# **Report of the Aboriginal Subsistence Whaling Working Group**

Monday 28th May 2012

# Background

At the 63<sup>rd</sup> annual meeting of the International Whaling Commission (IWC), the Commission adopted a proposal to establish an **Ad Hoc Aboriginal Subsistence Whaling Working Group** (IWC/63/12 Rev, Agenda Item 7, Appendix 1 attached) submitted by Denmark, the Russian Federation, and the United States. The purpose of this Working Group was to attempt to answer previous unanswered ASW issues and thereby inform those IWC Commissioners who have never been through an annual meeting in which ASW catch limit were reviewed and renewed and ASW issues in general.

The primary role of the Aboriginal Subsistence Whaling Working Group (ASWWG) is to identify unanswered ASW issues and to organize them into short and long term issues. The short term issues are to be addressed for IWC 64 and the long term issues for IWC 65 and beyond. It was recognized that not all issues would be agreed and reported to the IWC.

# **1. Introductory Items**

# 1.1 Composition of the ASWWG, and appointment of Chair

Circular Communication to Commission and Contracting Governments, IWC.CCG.984, dated 20 January 2012, provided the following organizational information about the Aboriginal Subsistence Whaling Working Group:

At IWC 63, the Commission approved the formation of an Aboriginal Subsistence Whaling Working Group (IWC/63/12 Rev). The Working Group has had its organizational meeting via electronic communications. It agreed to have Rolland Schmitten (US Delegation) chair the working group, and pursuant to the Working Group's terms of reference, has identified 2 members from the Scientific Committee and 1 from the Secretariat to join the 8 IWC parties comprising the working group. This completes the representation of the ASW Working Group. The final membership includes:

Contracting Governments:

Argentina, Austria, Denmark, Japan, Russia, St. Vincent and the Grenadines, Switzerland, United States

Scientific Committee:

Dr. Nick Gales (Australia), Dr. Lars Walloe (Norway)

Secretariat;

Greg Donovan

1.2 Review of Documents: The following documents were available to the ASWWG:

- 1) Report of the IWC63 ASW Sub-committee (IWC/63.Rep 3);
- 2) IWC63 Chair's Report- Jersey 2011

# 1.3 Meetings

Given the geographic distribution of the ASWWG members and time differences the Working Group agreed to work electronically and to meet, if necessary, in person during the Sub-committee week at IWC 64. The Chairman

facilitated the electronic meeting through a series of 3 ASWWG memos. The first memo (November 27, 2011) provided a draft list of short and long term ASW issues for the members to comment upon and to recommend adding or deleting issues from the list.

Short term ASW unresolved issues: It is understood that the ASWWG would work on short term ASW issues to present comments/recommendations at IWC64 and IWC65to the ASW Sub-committee. The second memo January 2, 2012) included the final list of short term ASW unanswered issues. One party proposed adding a short term issue to the list on "Discussion of IWC or other funding sources to support implementation by ASW hunters of any new IWC requirements that may arise", and this suggestion was adopted by consensus. The final list of short term ASW issues include:

1) Review by the Secretariat of all previous IWC actions concerning previously agreed ASW management measures and definitions;

2) Define a process to advance the exchange of technical hunting information between ASW parties. This could facilitate safety, hunting efficiency, and animal welfare;

- 3) Standardize catch limits expressed as number of whales v. tons;
- 4) Discussion of the merits of long term ASW catch limits;

5) Discussion of IWC or other funding sources to support implementation by ASW hunters of any new IWC requirements that may arise.

Long term unresolved issues: While it was understood that the long term unresolved ASW issues would be issues for resolution after IWC 64 or beyond, the chair encouraged an initial discussion on the merits of long term issues. Long term ASW issues suggested:

- 1) Standardized need statement;
- 2) Removing ASW catch limits from political discussion;
- 3) Changing the term "aboriginal" in ASW;
- 4) Obtain adequate information for ASW catch limits;
- 5) Ensure local consumption v. commercialism;
- 6) Improve operational efficiencies;
- 7) Improve welfare of the hunt.

The third memo (March 13, 2012) indicated unanimous support for ASW short term issues. The chair asked several different members to write papers on short term issues. The papers were circulated to ASWWG members upon submission and the chair provided a summary of comment received and indicated the status of each short term issue. The paper assigned to the Secretariat (January 6, 2012 letter attached) was to provide a review of all previously approved IWC ASW management issues and definitions. This paper was completed and submitted in draft to the ASWWG chairman on April 14, 2012 and was circulated to ASWWG members for comment. It was a very comprehensive review of IWC Annual Reports identifying IWC agreed ASW management issues and definitions.

#### 2. Review of List of Short Term ASW unanswered issues and recommendations

#### 2.1 Facilitating the exchange of technical Information on ASW hunts

**Background:** During previous meetings of the IWC, the Aboriginal Subsistence Whaling (ASW) Subcommittee, Infractions Committee and the Whale Killing Methods and Associated Welfare Issues (WKM/AWI) Working Group, several IWC members have expressed views that there appears to be little exchange of information between ASW members about weaponry, hunting techniques, equipment, hunter safety, time to death, and humane aspects of the hunt. In general, it is believed that a broader exchange of this information could lead to more efficient, safer, and improved aboriginal subsistence whaling. In the past, there has been some limited bilateral exchange of information on some of these issues but never in a formal or routinely scheduled manner. At IWC 58 (2006) in an effort to improve communications and quality of ASW data/information submitted to the Commission by Contracting Governments and facilitate the exchange of ASW information between ASW parties, the ASW parties agreed to form an ASW Caucus. Each year since IWC 58, the ASW parties have met in the ASW Caucus to review relevant information and materials to be presented to the Subcommittees and Working Groups. The United States submitted a paper on this topic (Appendix 2 Facilitating the Exchange of Technical Information on ASW Hunts) with recommendations.

Action: The ASWWG urges that the ASW subcommittee approve the following recommendations. This is an action between the ASW subcommittee and the ASW parties and not the Commission.

1) To request member governments having aboriginal subsistence hunts cooperate, to the fullest extent, in the exchange of technical hunting information;

2) To acknowledge and encourage the activities of the ASW Caucus in facilitating the exchange of technical information among its members.

3) To request that the ASW Caucus add an item on "exchange of technical information" to the agenda for each of its meetings and consider any significant issues, specific to ASW hunts, and forward them to the ASW Subcommittee.

Furthermore, the ASWWG stipulates that agreeing to the above actions does not give formal IWC recognition to the ASW Caucus nor does the Caucus seek formal IWC recognition.

# 2.2 Standardize catch limits expressed as number of whales v. tons

**Background:** Many parties in the IWC have commented on the contradiction in requesting catch limits; only Greenland reports it subsistence needs in terms of metric tons rather than number of whales taken and that leads to confusion when setting catch limits. Given this concern, the Working Group examined this issue to see if all catch limits could be harmonized. Denmark on behalf of Greenland submitted a paper on this topic (appendix 3, Standardize catch limits expressed as number of whales v. tons). The essence of their paper is that "the West Greenland need for whale meat was, at IWC 42, endorsed by the Commission at the level of 670 tons. The reason for expressing the need in tons was the nature of their multispecies hunt where the catch of individual species varied over the years due to a number of factors (ice and climatic conditions, weather, availability). If hunting on a single species leads to unsatisfactory results, then hunting on other species might help to attain their overall food security goal. The aggregated "need for whale meat" as such has never changed." "The need for whale meat is administratively, during the IWC process, changed into the normal catch limits for different species by the use of conversion factors, therefore the catch limits are expressed as number of whales and not as tons. Currently the East Greenland hunt is a single species hunt and is reported in numbers of whales taken".

Action: The ASWWG urges the Subcommittee to request Denmark/Greenland to continue to report East Greenland's single species hunt in numbers of whales taken.

Note: Argentina does not accept Greenland's explanation for expressing its nutritional subsistence need for whales in terms of tons. Argentina believes that need should be expressed as number of whales for ALL hunts and that applicants should provide details of other sources of food that contribute to meeting the subsistence need of the relevant population.

#### 2.3 Discuss merits of longer term ASW catch limits

**Background:** For over a decade, the IWC, IWC Scientific Committee, and ASW parties have informally discussed the feasibility of longer term catch limits, i.e. longer than 5 years. More recently, it is a provision under consideration as part of the proposed move to biennial meetings of the Commission (Annex J, Report of the Finance and Administration Committee, Chair's Report of the 63<sup>rd</sup> Annual Meeting). At IWC 63, the ASW Subcommittee's

report to the commission (Annex F of the Chair's Report) recommended the formation of an ASW Working Group (ASWWG) to examine certain short and longer term ASW issues including "longer term Catch Limits".

In this regard, the ASWWG reviewed the relevant part of the preliminary report from the Scientific Committee's AWMP workshop which also reviewed and commented on implications of a possible move to biennial meetings with respect to length of block quotas and noted the following comments:

"The workshop recalled that trials for the B-C-B bowhead and Eastern North Pacific gray whale SLAs had shown satisfactory performance for surveys at intervals of 10 years (and even for some Robustness trials for 15 years). The workshop **agreed** that there are no scientific reasons for the Commission not to set catch limits for block of even numbers of years up to 8-years for these stocks". Furthermore, it was noted that it would not be appropriate for catches to be left unchanged if new abundance estimates were not available after 10 years.

"It was noted that this would not mean that the Committee would need to change its regular process of Implementation Reviews approximately every five years (with the provision for 'emergency' reviews should circumstances arise) or an annual examination of new information and provision of advice."

The workshop noted that interim SLAs for the Greenland hunts had also been tested for surveys at 10-year intervals and shown satisfactory performance and had been adopted by the Committee and Commission in 2008. However, as noted at the time, those tests had been for a restricted number of scenarios rather than the wider range of hypotheses customarily considered for such trials. It had thus been **agreed** that this SLA was appropriate for the provision of advice for up to two blocks (i.e. approximately 10 years) or approximately 2018. The workshop **agreed** that there were no scientific reasons why the next quota block for the Greenland hunts could not be for a 6-year period, noting that the long-term SLAs will be available for implementation for the following block quota. (Note bold text is from the report.)

Action: The ASWWG noted the comments from the SC AWMP report and awaits final action by the SC on long term catch limits.

Note: Argentina does not believe that the IWC should move beyond 5 year block quotas for any population until it has adopted a Strike Limit Algorithm for that population and agreed all the other "elements required for management under the AWMP" recommended by the Scientific Committee in 2002 (carryover provisions, grace periods, guidelines for surveys, data and implementation reviews).

# 2.4 Discussion of IWC or other funding sources to support implementation by ASW hunters of any new IWC requirements that may arise

**Background:** Aboriginal subsistence whaling pursuant to paragraph 13 of the Schedule is subject to a number of measures of interests to Contracting Governments, as reflected in Schedule amendments and reports of the committees, subcommittees and working groups. These include, inter alia, the priority for hunter safety, reporting, and weapons improvement programs adopted by the IWC. In addition, IWC resolution 1991-1 contains many requests for additional information. A voluntary IWC fund for aboriginal subsistence whaling would assist in achieving compliance with those measures. This fund could be created through a change in the Financial Regulations. The United States submitted a paper on this topic (appendix 4, Discussion of IWC or other funding sources to support implementation by ASW hunters of any new IWC requirements that may arise).

The purpose of an IWC voluntary fund is to allow Contracting Governments, or organizations recognized by a Contracting Government, responsible for aboriginal subsistence whaling pursuant to paragraph 13 of the Schedule to receive financial assistance to assist in achieving compliance with IWC measures identified in Schedule amendments. The report discusses contributions from Contracting Governments and non-Contracting Governments, intergovernmental organizations and other entities as appropriate and recommends that the primary form of disbursement will be supported in accordance with the purpose of the Voluntary fund.

Action: This proposal (Appendix 4) is attached to the ASWWG Report to be submitted to the ASW Subcommittee with recommendation that a Contracting Government at IWC 65 introduce it as a resolution for adoption by the IWC by requesting the Secretary to make arrangements for the creation of such a fund whereby contributions in cash can be registered and utilized by the Commission.

# 2.5 Secretariat review of ASW management issues and definitions.

A draft working document has been approved for further review (Appendix 5).

#### 3. Discussion of long term unanswered ASW issues

As previously noted, the ASWWG is not expected to take action on Long Term ASW issues until IWC65 or beyond. The ASWWG noted a list of suggested Long Term ASW issues (item 1.3) and further agreed that if time is available there would be a discussion of Long Term ASW issues at the in person ASWWG meeting (6/26/2012) prior to IWC Subcommittee week.

The ASWWG seeks endorsement of the ASW Subcommittee for its recommendations and actions.

Submitted by:

Rolland A. Schmitten, AWWG Chairman

Appendix:

1) Ad Hoc Aboriginal Subsistence Whaling Working Group formation, IWC/63/12 Rev, Agenda item 7

2) Define a process to advance the exchange of technical hunting information between ASW parties; paper by the United States.

3) Standardize catch limits expressed as number of whales v. tons; paper presented by Denmark on behalf of Greenland.

4) Discussion of IWC or other funding sources to support implementation by ASW hunters of any new IWC requirements that may arise; paper by United States.

5) Draft working document – Background information for the Commission's aboriginal subsistence whaling working group (ASWWG)

# IWC/63/12 Rev Agenda Item 7

# Proposal to Establish an Ad Hoc Aboriginal Subsistence Whaling Working Group

# Submitted by Denmark, Russian Federation and the United States

It is proposed that an Ad Hoc Aboriginal Subsistence Whaling Working Group be established with the following terms of reference:

1) To identify and consider unresolved ASW issues, including, *inter alia*, those identified in IWC/63/Rep 3, the Report of the ASW Subcommittee, with the view of recommending steps forward for consideration by the ASW Subcommittee;

2) To prioritize those issues that can be dealt with in the short- (IWC 64) and long-term (IWC 65);

3) To convene an organizational meeting during IWC 63;

4) To work by correspondence and, as time permits, to meet during the subcommittee week; and

5) To report on its progress to the Aboriginal Subsistence Whaling Subcommittee at the next annual meeting.

Appropriate representatives from the Scientific Committee and the Secretariat will also serve on the Ad Hoc ASW Working Group to assist and facilitate its work on these matters.

# ASWWG Document submitted by the United States

#### Facilitating the Exchange of Technical Information on ASW Hunts

#### **Background:**

During previous meeting of the IWC, the Aboriginal Subsistence Whaling (ASW) and Infractions Subcommittees and the Whale Killing Methods and Associated Welfare Issues (WKM/AWI) Working Group, several IWC members have expressed views that there appears to be little exchange of information between ASW members about weaponry, hunting techniques, equipment, hunter safety, time to death, and humane aspects of the hunt. In general, it is believed that a broader exchange of this information could lead to more efficient, safe, and improved aboriginal subsistence whaling.

In the past, there has been some limited bilateral exchange of information on some of these issues but never in a formal or routinely scheduled manner. At IWC 58 (2006) in an effort to improve communications and quality of ASW data/information submitted to the Commission by contracting Governments and facilitate the exchange of ASW information between ASW parties, the ASW parties agreed to form an ASW Caucus. They wrote an organization document, STATEMENT OF ABORIGINAL SUBSISTENCE WAHLING COUNTRIES, IWC/58/Rep 7-Appendix 4, and ASW Contracting Governments formally submitted it to the WKM/ AWI Workshop and the Commission. Each year since IWC 58, the ASW parties have met prior to meeting of the Subcommittees and Working Groups to review relevant information and materials to be presented.

# **Recommendations:**

To facilitate the exchange of technical information concerning ASW hunts, and to improve the quality of ASW data/information submitted to the Commission by Contracting Governments, the ASWWG recommends that it forward the following recommendations to the ASW subcommittee for its consideration:

1) To request that member governments having aboriginal subsistence hunts cooperate to the fullest extent possible in the exchange of technical hunting information;

2) To acknowledge and encourage the activities of the ASW Caucus in facilitating the exchange of technical information amongst its members, as well as the provision of ASW information by Contracting Governments to the ASW subcommittee and Commission;

3) To request that the ASW Caucus add an item on "exchange of technical information" to the agenda for each of its meetings and consider any significant issue, specific to ASW hunts, forwarded to it by the Commission. Furthermore, agreeing to the above actions does not give formal IWC recognition to the ASW Caucus nor does the Caucus seek formal IWC recognition.

# Standardize catch limits expressed as number of whales vs. tons

#### Submitted by the Kingdom of Denmark

The West Greenland need for whale meat was, at the IWC42, endorsed by the Commission at the level of 670 tons. The reason for expressing the need in tons was the multispecies hunt where the catch of individual species varied over the years due to a number of factors (ice and climatic conditions, weather, availability). If the result of the hunt, on one individual species, lead to an unsatisfactory result, then the hunt on other species might help to attain the objective of overall food security or an approximation to that objective. The aggregated "need for whale meat" as such has never changed. The ways to attain the objective of 670 tons meat could be fulfilled by a number of various combinations of the catch.

Due to the introduction of quotas and the seasonal limitations, the supply of fresh meat has been reduced. The traditionally sharing system has also been affected, and some families are nowadays referred to acquiring their meat intake from the food stores or open air market.

In a statement to IWC40 the need for whale meat was explained as follows:

Annual catches (until 1986)	
Minke whales, average through 20 yrs. 232 a 2 tons meat	= 464 tons of meat
Fin whales, average through 10 yrs. 9 a 10 tons	= 90 tons of meat
Humpback whales, average through 10 yrs. 14 a 8 tons	=112 tons of meat
Total	app. 670 tons of meat

With the acceptance for the West Greenland hunt to include Bowhead whales in 2007 and Humpback whales in 2010, it will be even more difficult to establish catch limits expressed in number of whales, which will satisfy the underlying need for food security. Only very high quotas for the individual species could justify a permanent change alone to numbers of whales, as the availability of whales changes every year, whereas the need remains fixed in a food security context.

The established need for whale meat has been based on historical catches. The different species can, to a certain extent, substitute each other and consequently we have had to establish a common definition of needs, i.e. tons. The need for whale meat is administratively, during the IWC process, changed into the normal catch limits for the different species and that only after the Scientific Committee has had the opportunity to review the possibility of the various species to sustain a certain hunting pressure. So the catch limits is expressed as number of whale and not as tonnes.

The question of conversion factors has been discussed in the early 90'ies and at IWC62, based lately on a report of the small working group on conversion factors. It turned out that the 2 sets of conversion factors were rather close:

Tons	Early nineties <sup>(1)</sup>	2010
Minke whale	2	1.84 (2)
Fin Whales	9	$7.2^{(2)}$
Humpback whale	8	9.5 <sup>(2)</sup>
Bowhead whales	-	11

<sup>(1)</sup> Landed whales

<sup>(2)</sup> Interim conversion factors pr. Strike

The figures are not entirely compatible, as the figures from 2010 are interim and based on "strike", whereas the old figures do not include lost whales.

In the opinion of Denmark and Greenland, the small differences in the conversion factors do not change the main conclusion that the proceed from the West Greenland hunt has to be measured in tons of edible meat in order to verify to what extent the food security objective have been attained.

The East Greenland hunt for minke whales is similar to the West Greenland hunt, as the hunt in the East is directed only at minke whales and because there are no vessels with harpoon cannons in the area. Thus, it is logical to express the need for whale meat in that part of Greenland in numbers of whales and not in tons.

#### Voluntary Fund for Aboriginal Subsistence Whaling

Aboriginal subsistence whaling pursuant to paragraph 13 of the Schedule is subject to a number of measures of interest to Contracting Governments, as reflected in Schedule amendments and reports of sub-committees and working groups. These include, inter alia, the priority for hunter safety, reporting, and weapons improvement programs adopted by the IWC. A voluntary IWC fund for aboriginal subsistence whaling would assist in achieving compliance with those measures. This fund could be created through a change in the Financial Regulations, described below.

# Proposed Changes to the Financial Regulations

C. General Financial Arrangements

1. There shall be established a Research Fund, a General Fund, a Voluntary Fund for Small Cetaceans, <u>and a</u> Voluntary Fund for Aboriginal Subsistence Whaling.

(a) The Research Fund shall be credited with voluntary contributions and any such monies as the Commission may allocate for research and scientific investigation and charged with specific expenditure of this nature.

(b) The General Fund shall, subject to the establishment of any other funds that the Commission may determine, be credited or charged with all other income and expenditure.

(c) The details of the Voluntary Fund for Small Cetaceans are given in Appendix 1.

(d) The details of the Voluntary Fund for Aboriginal Subsistence Whaling are given in Appendix 2.

The General Fund shall be credited or debited with the balance on the Commission's Income and Expenditure Account at the end of each financial year.

# <u>Appendix 2</u>

[NOTE: Patterned on wording in Appendix 1 of the Financial Regulations.]

VOLUNTARY FUND FOR ABORIGINAL SUBSISTENCE WHALING

# **PURPOSE**

To establish an IWC voluntary fund to allow Contracting Governments, or organizations recognized by a Contracting Government, responsible for aboriginal subsistence whaling pursuant to paragraph 13 of the Schedule to receive financial assistance to assist in achieving compliance with IWC measures identified in Schedule amendments. These include, inter alia, the priority for hunter safety, reporting, and weapons improvement programs adopted by the IWC.

The Secretary is requested to make arrangements for the creation of such a fund whereby contributions in cash can be registered and utilised by the Commission.

# **CONTRIBUTIONS**

<u>The Commission calls on Contracting Governments and non-Contracting Governments, intergovernmental organisations and other entities as appropriate, in particular those most interested in aboriginal subsistence whaling, to contribute to the IWC Voluntary Fund for Aboriginal Subsistence Whaling.</u>

Acceptance of contributions from entities other than Governments will be subject to the Commission's procedures for voluntary contributions. Where funds are to be made available through the Voluntary Fund, the donation will be registered and administered by the Secretariat in accordance with Commission procedures.

The Secretariat will notify all members of the Commission on receipt of such voluntary contributions.

Where expenditure is incurred using these voluntary funds the Secretariat will inform the donors of their utilisation.

#### **DISTRIBUTION OF FUNDS**

**<u>1.</u>** The following primary forms of disbursement will be supported in accordance with the purpose of the Voluntary Fund:

- (a)
   provision of support for research (including surveys) in areas, species or populations that have

   subsistence hunts or in work identified as of direct interest or priority in the advice provided by

   the Scientific Committee to the Commission regarding aboriginal subsistence whaling;
- (b) advice or activities aimed at improving the efficiency of whale killing methods and hunter safety, including weapons improvement programs and improvements in hunting techniques aimed at reducing struck and lost rates and times to death;

- (c) technical exchange of information among aboriginal subsistence hunters; and
- (d) other work regarding aboriginal subsistence whaling that may be identified from time to time by the Commission as requiring, or likely to benefit from, support through the Fund.
- 2. Where expenditure involves research activity, the following will apply:
- (a) the normal procedures for review of proposals and recommendations by the Scientific Committee will be followed;
  - (b) appropriate procedures for reporting of progress and outcomes will be applied and the work reviewed by the Scientific Committee or relevant sub-committee or woking group; and
  - (c) the Secretariat shall solicit the involvement, as appropriate, of governments in the regions where the research activity is undertaken.

3. Where expenditure involves support for hunter safety, weapons improvement programs, or technical exchange of information, the following will apply:

- (a) the normal procedures for review of proposals and recommendations by the relevant subcommittee or working group will be followed;
- (b) appropriate procedures for reporting of progress and outcomes will be applied and the work reviewed by the relevant sub-committee or working group; and
- (c) the Secretariat shall solicit the involvement, as appropriate, of governments in the regions where the activity is undertaken or that have relevant expertise.

# Appendix 5

# Draft Working Document -- Background information for the Commission's aboriginal subsistence whaling working group (ASWWG)

# THE SECRETARIAT

This document provides background information requested by the Chair of the Aboriginal Subsistence Whaling Working Group (ASWWG). At its organisational meeting, the ASWWG believed that it would be useful to compile a list of previously agreed ASW management measures and definitions into a single document. The objective was to help the ASWWG (and ultimately the Commission) identify gaps and/or areas where clarification might reduce ambiguity. The Chair of the ASWWG noted that the list might include not only the provisions given in the Schedule but also other important Commission agreements on, inter alia:

- (1) Definitions for "subsistence use" and "aboriginal subsistence whaling";
- (2) *Objectives for managing aboriginal subsistence whaling;*
- (3) Resolutions on aboriginal subsistence whaling, or that reference aboriginal subsistence whaling;
- (4) Scientific Committee recommendations for calf lengths and Strike Limit Algorithms; and
- (5) Schedule amendments setting aboriginal subsistence catch limits.

The Secretariat also notes that at a later stage of the ASWWG's deliberations, it might be requested to assist in the facilitating other work of the ASWWG, including:

- (1) Identify missing terms and proposing definitions for them;
- (2) Suggest clarifications, if deemed needed;
- (3) Consider the disposition of all ASW measures and definitions in terms of direct placement in the Schedule and/or elsewhere (such as in an appendix of agreed ASW measures); and
- (4) Develop options for consideration by the Commission.

This summary document is **not** intended to replace reading the full published and unpublished accounts of the Commission's discussions on subsistence whaling (complete references are given to those accounts). It is merely intended to be a short introduction to assist with reading the full accounts; while commentary and contextual text may have made the document more readable, it is clear that there is potential for such text to be seen as subjective and thus unhelpful. This document thus tries to address this risk by minimising such text and readers are requested to consult the relevant Chair's reports, working group reports and original documents as given in the extensive reference list at the end for the overall context and precise wording of official reports of discussions. Note that where the account is published, the publication year will be one year later than the meeting itself.

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# 1. DEFINITIONS FOR 'SUBSISTENCE USE' AND 'ABORIGINAL SUBSISTENCE WHALING'

The issue of a formal definition of terms related to aboriginal subsistence whaling did not arise within the Commission until the late 1970s when concerns were raised over the status of the Bering-Chukchi-Beaufort Seas stock of bowhead whales.

Prior to that time, no formal definition of aboriginal subsistence whaling existed.

The term 'aborigine' was used in the context of the negotiations surrounding the 1931 International Convention for the Regulation of Whaling. Article 3 stated that

'The present Convention does not apply to aborigines dwelling on the coasts of the territories of the High Contracting parties provided that –

- 1. They only use canoes, pirogues or other exclusively native craft propelled by oars or sails.
- 2. They do not carry firearms.
- 3. They are not in the employment of persons other than aborigines.
- 4. They are not under contract to deliver the products of their whaling to any third person.'

The negotiated text for the 1937 International Agreement for the Regulation of Whaling did not specifically mention aboriginal whaling but noted that the treaty was limited to "factory ships and whale catchers and land stations." This continued for the later agreements and it was not until the Schedule to the 1946 International Convention for the Regulation of Whaling that the term was again used. Paragraph 2 of the original 1946 Schedule to the Convention stated:

'It is forbidden to take or kill gray or right whales, except when the meat and products of such whales are to be used exclusively for local consumption by the aborigines'

No definitions were provided in the Schedule for 'aborigine' or 'local consumption'. Given the taxonomy of the time, 'right' whales also included bowhead whales.

The question of definitions arose in the context of the issue of managing aboriginal subsistence hunts of Alaskan bowhead whales in the late 1970s. At the 1977 Annual Meeting (IWC, 1978), the Commission deleted the right whale part of the aboriginal exemption clause, which under various reorganisations was then found in Schedule paragraph 7, and that deletion in effect introduced a zero catch limit for the bowhead hunt; that decision was later amended at a special meeting in December 1977 as discussed under Item 5.2 below (IWC, 1979a).

At the same time, the Commission established a Technical Committee examination of the issues surrounding aboriginal/subsistence whaling. It also established a special Panel Meeting of Experts on Aboriginal/Subsistence Whaling that met in Seattle from 5-9 February 1979. Three expert panels were established: on Wildlife; Nutritional Needs; and Cultural Anthropology. The published report and associated papers can be found in IWC Special Issue 4 published in 1982. On the basis of the report, the following definitions relevant to aboriginal/subsistence whaling were put forward to the Commission by the "*Ad Hoc* Technical Committee working group on development of management principles and guidelines for subsistence catches of whales by indigenous (aboriginal) peoples" (IWC, 1981d) (IWC, 1981d)

*Aboriginal subsistence whaling* means whaling for purposes of local aboriginal consumption carried out by or on behalf of aboriginal, indigenous, or native peoples who share strong community, familial, social, and cultural ties related to a continuing traditional dependence on whaling and on the use of whales.

*Local aboriginal consumption* means the traditional uses of whale products by local aboriginal, indigenous, or native communities in meeting their nutritional, subsistence, and cultural requirements. The term includes trade in items which are by-products of subsistence catches.

Subsistence catches are catches of whales by aboriginal subsistence whaling operations.

The report also noted that "[t]he definition of subsistence whaling does not prevent the use of modern technology, and there is good reason to recommend improvement in the weapons, powder and bombs currently employed to further reduce the struck but lost rate." The report of the *Ad Hoc* group was

accepted by the Commission as part of a 1982 Resolution (IWC, 1982) see also Item 5.3. Another *ad hoc* group on definitions formed in 1988 proposed no changes to the definitions (IWC, 1988b)

The issue of definitions was not raised again formally until 2004 and was included in the work of a small working group (Russian Federation, Australia, Denmark, USA) whose primary charge was to review paragraph 13 of the Schedule to achieve consistency (IWC, 2005) . The results of work related to Schedule language are dealt with under Item 5.6.2 below but the report of the group also clarified further the understanding that the phrase "when the meat and products of such whales are to be used exclusively for local consumption' means that some transaction beyond the aboriginal whaling communities under the current Schedule language are acceptable." The working group based its conclusion on the work of the Cultural Anthropology panel in 1979, which defined the term "subsistence use." The report of the working group, including the definition of "subsistence use" included in the report, was formally adopted by the Commission by consensus in 2004 (IWC, 2005). As incorporated into the Chair's report, "subsistence use" provided for:

- (1) The personal consumption of whale products for food, fuel, shelter, clothing, tools or transportation by participants in the whale harvest.
- (2) The barter, trade or sharing of whale products in their harvested form with relatives of the participants in the harvest, with others in the local community or with persons in locations other than the local community with whom local residents share familial, social, cultural or economic ties. A generalized currency is involved in this barter and trade, but the predominant portion of the products from such whales<sup>1</sup> are ordinarily directly consumed or utilized in their harvested form within the local community.
- (3) The making and selling of handicraft articles from whale products, when the whale is harvested for the purposes defined in (1) and (2) above.

There have been no formal changes to any definitions subsequently. Discussion of Schedule-defined terms that are generally applicable to all forms of whaling is included under Item 5.2.

# 2. OBJECTIVES FOR MANAGING ABORIGINAL SUBSISTENCE WHALING

The Commission agreed to the following objectives for aboriginal subsistence whaling in 1982 (IWC, 1983a):

- (1) To ensure that the risks of extinction to individual stocks are not seriously increased by subsistence whaling;
- (2) To enable aboriginal people, to harvest whales in perpetuity at levels appropriate to their cultural and nutritional requirements, subject to the other objectives;
- (3) To maintain the status of whale stocks at or above the level giving the highest net recruitment and to ensure that stocks below that level are moved towards it so far as the environment permits.

This was based upon the work (IWC/33/14) of the "Ad Hoc Technical Committee Working Group on development of management principles and guidelines for subsistence catches of whales by indigenous (aboriginal) peoples" established by the Commission in  $1980^2$ .

As also noted under Item 5.3 below, these principles and guidelines were formalised in a more quantitative way into Schedule text as Paragraph 13 (a) by the Commission (IWC, 1983a). This occurred at the same meeting (the  $34^{th}$  in 1982) at which the commercial whaling 'moratorium' provision (Paragraph 10(e)) was adopted. The full text of new Paragraph 13(a) was as follows:

<sup>&</sup>lt;sup>1</sup> The definition of subsistence use of the 1979 Cultural Anthropology panel used the wording 'from each whale' rather than 'from such whales'. The revised wording is the wording reported in the Chair's Report of the 2004 meeting and is consistent with the wording used in the Schedule. <sup>2</sup> It was agreed that an '*ad hoc* Working Group be established to develop management principles, and in particular for the

<sup>&</sup>lt;sup>2</sup> It was agreed that an '*ad hoc* Working Group be established to develop management principles, and in particular for the setting of allowable catches for the whale stocks involved. The *ad hoc* Working Group would include representatives of the Technical Committee, the Scientific Committee and of indigenous people who take subsistence catches; should carry out its work as soon as possible and would report its findings to the meeting of the Technical Committee in 1981.'

'13. (a) Notwithstanding the provisions of paragraph 10, catch limits for aboriginal subsistence whaling to satisfy aboriginal subsistence need for the 1984 whaling season and each whaling season thereafter shall be established in accordance with the following principles:

- (1) For stocks at or above MSY level, aboriginal subsistence catches shall be permitted so long as total removals do not exceed 90 per cent of MSY.
- (2) For stocks below the MSY level but above a certain minimum level, aboriginal subsistence catches shall be permitted so long as they are set at levels which will allow whale stocks to move to the MSY level.\*
- (3) The above provisions will be kept under review, based upon the best scientific advice, and by 1990 at the latest the Commission will undertake a comprehensive assessment of the effects of these provisions on whale stocks and consider modification.

\* The Commission, on advice of the Scientific Committee, shall establish as far as possible (a) a minimum stock level for each stock below which whales shall not be taken, and (b) a rate of increase towards the MSY level for each stock. The Scientific Committee shall advise on a minimum stock level and on a range of rates of increase towards the MSY level under different catch regimes.'

Towards completion of the Revised Management Procedure (RMP) for commercial whaling, the Scientific Committee began to turn its attention towards developing an equivalent for aboriginal subsistence whaling (see Item 4 below). As part of that process it evaluated its ability to implement the approach presented in the Schedule text. It requested advice from the Commission on the approach it should adopt and this was eventually answered in Resolution 1994-4 (IWC, 1995b). The active part of that Resolution stated:

- (1) The Scientific Committee should investigate potential management regimes for aboriginal subsistence whaling, including regimes based on the approach taken in the Revised Management Procedure and utilising simulation trials where appropriate.
- (2) The review conducted by the Scientific Committee should be based on the principles listed in subparagraph 13(a) of the Schedule, and shall also consider the footnote to that sub-paragraph, taking account of any recent developments in conservation theory.
- (3) The objectives of any potential regime shall continue to be those accepted by the Commission at the 34th Annual Meeting, which are to:
  - (a) ensure that the risks of extinction to individual stocks are not seriously increased by subsistence whaling;
  - (b) enable aboriginal people to harvest whales in perpetuity at levels appropriate to their cultural and nutritional requirements, subject to the other objectives; and
  - (c) maintain the status of stocks at or above the level giving the highest net recruitment and to ensure that stocks below that level are moved towards it, so far as the environment permits.
- (4) Highest priority shall be accorded to the objective of ensuring that the risk of extinction to individual stocks is not seriously increased by subsistence whaling.

This has guided the Scientific Committee's subsequent work on developing methods to provide scientific advice (see Item 4).

# 3. RESOLUTIONS ON ABORIGINAL SUBSISTENCE WHALING, OR THAT REFERENCE ABORIGINAL SUBSISTENCE WHALING

The Commission has passed ten major resolutions related to aboriginal subsistence whaling. The full texts of these can be found on the IWC website (www.iwcoffice.org). The operative parts of the resolutions are provided here.

# 3.1 Bowhead whales (IWC, 1977a)

Discussion surrounding this resolution can be found in the Chair's report of the 28<sup>th</sup> meeting in 1976 (IWC, 1977a). The Commission had received information on 'increased [hunting] effort' on bowhead whales, a 'continued relatively high loss rate' and the need to 'improve assessments of current population' and the operative text of the resolution read:

'recommends that Contracting Governments as early as possible take all feasible steps to limit the expansion of the fishery and to reduce the loss rate of struck whales.'

# 3.2 Bering Sea bowhead whales (IWC, 1979b)

This Resolution was passed at the special meeting that restored the exemption allowing aboriginal hunting for bowhead whales and adopted a strike and catch limit for the Alaskan bowhead hunt after the removal of the aboriginal exemption for taking right whales at the Annual Meeting in 1977. Discussion surrounding the removal of the exemption can be found in the Chair's report of the 29<sup>th</sup> meeting (IWC, 1978). Discussion at the Special Meeting can be found in Chair's report of that meeting held in December 1977 (IWC, 1979a). In addition to the Schedule amendment (see Item 5.2), the Commission adopted a resolution (IWC, 1979b) relating to further national control of aspects of the hunt and improved research. The operative part of the Resolution stated:

BE IT HEREBY RESOLVED by the International Whaling Commission

(a) that the Commission calls upon the Government of the United States to take all necessary measures to minimise adverse effects upon the Bering Sea stock resulting from the aboriginal hunt, through controls on hunting techniques and equipment, size limits, seasons, and the kill or striking of calves, and females accompanied by calves,

(b) that the Commission welcomes the undertaking of the Government of the United States to implement management and research programs of the comprehensiveness of those tabled at the meeting of the Scientific Committee held in Australia in November of 1977, and to establish surveillance and enforcement measures for the 1978 hunt adequate to ensure that the number of whales struck does not exceed the limit established by the Commission,

(c) that the status of the Bering Sea bowhead whale stock be reviewed at the Commission's 30th Annual Meeting in June, 1978 in the light of information resulting from the proposed research program, with a view to establishing regulations based on the advice of the Scientific Committee, which should include comment on risks associated with different levels of removals from the stock,

(d) that all necessary. measures be taken to ensure that the reduction in the take of bowhead whales does not affect the take of beluga whales to any significant degree,

(e) that all necessary measures be taken to preserve the habitat of bowhead and beluga whales.

# 3.3 Capture of humpback whales in Greenland waters (IWC, 1979d)

Discussion surrounding this resolution can be found in the Chair's report of the 30<sup>th</sup> meeting in 1978 (IWC, 1979c). The operative text read:

THE COMMISSION REQUESTS the Danish Government to attempt to substitute fin whales for humpback whales in meeting the provisions of the International Whaling Commission Schedule, in so far as they apply to fin and humpback whales in West Greenland waters.

As noted under Item 5.3, the exemption that allowed the taking of humpback whales was removed in 1985.

#### 3.4 Resolution on Bering Sea bowhead whales (IWC, 1980b)

Discussion surrounding the adoption of this wide-ranging resolution can be found in the Chair's report of the 31st meeting in 1979 (IWC, 1980a). The operative text read:

Now therefore, the Commission hereby resolves as follows:

The Commission agrees to institute a regime such as that recommended by the Technical Committee Working Group on Aboriginal/Subsistence Whaling which met in Washington, D.C., 3-5 April 1979 (IWC/31/5/WG 1), to be implemented following completion of scientific analysis and when the stock will not be subjected to undue risk. The Commission will review this proposal for a regime, the scientific analysis, and the status of the Bering Sea bowhead stock at its Annual Meeting in 1981.

- The Commission intends that the needs of the aboriginals of the United States shall be determined by the Government of the United States of America. This need shall be documented annually to the Technical Committee, and shall be based upon the following factors:
  - 1. importance of the bowhead in the traditional diet,
  - 2. possible adverse effects of shifts to non-native foods,
  - 3. availability and acceptability of other food sources,
  - 4. historical take,

5. the integrative functions of the bowhead hunt in contemporary Eskimo society, and the risk to the community identify from an imposed restriction on native harvesting of the bowhead; and

6. to the extent possible, ecological considerations.

The Commission understands that the Government of the United States will adopt a National Management Plan which shall contain the following characteristics:

(1) it must annually establish a maximum permissible level of whales to be harvested,

(2) it must establish requirements for the reporting and for the providing of data as mandated by the Schedule,

(3) it must contain sufficient flexibility to permit quotas to be reduced immediately if, as a result of research and monitoring programs, the United States determines that the level of harvest is preventing the stocks from recovering to the optimum population levels,

(4) it must contain a provision which allows a lowering of the struck but lost quota if improved hunting efficiency or technology justifies a reduction in the number,

(5) it must contain a research plan which has the following characteristics:

(a) it must be implemented at a sufficient level of effort to produce a reliable estimate of stock size and/or net recruitment rate in five years,

(b) it must provide annual calf counts and direct measurements of the size composition of the population throughout its range, if possible,

(c) it must monitor trends in abundance of the entire population through direct annual counts using procedures that will provide comparable results between years,

(d) it must provide for continuance of research even after the establishment of both net recruitment and population size to assure continued monitoring of the population so long as the stock remains a Protected Stock.

The Commission expects that the United States shall submit an annual report on the complete results of its research,

- The Commission urges the Government of the United States to continue to take appropriate steps to improve the efficiency of the bowhead whale hunt and to ensure full utilization of all whales taken,
- The Commission requests the United States to submit appropriate information on a timely basis in order to permit the Scientific Committee, and thereafter the Commission, to review and make such determinations as may be appropriate with regard to the following:

(1) scientific data supporting the United States determination of its removal levels,

- (2) the research and management program of the Government of the United States,
- The Commission retains the authority to take emergency action if an unforeseen circumstance should create an imminent threat to the bowhead whale population, and,

The Commission will review this resolution at its annual meeting in 1981.

#### **3.5** Resolution on the documentation of aboriginal need (IWC, 1981c)

Discussion surrounding this resolution can be found in the Chair's report of the 32<sup>nd</sup> meeting in 1980 The resolution states: (IWC, 1981a). The resolution states:

'THE INTERNATIONAL WHALING COMMISSION HEREBY RESOLVES that all Contracting Governments under whose jurisdictions aboriginal subsistence whaling operations conducted under paragraph 12 of the Schedule occur shall document annually for the information of the Commission:

the utilisation of the meat and products of any whales taken for aboriginal/subsistence purposes.'

# 3.6 Resolution concerning aboriginal subsistence whaling (IWC, 1983b)

Discussion surrounding this resolution can be found in the Chair's report of the 34<sup>th</sup> meeting in 1982 (IWC, 1983a). This resolution adopted the principles and guidelines developed by the *ad hoc* group referred to under Item 2, highlighted the importance of the participation and co-operation of 'aboriginal peoples' and established the aboriginal whaling sub-committee of the Technical Committee. Its active text stated:

The Commission accepts the Report of the *ad hoc* Technical Committee Working Group on Management Principles and Guidelines for Subsistence Catches of Whales by Indigenous (Aboriginal) Peoples and agrees to implement an aboriginal subsistence whaling management regime in order to achieve the objectives of that Report.

The Commission agrees to manage aboriginal subsistence whaling in accordance with management principles to be set forth in the Schedule, and recognizes that the full participation and co-operation of the affected aboriginal peoples are essential for effective whale management.

The Commission agrees to establish a standing sub-committee of the Technical Committee to consider documentation on nutritional, subsistence, and cultural needs relating to aboriginal subsistence whaling and the uses of whales taken for such purposes, and to provide advice to the Technical Committee for its consideration and determination of appropriate management measures.

The standing sub-committee has met annually since that time, although the sub-committee now reports directly to the Commission (since 1988) rather than the Technical Committee (which no longer meets). All of the reports of that sub-committee can be found at <u>www.iwcoffice.org</u>. At the 35th meeting in 1983 (IWC, 1984), the Commission agreed to amend the terms of reference somewhat so that they read as follows:

to consider relevant information and documentation on nutritional, subsistence and cultural needs relating to aboriginal subsistence whaling and the uses of whales taken for such purposes, and to provide advice on the dependence of aboriginal communities to the Technical Committee for its consideration and determination of appropriate management measures.

The present terms of reference were established at the 48<sup>th</sup> meeting in 1996 (IWC, 1997). They read:

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.

# 3.7 Sub-Committee on Aboriginal/Subsistence Whaling Proposals Adopted (IWC, 1985b)

Although not a resolution, it appears appropriate here to refer to the proposals in the report from the Technical Committee Sub-Committee on Aboriginal/Subsistence Whaling (IWC/36/15) that were adopted by the Commission at the 36th Meeting in 1984 as Appendix 3 to the Chair's report (IWC, 1985b). Discussion of the proposals can be found in the Chair's report of the 36th Meeting (IWC, 1985a). The Appendix provided:

The sub-committee noted that a great deal of relevant information exists in published and unpublished documents, as shown by the extensive reference lists provided.

The sub-committee agreed to forward its report to the Technical Committee and recommended that each Commissioner be provided with a set of the submitted documents for their immediate use.

The sub-committee recognized that aboriginal/subsistence whaling for gray whales off the Chukchi Peninsula, for bowhead whales off Alaska, and for several species in Greenland waters is important in meeting cultural, nutritional, and subsistence needs. These needs should be brought to the attention of all Commissioners as effectively as possible.

The sub-committee agreed it was desirable to publish a special IWC volume on this subject at some future time.

The sub-committee noted that the Delegation of the USSR would seek to provide more information on the specific uses of whale products by the aboriginal population of the Chukot Region.

Recognizing the nutritional, subsistence and cultural significance of aboriginal/subsistence whaling off Greenland, which draws upon several species of whales, the sub-committee advises that, in considering quotas, the population harvested should be considered together in a way consistent with their use.

The sub-committee agreed that the current guidelines provided a useful checklist of information to be provided in considering aboriginal/subsistence whaling, but that further consideration needs to be given to the format of the documents to take into account the need to update information provided as necessary and to improve the evaluation of the data as provided in the terms of reference.

The above guidelines, entitled 'Draft Guidelines for the preparation of documentation' may be found in Annex 4 (labelled TC/36/AS 1) to IWC/36/15.

# 3.8 Resolution on humane killing in aboriginal subsistence whaling (IWC, 1986b)

Discussion surrounding this resolution can be found in the Chair's report of the 37<sup>th</sup> meeting in 1985 (IWC, 1986a). This raised the issue of killing methods used in subsistence whaling for the first time in a resolution. The operative text of the resolution stated:

The Commission URGES the prompt adoption of more efficient methods of killing whales, that reduce cruelty and inhumanity, in areas where aboriginal and subsistence whaling is practised.

# 3.9 Resolution on a Review of Aboriginal Subsistence Management Procedures (IWC, 1995b)

Discussion surrounding this resolution can be found in the Chair's report of the 46<sup>th</sup> meeting in 1994 (IWC, 1995a). This resolution provided the advice the Scientific Committee needed to begin to develop the management procedure approach for aboriginal subsistence whaling. It is discussed (and the operative text provided) under Item 2 above.

# 3.10 Resolution on improving the humaneness of aboriginal subsistence whaling (IWC, 1998b)

Discussion surrounding this resolution can be found in the Chair's report of the 49<sup>th</sup> meeting in 1997 (IWC, 1998a). The resolution's operative text states that the Commission:

WELCOMES the steps taken so far by the subsistence whalers of the United States of America, the Russian Federation and Greenland to improve the humaneness of whaling techniques in aboriginal subsistence hunts;

URGES them to do everything possible to reduce still further any unavoidable suffering caused to whales in such hunts;

REQUESTS the United States of America, the Russian Federation and Denmark to continue to inform the Commission on an annual basis of progress made in this matter, and to provide other information concerning the taking of whales under aboriginal subsistence quotas:

REQUESTS all Contracting Parties to provide appropriate technical assistance to improve the humaneness of aboriginal subsistence whaling;

AGREES to consider this issue at annual meetings of the Humane Killing Working Group;

REQUESTS the next Workshop on Whale Killing Methods to review the data received by the Commission on this matter.

# 4. SCIENTIFIC COMMITTEE RECOMMENDATIONS FOR *STRIKE LIMIT ALGORITHMS* AND CALF LENGTHS

# 4.1 Strike limit algorithms (SLAs)

The Scientific Committee established a Standing Working Group on the AWMP (aboriginal whaling management procedure) in 1995. Its task is to develop long-term methods (*Strike Limit Algorithms* – see

below) of providing scientific advice to the Commission on safe catch limits for aboriginal subsistence whaling operations that take into account scientific uncertainty and meet the Commission's management objectives (see Item 2). It reports to the Scientific Committee who in turn report to the Commission via its aboriginal subsistence whaling sub-committee.

The management objectives set by the Commission are aimed at allowing subsistence whalers to hunt at levels in accord with their cultural and nutritional requirements whilst ensuring that the whale populations concerned move towards and are maintained at healthy levels.

The provision of scientific advice requires knowledge of the status of the populations concerned. This includes information on population identity, abundance and trends in abundance. Testing possible *SLAs* that meet the Commission's objectives is undertaken using computer simulations of whale populations in the face of hunting over a 100-year period. These simulations take into account plausible levels of uncertainty in a large number of factors including knowledge of whale population structure, abundance and trends, historic and future catch levels, reproduction and survivorship, and environmental conditions. An important component of the Committee's work is receiving and reviewing scientific information on these factors and ensuring that appropriate levels of uncertainty are incorporated into the testing procedure.

Not all whales struck by hunters are able to be brought ashore. As a conservative approach, the Committee assumes that all struck whales die although this might not be the case. The method to calculate safe catches is therefore called a '*Strike Limit Algorithm*' or *SLA*. These are developed for each hunt and species.

Two *Strike Limit Algorithms* have been developed thus far: for bowhead whales hunted by the USA and Russia - adopted by the Commission in 2002 (IWC, 2003a); and for gray whales taken by Russia and potentially also by the USA (including the Makah tribe off Washington State, see below) - adopted by the Commission in 2004 (IWC, 2005).

A safe interim procedure for providing advice at least for up to two 'blocks' (10 years if five-year blocks) for the Greenland hunts was developed by the Committee and adopted by the Commission in 2008 (IWC, 2009a), although it was initially used to provide advice only for fin, bowhead and humpback whales (IWC, 2009b;2009c) since appropriate abundance data for West Greenland common minke whales did not become available until the 2009 Scientific Committee meeting (IWC, 2010b;2010c). Prior to this, the Committee had repeatedly expressed concern that it was unable to provide satisfactory management advice for catches of fin and minke whales off West Greenland due to difficulties in obtaining appropriate abundance estimates and the lack of knowledge on stock structure e.g. IWC (2006b). Catch advice for the East Greenland common minke whale hunt and the St Vincent and The Grenadines humpback whale hunts is based on the fact that the proposed hunts represent only a very small fraction of the total population. Work to develop long-term procedures is underway (IWC, 2010d).

Although *SLAs* are intended for long-term use, regular (usually 5-year) reviews are undertaken to ensure that no new information has been obtained that suggests that further testing is required. Although the *SLAs* are simulation tested for long periods of time (100 years), it is important to ensure that the factors and levels of uncertainty considered in the original testing remain appropriate. In addition, regular new information on abundance and catch levels must be considered. To this end the Committee undertakes '*Implementation Reviews*' every five yearsThis does not need to tie in with the timing of limit renewals (and often this has not been the case) and that usually they are relatively routine updates of new information. There are also provisions for 'emergency' *Implementation Reviews* if important new information becomes available within the normal five-year period. More formal draft guidelines on the conduct of such reviews will be considered by the Committee at IWC64.

The last bowhead whale *Implementation Review* took place over two years and was completed in 2007 with most focus being on the issue of stock structure (IWC, 2008b). No changes were needed to the

*Bowhead SLA* after the review. An *Implementation Review* for gray whales was completed in 2010 and the *Gray Whale SLA* was not changed with respect to providing advice on the Russian hunt off Chukotka (IWC, 2011c). However, before providing advice for a potential hunt of gray whales by the Makah tribe on the west coast of the USA, a further *Implementation Review* is underway to take into account catching from a small feeding aggregation known as the Pacific Coast Feeding Group (IWC, 2012b). It is expected to complete this work at IWC64.

In particular due to the more complex stock structure issues for the whales hunted by Greenlanders - common minke (East and West Greenland), fin, bowhead and humpback whales - development of final *SLAs* for these hunts is considerably more complex. As noted above, the SWG developed an 'interim safe procedure' that was adopted by the Committee and Commission in 2008 that is at least applicable for up to two blocks. A major focus of the Committee's work at present is the development of long-term *SLAs* for each Greenlandic hunt. As the Committee has noted, this must be done before any possible attempts to integrate these to provide advice for a multispecies hunt (IWC, 2012b).

# 4.1.2 AWS

The Scientific Committee has always expected that the management regime for aboriginal subsistence whaling will incorporate some generic aspects as well as the case-specific *SLAs* and informed the Commission of this. As part of its work it has proposed an AWS (aboriginal whaling scheme) that includes some generic features as discussed below. The Scientific Committee has developed possible text and examples as to how such a scheme might work (IWC, 2002;2003c) but this remains under discussion by the Commission e.g. (IWC, 2003a;2003b). Items incorporated included issues such as extent of carryover and what might be done if new abundance estimates are not available after 10+ years. A full presentation and discussion of a proposed draft AWMP is found in Annex C pp. 62-64 of IWC (IWC, 2003b) and some possible text provided in appendix 4 to Annex C on pages 74-75. The Committee continues to recommend these to the Commission each year e.g. (IWC, 2012a).

# 4.1.3 Block limits

The simulation trials for the B-C-B bowhead and Eastern North Pacific gray whale *SLAs* had shown satisfactory performance for surveys at intervals of 10 years (and even for some '*Robustness trials*' for 15 years). As agreed at a recent AWMP workshop (IWC/64/Rep3), there are no scientific reasons for the Commission not to set catch limits for blocks of even numbers of years up to 8-years for these stocks.

That Workshop had also noted that interim *SLAs* for the Greenland hunts had also been tested for surveys at 10-year intervals and shown satisfactory performance and had been adopted by the Committee and the Commission in 2008 (IWC, 2009a). However, as noted at the time those tests had been for a restricted number of scenarios than the wider range of hypotheses customarily considered for such trials. It had thus been agreed that this SLA was appropriate for the provision of advice for up to two blocks or approximately 2018. The Workshop agreed that there were no scientific reasons why the next block for the Greenland hunts could not be for a 6-year period, noting that the long-term *SLAs* will be available for implementation for the following block (IWC/64/Rep3).

# 4.2 Calf lengths

Calves are referred to twice in the most recent versions of the Schedule (see Item 5 for the historical developments).

The generic reference to calves introduced into the first Schedule applies to all whaling and states:

'It is forbidden to take or kill suckling calves or female whales accompanied by calves or suckling whales.'

This was modified in 1975 (IWC, 1977a) to read

'It is forbidden to take or kill suckling calves or female whales accompanied by calves.'

Subsequently, modifications were added to specific hunts (see Item 5) until in 2004 (IWC, 2005) the text regarding calves was harmonised to Paragraph 13.-(a)(4) which reads:

For aboriginal whaling conducted under subparagraphs (b)(1), (b)(2), and (b)(3) of this paragraph, it is forbidden to strike, take or kill calves or any whale accompanied by a calf. For aboriginal whaling conducted under subparagraphs (b)(4) of this paragraph, it is forbidden to strike, take or kill suckling calves or female whales accompanied by calves.

Paragraphs (b)(1-3) apply to hunts of bowhead, gray, and the Greenland hunts while paragraph (b)(4) applies to the hunt by St Vincent and The Grenadines. The differences are: (i) that the wording for (b)(1-3) does not specify that the calves must be suckling; or (ii) that the accompanying whales must be females.

While suckling can be determined from analysis of stomach contents after a whale has been killed, there is no formal definition of a calf. This was discussed in the context of humpback whales off St Vincent and The Grenadines in the late 1990s. In 1998, the Scientific Committee agreed that there is a high probability that any humpback whale <8m seen in the breeding area in the winter season is a calf (IWC, 1999b). The report of the Committee was adopted by the Commission(IWC, 1999a).

The question of the length of bowhead calves was considered in 2006 by the Committee which had received a request from the Commission in 2005 (IWC, 2006a). The Committee reported that a landed whale should be considered a calf when its length is  $\leq$ 7.5m and its baleen is <60cm (IWC, 2007b). The report of the Committee was adopted by the Commission (IWC, 2007a).

# 5. SCHEDULE AMENDMENTS RELATED TO ABORIGINAL SUBSISTENCE CATCH LIMITS

The following sections summarises Schedule amendments on whales stocks presently taken in aboriginal subsistence whaling since the inception of the Commission (Tables 2 and 3 at the end of this document summarise the information by hunt and should be read in conjunction with the text here). For contextual information, the reader should refer to the original documentation (Chair's reports and, where appropriate, the reports of relevant sub-groups).

# 5.1 Up to 1976

As noted under Item 1, the original aboriginal exemption in Paragraph 2 of the Schedule applied to catches of right and gray whales and no numbers or definitions were provided. In addition, Paragraph 9 of the original Schedule set minimum size limits on the taking of humpback and fin whales as follows:

9. It is forbidden to take or kill any blue, fin, sei, humpback, or sperm whales below the following lengths: -(a) Blue whales ... 70 feet (21.3 metres)
(b) Fin whales ... ... 70 feet (16.8 metres)
(c) Sei whales ... ... 40 feet (12.2 metres)
(d) Humpback whales ... ... 35 feet (10.7 metres)
(e) Sperm whales. ... ... 35 feet (10.7 metres)

except that blue whales of not less than 65 feet (19.8 metres), fin whales of not less than 50 feet (15.2 metres), and sei whales of not less than 35 feet (10.7 metres) in length may be taken for delivery to land stations provided that the meat of such whales is to be used for local consumption as human or animal food.

At the sixth meeting in 1954 (IWC, 1955), the Commission had adopted Paragraph 6 - (1) that had forbidden the catching of humpback whales in the North Atlantic Ocean for a period of five years. This was originally intended to expire on 8 November 1959 but was then extended to 8 November 1964 at the  $11^{\text{th}}$  meeting (IWC, 1960), 8 November 1969 at the  $16^{\text{th}}$  meeting (IWC, 1966), 8 November 1972 at the  $21^{\text{st}}$  meeting (IWC, 1971) and indefinitely at the  $24^{\text{th}}$  meeting (IWC, 1974).

In 1960, at the Commission's 12th Annual Meeting (IWC, 1961), the Chairman's Report stated the following:

20. Whaling at Greenland

- The Danish Commissioner sought guidance on certain points affecting whaling off Greenland and the Commission gave their views as follows:--
  - (1) Small boats armed with small harpoons and used for the taking of minke whales would be whale catchers under Article II of the Convention and therefore covered under Article I(2).
  - (2) All whales were covered by the wording of the Convention, but individual species when named in the Schedule to the Convention were subject to specific conservation measures.
  - (3) Paragraphs 2, 3, 4, and 6 of the Schedule applied to all methods for the taking or killing or attempted taking or killing of whales.<sup>3</sup>

At the 13<sup>th</sup> meeting (IWC, 1962), the Commission adopted a new amendment to Paragraph 6 - (1) stating:

'Notwithstanding this close season<sup>4</sup> the taking of 10 humpback whales per year is permitted in Greenland waters provided that whale catchers of less than 50 gross register tonnage are used for this purpose.'

This amendment did not refer to local consumption or use the term 'aborigine' but restricted the size of vessels that could be used and introduced a catch limit. At the same time, the Commission introduced two other related provisions, one increasing the length of the season for minke whales:

Para 7 (e) '....Notwithstanding this paragraph one continuous open season not to exceed eight months may be implemented as far as Greenland is concerned.'

The other, discussed in the Chairman's Report under the heading 'Greenland Whaling' (IWC, 1962) related to not having to use land stations in 'less developed regions':

Para 12 (b) ..... A Contracting Government may in less developed regions exceptionally permit treating of whales without use of land stations, provided that such whales are fully utilised in accordance with this paragraph.'

The next amendment relevant to aboriginal subsistence whaling occurred as a result of discussions at the 16<sup>th</sup> Annual Meeting in 1964 (IWC, 1966). It expanded the text of Para. 2 to read:

'2. It is forbidden to take or kill gray whales or right whales, except by aborigines or a Contracting Government on behalf of aborigines and only when the meat and products of such whales are to be used exclusively for local consumption by the aborigines.'

The paragraph formalised the understanding that the catches had to be made by the hunters themselves or (as occurred in the USSR) a Contracting Government on behalf of the aborigines.

At the 25<sup>th</sup> meeting in 1973 (IWC, 1975), in a reorganisation of the Schedule, the Commission moved the prohibition on taking humpback whales less than 35 feet (10.7 metres) that had formerly been in paragraph 9 of the Schedule and incorporated it in the exemption in paragraph 6 for Greenland humpback whales.

At the 27<sup>th</sup> meeting in 1975 (IWC, 1977b), there were major changes to the Schedule arising out of the adoption of the New Management Procedure and the classification of whales stocks specified in new paragraph 6 of the Schedule. From the perspective of aboriginal subsistence whaling, the major change was to combine the separate paragraphs relating to gray and right whales and humpback whales as follows:

'7. Notwithstanding the provisions of paragraph 6 the taking of 10 humpback whales not below 35 feet (10.7 metres) in length, per year in Greenland is permitted provided that whale catchers of less than 50 gross register tonnage are used

<sup>&</sup>lt;sup>3</sup> International Commission on Whaling, *Twelfth Report of the Commission*, (1961), pp. 20-21. Under the Schedule in effect at the time, paragraph 2 prohibited the killing of gray whales or right whales except for local consumption by aborigines, paragraph 3 prohibited killing of calves or suckling whales or females accompanied by such whales, paragraph 4(1) prohibited any taking of blue whales in the North Atlantic Ocean, and paragraph 6(1) prohibited the taking of humpback whales in the North Atlantic Ocean. *See Schedule* (16 March 1960).

 $<sup>^{4}</sup>$  Note that the words 'close season' were amended to 'prohibition' at the 24<sup>th</sup> meeting to account for the fact that the dated ending of the prohibition was removed.

for this purpose, and the taking of gray or right whales by aborigines or a Contracting Government on behalf of aborigines is permitted but only when the meat and products of such whales are to be used exclusively for local consumption by the aborigines.'

Catch limits and stock classifications for minke (and fin whales) applicable to the Greenland hunts were not specified separately for Greenlanders but were included in the overall catch limits given in paragraph 13 of the November 1975 Schedule for the relevant stocks (and from the November 1977 Schedule in table 1 of the Schedule); at that time catches were taken by both Greenlanders and commercial hunters (e.g. Norwegians) and the limits were not separated - the stock boundaries themselves were not included until the November 1977 Schedule (see item 5.2 below).

# 5.2 1977-1982

At the 29<sup>th</sup> meeting in 1977 (IWC, 1978), in addition to the removal of the exemption to take right (including bowhead) whales discussed previously, the Commission introduced provisional (pending accumulation of sufficient information for classification) Sustained Management Stock (SMS) classifications for the West Greenland fin whale stock and the West Greenland minke whale stock. For the former, the catch limit was set at 4, while for the latter the combined (i.e. commercial and aboriginal subsistence) catch was 397. The season for Greenland was extended to nine months (Para 2.-(e) in the Schedule dated November 1977.

At the special meeting in December 1977 (IWC, 1979a), old Schedule paragraph 7 (from the Schedule dated November 1975) was amended to be more specific with respect to bowhead whales (right whales were no longer mentioned) and introduced the concepts of 'strikes' as well as 'landings'. New wording for the bowhead whale hunt also included specific mention of calves (the existing paragraph referring to all whaling remained – see Item 4.2). The full text (for what was now paragraph 11 in the Schedule dated April 1978) read:

'11. Notwithstanding the provisions of paragraph 6 the taking of 10 humpback whales not below 35 feet (10.7 metres) in length, per year in Greenland is permitted provided that whale catchers of less than 50 gross register tonnage are used for this purpose, and the taking of gray whales, and of bowhead whales from the Bering Sea stock by aborigines or a Contracting Government on behalf of aborigines is permitted but only when the meat and products of such whales are to be used exclusively for local consumption by the aborigines and further provided, with respect to the Bering Sea stock of bowhead whales that:

(a) in 1978, hunting shall cease when either 18 have been struck or 12 landed,

(b) it is forbidden to strike, take or kill calves or any bowhead whale accompanied by a calf.'

The bowhead whale regulations up to the 1980 season are summarised in Table 1; references to those discussions are also provided in Table 1.

Meeting	Season	Strike limit	Landed limit	References
Special meeting December 1977	1978	18	12	(IWC, 1979a)
30th	1978 (rev)	20	14	(IWC, 1979c)
	1979	27	18	(IWC, 1979c)
31st	1980	26	18	(IWC, 1980a)

Table 1

Summary of bowhead whale strike and catch limits for the years 1978 - 80.

At the 30<sup>th</sup> meeting in 1978 (IWC, 1979c), limits were specifically introduced for the eastern stock of gray whales (178 inserted into Schedule Table 1 specifying that they were 'available to be taken by aborigines or a Contracting Government on behalf of aborigines pursuant to paragraph 11, but not for commercial purposes'; the stock was classified as SMS) and a combined catch limit for Greenland catches of humpback and fin whales was introduced (a limit of 15 animals was inserted into Schedule Table 1 for the West Greenland stock of fin whales with a footnote stating that the combined catch limit

of fin and humpback whales should not exceed 15 whales). The combined limit (i.e. commercial and aboriginal subsistence) for catches of minke whales from the West Greenland stock was 394.

At the 31<sup>st</sup> meeting in 1979 (IWC, 1980a), Schedule Table 1 had been amended such that the gray whale catch limit was now 179 whales (the then 10-year average catch; it remained at 179 until 1991, see below) whilst the West Greenland fin was limited to 6 with no mention of humpback whales in the table footnote; the exemption of 10 remained in what was now paragraph 12. The combined limit (i.e. commercial and aboriginal subsistence) for catches of minke whales from the West Greenland stock was 385.

At the 32<sup>nd</sup> meeting in 1980 (IWC, 1981b), the Schedule was amended to include definitions of terms that had relevance to aboriginal subsistence whaling:

"strike" means to penetrate with a weapon used for whaling

"land" means to retrieve to a factory ship, land station, or other place where a whale can be landed

"take" means to flag, buoy or make fast to a whale catcher

"lose" means to either strike or take but not to land.

In addition, the Commission adopted a three-year limit for bowhead whales. The text [now paragraph 13. -(a)(2)(i)] read:

(i) For the years 1981 through 1983, inclusive, the total number of whales landed shall not exceed 45 and the total number of whales struck shall not exceed 65, provided, however, that in any one year the number of whales landed shall not exceed 17.

It also added a new final sentence to Paragraph 13(b) such that it now read:

The taking of gray whales from the Eastern Stock in the North Pacific is permitted, but only by aborigines or a Contracting Government on behalf of aborigines, and then only when the meat and products of such whales are to be used exclusively for local consumption by the aborigines. The number of gray whales taken in accordance with this sub-paragraph shall not exceed the limit shown in Table 1.

The West Greenland fin, humpback and eastern gray whale limits remained unchanged. The combined limit (i.e. commercial and aboriginal subsistence) for catches of minke whales from the West Greenland stock was 444 with a footnote stating that the total catch should:

'not exceed 1,778 in the five years 1981-1985 inclusive.'

# 5.3 1982-1990

Concurrently with the adoption of the commercial whaling 'moratorium', the Commission formalised arrangements for aboriginal subsistence whaling at the 34<sup>th</sup> meeting in 1982 (IWC, 1983a). As noted under Item 2, it added considerable introductory text to the existing paragraph 13 that introduced the principles or objectives for aboriginal subsistence whaling. Interestingly, this is the first time the term 'aboriginal subsistence whaling' was incorporated into the Schedule.

The other main change was to formally bring into this section of the Schedule the Greenlandic hunts for minke and fin whales. The text under paragraph 13.-(b) was as follows:

(4) 'The taking by aborigines of minke whales from the West Greenland stock and fin whales from the West Greenland stock is permitted and then only when the meat and products are to be used exclusively for local consumption. The number of whales taken in accordance with this sub-paragraph shall not exceed the limits shown in Table 1 [of the Schedule].'

At that time, the table did not specify a number for the hunt by West Greenlanders for minke whales but Table 1 set a catch limit of 444 for the area with a footnote to Table 1 that noted that:

'Of the total numbers shown, a proportion corresponding to needs may be taken by aborigines pursuant to paragraph 13(b)(4).

The number for fin whales remained at 6 with a footnote stating that this was:

'Available to be taken by aborigines pursuant to paragraph 13(b)(4).

The classifications for both were given '-' in Table 1.

At the  $35^{\text{th}}$  meeting in 1983 (IWC, 1984), the Commission adopted new limits for bowhead whales. The limits were for two years and were expressed solely in terms of strikes – a total of 43 for the two years 1984 and 1985 with a maximum of 27 in any one year. For the first time, the Schedule also incorporated a footnote referring to the advice of the Scientific Committee that stated that:

'At the end of the first year this figure will be reviewed and if necessary amended on the advice of the Scientific Committee.'

Schedule Para 13.-(b)(1) was amended to change the exemption for humpback whales from 10 to 9 for West Greenland (no date was attached to the exemption text). Table 1 was modified for the West Greenland stock of minke whales to read 300 with two footnotes stating that the total catch should:

'not exceed 588 in the two years 1984 and 1985 inclusive' and '[o]f the total numbers shown, a proportion corresponding to needs may be taken by aborigines pursuant to paragraph 13(b)(4)'.

At the 36<sup>th</sup> meeting in 1984 (IWC, 1985a), the limit for humpback whales off West Greenland was set at 8 but with an additional provision added to the text of Para 13.-(b)(1) stating:

'If the catch limit is exceeded in either 1985 or 1986 so that more than 8 humpbacks are taken in either year, the excess shall be deducted from the catch limit in the following year.'

In addition, the number of fin whales that could be taken was increased to 8 in Table 1, with a footnote stating that the total catch should:

'not exceed 16 in the two years 1985 and 1986 inclusive'.

At the 37<sup>th</sup> meeting in 1985 (IWC, 1986a), the Commission adopted a three-year block limit for bowhead whales that incorporated the seasons 1985-1987 (i.e. including the last year of the previous two-year block) – again it related only to strikes, incorporated a carryover provision and annual review by the Scientific Committee (in a footnote '2'):

'For each of the years 1985, 1986, and 1987  $26^2$  whales may be struck. However, strikes not used in one year may be transferred to the subsequent year, provided that no more than 32 whales may be struck in any one year.'

For the first time, Table 1 in the Schedule provided a specific number (130) for the hunt by West Greenlanders for minke whales with a footnote that the total catch should:

'not exceed 220 in the years 1986 and 1987 inclusive.'

The Commission also removed the humpback whale exemption for Greenland (which had been 8) whilst increasing the catch of fin whales to 10.

At the 38<sup>th</sup> meeting in 1986 (IWC, 1987), the main change was that a catch limit (12) for minke whales for East Greenland (the Central stock) was added to Schedule Table 1 with reference to the footnote specifying that this was:

'Available to be taken by aborigines pursuant to paragraph 13(b)(4).'

The major change at the 39<sup>th</sup> meeting in 1987 (IWC, 1988a) was the introduction of a catch limit (a threeyear block) for the hunt of humpback whales by St Vincent and The Grenadines along with a footnote for annual review based on Scientific Committee advice for bowhead whales. The text read:

'(4) For the seasons 1987/88 to 1989/90 the taking of  $3^2$  humpback whales each season is permitted by Bequians of St Vincent and the Grenadines, but only when the meat and products of such whales are to be used exclusively for local consumption in St Vincent and the Grenadines'

In addition, the existing three-year block limit for bowhead whales was modified and extended to increase the number of strikes in 1987 (32) and 1988 (35).

At the 40<sup>th</sup> meeting in 1988 (IWC, 1989), a number of Schedule amendments were adopted that were relevant to aboriginal subsistence whaling. Three-year blocks (1989-1991) were set for bowhead whales (formally called the 'Bering-Chukchi-Beaufort Seas' stock in the Schedule for the first time) and gray whales. The bowhead limits referred to both landed and struck animals (44 struck annually and 41 landed) with a carryover provision of up to three strikes allowed to be transferred to the following year.

As discussed in the Chair's report (IWC, 1989), the number of minke whales (60) was set for one year only and the classification of the stock was set as Protection Stock (PS) in Table 1 of the Schedule. The number of fin whales was increased to 23, also for one year only.

At the 41<sup>st</sup> meeting in 1989 (IWC, 1990), the number of minke whales for West Greenland was increased to 100 in Table 1 of the Schedule, with a footnote to say that the total catch should:

'not exceed 190 in the two years 1990 and 1991 inclusive.'

The number of fin whales (23) for West Greenland remained the same in Table 1, but a footnote was added stating that the total catch should:

'not exceed 42 in the two years 1990 and 1991 inclusive.'

The catch limits for the East Greenland hunt of minke whales (Central stock) remained at 12 with the footnote stating that this was the:

'Catch limit for each of the years 1990, 1991 and 1992.'

At the 42nd meeting in 1990 (IWC, 1991), the only Schedule change was that the St Vincent and the Grenadines block was extended for an additional three seasons (1990/91 - 1992/93).

# 5.4 1991-1997

At the 43<sup>rd</sup> meeting in 1991 (IWC, 1992), there was a major review of catch limits and, apart from West Greenland fin whales and Central minke whales, the limits were all for three-year blocks. For the bowhead whales, limits were again set for a three-year block from 1992-1994. The precise wording for Para 13.-(b)(1)(i) was:

For the years 1992,1993 and 1994 combined, the total number of whales struck shall not exceed 141, except that:

- (A) any unused strikes up to ten percent (10%) of the total strikes allowed in the years 1989,1990 and 1991 combined shall be carried forward from those years and added to the combined total of strikes for the years 1992, 1993 and 1994; and
- (B) in any one year no more than 54 whales shall be struck and no more than 41 shall be landed.

The block limit for gray whales was reduced to 169 per year in Table 1 (the ten-year average catch) with the text Para 13.-(b)(2)(i) specifying the years 1992, 1993 and 1994. The bowhead and gray whale limits were subject to annual review:

'this provision shall be reviewed annually by the Commission in light of advice from the Scientific Committee.'

The three year block for West Greenland minke whales was set as a strike limit rather than a catch limit for the first time and the numbers included in the text [Para 13.-(b)(3)(ii)] rather than Table 1 as previously:

For each of the years 1992, 1993 and 1994, the number of minke whales struck from the West Greenland Stock shall not exceed 115, and the total number of whales struck shall not exceed 315 in these three years.

The limits for West Greenland fin whales (21) and Central minke whales (12) shown in Table 1 of the Schedule remained catch rather than strike limits and applied to the 1992 season. At the 44<sup>th</sup> meeting in 1992 (IWC, 1993), these limits for West Greenland fin whales and Central minke whales were extended to 1994 (i.e. as the other limits) via footnotes to Table 1 of the Schedule.

At the 45<sup>th</sup> meeting in 1993 (IWC, 1994), the only relevant Schedule change [Para 13.-(b)(4)] was to extend the period for the humpback whale catch off St Vincent and the Grenadines for another three seasons (up to 1995/96) although the number was reduced from 3 to 2 annually.

At the 46<sup>th</sup> meeting in 1994 (IWC, 1995a), all but the St Vincent and the Grenadines hunts required Schedule amendments if the catch limits were to continue. The text adopted for bowhead whales, applicable for four years, read:

(i) For the years 1995, 1996, 1997 and 1998, the number of bowhead whales landed shall not exceed 204 and the number of bowheads landed shall not exceed 68 in 1995, 67 in 1996, 66 in 1997, and 65 in 1998, except that any unused portion of the strike quota of each year shall be carried forward from that year and added to the strike quota of any subsequent years, provided that no more than 10 strikes shall be added to the strike quota for any one year.

In Table 1 of the Schedule, the gray whale limit was set at 140 annually, the West Greenland fin whale limit was set at 19 annually and the limit for East Greenland (the Central stock) minke whales was set at 12 annually; all referred to a footnote specifying that that this was for each of the years 1995, 1996 and 1997. The provision that the bowhead and gray whale limits were 'subject to annual review on the advice of the Scientific Committee' remained in Para 13.-(b). For West Greenland minke whales the strike limits were set at not more than 165 for each of the years 1995, 1996 and 1997) with not more than 465 being able to be struck for the total period [Para 13.-(b)(3)(ii)].

The next change occurred at the  $48^{\text{th}}$  meeting in 1996 (IWC, 1997), when the limit for St Vincent and The Grenadines was extended for the three seasons 1996/97 – 1998/99 (it remained at 2 per year with annual review in the advice of the Scientific Committee).

# 5.5 1997-2001

A major review of catch limits occurred at the 49<sup>th</sup> meeting in 1997 (IWC, 1998a). The Schedule provision for the bowhead whale limit referred to a strike limit only and the five-year block included the final year of the previous four-year block. The full text read:

- (i) For the years 1998, 1999, 2000, 2001 and 2002, the number of bowhead whales landed shall not exceed 280. For each of these years the number of bowhead whales struck shall not exceed 67, except that any unused portion of a strike quota from any year (including 15 unused strikes from the 1995-97 quota) shall be carried forward from that year and added to the strike quota of any subsequent years, provided that no more than 15 strikes shall be added to the strike quota for any one year.
- (ii) It is forbidden to strike, take or kill calves or any bowhead whale accompanied by a calf.
- (iii) This provision shall be reviewed annually by the Commission in light of the advice of the Scientific Committee, particularly its advice arising from the 1998 Comprehensive Assessment<sup>5</sup>.

The catch limit numbers for gray whales were introduced into the text of Paragraph 13 of the Schedule rather than Table 1 for the first time and two hunts were considered as the possibility of a hunt by the Makah tribe within the USA was raised. The full text of Paragraph 13(b)(2) read:

The taking of gray whales from the Eastern stock in the North Pacific is permitted, but only by aborigines or a Contracting Government on behalf of aborigines, and then only when the meat and products of such whales are to be used exclusively for local consumption by the aborigines whose traditional aboriginal subsistence and cultural needs have been recognised.

- (i) For the years 1998, 1999, 2000, 2001 and 2002, the number of gray whales taken in accordance with this sub-paragraph shall not exceed 620, provided that the number of gray whales taken in any one of the years 1998, 1999, 2000, 2001 or 2002 shall not exceed 140.
- (ii) It is forbidden to strike, take or kill calves or any gray whale accompanied by a calf.
- (iii) This provision shall be reviewed annually by the Commission in light of the advice of the Scientific Committee

<sup>&</sup>lt;sup>5</sup> Note: this referred to a specific task of the Scientific Committee at the 1998 meeting (IWC, 1999b).

In addition to the numbers and years in sub-paragraph (i), the changes were the addition of the final proviso to the opening paragraph ('...whose traditional aboriginal subsistence and cultural needs have been recognised') and the addition of sub-paragraph (ii) relating to calves.

Five-year blocks (1998-2002) with carryover were also introduced into the text for minke whales for both the West Greenland and Central stocks. The text for West Greenland also included provision for review on the basis of advice from the Scientific Committee. The full text [Para 13.-(b)(3)] read:

- .....(ii) The number of minke whales from the Central stock taken in accordance with this sub-paragraph shall not exceed 12 in each of the years 1998, 1999, 2000, 2001 and 2002, except that any unused portion of the quota for each year shall be carried forward from that year and added to the quota of any subsequent years, provided that no more than 3 shall be added to the quota for any one year.
- ..... (iii) The number of minke whales struck from the West Greenland stock shall not exceed 175 in each of the years 1998, 1999, 2000, 2001 and 2002, except that any unused portion of the strike quota for each year shall be carried forward from that year and added to the strike quota of any subsequent years, provided that no more than 15 strikes shall be added to the strike quota for any one year. This provision will be reviewed if new scientific data become available within the 5 year period and if necessary amended on the basis of the advice of the Scientific Committee.

The West Greenland fin whale limit was also for five years but the numbers (19 per year) remained in Schedule Table 1.

The 51<sup>st</sup> meeting in 1999 (IWC, 2000) only amended the Schedule with respect to the St Vincent and The Grenadines hunt. The limit remained at two per year (with a footnote referring to annual review on the basis of the report of the Scientific Committee) and the provision was for a three season block finishing in 2002 (i.e. the same year as the limits for the other hunts); the seasons were renamed as a single year rather than as seasons as previously (e.g. 1998/99) although the hunt itself can occur at the end of one year and the beginning of the next. In addition, it added a prohibition on calves into the paragraph. The full text [Paragraph 13.-(b)(4)] read:

For the seasons 2000 to 2002 the taking of  $2^1$  humpback whales each season is permitted by Bequians of St Vincent and The Grenadines, but only when the meat and products of such whales are to be used exclusively for local consumption in St Vincent and The Grenadines. It is forbidden to strike, take or kill calves or any humpback whale accompanied by a calf.

#### 5.6 Recent years: 2002-2010

Meeting	Limit	For	Against	Abstain	References				
2010 (62 <sup>nd</sup> )	Greenland humpback		Consen	sus	(IWC, 2011a)				
2009 (Special)	Greenland humpback		Inquora	ate	(IWC, 2011b)				
2009 (61 <sup>st</sup> )	Greenland humpback		Vote post	ooned	(IWC, 2010a)				
2008 (60 <sup>th</sup> )	Greenland humpback		Failed 3	3/4	(IWC, 2009a)				
2007 (59 <sup>th</sup> )	Greenland: all	41	11	16	(IWC, 2008a)				
2007 (59 <sup>th</sup> )	All except Greenland		Consen	sus	(IWC, 2008a)				
2002 (Special)	BCB Bowhead		Consen	sus	(IWC, 2004b)				
2002 (54 <sup>th</sup> )	BCB Bowhead		Failed 3	3/4	(IWC, 2003a)				
2002 (54 <sup>th</sup> )	All except BCB bowhead		Consen	sus	(IWC, 2003a)				

The Table below summarises the Commission's decisions from 2002 -2010.

# 5.6.1 The 2003-2007 block limits

At the 54<sup>th</sup> meeting in 2002 (IWC, 2003a), the amendments to the Schedule for the Greenland hunts and for the gray whale hunts related only to the years specified (updated to refer to the five years 2003-2007). There changes to Paragraph 13.-(b)(4) relating to the hunt for St Vincent and The Grenadines involved the number of takes (up to 20 for the block), formal reference to legislation and a statement relating to the limits for the final two years and advice from the Scientific Committee. The full text read:

For the seasons 2003-2007 the number of humpback whales to be taken by the Bequians of St. Vincent and The Grenadines shall not exceed 20. The meat and products of such whales are to be used exclusively for local

consumption in St. Vincent and The Grenadines. Such whaling must be conducted under formal legislation that accords with the submission of the Government of St. Vincent and The Grenadines (IWC/54/AS 8 rev2). The quota for the seasons 2006 and 2007 shall only become operative after the Commission has received advice from the Scientific Committee that the take of 4 humpback whales for each season is unlikely to endanger the stock.

The Commission was unable to agree a Schedule amendment for the bowhead whale limits.

The bowhead whale hunt was addressed at a special meeting held in October 2002 (IWC, 2004b) where the following text was adopted:

- (i) For the years 2003, 2004, 2005, 2006 and 2007, the number of bowhead whales landed shall not exceed 280. For each of these years the number of bowhead whales struck shall not exceed 67, except that any unused portion of a strike quota from any year (including 15 unused strikes from the 1998 – 2002 quota) shall be carried forward and added to the strike quotas of any subsequent years, provided that no more than 15 strikes shall be added to the strike quota for any one year.
- (ii) It is forbidden to strike, take or kill calves or any bowhead whale accompanied by a calf.
- (*iii*) This provision shall be reviewed annually by the Commission in light of the advice of the Scientific Committee.
- (iv) The findings and recommendations of the Scientific Committee's in-depth assessment for 2004 shall be binding on the parties involved and they shall modify the hunt accordingly.

# 5.6.2 Harmonising paragraph 13

At the 55th meeting in 2003 (IWC, 2004a), a group comprising the Russian Federation, Denmark, Australia, the USA and the Secretariat was charged with reviewing Schedule Paragraph13, to determine how consistency in approach across all such whaling operations could be achieved and to propose some amendments to the Schedule for review and decision-making at the 56th Annual Meeting (see also discussion under Section 1 of non-Schedule changes adopted). The main changes recommended in the context of the Schedule and adopted by consensus by the Commission (IWC, 2005) can be summarised as follows:

(1) harmonising the text regarding calves (see Item 4.2 for the full text);

(2) removing the text related to gray whales referring to 'whose traditional, aboriginal subsistence and cultural needs have been recognised' (c.f. Item 5.5); and

(3) adding a single reference to national legislation – 'All aboriginal whaling shall be conducted under national legislation that accords with this paragraph'.

At the 57th meeting in 2005 (IWC, 2006a), a footnote was added to Table 1 of the Schedule relating to the West Greenland fin whale hunt. It read:

'At IWC/57 in Ulsan, Republic of Korea, June 2005, Denmark (Greenland) voluntarily reduced the catch limit for the West Greenland stock of fin whales from 19 to 10 for each of the years 2006 and 2007.'

# 5.6.3 The 2008-2012 block limits

At the 59<sup>th</sup> meeting in 2007 (IWC, 2008a), the Schedule amendments for the bowhead, gray and St Vincent and the Grenadines humpback whale hunts all hunts amounted only to changing the years to refer to a new five-year block (i.e. 2008-2012).

The amendments were more complex for the Greenland hunts, and in particular Greenland's request with respect to West Greenland to be allowed to take two additional species: the bowhead (two strikes per year) and humpback (ten strikes per year) in addition to the fin (19 strikes per year) and common minke whales (200 strikes per year. The Schedule was amended to modify catch limits for fin and minke whales, and to allow the take of bowhead whales, but the requested amendment to permit a humpback whale hunt was not adopted. The adopted text for the Greenland hunts read:

(3) The taking by aborigines of minke whales from the West Greenland and Central stocks and fin whales from the West Greenland stock and bowhead whales from the West Greenland feeding aggregation is permitted and then only when the meat and products are to be used exclusively for local consumption.

- (i) The number of fin whales struck from the West Greenland stock in accordance with this sub-paragraph shall not exceed 19 in each of the years 2008, 2009, 2010, 2011 and 2012.
- (ii) The number of minke whales struck from the Central stock in accordance with this sub-paragraph shall not exceed 12 in each of the years 2008, 2009, 2010, 2011 and 2012, except that any unused portion of the quota for each year shall be carried forward from that year and added to the quota of any of the subsequent years, provided that no more than 3 shall be added to the quota for any one year.
- (iii) The number of minke whales struck from the West Greenland stock shall not exceed 200 in each of the years 2008, 2009, 2010, 2011 and 2012, except that any unused portion of the quota for each year shall be carried forward from that year and added to the strike quota of any of the subsequent years, provided that no more than 15 strikes shall be added to the strike quota for any one year. This provision will be reviewed annually by the Commission, according to the findings and recommendations by the Scientific Committee, which shall be binding.
- (iv) The number of bowhead whales struck off West Greenland in accordance with this sub-paragraph shall not exceed 2 in each of the years 2008, 2009, 2010, 2011 and 2012, except that any unused portion of the quota for each year shall be carried forward from that year and added to the quota of any subsequent years, provided that no more than 2 shall be added to the quota for any one year. Furthermore, the quota for each year shall only become operative when the Commission has received advice from the Scientific Committee that the strikes are unlikely to endanger the stock.

The changes to the previous text (in addition to years applicable) relate to: the change to the word 'struck' in sub-paragraphs (i) and (ii); the greater carryover flexibility given by the addition of the words 'of the' prior to the words 'subsequent years' in sub-paragraph (ii); the reference to the findings and recommendations by the Scientific Committee being binding in sub-paragraph (iii); and the new sub-paragraph (iv) relating to the bowhead whale hunt.

# 5.6.4 West Greenland humpback whales: 2009-2010

At the 61st meeting in 2009 (IWC, 2010a), the Chair requested that rather than resort to a vote, the item be left open for an intersessional meeting. That intersessional meeting was inquorate (IWC, 2011b) and so the matter was passed to the  $62^{nd}$  meeting in 2010 At that meeting (IWC, 2011a), the Schedule was amended regarding the Greenland hunts by amending paragraph 13(b)(3) to read:

'(3) The taking by aborigines of minke whales from the West Greenland and Central stocks and fin whales from the West Greenland stock and bowhead whales from the West Greenland feeding aggregation and humpback whales from the West Greenland feeding aggregation is permitted and then only when the meat and products are to be used exclusively for local consumption.'

Paragraph 13(b)(3) of the Schedule was also amended to reduce the catch limit for fin whales from 19 per year to 16 per year, and for minke whales from the West Greenland stock from 200 per year to 178 per year, and by the addition of a new paragraph 13. (b)(v):

'(v) The number of humpback whales struck off West Greenland in accordance with this sub-paragraph shall not exceed 9 in each of the years 2010, 2011 and 2012, except that any unused portion of the quota for each year shall be carried forward from that year and added to the strike quota of any of the subsequent years, provided that no more than 2 strikes shall be added to the strike quota for any one year. This provision will be reviewed if new scientific data become available within the remaining quota period and if necessary amended on the basis of the advice of the Scientific Committee.'

In addition, text was added to the existing paragraphs [13(b)(iii)and (iv)] relating to the West Greenland common minke whale and bowhead whale hunts regarding scientific advice as follows:

'This provision will be reviewed if new scientific data become available within the 5 year period and if necessary amended on basis of the advice of the Scientific Committee.' Finally, a footnote was added that stated:

At IWC 62 in Agadir, Morocco, June 2010, Denmark and Greenland agreed to voluntarily reduce further the catch limit for the West Greenland stock of fin whales from 16 to 10 for each of the years 2010, 2011 and 2012.

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The IWC website contains pdf versions of the full Resolutions and the Technical Committee documents cited here. It also contains other documents that have been submitted by ASW governments regarding need.

#### Table 2

Summary of regulations in force for stocks presently subject to aboriginal subsistence whaling up to 1976 (see text for details) by year decisions were taken - This table needs to be expanded to include Greenland fin and minke whales. Fins were taken under a 6 month season and a length limit, with short whales allowed provided they were taken for local consumption. Like humpbacks, fin whales could be "exceptionally" processed without the use of a land station. Minke whales were allowed to be processed without using a land station or factory ship, and were given an 8 month season. See discussion of Greenland amendments to the Schedule adopted in 1961, page 12.

All	It is forbidden to take or kill suckling calves or female whales accompanied by calves - all operations																									
Green land hump					on hur nues b		ks in N	Jorth A	tlantic	(all)	exei	mptior	n <500	GRT; 6	mon	th sea	ison; r	iot neo	cessai	rily lan	d stati	ions, 1	0 wha	les		
backs													Minir	num le	ength	limit (	35ft)									
Right and gray	F	Right a	ind gra	ay wha	nale exemption for aborigines and local consumption								I	'by aborigines or a CG on behalf of' added in 1964. Right whales (bowheads) removed in 1977 and gray whales in 1978 to their own paragraphs											to	
Year of meetin g	19 46- 19 51	19 52	19 53	19 54	19 55	19 56	19 57	19 58	19 59	19 60	19 61	19 62	19 63	19 64	19 65	19 66	19 67	19 68	19 69	19 70	19 71	19 72	197 3	197 4	197 5	19 76
Numb er of																										
meeti ng		4t h	5t h	6th	7th	8th	9th	10t h	11t h	12 th	13 th	14 th	15 th	16 th	17 th	18 th	19 th	20 th	21 st	22 nd	23 rd	24 th	25t h	26t h	27t h	28 th

#### Table 3

Short summary of regulations in force *by season* not year of meeting decision taken for aboriginal subsistence whaling from the 1977 season (see text for details). Note that C is used for catch limits, S is used for strike limits and L is used for landed animals. For block limits the text either states p.a. where it is per annum or gives a total for the block. Where a number is given after 'max' this apples to the maximum number in any one year. CO shows that a carryover provision is in force, where possible some clarification of that is included but refer to the text for full details. SC refers to the fact that there is a provision for annual advice from the Scientific Committee (in two bowhead cases specific reference is made to a particular assessment (1998A, 2004A). 'Calf' refers to specific rules by hunt over and above the general provision.

Limit starts	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	
Greenland	humpt	backs con	tinued fro	om befor	е			9C	8C	Exem	ption								
humpback	(10C p	o.a)								remov	ed								
										10C									
W Greenland			15 incl.	6C	6C	6C	6C	6C	16C	(max	10C	10C	23C	42 (	max	21	2	1 p.a.	
fin			humps						8					23C				I	
W Greenland							para	para	para	22	0C	110C	60C	1900	(max	31	55 (ma	ax 115)	
minke							n/s	n/s	n/s		130)	1100	000		c) CO	510		ix 110)	
THINKO .							11/5	145	11/3		0			1000	,, 00				
									ĺ		Ĭ				1		1		
Central minke											12C	12C	12C		12C		12	C p.a.	
											120	120	120		120	1	12	с р.а.	
St V&G													3 p.a.			2		200	
humpback													5 p.a.			3 p.a. 2 p.a.			
пипрраск													SC			SC		SC	
													30			30	-	SC	
Eastana Casu				1700	1700	1700	1700	1700	1700	1700	1700	1700		1700			1/0		
Eastern Gray				178C	1790	1790	1790	1/90	1790	179C	1790	179C		179C	, 1		169		
																	SC	;	<u> </u>
									-										
										each									
										ax 32)	<b>x</b>								
B-C-B		20S/14L*	27S/18L	26S/18L	65S	/45L (	max	43S			32S	35S	44	S/41L		141S		54S, 41L)	
Bowhead						17L)		27	- /					CO(3)	,	CO 10%			
		Calf	Calf	Calf		Calf		SC/	calf	SC	/calf	SC/calf		SC/ca	lf		SC/c	alf	
		ued from					or kil	l suckl	ing ca	lves or	fema	le whale	s						
	accom	panied by	y calves -	- all oper	ations	5													
Limit starts	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	

			l										l				l			
Table cont. Limit starts	1995	1996	1997	1998	1000	2000	2001	2002	2002	2004	2005	2006	2007	2008	2009	2010	2011	2012		
W. Greenland	1775	1770	1771	1770	1777	2000	2001	2002	2003	2004	2003	2000	2007	2000						
bowhead														2S p.a. CO max 2						
																SC / c	alf			
<u> </u>			L																	
Greenland humpback	exemp (cont.)	otion remo	oved														9 wha	lles		
пиприаск	(cont.)		1														SC/c	alf		
W Greenland fin					1	9 p.a.		•			19 p.a.			16 p.a	a. (vol	untaril	y 10, 2	2010-12)		
																	<u> </u>			
W Greenland minke	46	ōS (max 1	165S)	1	, 75S p	.a. CC	) 15S	<u> </u>		175 S	5 p.a. C	CO 15	ļ	200 p.a. then amended to 178 p.a. 2010-12, CO 15						
					L	SC		F.			SC/cal	f	6	Calf	/ SC (	bindin	g up to	2010)		
																	ļ			
Central minke		12 p.a.	1		12	C p.a		1	r	1	2C p.a	). I	I		12S p	o.a. C(	) max	3		
St V&G humpback	2 p.a	. (cont.)		2 p.a.	.a. 2 p.a.					20 p.a.					20 p.a.					
патрраск	SC	(cont.)		SC	SC SC/calf					Calf / SC for 2006 and 2007 / legislation					Calf					
						Ì					giorati					1	1			
Eastern Gray		140C p.a	a.	620	ЭСр.а	a. (ma	x 140	)	6	520C p	.a. (m	ax 140)			620C	p.a. (r	nax 14	0)		
		SC	1	-	S	C/calf	1	1	r		SC/cal	f	r		1	SC/ca	alf			
				280L (	may 6	76) (		15												
B-C-B	204L	. (max 68		995-98)		15)0	U III2	CT XI	2801	. (max	67S) (	CO max	(15	280	) DL (max	x 67S)	CO m	nax 15		
Bowhead			nax 10S C/calf		S	C (199	) 20 Λ \/r	alf	SC	(200/	1A) hin	ding/ ca	alf			SC/ca	alf			
		30	n can		5				50	, (2002		uny ta			1	30,0				
		forbidden es accom			kill suckling calves or										raph for all hunts at 2003 Annual leeting					
	icitian		p. by can										111	coung			1			
Limit starts	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012		