

**Report of the Third Meeting of
the Working Group on Hunting Methods¹**

Copenhagen, 7 November 1994

¹ This report of the NAMMCO Working Group on Hunting Methods does not necessarily reflect the views of the Council and should not be quoted without first consulting the Secretary of NAMMCO.

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The Working Group met at the offices of the Greenland Home Rule Government, Copenhagen on 7 November, 1994. The meeting was chaired by Amalie Jessen (Greenland) and also attended by Henrik Nielsen (Greenland), Jústines Olsen (Faroe Islands), Kristján Loftsson (Iceland), Egil Ole Øen (Norway).

1. Adoption of Agenda

The Agenda, as contained in Appendix 1, was adopted.

2. Election of Chairman

The Working Group elected Amalie Jessen, Greenland, as Chairman.

3. Possible tasks of the Working Group

The Chairman noted that the Working Group's terms of reference were to provide advice on hunting methods both in response to requests from the Council, as well as from individual member countries.

3.1 Question of wastage of meat with use of the penthrite grenade harpoon in Greenland

Jessen (Greenland) referred to claims made by the Greenland Hunters and Fishermen's organisation, KNAPK, that the use of the penthrite grenade in minke and fin whaling in Greenland led to a greater degree of wastage of meat, blubber and mattak than was the experience of Norwegian hunters. However, it was also noted that these claims could not be documented, as no systematic study of wastage levels had been undertaken.

Øen (Norway) explained that examinations of damaged meat in Norwegian minke whaling which had been carried out in 1983 and 1984 showed that levels ranged from 15kg to 70kg. This was largely dependent on the angle at which the animal was struck. It was also noted that in examining wastage systematically, it was important to take precise weight measurements and to distinguish between meat damaged by the grenade and damage caused by the harpoon itself. Despite some efforts, it had not been possible for practical reasons to collect further comprehensive data on wastage levels in 1994 Norwegian whaling operations.

Øen reported that it was the general experience in Norway that levels of damaged meat had been significantly reduced since the introduction of the penthrite grenade, and that no concerns had been raised by those involved with production about unacceptable levels of damaged meat due to the hunting methods employed. The greater efficiency of the penthrite grenade was also witnessed by the better quality of meat. It was suggested that if there were greater levels of wastage in Greenlandic minke whaling, this was more likely to be related to the accuracy of the shooting rather than undue damage caused by the equipment itself.

It was considered highly unlikely that the damage to blubber and mattak from the penthrite

grenade harpoon could give reason for concerns about unacceptable wastage.

Loftsson (Iceland) reported that Icelanders had been impressed with the dramatic reduction in wastage of meat in earlier fin and sei whaling operations after replacing black powder explosives with the penthrite grenade.

It was recommended that if the concerns raised by KNAPK were to be resolved, systematic investigations of damage levels from penthrite grenade harpoons in Greenlandic whaling should be carried out. This would require accurate weighing and sorting of meat according to whether it had been damaged by the explosive or the harpoon. Øen offered assistance in compiling a list of factors which should be taken into consideration in such a study.

It was also noted that such examinations should be conducted by an independent person who was competent to assess accurately the extent and type of damage to the meat.

3.2 Instruction and maintenance manual for use of harpoon canons in Greenland

Jessen reported on plans to produce an instruction and maintenance manual for harpoon canons in Greenland which will be made by KIS (ship consultant for Greenland Home Rule), in cooperation with the Department of Fisheries, Hunting and Agriculture. This was part of a project started in 1991 to check and overhaul all harpoon canons used in Greenlandic whaling. The next stage of the project was to determine the need for new parts and replacements of individual harpoon canons where necessary. The preliminary estimated total cost of the parts and replacements needed was well over 1 million Danish kroner. Hunters had received a deadline of 1 January 1996 by which time their harpoon canons should be fully upgraded. Clear instructions on use and maintenance of the equipment were important not only for the obvious reasons of safety and efficiency, but also because it was clear that regular maintenance would in the long term reduce the overall costs to hunters. The manual would be produced first in Greenlandic, and could then be translated to Danish.

Jessen asked the Working Group for advice on whether the production of such a manual would be of interest to whalers in other NAMMCO member countries.

Øen considered that, given the ready availability of technical expertise and assistance in Norway, there was not the same need for such an instruction manual for Norwegian minke whalers. Control of the proper use and functioning of harpoon canons was also an implicit part of the annual shooters test required by official regulations in Norwegian minke whaling. However, there had been some discussion of implementing a formal system for certification of equipment in a weapons logbook, which would require a regular check of the condition and proper functioning of harpoon guns before licences were issued. No formal proposal had yet been put forward on the matter.

Loftsson considered that there may be interest in Iceland in the production of such an instruction and maintenance manual. He also pointed out that an informative video to accompany an instruction manual, showing clearly the correct assembly and reparation procedures, would be a very effective means of instructing hunters in the proper operation of the equipment. The Working Group agreed that this would be very useful.

Øen pointed out that continued investments in Norway in the further development and refinement of whaling equipment would provide technology from which whalers elsewhere could also benefit.

3.3 Comparison of parameters used for collecting data related to hunting methods

Greenland reported that data on times-to-death in fin and minke whale hunting, including both harpoon and rifle hunting of minke whales, had been collected each year since 1992. Hunters were required to collect this data themselves, and although the percentage of reporting was low in the first year, it had increased significantly since (see Table 1 below).

		Fin whaling w/ harpoon canons	Minke whaling w/ harpoon canons	Minke, rifle hunting
1992 ¹⁾	% Reported Average TTD ' TTD Range	5% 15 min. * ¹ -	6% 10.8 min. 5-20 min.	7% 20 min. 10-30 min.
1993	% Reported Average TTD ' TTD Range	47% 22.3 min. 1-60 min. * ²	33% 23.6 min. 2-60 min. * ²	31% 33.6 min. 10-60 min. * ²
1994 ²⁾	% Reported Average TTD ' TTD Range	74% 21.3 min. 0.5 - 120 min. * ³	80% 16.2 min. 2 sec.- 90 min. * ³	75 % 45.7 min. 10 -180 min. * ³

* Average time-to-death (TTD) is calculated from the highest figures in cases where hunters have recorded maximum time-to-death as a time range.

¹⁾ The regulation requiring reporting of times-to-death came into effect in Greenland in mid June 1992.

²⁾ The 1994 season is not yet complete, so this does not represent all hunting reports.

*¹ There was only one report.

*² Duration of more than around 60 minutes is recorded in reports as "hours".

*³ Duration of more than around 60 minutes is recorded in reports as "hours" or as "1½ hours".

Table 1. Percentage of times-to-death (TTD) reported, average TTD and TTD range in the years 1992 to 1994 in Greenland (Department of Fisheries, Hunting and Agriculture, Greenland Home Rule Government, Nuuk).

It was further reported that the Greenland Department of Fisheries, Hunting and Agriculture had established a special working group to look in particular at the methods used in the rifle hunting of minke whales from dinghies.

Data collected so far showed large variations in times-to-death. Greenland would continue to collect a range of data from hunts, but noted that hunters required specific instructions for collecting data on times-to-death. Unlike in Norwegian minke whaling, it was not possible in Greenland to employ trained veterinarians to collect such data from whale hunts. Greenlandic hunters, who have no formal training in data collection of this kind, needed better guidelines to ensure that the data collected were as accurate as possible and compatible with similar data collected elsewhere.

Øen reported that Norway had developed a set of guidelines for veterinarians collecting data on times-to-death in Norwegian minke whaling, and that these could also be useful reference for Greenlanders. These guidelines were outlined by Øen as follows:

Inspectors record the number of harpoon shots, the point of entry of the grenade in the whale (marked on a diagramme), the angle of the shot, the distance from which the shot was fired, and which organs are registered as being damaged. They also record how the whale reacted after being shot, in particular whether any relaxation of the mandibles, and movements of the flippers or tail was noted. The time of death is recorded at the moment when all movement ceases. The time-to-death is, accordingly, the time from which the whale is hit by the first shot until all movement ceases. With respect to these matters, special forms with illustrations should be made for data collection in Greenland.

Olsen (Faroës) reported on the recent implementation of a project to collect data on times-to-death in the pilot whale drive in the Faroës. Data had been collected from 138 whales during a whale drive in the bay of Miðvágur on 29 June, 1994. Times had been recorded both from the first wound with the whale hook as well as from the commencement of the dorsal incision until the severing of the spinal cord and disruption of the blood supply to the brain.

Local firemen and rescue crews assisted in the collection of data and had been instructed on the necessary procedures and equipped with stopwatches for recording times. Data was recorded on standard forms, and two men were responsible for recording data in each instance, one to take the time and the other to oversee the data recording, in particular to ensure that each whale was not recorded more than once. The number and size of each whale from which data were collected was also recorded in order to examine any possible correlation with the size of the animal.

Due to the large number of whales in the particular whale drive it was possible to collect a relatively large sample of data. It was noted, however, that this data was only preliminary and that the same procedure at a range of whaling locations in different circumstance was required before a comprehensive analysis could be undertaken.

The overall objective with the study in the Faroës was to reduce the incidence of longer killing times from the insertion of the gaff to the death of the whale, as well as to contribute to the continued refinement of whale drive procedures in general.

Øen noted that the final spinal cut and resultant thrash of the whale was a useful parameter for recording the time of death. In this respect it would also be valuable to collect further data

on the duration of movement from this point until the complete loss of movement.

Øen noted that the IWC criteria for death - relaxation of the mandibles, flippers hanging alongside the animal and all movement ceased - did not take into account the fact that movements could probably occur some time after the brain had stopped functioning. Such movements were caused by spinal reflexes. When applying the IWC criteria for death, some animals which were unconscious and therefore insensible would be recorded as being still alive.

The Working Group noted that in assessing data on times-to-death it was important to consider median as well as average times-to-death. This had also been noted in discussions of whale killing methods in IWC technical workshops since the 1980's.

4. The 1995 IWC Workshop on Humane Killing Methods

The Working Group discussed briefly the forthcoming IWC Workshop on Humane Killing to be held in Dublin, 23-25 May 1995. It was noted that this Workshop had been agreed to as a reconvening of the previous IWC Workshop on Whale Killing Methods which had been held in Glasgow in June 1992, with terms of reference based on the definition of humane killing contained in the report of the Glasgow Workshop.

The Working Group noted, however, that the 1995 IWC Humane Killing Workshop would apparently report its findings directly to the Technical Committee of the IWC rather than to the Humane Killing Working Group. Working Group members would seek advice on the reasons for this change of procedure.

5. Any other business

For the general information of the Working Group, Jessen and Øen reported on their attendance at the recent meeting of the International Standards Organisation, Technical Committee 191, Working Group 4 on Performance Criteria, which had been held in Utrecht in October. The Group met to discuss the development of international standards for traps used in the hunting of terrestrial and semi-aquatic wildlife.

6. Adoption of report

The final report was adopted by correspondence and completed on 16 December.

Agenda

1. Adoption of Agenda
2. Election of Chairman
3. Possible tasks of the Working Group
 - 3.1 Wastage of meat in connection with use of different types of harpoons
 - 3.2 Possible production of common manual for use, operation and maintenance of harpoon guns
 - 3.3 Comparison of parameters used for collecting data related to hunting methods
4. The 1995 IWC Workshop on Humane Killing Methods
5. Any other business
6. Adoption of report