

Annex D

Report of the Sub-Committee on Aboriginal Subsistence Whaling

Tuesday 14 June 2005, Ulsan, Korea

1. INTRODUCTORY ITEMS

The list of participants is given as Appendix 1.

1.1 Appointment of Chair

Andrea Nouak (Austria) was appointed as Chair.

1.2 Appointment of rapporteur

Alexander Gillespie (New Zealand) was appointed as Rapporteur.

1.3 Review of documents

The documents for discussion included:

IWC/57/AS1 Revised Draft Agenda;
IWC/57/AS2 List of documents;
IWC/57/AS3 Subsistence gray and bowhead whaling by native people of Chukotka in 2004;
IWC/57/AS4 Documentation to IWC on Greenlandic whaling, 1979-2004; and
IWC/57/Rep1 Report of the Scientific Committee, Items 8 and 9.

2. ADOPTION OF THE AGENDA

The adopted agenda is given as Appendix 2.

3. ABORIGINAL SUBSISTENCE WHALING SCHEME

3.1 Aboriginal Whaling Management Procedure (AWMP)

3.1.1 Report of the Scientific Committee

The Chair of the Scientific Committee's Standing Working Group on the Development of an Aboriginal Whaling Management Procedure, Greg Donovan (hereafter Chair of the SWG), reported on the Scientific Committee's work in this regard. He noted that the primary work carried out this year was in relation to the fin and common minke whale fisheries off West Greenland.

With respect to management procedures, the Commission has now endorsed the *Bowhead SLA (Strike Limit Algorithm)* and, last year, the *Bowhead SLA*. The next priority is therefore the Greenland fisheries. The Committee has on several occasions informed the Commission that it would be extremely difficult, if not impossible, to develop an *SLA* for the Greenlandic fisheries that will satisfy all of the Commission's objectives. This is particularly important in the light of the Committee's grave concern at its inability to provide management advice for these fisheries - as discussed further under Items 4.3 and 4.4.

The major problem is that whilst there are strong indications that the animals that are available to be counted off West Greenland do not comprise the total stocks from which the hunted animals are found, the SWG have no

indication of how much greater the stocks might be or where to look for the other animals.

Under this item, therefore, the Chair restricted discussion to a brief report of progress in moving towards *SLA* development (Item 8.1.4 of IWC/57/Rep1). He noted that the Committee had welcomed the receipt of a paper that provided a population model that would enhance the Committee's ability to test potential *SLAs* for these fisheries in the future, once they are developed. The potential of using sex ratio information in potential common minke whale *SLAs* was noted.

3.1.2 Discussion and recommendations

The Sub-committee endorsed the report of the Scientific Committee.

3.2 Aboriginal Whaling Scheme (AWS)

3.2.1 Report of the Scientific Committee

The Chair of the SWG noted this part of its discussions is given in SC/57/Rep1, Item 8.5. He noted that in 2002, the Committee had developed scientific aspects of an Aboriginal Whaling Scheme (AWS) intended for use in conjunction with the *Bowhead SLA*. These proposals were agreed by the Scientific Committee and reported to this Aboriginal Whaling Sub-committee (the specifications can be found in *Ann. Rep. Int. Whaling Commn. 2002: 74-5*). At the 2003 and 2004 meetings, the Chair of the SWG discussed such matters with interested Commissioners and representatives of the hunters. Last year, the Commission again did not adopt the AWS and in particular the USA has expressed some concerns¹. The Chair of the SWG again reiterated his willingness to discuss any aspects of the scheme with interested delegations. He reported that the Scientific Committee again recommends the scientific components of an aboriginal whaling management scheme to the Commission, noting that it forms an integral part of the long-term use of *SLAs*.

3.2.2 Discussion and recommendations

Australia referred to the lack of progress on the wider whaling management considerations under the Aboriginal Whaling Scheme, as they did last year, and wanted this concern noted on the record.

The Sub-committee endorsed the report of the Scientific Committee.

4. ABORIGINAL SUBSISTENCE WHALING CATCH LIMITS

4.1 Bering-Chukchi-Beaufort Seas stock of bowhead whales

4.1.1 Report of the Scientific Committee

The Chair of the SWG first referred to discussions on stock structure issues under Item 9.1 of SC/57/Rep1. As discussed last year, an important assumption behind the testing of the *Bowhead SLA* is that there is only a single

¹ *Ann. Rep. Int. Whal. Commn. 2004: 12-13*

population of bowhead whales migrating past Barrow and available to the hunters in Alaska and Chukotka. Some preliminary information that this might not be the case was presented last year. Whether or not this is the case is important in terms of the forthcoming *Implementation Review* in 2007, recommended last year and reiterated this year. Part of the task of such a review is to determine whether or not the situation lies within the 'parameter space' that was used to test the robustness of the *Bowhead SLA*. This year, the Committee was pleased to receive a progress report on a major US-funded collaborative programme on stock structure issues that is being undertaken. The Committee stressed that the focus of the programme should be to provide advice of direct relevance to testing the *SLA*.

The Committee has determined an extensive workplan to try to ensure that it is in a position to complete the *Implementation Review* in 2007. This can be found under Item 8.4 of SC/57/Rep1 and involves two intersessional workshops.

The catch information reported for the 2004 Alaskan harvest was 43 animals struck and 36 (13 males, 22 females, 1 undetermined sex) landed. One male was taken in the Chukotkan fishery.

The Scientific Committee agreed that no change is required to the current block quota for 2003-2007. It recommended that every effort be made to obtain samples for genetic analysis from the Chukotka catch.

4.1.2 Discussion and recommendations

The USA thanked the Scientific Committee for its careful deliberations on matters important to the understanding of and ability to manage the Bering-Chukchi-Beaufort Seas (B-C-B seas) stock of bowhead whales. The USA emphasised that the Scientific Committee had reaffirmed its management advice regarding the appropriateness of the current level of aboriginal subsistence take from this stock. The USA reported on its research programme, which was greatly expanded in 2005 to accommodate the need for expanded research on stock structure. They added that they had provided the necessary research funds in 2005, and expected to do the same in 2006. The research programme covers a two-year field season and two years of laboratory and data analysis. Prior to completing two years of research, it will not be possible to forecast the outcome of these studies.

The USA also informed the SWG of two intersessional workshops on bowhead stock structure which were held over the previous 12 months. The first was in October of 2004, when the Government of Norway hosted a meeting in Oslo for the purpose of evaluating the Norwegian genetic analysis of B-C-B seas bowhead stock structure. This meeting was attended by experts from Russia, Japan, Norway and the USA. The USA expressed its appreciation to the Government of Norway for hosting this meeting and for Norway's, Japan's, and Russia's interest and cooperation in this research effort. The second meeting was held in February of 2005, when the USA hosted an intersessional meeting to evaluate and prioritise the entire research programme related to the bowhead stock structure. This meeting was also attended by experts from Norway, Japan, Russia and the USA. The USA expressed its appreciation for the continued collaboration with these countries as their research programme progressed and pledged their ongoing support.

Japan reiterated that cooperative scientific research in this area is very important, and emphasised that Japanese scientists had been cooperating closely on this subject with other countries, and pledged that scientific cooperation in this important area will be continued, as much as possible.

The Sub-committee endorsed the report of the Scientific Committee.

4.2. North Pacific eastern stock of gray whales

4.2.1 Report of the Scientific Committee

The Chair of the SWG noted that last year, the Commission had endorsed the *Bowhead SLA* for providing management advice.

In 2004, 110 gray whales (43 males and 67 females) were taken in the Chukotkan fishery. Of these, 6 (5% of the catch) exhibited a strong chemical odour and could not be used. Due to domestic legislation, the Makah tribe was unable to hunt in 2004.

The Committee agreed that the results from the *Bowhead SLA* showed that no change is required to the current block quota for 2003-2007. An *Implementation Review* is scheduled for 2009.

4.2.2 Discussion and recommendations

The Sub-committee endorsed the report of the Scientific Committee.

4.3 and 4.4 Common minke whales and fin whales off West Greenland

4.3.1 and 4.4.1 Report of the Scientific Committee

The Chair of the SWG explained that issues relating to Greenland fisheries and the provision of management advice were the most extensive and difficult discussions it had this year. As he has stated many times before, the Committee is extremely concerned that it has never been able to provide satisfactory management advice on these stocks.

The main questions for both common minke whales and fin whales off West Greenland revolve around how the abundance estimates derived from sightings made during surveys relate to the true number of animals 'available' to the hunters. It has been generally accepted for both species that the animals found off West Greenland probably do not comprise the total stocks.

Initially, the SWG examined the results of a valuable genetic study funded last year (see Item 8.1.1 of SC/57/Rep1). This led on to a broader discussion as to how genetic information can best assist the Committee in providing management advice. The Committee received information on some recent genetic techniques that may allow it to determine a lower bound for the size of the common minke whale population or populations hunted off West Greenland. Before embarking on an actual study however, it is essential to determine the statistical power of the proposed methods for the West Greenland case. This work will be carried out during the early intersessional period, and if the results are promising, the scientists involved will develop a full proposal for the work.

The SWG then went on to examine information from the catches, particularly on distribution of the animals and the sex ratio of the catch (females have formed 70-76% of the catches of common minke whales off West Greenland since such data became available in the mid-1950s). There was no evidence of marked differences in the sex ratio of the catch along the coast. The question of using the sex ratio

data in an assessment context will be discussed later in the report.

A major part of the work this year was to examine the results of two major aerial photographic strip-transect surveys carried out in 2002 and 2004, and an experimental survey in 2003 (involving some 95,700 photographs in total). The estimates provided by the scientists who carried out the surveys were: 510 (*CV* 0.75) common minke whales, which is significantly smaller than the revised estimate of 6,390 (*CV* 0.41) whales in 1993 - the most recent estimate agreed by the Committee; and 980 (*CV* 0.48) fin whales, which is similar to the last agreed estimate of 1,100 (95% *CI* 520 - 2, 100) for 1987-88. There was extensive discussion within the SWG of the methods used to read the photographs and to turn the results into abundance estimates. Those discussions are summarised under Items 8.1.3.1 and 8.1.3.2 of SC/57/Rep1. In summary, the SWG identified a number of improvements at all stages of the process that are necessary for these abundance estimates to be considered acceptable by the Committee. The SWG was particularly concerned with respect to the applicability of the method for common minke whales and has established a number of intersessional groups to provide advice and oversee the re-examination and reanalysis recommended.

The SWG then examined two papers that attempted to assess the status of these species off West Greenland, one of which incorporated the sex ratio data. The discussion of these papers is summarised under Item 8.2.2 of SC/57/Rep1. For the reasons given there, these preliminary assessments were not considered acceptable and can not be used to provide management advice. However, the SWG did agree that the sex ratio data show promise and again have set up an intersessional group to work with the Greenlandic scientists to see if they can be used to try to determine a lower bound for the total abundance of the stock.

With respect to management advice, the Chair of the SWG referred to its discussions under Item 8.2.3 of SC/57/Rep1. He stressed that the Committee was extremely concerned at its inability to provide advice. The Committee had spent considerable time agreeing the words in its report on this issue and therefore believed it was inappropriate to try to summarise them to any extent. The following section thus repeats the words of SC/57/Rep1.

'As it has stated on many occasions, the Committee has never been able to provide satisfactory management advice for either the fin or common minke whales off West Greenland. This reflects the lack of information on stock structure and abundance, and the absence of appropriate assessments. This is the reason the Committee first called for the Greenland Research Programme in 1998.

Despite receiving preliminary estimates of abundance from a photographic survey carried out in 2002 and 2004, the Committee **agrees** that, once again, it is in the deeply unfortunate position of being unable to provide satisfactory management advice on safe catch limits; **it views this as a matter of great concern**. The present uncertainties over the preliminary abundance estimates are such that the Committee does not consider them acceptable estimates. Although it has suggested further work with respect to the data collected on the photographic surveys, it cautions that there is no guarantee that this further work will result in significantly greater values, or, in the case of common minke whales, an agreed estimate. It notes that the Commission has set catch limits for the West Greenland fisheries of up to 175 common minke whales struck in each year for the period 2003-2007 with a provision that up

to 15 strikes may be carried over from one year to the next and a catch of up to 19 fin whales for the same period.

8.2.3.2 COMMON MINKE WHALES

Taken at face value, the preliminary (and not accepted) estimate of abundance for common minke whales suggests that about a 90% decline has occurred since the previous survey in 1993. However, the Committee has considerable doubts over this estimate (see Item 8.1.2.1) and there are several indications that such a decline has probably not occurred (e.g. the consistently high predominance of females in the catch suggests that the abundance estimate does not represent the total number of animals available to the fishery). Nonetheless, the Committee **urges that considerable caution be exercised in setting catch limits for this fishery** because it has no scientific basis for providing advice on safe catch limits. It noted that if an AWS (see Item 8.5) was in place, this fishery would be at or near the place where the grace period would begin. This management advice will be re-evaluated next year in the light of the intersessional work recommended.

Given this, the Committee **strongly recommends** that a re-examination of the existing photographs be undertaken as a matter of urgency, according to the protocols given in Annex E, Appendix 5. **In conjunction with this, it strongly recommends** that preparations be made to carry out a cue-counting survey in the summer of 2006 targeted especially at common minke whales, so that if the intersessional group overseeing the re-examination of the photographs concludes that this will not result in an acceptable estimate, a survey can be carried out. The Committee recognises that the prevailing weather conditions in Greenland mean that there is no guarantee that a survey will result in sufficient coverage to allow an abundance estimate to be obtained.

The Committee also **strongly recommends** that the sex ratio data be fully investigated *inter alia* to determine whether they can be used to obtain at least a minimum estimate for the total stock and be incorporated into an assessment model (see 8.2.2 above).

8.2.3.3 FIN WHALES

In 2004, the Committee had expressed special concern over the absence of an abundance estimate for fin whales since 1987/88 and had advised that in the absence of an agreed abundance estimate for fin whales from the 2004 survey, it would likely recommend that the take of fin whales off West Greenland be reduced or eliminated. This year the Committee had received a preliminary estimate (that was not considered acceptable, see Item 8.1.3 and the **recommendation** for reanalysis of the photographs given above) from the photographic surveys that was not appreciably different from the previously accepted estimate. Despite the fact that the Committee has more confidence in this preliminary estimate than it has for the common minke whale estimate (see above), it is not in a position to provide satisfactory management advice on safe catch limits. It therefore **urges that considerable caution be exercised in setting catch limits for this fishery**. Mindful of its recommendation of 2004 (see above), as interim *ad hoc* advice, the Committee advises that a take of 4-10 animals (approximately 1% of the lower 5th percentile and of the mean of the estimate of abundance) annually was unlikely to harm the stock in the short-term, particularly since this does not take into account the possibility that the fin whale stock extends beyond West Greenland (see Item 8.1). This advice will be re-evaluated next year in the light of the intersessional work recommended.

8.2.3.4 OTHER RESEARCH RECOMMENDATIONS

Last year, the Committee repeated its strong recommendation that samples for genetic analysis be collected from the catch as a matter of high priority and urged the Committee to encourage the Government of Denmark and the Greenland Home Rule authorities to assist with logistical and, if necessary, financial support. The Committee **repeats** its

recommendation this year. It was pleased to be informed that 103 common minke whale samples, 8 fin whale samples and 4 samples of unreported species had been collected last year. The Committee **strongly recommends** that these samples be analysed in accordance with the advice of the intersessional working group on genetics.

The Committee **reiterates its great concern** at its continued lack of ability to provide management advice on these stocks, with serious implications for both hunt and for the stocks involved. It **strongly urges** the relevant authorities to provide the necessary funds to allow all of the research recommendations given under Item 8.2 to be carried out. Should the necessary funding not be put in place to allow both (1) a re-examination of the photographs and (2) a cue-counting survey to occur if recommended by the steering group, it **agrees** that priority should be given to carrying out the survey.'

4.3.2 and 4.4.2 Discussion and recommendations

The United Kingdom observed that last year, the Scientific Committee had considered that, in light of the lack of any reliable estimate of the fin whale population off West Greenland, it would probably have to recommend reducing the catch quota on this species to zero. Given that the preliminary estimate made this year was considered unsatisfactory, the United Kingdom wanted to know what had led the Committee not to follow this approach this year. The United Kingdom also expressed concern about the high bias towards females in the catch of minke whales and asked what effect this might be thought to have on the stability of the population.

The Chair of the SWG responded that the present catch limit for fin whales is 19 animals. Thus, he suggested, the interim *ad hoc* advice this year is consistent with the Commission's recommendation last year with respect to a reduced catch.

With regard to sex ratio in the catches, he noted that it is quite common to find sexual segregation of minke whales in the North Atlantic. Although this question will be examined in great detail by the intersessional group, the evidence is that the sex ratio in the catch reflects the sex ratio in the waters off West Greenland. This is one of the pieces of evidence which suggests that the animals found off West Greenland do not comprise the whole stock.

Australia suggested that the Commission was facing a serious and invidious position coming up to the 2007 date to re-set catch limits for the Greenland ASW. Australia suggested that unless the Government of Denmark takes urgent action to correct the lack of relevant and robust data, the Commission will be asked to set catch limits for minke and fin whales without management advice from the Scientific Committee. On the basis of the Scientific Committee's current report, such catch limits would of necessity have to be set at precautionary very low levels, if at all. Australia called on the Government of Denmark to accept the Scientific Committee's urging at Item 8.2.3.4 of its report, and accordingly provide all necessary funding and resources to undertake essential research to support management advice. Furthermore, Australia noted that the Scientific Committee's interim advice is that that a take of 4 to 10 fin whales would be unlikely to harm the stock in the short term. Australia calls upon the Government of Denmark to urgently consider implementing a voluntary limit on the take of fin whales of 4 to 10 animals each year (notwithstanding that 19 animals could be taken each year under the IWC's Schedule).

Mexico raised the question of how Denmark could land 175 minke whales in 2004, when only two animals were actually detected in the photographic surveys.

The Chair of the SWG noted that in fact in 2004, only one animal was identified on the photographs. This is one of the reasons that the Scientific Committee is concerned over the applicability of this technique to common minke whales. Until the thorough re-examination of photographs according to the revised protocols, it is not sure whether the technique is applicable. However, the Committee has more faith that the approach may be applicable for the larger fin whales. It is for this reason that the Committee is giving high priority to preparations being made for a full traditional visual survey targeted at the common minke whale in 2006. However, he cautioned that, given the prevailing weather conditions in West Greenland, there is no guarantee that a survey in 2006 will provide sufficient coverage for an acceptable abundance estimate to be obtained.

New Zealand noted that the scientific uncertainty regarding stock identity and abundance had been a serious and long-standing matter for the Scientific Committee. With regard to fin whales off Greenland, the Scientific Committee had warned since the late 1990s that, 'it had never been able to provide satisfactory advice on those stocks due to the lack of requisite data, particularly on stock identity and abundance'. This concern was reiterated by the Scientific Committee during the following three years and in 2002, the Scientific Committee added, 'the inability to provide advice on safe catch limits is a matter of great concern... with potentially serious consequences for the status of the stock involved'. Similar advice was reiterated in 2003 and again in 2004 when the Scientific Committee stated that in the absence of an agreed population abundance estimate for fin whales in the following year, it would likely respond immediately that the take of fin whales off West Greenland should be reduced or eliminated. Despite the scientific work conducted by Greenland in 2005, the Scientific Committee expressed its reservations and continued to urge that 'considerable caution be exercised in setting catch limits for this fishery'.

New Zealand pointed out that similar problems exist with stock assessments of minke whales off Greenland. Since the late 1990s, the Scientific Committee had warned that due to a lack of adequate research and data, it had 'never been able to provide satisfactory scientific advice on minke whales off Greenland'. Accordingly, it 'strongly recommended' a research programme specifically for this purpose. This concern was repeated in 2000, 2001, 2002 and 2003 as a matter of 'great concern'. Despite some initial scientific work by Greenland on this matter in 2005, the Scientific Committee continued to urge that 'considerable caution be exercised in setting catch limits for this fishery' because it has no scientific basis for providing advice on safe catch limits. New Zealand expressed the view that this record and the recent comments of the Scientific Committee provided a persuasive case for setting a zero catch limit. In New Zealand's opinion, this was one of the most serious areas before the Commission, and New Zealand questioned when the Commission was going to do something about rectifying this serious situation. New Zealand suggested that if there is determination and commitment to rectify this

in the short term, this responsibility falls squarely on the Government of Denmark.

Denmark was thankful for the report of the Scientific Committee on this matter, which had provided new information to them, and had given them 'food for thought' before the Plenary sessions on a matter which they took extremely seriously. Denmark will consider carefully how to solve the situation in relation to the stocks but it pointed out that setting catch limits or changing them is outside the terms of reference of the ASW sub-committee. In addition, Denmark expressed its concern as to the wellbeing of the minke whales and fin whales visiting Greenland waters as they contribute in an important way to meet the meat requirement of the Greenland society. Denmark stated that with regard to the report on minke whales from the Scientific Committee, that they, like the Scientific Committee, were reluctant to draw conclusions on the evidence presented. Nevertheless, Denmark did suggest that the assertion of a 90% decline during the last decade cannot be correct. This was because Denmark doubts that this group of minke whales is a separate stock, as there is evidence indicating that the stock summering at West Greenland is in fact a component of a larger stock. In addition, scientific knowledge that the sex-ratio is 50/50 when minke whales are born is at loggerheads with the fact that the catch in West Greenland is $\frac{3}{4}$ female and $\frac{1}{4}$ male, and has been so for decades. Thus, the Denmark take is not consistent with a 50/50 sex ratio in the stock – unless the Greenland catch is coming from a greater stock, and not on a separate stock. In addition, in minke whales, females are generally found further north in summer. The skewed sex ratio in the Greenland catch may therefore indicate that it is being taken from the northern fringe of the summer distribution of a larger stock. Denmark also raised the point that only adult minke whales are caught in Greenlandic waters. Minke whale calves are not seen in Greenland waters. Denmark suggested that this raises fundamental questions about where the calves are. Finally, Denmark added that the hunters still use approximately the same time when they are hunting minke whales. If they were using more time, it could be the same as saying that there are fewer whales – but based on this evidence, that is not the case.

Denmark hoped that the Scientific Committee would succeed in establishing a link between the minke whales visiting Greenland waters and minke whales in other waters. However, Denmark was disappointed that the Scientific Committee had not proposed to the Commission any allocation of funds apart from £3,500 for genetic work, and Denmark suggested that without funds the uncertainty about stock structure would be carried into the future. They hoped to get the support of New Zealand to get further money for research in Greenland waters. Denmark noted that Greenland authorities had allocated extra funds in the last few years in order to meet the recommendations from the IWC on large whale assessments. In addition, they had allocated what amounts to US\$250,000 in each of the years 2003 and 2004 and Denmark is working towards getting further funds.

With regard to fin whales, Denmark expressed their concern about the state of fin whales in Greenland waters. They noted that as with the minke stock, it is unclear whether these fin whales are a stock of their own or part of a greater stock. Finally, Denmark noted that the Scientific Committee was not in a position to provide satisfactory management advice on safe catch limits. However,

Denmark did express their intention to exercise caution when setting catch limits for fin whales.

The Chair reminded the sub-committee of the fact that the renewal of the quota is due in 2007. Moreover, she expressed the hope that Denmark could find additional financial resources to carry out the necessary abundance estimates.

4.5 North Atlantic humpback whales off St. Vincent and The Grenadines

4.5.1 Report of the Scientific Committee

The Chair of the SWG recalled that in recent years, the Committee has examined the stock structure of humpback whales in the North Atlantic in the context of the fishery of St. Vincent and The Grenadines. It has stated that the most plausible hypothesis is that the whales from St. Vincent and The Grenadines are part of the West Indies breeding population, numbering around 10,750 animals in 1992, but has encouraged the collection of additional data. This year the Committee received confirmation of a photographic match between an animal taken in 1999 and an animal seen in the Gulf of Maine. Given this link and the previous information available, the Committee agreed that no change is required to the current block quota. The Committee also repeated its previous recommendations that wherever possible photographs and genetic material are collected from the catch. It was pleased to hear that two photographs (one from the 2003 catch and one from the 2005 catch) have been obtained and that arrangements will be made to send the photographs to the North Atlantic catalogue.

4.5.2 Discussion and recommendations

The United Kingdom urged St. Vincent and The Grenadines to send samples from any whales taken for genetic analysis. Saint Lucia stated that three samples from the hunt had been sent for genetic analysis to Japan and the USA as reported in the Scientific Committee report of 2003.

5. OTHER MATTERS

Mr Harry Brower Jr, the acting Chairperson of the Alaska Eskimo Whaling Commission (AEWC) following the death of Mr Thomas Napageak, made some brief comments on two other matters that are important to the AEW. First, he underscored the Scientific Committee's current bowhead population size estimate of 10,545 whales, with a 95 percent confidence interval of about 8,000 to 13,000. The estimated annual rate of increase for this stock is 3.4 percent. Mr Brower suggested that these numbers are consistent with what the hunters see during the bowhead migration. During the 2001 census a record calf count was documented. In addition, more small whales (known as *ingutuk*) were being seen, and may be taken as providing further evidence of increased calf production, which in itself, is one of the best indicators of the health of large whale stocks. Mr Brower suggested that these numbers and observations showed that under the AEW management plan, this stock was continuing to increase and was approaching its pre-commercial whaling size in the presence of their subsistence hunt. Mr Brower also suggested that the impressive recovery of the stock was due in part to the health and pristine nature of their ocean.

Mr Brower explained that although the IWC recognises the AEW as the local entity responsible for managing the bowhead hunt, his community also holds the AEW

responsible for protecting the bowhead whale and its habitat, including its feeding grounds from damage by oil and gas development, commercial fishing and shipping. This was problematic, as their oceans were warming and becoming more accessible, they were becoming very concerned about the increasing ship traffic in the Arctic Ocean, and they looked to the USA Government and the IWC to help them find ways to protect the bowheads from suffering the same fate as the North Atlantic right whale.

The second matter Mr Brower spoke on was bowhead genetics. He explained that his hunters were aware of the concerns raised at the IWC about bowhead whale stock structure. He noted that following earlier practices, the hunters were cooperating with research scientists, this time by donating tissue samples taken from the whales caught for their subsistence food. Mr Brower thanked the National

Oceanic and Atmospheric Administration (NOAA) for giving them the opportunity to manage the bowhead subsistence hunt through their cooperative agreement, and also thanked the North Slope Borough for the very significant contributions of financial support for research on bowhead whale biology. Finally, Mr. Brower thanked North Slope Borough Mayor, George Ahmaogak, Sr. for his many years of unwavering support of the AEW. Mayor Ahmaogak will retire this autumn after five terms; he has attended the annual IWC meeting since 1977. The AEW hopes that he will continue to work with them in the future.

6. ADOPTION OF REPORT

The Report was adopted on Saturday 18 June 2005, by correspondence.

Appendix 1

LIST OF PARTICIPANTS

Argentina

Miguel Iniguez

Australia

Pam Eiser

Conall O'Connell

Gillian Slocum

Austria

Andrea Nouak (Chair)

Michael Stachowitsch

Brazil

Jose Palazzo

Chile

Eisa Cabera

Denmark

Henrik Fischer

Leif Fontaine

Michael Kingsley

Ole Heinrich

Amalie Jessen

Peter Olsen

Ole Samsing

Lars Witting

Dominica

Andrew Magloire

Finland

Esko Jaakkole

Germany

Peter Bradhering

Marlies Reimann

Iceland

Stefan Asmundsson

Asta Einarsdottir

Kristjan Loftsson

Gisli Vikingsson

Italy

Caterina Fortuna

Japan

Hiroshi Hatanaka

Akihiro Mae

Joji Morishita

Seiji Ohsumi

Midori Ota

Haruo Tominaga

Republic of Korea

Chiguk Ahn

Zang Geum Kim

Hyun-Jin Park

Sung Kwon Soh

Mexico

Lorenzo Rojas-Bracho

Netherlands

Benno Bruggink

New Zealand

Mike Donoghue

Al Gillespie (rapporteur)

Geoffrey Palmer

Norway

Halvard Johansen

Anniken Krutnes

Egil Øen

Hanne Østgard

Jorn E. Pedersen

Sweden

Bo Fernholm

Anna Roos

Switzerland

Bruno Mainini

Russian Federation

Rudolf Borodin

Vladimir Etylin

Valentin Ilyashenko

Gennady Inankeuyas

Olga Ipatova

Vlailen Kavry

Igor Mikhno

John Tichotsky

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Richard Cowan

Laurence Kell

Jennifer Lonsdale

Trevor Perfect

Mark Simmonds

USA

Harry Brower, Jr

Roger Eckert

Maggie Hayes

Cheri McCarty

Micah McCarty

Daniel J. Morast

Rolland Schmitt

Diana Weigmann

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| 4.1.1 Report of the Scientific Committee | 6. Adoption of the report |

TERMS OF REFERENCE

The terms of reference of the Aboriginal Subsistence Whaling Sub-committee are to consider relevant information and documentation from the Scientific Committee, and to consider nutritional, subsistence and cultural needs relating to aboriginal subsistence whaling and the use of whales taken for such purposes, and to provide advice on the dependence of aboriginal communities on specific whale stocks to the Commission for its consideration and determination of appropriate management measures (*Rep. int. Whal. Commn.* 48: 31).

ADMISSION OF OBSERVERS

Rule of Procedure C.2

Observers accredited in accordance with Rule [of Procedure] C.1.(a) and (b) are admitted to all meetings of the Commission and the Technical Committee, and to any meetings of subsidiary groups of the Commission and the Technical Committee, except the Commissioners-only meetings and the meetings of the Finance and Administration Committee.