

Report of the Sub-Committee on Aboriginal Subsistence Whaling

1. INTRODUCTORY ITEMS

The list of participants is given as Appendix 1.

1.1 Appointment of Chair

Conall O'Connell (Australia) was appointed as Chair.

1.2 Appointment of Rapporteur

Laurence Kell (United Kingdom) was appointed as Rapporteur, with assistance from Donovan (Chair of the SWG).

1.3 Review of Documents

The documents for discussion included:

IWC/58/AS 1	Revised draft agenda.
IWC/58/AS2	List of documents.
IWC/58/ AS3	Greenland
IWC/58/ AS4	Subsistence Gray and Bowhead Whaling by Native People of Chukotka in 2004
IWC/58/Rep 1	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 MANAGEMENT PROCEDURE

3.1 Progress with the Greenlandic Research Programme

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 *Gray whale 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.

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 do not comprise the total population; the evidence is particularly strong for the common minke whale. However, there is no information on the extent of the total population.

The Chair of the SWG reported on progress made with respect to genetic analyses (Item 8.1.2 of IWC/58/Rep1). For common minke whales work is progressing on a genetic method that may allow for an estimate of the lower bound of the population size to be estimated, while for fin whales, considerable work has been undertaken to compare fin whales from West Greenland with other areas of the North Atlantic.

The most gratifying area of progress, however, relates to abundance estimates for both species (Item 8.1.2 of IWC/58/Rep1). Last year, the Scientific Committee had been unable to accept the results from a photographic aerial

survey and *inter alia* had strongly recommended that a traditional aerial survey be undertaken as soon as possible. It was with great pleasure, therefore, that the SWG received the results of two surveys undertaken in 2005, a dedicated aerial survey and shipboard survey that used dedicated cetacean observers on a capelin stock survey.

With respect to the latter, poor weather conditions, particularly in southwest Greenland, resulted in poor and restricted coverage in that region that meant that the estimates could not be used. However, the SWG encouraged further use of such 'piggy back' surveys since the survey had revealed the potential of this approach if conditions were such that realised coverage could be increased.

The aerial survey was extremely successful. Although some further analyses are to be carried out, the Scientific Committee was able to accept the estimates presented by the Greenlandic scientists, recognising that they were probably underestimates for a variety of reasons. The estimates were for common minke whales about 3,500 (95%CI 1,500-7,700) and for fin whales about 1,700 (95%CI 840-3,500). The Scientific Committee thanked Greenland and the Greenlandic scientists for the tremendous effort put in to following the recommendations of last year.

With respect to the development of *SLAs*, the SWG had received a paper that developed an approach that might be used as a candidate *SLA* for the common minke whale off West Greenland. Unlike traditional *SLAs*, it requires only sex specific catch data. The Committee **appreciates** the substantial effort made to begin to develop an *SLA* for the common minke whale but had some concerns about the approach which also applied to an assessment approach discussed under Item 5.3.1 below. The Scientific Committee has formed an intersessional working group that will meet to fully consider the use of sex ration data in conjunction with the development of an *SLA*.

3.1.2 Discussion and Recommendations

The UK stated that previously it had been critical of the results from Greenlandic research program but recognised the efforts made in 2005-2006 and congratulate Greenland on their efforts and hoped that they would continue.

The Sub-committee endorsed the report of the Scientific Committee and its recommendations.

3.2 Planning for the Implementation Review for bowhead whales

3.2.1 Report of the Scientific Committee

The Chair of the SWG reported on progress towards completing an *Implementation Review* in 2007. Considerable work had been undertaken during the year, notably at an intersessional workshop (SC/58/Rep2) as well as at the Annual Meeting. The primary focus had been on reviewing the available evidence, particularly genetic data, on stock structure. Stock structure hypotheses serve two different but related purposes, one concerning biology and the other the development of trials. The Workshop carried out a thorough review of the available information and considered both of these issues, agreeing a number of one- and two-stock scenarios to be examined in the review. Additional genetic evidence was examined at the Annual Meeting but it was agreed that no further hypotheses were needed. Details can be found under Item 9.1 of IWC/58/Rep1 and Item 8.2.2. Further genetic analyses will be considered at the next intersessional workshop to be held in mid-January 2006.

When more than a single stock hypothesis has to be investigated, it is extremely important to have good knowledge of the timing and positions of the historical catches. In the case of the bowhead whales, by far the greatest catches took place in the 19th century. In the light of its discussions, the SWG restricted the need for the data to three of the blocks (A, G, I) included in a 1983 paper by Bockstoce and Botkin (1983). The Scientific Committee **strongly urges that every effort be made** to obtain these data and that they are made available under Procedure A of the DAA. It re-emphasised the protection for data owners inherent in the DAA – the data can only be used in the context of the

Implementation Review, the data owners retain publication rights and on completion of the review the data must be returned to the owner and any copies destroyed. Work to refine the data set for the aboriginal subsistence catches to as fine a level as possible (village and if possible position) is proceeding well.

The Chair of the SWG welcomed the provision of a preliminary abundance estimate for Chukotka, the first of its kind. Most of the animals counted would not have been included in the census at Barrow. The Scientific Committee thanked the scientists involved and further such work is encouraged. The series of abundance estimates from the Barrow censuses represent some of the best estimates for cetacean populations and they will play a valuable role in the *Implementation Review*.

Tremendous progress was made in terms of developing the modelling framework for the 2007 review. In particular, a new computer program ('AWMP-lite') has been developed that will greatly speed up the process and allow a wide variety of scenarios to be tested. Details are given under Item 8.2.5.1 of the Scientific Committee report.

3.2.2 Discussion and Recommendations

The USA, commended the Scientific Committee for its efforts and stated that the Bockstole and Botkin data on bowheads requested by the Scientific Committee to help evaluate stock structure hypotheses will be sought as a priority by the USA. It was further noted that the Government of the USA currently does not have these data and the fact that they have not yet been made available to the Scientific Committee is not as a result of them being withheld. Every effort will be made to obtain the data and make them available for the forthcoming workshop on Bowhead stock structure.

The USA also thanked the subsistence hunters and local communities for their willingness to cooperate with the IWC and in particular for their ongoing efforts in the areas of conservation management, biological research, and the improvement of hunting techniques without which the work of the IWC would not be possible. The USA also thanked the Scientific Committee for its ongoing and excellent work and noted that the Scientific Committee had completed its annual review of information relevant to the management of bowhead whales and has reaffirmed its advice that the current level of the aboriginal subsistence hunt on these whales is sustainable and that the bowhead SLA is the most appropriate management tool for this hunt. The USA emphasised that as of 2001 the population estimate for Bering-Chukchi-Beaufort Seas stock of bowhead whales was 10,500, with an estimated annual increase of 3.4 percent and pointed out that in that year a record number of calves were counted. The SWG agreed with the USA and expressed appreciation for the AEWC's outstanding management capabilities with regard to this hunt and for its 29 years of cooperation with the U.S. Government and the IWC.

Harry Brower, the chair of the AEWC, then stated that he was pleased to report that under the AEWC's management of the Alaskan bowhead whale subsistence hunt, the Bering-Chukchi-Beaufort Seas stock of bowhead whales remains healthy and is continuing to increase. He noted that during the 2005 subsistence hunt in Alaska, 68 whales were struck and 55 were landed, for an efficiency rate of 81 percent. This is higher than the 10 year average of 79 percent, which is well above the AEWC's 1978 commitment to the IWC to achieve an annual average efficiency rate of 75 percent. Harry Bower also noted that throughout the many years of bowhead research the hunters of the AEWC have cooperated with research scientists. The crews have given scientists meat, muktuk, organ and other parts of the whales caught for food, despite the sacrifice this entailed. While hunters in Gambell and Savoonga on St Lawrence Island have also assisted in the collection of whale bone samples from past hunts. However, they recognised that this was important for supporting scientific research and for the best possible management of subsistence resources. The AEWC also agreed to allow a tagging project to be conducted despite possible concerns about the impact of tagging on the whales.

The chair of the AEWEC then observed that last winter in Alaska, despite the climate warming trend, was unusually cold and there was a lot of heavy multi-year ice. This in combination with unfavourable winds has kept the spring lead system closed in many areas, this resulted in few whales being harvest. The AEWEC stated that in the upcoming workshop on Whale Killing Methods they would provide more information on their hunt. The AEWEC thanked NOAA for giving the AEWEC the opportunity to manage the bowhead subsistence hunt and thanked the USA and the North Slope Borough for the very significant contributions of financial support for research on bowhead whale biology.

The Sub-committee endorsed the report of the Scientific Committee and its recommendations.

4. ABORIGINAL WHALING SCHEME (AWS)

4.1 Report of the Scientific Committee

The Chair of the SWG 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 Subcommittee (the specifications can be found in *Ann. Rep. Int. Whaling Comm. 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 (IWC, 2006). The Chair of the SWG again re-iterated 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*.

4.2 Discussion and Recommendations

5. ABORIGINAL SUBSISTENCE WHALING CATCH LIMITS

5.1 Bering-Chukchi-Beaufort Seas stock of bowhead whales

5.1.1 Report of the Scientific Committee

The Chair of the SWG first reported on the catch information for the 2005 subsistence harvest. In Alaska, a total of 68 bowhead whales was struck resulting in 55 animals landed (25 males, 28 females, 2 not determined). He also noted an addendum to the 2004 harvest report in which one female landed on 31 December 2004 at Gambell had been inadvertently left out. Two bowhead whales (one male and one female) were landed in 2005 in Chukotka.

The Scientific Committee **agreed** that the same management advice as that given in 2005 is appropriate. The *Bowhead SLA* remains the most appropriate tool for providing management advice for this harvest (IWC, 2003, p.22), at least in the short term, and the results from the *Bowhead SLA* indicate that no change is needed for the current block quota for 2003-07.

5.1.2 Discussion and Recommendations

The Sub-committee endorsed the report of the Scientific Committee and its recommendations.

5.2 North Pacific Eastern stock of gray whales

5.2.1 Report of the Scientific Committee

The Chair of the SWG first reported on interesting telemetry work carried out in Mexico (see Item 9.3.1 of IWC/58/Rep1). In 2005, 115 eastern North Pacific gray whales (45 males and 70 females) were landed by native people of the Chukotka Autonomous region. An additional nine whales were struck and lost compared to only one the previous year. Two of the gray whales harvested in 2005 had a strong chemical smell and were inedible. The Makah Indian Tribe was unable to conduct whaling on this stock in 2005 because of domestic litigation.

The Scientific Committee **reaffirmed** its advice from last year that the *Gray Whale SLA* remains the most appropriate tool for providing management advice for this harvest; no change is needed to the current block quota for 2003-2007. An *Implementation Review* is scheduled for 2009.

5.2.2 Discussion and Recommendations

The Sub-committee endorsed the report of the Scientific Committee and its recommendations.

5.3 Minke whale stocks off Greenland

5.3.1 Report of the Scientific Committee

The Chair of the SWG noted that last year, catches of common minke whales off West Greenland totalled 173 (34 males; 134 females; 5 unidentified sex, 3 struck and lost).

Last year, the Scientific Committee had agreed that sex ratio data should be attempted to be used in assessments but noted some of the potential limitations of such an approach. This year, two papers were received on this subject. The more complex paper had concluded that the current catch of 175 whales was probably sustainable. Details can be found in Item 9.4.2.1 of IWC/58/Rep1. Although the SWG welcomed these papers, no agreement could be reached on their suitability for providing management advice at this meeting. These discussions and disagreements highlighted the importance of a consolidated co-operative effort to determine whether, and if so how, sex ratio data can be used to conduct a suitable assessment of common minke whales and/or be incorporated into an *SLA*. The Scientific Committee **agreed** to establish an intersessional working group (that also would meet for a number of days) to examine this issue and report back to the next annual meeting.

Last year, when faced with the new information provided from photographic surveys (while the abundance estimates from those were not considered acceptable, when taken at face value, their implications were extremely severe, particularly for minke whales), the Scientific Committee had urged that considerable caution be exercised in setting catch limits for this fishery because it had no scientific basis for providing advice on safe catch limits. It had noted that if an Aboriginal Subsistence Whaling Scheme (AWS) was in place, this fishery would be at or near the place where the grace period would begin.

This year, the Scientific Committee stressed that it was in a **considerably stronger position** than it was last year. In particular, it had accepted a new abundance estimate from the aerial survey. In addition, progress had been made on incorporating the sex ratio data into an assessment and in examining whether the genetic data can be used to obtain a lower bound for the abundance of the total population. Further progress will be made on these issues during the intersessional period, although it could not guarantee that this work would necessarily result in an acceptable assessment in 2007.

The new abundance estimate is not significantly different to the 1993 estimate accepted by the Committee although the power to detect trends is low. Its acceptance of course, also means that the question of a grace period under the

proposed AWS no longer applies. However, the problem of stock structure remains. Although it is agreed that the survey estimate does not apply to the whole population available (*inter alia* given the consistent strong female bias in the catches), it is not presently possible to determine by how much. Thus, despite the great improvement in the situation compared to last year, the Scientific Committee was still **concerned** that it is not in a position to give authoritative advice on safe catch limits this year. It noted that the current block catch limit ceases next year. There was considerable discussion as to whether the Committee should provide *ad hoc* interim advice on this stock. A number of possible approaches were suggested. These included:

- (a) no *ad hoc* interim advice should be provided this year other than that above, particularly given the intersessional work proposed and the fact that a major review would occur next year given the completion of the present block quota;
- (b) a crude *ad hoc* approach could be used to provide a range of possible replacement yields (RYs) under a number of hypothetical scenarios – it was noted that under assumptions that (a) MSYR (mat) is 3%¹, (b) that the true population has a sex ratio of 1:1 and (c) that the population is underestimated by factors of between 2 and 7², the estimated RY ranges from about 80-270 if the lower 5% bound of the 2005 aerial survey estimate is used.

The Scientific Committee agreed that **the Commission should exercise caution** when setting catch limits for this stock.

5.3.2 Discussion and Recommendations

The Sub-committee endorsed the report of the Scientific Committee and its recommendations.

5.4 West Greenland stock of fin whales

5.4.1 Report of the Scientific Committee

The Chair of the SWG noted that last year, catches of fin whales off West Greenland totalled 13 (1 male; 11 females; 1 unidentified sex, 1 struck and lost).

This year, it had received an updated assessment from that presented last year. That paper had concluded that a catch of up to 19 whales per year had an 88% chance of fulfilling the AWMP objectives. The SWG had welcomed this paper, although some concerns were expressed about aspects of the method that might cause it to be overoptimistic. However, it was agreed that, provided certain factors were addressed, the method was acceptable. Some members, however, expressed the view that the available information was too uninformative for the method to produce reliable results in the near future. Others believed that it was appropriate to provide interim management advice this year.

Last year, in the light of the photo-survey results and the fact that the previous estimated dated from the late 1980s, the Scientific Committee had urged that considerable caution be exercised in setting catch limits for this fishery and as an interim measure advised that a take of 4-10 animals (approximately 1% of the lower 5th percentile and of the mean of the estimates 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. This advice would be re-evaluated in 2006 in the light of the intersessional work recommended.

This year, while the Committee was still not in the position of providing satisfactory long-term management advice, it stressed that it was in a **considerably stronger position** than it was last year. In particular, it had accepted a new

¹ The Committee has elsewhere suggested that the likely value for common minke whales lies towards the upper end of the range 1-4%; (IWC, 2004a, p.10)

² Although not accepted as appropriate to use to provide management advice at this meeting, the value of 7 is broadly compatible with the results of the methods that attempted to use sex ratio information to obtain a lower bound for the total population abundance (see Item 4.2.1).

abundance estimate from the aerial survey, which it recognises is an underestimate. In addition, considerable progress has been made on developing an assessment method although some have some concerns as to whether the data available are sufficiently informative to use it for providing management advice.

The present abundance estimate was not significantly different from that accepted for 1987/88, although the power to detect trends was low. If a similar *ad hoc* interim approach was adopted to that used last year, then using the lower 5% bound and the central estimate from the aerial survey provides a range of RYs of 9-17 for a value of MSYR(mat) of 2% and a range from 17-34 for an MSYR(mat) of 4%. An alternative approach suggested a value of around 23 animals for MSYR 2.5% when using the lower bound of the abundance estimate. Although not accepted by the SWG as an agreed assessment at this meeting, some members believed that the results in SC/58/AWMP5 suggest that an annual catch of 19 whales is safe.

The Scientific Committee also made some research recommendations applicable to both the fin whales and common minke whales as detailed in IWC/54/Rep1, Item 9.4.6. In particular it **reiterated** the need for genetic samples from each of the captured whales as a matter of priority and welcomed the progress that has been made in this regard.

5.4.2 Discussion and Recommendations

Iceland stated that there would like to congratulate Greenland with the successful conduct of the two sighting surveys in 2005. These surveys have completely changed the picture from last year and put the Scientific Committee, in their own words, in a much stronger position to provide management advice. Although the Scientific Committee could not agree on whether the estimates from the shipboard survey could be used as a basis for assessment at present, the Scientific Committee agreed new abundance estimates for both minke and fin whales from the aerial survey. For both species the abundance estimates are recognised as being negatively biased because the surveys only cover a part of the population area and they are not corrected for animals missed by observers. The consequences of this new information are (a) there is no need for considerations of a grace period as clearly stated in the Scientific Committee report; (b) the present quotas can be maintained until the comprehensive review of these stocks in 2007 when the present block quota expires.

Australia congratulated the Greenlandic Home Rule Government and Denmark on the new abundance estimates and welcomed that the fact that the Scientific Committee was able to agree an abundance estimate.

The Sub-committee endorsed the report of the Scientific Committee and its recommendations.

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

5.5.1 Report of the Scientific Committee

The Chair of the SWG reported that a single female humpback was caught in April, 2006. It was not lactating and was not accompanied by a calf.

In recent years, the Scientific Committee has agreed that the animals found off St. Vincent and The Grenadines are part of the large West Indies breeding population. The Commission has adopted a total block catch limit of 20 for the period 2003-07. The Scientific Committee **agreed** that this catch limit will not harm the stock. It also **repeated** its recommendations of previous years that wherever possible, photographs and genetic material are collected from the catch. It welcomed the progress reported in this regard and thanked those involved in St Vincent and The Grenadines for their co-operation in this matter.

5.5.2 Discussion and Recommendations

The Sub-committee endorsed the report of the Scientific Committee and its recommendations.

6. OTHER MATTERS

Denmark on behalf of Greenland notified the SWG that during the plenary it would ask the Scientific Committee to provide advice on other whale stocks.

7. ADOPTION OF THE REPORT

Appendix 1

List of Participants

Antigua & Barbuda

Tricia Lovell

Argentina

Miguel Iniguez

Javier Figueroa

Australia

Conall O'Connell

Virginia Mudie

Gillian Slocum

Zena Armstrong

Pam Eiser

Phil Tracey

Austria

Andrea Nouak

Michael Stachowitsch

Belgium

Koen Van Waerebeek

Brazil

Régis Pinto de Lima

José Truda Palazzo Jr.

Chile

Elsa Cabrera

Denmark

Henrik Fischer

Ole Samsing

Maj Friis Munk

Fernando Ugarte

Ole Heinrich

Amalie Jessen

Leif Fontaine

Dominica

Lloyd Pascal

Andrew Magloire

Germany

Marlies Reimann

Grenada

Frank Hester

Iceland

Ásta Einaradóttir

Gísli Víkingsson

Japan

Minoru Morimoto

Joji Morishita

Hiroshi Hatanaka

Jiro Hyugaji

Ryoichi Nakamura

Kayo Ohmagari

Republic Of Korea

Chiguk Ahn

Zang Geun Kim

Hyun Jin Park

Luxembourg

Pierre Gallego

Mexico

Lorenzo Rojas-Bracho

Monaco

Frederic Briand

Netherlands

Stefan Verbunt

Maaïke Moolhuijsen

New Zealand

Geoffrey Palmer

Michael Donoghue

Al Gillespie

Indra Prasad

Phillipa Brakes

Norway

Halvard P. Johansen

Anniken Ramberg Krutnes

Hild Ynnesdal

Jan Birger Jorgensen

Lars Walløe

Portugal

Marina Sequeira

Russian Federation

Valentin Ilyashenko

Rudolf Borodin

Igor Mikhno

Olga Ipatova (I)

Saint Kitts & Nevis

Joseph Simmonds

Saint Lucia

Jeannine Rambally

Saint Vincent and The Grenadines

Raymond Ryan

Sophia Punnett

South Africa

Herman Oosthuizen

Luyanda Antony

Spain

Carmen Asencio

Santiago Lens

Renaud De Stephanis

Switzerland

Bruno Mainini

UK

Richard Cowan

Trevor Perfect

Mark Simmonds

Ruth Thirkettle

Laurie Kell (rapporteur)

USA

William Hogarth

Doug DeMaster

Cheri McCarty

Roger Eckert

Emily Lindow

John Field

Heather Rockwell

Bob Brownell

Rollie Schmitt

Harry Brower

Secretariat

Nicky Grandy

Greg Donovan

Appendix 2

ABORIGINAL SUBSISTENCE WHALING SUB-COMMITTEE

AGENDA

1. INTRODUCTORY ITEMS
 - 1.1 Appointment of Chair
 - 1.2 Appointment of Rapporteur
 - 1.3 Review of Documents
2. ADOPTION OF THE AGENDA
3. ABORIGINAL SUBSISTENCE WHALING MANAGEMENT PROCEDURE
 - 3.1 Progress with the Greenlandic Research Programme
 - 3.1.1 Report of the Scientific Committee
 - 3.1.2 Discussion and Recommendations
 - 3.2 Planning for the Implementation Review for bowhead whales
 - 3.2.1 Report of the Scientific Committee
 - 3.2.2 Discussion and Recommendations
4. ABORIGINAL WHALING SCHEME (AWS)
 - 4.1 Report of the Scientific Committee
 - 4.2 Discussion and Recommendations
5. ABORIGINAL SUBSISTENCE WHALING CATCH LIMITS
 - 5.1 Bering-Chukchi-Beaufort Seas stock of bowhead whales
 - 5.1.1 Report of the Scientific Committee
 - 5.1.2 Discussion and Recommendations
 - 5.2 North Pacific Eastern stock of gray whales
 - 5.2.1 Report of the Scientific Committee
 - 5.2.2 Discussion and Recommendations
 - 5.3 Minke whale stocks off Greenland
 - 5.3.1 Report of the Scientific Committee
 - 5.3.2 Discussion and Recommendations
 - 5.4 West Greenland stock of fin whales
 - 5.4.1 Report of the Scientific Committee
 - 5.4.2 Discussion and Recommendations
 - 5.5 North Atlantic humpback whales off St. Vincent and The Grenadines
 - 5.5.1 Report of the Scientific Committee
 - 5.5.2 Discussion and Recommendations
6. OTHER MATTERS
7. 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).