NAMMCO SCIENTIFIC COMMITTEE 22nd MEETING Tórshavn, Faroe Islands 9-12 November 2015

Start 9 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/22/NPR-F, -G, -I, -N, -C, -J, -R]
- **4.2.** Working Group Reports
 - **4.2.1.** Large Whale Assessment [SC/22/15]
 - **4.2.2.** JCNB [SC/22/07] [also Secretariat will check if the Commission report is available for the SC meeting]

For SC/22: The report contains new Rules of Procedure for the JWG, please read and bring any comments (to be discussed under Item 5.4)

4.2.3. SPWG [SC/22/09]

For SC/22:

- Present cruise reports (Norway, Iceland, Greenland, Faroe Islands)
- **4.3.** Other reports and documents
- 5. COOPERATION WITH OTHER ORGANISATIONS
- **5.1.** IWC [SC/22/13]

From SC/21 (pg. 14):

"Víkingsson informed that work continued on the Implementation review on North Atlantic fin whales. Given the complexity of the trials, it had not been possible to complete conditioning successfully during the workshop. The IWC SC developed a work plan with the objective of finishing the Implementation Review at the 2015.

The SC of NAMMCO recognizes that the NAMMCO Large Whale Assessment should await the work of the IWC on minke and fin whales to be completed in 2015."

From NAMMCO/23 (pg. 56):

The MC discussed why NAMMCO has been waiting for the work of the IWC SC. It was noted that NAMMCO's usual procedure is to avoid duplication of work and to use the work of the IWC SC as a basis for the NAMMCO work, however, the NAMMCO SC does not automatically accept the advice of the IWC SC.

Iceland **noted** that it is very important for the LWAWG to occur this autumn and **proposed** that the MC **amend** request R-3.1.7 to include the following additional text: "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." The MC **endorsed** the amendment of R-3.1.7 to include this text.

For SC/22:

- Update on progress of Implementation review for NA fin whales in IWC (Iceland)
- Updates on work of AWMP on Greenlandic hunts?

5.2. ASCOBANS [SC/22/06]

From SC/21 (pg.15):

The SC discussed the level of cooperation between NAMMCO and ASCOBANS. Formally NAMMCO and ASCOBANS have an official agreement for exchange of observers.

The SC recommended that the NAMMCO Secretariat request harbour porpoise by-catch numbers for the North Sea from ASCOBANS, when needed for future ssessments/WGs.

For SC/22:

Secretariat will give update on letter to ASCOBANS

- **5.3.** ICES [SC/22/12]
- 5.3.1. Joint ICES/NAFO/NAMMCO WGHARP

From SC/21 (pg. 15):

Prewitt informed the SC that a request for NAMMCO to join the WGHARP was sent from the NAMMCO Secretariat to the ICES Secretariat in August 2014. The Secretariat is awaiting a response, hopefully after the upcoming WGHARP meeting (two weeks after the SC meeting, November 2014, Quebec City, Canada).

For SC/22:

Secretariat will give an update on request to join ICES WGHARP

From NAMMCO/23 (pg. 68):

In 2014 Greenland had agreed to send a new request to ICES in order to finalize the assessment on the Northwest Atlantic stock [harp seals], because the results from the last surveys in 2013 had not been ready, and therefore not been dealt with at the last WGHARP meeting in August 2013.

Greenland had sent a request to ICES that somehow had not been received in the right department. The WG on harp and hooded seals had therefore not discussed this request at its last meeting in November 2014. SC will have to discuss the issue once a response has been received.

5.4. JCNB [SC/22/07]

For SC/22:

SC/22/07: in addition to the updated assessments and the narwhal catch allocation model, please note the new Rules of Procedure and bring comments

- **5.5.** Arctic Council [SC/22/14]
- **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

From SC/21 (pg. 19):

The SC welcomes these by-catch estimates from Iceland, and the previous data from Norway on harbour porpoise. It notes that the lack of by-catch recording in the gill net fishery from the logbook system implemented in 2009 in Iceland is of great concern. A functioning by-catch recording system is of highest priority. The uncertainty on reporting of by-catches in other gear such as monkfish nets should be given priority by fisheries inspectors. The SC noted that the Harbour Porpoise Working Group (HPWG) may want to review the data from Iceland to consider whether there are better methods of monitoring the by-catch. The 2013 HPWG considered the by-catch issue from Norway, including suggestions for mitigation. The SC noted that a future HPWG meeting requires information on by-catch before the assessment can continue.

With this new information on by-catch, the SC recommended convening a By-catch Working Group (WG). This would be a technical WG that could focus on discussing the methods that are being used to collect the data and extrapolate the results, and decide if further work is required.

Prior to a By-catch WG meeting, it will be important to have the by-catch numbers from the reference fleet in Norway, but also to compile the necessary fisheries data. These data would need to come primarily from management agencies, and includes fishery effort data (both spatial and temporal) from all fisheries, but most specifically net fisheries.

For SC/22:

Is there any new bycatch information from any of the countries this year?

6.1.1.1. Update on plans for WG

For SC/22:

Secretariat will give update on plans for bycatch WG.

- **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.

From SC/21 in response to R-1.2.1 (pg. 20): A large-scale ecosystem modelling project (MAREFRAME) is underway, which includes marine mammals in Icelandic and adjacent waters (SC/21).

For SC/22:

Can someone prepare to give a short update on activities in the MAREFRAME project?

- **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 (*New Request- R-1.4.7*)

From NAMMCO/23 (pg. 75 [request number not in document]):

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).

- **6.4.** Environmental issues (*no active requests*)
- **6.5.** OTHER (no active requests)

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

7.1. Harp Seal

- **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/22:

Haug will give update on the November 2014 WGHARP meeting for harp seals

From NAMMCO/23 (pg. 68): (same issue under 5.3)

In 2014 Greenland had agreed to send a new request to ICES in order to finalize the assessment on the Northwest Atlantic stock, because the results from the last surveys in 2013 had not been ready, and therefore not been dealt with at the last WGHARP meeting in August 2013.

Greenland had sent a request to ICES that somehow had not been received in the right department. The WG on harp and hooded seals had therefore not discussed this request at its last meeting in November 2014. SC will have to discuss the issue once a response has been received.

7.1.3. Future work

7.2. Hooded seal

- **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>

From SC/21 (pg. 24): Haug reported that the ICES Working Group on Harp and Hooded Seals will meet again in November 2014 in Quebec, Canada, to discuss hooded seals in the Northeast Atlantic.

For SC/22:

Haug will give update on the November 2014 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. <u>Update</u>

From SC/21 (pg. 24):

At SC20, it was suggested that a Working Group be considered in the next few years (2015 or later), but that the CAFF report should be considered first. The SC **noted** that the CAFF group is likely a better forum than convening a NAMMCO WG, however the group was not sure if CAFF is planning more meetings.

From NAMMCO/23 (pg. 70):

Greenland raised concern over the work being done in the Arctic Council CAFF on ringed seals. The main focus of ringed seals in CAFF is related to it being the prey of the polar bears and the climate change issue.

For SC/22:

For anyone familiar with the work of the CAFF group, bring any updates on any upcoming plans. The Secretariat can update from a recent meeting with the Arctic Council Secretariat.

7.3.3. Future work

7.3.3.1. *Possible WG*

Continued from SC/21 (pg. 25):

The SC reiterated that data on this species is sparse and a full assessment is not possible. The SC recommends that a future WG should await results of ongoing tagging studies in central West Greenland, and future genetics studies to elucidate information on population structure.

For SC/22:

Are there updates on the tagging and genetics studies in Greenland and Norway?

- **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. <u>Update</u>

From SC/21 (pg. 25):

Mikkelsen informed that no survey has yet been conducted to estimate stock size, however there are plans to conduct a survey within the next few years. The Faroes have implemented a system to obtain numbers on removals from fish farmers (salmon), however they have not received data from all areas, and the statistics are not complete. Effort will be put into completing this work by next year.

For SC/22:

- Is there an update on the plans for a seal survey in the Faroes?
- Results from the data on removals from fish farms

7.4.3. Future work

7.4.3.1. Coastal Seals WG

From SC/21 (pg. 26):

A Coastal Seals WG (CSWG; Chair: Kjell Tormod Nilssen) meeting has been tentatively scheduled for February 2016 to address R-2.4.2 and R-2.5.2. By February 2016, the CSWG will likely have by-catch estimates and a new complete grey seal estimate in Norway for consideration at the meeting.

The Terms of Reference for the meeting will be for the WG to:

- 1) assess the status of all populations, particularly using new abundance estimate data that are available from Iceland and Norway.
- 2) address by-catch issues (grey seals) in Norway, Iceland, and the Faroe Islands
- 3) re-evaluate the Norwegian management plans (which have been already implemented) for grey and harbour seals.

For SC/22:

Iceland, Norway and the Faroe Islands: look at the terms of reference and provide updates on the status of the information (e.g., abundance estimates and bycatch estimates) that will be available for the CSWG.

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. <u>Update</u>

From SC/21 (pg. 26):

The catch statistics from Norway do not include by-catch removals. Norway is now in the process of developing a model for management of harbour seals, which will include uncertainties around by-catch.

. . .

A comprehensive seal count was conducted in July 2013 in N.W. Iceland. The count resulted in 755 seals (mainly harbour seals) compared to 618 in the same area and time of the year in 2012.

In Iceland experiments were made with using drones for a survey this year. There are plans for full survey next year.

(**Pg. 27**) Haug reported that biopsy sampling of tissue from pups for genetic studies will continue on the Norwegian coast in 2015. The aim of such sampling is to assess the population structure of the species using DNA analyses.

For SC/22:

- Norway provide update on the development of the management model that includes uncertainties around bycatch.
- Norway provide update on biopsy sampling project
- Iceland provide update on seal survey- will the details of this survey be available for review by the CSWG?
- Iceland provide update on plans for surveying using drones

7.5.2.1. Presentation from Japan

7.5.3. <u>Future work</u>

7.5.3.1. Coastal Seals WG

7.6. Bearded seal

From NAMMCO/23 (pg. 72):

Since 2009 the Management Committee has recommended that the status of this species be assessed.

The Chair noted that there is no request for advice from the Scientific Committee on this species.

Update from the Scientific Committee

The Scientific Committee communicated that some limited satellite tracking of bearded seals is on-going and continuing in Svalbard and Greenland. However it was noted that this species like the ringed seal is suffering from the new ice conditions.

Conclusion

The Management Committee reiterates the conclusion from the last meeting that there is still not much information on bearded seals, and that this probably reflects that this is not a target species for NAMMCO members.

There is no recommendation for new Scientific Research or recommendations to member countries.

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.** <u>Disturbance Symposium</u> [report if available, otherwise general update]
- **7.7.3.** Working Group- updated assessment Baffin Bay

From SC/21 (pg. 28):

... [a] survey was completed in early April 2014 only covering the eastern coastal part of the North Water. The results were promising with more than 30 sightings and should allow for a new abundance estimate to be developed soon. Together with updated hunting statistics, this new abundance estimate could be used for a revised assessment for this particular stock with a possible update on advice.

It was suggested that the Walrus Working Group (WWG) should resume for a one-day meeting in March 2015 to address the possibilities for updating advice on sustainable takes of walruses in the Baffin Bay stock. If feasible, the meeting could be conducted as a teleconference and participants would include Wiig (Chairman), Witting, Heide-Jørgensen, Hansen, Lydersen, Acquarone, Ugarte and Stewart.

7.7.4. Update

7.7.4.1. *Status of recommendations from 2013 Walrus WG* [for information paper, past recommendations]

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.

NEW AMENDMENT: "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."

8.1.2. Large Whale Assessment WG [SC/22/15]

From SC/21 (pg. 55):

The SC **noted** that R-3.1.7 has been ongoing for some time while waiting for the IWC review. A Large Whale Assessment Working Group (LWAWG) meeting was previously planned for Fall 2014. This was postponed to Fall 2015, awaiting work to be completed by the IWC on the fin and minke whale *RMP Implementation Reviews*. The hope is that the IWC's work will be finished in spring. However, the SC noted that the LWAWG will meet this fall regardless of IWC progress, since NAMMCO needs to have interim advice.

From NAMMCO/23 (pg. 56):

The MC discussed why NAMMCO has been waiting for the work of the IWC SC. It was noted that NAMMCO's usual procedure is to avoid duplication of work and to use the work of the IWC SC as a basis for the NAMMCO work, however, the NAMMCO SC does not automatically accept the advice of the IWC SC.

Iceland **noted** that it is very important for the LWAWG to occur this autumn and **proposed** that the MC **amend** request R-3.1.7 to include the following additional text: "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." The MC **endorsed** the amendment of R-3.1.7 to include this text.

- **8.1.3.** <u>Upd</u>ate
- 8.1.4. Future work
- **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.
- **8.2.2.** Update [SC/22/15]

From NAMMCO/23 (pg. 56):

The MC noted that at last year's MC meeting, it was recommended that humpback whales not be considered at the Large Whale Assessment WG. However, the advice for removals in West Greenland is for 2010-2015. Greenland noted that the situation regarding quotas in the IWC is not stable, and that they do not want to risk a situation where they do not have advice from either the IWC or NAMMCO. Therefore Greenland would like to ask the SC whether there is sufficient data available to conduct an assessment of humpback whales at the upcoming Large Whale Assessment Working Group meeting in Fall 2015.

Greenland referred to the end of SC advice of humpback whales 2009-2015 and the risk of postponement of the NASS. Greenland also noted that a new quota negotiation in the IWC will be in 2018 and due to the uncertainty in allocation of quotas, Greenland proposed that R-3.2.4 is **reiterated** and ask that the assessment of humpback whales is completed at the Large Whale Assessment Working Group in fall 2015. The MC **endorsed** this reiteration of the request.

- **8.2.3.** Future work
- **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

From NAMMCO/23 (pg. 57):

Council agreed to **amend** the request to read "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. While long-term advice based on the outcome of the RMP Implementation Reviews (with 0.60 tuning levels) is desirable, a 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."

- **8.3.2.** Update [SC/22/15]
- **8.3.3.** Future work
- **8.4.** Beluga
- **8.4.1.** 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 22
- **R-3.4.11** (standing): update the assessment of both narwhal and beluga
- **8.4.2.** JCNB/NAMMCO WG report [SC/22/07]
- **8.4.3.** Disturbance Symposium [SC/22/08]
- **8.4.4.** Update
- **8.4.5.** Future work
- 8.4.5.1. JCNB/NAMMCO JWG meeting- spring 2016
- 8.4.5.2. Global review of monodontids
- 8.4.5.3. 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 22
- **R-3.4.11** (standing): update the assessment of both narwhal and beluga
- **8.5.2.** Updates
- 8.5.2.1. NAMMCO-JCNB JWG report [SC/22/07]

From SC/21 (pg. 33):

The SC **noted** that potential problems may arise if hunters take their whole quota from a single small stock. One way to reduce the risk of this is to look at within season movements with satellite tags to see how the stocks' movements overlap (e.g., early spring vs late spring, may be able to determine which stock moves early vs late).

- 8.5.3. Future work
- 8.5.3.1. Planning JCNB/NAMMCO JWG meeting (taken above in 8.5.3.1)
- 8.5.3.2. Global review of monodontids (taken above in 8.5.3.2)
- 8.5.3.3. Disturbance symposium (taken above in 8.5.3.3)

8.5.3.4. 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

From NAMMCO/23 (pg. 56):

The MC noted that the IWC has been considering whether they will conduct an assessment on sei whales for many years. Most previous sightings surveys have not included sei whales as a priority species, and therefore the survey areas did not cover far enough south to obtain complete abundance estimates. Iceland noted that they were hoping to conduct a separate sightings survey with the primary focus on sei whales in the future. It was suggested that the previous estimates from 1989 and 1995, while acknowledged that they are likely underestimates, could be used as a minimum estimate to base some advice.

The MC suggested that request R-3.5.3 remains a pending request, and notes that this work will not be completed by the SC in 2015. The MC also notes that there may be future work in the IWC.

For SC/22:

Iceland- update on plans for a sei whale survey and any plans for sei whales in the IWC

- **8.6.3.** Future work
- **8.7.** Bottlenose whale
- **8.7.1.** Update
- **8.7.2.** Future work
- **8.7.3.** Abundance estimate?

From SC/21 (pg. 34):

NAMMCO does not have an endorsed abundance estimate for the most recent sightings surveys. The latest available abundance estimate is 24,561 (CV 0.23), for the Icelandic and Faroese blocks of the ship-based part of the NASS-2001 survey. This abundance estimate was presented to the SC in 2003, but has not been formally endorsed.

For SC/22:

There has been previous discussion on some abundance data from TNASS 2007, Faroese data combined with CODA data but it is not reflected in the past reports. Is there an update on this?

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.

For SC/22:

When the NPR from Greenland is available, SC members please note the catch information.

- **8.8.2.** <u>Update</u>
- **8.8.3.** Future work
- 8.9. Pilot whale
- **8.9.1.** Review of active requests (R-3.8.3, 3.8.4, 3.8.5, 3.8.6, 1.7.11)
- **R-1.7.11** (ongoing): develop estimates of abundance and trends as soon as possible

- **R-3.8.3** (ongoing): to develop a proposal for the details of a cost-effective scientific monitoring programme for pilot whales in the Faroes
- **R-3.8.4** (ongoing): methodology and the coverage of T-NASS take into account the need for reliable estimates for pilot whales. In addition, priority should be given to the analysis of data on pilot whales after the completion of T-NASS
- **R-3.8.5** (ongoing): assess the status of long-finned pilot whales in West Greenland waters and provide minimum estimates of sustainable yield
- **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. <u>Update</u>

From SC/21 (pg. 35):

Mikkelsen updated on progress for a future assessment of pilot whales. No pilot whales were satellite tagged in 2013 and 2014. Efforts have increased in the sampling programme of harvested animals, prioritizing obtaining teeth for ageing, skin samples, and reproductive parameters for each animal. A total of 270 animals were sampled in 2013.

From NAMMCO/23 (pg. 61):

The MC notes the SC report and welcomes the progress on the sampling programme in the Faroes. The MC also awaits new abundance estimates resulting from NASS-2015.

For SC/22:

- Faroes provide update on tagging during NASS
- Faroes provide update on sampling programme, including samples collected in 2015 and plans for analysis.
- **8.9.3.** 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.** Update

From SC/21 (pg. 36):

Analysis from white sided dolphin data from the Faroes is awaiting completion.

From NAMMCO/23 (pg. 62):

The MC ... awaits the analysis of the white-sided dolphin data from the Faroe Islands.

For SC/22:

Faroes provide update on the white-sided dolphin data

- **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.** <u>Update</u>

From SC/21 (pg. 36):

A future harbour porpoise WG will be scheduled after a report from the By-catch WG, new data from T-NASS2015, and progress on research requests from the 2013 HPWG.

8.11.2.1. Status of recommendations from 2013 HPWG

From SC/21 (pg. 37):

Regarding recommendations given at the HPWG in 2013, Norway are continuing to collect data from the reference fleet and bycatch estimations will be updated. The reference fleet has not yet been expanded to the lumpfish fishery. An application has been made for a feasibility study in Vestfjord for a shipboard survey for harbour porpoises in the fjord systems. Experiments with pingers on monkfish gillnets are in progress in the Vestfjord area.

From NAMMCO/23 (pg. 62):

Regarding the recommendations to member countries from 2014, Greenland informed the MC that they hope that new tagging data and surveys will help inform the SC on the assessment work. Greenland also noted that the work on catch history validation data is ongoing.

For SC/22:

- Norway- update on reference fleet and bycatch estimates
- Norway- update on survey plans for HP in Vestfjord
- Norway- update on pinger experiments on monkfish gillnets
- Greenland- update on tagging and surveys
- Greenland- update on catch history validation
- 8.11.2.2. Updates on catch/bycatch reporting and numbers
- **8.11.3.** Future work
- 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

For SC/22:

- Last year Iceland reported on tagging efforts and samples collected. Any update on tagging and/or analysis of samples?
- Norway reported increases in numbers of sightings in Svalbard. Has this continued?
- **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.** NASS Debrief [Cruise reports & Debriefing report]
- 9.2. Plans for analysis/presentation of abundance estimates (WG)

For SC/22:

Updates from all on when abundance estimates are expected for review by WG

- 9.3. Plans for future surveys
- **9.3.1.** Timing
- **9.3.2.** Coordination

From SPWG report (pg. 1): Hammond commented that the surveys were not "coordinated" but rather a collection of associated national surveys. Desportes noted that this lower level of

coordination compared to the 2007 survey reflected the choice made by the SC at the 2012 annual meeting.

- **9.3.3.** Ideas for improving planning for next NASS
- **9.4.** <u>Issues regarding trends/abundance/distribution of marine mammals in the North</u> Atlantic
- **9.5.** Publications from TNASS-07
- **9.6.** Other updates
- **9.7.** Future work

10. NAMMCO SCIENTIFIC PUBLICATIONS

- 10.1. Monodontid age estimation
- 10.2. Next volume?

11. DATABASES ON ABUNDANCE AND CATCHES

11.1. Abundance [SC/22/05]

SC/22/05 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

- 12. WORK PROCEDURES IN THE SC
- 12.1. Involvement of the Vice-Chair
- 12.2. Guidelines for chairing the SC [SC/22/19]
- 12.3. New meeting procedures
- 12.4. Other suggestions
- 12.5. Use of NAMMCO documents

13. FUTURE WORK PLANS

- 13.1. Scientific Committee
- **13.1.1.** 2016 Meeting (Greenland)
- 13.2. Working groups
- **13.2.1.** Coastal Seals
- **13.2.2.** JCNB/NAMMCO
- 13.2.3. ICES/NAFO/NAMMCO WGHARP
- **13.2.4.** Bycatch- data reviewed in ICES WGBYC or NAMMCO WG?
- **13.2.5.** Others?

Abundance Estimates WG?

13.3. Other matters

- 14. BUDGET
- 14.1. Spending in 2015 [SC/22/11]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