

NAMMCO



**THE 24th MEETING OF THE COUNCIL
REPORT**

10-11 February 2016, Oslo, Norway

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1. OPENING PROCEDURES**1.1 Welcome address**

The meeting was opened with a welcoming address by the Chair of Council, Ásta Einarsdóttir (Appendix 4). The Chair welcomed the new General Secretary, Geneviève Desportes, to her first Council meeting in this function. She remembered the late Dorete Bloch, a strong personality in NAMMCO since its beginning and a member of the Scientific Committee between 1992 and 2009, and recalled her warmth and not the least her endless hospitality.

She underlined that 2015 had been a very active year for NAMMCO and listed the most important events. With all these activities as background, she welcomed all the participants (Appendix 1).

1.2 Admission of Observers

The Chair welcomed all observers, noting representatives from Canada, Denmark, Japan, the Russian Federation, and in addition representatives from intergovernmental organisations, the International Whaling Commission (IWC), Northwest Atlantic Fisheries Organisation (NAFO), North East Atlantic Fisheries Commission (NEAFC) and South East Atlantic Fisheries Organisation (SEAFO) as well as the IWMC World Conservation Trust.

Regrets had been received from Inuit Circumpolar Conference (ICC) Greenland, the EU (EC, DG Mare and DG Environment), and the North Atlantic Salmon Commission (NASCO).

1.3 Opening statements

Opening statements were presented by member nations, the Faroe Islands, Greenland, Norway and Iceland. Canada, Russia, Japan and the International Whaling Commission also made opening statements. All statements are contained in Appendix 4.

1.4 Adoption of agenda

The agenda (NAMMCO/24/2rev5) was adopted without amendments (Appendix 2). An update from Japan on their new whale research programme in Antarctica, NEWREP-A, would be dealt with under point 14. Documents relating to the agenda points are listed in Appendix 3.

1.5 Meeting arrangements

The General Secretary, Geneviève Desportes, welcomed all participants on behalf of the Secretariat which hosted this year's meeting, and presented the meeting arrangement and practicalities. She drew particular attention to the structural changes brought to the programme, with the meetings of the Management Committees being held prior to the Council meeting proper. She also mentioned that meeting updates would be posted on the NAMMCO Facebook page. All participants were invited to a reception hosted by the Secretariat at the Grand Hotel.

1.6 Invited speaker

A presentation entitled "Why do marine mammals need ecosystem-based management? And what have they ever done for us? An exploration of the ecosystem service approach to support NAMMCO framework" was given by Dr Nicola Beaumont from the Plymouth Marine Laboratory. A summary of this presentation is provided in Appendix 5.

A number of questions followed, relating to the implementation of such an ecosystem approach in the framework of NAMMCO. One question related to the general application of the valuation, monetary or not, of ecosystem services, as this valuation would be very different according to societal and cultural values. The importance of identifying all important linkages within the ecosystem and monitoring changes in all compartments was also underlined, and not only those related to species/sectors of commercial interest. Particular references was made to the fact that the late monitoring of plankton in many areas prevented a

complete understanding of the distributional changes presently observed. Plankton is a crucial element in relation to marine mammal distribution, directly or through their prey, but because it was not commercially interesting, its monitoring had only started recently. A long-term trend was lacking and only the present situation could be referred to.

Beaumont was thanked for her thought-provoking, inspiring, excellent and lively presentation.

2. FINANCE AND ADMINISTRATION

2.1 Report of the Finance and Administration Committee (FAC)

The Chair of the FAC, Ole-David Stenseth (Norway), presented the report of meetings held since NAMMCO 23 in February 2015 (NAMMCO/24/04). The main subjects dealt with and of relevance to Council were:

- The streamlining, clarification and aligning of NAMMCO rules (RoP of Council and Committees, Staff Rules, Rules for Observers, attendance of External experts),
- The possibility of NAMMCO conducting a performance review,
- The improvement of NAMMCO visibility and the need for developing a communication, information and outreach strategy,
- The Accounting for 2015, and the preparation of the budget 2016 and draft budget 2017.

Stenseth also informed that the Committee had elected Joánnes Hansen from the Faroe Islands as its new chair.

Comments

The Chair of Council thanked Stenseth for his able chairing of the Committee during the past four years. She invited comments to the report, and subsequently the **report was accepted and its recommendations and conclusions endorsed**.

2.1.1 Audited accounts 2015

Stenseth highlighted that the 2015 accounts (NAMMCO/24/05; appendix 6) had closed with a surplus of NOK 402,840. The auditors' report had been received without comments, and the accounts were adopted by FAC.

He also recalled the Council's decision (2013) to rebuild the General Reserve to 10% of operating expenses estimated to approximately NOK 600,000 within 5 years. As of 31.12. 2014, Stenseth was pleased to announce that the General Reserve had now reached this level.

Comments

The 2015 accounts were approved and **adopted** by Council.

2.1.2 Communication and Outreach Strategy

Stenseth drew attention to the draft Communication and Outreach Strategy prepared by the Secretariat (NAMMCO/24/25). Considering that it would be beneficial for NAMMCO to have a Communication and Outreach Strategy in order to obtain more focussed and coherent information work, the FAC recommended Council to support the idea of NAMMCO adopting such a strategy.

The FAC underlined that communication and outreach work should not be solely the task of the Secretariat, but also of the NAMMCO countries.

In the framework of this strategy the FAC recommended that prioritisation was given to a complete upgrade of the present website on a new digital support, offering more up to date technological features and also that the completion of the species sites was given high priority.

Comments

Council **agreed** with the FAC proposal and tasked the FAC to continue developing a communication, information and outreach strategy on the basis of the present document with the goal of adopting it at the next meeting of the Council.

Council **endorsed** FAC's priority to develop a new technically updated website, serving as a hub of all NAMMCO information, communication and outreach activities, both internal and external. Council also noted that this would have implication on the work priorities of the Secretariat and the budgets for 2016 and 2017.

2.1.3 Performance Review

Considering that it would be beneficial for NAMMCO to take on an external review of the organisation, as called by the 2006 UN Resolution 61/105 for Regional Fisheries Management Organisations (RFMOs), the FAC recommended Council to adopt the proposal outlined in document NAMMCO/24/28.

Comments

Council **endorsed** the idea of a performance review of the organisation and tasked the FAC to prepare for such a review process with the aim of endorsing it at NAMMCO 25.

2.1.4 Amendments to Rules

Noting that the NAMMCO set of Rules needed clarification and improvement and in an effort of clarification and streamlining, the FAC proposed a series of amendments to the present Rules and the addition of Rules for observers.

2.1.4.1 Amendments to RoP of Council and Committees

Stenseth underlined that most of the changes proposed were not substantial in essence, but for clarity and consistency between the RoP of the different committees and their alignment.

There was, however, one change of substance concerning the accreditation of observers, which governed some of the other changes put forward. The FAC proposed that, as a simplification and streamlining measure, only Council should have the ability of accrediting observers to NAMMCO. Accredited observers may then observe at all NAMMCO meetings, unless otherwise decided by the majority of the subsidiary body.

The General Secretary presented the amendments proposed by the FAC to the RoP of Council (NAMMCO/24/15), Management Committees (NAMMCO/24/16), Scientific Committee (NAMMCO/24/17rev), Committee on Hunting Methods (NAMMCO/24/18), Committee on Inspection and Observation (NAMMCO/24/19). She noted that, according to the RoP of Council and committees, the amendments proposed had been circulated on December 22, 2015, by the Secretariat on behalf of the Chair of the Council, to the Council at large, including Heads of Delegations, Chairs and members of all committees.

Comments

Council **agreed** that, as proposed, only Council should accredit observers and the RoP of the different Committees should be changed accordingly. It was also agreed, that in the name of transparency, all committees except FAC should, as a general rule, accommodate observers.

Council **adopted** all the proposed amendments as presented in the documents cited above.

2.1.4.2 Amendments to Staff Rules

The present Staff Rules did not have text referring to the conditions for staff relocation. The FAC therefore proposed to incorporate the text contained in document NAMMCO/24/21 into the Staff Rules for the NAMMCO Secretariat.

Comments

Council **adopted** the text presented as an amendment to the present Staff Rules and tasked the FAC to make a general review of the Staff Rules, without changing the existing balance of benefits and duties, with the aim of presenting possible amendments to the next Council meeting for adoption.

2.1.4.3 Adoption of Rules for Observers

Considering that it would be beneficial for NAMMCO to have Procedures & Rules for Observers attending NAMMCO meetings, the FAC proposed Council to adopt the guidelines presented in document NAMMCO/24/22.

Comments

Council **adopted** without changes the proposed rules and guidelines for observers.

2.1.5 Budget 2016 and draft Budget 2017

The agenda item remained open pending the outcome of the reporting from the different committees with respect to financial consequences. Stenseth introduced the 2016 budget and draft budget for 2017 (NAMMCO/24/06). Explanations of the budget items and their rationale were presented.

The General Reserve had been rebuilt to a level of 10% of the annual operating expenses. The FAC recommended that all efforts and priority be given to updating and upgrading the NAMMCO website, as a first step in implementing a communication strategy and facilitating access to information. The FAC further recommended that funds should be allocated to this task, so professional support could be sought.

Running costs should be kept as low as possible and the Secretariat was encouraged to regularly investigate possibilities of cost reduction. The possibility of having interns at the NAMMCO Secretariat should be investigated.

Comments

Council **endorsed** the prioritisation given by the FAC to develop a new website with updated technology, serving as a hub of all NAMMCO information, communication and outreach activities.

Council **adopted** the budget 2016 and the draft budget 2017 as contained in NAMMCO/24/06.

2.2 Adoption of the ROP for the Scientific Joint Working group of NAMMCO and JCNB

The Greenland-Canada Joint Commission on Narwhal and Beluga (JCNB) had proposed amendments to the RoP for the Scientific Joint Working Group of NAMMCO and JCNB. These amendments, presented in NAMMCO/24/29, had already been adopted by the JCNB but required the endorsement of the Council of NAMMCO.

Comments

Council **adopted** the proposed amendments to the RoP for the Scientific Joint WG of NAMMCO and JCNB.

2.3 Other business

The Chair of the FAC commended the work of the new General Secretary and thanked her for presenting initiatives, which contributed to streamlining and supporting the work of the Committee.

3. SCIENTIFIC COMMITTEE**3.1 Report of the Scientific Committee (SC)**

The Chair of the Scientific Committee, Thorvaldur Gunnlaugsson (Iceland), presented the SC report (NAMMCO/24/07) to the Council. The species-specific details had already been presented at the meetings of the Management Committees, and the presentation focused on the other work of the SC and the work plan for 2016.

3.1.1 Overall work in 2015

In 2015, the SC held three Working Group (WG) meetings. The NAMMCO-JCNB Joint WG met in Ottawa from 9-13 March 2015 to complete the development of the narwhal catch allocation model and to update the assessments of narwhal and beluga. A Survey Planning WG was held in Reykjavik from 13-15 April 2015 for the final preparations for NASS2015. The Large Whale Assessment WG met in Copenhagen from 5-7 October 2015 and gave management advice for fin and common minke whales in Iceland, and humpback whales in Greenland.

In addition, the SC held a symposium entitled "Impact of human activities on Arctic marine mammals, with a focus on narwhal, beluga and walrus" from 13-15 October in Copenhagen. The Symposium had 46 participants

and 22 presentations were given on the focal species, but also on bowhead and humpback whales and harbour seals. Concerns were raised at both the Symposium and the SC meeting about a mining project currently under development in the Canadian Arctic. The Mary River Project (see point 5.1 for detail), is an iron-ore mining project that continues expanding, currently with the prospect of shipping up to 10 months of the year through Baffin Bay. Other industrial activities that were addressed at the symposium as being particularly important disturbance factors for marine mammals were seismic exploration in Canada, and West and East Greenland.

The SC held its Annual meeting in Tórshavn from 9-12 November 2015 where they reviewed the work of the WGs, received updates on research activities, and proposed future work. The SC drew the attention of the Council to the potentially severe consequences of the industrial activities mentioned above. They will likely have impacts on the hunting of the species concerned, and could affect the management advice given.

3.1.2 Cooperation with other organisations

The SC has close ties to the JCNB, IWC SC and ICES. The NAMMCO-JCNB JWG held a meeting in March 2015 to complete the development of the narwhal catch allocation model and to update the assessments for narwhal and beluga. Work on fin and common minke whales in the IWC RMP Implementation Review process was used during the NAMMCO Large Whale Assessment WG. The ICES WGHARP is now officially the ICES/NAFO/NAMMCO WGHARP, which will hopefully streamline and facilitate scientific advice for harp and hooded seals.

3.1.3 Officers

Elections were held at the 22nd SC meeting. Tore Haug (Norway) was elected Chair, and Bjarni Mikkelsen (Faroe Islands) was elected Vice-Chair. The SC thanked outgoing Chair Thorvaldur Gunnlaugsson for his efforts during his chairmanship.

3.1.4 Other business

There was no other business.

3.2 Priorities and work plan of the Scientific Committee in 2016-2017

Gunnlaugsson presented the schedule of the WGs recommended by the SC.

Work Plan and Working Groups in 2016

By-catch Working Group (BYCWG)

29 February, Reykjavik. Convenor: Geneviève Desportes

This half-day meeting, convened just prior to the Coastal Seal WG, has as specific terms of reference the planning of the work of the BYCWG, including future meetings and cooperation with other organisations, as well as the identification of a Chair and relevant Scientific Experts (also fishery experts).

It is anticipated that a full WG will meet in the fall 2016.

Coastal Seals Working Group (CSWG)

1-4 March 2016, Reykjavik. Chair: Kjell Tormod Nilssen

The WG will mainly address R-2.4.2 and R-2.5.2.

The Terms of Reference for the WG had been broadened (see agenda item 7.1) and were now the following:

- a) Assess the status of all populations, particularly using new abundance estimate data that are available from Iceland and Norway,
- b) Address by-catch issues in Norway, Iceland, and the Faroe Islands,
- c) Re-evaluate the Norwegian management plans for grey and harbour seals,
- d) Review all of the available grey seal data from the Faroes and 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).

Abundance Estimates Working Group (AEWG)

1-3 days, May 2016, Copenhagen or Bergen. Chair: Daniel Pike, Convenor: Geneviève Desportes

At this first meeting, the WG will review the progress of and give advice on the analyses of the new abundance data

A second meeting may be scheduled in October 2016, depending on progress with the analyses. It could be held back to back with a LWA WG meeting in October 2016.

ICES/NAFO/NAMMCO Working Group on Harp and Hooded Seals (WGHARP)

3 days, August 2016, ICES HQ, Copenhagen. Chair: Mike Hammill, Convenor: Tore Haug

This WG will review the status and assess the catch potential of harp and hooded seals in the North Atlantic. Norway has forwarded a request to ICES requesting an assessment of status and harvest potential of the harp seal stocks in the Greenland Sea and the White Sea/Barents Sea, and of the hooded seal stock in the Greenland Sea. This request will form the basis for the next WGHARP meeting.

Large Whale Assessment Working Group (LWA WG)

Fall 2016. Chair: Lars Walløe, Convenor: Gisli Víkingsson

The terms of reference for the meeting is to incorporate the new abundance estimates ensuing from NASS2015 in stock assessments and generate longer-term advice.

Scientific Committee 23rd Annual Meeting

4 days, November 2016, (hosted by Greenland)

The SC suggested that it would be very cost and time efficient to have the next SC meeting in Copenhagen rather than Greenland. Should the meeting be held in Copenhagen, the SC urged all countries to send all of their SC members to the next meeting to take advantage of the cost savings.

Comments

Council **agreed** with the proposed work plan and endorsed the recommendation pertaining to attendance to the next SC meeting. It also approved the 2017 work plan, pending budget considerations.

3.3 Other business

The amendment to the SC Rules of Procedure (NAMMCO/24/17rev) was approved by Council under point 2.1.4.1.

There was no other business.

4. NATIONAL PROGRESS REPORTS

National Progress Reports (NPR) had been received from member countries (NAMMCO/24/NPR-F, NAMMCO/24/NPR-G, NAMMCO/24/NPR-I, NAMMCO/24/NPR-N; see Section 4). National Progress reports were also received from the observer countries Canada, Japan, and the Russian Federation, all of whom were thanked for their contributions.

Comments

No further comments were made by Council.

5. JOINT MEETING OF THE MANAGEMENT COMMITTEES

5.1 Report of the Joint Meeting of the Management Committees (JMC)

The Chair of the Joint Meeting of the Management Committees, Ulla S. Wang (Faroe Islands), presented the report (NAMMCO/24/08, section 2).

Under Environmental questions, the JMC was presented with an update on the Disturbance Symposium and especially the Canadian iron-ore mining project (Mary River project) that is of concern to marine mammals in Baffin Bay. Furthermore the effects of climate change seen in marine mammals in the North Atlantic were highlighted. The JMC reviewed updates on past requests for advice from the Scientific Committee related to environmental questions, and one new request was proposed. The JMC also discussed using management procedures developed in other organisations for decision making in NAMMCO.

Disturbance Symposium and Mary River Project

The Symposium organised by NAMMCO and entitled “Impacts of Human Activities on Arctic Marine Mammals” was held in October 2015 in Copenhagen. Pending the full report from the symposium, the Scientific Committee at their meeting in November 2015 had been informed of a few issues of concern, in particular the Mary River mining project.

Mads Peter Heide-Jørgensen, one of the organizers of the Disturbance Symposium, had been invited to present an update on this specific project to the JMC. The Mary River Project operated by Baffinland Iron Mines Corp, may result in 10-month of shipping through the heavy pack ice in Baffin Bay. This will have severe, unpredictable consequences for the large numbers of marine mammals (narwhals, belugas, bowheads, ringed seals and walrus) using the area in summer and winter, both for the populations themselves and also for the accessibility to hunting and/or its sustainability.

Heide-Jørgensen highlighted three main concerns with this project:

- 1) The effects of the shipping routes
- 2) Vessels moving through the pack ice, and the effects of their presence and the noise generated
- 3) The possibility of accidents, including spills of oil or other chemicals

The JMC noted the preliminary report, and acknowledged that there appears to be reason for concern for human activities negatively affecting marine mammals in the Arctic. The Committee noted that it looked forward to getting advice from the SC after their review of the full report of the symposium at their next meeting.

The JMC also proposed a new Request for Advice from the SC (**R-1.5.3**):

“The Council requested that the SC monitor the development of the Mary River Project and assess qualitatively or if possible quantitatively the likely impact and consequences on marine mammals in the area.”

Climate change

The SC vice-chair, Tore Haug (Norway) presented updates from the SC on environmental issues, particularly the impacts of climate change. Harp seals and common minke whales were exhibiting declines in body condition in recent years, and competition for food with the increasing cod stock (likely due to climate change) was suggested as a possible explanation. Harp seals were also experiencing decreasing ice conditions. This was a matter of concern, considering that this species was dependent on ice for breeding, moulting and resting.

The shifts in distribution of common minke whales away from Icelandic coastal waters was likely due to a northward shift in summer distribution of capelin and a crash in the abundance of sand eel. Continued monitoring of the distribution and abundance of cetaceans was considered essential for conservation and management of cetacean populations and as part of wider studies of ongoing changes in the ecosystem.

Procedures for decision making on conservation and management measures

The Secretariat had drawn attention to the potential conflict of NAMMCO Scientific Committee using management procedures developed in other organisations when these do not meet the management objectives of NAMMCO.

The JMC underlined the importance of keeping in mind NAMMCO management objectives if using management procedures from other organisations in formulating an advice.

By-catch data and monitoring and Trade-related issues

The NAMMCO countries had reviewed their by-catch reporting systems, which were quite different in nature and scope.

Norway informed on the possibility that the USA will be implementing rules potentially banning import of marine products from countries with fisheries with unmanaged high by-catch. It was unclear whether the USA was planning to ban all marine products or just products from the problematic fisheries. This is a potentially significant economic issue for all NAMMCO countries, which was another reason for the increased emphasis on future work on by-catch in general.

No new recommendations for Conservation and Management had been proposed.

Comments

Council took note of the report and concerns of the joint meeting of the Management Committees and adopted the recommendations.

Norway informed that the letter from the USA related to the by-catch issue was received in August 2015 and referred to all kinds of sea food, both wild-caught and maricultured. USA required that stock assessment of a certain standard be carried out and mitigation measures of a certain quality be taken. Norway was currently in the process of discussing this issue (terms of the letter and consequences) with the USA and will provide an update in the future. No deadline had been given to a response by Norway.

At the time of the meeting the other NAMMCO countries had not received similar letter, but they agreed that this was potentially a matter of concern for all NAMMCO member countries.

5.2 Recommendations for requests for advice

There was one new request for advice from the SC that was **adopted** by the Council.

R-1.5.3 The Council request the SC to monitor the development of the Mary River Project and assess qualitatively or if possible quantitatively the likely impact and consequences on marine mammals in the area.

5.3 Other business

There was no other business.

6. MANAGEMENT COMMITTEE FOR CETACEANS

6.1 Report of the Management Committee for Cetaceans (MCC)

The Chair of the Management Committee for Cetaceans, Ulla S. Wang (Faroe Islands), presented the report (NAMMCO/24/7; Section 2). The MCC was presented with the status of NASS2015 and the recommendations from the Steering Committee, and the narwhal catch allocation model developed in the NAMMCO-JCNB Joint WG. The MCC was also presented with updates on past requests for advice from the Scientific Committee and their status were discussed. Past proposals for conservation and management were also discussed.

NASS2015

The Chair of the NASS2015 Steering Committee, Mads Peter Heide-Jørgensen (Greenland), had been invited to present an update on NASS2015. Despite challenges with late notification of funding and weather in parts of the survey areas, the surveys were generally successful and abundance estimates were expected for fin, humpback and pilot whales. The Icelandic coastal aerial survey will be repeated in 2016 due to poor weather conditions in 2015, and hopefully this will allow for development of abundance estimates for common minke whales.

The NASS Steering Committee had recommended a plan for analysing the data from these surveys. After the completion of the initial analysis, the preliminary results will be presented for review to the Abundance Estimate Working Group (AEWG), with a meeting proposed for mid-May 2016 in Copenhagen.

The MCC agreed that the Steering Committee had completed its work and referred future work to the SC and its Abundance Estimation WG (AEWG).

Narwhal Catch Allocation Model

Mads Peter Heide-Jørgensen, also gave a presentation on the Catch Allocation model that had been developed in the NAMMCO—JCNB JWG. The model allows for assigning catches from the narwhal meta-population that Canada and Greenland share to the appropriate summering aggregations, by different hunting grounds and seasons. It includes all information that is available on narwhal movements including telemetry data, abundance estimates, seasonal occurrence and historical catch data.

The MCC commended the work of the WG on developing this model and endorsed the use of the model in management procedures. The MCC was also pleased to hear that Greenland had already implemented this advice into their management procedures.

Comments

Council took note of the report and **adopted** the recommendations of the Management Committee for Cetaceans.

Council also noted the uniqueness of the Narwhal Catch Allocation Model, which was a step forward in this complex assessment situation and further noted that it could potentially be applied in many situations where migratory populations were exploited in several areas under various jurisdictions. Council complimented the Joint WG and the SC for this work.

6.2 Recommendations for requests for advice

There were one proposal for a new request for advice from the SC and three proposals for amendments to existing requests that were **adopted** by the Council.

New Request

R-3.4.14 The Council request the SC to examine the data existing on beluga in East Greenland (sightings, strandings, By-catch and catch) and examine how this material can be used in an assessment process and advice on how this data can be improved.

Amendments

R-3.2.4 The original text reads: “The Commission requested the Scientific Committee to 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.” (NAMMCO/15)

The new amendment add the following text: “The SC is further asked to provide advice on future catch levels of humpback whales in West Greenland at different probability levels for a non-declining population evaluated over a 5 year period, similar to the procedure for the advice generated for beluga, narwhal and walrus. The advice should include the latest abundance estimate.”

R-3.1.7 The original text reads: “The SC is requested to complete an assessment of fin whales in the North Atlantic and also to include an estimation of sustainable catch levels in the Central North Atlantic. This work should be initiated as soon as all estimates become available and before the meeting of the SC in 2009 (NAMMCO/17). In 2014 it was amended to include “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.” (NAMMCO/23)

The new amendment replace the NAMMCO/23 amendment and reads: The SC is requested to complete an assessment of fin whales in the North Atlantic and also to include an estimation of sustainable catch levels in the Central North Atlantic. A long-term advice based on the new NASS2015 abundance estimate and the available results from the RMP Implementation Reviews (with 0.60 tuning level) is needed in 2016.

R-3.3.4 The original text reads: “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.” (NAMMCO 23)

The new amendment replace the NAMMCO/23 amendment and reads: 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.

6.3 Other business

There was no other business.

7. MANAGEMENT COMMITTEE FOR SEALS AND WALRUSES

7.1 Report of the Management Committee for Seals and Walrus

The Chair of the Management Committee for seals and walruses, Hild Ynnesdal (Norway), presented the report (NAMMCO/24/10, Section 2), highlighting the main recommendations and request for advice from the Scientific Committee. The MCSW endorsed one new request on struck and lost listed below under agenda item 7.2.

The Committee endorsed the recommendation of the SC that all available grey seal data from the Faroes should be presented to the CSWG for review. The terms of reference of the CSWG was broadened with the following task: Reviewing all of the available grey seal data from the Faroes and developing 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).

Special attention was drawn to the updated assessment of the Baffin Bay walrus population that resulted in a new recommendation of sustainable takes of no more than 85 walruses annually in Qaanaaq from 2016 to 2020.

Comments

Council took note of the report and **adopted** its recommendations.

Council noted the deliberations of the Committee on species and stocks of seals and walruses.

Council also noted that the Terms of Reference for the Scientific Committee Working Group on Coastal Seals (CSWG) had been broadened to include development of specific monitoring plans for grey seals in the Faroe Islands.

Council reiterated its contentment that there is scientific cooperation between ICES and NAMMCO and welcomed the new ICES/NAMMCO Working group on harp and hooded seals (WGHARP).

Finally, Council thanked the outgoing Chair Hild Ynnesdal (Norway) for her very able chairmanship during four years and noted that the new chair would be Iceland and the Vice-Chair Faroe Islands.

The Faroe Islands thanked the outgoing chair for her excellent work carried out for the last four years.

7.2 Recommendations for requests for advice

There was one proposal for new request for advice from the SC that was **adopted** by the Council.

R-1.6.4 The SC has recommended that catch statistics include correction for struck but lost animals for different seasons, areas, and catch operations. Council requested the SC and the Committee on Hunting Methods to provide advice on the best methods for collection of the desired statistics on losses.

Council noted that this request, although brought up regarding walruses, not only pertains to walrus but to all species.

7.3 Update on the EU sealskin ban and Inuit exemption **Greenland made the following statement:**

The final WTO conclusions and the effects of the EU sealskin ban from 2015 are one example of the lack of respect for the facts and realities seen in communities depending on wildlife resources.

The Government of Greenland has recently been forced to make drastic decisions in trying to adjust the Greenlandic sealing industry. The situation is serious and the survival of the sealing industry in Greenland can be a matter of time, even though the hunt of course will continue.

Greenland and Denmark had a very constructive working relationship on the issue and Greenland appreciated the effort Denmark put into the case. However, the so-called Inuit exemption is not functioning. The Government has decided to continue its subsidy and is using a lot of effort to keep the negative effects as low as possible, focussing its funding to reach small communities and full time hunters. It is therefore the hope that the EU Commission will fulfill its responsibilities and disseminate information on the trade restrictions and arise awareness on the Inuit exemption.

Comments

Council expressed great concern for the negative consequences faced by Greenland due to the EU-ban. The Faroes reiterated that they fully support the right to use marine mammals and marine resources in a sustainable manner.

7.4 Any other business

There was no other business.

8. HUNTING METHODS

8.1 Report of the Time to Death (TTD) Expert group meeting

The Chair of the Committee on Hunting Methods, Nette Levermann (Greenland), presented the report from the Expert Group meeting on assessing time to death data from the large whale hunts (EG). The meeting, held 4 – 6 November 2015 in Copenhagen (NAMMCO/24/12, Annex1) was chaired by Dr Christina Lockyer. The EG was composed of 21 experts in fields related to the issue of killing mammals.

Council, at NAMMCO 23 (February 2015) had tasked the Committee on Hunting Methods to convene a second expert group meeting on TTD data from large whale hunts with the following terms of reference:

- To undertake a review and evaluate the whale killing data submitted to NAMMCO by member countries and associated hunting nations, as well as data and information on recent and ongoing research on improvements and technical innovations in hunting methods and gears used for the hunting of large whales.

TTD data and other relevant information on hunting methods were presented from Greenland, Iceland, Norway, Japan, USA (Alaska and Makah hunts) and Canada. TTD, Survival time (ST) and the Instantaneous death rate (IDR) were the parameters used to measure and quantify killing efficiency. The standardised collection and analysis of these parameters, together with relevant covariates, made it possible to compare killing practices and monitor the effects of new developments, changes in hunting practices and training of hunters.

The “Norwegian method” of collecting and analysing TTD, recommended by the first Expert Group meeting in 2010, had been used both in Norway and Iceland. Results from the Norwegian minke whale hunt indicated an increase in IDR of 65% in the period 1981 to 2012, from 17% to 82%. The average TTD had been reduced from 11.5 min to 1 min. The angle of the shot relative to the animal's long axis influenced the TTD significantly. Shots directed at the thorax from the recommended side position of about 45°-135° relative to the animal's long axis resulted in 92% instant kills.

Iceland had collected TTD data from the minke whale hunts in 2014 and 2015. Although the weapons used in Iceland are identical to the ones used in Norway, the IDR was 69%, thus lower than the 82% registered in the Norwegian hunt. The EG was unable to draw any firm conclusions regarding this discrepancy in killing efficiency due to the very limited set of data. Much effort has been dedicated to improving hunting efficiency

in the Icelandic fin whale hunt through modifications of the penthrite grenade. The resulting 84% IDR was the best of all presented hunts.

Japan presented TTD data for all their whaling operations. IDR continues to be substantially lower than in comparable hunts (Norway, Iceland), where the penthrite grenade is used as the primary weapon. The EG reiterated its advice from 2010 that the use of sonar (affecting the whale behaviour) and the chase with high speed boats (resulting in shot angle well below 45°) likely prevent achieving a high IDR. The EG also recommended that Japan develops and uses a more effective back-up weapon than the lance as secondary method in the coastal whaling.

The Greenlandic IDR for the harpoon grenade minke hunt had improved to around 50%. The IDR and TTD were still less than in the Norwegian hunt and it was suggested to make an analysis of strike locations, which may explain the discrepancy. The EG expressed concerns from an animal welfare point of view that the rifle hunt seemed to be increasing and Greenland was encouraged to evaluate and analyse the hunting sequences and efficiency in this hunt. An increased penthrite charge had resulted in a higher IDR in the fin whale hunt but not in the humpback whale hunt, likely because of poor shooting angles. In general, the importance of correct shooting angle, strike and detonation location was emphasised.

In Alaska, struck and lost had been drastically reduced from about 50% to less than 10%, due to the introduction of the penthrite grenade in the darting gun and the training programmes organised by AEW. The EG encouraged Alaska to collect TTD and IDR data from the bowhead hunt and present the results at the next EG meeting to allow comparison of bowhead hunt effectiveness with other nations.

Canada presented detailed observations of five bowhead hunts conducted in different communities in 2010-2014. The EG agreed that the long TTD observed could be substantially reduced through further training of hunters, exchange of information and sharing of experience with other bowhead-hunting nations. The Canadian hunting method deviates considerably from the successful and efficient Alaskan method and Canada was encouraged to adopt this technique.

The Makah tribe presented a very thorough and efficient training program. The EG pointed out that using traditional methods like harpooning first and then shooting is problematic both from an animal welfare point and from the point of view of hunters' safety.

The meeting was successful with in-depth and informed discussions, and resulted in specific conclusions and recommendations agreed by consensus. In addition, the meeting also resulted in two protocols, one on collection of TTD and one on analyzing TTD.

Comments

Council thanked the Committee on Hunting Methods for organising the second expert group meeting on TTD for large whales and expressed great appreciation of the work of the Expert Group. The specific conclusions and recommendations deriving from the EG meeting was dealt with under the next agenda item.

Japan noted that it had submitted data and information on whale killing methods to NAMMCO since 2009. Japanese scientists participated in the Expert Group meeting in November 2015, where they submitted TTD data and received various constructive comments. Japan expressed its appreciation on this collaboration on evaluating killing data and wished to pursue it to further improve killing methods for cetaceans.

Iceland questioned why Japan was using a lance as secondary weapon in the minke coastal whaling. In Europe the alternative was a 2nd grenade, which was a more efficient killing method. The Japanese delegates informed the meeting that they would convey this question to their colleagues dealing with killing methods.

Norway reiterated the point of the Committee that shooting the whale while chasing them at high speed resulted in too narrow shooting angles and consequently lower IDR. They recommended Japan to modify its way of approaching the whales so IDR rates could be improved.

Norway also reiterated the point of the Committee that Canada should consider using the hunting methods developed in Alaska in order to reduce TTD, which presently were of over half an hour in the Canadian hunt. The Faroes thanked all those involved in this Expert Meeting and for the reporting of the results. It noted that improving hunting and killing technics was a focus area for NAMMCO, and all should make every effort to improve them.

8.2 Report of the Committee on Hunting Methods

The chair of the Committee on Hunting Methods, Nette Levermann (Greenland), presented document NAMMCO/24/11 (Section 1.2), containing the report of the Committees activities since the last Council meeting.

The Committee had held two face-to-face meetings and four telephone meetings, the last exclusively dealing with the organising of the Expert Group Meeting.

The Committee had also organised a one-day seminar on the statistical analysis and presentation of TTD data, with Lars Walløe (Norway) as convener. Walløe had also produced a protocol on the Norwegian method of analysing and presenting TTD data.

Representatives from Japan had held a meeting with members of the Hunting Committee concerning the small cetaceans hunt in Tajii: Japan was considering holding a workshop on this hunt and wanted NAMMCO's input. A preliminary program including a budget and the NAMMCO manual on pilot whaling had been forwarded to Japan.

In 2015, Justines Olsen, a long standing member of the Hunting Committee for the Faroe Islands had retired. Olsen had been a member of the Hunting Committee since the beginning and his expertise and dedication to developing new hunting equipment in the pilot whale hunt had greatly contributed to the successful work of the Committee.

Both Greenland and Faroe Islands reported on revised executive orders and new laws. All members reported on quota numbers, catches, number of active vessels, hunting periods, strandings and irregularities in their respective whaling and/or sealing activities.

The Committee discussed at length the problems related to by-catch, strandings and entanglement of live whales. It recognised that its terms of reference focused on direct takes, but at the same time acknowledged that these issues have great animal welfare consequences which is of concern to the Committee. The Committee therefore agreed to ask advice from Council on how best to address these questions.

The Committee also agreed to draw the attention of the Council to the issues mentioned under agenda item 8.3 below.

Comments

Council thanked the Committee for its work. The importance of openness and transparency when dealing with issues like TTD and IDR continues to be at the core of NAMMCO principles.

Iceland recalled that the main involvement of NAMMCO's Hunting Committee resides in improving methods for direct catches. Methods for euthanising stranded whales and disentangling live whales are very different matters, and not in the remit of the Committee.

Greenland stressed that this was a growing problem in their waters and that they would like to get advice and guidelines from NAMMCO on the matter.

Norway commented that IWC has developed principles on how to address both euthanasia of stranded cetaceans and disentanglement of large whales. There should be no need for NAMMCO to duplicate this exercise. Norway also informed that they were currently working on practical guidelines on how to conduct appropriate euthanasia of stranded cetaceans. When finished, these guidelines would be made available to all NAMMCO member countries, and these and the supporting principles could then be discussed in NAMMCO.

The Faroes noted that it was important to learn from best practices, wherever they come from. These should then form the background of a discussion within NAMMCO.

Greenland highlighted that, as a matter of principle, the IWC had no competence regarding small cetaceans and seals. Greenland, however, agreed with the statement of the Faroes and pointed out that this discussion was relevant in the NAMMCO context.

Council **agreed** that a discussion be initiated in NAMMCO, on the background of both the Norwegian preparatory work and guidelines and the IWC recommendations and conclusions. Such discussion should enlighten how to best apply locally the recommendations brought forward.

Greenland asked whether the By-catch WG in the Scientific Committee could be an adequate forum. The General Secretary pointed out that the By-catch WG had no expertise in dealing with entanglement and euthanasia of live marine mammals. It will be composed of experts on by-catch and fisheries data and statisticians. She suggested the possibility of convening an ad hoc WG.

Council **decided to ask** the Committee on Hunting Methods to review its Terms of Reference and to come up with suggestions on how best to deal with the animal welfare concerns related to by-catch, entanglements and strandings in the NAMMCO framework.

8.3 Recommendations arising from the Committee

The Committee on Hunting Methods drew the attention of Council to the following issues arising from the conclusions and recommendations of the EG meeting on TTD data:

- The concern that the rifle hunt in Greenland seems to be increasing, as a result of demand for meat that is not being met by the harpoon grenade hunt.
- The importance of increasing, through training, hunters' awareness of the influence of the shooting angle relative to the animal's body in order to reduce TTD.
- The need for monitoring TTD at 10 years intervals.
- The need to organise a workshop on alternative methods for collecting standardised TTD data that are less expensive, thus making it easier to compare TTD between countries.
- The need to review the underlying reasons for struck and lost, with the aim of decreasing rates.

Comments

Council noted and **endorsed** the recommendations of the Committee. It **agreed** to

- Express concern to Greenland that the rifle hunt is increasing.
- Recommend to monitor TTD at 10 years intervals
- Recommend to enhance hunters' awareness of the impact of the shooting angle on the TTD.

Council also **agreed** to organise a workshop for developing alternative means of collecting standardised TTD and to the need of reviewing underlying reasons for struck and lost.

Council **tasked** the Committee on Hunting Methods to return to Council with a proposal for how these recommendations best can be dealt with, including budget implications.

8.4 Other business

There was no other business.

9. THE JOINT NAMMCO CONTROL SCHEME

9.1 Report of the Committee on Inspection and Observation

The Chair of the Committee, Ulla S. Wang (Faroes) presented document NAMMCO/24/13 (Section 1.3), containing the report of the Committee.

The Committee had held one telephone meeting January 12, 2016, where it had discussed the activities carried out in 2015 and the planned 2016 observation activities (see agenda item 9.2 and 9.3 respectively).

Members of the Committee had reported on the national control effort, monitoring type and data collection.

Comments

Council took note of the report from the Committee on Inspection and Observation.

9.2 Observation in 2015

The Deputy Secretary, Charlotte Winsnes, presented document NAMMCO/24/14 containing the report from the Secretariat on the implementation of the NAMMCO International Observation Scheme in 2015.

Pilot whaling in the Faroe Islands had been the focus of the observation scheme in 2015. Two observers were contracted from 3 – 24 August and 7 – 28 September respectively. During the total observation period of 44 days one pilot whale hunt took place and was observed. No violations had been observed, and observer reports had been submitted to the Secretariat.

Comments

Council took note of the report from the Secretariat.

9.3 Observation planned in 2016

Winsnes presented document NAMMCO/24/14 containing the plans for the Observation scheme in 2016.

A list of nominated observer candidates had been circulated prior to the Council meeting in January 2015. The suggested scope of observation activities of the NAMMCO International Observation Scheme for 2016 is whaling in Norway. It is proposed to contract three observers, one from Greenland and two from Iceland/Faroes Islands, with observation periods from two weeks up to 1 month depending on the hunting grounds of the observed vessels.

The hunting season starts 1 April with varying ending dates. In 2015, the majority of the boats started around middle of May and the season closed on September 28. In the 2015 season, 21 vessels participated representing 546 weeks of hunting activities. Based on the 2015 season, the effort suggested for 2016 (maximum 10 weeks) would represent a coverage of less than 2% of the total activity. The suggested budget of NOK 230 000 had been approved by the FAC and was included in the revised 2016 budget.

Comments

Council **appointed** the nominated observer candidates and **approved** the proposal for observation activities in 2016.

9.4 Other business

There was no other business.

10. ENVIRONMENTAL QUESTIONS

Greenland made the following statement:

Greenland is concerned about the increased shipping activity in the Arctic and the disturbance to marine mammals this may cause. In particular, ice breaking through pack ice areas like Baffin Bay and the Greenland Sea is a concern because of the pristine environment that hosts large numbers of marine mammals. Some of these areas have never before been exposed to shipping activities during winter months and the effects from noise pollution from large vessels is unknown. Furthermore, accidents with oil spills in ice-covered areas are known to be detrimental to most of the food chain from phyto- and zooplankton, to fish larvae, birds and mammals.

Greenland is particularly concerned about the development of the Mary River Project on northern Baffin Island, Canada, where biweekly shipping with large ice breaking cargo vessels is currently being considered.

Shipping through one of the most important narwhal summering grounds, the Eclipse Sound, could potentially risk collision with 123 narwhals and 1 bowhead whale per year, according to model estimates. Considerably noise pollution locally that will ensonify the entire narwhal summering ground may cause the narwhals to abandon the area. It is important to notice that the Eclipse Sound narwhal population is both supplying the local hunt in the area and the hunt in West Greenland and advice for future sustainable harvest will have to be revised accordingly.

The year-round shipping through the Baffin Bay, planned in the Mary River Project, will affect the wintering grounds for bearded and ringed seals, belugas, bowheads and narwhals from several populations, as well as walruses in West Greenland that have one of their few feeding, mating and whelping grounds in this area. Activities that affects important concentrations in international waters and trans-boundary migrations of marine mammals need to be assessed and regulated through existing international legal arrangements.

Comments

Council took note of and **supported** Greenland's concerns and **adopted** the recommendation from the Management Committees to request that the SC "monitor the development of the Mary River Project and to assess qualitatively or if possible quantitatively the likely impact and consequences on marine mammals in the area (see point 5.2, R-1.5.3)".

Canada made the following statement concerning the Mary river project:

The Mary River Iron Ore Project is an approved iron ore mine by Baffinland located on Baffin Island approximately 100km south of Pond Inlet, Nunavut. The Project was subject to an environmental assessment conducted by the Nunavut Impact Review Board.

In October 2014 Baffinland submitted the Mary River Phase 2 project proposal for an amendment to the approved Project to increase production which would necessitate an increase to the shipping season to 10 months per year.

Full details in support of the revised proposal have not yet been submitted to the Nunavut Impact Review Board, so the assessment of the revised proposal has not substantively begun. Once it commences, Fisheries and Oceans Canada will be providing expert advice to the Nunavut Impact Review Board in relation to potential project impacts to fish and marine mammals and their habitats.

11. MARINE MAMMAL AS FOOD RESOURCES

The Ministerial Meeting in 2012 had emphasised the importance of an increased focus on marine mammals as a food resource. A Planning Group was established at NAMMCO 21 to advance this theme. The Planning Group had outlined two main parts – firstly, production of a background document reviewing and compiling the existing material on the topic, and secondly, communicating the message. The second part required a communication strategy, involving expert help to develop the message.

11.1 Report of the Planning Group

The Chair of the Planning group, Amalie Jessen (Greenland) presented the progress report (NAMMCO/24/23).

The planning group has met twice (June 11, 2015, February 07, 2016). Key elements and messages were:

- The overarching principle for exploitation of natural resources should be sustainability. Either a hunt was sustainable or not.
- There should be no reference to indigenous peoples or the concept of rights of small communities to hunt for special reasons.
- Exploitation of animals must take into consideration the welfare aspects of the hunt i.e. to carry out the hunt in a manner that minimizes animal suffering and waste of landed animals.
- The goal of the project was to normalize marine mammals as food resources, as other marine resources. The working title was therefore changed from "marine mammals and food security" to "marine mammals as a food resource". The issue of food security was one of many concerns/issues deriving from this.

Funds available to the project, excluding secretariat salaries, were NOK 325.000 in 2016 and NOK 220.000 in 2017.

The background document prepared by the Secretariat represented a very valuable and comprehensive tool, touching upon most aspects of the issues at hand. The ideas brought up at the February meeting will be incorporated into the document, after which it will be sent to the member countries for comments.

A communication and outreach strategy will then be developed on the basis of this document. The Planning Group decided that this would be done by the Secretariat in cooperation with a communication expert, using funds available to the project for this task. The strategy would be presented to the Group at its meeting in June. It should include, for each target group identified, the relevant key messages to be delivered and the information best substantiating these key messages. The strategy should also define the respective outreach role of NAMMCO and the member countries.

The target group was defined as the group of persons situated between those accepting sealing and whaling as normal providers of food resources and those “religiously” against the use of marine mammals. If the project succeeded in getting some acceptance and respect, if not automatically support, from this target group, then the project would have succeeded. Opinions are often based on false premises or lack of information. Well-founded facts may help to change views and/or the level of acceptance.

The importance for NAMMCO of being pro-active in communication and visible on social media was underlined, as well as the necessity of being totally open and transparent. NAMMCO should be proud of its management, and its management results and the improvement in hunting methods and its observation scheme.

While the project had changed in character and had been delayed, the Group felt that it was now well on its way and that the present background document represented a very valuable base to work from. The Group felt confident and positive in the outcome of the project and its chance of success, but it was important to focus on the success criteria and to progress in logical steps, monitoring progress and gaining experience on the way. Finally, the Planning Group agreed that Members should learn from each other’s success in public relations.

Comments

Council took note of the report and is looking forward for the continuation of the project.

Greenland thanked the Secretariat for the work it had put into the background document.

Iceland referred to the present situation where there are few available export markets for whale products. CITES has placed most whale stocks on Appendix I with the consequence that only countries that have made reservations to the listing such as Iceland, Norway and Japan can trade in whale products. Iceland noted that Japan continue to introduce special trade barriers to such an extent that the export trade in whale products is hardly viable. Iceland would like to see an end to this kind of protectionism and Iceland encouraged the NAMMCO Governments to work towards this.

The IWMC noted that the list of international conservation meetings of relevance to management and sustainable use of wild resources (mainly marine resources) is unprecedented in 2016, with the CITES 66th Standing Committee Meeting in January, the NAMMCO Council meeting, and the FAO Committee on Fisheries, 15th Sub-Commission Fish Trade in February, the CITES Livelihoods Working Group in April, the Meeting on Sustainable use of Marine Living Resources including Cetaceans and the INFOFISH Tuna Forum in May, the FAO Committee on Fisheries in July, the IUCN World Conservation Congress and the CITES CoP17 in September, the IWC 66th meeting in October and the CBD in November. Interestingly each one of these international conservation institutions has a component and/or program dealing with the importance of livelihoods in the achievements of conservation objectives.

Furthermore IWMC noted that at its 38th Conference held in Rome in June 2013, the UN Food and Agricultural Organization (FAO) adopted Five Strategic Objectives (SOs), which are naturally adhered to by NAMMCO:

- Help eliminate hunger, food insecurity and malnutrition;

- Make agriculture, forestry and fisheries more productive and sustainable;
- Reduce rural poverty;
- Enable inclusive and efficient agriculture food systems; and
- Increase the resilience of livelihoods to disasters.

IWMC sees the objective sought by the members of NAMMCO to be to "... ensure effective conservation, sustainable marine resource utilization and development with due regard to the needs of coastal communities and indigenous people". This is a perfect match with the FAO's five SOs, and IWMC recommended that NAMMCO officially subscribes to the FAO Five Strategic Objectives and links itself to the laudable objective of using wild resources to provide subsistence for human beings and, in return, to enhance the possibility of "effective conservation".

Greenland thanked the IWMC for its continuous support to the sustainable use of resources.

12. EXTERNAL RELATIONS

12.1 Cooperation with other organisations

The General Secretary introduced NAMMCO/24/24 which presented summaries of observer reports from attendance at meetings of a number of organisations with which NAMMCO has established formal relations, as well as at two Conferences. The former included meetings of the IWC 66th Annual Scientific Committee meeting, the IWC Expert Workshop on Aboriginal Subsistence Whaling, the 6th Meeting of the Arctic Council Task Force for Enhancing Scientific Cooperation in the Arctic (SCTF), the Board Meeting of Arctic Council Working Group PAME & CAFF meeting, as well as the joint meeting of the PAME, CAFF, AMAP and ACAP Working Groups, the CAFF Circumpolar Biodiversity Monitoring Programme (CBMP) Marine Annual Meeting, the ASCOBANS Advisory Committee meeting, the NEAFC 34th Annual Meeting, the NAFO 37th Annual Meeting and the NASCO 32st Annual Meeting. In addition, the Secretariat attended the Nordic Committee on Bioethics Symposium on Ethical Dilemmas of Consuming Animals and the 21st Biennial conference of the Society for Marine Mammalogy (SMM).

Presentations on NAMMCO activities were prepared for the PAME Board Meeting and the ASCOBANS Advisory Committee, as well as the Norwegian Diplomatic Excursion. At the SMM Biennial a stand had been organised with the NAMMCO banner, leaflets and Scientific Publications that was well visited and functioned as the contact hub for scientists involved in or cooperating with NAMMCO.

Desportes underlined the IWC Expert Workshop on Aboriginal Subsistence Whaling as particularly interesting in its inclusion of "the outside of the IWC world" – by placing cultural, subsistence and nutritional issues in the broader world context of internationally recognised Indigenous people's rights. In adherence to and as a result of these rights most of what has been debated in IWC related to questions of ASW quota became uncalled for. Many IWC member states were committed to uphold the rights of Indigenous Peoples through ratification and adherence to various international instruments. It will therefore be interesting to observe how this potential conflict/challenge will be dealt with at the next IWC meeting.

Referring to the CBMP Marine Annual Meeting, Desportes highlighted the opportunities gained by re-enforcing links with AC and subsidiary bodies & making the work of NAMMCO and its success stories known. It was important in particular to have NAMMCO's work and assessments ascribed to NAMMCO when referred to. NAMMCO had much to contribute to the CBMP, as the assessments of most marine mammal stocks in the Atlantic Arctic and adjacent waters were the remit of NAMMCO. She announced that the CAFF board had responded positively to the proposition made by NAMMCO to cooperate on the Global Review of Monodontids.

Desportes pointed out that in the time of climate change, with unforeseeable consequences for marine mammals and consequently the coastal communities using them as resources, it was essential to re-inforce the scientific cooperation between those bodies striving for the conservation of marine mammals and make use of each other's expertise and competence.

Comments

The Faroes, Iceland and Greenland concurred to thank the Secretariat for its active role and good work in outreach and representation and encouraged it to continue. They underlined the importance for NAMMCO of being a transparent and visible body.

IWMC noted that the next meeting of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), CoP17, could be subjected to two proposals of interest to NAMMCO, which are the Narwhal (*Monodon monoceros*)—to be transferred from Appendix II to Appendix I and for the inclusion in Appendix I of the Walrus (*Odobenus rosmarus*).

IWMC also informed that Article XV, paragraph 2, sub-paragraph (b) of the CITES Convention states the following: "For marine species, the Secretariat shall, upon receiving the text of the proposed amendment, immediately communicate it to the Members. It shall also consult inter-governmental bodies having a function in relation to those species especially with a view to obtaining scientific data these bodies may be able to provide and to ensuring co-ordination with any conservation measures enforced by such bodies. The Secretariat shall communicate the views expressed and data provided by these bodies and its own findings and recommendations to the Members as soon as possible." This represented an excellent opportunity for NAMMCO to officialise a link with CITES and to have an influence on its decision making-process.

12.2 ASCOBANS

As noted above, the General Secretary underlined the benefits to conservation of joining forces and competence when possible. She presented three areas where a scientific cooperation with ASCOBANS would be of relevance to both organisations.

The assessment of North Sea harbour porpoises, so far considered a single stock and therefore a shared stock between one NAMMCO party (Norway) and several ASCOBANS parties (Sweden, Denmark, UK, Germany, Netherlands, Belgium, France), was the most obvious. The estimation of life parameters, population health status, impact of anthropogenic disturbances, including by-catch, and their mitigation were all difficult areas which would benefit from the broadest possible expertise.

Within the framework of ecosystem-based management, it was relevant for NAMMCO to monitor / support monitoring the actual impact of persistent organic pollutants on marine top predators, to inform conservation management. Such monitoring was also a theme within ASCOBANS.

ASCOBANS had announced its intention of developing a Conservation Plan for Common Dolphins. In the present occurrence of the species as north as Tromsø, the development of this plan may also be an area where sharing of data between both organisations could be beneficial.

Comments

The Council **agreed** that a scientific cooperation between ASCOBANS and NAMMCO would be beneficial in some areas. It tasked the Secretariat to consult with the ASCOBANS Secretariat to explore which areas would be best suited for initiating such a scientific cooperation.

12.3 Other business

In general, with climate change and unforeseeable consequences for marine mammals, the Council agreed that it was essential to increase the scientific cooperation between organisations dealing with marine mammals. NAMMCO should therefore aim at strengthening its cooperation with the Arctic Council, the International Council for the Exploration of the Sea (ICES), the International Whaling Commission (IWC), OSPAR, the Agreement on the Conservation of Small Cetaceans in the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS) and any other international instrument, which may require the advice of NAMMCO.

IWMC noted that NAMMCO wishes to strengthen its cooperation with the organisations having competence in marine mammals. In that respect, IWMC advised NAMMCO to develop in particular stronger links with the FAO and CITES.

13. INFORMATION AND COMMUNICATION

The Chair of Council commended the work and activity of the Secretariat in this domain and in particular the leading role of the new General Secretary.

13.1 Website

The Scientific Secretary, Jill Prewitt, gave an update on the new website, which went on line in July 2015. The new site represented a complete upgrade of the old site, including lots of new material and information. All NAMMCO documents, both basic texts, reports from Council, committees and subsidiary bodies and all publications were available on the site. Species site and stock status were completed for walrus, ringed seal, fin, minke and pilot whales as well as narwhal and beluga. However, the upgrade had been done on a very low budget, and technicalities were not up to date. The site was actually difficult to manage and update, and many common features, like e.g. a search instrument and a visit counter, were not available.

The Secretariat was presently examining the cost of changing the website support and had contacted different providers of websites that were thought to be well designed and user-friendly and which also allowed password areas for internal and meeting communication.

Comments

Council commended the work done on the website and the amount of information contained, in particular the stock status part and thanked the Secretariat for this. As noted under point 2.1.2, Council **agreed** to transfer the NAMMCO website to a more technically updated support, which could also be used as a communication hub. The priority of NAMMCO possessing such a website was underlined in the draft Communication and Outreach strategy and will be taken into account in the budget for 2016 and 2017.

13.2 Stock Status List

As noted above, a comprehensive account was now completed and available online for seven species.

Comments

Council commended the work done on these seven species and agreed to prioritise the development of comprehensive stock status for all exploited species, and to use external help to accomplish this rapidly.

13.3 Social Media

The Secretariat had opened a NAMMCO Facebook page in November. The site contained both internal information (related to NAMMCO events, meetings, projects, new assessments, activities) and external news (generated by other bodies and related to marine mammals, conservation-related issues, release of reports, conference announcements).

The General Secretary also informed that journalist S. Leth Nissen, as part of an assignment and her final exam for the diploma education on Social Media in Strategy and Communication (DMJX, Denmark), had developed a social media strategy for NAMMCO. This work would be an input in the NAMMCO general communication and outreach strategy presently being developed.

Comments

The Faroese commended the Secretariat for its activity on the Facebook page and urged everyone to invite friends to like the NAMMCO page in order to increase the volume of persons and institutions reached and boost the size of the network.

13.4 Flyers

The Secretariat developed in December a short flyer informing on the NAMMCO vision and its wide spectrum of activities, spanning from marine mammal stock assessments to improving killing methods. The flyer also describes some NAMMCO success stories in management and in improving hunting efficiency. The flyer had been largely distributed and well received.

General Comments to points 13.1-4:

The Faroes thanked the Secretariat for its active involvement in outreach work, through the website, social media and flyer. They found it very positive for the organisation to be open and transparent and to actively engage with different kinds of public. They looked forward to the development of the general communication and outreach strategy as this will further enhance the visibility of NAMMCO

Greenland was also supportive of these developments and considered the adoption of a communication strategy a positive step forward. Informing the general public on the challenges inherent to the sustainable management of marine mammals is an important task of NAMMCO. Greenland concurred with the Faroes in thanking the Secretariat for these initiatives.

13.5 Scientific Publications

The Scientific Secretary summarised the activities pertaining to the online publications. In 2016 the journal website (<http://septentrio.uit.no/index.php/NAMMCOSP/index>), had about 5,000 visitors from 94 countries. All volumes were now accessible on the journal website.

The volume 10 on Age estimation of marine mammals with a focus on monodontids has 8 papers and one workshop report published online as “online early versions”. Additional papers will be online soon, and professional typesetting of completed papers will begin shortly.

Ideas for future volumes include a survey volume containing any previously unpublished NASS papers, and the new results from NASS2015.

Another possible future volume could be based on the planned Global Review of Monodontids. Of particular interest are papers presented by Russian scientists because these scientists normally do not publish in English, and therefore their information is usually not accessible.

Comments

Norway proposed the idea of having the results of all surveys, 2015 NASS and the European and Canadian 2016 surveys, assembled in a NAMMCO special publication, as the surveys covered adjacent areas.

Iceland asked whether there could be any possibility in summarizing some of the articles published, so they would be in a form more suited for interested non-scientists/specialist. The same was valid for the species stock status, which contained a lot of information, but by the same token were unfriendly for non-specialists. The Secretariat informed that summarising the articles seemed difficult, but that summary sheets were planned for the website for different subjects such as stock status, legislative instruments, etc.

13.6 Other business

Iceland noted that NAMMCO celebrates its 25-year Jubilee next year and was pleased that Greenland would be the host for this celebration. It suggested that it would be a good opportunity to extend invitations to Canada and Russia to join the organisation. In view of the changes in the Canadian government and the Minister of Fisheries coming from Nunavut, it may be a particular good timing to revisit the question of membership.

The Chair of Council agreed that this was indeed a good opportunity and referred the question to the FAC. The Chair of FAC, Ole-David Stenseth, mentioned that there had been some discussions already within FAC, which was looking at different ways of approaching the question.

Iceland suggested that NAMMCO should undertake a Gallup survey in member Countries to see how successful NAMMCO had been at making itself known and recognized.

Greenland underlined that it would be very beneficial for member countries to share information about their media material and their communication success (or mistakes).

14. ANY OTHER BUSINESS

Japan presented the outline of the Plan for the New Scientific Whale Research Program in the Antarctic Ocean, NEWREP-A (NAMMCO/24/20) and informed the meeting about the Meeting on the Sustainable Use of Marine Living Resources including Cetaceans, to be held in Tokyo in spring 2016.

Japan made the following statement:

As mentioned in Japan's opening statement, in accordance with the review procedure agreed on at the IWC Scientific Committee, Japan developed the New Scientific Whale Research Program in the Antarctic Ocean (NEWREP-A) taking account of the Judgment of the International Court of Justice in March 2014 and started the research.

Objectives of the research are (1) Improvements in the precision of biological and ecological information for the application of the RMP to the Antarctic minke whale and (2) Investigation of the structure and dynamics of the Antarctic marine ecosystem through building ecosystem models. To achieve these objectives both lethal and non-lethal means are used appropriately.

Information to be obtained from the research plan will promote the sustainable use of the marine living resources. Japan would like to ask NAMMCO members' support to this research.

In the meeting on sustainable use in Tokyo in December last year, participants shared their views on various issues in a constructive and proactive manner. Japan would like to express its appreciation to Norway, Iceland and Greenland for their participation. Again this year Japan will organize a meeting on Sustainable Use of the Marine Living Resources including Cetaceans to discuss strategies for the next IWC meeting. It will be held in Tokyo in mid-May this year. Japan will invite a representative from each IWC member state which supports the sustainable use of cetaceans. Japan would appreciate active participation to this meeting.

Comments

The Council noted this information and the Chair thanked Japan for its presentation.

15. CLOSING ARRANGEMENTS

15.1 Press Release

The General Secretary presented the draft press release prepared by the drafting group (Geneviève Desportes and the journalist Stine Leth Nissen) and reviewed by the HoDs, Nette Levermann (Greenland), Guðni M. Eiríksson (Iceland) and the Secretariat.

Council **approved** the press release (Appendix 7). The text was distributed to Council, meeting participants, range state governments, national and international media and was posted on the NAMMCO website and Facebook site.

15.2 Next meeting and closing of meeting

The next meeting will be hosted by Greenland at a venue to be determined.

Greenland was pleased to host the meeting celebrating the 25-year Jubilee of the organisation, especially since the agreement was signed in Nuuk on April 12, 1992. Amalie Jessen announced that the date would likely be postponed to April to encompass the day when the Agreement was signed. She underlined that Greenland sees NAMMCO as an adult organisation, which, besides developing itself into a well-functioning organisation, had also achieved many accomplishments in various domains during this 25 years.

The Chair of Council thanked all delegates, participants and the Secretariat for a productive meeting, and declared the meeting closed.

Greenland thanked Ásta Einarsdóttir for her able chairing of the meeting.

The Report of the 24th Council Meeting of NAMMCO was adopted by correspondence on 15th March 2016.

Appendix 1 - List of participants

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Ms Charlotte Winsnes
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Appendix 2 - Agenda

1. OPENING PROCEDURES
 - 1.1. Welcome address
 - 1.2. Admission of Observers
 - 1.3. Opening statements
 - 1.4. Adoption of agenda
 - 1.5. Meeting arrangements
 - 1.6. Invited speaker presentation: Dr. Nicola Beaumont, Plymouth Marine Laboratory, UK.
Title: *“Why do marine mammals need ecosystem-based management? And what have they ever done for us? An exploration of the ecosystem service approach to support the NAMMCO framework”*.
2. FINANCE AND ADMINISTRATION
 - 2.1. Report of the Finance and Administration Committee
 - 2.1.1. Audited accounts 2015
 - 2.1.2. Communication and Outreach Strategy
 - 2.1.3. Performance review
 - 2.1.4. Amendments to Rules
 - 2.1.4.1. Amendments to RoPs of Council and Committees
 - 2.1.4.2. Amendments to Staff Rules
 - 2.1.4.3. Adoption of rules for Observers
 - 2.1.5. Budget 2016 and Draft Budget 2017
 - 2.2. Adoption of RoP for the Scientific Joint Working Group of NAMMCO and JCNB
 - 2.3. Other business
3. SCIENTIFIC COMMITTEE
 - 3.1. Report of the Scientific Committee
 - 3.1.1. Overall work in 2015
 - 3.1.2. Cooperation with other organisation
 - 3.1.3. Officers
 - 3.1.4. Other business
 - 3.2. Priorities and work Plan of the Scientific Committee in 2016-2017
 - 3.3. Other business
4. NATIONAL PROGRESS REPORTS
5. JOINT MEETING OF THE MANAGEMENT COMMITTEES
 - 5.1. Report of the Joint Meeting of the Management Committees
 - 5.2. Recommendations for requests for advice
 - 5.3. Other business
6. MANAGEMENT COMMITTEE FOR CETACEANS
 - 6.1. Report of the Management Committee for Cetaceans
 - 6.2. Recommendations for requests for advice
 - 6.3. Other business
7. MANAGEMENT COMMITTEE FOR SEALS AND WALRUSES
 - 7.1. Report of the Management Committee for Seals and Walrus
 - 7.2. Recommendations for requests for advice
 - 7.3. Update on EU sealskin ban and Inuit exemption
 - 7.4. Other business
8. HUNTING METHODS
 - 8.1. TTD Expert Group
 - 8.2. Report of the Committee on Hunting Methods
 - 8.3. Recommendations arising from the Committee
 - 8.4. Other business
9. THE JOINT NAMMCO CONTROL SCHEME
 - 9.1. Report of the Committee on Inspection and Observation
 - 9.2. Observation in 2015
 - 9.3. Observation planned in 2016
 - 9.4. Other business

10. ENVIRONMENTAL QUESTIONS
11. MARINE MAMMALS AS FOOD RESOURCES
12. EXTERNAL RELATIONS
 - 12.1. Cooperation with international organisations
 - 12.2. ASCOBANS
 - 12.3. Other business
13. INFORMATION AND COMMUNICATION
 - 13.1. Website
 - 13.2. Stock Status List
 - 13.3. Social media
 - 13.4. Flyers
 - 13.5. Scientific publications
 - 13.6. Other Business
14. ANY OTHER BUSINESS
15. CLOSING ARRANGEMENTS
 - 15.1. Press release
 - 15.2. Next meeting

Appendix 3 – List of documents

Doc Reference	Title	Agenda item
NAMMCO/24/01	List of Participants	1.2
NAMMCO/24/02	Agenda	1.4
NAMMCO/24/03	List of Documents	
NAMMCO/24/04	Report of the Finance and Administration Committee	2.1
NAMMCO/24/05	Audited accounts 2015	2.2
NAMMCO/24/06	Budget 2016 and forecast budget 2017	2.3
NAMMCO/24/07	Report of the Scientific Committee	3.1 & 3.2
NAMMCO/24/08	Report of the Joint Meeting of the Management Committees	5.1
NAMMCO/24/09	Report of the Management Committee for Cetaceans	6.1
NAMMCO/24/10	Report of the Management Committee for Seals and Walrus	7.2
NAMMCO/24/11	Report of the Committee on Hunting Methods	8.1
NAMMCO/24/12	Report of Expert Group meeting on Assessing TTD	8.2
NAMMCO/24/13	Report of the Committee on Inspection and Observation	9.1
NAMMCO/24/14	Report of the NAMMCO observation scheme 2015 season and plans for 2016 season	9.2 & 9.3
NAMMCO/24/15	Proposed amendments to the RoP for the Council	2.4
NAMMCO/24/16	Proposed amendments to the RoP for the Management Committees	2.4
NAMMCO/24/17	Proposed amendments to the RoP for the Scientific Committee	2.4
NAMMCO/24/18	Proposed amendments to the RoP for the Committee on Hunting Methods	2.4
NAMMCO/24/19	Proposed amendments to the RoP for the Committee on Inspection and Observation	2.4
NAMMCO/24/20	Outline of the Japanese New Scientific Whale Research Program in the Antarctic	15
NAMMCO/24/21	Proposed for amendment to the Staff Rules	2.5
NAMMCO/24/22	Procedures & rules for Observers attending NAMMCO meetings	2.6
NAMMCO/24/23	Report from the Marine Mammal and Food Security Project	11
NAMMCO/24/24	Observers' report	12.1
NAMMCO/24/25	Proposed Communication and Outreach Strategy	13
NAMMCO/24/26	NAMMCO Flyer 2015	13.5
NAMMCO/24/27	<i>No document</i>	
NAMMCO/24/28	Proposal for NAMMCO Performance Review	14
NAMMCO/24/29	RoP for the Scientific Joint Working Group of NAMMCO and JCNB	2
NAMMCO/24/NPR-F	National Progress Report Faroe Islands	4
NAMMCO/24/NPR-G	National Progress Report Greenland	4
NAMMCO/24/NPR-I	National Progress Report Iceland	4
NAMMCO/24/NPR-N	National Progress Report Norway	4
NAMMCO/24/NPR-C	National Progress Report Canada	4
NAMMCO/24/NPR-J	National Progress Report Japan - compilation	4
NAMMCO/24/NPR-R	National Progress Report Russian Federation	4

Appendix 4 - Opening statements and welcome address

WELCOME ADDRESS BY THE CHAIR OF NAMMCO COUNCIL

Delegates, Observers and Guests

It gives me great pleasure to open the 24th Annual Meeting of NAMMCO here in Oslo. I would like to express my gratitude to the Secretariat, for carrying out good work in preparing this meeting and providing us with excellent meeting facilities.

Last year brought about big changes in the Secretariat. We said goodbye to our former General Secretary, Dr Christina Lockyer, who had been with us for 10 years, and welcomed our new General Secretary Dr Geneviève Desportes. Many of you may know Geneviève as she has been greatly involved in the Scientific Committee of NAMMCO that she chaired from 2005 to 2009. And you will know that she is buzzing with enthusiasm, energy and ideas when it comes to NAMMCO. The work of the Secretariat will thus continue efficiently under the leadership of our new appointee. I welcome Geneviève to this her first NAMMCO Council Meeting as the General Secretary of NAMMCO. I am also very pleased to be able to announce that Jill Prewitt will be continuing as NAMMCO Scientific Secretary for - at least four - years more and I would like to thank her for her very good work.

I would also like to thank the outgoing chair of the Scientific Committee, Thorvaldur Gunlaugsson from Iceland for his good work, and welcome the incoming chair, Dr Tore Haug from Norway. I wish him, and the Scientific Committee under his guidance, all the best.

In February last year we received sad news when we heard about the passing away of our dear friend Dorete Bloch. Dorete was involved in many aspects of NAMMCO since the beginning and was member of the SC from 1992 until 2009. I did not know Dorete personally, but from what I have heard she was a big personality of NAMMCO and quite a character. She is remembered for her warmth and not the least her endless hospitality and good food.

I am particularly pleased to open this annual meeting, because it concludes a year, 2015, where activities have been booming in NAMMCO. In March, the NAMMCO-JCNB Joint Working Group on narwhal and beluga finalised a new and unique Catch Allocation Model for the meta-population of narwhals shared by Greenland and Canada. This Model represents a big step forward in this very complex assessment situation. NAMMCO is looking forward to follow its implementation.

The North Atlantic Sightings Survey was completed during summer. The extension part, allowing for a synoptic coverage of minke whales in the Central North Atlantic, was finally carried through, thanks to funding from the Norwegian Ministry of Foreign Affairs, and - not the least the flexibility of the survey organisers in Greenland and Norway, which were willing to change their plans at the very last stage for accommodating the late funding confirmation. I would also like to thank and commend the Secretariat for its dedicated work in finding a solution for the implementation of NASS 2015. NASS 2015, occupied many weeks for many scientists, ships and plane crews in NAMMCO countries. Although the weather gods were not the most generous with calm and clear seas, lots of good surveys were carried out. NAMMCO is looking very much forward to the new abundance estimates.

In October, a very successful symposium on the Impacts of Human Disturbance on Arctic marine mammals was held. Its results and recommendations are important for NAMMCO and the conservation of marine mammals in the Arctic and confirm NAMMCO's involvement in Ecosystem Approach to Management.

In November, the Expert Group on Assessing Time-to-Death Data from Large Whale Hunts met for the second time. The results of the meeting confirm the success of NAMMCO in improving hunting methods, and thereby animal welfare. We are very pleased that Alaska, Canada and Japan choose to present their killing data to NAMMCO and look forward for continuing this beneficial cooperation.

On the basis of all these activities, it is therefore my great pleasure to welcome you all to this meeting,

NAMMCO Member Countries, Delegates, Observer Governments, Organisations and the Secretariat. I am looking very much forward to these two days with you, and to the good presentations and discussions we will have.

FAROE ISLANDS – OPENING STATEMENT

Madam Chairman, Delegates, Observers, ladies and gentlemen

It is a great pleasure to be here in Oslo for the 24th Annual Meeting of NAMMCO.

We would like to thank our host and everyone in the secretariat for preparing the meeting and making us feel so welcomed. We look forward to work with the new General Secretary and all her staff during this meeting.

We in the Faroes regard NAMMCO as a very important organisation in managing marine mammals in the North Atlantic Ocean. We in the Faroes firmly believe that marine mammals should be managed in a sustainable way and through regional cooperation. Furthermore, we in the Faroes believe that the management should be based on full transparency and the best available scientific advice. This should happen by sharing information and by the development of the best possible practice.

We in the Faroes believe that NAMMCO fulfils all of these requirements, which therefore places NAMMCO very close to our hearts in the Faroes. We believe that we should further strengthen the outreach of NAMMCO and promote NAMMCO as a successful organisation managing marine mammals in the North Atlantic.

Madame Chairman,

We come here in good faith and good spirit and we look forward to be working with all of you in what promises to be yet another good annual meeting.

Thank you for your time and consideration.

GREENLAND – OPENING STATEMENT

Mrs Chair, Ladies and Gentlemen,

The Need for an Information and Communication Strategy for Sustainable, Responsible Management of Whaling and Sealing and Food Security:

NAMMCO is a responsible international science-based management organisation for marine mammals that will celebrate its 25 years Jubilee next year. Greenland is looking forward to organise this important event with you all back in Greenland where it all originally started.

Since the establishment, NAMMCO has always strived to work in a transparent way. Various Committees and member countries have not been shy to say what had to be said and done so that a species would be managed in a sustainable way. Including when our shared marine mammal species needs to undergo scientific assessment and it being very costly and the animals are distributed in very remote and isolated areas bigger than the size of Europe.

Greenland is therefore thankful and proud that TNASS 2015 was able to be organized with such a high level of achievement. We are looking forward to seeing the final recommendations.

Greenland also sees fruitful and constructive results in the work of the Management Committees and the two technical Committees. However, Greenland sees a need for more focus and continual follow-ups of the many recommendations provided to member countries. Greenland also notes that NAMMCO needs to coordinate on a larger scale with non-member neighbouring countries that we share stocks with. Especially when the demand for ecosystem based management is increasing.

All the work we already have achieved and the many coming activities to be solved needs to be communicated in a clear voice not only to the member and observer countries, but also to the general public. Therefore,

NAMMCO needs to focus on its public relations. Greenland is looking forward to an active participation in the process that has been started with a strengthening of the information and communication strategy of NAMMCO.

Unfortunately, no other relevant countries in the North Atlantic area have joined the NAMMCO Agreement since its beginning in 1992. Greenland as always would like to invite to a tighter and more direct cooperation on shared stocks in the North Atlantic.

As it is known, the utilization of marine mammals outside the NAMMCO countries is often substance for emotional discussion. Probably because of this marine mammals are ignored as a common food resource. Greenland wish to continue its engagement in the promotion of increased knowledge of the many possibilities marine mammals have as a food resource. The aim is to develop and finalize a communicational tool that can be used in promoting for a normal concept of marine mammals as a healthy, ecologically, abundant, underutilized food resource to the public and in other relevant fora.

We are engaged in the debate of food security to highlight that marine mammals is an under-estimated protein source that could benefit the worlds growing human population and the shortage of food in the developing countries.

The key word concerning management for NAMMCO is sustainable use. NAMMCO does not categorize member countries into certain groups of people or categorize the hunts into aboriginal, small-type whaling or commercial whaling or sealing. We stand behind this way of managing marine species.

The final WTO conclusions and the effects of the EU sealskin ban are one example of lack of respecting the facts and realities. The Government of Greenland have recently been forced to make drastic decisions in trying to adjust the Greenlandic sealing industry. The situation is serious and the survival of the sealing industry in Greenland can be a matter of time, even though the hunt off course will continue. The so-called Inuit exemption is not functioning.

Greenland is committed to finding ways to enhance the capacity of NAMMCO as a regional and international science-based management organisation. This requires a strong Scientific Committee that can develop management procedures for all our marine mammals.

I will therefore invite the Council to discuss which steps NAMMCO should take in the next 5-10 years. Only by dialogue and cooperation within the Council, can we build on the capacity in NAMMCO to the benefit of all North Atlantic peoples.

Thank you for your attention.

NORWAY – OPENING STATEMENT

Madam Chair, Delegates, Observers and Guests - Dear friends

Welcome to Norway and welcome to Oslo and welcome to our 24th meeting!

We are happy to see that NAMMCO, over the last years, has strengthened its position as a well-functioning management body that generates high quality advice to its members, observers and other interested parties.

Through NAMMCO we have created an instrument and an environment for researchers and managers that enable us to fulfill our need to cooperate and thereby meet our international obligations under the Law of the Sea.

Nevertheless we must ask ourselves if the scope and quality of our organisation meet our future needs, and enable us to strengthen both the understanding and acceptance of our way of life in the international community.

NAMMCO's work on animal welfare and hunting methods is a prime example of high quality advice that hands-on management needs. I would like, once again, to commend the Committee on hunting methods. The relevance and quality of its work are reflected in the fact that all whaling nations now use NAMMCO for guidance in this field.

It is Norway's goal to secure and further develop our organisation in this respect. We need to be at the forefront of what constitutes relevant and reliable knowledge.

Progress reports have also this year been submitted by Canada, Japan and Russia. This is a sign of strengthening cooperation between our countries that Norway very much welcomes. And we would like to repeat our wish for a closer cooperation between these countries and NAMMCO.

I look forward to and wish us all a fruitful meeting.

ICELAND – OPENING STATEMENT

Madam Chair, Delegates, Observers, Ladies and Gentlemen.

It is with great pleasure that the Icelandic delegation attends the 24th Annual Meeting of NAMMCO here in Oslo.

First I would like to welcome our new General Secretary Dr Genevieve Desportes to this meeting. I would also like to express our gratitude to the Secretariat that has done a good work in preparing this meeting and providing us with excellent meeting facilities

Iceland values its membership in NAMMCO and the close cooperation between the NAMMCO countries regarding marine resources that is of great importance to us.

As you know, Iceland resumed its commercial whaling in 2006 after a 20 year break. All commercial whaling ceased in 1986 following the decision by the International Whaling Commission (IWC) on the so-called moratorium on commercial whaling. This year's sustainable catch limits for minke and fin whales followed the advice of the Marine Research Institute (MRI) in Iceland and the Scientific Committee of NAMMCO for a catch of 154 fin whales and 229 minke whales.

Iceland places great emphasis on sustainable management of all living marine resources. Sustainable management of marine mammals is not only important to Iceland but it is crucial for all of the NAMMCO member states. The main basis for Iceland's economic welfare has been utilising the living resources of the sea and therefore the international co-operation within NAMMCO in this field is very important. The work done within NAMMCO has made valuable contributions to the conservation and sustainable management of marine mammals, not least through the work of the Scientific Committee.

The 6th North Atlantic Sightings Survey (NASS) was conducted in the summer of 2015. These surveys constitute the single most important basis for scientific assessments and advice concerning conservation and management of whale stocks in the NAMMCO area. As in previous surveys, funding was mostly achieved through national budgets but coordination of the survey was under the auspices of NAMMCO. In 2015, a considerable additional coverage was achieved though NAMMCO facilitated funding. For this we are particularly grateful to the TNASS Steering Committee and Norwegian authorities in particular. Although various obstacles were encountered during the planning phase, all pieces fell in place at the last minute and the survey was conducted successfully.

Thank you.

CANADA – OPENING STATEMENT

Madame Chair, Distinguished delegates, fellow observers.

Canada is pleased to participate as an Observer in this 24th meeting of the NAMMCO Council. We would like to take this opportunity to thank our Norwegian colleagues for hosting this meeting and to the Secretariat for doing such a good job in organizing this meeting.

NAMMCO continues to be an organisation that is well-known for providing strong and impartial science advice on marine mammals and has shown a dedication to the sustainable management of marine mammals.

Canada is also committed to promoting the sustainable use of living marine resources, including marine mammals. We have subsistence harvests of bowhead whales, beluga and narwhal which take place in communities in Northern Quebec, Nunavut and the Northwest Territories.

Canada continues to work on ensuring that harvests of marine mammals are based on the best available scientific and traditional information in order to provide long-term social and economic benefit to the small communities throughout these regions. Canada continues to recognize the strong value which NAMMCO provides to the conservation of these species.

Canada recognizes the importance of collaborating with our international partners on both the science and management of these species and maintaining our close relationship with NAMMCO participants to ensure a coordinated approach to research and conservation.

As you may know, the Department of Fisheries and Oceans Canada has a new Minister from the North, the Honourable Hunter Tootoo who is well aware of harvests of marine mammals .

Canada is of course looking forward to continued bilateral engagement with NAMMCO members within other fora, such as Convention on International Trade of Endangered Specimens of Wildlife Fauna and Flora (CITES) and the Joint Commission on Management of Narwhal and Beluga (JCNB).

We are looking forward to positive discussions over the next two days.

JAPAN – OPENING STATEMENT

The delegation of Japan would like to thank the Government of Norway for its hospitality and the NAMMCO Secretariat for the meeting arrangements. We recognize that the NAMMCO has achieved a great success in the sustainable management of living marine resources including cetaceans, and we are honoured to attend the meeting and contribute to the discussion as an observer. It is obvious that Japan and the NAMMCO share the goal of the sustainable use of living marine resources. We believe that the cooperation between Japan and the NAMMCO allows us to efficiently utilize knowledge and experiences for managing resources in a sustainable manner.

In accordance with the review procedure agreed on at the IWC, Japan developed the New Scientific Whale Research Program in the Antarctic Ocean (NEWREP-A) duly taking account of the Judgment of the International Court of Justice in March 2014 and started the program in December 2015. Japan believes that scientific information is the most important tool we can rely on in promoting the sustainable use and management of whale resources at the IWC, which, to our deep regret, does not seem to be working towards the very objective it was created for. Scientific information collected by Japan has contributed to the discussion at the Scientific Committee of the IWC, and we believe this is the case also at NAMMCO.

Japan has been engaged in the intersessional discussion, including the participation in the IWC expert workshop held in Greenland in 2015, to resolve these issues for the next revision of aboriginal subsistence whaling quotas in 2018. While Japan observes such positive developments at the NAMMCO during last year, it recognizes the complex range of issues still unresolved, such as how to standardize the needs statements and interests based on the local consumption principle and those based on the commercialism. Japan is willing to commit itself to the discussion to resolve these issues under the framework of IWC, and believe that the

cooperation among member countries to resolve these long-term issues will positively affect the situation inside and outside the IWC.

On the other hand, it is regrettable that Japan's proposal on small-type coastal whaling has not yet been adopted by the IWC. At the IWC 65, IWC members that opposed Japan's proposal did not provide any sound scientific reasons for their positions, while stating the unconditional need to maintain the moratorium on commercial whaling and their unconditional opposition to commercial whaling. During the intersessional period, through the IWC website, Japan asked the members further clarification for their reasons of opposition for the purpose of highlighting their lack of any sound reasoning. The responses provided, however, simply repeated the same arguments these members made at IWC 65. NAMMCO and Japan undoubtedly share the same position that whale resources should be subject to sustainable use. Japan intends to continue this approach ahead of the IWC 66 meeting in Slovenia, and hopes to work with the parties in NAMMCO to achieve this end.

Finally, it is Japan's view that all these issues are inter-related and our unity is a vital force to resolve them and to promote sustainable use of living resources including marine mammals. Japan plans to hold a meeting on the Sustainable Use of Marine Living Resources including Cetaceans in Tokyo in May 2016, where our friends gather to discuss detailed strategies for the upcoming CITES CoP 17 and IWC 66 meeting. Japan wishes to enhance the cooperation through such valuable opportunities.

Thank you.

THE RUSSIAN FEDERATION – OPENING STATEMENT

Dear NAMMCO Chair and Vice-Chair, NAMMCO countries, members of the NAMMCO Secretariat, delegates, colleagues, observers, ladies and gentlemen,

It is a great honor for me to represent the Russian Federation as observer at the 24th meeting of the NAMMCO Council.

On behalf of the Russian Federation, I would like to thank the NAMMCO Secretariat and the Norwegian authorities for hosting this annual meeting in Oslo. Thank you very much for the excellent arrangements, and for the preparations for this meeting.

I would like to commend the excellent work undertaken by different NAMMCO bodies, especially the NAMMCO Secretariat and the Scientific Committee including its different working groups during the intersessional period. The Russian Federation would also like to note that NAMMCO has very good cooperation with different countries not only observer countries, and different North Atlantic organisations and Commissions like NAFO, NEAFC, ICES and IWC.

NAMMCO management and scientific advice is built on a strong ecosystem approach, taking into consideration the precautionary principle. Based on many years of scientific results and sighting surveys marine mammal stocks have been and can safely be exploited. The results of the last North Atlantic Sighting Survey undertaken in 2015 will be part of this.

I would like to tell you once more that the Russian Federation is very interested in a long term cooperation with NAMMCO, and I hope that this cooperation will be developed.

We have a full agenda ahead of us during this week, and I am looking forward to a successful and productive meeting.

Thank you very much for your attention.

SECRETARIAT OF THE INTERNATIONAL WHALING COMMISSION – OPENING STATEMENT

The IWC is an Inter-governmental organisation with a membership of 88 Contracting Governments. It was established under the International Convention for the Regulation of Whaling (1946) and its purpose is to provide for the conservation of whale stocks and the management of whaling.

The Commission is active in setting catch limits for subsistence whaling and in developing conservation and recovery measures for stocks which have previously been over-exploited. In addition, through the work of its Scientific and Conservation Committees, the Commission studies a broad range of environmental factors affecting the health and habitat of cetaceans. The Commission's work and studies extend across all ocean basins, and from the tropics to the Polar Regions. Several IWC initiatives have commonalities with NAMMCO's objectives on the conservation, management and study of marine mammals in the North Atlantic.

2014 IWC Workshop on Impacts of Increased Marine Activities on Cetaceans in the Arctic

In March 2014, at the suggestion of the Government of the United States, the IWC convened a workshop to consider how the growing anthropogenic uses of the Arctic Ocean are relevant to cetaceans. The workshop focussed upon human activities related to oil and gas exploration, commercial shipping and tourism as well as likely changes to the ecosystem as a result of climate change.

The workshop was successful in bringing together representatives of many key stakeholders working on Arctic affairs relevant to cetaceans. The workshop's conclusions and recommendations highlighted the over-arching requirement for collaboration with inter-governmental organisations including in particular the Arctic Council, the International Maritime Organisation and NAMMCO. This recommendation for collaboration on cetacean related issues was echoed by the Arctic Council's PAME working group at its meeting last week in Stockholm.

2015 IWC Expert Workshop on Subsistence Whaling

The IWC regulates subsistence whaling undertaken by four of its Contracting Governments. In 2014 the Commission adopted Resolution 2014-1 which recognised the need to regulate subsistence whaling through a more consistent and long term approach. Following from this, and at the invitation of the Government of Greenland, the Aboriginal Subsistence Whaling Working Group organised an expert workshop to examine options for achieving a more consistent approach.

During the workshop native hunters provided first-hand accounts of their respective hunts, and the workshop received expert input from a range of invited experts from the anthropogenic sciences and international human rights law.

The workshop made an extensive series of recommendations, many of which examined possibilities for improving the Commission's process and timelines for decision making, and for developing its approach to receiving statements of subsistence need. These recommendations will be transmitted to the IWC, via the Aboriginal Subsistence Whaling Sub-committee when it next meets in October 2016.

Conclusion

The two examples above are illustrative of the opportunities for collaboration between NAMMCO and the IWC. Other synergies are present in development of whaling management procedures, on consideration of hunting safety and welfare, on methods for population assessment and on scientific research relating to habitat and health issues.

Appendix 5 - Summary of the presentation by the invited speaker**“Why do marine mammals need ecosystem-based management? And what they ever done for us? An exploration of the ecosystem service approach to support NAMMCO framework”**

Dr Nicola Beaumont

Plymouth Marine Laboratory, Plymouth, UK

Dr Beaumont’s presentation covered four key areas. Firstly, an introduction to the Plymouth Marine Laboratory and specifically the Science and Society group; secondly, an introduction to Ecosystem Based Management (EBM), focusing on why EBM is relevant to marine mammals; thirdly, she introduced the concept of Ecosystem Services, using this to explore the full range of benefits which humans receive from marine mammals; and finally she discussed how the ecosystem service approach could be used to support Ecosystem Based Management and the NAMMCO framework.

The ecosystem approach was first coined in the early 80s, and was formally accepted at the 1992 Rio Earth Summit in response to declining stocks and ocean health. It is an underpinning concept of the Convention on Biological Diversity and has been defined as ‘A strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way’. EBM is not concerned with managing or manipulating ecosystem processes, rather it is tightly linked to the governance of human behaviour which impacts the marine environment. EBM is a key aspiration in marine policy and management across the world, including Europe, Antarctica, the United States, and Australia, for example in the Marine Strategy Framework Directive; Water Framework Directive; Convention for Biological Diversity; Marine Spatial Planning; Helsinki Convention, Barcelona Convention and the Australia Great Barrier Reef management plan.

There are a number of guides to EBM available, including the UNEP Introductory Guide, and these tend to encourage 7 key steps:

1. Define Spatial Boundaries. This includes identification of the relevant ecosystems, and their boundaries and characteristics; recognising the connections within and across ecosystems and other marine sectors
2. Define Objectives: Agree objectives (ecosystem factors and stakeholder groups), including humans and governance regimes.
3. Undertake Research: including on cumulative impacts, future stressors and humans
4. Monitor progress: including establishment of sustainability indicators, to inform future pro-active management
5. Enforcement: any management plans needs an accompanying enforcement regime.
6. Include Uncertainty: embrace change through the application of Adaptive Management and the Precautionary Principle and be aware of uncertainty at all stages.
7. Utilise an Ecosystem Services Approach

The management of marine mammals benefits particularly from EBM due to the profound interactions between marine mammals and their supporting ecosystem, for example they are dependent on ecosystem productivity and health, and equally their utilisation by humans has an effect on the ecosystem. In addition, marine mammals have a global reach with vast spatial distributions, including to depth, and with no enforceable boundaries; unclear ownership and cultural use patterns; their habitat is separate from humans making it harder to manage; there is a paucity of data; and finally, unlike the terrestrial equivalent one marine area may have many uses (fish, renewables, C sequestration, marine mammal habitat etc.). All these factors mean EBM is essential to ensure the sustainable management of marine mammals, and it is clear from the NAMMCO literature that this is a long term key aspiration within NAMMCO.

Unfortunately practical examples of EBM are rare, there are often multi-fish or multi-species examples, but these rarely include human activities or broader environmental benefits. Again unfortunately, when there are multiple uses of a marine space prioritisation of user is often based on monetary and commercial uses. Biological and non-commercial “uses” are often particularly difficult to communicate, and this is where the Ecosystem Services approach can be useful to raise the profile of these previously under-represented benefits.

Ecosystem Services can be defined as “the aspects of ecosystems utilised (actively or passively) to produce human well-being” (Fisher et al. 2009), and include a range of environmental benefits such as fisheries, carbon sequestration and recreation. These can be valued in monetary terms enabling their direct comparison with commercial uses, but in some cases simply identifying these benefits can be enough to raise their profile and ensure they are properly represented in policy and management decisions.

Ecosystem services relating to marine mammals are extensive and varied, and include:

1. Food provision, with whale consumption undertaken in Japan, Norway, Iceland, Faroe Islands, United States, Canada, Greenland, Siberia, and the Caribbean Sea.
2. Carbon sequestration is the service of the balance and maintenance of the chemical composition of the atmosphere and oceans by marine living organisms, and is mediated by marine mammals, for example as documented by “the Impact of Whaling on the Ocean Carbon Cycle: Why Bigger Was Better A. J. Pershing, L. B. Christensen, N. R. Record, G. D. Sherwood, P. B. Stetson, PLOS One, August 26, 2010”
3. Recreation and tourism, for example, worldwide whale watching generates about \$2.1bn per year (International Whaling Commission (IWC), 2009) and 13 million people went to sea to watch cetaceans in 119 countries in 2008
4. Cultural heritage and identity, including religion, folklore, painting, cultural and spiritual traditions, for example whale hunting is fundamental to a way of life e.g. since Iceland was settled and with Norwegian traditions in rock carvings and written accounts to 9th century, and marine mammals are integral to art, music, and literature across the ages.
5. Cognitive, including research and education, for example university and research, including historical context e.g. UK research and development in the marine sector to be £292 million plus education and training was valued at £24.8 million. This is in addition to the information ‘held’ in the natural environment which can be adapted, harnessed or mimicked by humans, for technological and medicinal purposes, for example an enzyme for low temp washing powder was found in the deep sea degradation of whale carcass and dolphins have been used for navigation and even finding mines.
6. Non-Use value which we derive from marine organisms without using them, for example Hageman (1985) and Loomis and White (1996) estimated the average household’s willingness to pay to ensure the continued survival of various sea mammals: £19 and £46 annually, depending on the sea mammal, so with 2.4 million households in Norway this extrapolates to £45.6 million – £110.4 million per year.

These six ecosystem services are provided by marine mammals in their own right and can be quantified and valued (monetarily and non-monetarily). However, in addition, it is critical to keep in mind the influence which marine mammals have over a wide range of other ecosystem processes, or “supporting services”. These include: nutrient movement; maintenance of biodiversity and balance, for example through scoop feeding on seabed and spatial heterogeneity; provision of biologically mediated habitat; and contributions towards resilience and resistance of the system, this is the extent to which ecosystems can absorb recurrent natural and human perturbations and continue to regenerate without slowly degrading or unexpectedly flipping to alternate states. If we can value these ecosystem services (monetarily and non-monetarily) it can help to influence and inform the policy agenda, showing marine mammals have varied and high values in both their own right and in supporting terms. This enables us to start to understand the comparable importance of these species, and potential impacts and stressors upon them, and also to organise research programmes, for example to highlight linkages, indicators, key stressors, data gaps etc.

So in conclusion it is considered that both an Ecosystem Service approach and Ecosystem Based Management can play a substantial role in supporting NAMMCO. The application of an Ecosystem Service assessment of marine mammals can enable the communication of the broad range of marine mammal benefits to a wide range of stakeholders, and provide clarity of both the role of marine mammals in the ecosystem, and also the impact of changes in the ecosystem on marine mammals. This clarity of the role of marine mammals will enable negotiation within wider governance regimes, and can also support the identification of indicators and enhance monitoring regimes. Finally, ES and EBM approaches can be used to shape the future research agenda ensuring a proactive and strategic approach to future management.

Report of the Council

Appendix 6 - Audited accounts for 2015

All figures in NOK

INCOME AN EXPENDITURE

Income

Contributions	4,292,323
Interest	32,922
Book sale	4,643
Employers Tax	227,690
NASS	1,489,294
Total income	6,046,872

Expenditure

Staff related costs	2,874,213
Rent of premises	223,855
Meetings	11,554
Travel and subsistence	295,528
Communications/Data & office supplies	129,206
Information, incl subscription	172,350
Accounts & auditing	99,072
Observation Scheme	174,508
Other expenses	10,701
Scientific Committee	52,450
NASS	1,489,294
Hunting Committee	97,769
Disturbance symposium	13,532
Total expenditure	5,644,032

OPERATING RESULT

402,840

BALANCE

Assets

Outstanding claims	295,795
Bank deposits	8,573,037
Total assets	8,868,832

Equity

Distributable equity	289,291
General Reserve	600,000
Restricted equity	118,816
Total equity	1,008,107

Liabilities

Other	7,661,454
Creditors	146,472
Employers tax	52,799
Total liabilities	7,860,725

TOTAL LIABILITIES AND EQUITY

8,868,832

Appendix 7 - Press release

NAMMCO - 24th Annual Council, Oslo, February 11, 2016

Whales and seals: Management matters!

The increasing stocks of narwhal, beluga and walrus are a clear result of sound and science-based management, following advice from NAMMCO, the North Atlantic Marine Mammal Commission.

This was one of several positive results and initiatives presented to the Council of NAMMCO at its annual meeting in Oslo on February 10-11.

However, the NAMMCO Council recognises that increased human activities (shipping, mining, etc.) in the Arctic may threaten the ecosystem. The parties were particularly concerned by a large scale iron-ore project (Mary River Project operated by Baffinland Iron Mines Corp) which includes year round shipping through some of the most important areas for narwhal, beluga and walrus. The increased shipping activities and noise disturbances could lead to the marine mammals abandoning these areas. This could have severe consequences for local communities, both in Canada and Greenland.

Also, climate change carries serious consequences for marine mammals. This can already be seen from the decreasing blubber thickness of harp seals and minke whales in the Barents Sea, and the changes in geographical distribution of minke whale and fin whale around Iceland. Therefore, effective ecosystem-based management matters.

For more information concerning the Council Meeting outcome, see below (Annex to Press Release).

Annex to Press Release

NAMMCO - the North Atlantic Marine Mammal Commission - is an international body for cooperation on the conservation, management and study of marine mammals in the North Atlantic. The North Atlantic Marine Mammal Commission held its 24th Council meeting from 10 – 11 February 2016, in Oslo, Norway. The member countries of NAMMCO, the Faroe Islands, Greenland, Iceland and Norway again confirmed their commitment to ensuring the conservation and sustainable use of marine mammals through active regional cooperation and science-based management decisions.

The Governments of Canada, Denmark, Japan and the Russian Federation were represented by observers at the meeting, as well as other international governmental organisations within the fields of fisheries (Northeast Atlantic Fisheries Organization, NAFO; North East Atlantic Fisheries Commission, NEAFC) and whaling (International Whaling Commission, IWC) and conservation (IWMC World Conservation Trust).

Key events and conclusions from the meeting included the following:

- **Ecosystem-Based Management of Marine Mammal**

Dr. Nicola Beaumont of the Plymouth Marine Laboratory talked about marine mammals in the framework of an ecosystem approach. She underlined the importance of assessing the full array of services they provide to the ecosystem as well as their interdependencies with the other components of the ecosystem. Their immense importance to nature and human beings made it essential to work toward their conservation. She was impressed to see how NAMMCO had applied an ecosystem approach since its very beginning.

- **Improving Hunting Methods**

NAMMCO's 2nd expert group meeting to assess killing data in the large whale hunts in the member countries, and also in Japan, Canada and USA confirms positive development in quick and efficient kills. The introduction of the explosive grenade and the continuous development of hunting methods is improving animal welfare. The number of animals killed instantaneously has increased significantly in many hunts.

- **Inspection and Observation of Hunts**

NAMMCO operates an international observation scheme to monitor whether national legislation and decisions

Report of the Council

made by the Commission are respected. Observers are appointed to report on hunting activities in member countries. The scope for 2016 is minke whaling in Norway.

- **Whale Surveys**

New surveys were carried out in the NAMMCO member countries in 2015 to update knowledge on abundance and distribution of cetaceans in the North Atlantic. Although the weather was not always cooperative in all areas, the amount of area covered by the surveys and the number of sightings was good, and new abundance estimates are expected for fin, humpback, common minke and pilot whales.

- **Shared Resources between Canada and Greenland**

Council highlighted the good work and cooperation between NAMMCO and the Joint Commission on Narwhal and Beluga, which has developed a catch-allocation model that allows managers to assign catches from the different narwhal stocks that are shared by Canada and Greenland.

Council welcomes this new methodological development for this complex management situation. The development and implementation of the allocation model is considered a step forward and could potentially be applied in many situations where migratory populations are exploited in several areas under various jurisdictions.

- **International Cooperation**

With climate change and unforeseeable consequences for marine mammals, it is essential to increase the cooperation between organisations dealing with marine mammals. NAMMCO aims therefore at strengthening its cooperation with the Arctic Council, the International Council for the Exploration of the Sea (ICES), the International Whaling Commission (IWC) and Agreement on the Conservation of Small Cetaceans in the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS) and any other international instrument which may require the advice of NAMMCO.

- **Scientific Advice**

The best scientific evidence forms the basis of management advice in NAMMCO. Through the Scientific Committee, many specialist topics are addressed by Expert Working groups. During 2016, topics to be dealt with include stock assessments of coastal seals, fin, minke and humpback whales, as well as by-catch issues. The Scientific Committee has also been tasked to assess the impact of the Mary River Project.