

The Review of Significant Trade in the Narwhal (*Monodon monoceros*)

A briefing by WDCS for the 20th meeting of CITES Animals Committee

Introduction

A Review of Significant Trade in the products of the Narwhal (*Monodon monoceros*) was conducted by Animals Committee in 1995. No comprehensive population surveys have been conducted since 1979, but hunting has increased in that time. Currently no hunting quotas are set. Based on historical and current recorded trade levels and biological and management information provided by both regional and international bodies, the Narwhal may be threatened by unsustainable hunting which, in turn, supplies an international trade in its tusks and teeth.

This information paper provides background information on the status of, and international commercial trade in, the Narwhal.

About the Narwhal

The Narwhal (*Monodon monoceros*) is a medium sized toothed whale that is endemic to Arctic waters where it is hunted by aboriginal hunters in Greenland and Canada. In addition to its value for food (mainly mattak, which is skin and some of the adhering blubber), the Narwhal is also hunted, particularly in the Eastern Canadian Arctic and Greenland, for its unique spiralled ivory tusk. This is commercially valuable and traded internationally through middlemen who buy the whole tusks or carvings from hunters. There is no evidence of regular international trade in mattak, although 971 'skin pieces' were exported from Greenland to Canada in 1999¹. Several hundred Narwhal teeth have been reported in trade in the last decade, but it is not clear if these have been accurately reported.

Narwhals were included in CITES Appendix II in 1979. Its IUCN category is Data Deficient. The species is included in Appendix II of the Convention on Migratory Species (CMS). Its range States are Canada, Denmark (Greenland), Iceland, Norway (Svalbard), the United States (Alaska) and the Russian Federation. However, the vast majority of the world's Narwhals occur in Canada and Greenland, and they are hunted intensively in both of these countries.

Narwhals have a pronounced annual migratory cycle and three 'centres of distribution' are recognised: Baffin Bay/Davis Strait and adjoining channels, northern Hudson Bay/southern Foxe Basin, and the Greenland Sea/Svalbard area (IWC 2000)². Recent satellite-linked telemetry and aerial survey data have suggested finer-scaled stock structure. Based on data collected in the 1970s and 80s, the shared 'Baffin Bay' stock between eastern Canada and west Greenland was estimated to number 34,000 (95%CI 21,600-54,600)³ and the east Greenland stock about 300⁴. The Hudson Bay stock was estimated at 1355 (90%CI 1000-1900) in 1984⁵. In all cases, the estimates were based on numbers seen at the surface and were not adjusted for animals that would have been missed by observers or unavailable at the surface as the aircraft passed overhead. Further published estimates include 18,000 (90%CI 15,000-21,000) for the Canadian High Arctic in 1984 (Richard et al. 1994), also uncorrected for missed whales. A 1996 aerial survey of a large part of the summer range in Canada produced an estimate of 45,358 (95%CI 23,397-87,932), fully corrected to account for missed animals (Innes et al. 2002). Additional large-scale aerial surveys were undertaken in the Canadian Arctic in 2002 and 2003 but the results apparently are still being analyzed. An index estimate for narwhals wintering in West

¹ WCMC trade data

² Report of the Sub-committee on Small Cetaceans. J. Cetacean Res. Manage. 2 (Suppl.):235-263

³ Reeves, R.R., Dietz, R. & Born, E.W. 1994. Overview of the special issue "Studies of white whales (*Delphinapterus leucus*) and narwhals (*Monodon monoceros*) in Greenland and adjacent waters". Meddr. Grønland, Biosci. 39: 3-11. Copenhagen 1994-04-22.

⁴ Larsen, F., Heide-Jørgensen, M.P., Martin, A.R. & Born, E.W. 1994. Line-transect estimation of abundance of narwhals (*Monodon monoceros*) in Scoresby Sund and adjacent waters. Meddr. Grønland, Biosci. 39:87-91.

⁵ Richard, P. 1991. Abundance and distribution of narwhals (*Monodon monoceros*) in northern Hudson Bay. Can. J. Fish. Aquat. Sci. 48:276-283.

Greenland in 1998-99 was 2,861 (95%CI 954-8,578) (Heide-Jørgensen and Acquarone 2002). Recent photographic aerial surveys of narwhals in Inglefield Bredning, NW Greenland, indicated a significant decline in abundance there since 1985 (Heide-Jørgensen 2004⁶). Little information exists about basic biological parameters of Narwhals, such as reproduction rates and natural mortality. In fact, scientists use data from the partially sympatric Beluga to estimate key life history parameters for the Narwhal.

Reports of Narwhal catches in both Greenland and Canada are believed to be incomplete, and under-reporting is significant in some areas. Undocumented mortality of Narwhals that are shot but not landed ('struck and lost') is believed to be higher than 30% in some areas⁷.

Between 1993 and 2001, the average reported landed catch of Narwhals by Greenland was 662 per year⁸ (compared to 270 between 1970-1980⁹). Canadian hunters landed an average of 364 Narwhals annually between 1996 and 2000¹⁰. However, making reasonable allowances for struck and lost animals, mortality due to hunting certainly exceeded 1,000 Narwhals annually for the Baffin Bay stock through the 1990s¹¹ and could have been as high as 1,500. In 1996, Canada (quoting the Arctic Fisheries Advisory Committee) told CITES that an offtake of 2.5% a year would be sustainable for this stock¹². However, it justified its hunting level by doubling the population estimate that was based on an aerial survey of half the known range. At the same time, Greenland quoted the advice of the Greenland Fisheries Research Institute that "2-4% of a narwhal population can be harvested without jeopardising the sustainability of the catches"¹³. Those statements do not reflect current understanding of narwhal stock structure and status.

During the period 1981 – 1990, the catch of narwhals from east Greenland averaged at least about 80 animals per year¹⁴. More recent figures are not available.

Regulation of Narwhal hunting and trade

The stocks of Narwhals in Davis Strait and Baffin Bay shared by Canada and Greenland are jointly monitored by the Canada Greenland Joint Commission on Conservation and Management of Narwhal and Beluga (the JCNB), although responsibility for management and conservation rests with the national agencies. The Scientific Committee of the JCNB met most recently at a joint meeting with the Scientific Committee of NAMMCO in February 2004.

Greenland

The Home Rule Government sets no quota on the number of Narwhals that can be taken or traded annually by more than 11,000 licenced professional and leisure hunters in Greenland. Hunters are required to provide a hunting report documenting the number and sex of Narwhals killed, and the hunting gear and type of vessel used, as well as details about the hunter, including address and social security number. However, in 1996, Greenland acknowledged to CITES that it had difficulties in obtaining this information from some areas and in ensuring surveillance of the hunt due to inadequate coverage by Wildlife Inspectors¹⁵. Although a national inspection system has since been implemented, each Inspector still has, on average, 50,000 km² coastal areas to control. In 2002, the spokesman for

⁶ Paper presented to JCNB/NAMMCO Joint Scientific Meeting, Montreal, Canada, 3-6 February 2004 . NAMMCO/SC/12-JCNB/SWG/2004-JWG/14

⁷ The JCNB/NAMMCO Joint Scientific Meeting in 2001 noted that "The reported ratio of killed-but-lost to landed Narwhal is between 6% and 31% for 4 communities in 1999 and 2000. These ratios rise to between 19% and 86% if it is assumed that all narwhal reported as "wounded & escaped" are in fact lethally wounded".

⁸ Heide-Jørgensen, M.P. Reconstructing catch statistics for narwhals in West Greenland, 1862-2001: A preliminary compilation (ver. 3). Paper presented to JCNB/NAMMCO Joint Scientific Meeting, Montreal, Canada, 3-6 February 2004 (NAMMCO/SC/12-JCNB/SWG/2004-JWG/15)

⁹ Heide-Jørgensen M.P. 1994. Distribution, exploitation and population status of white whales (*Delphinapterus leucas*) and narwhals (*Monodon monoceros*) in West Greenland. – Meddr Gronland, biosci. 39: 135-149. Copenhagen 1994-04-22

¹⁰ JCNB/NAMMCO Joint Scientific Meeting. Qeqertarsuaq, Greenland, May 9-13, 2001.

¹¹ Executive Summary. JCNB/NAMMCO Joint Scientific Meeting. Qeqertarsuaq, Greenland, May 9-13, 2001

¹² Doc. AC.13.14.1 Implementation of Resolution Conf. 8.9. Thirteenth Meeting of the Animals Committee. CITES 1996

¹³ Doc. AC. 13.14.1 Implementation of Resolution Conf. 8.9. Thirteenth Meeting of the Animals Committee. CITES 1996

¹⁴ Dietz, R., Heide-Jørgensen, M.P., Born E. W. & Glahder C. M. 1994. Occurrence of narwhals (*Monodon monoceros*) and white whales (*Delphinapterus leucus*) in East Greenland. – Meddr Gronland, Biosci. 39: 69-86. Copenhagen 1994-04-22.

¹⁵ Doc. AC.13.14.1 Implementation of Resolution Conf. 8.9. Thirteenth Meeting of the Animals Committee. CITES 1996

Wildlife Inspectors, speaking about violations of Greenland's whaling regulations, demanded that the number of Inspectors and Assistant Inspectors should double¹⁶.

Tusks are bought from hunters by Pilersuisoq, a home rule owned company that buys non-food hunting products from the hunters for re-sale.

In 1999, the Greenland Government began drafting new regulations for Beluga and Narwhal hunts that would establish annual and regional quotas, prohibit the killing of females and juveniles, prohibit hunting using nets and set trading quotas for meat and blubber (no mention is made of tusks). Although the draft regulation was submitted for public hearing in July 2002 and was expected to enter into force no later than 1 January 2003¹⁷, it still has not been adopted. Both Beluga and Narwhal hunts in West Greenland continue to be conducted at high levels and subject to no quota.

In 1992, the JCNB issued a press release stating that, if there was no regulation of Narwhal and Beluga hunts in Greenland, the stocks would be depleted in 1999. Today it is recognised that Beluga in the West Greenland area in winter are depleted to less than 25% of their abundance in the early 1950s¹⁸, and the suggestive evidence of a steep decline in narwhal abundance based on recent surveys in West and Northwest Greenland indicates that the Narwhal population is following a similar pattern¹⁹. Indeed, as the JCNB stated in 2001, "there is an urgent need for a focused and intensive effort to improve knowledge of Narwhal, to strengthen the basis for advice on the conservation and management of this species in the north".²⁰

According to Home Rule Executive Order no. 30 of 11th October 1995 on Whaling of Beluga and Narwhal, the export of Narwhal products requires a permit from the Home Rule.

Canada

In 1971, after years of unregulated hunting and trade, the Government enacted Narwhal Protection Regulations that established an annual catch quota for individual Inuit hunters. In 1976, this system was replaced by quotas awarded to settlements and enforced by the issuance of tags to be attached to the carcass or tusk of each Narwhal taken. However, the Government of Canada abandoned the quota scheme. The average reported annual catch by the Baffin Island communities between 1996 and 2000 was 364 Narwhals²¹.

Extent and value of trade

According to the last Review of Significant Trade by CITES, international trade in Narwhal tusks (including re-exports) averaged 113 tusks annually between 1980 and 1985 and 317 tusks between 1987 and 1992²². WCMC's recent records show an average of 297 tusks traded annually between 1992 and 1996, and 205 tusks between 1997 and 2001. However, Greenland has not issued annual trade reports for 2000 to 2002, and there is no way to judge how complete these trade figures are. As Greenland has not submitted Annual Reports for three consecutive years, it is not clear why the Secretariat has not included it in the list of Parties against which the Standing Committee may apply trade sanctions in accordance with Decision 11.37.

Canada

Historically most tusks from the Canadian Arctic were sold within Canada or exported to the UK and marketed on a weight basis. In 1984, new EC Regulations required member states to treat all cetaceans species as if they were on CITES Appendix I. This prohibition on import for primarily commercial purposes (with the exception of personal effects) significantly slowed the trade in tusks through Europe and the price paid to hunters fell. By the beginning of the 1990s, the primary importing

¹⁶ www.knr.gl (7th Febr., 2002): "Police fear more infractions than reported"

¹⁷ Letter from Department of Fishery, Hunting and Agriculture to participants at the public hearing. Dated 4 May 2002 (file no.: 66.00, letter no.020747)

¹⁸ Executive Summary. JCNB/NAMMCO Joint Scientific Meeting. Qeqertarsuaq, Greenland, May 9-13, 2001. P.v.i.

¹⁹ Heide-Jørgensen, M.P. Aerial digital surveys of narwhals, *Monodon monoceros*, in northwest Greenland. Paper presented to JCNB/NAMMCO Joint Scientific Meeting, Montreal, Canada, 3-6 February 2004 (NAMMCO/SC/12-JCNB/SWG/2004-JWG/14)

²⁰ JCNB/NAMMCO Joint Scientific Meeting. Qeqertarsuaq, Greenland, May 9-13, 2001.p 74

²¹ JCNB/NAMMCO Joint Scientific Meeting. Qeqertarsuaq, Greenland, May 9-13, 2001. P.i.x.

²² Review of Significant Trade in Animal Species included in CITES Appendix II. Final Report to the CITES Animals Committee. March 1996.

nations became Switzerland and Japan and prices (by then calculated by length) rose to near their peak levels of the early 1980s. In 1990, Canadian Narwhal hunters could earn more than US\$800 for an average unbroken 2 metre tusk²³. No more recent prices are available. Between 1997 and 2001, Switzerland imported an average of 27.8 tusks annually from Canada. Between 1992 and 1996, it imported 15 tusks in total from Greenland and 10 from Canada²⁴.

Between 1992 and 2001, Canada exported 755 tusks (an average of 75.5 annually) and 20 carvings.

Greenland

Between 1992 and 2002, at least 26 countries have imported Narwhal products from Greenland. The majority of tusks from Greenland are exported to Denmark. Although all cetacean species are listed on Annex A (equivalent to CITES Appendix I) of the European Regulations that implement CITES, a special exemption is made for the products of cetaceans that are "taken by the people of Greenland under licence granted by the competent authority of Greenland or Denmark".

Unlike in Canada, Greenlanders often make souvenirs and craft items for export from small or damaged tusks. The CITES Guidelines on the Submission and Preparation of Annual Reports require reports to be submitted "in standard units of measure and never in non-standard units", and the description of the specimen to indicate the type of product traded. However, Greenland regularly reports the export of 'carvings', 'sets of carvings' (with no details of the number of carvings in the set, or their size or weight) and 'ivory products'²⁵. As a carving or ivory product could be anything from a small carved bead to a three metre long engraved tusk, failure to report specific details of the item(s) traded makes it impossible to determine how many individual animals contribute to the trade. Furthermore, it is not possible to identify from the trade data whether a carving or ivory product is a tusk, tooth or bone. As the 1995 Review of Significant Trade in Narwhals noted, "Standardisation of terms (teeth, tusks) used when reporting trade to CITES is also required to identify the numbers of animals represented by this trade".

Between 1992 and 2002, Denmark imported 1,124 tusks, 3,793 carvings and several more sets of carvings from Greenland. It re-exported 356 tusks, 1109 carvings and 500 unidentified 'specimens'. Of the re-exported carvings, 628 were re-imported by Greenland. As the Review of Significant Trade noted in 1996, "Under the EU's common border policy, once Narwhal products have entered Denmark, they can be traded with any other EU country without the need for further CITES permits". Therefore the re-export figures for Denmark likely under-represent the true amount of trade with other EU countries.

In Japan and other Asian countries, Narwhal tusks have been valued for their claimed medicinal properties as well as for ornamental purposes. Between 1992 and 2002 Denmark reported the re-export of 3 tusks and 1 carving to Japan while, over the same period, Japan imported 11 tusks and 5 carvings from Greenland.

In October 2003, a WDCS researcher dispatched a questionnaire by email to 40 Chinese Medicine shops in Japan. Of the eight shops who responded to the survey, none acknowledged offering medicine derived from narwhal tusks, but three explained that tonic containing ground narwhal tusk is used to treat fever, toxicity, pleurisy, measles, pain and venereal disease.

A researcher visited all the shops that had responded to the survey. One (one of a chain of 10 stores) offered tonic containing ground narwhal tusk and was told that a large volume of one brand (Great Emperor) was sold annually, mainly to male customers in their 50s and 60s. Great Emperor was offered for sale at Y 57,000 (US\$540) for 50g or Y 98,000 (US\$929) for 100g. Another brand, which was not seen (Kotengen Seiryokuge) was said to be sold at Y1.8 million (US\$17,000) for 50g and Y 3 million (US\$28,454) for 100g.

²³ Reeves, R.R. 1993. Domestic and international trade in narwhal products. *TRAFFIC Bulletin* 14(1):13-20.

²⁴ Swiss Federal Veterinary Office Annual Report to the International Secretariat on the Management of the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

²⁵ For example, since 1990 Greenland has reported the export of 3442 carvings, 79 sets of carvings and 86 ivory products in addition to 1735 tusks and 1200 teeth.

A WDCS survey of tourist shops in Ilulissat, Greenland between 10-14 July 2003 found an uncarved 180cm Narwhal tusk for sale at DKK15,000 (US\$ 2,300), and a 150 cm tusk at DKK10,000 (US\$ 1,539). It also found a necklace made of carved tusk for DKK 3,550 (US\$515), earrings at DKK 350/pair (US\$53) and rings at DKK 400 – 500 (US\$ 61-76) each. By contrast, in 1997, a 200cm tusk cost 8,000 Danish kroner, (\$1,100 USD)²⁶.

The commercial value of Narwhal ivory

No in-depth studies have been undertaken since the early 1990s²⁷.

Recent evaluations of Narwhal Status

NAMMCO

In 1999, the North Atlantic Marine Mammal Commission asked its Scientific Committee to identify the information needed to assess the level of sustainable utilisation of the 'West Greenland Narwhal'. The Committee responded that developing such recommendations would require significant additional research and could not be done at that time.

JCNB and NAMMCO

A joint meeting of the NAMMCO Scientific Committee Working Group on the Population Status of Narwhal and Beluga in the North Atlantic and the Canada/Greenland Joint Commission on Conservation and Management of Narwhal and Beluga Scientific Working Group (the Joint Working Group) in May 2001, reached some important conclusions about Narwhal status and the sustainability of current hunts. The Executive Summary concluded:

- There are no recent reliable survey estimates for Narwhal in either the Canadian High Arctic or West Greenland;
- New information seriously challenges our previous confidence that the hunting has been sustainable;
- There is a high chance that some stock units are contributing to several hunts annually;
- There is a risk that at least some stock units may be over-harvested;
- Until we know more about the Narwhal, it may be necessary to assume that they live, grow and reproduce like beluga;
- All these results argue strongly for a focussed effort to assess these stocks as quickly as possible.

Aerial surveys and radio-tagging since then have reinforced that concern, especially with regard to the narwhal stocks in North and West Greenland.

The Joint Working Group also noted in 2001 that the reported ratio of killed-but-lost to landed Narwhal is between 3 and 31% for four communities in Canada in 1999 and 2000. These ratios would increase to between 19 and 86% if it were assumed that all Narwhals reported as "wounded and escaped" were actually lethally wounded²⁸.

International Whaling Commission (IWC)

The IWC's Scientific Committee reviewed the status of Narwhals in 1992 and expressed continuing concern about the sustainability of harvests from the Baffin Bay stock²⁹. It conducted another review in 1999 and reiterated its recommendations from 1992 concerning the importance of studies to identify stocks and efforts to improve catch reporting and estimation of hunting losses. It should be noted that Canada withdrew from the IWC in 1982 and that Greenland has consistently rejected the idea of IWC competence over small cetaceans, including the narwhal. Consequently, the two countries'

²⁶ Polar Exposure. Environmental Threats to Arctic Marine Life and Communities. Swiss Coalition for the Protection of Whales. 1997.P3

²⁷ Reeves, R.R. 1992. Recent developments in the commerce in narwhal ivory from the Canadian Arctic. Arctic and Alpine Research 24:179-187; Reeves, R.R. & M.P. Heide-Jørgensen. 1994. Commercial aspects of the exploitation of narwhals (Monodon monoceros) in Greenland, with emphasis on tusk exports. Meddr Grønland, Biosci. 39:119-134.

²⁸ JCNB/NAMMCO Joint Scientific Meeting. May 9-13 2001, Qeqertarsuaq, Greenland

²⁹ Report of the Scientific Committee. Report of the International Whaling Commission 43.

contributions to the IWC SC's review in 1999 were very limited. In June 2003, the IWC's Scientific Committee again considered the status of the Narwhal and reiterated its previous recommendations concerning the desirability of better information on stock identity and catch reporting. The Commission asked Greenland to provide information to the next annual meeting, but the representative from Greenland stated that it would not do so.

Previous Review of Significant Trade in Narwhals

A Review of Significant Trade in the Narwhal was conducted in 1995. The reviewers concluded that³⁰:

- "Despite the long history of exploitation, there are insufficient data to determine whether Narwhal populations have declined and to assess reliably whether current exploitation is sustainable."
- Further research...is required in order to better assess the impact of current offtake on Narwhal populations."
- "While there is clearly an international market for Narwhal tusks, there is insufficient trade information to determine... whether international trade *per se* is affecting the conservation status of the species".
- "A greater understanding of the domestic and international market for Narwhal products will be central to any efforts to ensure that offtake does not threaten individual populations of this species.
- Standardisation of terms (tusks, teeth) when reporting trade to CITES is also required to identify the number of animals represented by this trade".

Animals Committee responded to this Review with the following Primary and Secondary Recommendations that were sent to the Parties concerned in March 1996:

Primary Recommendations

- 1) *The responsible authorities of Canada and Greenland should inform the Secretariat of the basis for their non-detriment findings in accordance with Article IV, paragraph 2 (a) of the Convention;*

Canada responded by referencing a 1979 aerial survey of half the range of the Baffin Bay stock, which produced an estimate of 34,000. By doubling the population estimate, it claimed that the maximum annual kill could be no more than 1,600 Narwhals based on the estimate of the Arctic Fisheries Scientific Advisory Committee that an offtake of 2.5% per year would be sustainable. Greenland responded with reference to this and two other population estimates from 1984 and claimed that "diving data suggest that the estimates should be multiplied by two". Greenland concluded by quoting a 1994 report by the Greenland Fisheries Research Institute which states that "It is believed that 2-4% of a Narwhal population can be harvested without jeopardizing the sustainability of the catches"³¹.

In retrospect, these crude responses by the two governments appear to have greatly underestimated the complexity of narwhal stock structure and, particularly in the case of Greenland, failed to recognize that some stocks were being seriously overexploited through the 1990s.

- 2) *The responsible authorities of Greenland should inform the Secretariat of measures in place to ensure compliance with catch reporting requirements.*

Greenland provided information on the Regulation requiring hunters to report to the local authorities on all Narwhals caught, wounded or taken as bycatch. However, it acknowledged difficulties in collecting data in some areas and that low numbers of full-time rangers were "making surveillance of the hunt impossible".

Secondary Recommendations

- 1) *The responsible authorities of Canada and Greenland should initiate a scientifically based survey programme for the Baffin Bay stock. If one is not already in operation, to form the basis of an improved population monitoring programme.*

³⁰ IUCN Species Survival Commission, TRAFFIC Network and World Conservation Monitoring Centre. Review of Significant Trade in Animal Species included in CITES Appendix II. Final Report to CITES Animals Committee. 1996.

³¹ CITES Doc AC 13.14.1 Implementation of Resolution Conf. 8.9.

Although Greenland informed the Secretariat in 1996 that “Greenland/Canada do not have any survey programme to monitor the population(s) of Narwhal(s),” large portions of the species range in both countries have been surveyed, sometimes repeatedly, since that time. Results for Canada have indicated somewhat larger stocks in High Arctic areas than previously believed, but the opposite appears to be true for Greenland stocks.

All responses were accepted by the Secretariat as providing the information required.

Since the 16th meeting of the Animals Committee, implementation of all recommendations from Reviews of Significant Trade has been reviewed. At AC17, the observer from Canada explained that Canada “was having some difficulties with surveying its Narwhal populations and that consultation with Greenland and Denmark was taking time”. He claimed that “current levels of harvest were sustainable and that he would make the necessary data available to the Committee. However, this response does not address hunts in Greenland who did not respond. The action agreed was for “the Management Authority of Canada to provide the Committee with survey results that demonstrate sustainability of present harvest levels”. This has not been provided.

Conclusions and Recommendations

Res. Conf. 12.8 (Review of Significant Trade in Specimens of Appendix-II Species) recalls that it is a condition for granting a CITES export permit, that a Scientific Authority of the State of export has advised that the export will not be detrimental to the survival of the species concerned. In the resolution, the COP expresses concern that some States who permit export of Appendix-II species do not effectively implement the Convention, including not conducting population assessments and monitoring programmes, so that information on the biological status of many species is not available to make the necessary ‘no detriment’ finding.

It is clear that there is an urgent need for improved and updated assessments of Narwhal populations and of the sustainability of harvests, especially in Greenland but also in parts of Canada (e.g. Repulse Bay). In order to make a Non-Detriment Finding, CITES Res. Conf. 10.3 recommends that “the findings and advice of the Scientific Authority of the country of export be based on the scientific review of available information on the population status, distribution, population trend, harvest and other biological and ecological factors, as appropriate, and trade information relating to the species concerned”.

WDCS urges Animals Committee to include the Narwhal in the next phase of the Review of Significant Trade and:

- express concern to Canada and Greenland about the high levels of removals of Narwhals, including for international commercial trade, in the absence of sound population data and hunting quotas;
- advise that a scientific review of stock structure, population status (including trends), harvest levels and other biological information relevant to risk analysis must be undertaken as a matter of urgency;
- recommend clear categories for reporting data on Narwhal products in trade, that are based on weight and length of tusks and carvings, and which clearly distinguish tusks from teeth.