TWENTY FIFTH MEETING OF THE COUNCIL

5 – 6 April 2017, Nuuk, Greenland

DOCUMENT 10 **REPORT OF THE MANAGEMENT COMMITTEE FOR SEALS AND WALRUSES**

Submitted by: **Management Committee for Seals and Walruses**

Action requested:

- Review and adopt possible new requests

MEETING OF THE MANAGEMENT COMMITTEE FOR SEALS AND WALRUSES

REPORT

4 APRIL 2017

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MEETING OF THE MANAGEMENT COMMITTEE FOR SEALS AND WALRUSES
4 APRIL 2017, Nuuk, Greenland
Report

1. OPENING REMARKS

The Chair, Guðni Magnús Eiríksson, Iceland, opened the meeting and welcomed all participants.

2. ADOPTION OF AGENDA

The agenda was adopted and the list of documents reviewed, both documents are contained in Appendices 1 and 2 respectively.

3. CONSERVATION AND MANAGEMENT MEASURES FOR SEAL STOCKS

The Chair drew attention to the following documents:

- NAMMCO/25/MC/05 summarising past proposals for conservation and management and responses to these
- NAMMCO/25/MC/06 summarising past requests to the Scientific Committee and responses.
- NAMCMO/25/MC/08 recent proposals and recommendations for research to member countries

The Chair of the Scientific Committee, Tore Haug, presented the information on seal and walrus stocks from the Scientific Committee report (NAMMCO/25/07) under each species.

3.1 Harp Seals

Requests by Council for advice from the Scientific Committee

R-2.1.4 - NAMMCO/12-2003 (standing): *to regularly update the stock status of North Atlantic harp and hooded seals as new information becomes available.*

R-2.1.10 – NAMMCO/17-2008 (standing*): to 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.*

Advice from the Scientific Committee

The ICES/NAFO/NAMMCO WG on Harp and Hooded Seals (WGHARP) had met in September 2016. The WG discussed abundance estimates, harvest potential, and ongoing research of White Sea/Barents Sea, Greenland Sea and Northwest Atlantic harp seal and Greenland Sea hooded seal stocks. The NAMMCO SC had reviewed the report and had endorsed the following abundance estimates:

***Greenland Sea harp seal population*:** a population model estimates a 2017 abundance of 650,300 (471,200 – 829,300) seals. Using current catch levels, the model projects an increase in the 1+ population of 58% over the next 15 years. The equilibrium catch level (which maintains constant population size) is 21,500 (100% 1+ animals). If pups are hunted, two pups balance one 1+ animal. A catch of 26,000 animals (100% 1+) will reduce the population, but with a 0.8 probability that the population remains above N70 over a 15-year period.

The model estimates of abundance for ***White Sea harp seals*** in 2017 is 1,408,000 (95% CI: 1,251,680 – 1,564,320). The harp seal population in the Barents Sea / White Sea is considered data poor because of the time elapsed since the last series of reproductive samples were obtained. Although PBR is generally recommended in a data poor population, simulations based on the population model using PBR resulted in a projected population decline of 25% over the next 15 years. It was concluded that the equilibrium catch level of 10,090 (100% 1+ animals) be used.

For ***Northwest Atlantic harp seals population*** modelling indicates that since 2008, there has been little change suggesting that the population has stabilized at around 7.4 million animals (95% CI= 6,475,800-8,273,600).

Comments and discussion by the Management Committee:
Norway informed that in the West Ice the quota for 2016 was 21 270 harp seals (1+ animals or an equivalent number of pups where 2 pups equals one 1+ animal) and the catch was 1 129 1+ animals, including 6 animals taken for scientific purposes. One vessel participated in the hunt, and had an inspector onboard. No violations were reported. In the East Ice the Norwegian quota was 7000 animals, but there were no commercial catches as has been the case for the previous 7 years. 28 seals were taken for scientific purposes.

Greenland informed that about catch numbers there had been a change in catches, annually average for the last 5 years is 69.000 compared to an annually average of 85.500 in the previous 5 years. There was no changes in management measures.

Conclusion
The Management Committee took note of the report from the Scientific Committee, and noted:

New 2017 abundance estimate for the Greenland Sea harp seal population of 650,300 seals. A catch level of 26 000 animals will reduce the population which will still be above N70 over a 15-year period.

The White Sea/Barents Sea population a new equilibrium catch level of 10 090 1 + animals.

There was no recommendation for new Scientific Research or recommendations to member countries from the SC.

3.2 Hooded Seals

In 2007 the Management Committee for Seals and Walruses recommended a commercial catch level of zero only allowing limited research catches.

Requests by Council for advice from the Scientific Committee
R-2.1.4 - NAMMCO/12-2003 (standing): *to regularly update the stock status of North Atlantic harp and hooded seals as new information becomes available.*
R-2.1.9 – NAMMCO/16-2007 (ongoing): *to investigate possible reasons for the apparent decline of the Greenland Sea stock of hooded seals; assess the status of the stock on basis of the results from the survey in 2007.*

Update from the Scientific Committee
WGHARP had met in September 2016.The SC had endoresed the WG estimate of the 2017 abundance of Greenland Sea hooded seals is 80,460 (59,020 – 101,900). All model runs indicate a population currently well below the Limit Reference Level of 30%. Following the precautionary approach framework developed by WGHARP, no catches should be taken from this population, with the exception of catches for scientific purposes.

Norway plans to carry out a survey in the Greenland Sea in 2018, and it was anticipated that most of the information needed to answer R-2.1.4 and R-2.1.9 will come from this survey. By 2018 enough time should have gone for the pups to have reached sexual maturity and possibly show an increase in the population as a result of the protection in 2007.

Comments and discussion by the Management Committee
Norway informed that there was no quota, but 18 animals were taken for scientific purposes.

Greenland reported a change in catches, annually average last 5 years is 1800 compared to an annually average of 3000 previous 5 years.

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.

Conclusions
The Management Committee took note of the report from the Scientific Committee.

There were no recommendations from the SC for new scientific research or recommendations to member countries.

3.3 Ringed Seals

Requests by Council for advice from the Scientific Committee

R-2.3.1- NAMMCO/5-1995 (ongoing): *to advise on stock identity, assess abundance in each stock area, long-term effects on stocks by present removals in each stock area, effects of recent environmental changes (i.e. disturbance, pollution) and changes in the food supply, and interactions with other marine living resources.*

R-2.3.2 - NAMMCO/7-1997 (ongoing): *to advice on what scientific studies need to be completed to evaluate the effects of changed levels of removals of ringed seals in West and East Greenland.*

Update from the Scientific Committee
There is still not enough information available to answer the requests for advice. As previously noted information on abundance and stock structure, especially satellite telemetry and collection of samples for genetics to inform on possible stock structure in Greenland, and across the Arctic was recommended to help answering current requests.

Recent information from tagged ringed seals suggest that the Arctic ringed seals (*Pusa hispida hispida*), consist of a number of subpopulations.

Comments and discussion by the Management Committee
Greenland reported a change in catches, annually average last 5 years is 62.000 compared to an annually average of 71.000 previous 5 years. Change could be because of reduced trading opportunities of pelts. Decreased prices in combination with sea ice conditions.

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.

Conclusions
The Management Committee noted the report from the Scientific Committee. There were no requests for new Scientific advice or new recommendations to member countries.

3.4 Grey Seals

Requests by Council for advice from the Scientific Committee

R-2.4.2 - NAMMCO/11-2002 (standing): *provide a new assessment of grey seal stocks throughout the North Atlantic.*

The Working Group on Coastal seals had met 1- 4 March 2016 with the following terms of reference:

- assess the status of all populations, particularly using new abundance estimate data that are available from Iceland and Norway.
- address by-catch issues in Norway, Iceland, and the Faroe Islands
- re-evaluate the Norwegian management plans (which have been already implemented) for grey and harbour seals.
- develop specific plans for monitoring grey seals in the Faroes, e.g., obtaining a relative series of abundance (if a full abundance estimate is not possible at this time).

Advice from the Scientific Committee

Norway

Model runs indicated an increase in abundance of the total Norwegian grey seal population during the last 30-years, suggesting a total of 7,120 (5,710 – 8,540) animals (1+) in 2011, with an estimated pup production of 1,620 (95% CI 1,410-3,050). However, recent surveys (2013-2015) indicate a severe reduction in grey seal pup production in certain areas of the Norwegian coast (Trøndelag and Nordland). The issued quotas have been reduced accordingly.

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

Evaluation of the Norwegian Harbour and Grey Seal Management Plans

The WG agreed that the Norwegian management plans for harbour and grey seals managed the hunt, for which it was designed, well. However, recent information about the extent of the by-catches in gillnet fisheries were not expected when the plan was implemented.

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.

Iceland

The reference point for the highest population level of 10,000 should be considered a minimum estimate because the aerial survey was only flown once. The most recent abundance estimate in 2012 was 4,200 grey seals (95% CI: 3,400-5,000). Calculations based on the latest population count in 2012 reveal that the population was smaller than the recommended number of 4,100 animals.

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.

Comments and discussion by the Management Committee
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.

Conclusions
The Management Committee took note of the report from the Scientific Committee, endorsed the recommendations and proposals for conservation and management to member countries noted above. The Committee further noted the new abundance estimates.

3.5 Harbour Seals

Requests by Council for advice from the Scientific Committee
R-2.5.2 - NAMMCO/16-2007 modified **NAMMCO/19-2010** (pending): *To conduct a formal assessment of the status of harbour seals for) as soon as feasible.*

The Working Group on Coastal seals had met 1- 4 March 2016, see agenda item 3.4.

Advice from the Scientific Committee

Abundance estimates and trends in abundance were agreed upon for the harbour seal populations in the North Atlantic. In addition the SC recommended the following specific recommendations for the member countries Norway, Iceland and the Faroe Islands.

Norway

In 2011-2015, the entire Norwegian coast was surveyed resulting in a minimum total population of 7,642 harbour seals.

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.
- Reporting of all removals, including removals around fish farms, or of by-catches in commercial gill net fisheries and recreational fisheries.
- Collect data from by-catches (age, sex, etc.).

Iceland

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.

It was noted that new legislation banning drowning of animals might make the last recommendation unnecessary, but this situation needs clarification.

A full survey was completed in summer 2016 (after the CSWG), and preliminary results confirm the decreases seen from the survey completed in 2014 (30-40% decrease). This is of concern, as the population level will be below the target population level.

Comments and discussion by the Management Committee

Iceland informed that Icelandic legislation bans hunting by drowning. Generally, as was noted under the grey seals Iceland is considering the management of seal stocks and welcomes the recommendations from NAMMCO:

Iceland also informed that the recommendation to carry out a survey will be conducted in the summer of 2017. Iceland is already implementing a program that involves seal surveys every year, i.e. every other year for each of the coastal seal species.

Norway informed that their survey cycle is 5 years.

Norway informed the meeting that the catch in 2016 was 362 of a quota of 455 animals.

Conclusions

The Management Committee took note of the report from the Scientific Committee and endorsed the recommendations to member countries. It was also noted that the WG would meet in 2018 before can finalise request R-2.5.2.

4.6 Bearded seal

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. No request was tabled.

Update from the Scientific Committee

Although data on this species is still limited, the SC noted that it seems to have more information than ever before (e.g., movements, distribution, diet, local estimates, etc.). Given this new information, the SC had discussed the possibility of organizing a status meeting.

The Terms of Reference for the bearded seal WG would 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

Comments and discussion by the Management Committee

Greenland reported a change in catches, annually average last 5 years is 1250 compared to an annually average of 1500 previous 5 years.

Conclusions

The Management Committee noted the report and the idea of having a working group.

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

3.7 Walrus

Requests by Council for advice from the Scientific Committee

R-2.6.3 - NAMMCO/15-2006 (ongoing): *provide advice on the 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.*

Advice from the SC

Updates on recent satellite tracking studies in Northwest Greenland indicating that walruses in this area must be considered a shared stock between Greenland and Canada had been noted by the SC.

The SC had reviewed past recommendations from the 2013 Walrus Working Group, and recommended prioritized these for a future assessment:

1) New abundance estimates
2) Age-structure of catches
3) Catch statistics from Canada (*available*)
4) Struck and lost rates. This is lowest priority for the assessment, however not having newer, reliable struck and lost rates will affect the quotas given (e.g., if the struck and lost rates that are being used are high, then the quotas will be lower). If better struck and lost rates are obtained, quotas may increase.

Comments and discussion by the Management Committee

Greenland informed on quota and catches:
Catch including S&L 2016 walrus:

- West Greenland: 52
- Northwater: 74

- East Greenland: 9

GRL 2017 quotas walrus
- West Greenland: 69
- Northwater: 85
- East Greenland: 18

All three stocks are now following the advice given from NAMMCO SC. It sets the stage for a positive NDF statement. Greenland is revising its Executive Order on the protection and hunting of walrus. It will be presented at a later Council meeting after approval.

Greenland asked for 2 new quota advice:

1) "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."

2) "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."

Conclusions
The Management Committee took note of the report from the Scientific Committee, and endorsed the prioritised recommendations. The Committee endorsed 2 new requests for Scientific advice.

4. ANY OTHER BUSINESS

There was no items discussed under this agenda item.

Appendix 1 - Agenda

AGENDA ITEMS	DOCUMENT REFERENCE
1. CHAIRMAN'S OPENING REMARKS	
2. ADOPTION OF AGENDA	NAMMCO/25/MC/03
3. CONSERVATION AND MANAGEMENT MEASURES FOR SEAL STOCKS	NAMMCO/25/MC/05 NAMMCO/25/MC/06 NAMMCO/25/07
3.1 Harp Seals	NAMMCO/25/07, item 7.1 NAMMCO/25/MC/06, R-2.1.4, R-2.1.10 NAMMCO/25/MC/05, 2.1.1 - 2.1.6
3.2 Hooded Seals	NAMMCO/25/07, item 7.2 NAMMCO/25/MC/06, R-2.1.4, 2.1.9 NAMMCO/25/MC/05, 2.2.1 - 2.2.3
3.3 Ringed Seals	NAMMCO/25/07, item 7.3 NAMMCO/25/MC/06, R-2.3.1 - 2.3.2 NAMMCO/25/MC/05, 2.3.1 – **2.3.3**
3.4 Grey Seals	NAMMCO/25/07, item 7.4 NAMMCO/25/MC/06, R-2.4.2 NAMMCO/25/MC/05, 2.4.1-2.4.2
3.5 Harbour Seals	NAMMCO/25/07, item 7.5 NAMMCO/25/MC/06, R-2.5.2 NAMMCO/25/MC/05, 2.5.1
3.6 Bearded Seal	NAMMCO/25/07, item 7.6 NAMMCO/25/MC/06, NAMMCO/25/MC/05, 2.8.0
3.7 Walrus	NAMMCO/25/07, item 7.7 NAMMCO/25/MC/06, R-2.6.3 NAMMCO/25/MC/05, 2.6.1, 2.7.2
4. ANY OTHER BUSINESS	

Appendix 2 – List of documents

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