25 year Jubilee

(Norway next in rotation) – SC Jubilee!

12.1.1.2. Timing**12.2. Working groups/Symposia/Other meetings****12.2.1. 2018**

- Abundance Estimates WG (Early 2018)
- Possibly BYCWG
 - Videoconference or in-person if necessary
 - Review re-analysis by Norway and Iceland
- WGHARP (September 2018, likely Tromsø)
- Harbour Porpoise WG (Fall 2018?)
- Walrus WG (fall 2018, location TBD)

12.2.2. 2019

- Coastal Seal WG
- Bearded Seal WG
- Pilot Whale WG
- NAMMCO-JCNB JWG (March)

13. BUDGET**13.1. Spending in 2017 [SC/24/10]****13.2. Budget for 2018****14. ANY OTHER BUSINESS****14.1. Election of officers?****15. MEETING CLOSURE****15.1. Acceptance of report****15.2. Closing remarks**