

**INTER-SESSIONAL MEETING OF THE MANAGEMENT COMMITTEE FOR  
THE SEALS AND WALRUSES**

7 January 2010, Teleconference

**1. CHAIRMAN'S OPENING REMARKS**

The Management Committee on Seals and Walruses (SMC) was convened at a teleconference on 7 January 2010 at the request of the Greenlandic delegation. Present from Greenland were Amalie Jessen (Chair), Nette Levermann, Helga Jakobsen, Kaare W. Hansen, Lars Witting (Chair of the Scientific Committee (SC)); from Faroes was Kate Sanderson; from Iceland was Ásta Einarsdóttir; from Norway were Hild Ynnesdal, Ole-David Stenseth (Chair of Council); the NAMMCO Secretariat was represented by Charlotte Winsnes and Christina Lockyer.

The Chair of the SMC explained the reason and need for the inter-sessional meeting. In Greenland, new management advice concerning quotas on walrus harvests must be provided for the 3-year period commencing January 2010, and it was essential to have the most recent advice on stocks and sustainable removals from the Scientific Committee on which to base management decisions on quotas. The late meeting of the SC WG on walruses in 2009 meant that up-to-date advice would not normally be available until after the next SC meeting in April 2010, which would be too late for Greenland to make use of the advice.

**2. ADOPTION OF AGENDA**

The agenda was adopted (Appendix 1), with agreement that discussion not central to the main agenda item would be taken under Any Other Business.

**3. APPOINTMENT OF RAPPORTEUR**

Christina Lockyer and Nette Levermann were appointed as joint rapporteurs.

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

Documents referred to at the meeting are listed below in Appendix 2. The focus of the meeting was on walruses, and specifically in Greenland.

**4.1 Walrus in Greenland**

The Chair, with reference to documents NAMMCO/18/MC/3 and NAMMCO/18/MC/4, reminded the meeting of the requests for advice to the SC, the status of past proposals and responses by the SC to date. She then invited the Chair of the SC to present a summary of document NAMMCO/SMC/2010 Intersessional/2 which was the report from the SC with reference to the working group report on

walrus (NAMMCO/SC17/WWG Report). The main items which were accepted and discussed by the SMC are provided below.

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

**R-2.6.3 (NAMMCO/15-2006):** The SC was asked to provide advice on the effects of human disturbance, including fishing and shipping activities, in particular scallop fishing, on the distribution, behaviour and conservation status of walrus in West Greenland.

**R-2.6.4 (NAMMCO/16-2007):** The SC was requested to provide a formal assessment of the Davis Strait (walrus) stock as soon as finalization of the catch series is complete and the results from the planned 2007 survey are available. The SC was then requested to provide estimate of sustainable yields for the North Water and West Greenland stocks of walrus.

**R-2.6.5 (NAMMCO/17-2008):** The SC was requested to provide a full assessment of the North Water, West Greenland-Eastern Baffin Island and East Greenland (walrus) stocks.

Witting explained that the SC WG had addressed all these requests. He started with responses to the first listed R-2.6.3 (NAMMCO/15-2006).

#### **4.1.2 Effects of Human Disturbance**

The major concerns in relation to walrus in Greenland are disturbance and accidental oil spills. The preliminary Strategic Environmental Impact Assessments (SEIA) concluded that: (1) Walrus in Central W. Greenland are not likely to be impacted by exploration activities (only in summer and autumn) as there will be no temporal overlap between these activities and the presence of walrus in the area, while during development and production there is a risk of displacement from critical habitats. (2) In the eastern Baffin Bay area the risk of temporal overlap of exploration activities and the occurrence of walrus is limited, while development and production activities potentially may pose a major risk for long-term population impacts. (3) The situation in East Greenland is somewhat different as there will be a temporal overlap in the occurrence of walrus and both exploration and exploitation activities, and there will be a major risk of long-term population impacts.

The overall effect on the West Greenland – S.E. Baffin Island and Baffin Bay populations will be difficult, if not impossible to quantify. However, should it be desirable to allow the two walrus populations a fair chance to re-establish haul out sites in West and Northwest Greenland over time, other management measures like protected areas are likely required in combination with restrictions on total allowable takes.

The SMC noted that owing to a lack of explicit studies, **the SC is not in a strong position to provide advice on the effects of human disturbance on walrus.**

#### **4.1.3 Stock Structure and Management Units**

## Report of the Management Committee for Seals and Walruses

The issues of stocks and management units had been reviewed and revised throughout Greenland and Canada. New information from satellite tracking of individual animals' movements and genetics had resulted in defining three stock categories for Greenland:

1. North West Greenland and the North Water
2. West Greenland and South East Baffin Island
3. East Greenland which is isolated.

This information was welcomed by the SMC in response to the request **R-2.6.5** (NAMMCO/17-2008). The SC can now give advice on all 3 stocks, which has not been possible before in response to the request **R-2.6.4** (NAMMCO/16-2007).

### **4.1.4 Catch Statistics**

Since 2005 accurate catch series, including correction for “struck and lost” and under-reporting, were required to be provided and the accuracy of the recent harvest reports be evaluated. Some progress had been made in Greenland on the old catch series, but data on “struck and lost” are still missing for all areas. Although the reporting system starting in 2005 is likely better than the old system, an evaluation of the accuracy of the system had not been provided. In particular, it was noted that there was an implausibly low reporting of “struck and lost” and an apparent problematic reporting of caught females as males.

This situation is regrettable and the SMC noted that the SC reiterated its recommendation of gathering reliable harvest data, including “struck and lost”, under-reporting, and correct sex determination.

The SMC expressed concern that the existing reporting in Canada and Greenland is not working satisfactorily. The SMC also requested that in future reports, relevant catch statistics be provided for information.

### **4.1.5 Abundance and Trends**

The SMC welcomed the recent abundance estimates of stocks in Greenland, Canada and Svalbard provided below in Table 1.

Stock	Year	Season	N (number)	cv	95% CI
East Greenland	2009	August	1429	0.45	616-3316
Penny Strait-Lancaster Sound	2009	August	2010	0.18	1416-2852
Western Jones Sound	2008	August	1415	0.18	997-2008
Baffin Bay	2009	August	1616	0.32	876-2980
	2009	May	2676	0.32	1140-4920
West Greenland-SE Baffin Island (West Greenland only)	2006	March-	2791	0.54	1036-7522
	2008	April	3240	0.76	863-12170
West Greenland-SE Baffin Island (SE Baffin Island only) <sup>1)</sup>	2007	September	1056		
Svalbard	2006	August	2629		2318-2998

1) Not corrected for walruses that were not present on land during the boat-count at terrestrial haulouts.

**Table 1.** Recent estimates of abundance (with coefficient of variation (CV) and 95% confidence intervals, CI) of various stocks of walruses in Greenland and neighbouring

Canada and Svalbard. The estimates of abundance for the “East Greenland”, “Baffin Bay” (both May and August 2009 estimates in combination) and “West Greenland only” (2006 and 2008) stocks were used in the assessment of walrus in Greenland waters.

The SMC noted that there are no reliable data to provide information on abundance trends at this time.

#### **4.1.6 Assessment by Stock**

The following assessments in response to **R-2.6.5** (NAMMCO/17-2008) were accepted by the SMC.

##### ***West Greenland – S.E. Baffin Island stock***

A 2010 abundance of 3,200 (90% CI:2,300-4,400) has been estimated which represents a 2010 depletion ratio of 0.33 (90% CI:0.19-0.60) relative to the pre-exploitation level in 1900, and a yearly replacement of 130 (90% CI:61-190) individuals.

##### ***Baffin Bay stock in the North Water polynya area***

A 2010 abundance of 2,100 (90% CI:1,500-3,100) is predicted to represent a 2010 depletion ratio of 0.20 (90% CI:0.11-0.33) relative to pre-exploitation level in 1900 with a yearly replacement yield of 84 (90% CI:31-140).

##### ***East Greenland stock***

From a maximal depletion in 1909, the population is estimated to have increased slowly and steadily to a depletion ratio of 0.96 (90% CI:0.80-0.99) in 2010 with a corresponding abundance of 1,500 (90% CI:940-2,400) individuals. Given the low depletion, the current yearly replacement yield is also low at 12 (90% CI:10-16).

#### **4.1.7 Sustainable Harvest Levels and Management Recommendations**

The SMC accepted the SC approach to provide a range of options to allow managers to set the preferred balance between risk and removal levels of walrus. Table 2 shows the total annual removals that will allow the West Greenland – S.E. Baffin Island stock to increase with estimated probabilities from 50 to 95%, given a female fraction in the removals of either 0.68 or 0.20. The SC recommends that future total removals be set for an assumed female fraction of 0.68, given an acceptable protection level larger than or equal to 0.70 probability (numbers in bold). Advice based on a more male biased removal can only be given once it is proven that the actual removals are more male biased.

For the relevant stocks for which advice had been requested, the options are shown in Table 2 below.

Report of the Management Committee for Seals and Walruses

	W Greenland-SE Baffin Isl.		Baffin Bay		E Greenland
Probability	FF: 0.68	FF: =0.20	FF: 0.50	FF: =.20	FF: 0.10
0.50	108	154	83	108	26
0.60	100	141	75	98	23
<b>0.70</b>	<b>89</b>	129	<b>68</b>	87	<b>20</b>
<b>0.80</b>	<b>79</b>	115	<b>57</b>	74	<b>17</b>
<b>0.90</b>	<b>65</b>	95	<b>45</b>	58	<b>14</b>
<b>0.95</b>	<b>53</b>	80	<b>35</b>	45	<b>12</b>

**Table 2.** Estimated total removals that have a probability of 0.50 to 0.95 of being sustainable. (FF = female fraction in the removals. For W. Greenland-S.E. Baffin Island, 0.68 FF refers to the proportion found in genetic samples. For E. Greenland there is evidence that catches are mainly of males, corresponding to the sexual distribution observed).

In discussion of quotas and take, Greenland clarified that quotas had been introduced in 2006 together with a new Executive Order and that the hunt was only allowed for commercial hunters. Walruses provided meat and food for people and dogs in the north. There were two regulatory systems, and each was evaluated annually. The regulations had been working well in the last 2 years. There had been a lowering in quotas per year in the last 3-year quota plan. Catches had been lower than quotas in all years except 2009. It was explained that in the last 3 years, quotas had been set as separate quotas for the three management areas and at a total for all areas of 200 in 2007, and a total for all areas of 136 in 2009, which was based on a sustainable level.

The SMC was assured that all Canadian catches since 1977 – where available – had been included in the modelling processes, but it was noted that Canadian catches were generally very small compared to Greenland take, particularly in Baffin.

The SMC noted that the current Greenlandic quotas are in line with recommended harvest levels (at 0.70% probability) as listed in Table 2.

The SMC noted again that although catch reporting concerning catch numbers was in order, there were some inconsistencies regarding under-reporting of “struck and lost” and also sex differentiation which would affect the estimates of sustainable harvest. As a precautionary approach, assumptions on a higher female fraction are recommended if this is unknown in the catches.

## 5. GENERAL RECOMMENDATIONS

The SMC thanked the Chair of the SC for the excellent work and effort provided by the SC to provide advice at very short notice. A number of recommendations was endorsed as follows.

### 5.1 New Proposals and Recommendations for Scientific Research

The **SMC endorsed** the following recommendations:

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

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

The **SMC endorsed** the following recommendations:

1. Total removals for all areas should be set under consideration of a probability of sustainability that is higher than or equal to 70%.
2. Managers consider establishing a more robust system for monitoring the sex and age composition of the catch (*i.e.* through collection of tissue samples from the catch).
3. A common management regime be established between Greenland and Canada on shared stocks of walrus.

Greenland commented that a level of 70% probability would be applied in West Greenland and most likely in East Greenland in determining quotas. Efforts would be directed to improving catch reporting from both Greenland and Canada but Canadian catches were not validated at present. The Greenland Institute for Natural Resources would be the coordinator for gathering data on sex and tissue sampling. Efforts to get data on “struck and lost” would be made.

All members agreed that Canada should be encouraged to join NAMMCO in order to improve management of shared stocks. The SMC noted that Canadian scientists (also from USA) had participated as experts in the SC WG on walrus. In future, it would be prudent to invite participation of Canada as observer at SMC meetings when shared stocks were discussed as ultimately this collaboration is crucial in management.

## **6. ANY OTHER BUSINESS**

### **6.1 Inter-sessional Meeting Procedures**

Members of the SMC expressed concerns regarding the short notice for convening this inter-sessional meeting, although it was understood why Greenland needed this (see explanation earlier). In particular, the SMC recognised that it was unsatisfactory for the SC to have to consider important matters by e-mail correspondence with short deadlines. In future such inter-sessional meetings should be reserved for emergencies only, and member countries should try to plan well ahead in seeking advice on issues relating to their management policies. In conclusion, it was accepted that on this occasion, there were exceptional circumstances.

In addition, it was agreed that although Canada had not been included at this meeting, it was important to inform them of the outcome. The Secretariat was requested to

## Report of the Management Committee for Seals and Walruses

forward the final agreed report to Canada as soon as it becomes available. In future, channels should be kept open for Canada to provide input to such meetings.

It was agreed that the matter of procedures for inter-sessional meetings should be referred to the FAC for advice.

### **6.2 USA Proposal regarding Walrus**

Greenland informed the SMC that the USA will include the walrus on the US Endangered Species List. It was understood that this proposal would be taken up in September 2010. Greenland would undertake to find out more information on this matter and report back. So far the USA has not submitted a proposal on walrus to the upcoming CITES COP 15 in 2010.

## **7. CLOSURE OF MEETING**

The meeting was then closed. The draft report would be circulated by e-mail within a few days. The report was adopted on 19 January 2010.

### **Appendix 1: AGENDA**

1. CHAIRMANS OPENING REMARKS
2. ADOPTION OF AGENDA
3. APPOINTMENT OF RAPPORTEUR
4. CONSERVATION AND MANAGEMENT MEASURES  
FOR WALRUS IN GREENLAND
5. GENERAL RECOMMENDATIONS
6. ANY OTHER BUSINESS

### **Appendix 2: LIST OF DOCUMENTS**

NAMMCO/SMC/2010 Intersessional/1: Draft Agenda  
NAMMCO/SMC/2010 Intersessional/2: SC Report on Walrus  
NAMMCO/SC17/WWG Report: Walrus Working Group Report