Minke whaling re-established in Iceland

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Hunting of minke whales was initiated in 1914 and conducted in Iceland throughout most of the 20th century. These were small-type operations conducted by fishermen in coastal waters mainly in West and North Iceland. The moratorium imposed by the IWC in1982 and taking effect 1986 led to a stop in these operations. After that no minke whaling was conducted in Icelandic waters until 2003 when a research program was initiated including a take of a total of 200 minke whales during 203-2007.

Official catch statistics are not available prior to 1974, but catches were low, estimated to be less than 50 per year prior to 1960. After that catches gradually increased and annual catches were around 200 animals after IWC regulations took effect in 1977 (Table 1).

	Catch			Catch	
Year	Commercial	Special Scientific Permit	Year	Commercial	Special Scientific Permit
1974	90		1984	178	
1975	181		1985	145	
1976	195		1986-2002	0	
1977	194		2003		37
1978	198		2004		25
1979	202		2005		39
1980	201		2006	1	60
1981	200		2007	6	39
1982	212		2008	38	
1983	204		2009	81	

Table 1. Minke whale catches by Iceland 1974-2009.

Minke whaling for commercial purposes was re-introduced in 2006. Catches were low in 2006-2007 as the minke whalers were occupied in the scientific program that sampled 99 minke whales in these two years (Table 1). The first year aftert he completion of the scientific program (2008) 38 minke whales were taken out of a quota of 40 animals. In the beginning of 2009, the minister of fisheries issues a regulations stating that quotas for the next 5 years (2009-2013) should be according to the scientific advice given by the Marine Research Institute (MRI) every year. The latest advice is 200 minke whales, which was the quota in 2009. The advice given by the MRI has been primarly based on the work of the Scientific Committe of NAMMCO.
In 2008-2009 the minke whaling was mostly conducted from single vessels each year (a larger vessel hired in 2009) operated by the Icelandic Association of Minke Whalers. The crew was composed of minke whalers with experience from the pre-moratorium years (before 1986) and during the scientific sampling program 2003-2007. In 2009, three new companies took part in the whaling. Of a total of 81 minke whales caught that year, 68 were taken by the vessel operated by the Icelandic Association of Minke Whalers. The products were sold on the Icelandic market.

The equipments used in the hunting are very similar to those used in Norway, i.e. 50mm explosive harpoon and 458 calibre riffels as a back up for re-shooting if needed. The harpoon is connected to an elastic line tied to an underline that is connected to an effort-sensitive hydrolic winch. Traditionally 40g of gunpowder have been used to launch the harpoon. In the summer the amount was increased to 52g. This increased the success surprisingly much, you could use the word revoulution. After this change not a single incidence of line breakage occurred while previously it was not uncommon that the harpoon

failed to penetrate through the animal resulting in very loose attachment of the harpoon to the whale. We have benefited enormously from the developemental work by Norway, in particular Egil Ole Øen regarding all aspects of equipment and it's use. As I know that detailed descriptions exisit of the Norwegian equipment it is not necessary for me to describe that here, so I will rather focus on the differences between Iceland and Norway in that respec.

We use line made of a superstrong material (dynema), 10mm in diameter, but has double the strength of the traditional 16-18mm nylon line used before. This line is also much lighter and thus decreases the power of the shot to a much less extent. For the under (back) line we use the traditional material. Demands for elasticity of the line and "giving in" under pressure (when the whales don't die instantly) are met by the winch. The winch can be adjusted to a certain pressure, above which it gives in, similar to the reel on a fishing rod. If the whale is alive and pulling the linet he winch will give in, but at the same time holding back with a pre-specified pressure. Minimum power of winched allowed is 5 tons. Hauling of the whale towards the vessel shall start immediately after confirmation that it is alive and securely attached to the line. The the whale is shot to the brain as soon as possible. This can often be done before has been pulled all the way to the ship. Systematic data on time to death have not been collected from the commercial hunt. The rate of instantaneous death in the vessels operated by the association was 70% in 2009.

Immediately after death the minke whales are hauled onboard, drained for blood, the internal organs removed and samples required by buyers and authorities taken. Then the blubber and ventral grooves are removed. After that the carcass awaits for 6-8 hours for the post-mortem rigor is taking place in the muscles. The the whale is flensed and the meat is cut into suitable pieces that are put into ice water (0°C) to keep bacteria and orhter micro organisms to a minimum.

Traditionally, education and training of minke whalers took place informal transfer of knowledge from one generation to the next as was common in the fishery sector. Formal courses in the use of harpoon guns and grenades were first held in 1983 by Egil Ole Øen from Norway, and ever since he has been a central figure in maintaining knowledge in this field including updates of the developements of equipment. The last beginners course held by Egil in Iceland was in 2009. Icelandic regulations demand that at least the gunner has completed a recognized course in treatment of harpoons and grenades as well as holding general licence for firearms, before a vessel can aquire a licence for minke whaling.

From my perspective, as a whaler and a vessel owner, commercial hunting of minke whales has to be profitable, after taking full account of human ekilling methods as far as possible.
I am not familiar with the latest developements in using fish finders to see whales underwater. However, Everybody with experience in minke whaling know that the animals often trick the hunter, surfaces behind the boat when expected to be ahead, or on the backboard side when the hunter was ready for shooting on the starboard side. And sometimes the animals disappear completely even in good visibility. For one thing this causes significant delays in the process, but secondly, and what's worse, is that the gunner has less time to aim and shoot at the spot most likely to result in instantaneous death if the gunner is taken by surprise and is thus not ready. This often results in shots that don't kill the animal, but only serve to attach the boat to the whale, after which the killing process continues. I think that by using a good sonar for monitoring the movements of the animal underwaters it should be possible to lock the aim (target lock) on the animal and thereby reducing the hunting time and more importantly increase the rate of instantaneous deaths, as the gunner will then be ready whenever the animal surfaces around the boat.