NAMMCO SCIENTIFIC COMMITTEE 23rd MEETING Nuuk, Greenland 4-7 November 2016

Start 4 November 09.00 hr

Draft Agenda

Paper numbers in []. Grey shading provides annotations from previous reports. Green shading indicates work 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/23/NPR-F, -G, -I, -N, -C, -J, -R]
- **4.2.** Working Group Reports
 - **4.2.1.** By-catch WG [SC/23/13]
 - **4.2.2.** Coastal Seals WG [SC/23/14]
 - **4.2.3.** Abundance Estimates WG [SC/23/15]
 - **4.2.4.** WGHARP [SC/23/17]
- **4.3.** Other reports and documents
 - **4.3.1.** Disturbance Symposium [SC/23/12]
 - Species-specific discussions under beluga/narwhal/walrus (and/or bowhead, ringed seal, if applicable)
 - Can discuss any general thoughts here as well

5. COOPERATION WITH OTHER ORGANISATIONS

5.1. IWC [SC/23/07]

For SC/23:

- Implementation review completed for NA fin whales (Iceland) and plans for minkes to be completed next SC meeting
- AWMP?
- Other highlights?
- **5.2.** ASCOBANS [SC/23/06]
- **5.3.** ICES [SC/23/08]

5.3.1. Joint ICES/NAFO/NAMMCO WGHARP [SC/23/17]

- WGHARP meeting in Sept, species updates under harp and hooded seals
- **5.4.** JCNB (Commission report?)
- **5.5.** Arctic Council [SC/23/09]
 - SAMBR meeting
 - CAFF on GROM organizing committee
- **5.6.** Other
- 6. ENVIRONMENTAL / ECOSYSTEM ISSUES
- **6.1.** Marine mammals-fisheries interactions (R-1.1.5, 1.1.8)
- **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.
- **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.
- **6.1.1.** Bycatch [SC/23/13]

From SC/22:

The SC agreed that the bycatch issue should not be fully handed over to the ICES WGBYC, and that the NAMMCO SC Bycatch WG should have an initial meeting soon, then consider a joint meeting with the ICES WGBYC. The NAMMCO SC Bycatch WG should include Mikkelsen and Gunnlaugsson from the SC, and Arne Bjørge (from Norway), and should incorporate members from outside the marine mammals sphere and the SC (e.g. fishery experts) and outside NAMMCO.

For SC/23:

- By-catch WG report
 - Executive summary (GD?)
- Next meeting:

From BYCWG report: *The TOR of that particular meeting will be to:*

- Review Norwegian harbour and grey seals and harbour porpoise by-catch data and estimates
- Review the Icelandic lumpsucker and cod gillnet fishery by-catch data and estimates.
- Review of the situation in the Faroese mid-water trawling precise fleet description, by-catch risk and reporting, methods for improving the situation.
- Review information from Greenland on reporting of by-catch for the different species.
- Kimberly Murray has accepted the BYCWG Chair position
- Update from Secretariat- status of data for 2017 BYCWG meeting
- **6.2.** Multispecies approaches to management (R- 1.2.1, 1.2.2)
- **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.
- **6.3.** Economic aspects of marine mammal-fisheries interactions (R-1.4.7)
- **R-1.4.7** (NEW): 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/22:

The European MAREFRAME project includes several components addressing marine mammal fisheries interactions. These include research on interactions between cod and common minke whales in Icelandic waters and between cod and seals off Scotland. The MAREFRAME project is scheduled to be concluded in 2017, after which the SC will review the result as requested by the Council.

- Update (from Bjarki?) on MAREFRAME progress (will it be finished by 2017)?
- Secretariat: short email communication and meeting with Lyne Morisette, Gisli Vikingsson and Lars Walløe; idea to resurrect the NAMMCO Ecosystem modelling project, to complement MAREFRAME work? Lyne Morisette would be interested. Perhaps contract her to start looking for funding? Other SC members interested?

6.4. Environmental issues (**NEW R-1.5.3**)

NEW 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.

6.4.1 Disturbance Symposium report [SC/23/12, SC/23/O03]

From SC/22:

The SC draws the attention of the NAMMCO Council to the potentially severe consequences of [Mary River-Baffinland, other] projects. The SC noted that these industrial activities will also likely have impacts on the hunting of these species, and could affect the advice that is given by this SC.

From NAMMCO/24:

The MC noted the report, and acknowledges that there appear to be reason for concern for human activities negatively affecting marine mammals in the Arctic. Therefore, the MC asked the SC to fully consider the report at their 2016 meeting and provide comments in their next annual report.

. .

The MC proposed a New request for advice from the SC: 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."

The MC looks forward to further comments on this issue after the SC has fully reviewed this issue, and the other issues raised at the Disturbance Symposium.

7. SEALS AND WALRUS STOCKS - STATUS AND ADVICE TO THE COUNCIL

- **7.1.** Harp Seal [SC/23/17]
- **7.1.1.** 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

7.1.2. <u>Update</u>

For SC/23:

Haug will give update on the September 2016 WGHARP meeting for harp seals

- 7.1.3. Future work
- **7.2. Hooded seal** [SC/23/17]
- **7.2.1.** 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.
- **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
- **7.2.2.** <u>Update</u>

For SC/23:

Haug will give update on the September 2016 WGHARP meeting for hooded seals

- **7.2.3.** Future work
- 7.3. Ringed seal
- **7.3.1.** 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
- **7.3.2.** Update

From SC/22:

(re: ringed seals from the Ilulissat Icefjord (Kangia) in Greenland)

The SC noted that it is important that morphs/ecotypes/subspecies that are so different (and probably highly specialized to certain environmental conditions) are protected from overharvest, because a replacement by the more common ringed seals will be a great loss of diversity. A separate management plan should therefore be developed for the ringed seal in the Ilulissat Icefjord, as soon as a survey has been conducted.

The SC **recommends** that genetics sampling work continues and looks forward to seeing these results. The SC also **recommends** that a survey be conducted to obtain an abundance estimate for this population. The SC noted that with the increasing number of hunters, and with little known about this population, the hunt could have a large impact on the population quickly and Greenland should consider protection of this small population until more information is known. SC **recommends** wider research to look at whether these types of seals are more widely geographically spread.

This work will help towards responding to **R-2.3.1**.

From NAMMCO/24:

The MC recommended that Greenland continue the genetic work and planned survey, and encouraged Greenland to take a precautionary stand and protect the Ilulissat population until more information is available.

- 7.3.3. Future work
- **7.4.** Grey seal
- **7.4.1.** Review of active requests (R-2.4.2)
- **R-2.4.2** (ongoing): abundance estimates all areas
- **7.4.2.** Coastal Seals WG [SC/23/14]
 - (Kjell: grey seal section of report, maybe by location with breaks for discussion?)
- **7.4.3.** Update
- **7.4.4.** Future work
- **7.5.** Harbour seal
- **7.5.1.** 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
- **7.5.2.** Coastal Seals WG [SC/23/14]
 - (Kjell: harbour seal section of report, maybe by location with breaks for discussion?)

7.5.3. Future work

- **7.6.** Bearded seal
- **7.6.1.** Update
- 7.6.2. Future work
- **7.7.** Walrus
- **7.7.1.** Review of active requests (R-2.6.3)
- **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.
- **7.7.2.** Disturbance Symposium [SC/23/12]

7.7.3. Update

From SC/22:

The catches in [SC/22/18, catch statistics in Greenland] are not corrected for struck and lost. The SC **reiterated the previous recommendation** that Greenland provide information on struck and lost in walruses.

New Request from NAMMCO/24: 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.

From SC/22:

The SC **noted** that in Greenland there are 2 different reporting schemes for quota versus no-quota animals (*Piniarneq* and *Særmeldingsskema*). There are inconsistencies between the numbers that are reported, which creates problems when attempting to determine which numbers are accurate. For any assessment, the SC noted that it is important to obtain accurate removals. It is important to know whether the smaller numbers in *Piniarneq* reflects a general underreporting for all species in this system, as some marine mammal species are only reported under this system. The SC therefore **recommended** that Greenland should streamline their reporting system, and also conduct a study to investigate why the numbers are different between the reporting schemes.

• Greenland reported at NAMMCO/24 that they are looking into the reporting system. Do the Greenland scientists have any updates?

From SC/22: The SC **recommended** that NAMMCO request the Canadian catch data. The SC also **recommended** a new survey in the North Water Polyna (NOW; Baffin Bay stock) area as a means of monitoring this population. The SC also **recommends** that new age data and struck and lost data be obtained from both Canada and Greenland.

- **7.7.3.1.** Status of recommendations from 2013 Walrus WG [SC/23/10]
 - Perhaps some of these already addressed above

From 2013 WWG:

Recommendations for Research

The SC recommends:

- That new estimates of sex and age structure of the catch for West Greenland are
 obtained. The sex determination that is reported by the hunters should be validated
 using genetics.
- That the fraction of the catches and abundances in Canada that belong to the West Greenland/Baffin Island population are clarified.
- That complete catch statistics from Canada are collated.
- That reliable reports of struck and lost are obtained for the entire range of the stocks in Greenland and Canada.
- That regular abundance estimates (5-10 years) from Baffin Bay, West Greenland, and the southeast coast of Baffin Island are obtained.

8. CETACEANS STOCKS - STATUS AND ADVICE TO THE COUNCIL

- **8.1.** Fin whale
- **8.1.1.** 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.

8.1.2. <u>Update</u>

- **8.1.2.1.** Abundance Estimates WG [SC/23/15]
- **8.1.2.2.** Other Updates

8.1.3. Future work

From SC/22: The SC encouraged collaborative genetic research led by Iceland aimed at identifying close kin relationships within the North Atlantic and urged member nations to participate by supplying samples.

- **8.1.3.1.** Large Whale Assessment WG
 - Scheduled for 25-27 January 2017
 - Due to scheduling difficulties, this meeting was postponed until January 2017 (after SC/23). Therefore, advice for fin whales for Iceland from this WG will need to be endorsed by the SC intersessionally, before the April 2017 NAMMCO Council meeting. This could be done via correspondence or tele/video-conferencing.
 - Not specific to fin whales, but perhaps discuss here: we need ideas for assessment experts. Butterworth is not getting younger, De Moor is a potential replacement, but it would be good to have options, and also Europeans. Ideas?
- **8.2.** Humpback whale
- **8.2.1.** 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** (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.

NEW 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."

- **8.2.2.** <u>Update</u>
 - **8.2.2.1.** Abundance Estimates WG [SC/23/15]
 - **8.2.2.2.** Other updates
- 8.2.3. Future work
 - **8.2.3.1.** Large Whale Assessment WG (25-27 January 2017)
 - Can the new amendment to R-3.2.4 be completed at this meeting?
- **8.3.** Minke whale
- **8.3.1.** 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.

- **8.3.2.** Update
 - **8.3.2.1.** Abundance Estimates WG [SC/23/15]
 - **8.3.2.2.** Other updates
- **8.3.3.** Future work
 - **8.3.3.1.** Large Whale Assessment WG (25-27 January 2017)
- **8.4.** Beluga
- **8.4.1.** Review of active requests (R-3.4.9, 3.4.11, NEW 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

NEW R-3.4.14 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.

8.4.2. Disturbance Symposium [SC/23/12]

Addressing R-3.4.9

- **8.4.3.** Update
- 8.4.4. Future work
- **8.4.4.1.** *JCNB/NAMMCO JWG meeting:* 8-11 *March* 2017
- **8.4.4.2.** Global review of monodontids: 13-17 March 2017
- **8.4.4.3.** Other
- 8.5. Narwhal
- **8.5.1.** 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
- **8.5.2.** Disturbance Symposium [SC/23/12]
 - Addressing R-3.4.9
- **8.5.3.** Updates
- **8.5.4.** Future work
- **8.5.4.1.** *JCNB/NAMMCO JWG meeting (taken above in 8.4.3.1)*
- **8.5.4.2.** Global review of monodontids (taken above in 8.4.3.2)
- **8.5.4.3.** *Other*
- 8.6. Sei whale
- **8.6.1.** 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

8.6.2. Update

8.6.3. Future work

8.7. Bottlenose whale

8.7.1. Update

From NAMMCO/24:

Greenland have reported catches of bottlenose whales in the past, however validation of these catches have revealed that they are actually catches of harbour porpoises that have been reported wrongly on the reporting catch form. An update will be provided in the future. This is not a species that is normally targeted in Greenland.

8.7.2. Future work

8.7.3. Abundance estimate

From SC/22:

The Faroese data from T-NASS 2007 has been integrated into a model-based assessment of deep diving species being done in the UK. Mikkelsen informed the SC that the manuscript is planned to be submitted within a few months.

8.8. Killer whale

8.8.1. 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/20 (pg. 37):

Greenland

SC/20/20 reported on a recent increase in catches of killer whales off Tasiilaq in East Greenland (8 on average per year from 2010 to 2012). Samples have been collected, and genetics indicate that these animals are related to Norwegian herring-eating killer whales

(Foote *et al.* 2013). However, only marine mammals (including harp seal pups, and bearded seals) have been found in the stomachs of caught whales. The authors also report the possibility of a high struck and lost rate in this hunt.

The SC **noted** higher levels of annual catches (19 on average per year from 2010 and 2012) also in West Greenland. The SC was informed that the recent catch statistics on killer whales in West Greenland have not been validated. As for bottlenose whales, the SC **recommends** that all catch data on killer whales are validated before the next SC meeting, so that it is possible for the SC to monitor the development of the hunt.

From SC/21 (pg. 34):

This request is **ongoing**. There is still not enough information to answer the request. Unfortunately catch information in Greenland was not available for review by the SC at this meeting.

From NAMMCO/24:

Greenland informed the MC that validation of these catches is expected to be completed in 2016, going back to 2010. The Ministry have received reports of catches in 2014 and 2015.

For SC/23:

- It has now been 3 years since the SC has asked for validated catches in order to monitor the development of this hunt. Are validated catch statistics available? If not, when are they expected?
- **8.8.2.** Update
- **8.8.3.** Future work
- 8.9. Pilot whale
- **8.9.1.** 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
- **8.9.2.** Abundance Estimates WG [SC/23/15]

From SC/22:

The goal is to have an approved pilot whale abundance estimate in 2016.

8.9.3. Update

From SC/22:

In preparation for a new assessment, the Faroes are re-establishing the competence for age and reproduction analysis.

8.9.4. Future work

8.10. Dolphins

8.10.1. Review of active requests (R-3.9.6)

R-3.9.6 (ongoing): assessments of dolphin species

8.10.2. <u>Update</u>

8.10.2.1. Abundance Estimate [SC/23/15]

From SC/22:

Some sampling has been occurring in the Faroes previously, however no new samples have been collected recently because there have been very few catches in recent years. The results from the previous sample collections have yet to be published.

From NAMMCO/23:

The MC notes the report of the SC, awaits the publication from the previous sampling.

. . .

Greenland updated the MC that catches in the last 5 years on average were close to 190 dolphins, compared to previous 5 years where annual average numbers were 70. It is unknown whether this is because of increased distribution in Greenland or if dolphins have become a more targeted species by the hunters.

MC discussed whether there were any plans in Greenland to collect samples from the catches, and Greenland informed that they had no plans for sample collection.

8.10.3. Future work

8.11. Harbour porpoise

8.11.1. Review of active requests (R-3.10.1)

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

8.11.2. Updates

8.11.2.1. Abundance Estimates [SC/23/15]

8.11.2.2. By-Catch WG [SC/23/13]

From SC/22:

By-catch is the main issue with harbour porpoise in Norway. Previous calculations in Norway on level of by-catch may have included an error, which will likely reduce the estimates, but the by-catches are still of concern. As mentioned in the JMC, a new aerial survey for harbour porpoises will be conducted from southern Norway up to Lofoten for a new abundance estimate, the goal mainly being assessing the sustainability of these by-catches.

Mitigation studies using pingers are being conducted in the lumpfish gillnet fisheries in Lofoten. These studies will continue, and Norway has obtained external funding for this work.

In Iceland, harbour porpoises are mainly caught in gillnets as by-catch in the lumpfish fishery.

8.11.2.3. Catches in Greenland

From NAMMCO/24:

Greenland have reported catches of bottlenose whales in the past, however validation of these catches have revealed that they are actually catches of harbour porpoises that have been reported wrongly on the reporting catch form. An update will be provided in the future. This is not a species that is normally targeted in Greenland.

• The 2013 HPWG already noted that catches in Greenland were high. Additional catches could be concerning. (From [SC/20/XX]: Nevertheless, the working group noted that the average annual catches since 1993 in West Greenland were 2125.6 harbour porpoises and that a large abundance is needed to sustain such catches. Given the recent discovery of high uncertainty in catches, the working group strongly recommended that Greenland provides a complete catch history accounting for all types of underreporting of catches before any future attempts are made to conduct an assessment of harbour porpoises in West Greenland.)

8.11.2.4. Status of recommendations from 2013 HPWG [SC/23/10]

For SC/23:

- Norway- update on reference fleet and bycatch estimates
 - Re-analysis and future work
- Norway- update on survey for HP in 2016
- Norway- update on pinger experiments on monkfish gillnets
- Greenland- update on tagging and surveys
- Greenland- update on catch history validation

8.11.3. <u>Future work</u>

- 8.12. Sperm whale
- **8.12.1.** Update
- **8.12.2.** Future work
- **8.13.** Bowhead whale
- **8.14.** 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
- **8.14.1.** Update
- **8.14.2.** Future work
- 8.15. Blue Whales
- **8.15.1.** Update
- **8.15.2.** Future work
- 9. SURVEY PLANNING (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
- 9.1. Abundance Estimates WG [SC/23/15]
- 9.2. Plans for future surveys
- 10. NAMMCO SCIENTIFIC PUBLICATIONS
- 10.1. Monodontid age estimation
- 10.2. Next volume?
- 11. DATABASES ON ABUNDANCE AND CATCHES
- **11.1. Abundance** [SC/23/XX]
 - The Secretariat has been preparing a spreadsheet of all of the abundance estimates that have been approved by the SC for use in assessments

• SC/23/05 is not a finished document — it would be good to have input on whether more/different information should be included, and any other thoughts.

11.2. Catches

11.2.1. Struck and Lost

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 walruses, not only pertains to walrus but to all species.

11.2.2 Catch reporting

- Secretariat asks that catches reported in NPRs be in the table template as agreed at SC/20
- Catch validation in Greenland- it is unclear to the Secretariat what the process is, and who to contact to obtain updated catch statistics (we usually receive statistics that say they have not been validated, and then are not updated with validated catches. Suggestions on how to fix this process?)

12. WORK PROCEDURES IN THE SC

- 12.1. Ideas for future meetings
 - At last year's SC meeting, there was a discussion of ideas for improving SC meetings, continue discussion?

12.2. Development of management advice in NAMMCO

- From Management Committee at NAMMCO/24: The MC informed the SC that anytime management procedures from another organisation are used in formulating management advice, the SC should make sure that those procedures meet the NAMMCO management objectives before basing their advice on those procedures.
- 12.3. Participation of External Experts [SC/23/16]
- 12.4. Funding of External Experts [SC/23/16]
- 12.5. Confidentiality of Reports and documents [SC/23/19]
- 12.6. Management Procedures

13. FUTURE WORK PLANS

- 13.1. Scientific Committee
- **13.1.1.** 2017 Meeting (Iceland next in rotation)
 - Secretariat suggests that we choose a week now to get it on our calendars, perhaps 1st week in November, and have that always be set aside?

13.1.1.1

 Previous informal talk in the SC about suggesting to Council to change the SC meeting to be held in spring again. If the SC wants to do this, need to come up with justification, and put this forward to the Council meeting in April this year. (the 2017 SC meeting will not be held in the spring, regardless)

13.2. Working groups/Symposia/Other meetings

13.2.1. Large Whale Assessment (25-27 January 2017)

Chair: Lars Walløe, Convener: Gisli Vikingsson TOR:

- Long-term advice on minke and fin whales in Iceland
- Humpback whale advice Greenland

13.2.2. JCNB/NAMMCO (8-11 March 2017)

NAMMCO Chair: Rod Hobbs, Convener: Mads Peter Heide-Jørgensen JCNB Chair: Rikke Hansen TOR:

Update assessments on narwhal and beluga

13.2.3. Global Review of Monodontids (13-16 March 2017)

Chair: Arne Bjørge

Organizing Committee: Randy Reeves, Robert Suydam, Olga Shpak, Rikke Hansen, Steve Ferguson, Marianne Marcoux, Rod Hobbs, Tom Barry, Jill Prewitt

TOR:

1) share current scientific knowledge on the status of each stock, 2) identify the main gaps in knowledge, 3) identify key threats to each stock, and 4) outline possible areas of scientific cooperation.

13.2.4. Bycatch WG (April 2017 tentative)

Chair: Kimberly Murray (NOAA, USA), Convenor: Geneviève Desportes? TOR:

13.2.5. Abundance Estimates WG (June 2017)

Chair: Daniel Pike, Convener: ?

TOR:

- Icelandic coastal aerial survey
- Norway

13.2.6. Survey Workshop at SMM 2017

Recommended by AEWG (SC/23/15)

Possibly collaborate with Jack Lawson, Phil Hammond, Debra Palka, anyone from NAMMCO SC want to be part of organizing the agenda, etc.?

Prewitt will take on the logistical organization

13.3. Other matters

- 14. BUDGET
- 14.1. Spending in 2016 [SC/23/XX]
- 14.2. Budget for 2016/2017
- 15. ANY OTHER BUSINESS
- 15.1. Election of officers?
- 16. MEETING CLOSURE
- 16.1. Acceptance of report
- 16.2. Closing remarks