#### 2.2

# REPORT OF THE MEETING OF THE MANAGEMENT COMMITTEE FOR SEALS AND WALRUSES

1 September 2010, Tórshavn, Faroe Islands

#### 1. CHAIRPERSON'S OPENING REMARKS

The Chair Amalie Jessen (Greenland) welcomed the delegates (members listed in Section 5.3) and the observers to the Management Committee for Seals and Walruses.

#### 2. ADOPTION OF AGENDA

The agenda was adopted (Appendix 1) with the addition of the agenda item any other business under each species.

#### 3. APPOINTMENT OF RAPPORTEUR

The Secretariat was appointed as rapporteur.

#### 4. CONSERVATION AND MANAGEMENT MEASURES FOR SEAL STOCKS

Documents to the meeting were compiled in Appendix 2. Past proposals for conservation and management and responses with reference to document NAMMCO/19/MC/3 (Section 2.2 ANNEX 2) and past requests to the Scientific Committee and responses with reference to document NAMMCO/19/MC/4 (Section 2.2 ANNEX 3) were summarised. The list of past recommendations to member countries was presented for information in document NAMMCO/19/SMC/5. All new recommendations to member countries agreed below are listed in Appendix 3.

A Drafting Committee for both Management Committees was established to draft requests for advice for the Scientific Committee.

The Chair of the Scientific Committee, Lars Witting, presented the information on seal and walrus stocks from the Scientific Committee report (NAMMCO/19/6, Section 3.1).

#### 4.1 Harp Seals

## Requests by Council for advice from the Scientific Committee

There were two standing requests to the Scientific Committee:

- To regularly update the stock status of North Atlantic harp and hooded seals as new information becomes available. The Management Committee for Seals and Walruses noted the likely impact of increasing abundance of these species on fish stocks. For harp seals in the Northwest Atlantic, the immediate management objective is to maintain the stocks at their present levels of abundance (R- 2.1.4 - NAMMCO/12-2003).
- To provide advice on Total Allowable Catches (TAC) 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 (**R-2.1.10** - NAMMCO/17-2008).

There was one pending request to the Scientific Committee:

• To evaluate how a projected increase in the total population of Northwest Atlantic harp seals might affect the proportion of animals summering in Greenland (**R-2.1.11** - NAMMCO/18-2009).

#### **Advice from the Scientific Committee**

In response to R-2.1.4 and R-2.1.10, the Scientific Committee took note of the update of the stock status of North Atlantic harp seals made by the ICES-NAFO Working Group WGHARP at its 2009 August meeting.

A Russian survey in 2009 estimated the number of harp seal pups in the White Sea/Barents Sea to 157,000 (95% CI: 123,680 - 190,320), significantly lower than the prior estimate from 2004. The low pup production might be reduced adult recruitment due to past juvenile mortality, or unobserved mortality of adults in recent years, or the number of pups might be underestimated if pupping is now occurring on unknown locations outside the traditional pupping areas.

The White Sea/Barents Sea stock is now considered data rich. The decline in pup production after 2003 could not be accounted for by the existing population model. Sustainable catch levels were therefore calculated by the Potential Biological Removal (PBR) approach that estimated the total allowable catch from the White Sea/Barents Sea harp seal stock to be of no more than 30,062 animals.

A Norwegian survey in 2007 estimated 110,530 (95% CI: 56,080-164,580) harp seal pups in the Greenland Sea, and reproductive data were collected in 2009 to supplement the survey.

The Greenland Sea stock is now considered data rich, with a population model estimating a stock size of 810,600 (95% CI: 487,100-1,134,000) animals for 2009. The model estimates a replacement yield of 30,865 animals for 2010, and it estimates that total annual removals of 42,400 1+ animals (or an equivalent number of pups, with one 1+ seal being balanced by 2 pups) over a 10 year period implies a 80% chance that the population will remain above 70% of  $N_{max}$ , with  $N_{max}$  defined by the 2007 abundance estimate. Any allowable catch of this magnitude should be contingent on an adequate monitoring scheme to detect any adverse population impacts.

White coat pups have arrived to Southwest Greenland with drift ice from the East every year since 2007. The timing of the pups indicates that they belong to the Greenland Sea stock. How many seals are born in this area far from the traditional breeding grounds are unknown.

Canadian catches have now declined to approximately 72,000 in 2008 (from 1996 to 2006 on average 272,600 taken per year) because of ice conditions and poor markets. Since 1980, the Greenland catches increased relatively steadily to a peak of approximately 100,000 in 2000, whereafter they have varied around an average take of just over 80,000 individuals.

Aerial surveys off Newfoundland and over the Gulf of St. Lawrence in March 2008 estimated a total pup production between 1,648,800 (CV: 7.2%; photo estimate) and 1,076,600 (CV: 5.7%; visual estimate). This indicates a pup production that is similar to, or higher than that seen over the past decade. Applying a population model to the data, it estimates a total population size between 6,851,600 (95% CI: 5,978,500-7,697,200) and 8,238,500 (95% CI: 6,774,300-9,540,300) individuals.

In response to R- 2.1.11, the Scientific Committee had recommended that Greenland forward the request to the ICES/NAFO WGHARP as the NAMMCO Scientific Committee has no tradition of establishing Working Groups on harp seals.

Greenland commented that the request had been forwarded to ICES/NAFO WGHARP, and action was pending the response.

The Management Committee noted that a recommendation had been sent from the Secretariat to Russian authorities concerning permission to tag seals in the White Sea under the joint Norwegian – Russian research programme on harp seal ecology.

#### Recommendations to member countries

The Management Committee for Seals and Walruses **endorsed** the Scientific Committee recommendations to undertake reconnaissance surveys to investigate the possible presence of whelping patches in untraditional areas, both in the Greenland Sea (*e.g.* south of 67°N in East Greenland), the Denmark Strait and Southwest Greenland, and in the Barents Sea (southeast and north). The Management Committee further **endorsed** the Scientific Committees recommendation to continue sampling of biological parameters, and studies on stock identity.

Regarding conservation and management issues, Greenland informed the Committee that a new Executive Order on seals will come into force in 2010.

#### Any other business

Representatives from Greenland and Nunavut both reported hunters' observations of early arrival of young harp seals, confirming the information given by the biologists.

#### 4.2 Hooded Seals

#### Requests by Council for advice from the Scientific Committee

There was one standing request and one specific request still being addressed:

• <u>Standing request</u>: to regularly update the stock status of North Atlantic harp and hooded seals as new information becomes available. The Management Committee for Seals and Walruses noted the likely impact of increasing abundance of these species on fish stocks. (**R-2.1.4** - NAMMCO/12-2003).

 On-going request: to investigate possible reasons for the apparent decline of the Greenland Sea stock of hooded seals; and assess the status of the stock on the basis of the results from the planned survey in 2007 (R-2.1.9 -NAMMCO/16-2007).

#### **Advice from the Scientific Committee**

In response to request R-2.1.4, the Scientific Committee reported that no assessment was performed for hooded seals at the ICES/NAFO WGHARP meeting in 2009. The Scientific Committee further reported that the analysis from the 2007 Norwegian aerial surveys in the Greenland Sea pack-ice to assess pup production for populations of both hooded and harp seals gave an estimate of hooded seal pup production of 16,140 (95% CI: 11,950 – 20,380).

In 2009, 396 bluebacks were taken by Norwegian scientists in order to continue a time series that started in 1995 on the condition of bluebacks in the Greenland Sea. Further sampling will be conducted in July 2010 with a planned minimum take of 200 adults.

Satellite tracking has shown that young hooded seals come to Southeast Greenland during their first spring or summer, and that they usually stay in this area during the first years of their life. Satellite tracking will continue in 2010, where tags will be placed on pups off Newfoundland.

#### **Recommendations to member countries**

The Management Committee for Seals and Walruses **endorsed** the Scientific Committee recommendation to facilitate the funding and execution of Norwegian reconnaissance surveys for relocated pupping areas of hooded seals in the Greenland Sea.

The Management Committee for Seals and Walruses also **endorsed** the Scientific Committee recommendation for further sampling with the aim of identifying biological factors that contribute to the prevailing low abundance of hooded seals in the Greenland Sea.

#### Any other business

Greenland reported that observations of hooded seals in the Disco Bay area in recent years have been rare but observations of young harp seals are increasing, indicating the existence of new whelping areas.

#### 4.3 Ringed Seals

The Management Committee agreed that the status of requests R-2.3.1 and R-2.3.2 should be changed from "completed" to "standing".

• R-2.3.1- NAMMCO/5-1995: to advise on stock identity of ringed seals and to assess abundance in each stock area, To advise on stock identity of ringed seals (*Phoca hispida*) for management purposes and to 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: to advise 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.

Diving behaviour of ringed seals in Greenland will be monitored by satellite tags at Ilulissat Icefjord in 2010, and Greenland is planning aerial surveys and satellite tracking of ringed seals in Baffin Bay in relation to oil prospecting, as well as opportunistic sampling for genetic analysis.

#### Recommendations for scientific research

The Management Committee for Seals and Walruses **reiterated its recommendation** from last year to perform abundance estimates on sea ice in offshore areas.

The Management Committee for Seals and Walruses also **reiterated the recommendation** for obtaining new abundance estimates and increasing the effort in tagging for the better understanding of movements, recognizing the difficulties and the expense of surveys.

#### Any other business

In the Disco Bay area observations made by hunters indicated that the seals now are further north due to climate change and less sea ice.

The representative from Nunavut Tunngavik Inc reported that there were no changes in abundance or distribution. However communities in the Baffin Bay had noted a decrease of ringed seal pups due to predation that is directly correlated to an increasing polar bear population.

#### 4.4 Grev Seals

The Management Committee **agreed** to change the status of requests R-2.4.2 from "completed" to "standing".

• R-2.4.2 - NAMMCO/8-1998: The Scientific Committee had previously provided advice in response to a request to review and assess abundance and stock levels of grey seals in the North Atlantic, with an emphasis on their role in the marine ecosystem in general, and their significance as a source of nematodal infestations in fish in particular (NAMMCO 1995). Given the apparent stock decline in Iceland, an apparent increase in Southwest Norway and in the United Kingdom, and the fact that this species interacts with fisheries in three NAMMCO member countries, the Management Committee recommended that the Scientific Committee provide a new assessment of grey seal stocks throughout the North Atlantic.

#### Recommendations

The Management Committee for Seals and Walruses **endorsed** the recommendation from the Scientific Committee that all directed catches and by-catches be reported from all areas.

The Management Committee further **reiterated its endorsement** to convene a Scientific Working Group on Coastal Seals to be held early 2011.

The Management Committee noted the following recommendations made by the Scientific Committee to member countries:

**Greenland** is asked to gather further information on grey seals during fieldwork on harbour seals. Given the possibility of a small isolated stock in Southeast Greenland, it is recommended that grey seals be protected against hunting in Greenland.

The **Norwegian** management plan for coastal seals has in part been implemented. Population modelling efforts are planned, with reproductive data being collected from catches. It is reiterated that the Russian grey seal colonies on the coast of Murmansk be surveyed again.

**The Faroe Islands** were urged to estimate removal and abundance off their coast. All efforts should be made to provide proper estimates of population size and catch for the next annual meeting.

The Faroe Islands commented that effort will be allocated to estimate the population size. Tracking has shown that the animals are quite local, and no evidence was found of an exchange with the UK population, as indicated by flipper tag recoveries. These data will be provided for the planned Scientific Working Group on coastal seals.

An **Icelandic** autumn survey in 2009 indicated a grey seal pup production that was somewhat lower than estimated in 2008. Direct takes have decreased in recent years, making by-catch the likely main removal method. No reliable estimate of total by-catch is available.

Iceland reported that the management objective is to maintain the stock at the 2004 level of 4,100 animals. The latest estimate is 6,200 animals, well above this management objective.

Norway reported that management plans are presently ready to be fully implemented for both grey and harbour seals.

Greenland reported that the recommendation of a total ban on hunting in Greenland has already been incorporated in a new Executive Order.

#### 4.5 Harbour Seals

## Requests by Council for advice from the Scientific Committee

There was one pending request that the Scientific Committee conducts a formal assessment of the status of harbour seals around Iceland and Norway as soon as

feasible (**R-2.5.2** - NAMMCO/16-2007). The Management Committee **agreed** to change the geographical focus of this request to entail all areas.

The Management Committee noted that a formal assessment of harbour seals in all areas will be carried out by the Working Group on coastal seals scheduled for early 2011.

#### Advice from the Scientific Committee

A small colony of about 40 adult harbour seals was found in southeast Greenland in 2009. Eight of the seals were equipped with satellite-linked transmitters, with seals staying mainly within a range of 10 km of the colony. Only two seals have so far made excursions of more than 50 km.

There are plans to conduct surveys in Norway for 2011 and 2012. The study of this species is part of an ecosystem project in Porsanger and Hardanger fjords.

Iceland implemented the last overall survey in 2006. Annual counts are made by the Seal Center and the last count gave an estimate of under 1,000 animals.

#### Proposals for conservation and management

Greenland drew attention to the new Executive Order coming into effect in 2010 where a ban on hunting of this species has been incorporated.

Iceland's management objectives have been set to maintain the stock close to the 2006 estimate.

#### 4.6 Walrus

Attention was drawn to the report from the inter-sessional meeting held 7 January 2010 (ANNEX 1) where the following recommendations for Scientific Research and new proposals for conservation and management were endorsed by the Committee:

#### **Recommendations for Scientific Research**

- Mechanisms for validating reporting of "struck and loss" both for Greenland and for Canada should be designed and enforced.
- For the West, East Greenland and Baffin Bay stocks, the catches and losses (including the Canadian ones) and the future development of the population should be monitored in light of total removals, as well as in the light of climate change and planned industrial development.

#### **Proposals for Conservation and Management**

- Total removals for all areas should be set under consideration of a probability of sustainability that is higher than or equal to 70%.
- Managers should consider establishing a more robust system for monitoring the sex and age composition of the catch (i.e. through collection of tissue samples from the catch).

 A common management regime should be established between Greenland and Canada on shared stocks of walruses.

Greenland commented that the inter-sessional meeting for the Management Committee was called for based on the desire to use and implement NAMMCO's advice when setting the 3-year quota for walrus. This 3-year quota is now adopted. It was also pointed out that there was a growing concern among hunters regarding the effects of human disturbance in connection with seismic research and off shore operations close to Disco Bay.

Greenland noted that it regards NAMMCO as the most suitable organisation for the management of walrus.

Canada noted that, while supportive of common management regimes for shared populations of marine mammals, such a regime for walrus will need to be considered subject to available recourses.

The representative from Nunavut Tunngavik Inc. reported that annual harvest of walrus is declining, not due to a decreased population – in fact it is assumed that the population is increasing - but due to changes in socio-economic factors such the use of smaller and faster vessels than before.

Greenland asked about possibilities for a carry-over within a management area with respect to unused quotas, from one year to the next. The Chair of the Scientific Committee replied that carry-overs are generally not a biological problem as long as the average removal coincides with the recommended removals.

#### 4.7 Bearded seal

A bearded seal was fitted with a satellite transmitter in summer 2009 in the area around Cape Farewell, Greenland. The animal has resided mainly within a radius of 5 km from the tagging location.

There are plans to tag more animals around Cape Farewell during summer 2010, and Greenland is planning acoustic monitoring and tagging in relation to oil exploration in Baffin Bay.

Noting that only a few studies have been initiated for this data-poor and exploited species, the Management Committee recommended that efforts be renewed towards gathering information on biology, abundance and stock status with the view to an assessment.

Greenland commented that the bearded seal is of high importance as it is a preferred dog food. It was further noted that a higher hunting pressure is put on bearded seals when the quota on walrus is low. Data from the hunting database *Piniarneq* has not been analyzed yet to verify this.

#### JOINT SESSION OF THE MANAGEMENT COMMITTEES

The following agenda items 5 through 8 were discussed in a joint session of the two management committees, chaired by Amalie Jessen (Greenland).

# 5. PROCEDURES FOR DECISION-MAKING ON CONSERVATION AND MANAGEMENT MEASURES

#### 5.1 General Models

At its last meeting the Management Committees endorsed the Scientific Committee recommendation to use an "RMP implementation simulation process (IST)-like approach – as modified by Norway" as a general model for conservation and management of baleen whales in NAMMCO.

The Management Committees recognised the usefulness of basing advice on the RMP work conducted by the IWC, though it might not be applicable an all stocks and may limit the questions that can be raised within NAMMCO.

The Management Committees recommended that the Scientific Committee Assessment Working Group investigate how NAMMCO can take over a larger and more direct role in this work and become less dependent on other organisations, while also avoiding unnecessary duplication of work.

The Management Committees recommended that the Scientific Committee Working Group investigate the trade-off space between catches and conservation for management procedures that have already been thoroughly investigated but not examined in detail by NAMMCO.

The Management Committees recommended that the Scientific Committee Working Group on coastal seals perform assessment for grey and harbour seals in all areas and develop a common management model for both species in all areas.

#### 6. ECOSYSTEM-BASED MANAGEMENT

See under agenda item 8.1.

#### 7. USER KNOWLEDGE IN MANAGEMENT DECISION-MAKING

See under agenda item 4 – under the various species.

## 8. RELATED MANAGEMENT ISSUES

#### 8.1 Marine mammal- fisheries interactions

The Management Committee noted (NAMMCO/16) the long-standing requests to the Scientific Committee in this area, and the conclusion of the Scientific Committee that no further progress was likely unless more resources were dedicated to modelling

efforts already begun in Iceland and Norway, and to gathering the data necessary as model input previously identified by the Scientific Committee.

In October 2009 NAMMCO filed an application for funding from the Nordic Council of Ministers which was aimed at creating a network of scientists to develop the project defined by the Working Group on Marine Mammals and Fisheries Interactions at its meeting in 2009 and recommended by Council (NAMMCO/18). This application proved successful. The network is coordinated by Matís in Iceland on behalf of NAMMCO, and Matís will not take part in the actual modelling project.

The Working Group on Marine Mammal Fisheries Interactions met in Copenhagen March 13-14 to compile proposals and budgets for the ecosystem modelling of the Barents' Sea and Icelandic Waters. Details on the meeting can be found in the WG report (NAMMCO/19/6 Annex 3; Section 3.1).

The Scientific Committee concluded that there is sufficient basis for proceeding with the planned modelling for both areas and that funding applications should include both the Barents Sea and Icelandic water areas. The Scientific Committee recommended that external funding should be sought in the following order of priority: 1. Nordic Council Ministers, 2. European Union, and 3. Norwegian sources.

The Management Committees commended progress so far and urged the continuation of the project.

#### 8.2 Environmental questions

The Management Committees noted that owing to a lack of explicit studies it is not in a strong position to provide advice on the effects of human disturbance on walrus.

#### 8.3 By-catch data and monitoring

At NAMMCO 18, the Management Committees welcomed the work undertaken by the Scientific Committee to organise a joint workshop with ICES, focusing on by-catch monitoring systems and reviewing the advantages and disadvantages of existing observation schemes for marine mammals.

The workshop was held successfully in July 2010 and the final report, and a manual on Best Practices for minimising By-catch, which are planned for completion before the end of 2010, will be reviewed by the Scientific Committee at its next meeting.

#### Norway:

At NAMMCO 16, the Management Committee supported the recommendation of the Working Group on by-catch that Norway provide the report of the March 2007 evaluation meeting to the NAMMCO Scientific Committee at their next meeting, and provide estimates of by-catch from fisheries to NAMMCO as soon as they become available.

Norway reported that it has a reference fleet as a trial for by-catch reporting. Analyses are ongoing and electronic logbooks with mandatory reporting of by-catch have been implemented from this year.

#### **Iceland:**

Iceland presented new information on by-catch monitoring including by-catch data from 2009 (harbour porpoise, harbour, bearded, grey and harp seal). By-catch seems to be limited to the use of gill-nets for the lumpsucker fishery. Some improvements including the implementation of electronic logbooks have failed to improve the reporting of marine mammal by-catch satisfactorily and further improvements are being made.

#### The Faroe Islands:

The Faroe Islands reported that a new electronic logbook system for all vessels larger than 15 BRT is under development, and should be implemented in 2011, where reporting of marine mammal by-catch will be mandatory. It was further noted that conventional logbooks are already mandatory on all vessels over 15 tonnes (NAMMCO 18).

## **Greenland:**

By-catches are included in the reporting system as catch but a revised reporting system allowing the discrimination of catch and by-catch is underway.

In general the Management Committees recommend that all catches and by-catches be reported to allow for an evaluation of total removal.

#### 8.4 Other topics

At NAMMCO 18, it was agreed that NAMMCO should not attempt to hold a complete, detailed database of historical catches that could be used for generating catch series for assessment work. These data can instead be obtained from databases in the different countries, or from the IWC. NAMMCO should instead hold relatively simple catch series that provide an overview of the number of individuals of different species and stocks harvested in different areas.

The Scientific Committee reported that it would maintain the email group on establishing a catch database at NAMMCO. The email group should agree on a simple format for submitting yearly catches to NAMMCO starting with an initial submission of catch histories. The group shall report back to the Secretariat as soon as possible and inform the Scientific Committee at its next meeting.

Noting that it had been recommended last year to remove information on annual catches from the National Progress Reports and to compile such data in the report of the Scientific Committee, the Management Committees underlined the need for the timely completion by the Secretariat of procedures to allow for this data to be regularly compiled and readily accessible. The Management Committees stressed the importance of having such data available as an aid for discussions in the Management Committees.

#### 9. TRADE ISSUES AND THE EU BAN OF IMPORT OF SEALSKIN

The ban on the import of sealskin was adopted by the EU in July 2009. At its last meeting NAMMCO member countries and observer countries expressed their grave concern that the EU ban is a huge step backwards for sustainable development and intenational trade: noting that such a ban can have serious consequenses for the economies of the many communities dependant on abundant seal stocks across the North Atlantic and that it raises serious concerns for the future of international cooperation on responsible management and the sustainable use of renewable natural resources in general.

Greenland reported that the EU regulation (1007/2009 and 737/2010) on the import of seal products to the EU market has come into force from 20 August 2010. The regulations put a ban on the import of seal products, however an exemption allows seal products from Inuit hunts to be sold in the EU. In response Greenland has drafted an Executive Order on the export of seal products from Greenland to the EU, in order to comply with the two regulations.

Norway, Greenland and Canada informed the Management Committee for Seals and Walruses on their actions in response to the EU ban. It was also reported that a number of persons and organisations in Canada/Nunavut and Greenland have applied and succeeded in receiving an interim relief of the Regulation (EC) No 1007/2009.

The Management Committee agreed to recommend that the Council reiterate its continued concern regarding the EU seal import ban through a further statement.

## 10. ANY OTHER BUSINESS

There was no other business.

## 11. ADOPTION OF REPORT

The report was adopted by correspondence.

## Appendix 1

#### **AGENDA**

- 1. CHAIRMAN'S OPENING REMARKS
- 2. ADOPTION OF AGENDA
- 3. APPOINTMENT OF RAPPORTEUR
- 4. Conservation and Management measures for seal stocks
- 4.1 Harp Seals

White / Barents seas

Greenland Sea

NW Atlantic

- Status of past proposals
- Requests by Council for advice from the Scientific Committee
- Responses by the Scientific Committee
- New proposals and recommendations for scientific research
- Proposals for conservation and management
- 4.2 Hooded Seals

Greenland Sea

NW Atlantic

- Status of past proposals
- Requests by Council for advice from the Scientific Committee
- Responses by the Scientific Committee
- New proposals and recommendations for scientific research
- Proposals for conservation and management
- 4.3 Ringed Seals

Greenland

Others?

- Status of past proposals
- Requests by Council for advice from the Scientific Committee
- Responses by the Scientific Committee
- New proposals and recommendations for scientific research
- Proposals for conservation and management
- 4.4 Grey Seals

Greenland

Norway

Faroe Islands

Iceland

- Status of past proposals
- Requests by Council for advice from the Scientific Committee
- Responses by the Scientific Committee

## Report of the Management Committee for Seals and Walruses

- New proposals and recommendations for scientific research
- Proposals for conservation and management
- 4.5 Harbour Seals

Greenland

Norway

**Iceland** 

- Status of past proposals
- Requests by Council for advice from the Scientific Committee
- Responses by the Scientific Committee
- New proposals and recommendations for scientific research
- Proposals for conservation and management
- 4.6 Walrus

#### Greenland

- Status of past proposals
- Requests by Council for advice from the Scientific Committee
- Responses by the Scientific Committee
- New proposals and recommendations for scientific research
- Proposals for conservation and management
- 4.7 Bearded seal

Greenland

Norway

- 5. PROCEDURES FOR DECISION-MAKING ON CONSERVATION AND MANAGEMENT MEASURES
- 5.1 General Models
- 6. ECOSYSTEM-BASED MANAGEMENT
- 7. USER KNOWLEDGE IN MANAGEMENT DECISION-MAKING
- 8. RELATED MANAGEMENT ISSUES
- 8.1 Marine mammal fisheries interactions
- 8.2 Environmental questions
- 8.3 By-catch data and monitoring
- 8.4 Other topics
- 9. TRADE ISSUES AND THE EU BAN OF IMPORT OF SEALSKIN
- 10. ANY OTHER BUSINESS
- 11. ADOPTION OF REPORT.

## Appendix 2

## LIST OF DOCUMENTS

Document no	Title	Agenda item
NAMMCO/19/SMC/1	List of Documents	
NAMMCO/19/SMC/2	Agenda	2.
NAMMCO/19/MC/3	Status of Past Proposals for Conservation and Management	4.
NAMMCO/19/MC/4	Summary of Requests by NAMMCO Council to the Scientific Committee, and Responses by the Scientific Committee	4.
NAMMCO/19/SMC/5	Recommendations to member countries 2009	4.
NAMMCO/19/SMC/6	Report of the Inter-sessional Meeting of the Management Committee for the Seals and Walruses	4.
NAMMCO/19/6 and ANNEXES	Report of the Sixteenth Meeting of the Scientific Committee	4., 5. and 7.

Appendix 3

## **RECOMMENDATIONS TO MEMBER COUNTRIES 2010**

#### Harp seal

#### Greenland

To request ICES/NAFO WGHARP to evaluate how a projected increase in the total population of Northwest Atlantic harp seals might affect the proportion of animals summering in Greenland.

#### Greenland and Norway

To undertake reconnaissance surveys to investigate the possible presence of whelping patches in untraditional areas, both in the Greenland Sea (e.g. south of 67°N in East Greenland), the Denmark Strait and Southwest Greenland, and in the Barents Sea (southeast and north).

To continue sampling of biological parameters and studies on stock identity.

#### Hooded seal

#### Greenland and Norway:

To facilitate funding for and execution of Norwegian reconnaissance surveys for relocated pupping areas in the Greenland Sea.

To conduct further sampling with the aim of identifying biological factors that contribute to the prevailing low abundance of hooded seals in the Greenland Sea.

#### Ringed seal

#### **Greenland and Norway**

To initiate studies for addressing the importance of pack-ice breeding seals, to obtain new abundance estimates and increasing the effort of tagging for the better understanding of movements recognising the difficulties and the expense of surveys.

## **Grey seal**

#### All countries

To report all direct catches and by-catches from all areas.

#### Greenland

To gather further information on grey seal during fieldwork on harbour seal.

#### Faroe Islands:

It was strongly recommended that the Faroe Islands estimate removal and abundance off their coast. All efforts be made in providing a proper estimate of population size and catch at the next annual meeting.

## Norway:

It also recommends that the Russian grey seal colonies on the coast of Murmansk be surveyed again.

## **Bearded seal**

## All:

Efforts should be made to gather information on biology, abundance and stock status with the view to an assessment.