



NORTH ATLANTIC MARINE MAMMAL COMMISSION

TWENTY FOURTH MEETING OF THE COUNCIL

10 - 11 February 2016, Grand Hotel, Oslo, Norway

DOCUMENT 10 MANAGEMENT COMMITTEE ON SEALS AND WALRUS

Submitted by: Management Committee on seals and walrus

Action required:

Council is recommend to request NAMMCO to provide advice on the best methods for collecting struck and lost data in Greenland.

Background:

**REPORT OF THE MEETING OF THE MANAGEMENT COMMITTEE FOR
SEALS AND WALRUS
9 February 2016, Oslo, Norway**

1. CHAIRPERSON'S OPENING REMARKS

The Chair, Hild Ynnesdal, Norway, 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. APPOINTMENT OF RAPPORTEUR

The Secretariat was appointed as rapporteur.

4. CONSERVATION AND MANAGEMENT MEASURES FOR SEAL STOCKS

The Chair drew attention to the following documents:

- NAMMCO/24/MC/05 summarising past proposals for conservation and management and responses to these
- NAMMCO/24/MC/06 summarising past requests to the Scientific Committee and responses.

The vice-chair of the Scientific Committee, Tore Haug, presented the information on seal and walrus stocks from the Scientific Committee report (NAMMCO/24/07) under each species.

4.1 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, leaving full freedom to the Committee to decide on the best methods to determine this parameter based on an ecosystem approach.*

Advice from the Scientific Committee

The NAMMCO SC had reviewed and endorsed the following advice of the ICES WG on Harp and Hooded seal that had met in November 2014:

- Pup production surveys (Russia (PINRO)) have been carried out in the White Sea since 1998. From 2004 onwards there are indications of a significant reduction in pup production without firm knowledge of why. Estimates have gone from around 340 000 (2003) to 129 000(2013).
- The population assessment model used for the White Sea/Barents Sea harp seal population provide a poor fit to the pup production survey data. ICES never the less decided to continue to use the model which estimated a total 2015 abundance of 1,368,200 (95% C.I. 1,266,300

– 1,509,378). The population is classified as data poor, still ICES *concluded* that the estimated equilibrium catches were the most preferred option. The *equilibrium catch level is 19 200 1+ animals, or an equivalent number of pups (where one 1+ seal is balanced by 2 pups), in 2015 and subsequent years.*

- An analysis of the effects of potential increases in Canadian catches (designed to reduce the NW Atlantic population of harp seals over a 10 year period) on Greenlandic catches indicates that if catches of young of the year in Canada increase (e.g. if sealskin prices increase), this will significantly reduce the availability of young harp seals for Greenland hunters. Although it is unlikely that Canadian catches will increase in the near future, the situation should be monitored.

The Joint ICES/NAFO/NAMMCO Working Group on Harp and Hooded Seals will meet again in August 2016 at the ICES HQ in Copenhagen, Denmark, to review the status and assess the catch potential of harp and hooded seals in the North Atlantic.

ICES and the North Atlantic Fisheries Organization (NAFO) have accepted NAMMCO's request to join the WGHARP, and the Secretariat will communicate with the ICES Secretariat before the next WGHARP meeting (scheduled for August 2016) to clarify the procedures in WGHARP on how requests should be forwarded for review.

Other information:

Traditional photo aircrafts to assess seal populations in remote areas, such as the West Ice, is expensive and becoming more difficult to operate. IMR (Norway), with funding from the Norwegian Research Council (NRC), are investigating alternative (and cheaper) methods to perform photo-based aerial surveys. Unmanned Aerial Vehicles (UVA) have been tested in the West Ice with promising results. Both harp and hooded seals, including pups, were easily identified on the images taken at an altitude of 300 m (the usual altitude for photographing during traditional surveys).

A new population model for harp seals in the Barents and White Seas is being developed by Norwegian scientists, that is more flexible in capturing the dynamics of the observed pup production data. The current management model predicted that the pup abundance would give a slight increase over the next 15 years, whereas the new (state-space) model predicted that the pup abundance would increase substantially. The state-space model show some promising results and might be a step forward towards more realistic modelling of the population dynamics of the Barents Sea/White Sea harp seal population.

A recent paper using a new genetic analysis supports the hypothesis that harp seals comprise three genetically distinguishable breeding populations, in the White Sea, Greenland Sea, and Northwest Atlantic.

Discussion

Greenland informed the meeting that in 2014 approximately 63000 harp seals had been caught. For 2014 only preliminary numbers are available but the catch numbers seems to at the same level. There is no quota for harp seals only regulations on hunting methods. It was also reported that the average catches the last 5 years gave an annual catch of 74 000 animals compared to the previous 5 years when the annual catch was 86000 animals. The reduction in catch levels was explained by a shift to cod fisheries as opposed to the seal hunt.

Norway informed that in the West ice the quota for 2015 had been 21 270 seals (1+ animals or an equivalent number of pups where 2 pups equals one 1+ animal) and the catch was 1 985 1+ animals,

including 8 animals taken for research purposes. As had been the case for previous 6 years there were no catches in the East ice in 2015.

The meeting welcomed the new ICES/NAFO/NAMMCO WG on harp and hooded seals.

Conclusion

The Management Committee took note of the report from the Scientific Committee, and endorsed the advice from the SC pertaining to the White Sea/Barents Sea population of an equilibrium catch level of 19 200 1 + animals in 2015 and subsequent years.

It also noted the need to monitor the catch level in Canada with respect to the effect this will presumably have on the availability of young harp seal for Greenland hunters.

The Committee was pleased to learn that NAMMCO now is part of the ICES WGHARP, and noted that the Secretariat will ensure that NAMMCO's request to review the status and assess the catch potential of harp and hooded seals in the North Atlantic will be dealt with at the meeting of this group in August 2016.

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

4.2 Hooded Seals

In 2007 the Management Committee for Seals and Walrus 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

The joint analyses of the Norwegian and Russian data on female hooded seal reproductive biology in the Greenland Sea are currently being prepared for publication.

The WGHARP will meet again in August 2016 at the ICES HQ in Copenhagen, Denmark, to review the status and assess the catch potential of hooded seals in the North Atlantic.

Discussion

Greenland informed the meeting that the average catches the last 5 years gave an annual catch of 1 850 animals compared to the previous 5 years when the annual catch was 3 400.

Norway informed that 11 animals had been taken for the purpose of scientific research in 2015.

Conclusion

The Management Committee took note of the report from the Scientific Committee, and looked forward to the result of the August meeting in ICES/NAMMCO WGHARP.

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

4.3 Ringed Seals

Requests by Council for advice from the Scientific Committee

R-2.3.1- NAMMCO/5-1995 (standing): *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 (standing): *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.*

Advice from the Scientific Committee

Ongoing studies in Greenland have shown that ringed seals from the Ilulissat Icefjord (Kangia) are significantly different in size, pelage pattern, and behaviour (e.g., movements and diving patterns) than other ringed seals in the Arctic. In 2016 Greenland plan to continue investigations of possible genetic differences and survey the area for abundance of these seals in the Icefjord.

The increasing number of hunters could potentially have an impact on the population in the area, and it was recommended that Greenland continue the ongoing genetic work, that abundance surveys are carried out, and that Greenland consider protecting this small population until more information is available. A separate management plan should be developed for the Ilulissat ringed seal as soon as the survey is conducted.

There is still not enough information to warrant convening a NAMMCO Ringed Seal WG and it is recommended that this should occur after new surveys and genetics studies are completed.

Other information:

Research in Svalbard has shown dramatic shifts in movement patterns and foraging behaviour of ringed seals before and after a major collapse in sea-ice around the archipelago. These behavioural changes suggest increased foraging effort and thus likely increases in the energetic costs of finding food. Continued declines in sea-ice are likely to result in distributional changes, range reductions and population declines in this keystone arctic species.

Discussion

Greenland informed the meeting that the average catches the last 5 years gave an annual catch of 62 000 animals compared to the previous 5 years when the annual catch was 77 000.

Greenland also informed that the trade of ringed seal skins has been closed down from the south up to Disco bay, due to a surplus built up over the last 6 years. Hunting still continues but the lack of income from the skin sales in these areas can have a dramatic consequence for hunters.

Conclusions

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

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.

No proposal for new Scientific Research.

4.4 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.*

Advice from the Scientific Committee

Norway

The most recent pup production estimate of grey seals in Norway is based on data obtained in 2006–2008. The management plan require that abundance data be updated every 5 year, and boat-based visual surveys obtaining new estimates were conducted from 2013 – 2015. Some of the new estimates obtained in mid Norway were much lower than in the previous survey, and quotas were immediately reduced in these areas as a result.

It is assumed that some animals in the Tromsø/Finnmark area come from the Murman Coast, and the quota is higher than the usual 5% of current abundance estimate for the area. Russia does not allow hunting of grey seals and there is likely no bycatch as Russian fisheries do not use gillnets.

If possible Norway and Russia will conduct a joint survey of grey seals on the Murman Coast – last survey was in 1991.

Faroe Islands

A reporting system, implemented in the Faroes to obtain estimates of removals of grey seals at salmon farms, indicate removals of about 100+ seals per year.

Removal numbers are high and this is a concern because the population size is unknown. Therefore all available grey seal data should be presented for the review of the Coastal Seals Working Group (CSWG). It was recommended that the CSWG develops specific plans for monitoring grey seals in the Faroes.

Pup counts of grey seals in the Faroes are challenging because they pup in caves, however direct counts at haulout sites, perhaps using drones, should be considered for surveys. These surveys could aim to obtain, at the least, information on relative abundance.

Iceland

An abundance estimate from 2012 is available, and there is a plan for a new grey seal survey in 2016 pending funding.

Coastal Seals WG (CSWG)

The CSWG (Chair: Kjell Tormod Nilssen) will meet in early March 2016 and mainly address grey seals and harbour seals requests R-2.4.2 and R-2.5.2.

It is anticipated that the CSWG will have both by-catch estimates and a new grey seal estimate in Norway for consideration at the meeting.

The Terms of Reference for the meeting of the WG agreed upon in 2015:

- 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 in Norway, Iceland, and the Faroe Islands
- 3) re-evaluate the Norwegian management plans (which have been already implemented) for grey and harbour seals.

Discussion

The Faroe Islands remarked, with reference to number 2 of the Terms of Reference of the WG, that bycatch of seals is not a problem in the Faroes as the Faroes do not have gillnet fishery.

The Committee acknowledged that several recommendations/proposals had been tabled pertaining to the request that the Faroe Islands develop a management plan, get abundance estimates and get numbers on removals.

Russian observations made from coastal sites along central parts of the Kola Peninsula (in the southern Barents Sea) seems to indicate some redistributions of grey seals from Norwegian sites and eastwards to Russian sites.

Conclusions

The Management Committee took note of the report from the Scientific Committee. The Committee recommends that the CSWG in addition to the already agreed Terms of Reference also develop specific monitoring plans for grey seals in the Faroe Islands as suggested by the SC.

The Committee is looking forward to the results of the CSWG in anticipation that this will finalise request 2.4.2.

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

4.5 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.*

Advice from the Scientific Committee*Norway*

Aerial and boat based visual surveys to obtain a new abundance estimate in Norway were conducted from 2011 - 2015. This has yielded a new point estimate of 7,594 for the species for the entire Norwegian coast. This new estimate is implemented in the current management of the species – this management now follows the management plan reviewed by NAMMCO SC in 2011.

Norwegian catch is reported by hunters and is considered reliable. The quotas are precautionary so some underreporting is not considered problematic.

IMR, in collaboration with the Swedish Natural History Museum, are considering tagging harbour seals in Sweden to see if they visit Norwegian coast.

Iceland

Results from the partial survey of harbour seals in 2014 shows an appreciable decrease in abundance in the most important haul-out areas. Aerial surveys of harbour seals are planned for 2016, if funds are available. Large uncertainties in abundance and catch statistics, both direct catches and bycatches, make assessments of the present status and sustainability of removals problematic. The Marine Research Institute (MRI) in Iceland therefore said in 2015 that in the absence of new abundance estimates it was unable to evaluate whether the existing management objectives of grey seals and harbour seals are being met.

Greenland

In Greenland a new small group of harbour seals (three mothers with pups) was documented. Only four regularly used haul-out places (with a total of less than 100 seals) is presently known in Greenland. All hunting on this species was banned in 2010 and it is believed that several small remnant populations still exist, but live undetected.

Discussion

Greenland informed the meeting that hunting of this species has been banned since 2010 based on NAMMCO advice. Normally a few catches are still reported by hunters and in 2014 12 were reported as taken. However there has been several cases of misidentification, and the Greenland Institute of Natur Research has been asked to validated the data.

Norway informed the meeting that the catch was 297 of a quota of 495 animals.

Conclusion

The Management Committee took note of the report from the Scientific Committee and notes that the Working Group on Coastal seals meet in March 2016 in order to finalise request R-2.5.2.

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

4.6 Bearded seal

Update from the Scientific Committee

The Scientific Committee had no new information on this species.

Discussion

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, and pointed out that a request for advice would have to be formulated if the meeting wanted to uphold this request. No request was tabled.

Greenland informed the meeting that the average catches the last 5 years gave an annual catch of 1 250 animals compared to the previous 5 years when the annual catch was 1 500.

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 highly target species for NAMMCO members.

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

4.7 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.*

The Chair reminded the meeting of the debate arising from the 2013 quota assessment for West Greenland, and the decision to carry out a supplementary survey of the northern stock (Baffin Bay stock in NW Greenland, Qaanaaq area). This survey, completed in early April 2014, combined with

updated hunting statistics allowed for a new abundance estimate to be developed. Therefore at the last meeting in 2015 the Committee asked the SC to update the advice on sustainable takes of walrus from the Baffin Bay stock.

Advice from the SC

The assessment and quota advice was updated for the Baffin Bay population, and it is recommended that no more than 85 walrus are taken annually in Qaanaaq from 2016 to 2020.

Due to inconsistencies between the two reporting schemes (*Piniarneq* and *Særmeldingskema*) in Greenland, it was recommended to streamline the reporting system including to find out why the numbers are different between the reporting schemes.

In lack of any formal agreement on sharing of information between Canada and Greenland on this shared stock of walrus, 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.

Satellite tagging of walrus continues in Svalbard, and the researchers are training Russian scientists so that they can use these techniques in the Pechora Sea. Genetics studies on walrus in the Pechora Sea indicate that they are similar to the Svalbard-Franz Josef Land walrus.

Discussion

Greenland informed that there is still a lack of coordination with Canada. The catches in West Greenland was 53 animals (quota 69), the catches in North Water was 74 (quota 86) and in East Greenland 4 animals (quota 18).

Greenland further informed that they were presently reviewing the reporting system.

GRL informed that the Government has set the S&L level in Qaanaaq to 3% not following the SC advice on 11 % . For the rest of GRL the advice is followed.

Greenland has been asked to report on catch statistics including corrections for killed but lost animals for different seasons, areas and hunts. In Greenland the hunting licenses in the narwhale, beluga, walrus, harbour porpoise and seal operations are closely related to struck and lost reporting in such a manner that reporting of S/L may lead to a hunter losing his/her license. It is therefore difficult to get reliable data on S&L and Greenland seek guidance from the MC on how to handle and collect such data on S&L. Greenland asked if one possibility was to look at the contract between scientists and Norwegian fishermen to collect by-catches (the so-called reference fleet).

In 2015 the three years Russian research programme on walrus was completed. The main area in focus was the Pechora Sea which is located in the southeastern part of the Barents Sea, adjacent to the Kara Sea. This "Walrus Programme" was financed by a Russian oil and gas company. Main participants were scientists from different Institutes of Russian Academy of Science, WWF, and oil and gas Company Institutes. During the program period, data on distribution, abundance and biological parameters were obtained. The methodology included deployment of satellite based transmitters and aerial surveys. Also, visual observations from vessels and coastal sites were made. Preliminary results from the "Walrus Programme" are being published in special book issue, first in Russian but later with translations to English.

Conclusion

The Management Committee took note of the report from the Scientific Committee, and endorsed the recommendation on sustainable takes of walrus from the Baffin Bay stock.

The Committee also agreed to recommend the Council to request NAMMCO to provide advice on the best methods for collecting struck and lost data in Greenland.

5. Election of officers

New Chair: Iceland

Vice-chair: Faroes Islands

The meeting thanked the outgoing chair, Hild Ynnesdal, for her professional and good work during the last 4 years and welcomed the new officers.