

AWI Comments on Greenland's Methods for Calculating Aboriginal Subsistence Need



Introduction

As delegations to the International Whaling Commission (IWC) noted at the time, Greenland's recent needs statements (2007, 2008, 2009, 2010 and 2012) submitted in support of requests for its Aboriginal Subsistence Whaling (ASW) quotas, have not adequately substantiated its claimed need for increasing amounts of whale meat.

Greenland's 2014 needs statement (IWC65/17), which claims that Greenlanders now need 796 metric tons of whale meat annually, provides some new information, but it does not provide substantive information in support of its claim that the nutritional, subsistence and cultural need for whale meat in Greenland has increased and is not being met.

The methodology Greenland uses to calculate need is misleading. For example, by basing its needs request on the entire population of Greenland, not just Inuit people with a genuine need for whale meat for nutritional, subsistence, and cultural purposes, Greenland is able to claim that its need for whale meat increases in direct proportion to human population growth, which includes immigrants. These assumptions ignore recent, well documented, changes in population dynamics and demographics in Greenland including projections of negative population growth. They also fail to take account of recent changes in consumption patterns as the availability of alternative sources of food has increased.

Background

Greenland, unlike the other ASW countries, expresses its annual need in terms of metric tons of whale meat, rather than as numbers of whales by species. However, since the IWC sets quotas by species, Greenland must convert the tonnage into catch limits using conversion factors (of meat yield) for each species.

Since 1990 Greenland has claimed that it needs 670 tons of whale meat a year. In 2002 it sought and received an ASW quota of 187 minke whales and 19 fin whales year which, based on accepted conversion factors at the time, would have yielded around 540 tons.

In 2007, claiming that its needs were not being met, Greenland sought and received 13 more minke whales and a new annual quota of two bowhead whales from the IWC, raising the annual potential yield by 48 tons to 588 tons. In 2010, it secured a new annual quota of nine humpback whales adding 85.5 tons to its potential annual yield (based on interim meat yield conversion factors proposed by the Scientific Committee that year). However, it also voluntarily reduced its fin whale quota that year from 19 to 10 which subtracted 64.8 tons from its yield thereby providing a net gain of only 20 tons or a total of 608 tons.

In 2012, claiming that it was still 100 tons short of the 670 tons needed, Greenland requested an additional humpback whale from the IWC and sought to restore its fin whale quota to 19.¹ These requests were not accepted by the IWC.

In its 2014 need statement, Greenland claims that its human population has increased by 19 percent since it first calculated ASW need and that it therefore needs 19 percent more whale meat than that sought in 2012; or 799 metric tons.²

¹ IWC/64/ASW7. White Paper on Management and Utilization of Large Whales in Greenland

² Greenland refers to the population of West Greenland (rather than the whole of Greenland) in its need statement, presumably because the vast majority of its population live there.

How Greenland calculates need

Greenland bases its current calculation of need on whale consumption data from the years 1965 to 1985—creating a baseline of *per capita* need for a period when it believes its needs were adequately met.³ Thus, 670 metric tons of whale meat divided by 44,442 people (i.e., the average amount of whale meat consumed divided by Greenland’s average population from 1965-1985) amounts to 15kg of whale meat consumed per person per year. Based on a 19 percent growth in the total population since 1985, Greenland calculates that the current population (assuming that they still consume 15kg of whale meat *per capita* per year) needs an additional 129 tons of whale meat per year. I.e. a total of 799 tons in 2014. This calculation is in error since, even if Greenland’s population estimates and per capita whale meat consumption rate are correct, its alleged need would equal less than 795 metric tons.

There are a number of problems with this approach to calculating need:

- **Greenland’s population is declining.** Greenland’s methodology does not acknowledge that most of the population increase in Greenland from 1985 to 2012 occurred in the 1980s and 1990s but has slowed since then and that its population is now contracting based on Greenland’s own statistical data. A recent government publication, “Greenland in Figures, 2014,” shows that the 2014 population (56,282) is lower than in 2002 (56,545⁴) and is expected to decrease further.⁵ The front page of the self-rule government’s Statistics Greenland website dated May 15, 2014 announces that the total population “is over the next 20 years projected to decline from today’s [sic] 56,282 persons to 55,900 in 2020 and 54,800 in 2030”.⁶ The projected decline can

³ To calculate the total average meat yield from 1965-1985, Greenland divides the average catches of minke, fin and humpback whales by conversion factors of two, ten and eight tons respectively for each species. It then divides the average annual yield of whale meat for that period by the human population at that time.

⁴ Greenland in Figures, 2012. 9th revised edition · March 2012. Published by Statistics Greenland. www.stat@stat.gl

⁵ Statistics Greenland, 2012
<http://www.stat.gl/dialog/main.asp?lang=en&theme=Greenland%20in%20figures&link=GF>

⁶ <http://www.stat.gl/default.asp?lang=en>. And
<http://www.stat.gl/publ/en/BE/201402/pdf/Population%202014-2040.pdf>

partly be attributed to a fall in the total fertility rate to 2.0 children per woman in Greenland (below the replacement level for population stability of 2.1 children). In addition, emigration consistently exceeds immigration.⁷

- **Not all of Greenland’s population has a traditional culture of eating whale meat.** According to Statistics Greenland, only 87.8 percent of Greenland’s current population was born in Greenland.⁸ Of those born outside Greenland, 986 were born outside Denmark and the rest presumably were born in Denmark. As Greenland acknowledged in its 2012 needs statement, “[t]he people born in Greenland are the ones that are primary consumers of marine mammal products, including meat from large whales”.⁹ Therefore, to calculate need more precisely, Greenland should use the current population of people born in Greenland (49,415), the majority of whom are Inuit, not its total population. Its needs statement should also account for regional differences in consumption of whale meat as it did in 1983 when it acknowledged that “*the usage of meat between different cetacean species varies widely among Greenland regions.*”¹⁰

- **Increasing urban migration.** Over the same 30 year period (1985-2014) for which Greenland is claiming a population increase, its predominantly Inuit population has experienced significant demographic and societal changes, with a major shift from remote settlements towards towns, where people are presumably less dependent on Greenlandic food such as whale meat to meet their nutritional and subsistence needs. According to “Greenland in Figures, 2014,” 8,085 people live in settlements and 48,197 in towns in 2014, including 16,818 (almost 30 percent of the total population) in Nuuk, the capital. This compares to 9,980 people living in settlements and 46,874 in towns in 2004 and represents a decrease in the population of settlements over the last ten years of 18.9 percent.

⁷ Greenland in Figures 2014, 11th revised edition. March 2014. Published by Statistics Greenland. www.stat@stat.gl

⁸ Ibid. p.6

⁹ White Paper on Management and Utilization of Large Whales in Greenland. IWC64/AS7. P65

¹⁰ IWC/35/17. Report of the ASW sub-committee, 1983 p.4

- **There is a decreased reliance on native foods.** The increasing urbanization of the population of Greenland is reflected in a decreasing reliance on native foods. A 2007 study suggests that the percentage of local food consumed in Greenland has decreased over the last 30-50 years to an average of 20 percent,¹¹ while another study from 2008 indicates that, in some districts, intake of traditional food is now below 10 percent.¹² These studies, which are not included in the bibliography annexed to Greenland's 2014 needs statement, acknowledge the same negative implications of a western diet that Greenland uses to promote the consumption of whale products (including lower intakes of vitamins, minerals and fatty acids). However, unlike the 2014 needs statement, they also recognize the high contaminant levels in the "native diet."¹³
- **Greenland fails to consider changing dietary patterns in calculating need.** Jeppesen et al. (2012) analysed the consumption of seal, fish, and whale (including small cetacean) products by 2,224 randomly sampled Inuit¹⁴ from seven towns and eight villages between 2005 and 2008.¹⁵ Their research shows that Greenland's Inuit currently consume an average of 27.6 grams of cetacean meat, 46.9 grams of seal, and 61.2 grams of fish products per day. This amounts to approximately 10kg of cetacean meat per year.

Based on the average consumption of whale meat cited in the Jeppesen study, Greenland's

current total population of 56,282 would consume approximately 563 metric tons of whale meat a year. If the tonnage of whale meat needed was—as it should be—based on the current population of people born in Greenland (49,415) this would equate to approximately 494 metric tons of whale meat a year. Both figures are significantly less than the 799 metric tons that Greenland claims it now needs. However, such simple calculations fail to take into account the fact that not everyone in Greenland has a nutritional, subsistence and cultural need for whale meat and that, as Jeppesen notes, "... children and young adults consume rather little seal and whale."

- **Small cetacean meat is not accounted for in needs calculation.** Greenland's calculation of need does not take into account that nutritional and subsistence need for meat is also met by thousands of small cetaceans killed each year, including an average of the last five years of 215 belugas, 339 narwhals, 23 killer whales, 263 pilot whales and 2,541 harbor porpoises.¹⁶ In contrast, when reporting consumption of whale meat in Jeppesen's study, interviewees included small cetaceans.
- **Whale meat available to tourists suggests a surplus.** Extensive sales of whale meat to tourists in Greenland's restaurants and hotels suggest that there is a surplus, not a shortfall in whale meat available to Greenlanders today. Two visits to Greenland by Whale and Dolphin Conservation (WDC) and Animal Welfare Institute (AWI) in 2011 (May and September¹⁷) and a survey by telephone, email and the Internet of 31 out of an estimated 50 hotels and restaurants in Greenland conducted by AWI in June 2012 revealed that 77 percent of Greenland's restaurants and hotels made whale meat available to tourists as well as local people.

Dishes marketed to tourists included inexpensive whale burgers, buffets and barbecues serving "Greenlandic meat," "Asian fusion," and expensive cuisine on a la carte menus. In 2013, 98,288 nights were spent in

¹¹ Bente Deutch, Jorn Dyerberg, Henning Sloth Pederson, Eijner Aschlund, Jens C Hansen. 2007. Traditional and modern Greenlandic Food – dietary composition, nutrients and contaminants. *The Science of the Total Environment* 2007: 384 (1-3) 106-19

¹² Jens Hansen, Bente Deutch, Jon Øyvind Odland. Dietary Transition and contaminants in the Arctic: Emphasis on Greenland. *Circumpolar Health Supplements*. 2008 (2). International Association of Circumpolar Health Publishers.

¹³ Ibid.

¹⁴ Ethnicity was determined at enrollment based on the primary language of the participant and self-identification.

¹⁵ Jeppesen, C., M. Eika Jørgensen, and P. Bjerregaard. 2012. Assessment of consumption of marine food in Greenland by a food frequency questionnaire and biomarkers. *International Journal of Circumpolar Health*, 71: 18361. Available at: <http://www.circumpolarhealthjournal.net/index.php/ijch/rt/printerFriendly/18361/html>

¹⁶ Greenland in Figures 2014, 11th revised edition. March 2014.

Published by Statistics Greenland. www.stat@stat.gl

¹⁷ WDCS visited in May 2011, WDCS/AWI visited in September 2011

Greenland hotels by overseas visitors.¹⁸ In addition, more than 20,000 cruise ship passengers visit Greenland every year, many disembarking to visit local restaurants.¹⁹ Greenland's 2014 need statement asserts that a review by its authorities concluded that *"in 2010-2012 an estimated average of 13 restaurant meals per day throughout Greenland contain whale products,"* but it does not explain what this means or the methodology used in the review.

- **Whale meat exports to Denmark.** A surplus of whale meat is also suggested by extensive exports to Denmark. According to the CITES trade database maintained by UNEP-WCMC, from 2002 to 2012 Greenland reported total exports of 2,373.99 kg of minke whale meat to Denmark. WCMC data also recorded additional shipments of Greenlandic minke whale meat (1,488 kg in 2007 and 1,083 kg in 2012) that were reported by Danish importers, but not reflected in export reports from Greenland. Greenlanders may legally export West Greenland minke whale meat to Denmark in two ways: accompanied with CITES permits for the exclusive consumption (no commercialization permitted) by Greenlanders living in Denmark; and without CITES permits in restricted amounts (less than 10 kg per person per trip) for personal private use.²⁰

Despite the restriction on its use in Denmark, whale meat from Greenland was sold to non-Greenlanders in Copenhagen tourist shops.²¹

The fact that small cetacean meat is exported from Greenland to Denmark, including 1,186.28 kg of narwhal meat between 2002 and 2005, also suggests that a surplus of cetacean meat may exist in Greenland.

- **Greenland seldom meets its ASW quota.** Greenland's calculation of need also ignores the fact that Greenland has seldom taken its full quota of great whales, suggesting that it needs less than its quota already provides. In 2014, the Danish Minister of Foreign Affairs stated that "On average 482 tons of edible products from large whales have been landed in Western Greenland per year during 2008-2012".²² Since Greenland is claiming that it needs more whale meat it would be logical to assume that it is routinely meeting its IWC quota, yet it is not. Instead, since 2000, Greenland has only taken an average of 9.84 fin whales per year, against an available quota of 19 for most of those years. Furthermore, despite securing a quota of two bowhead whales a year in 2007, it has only taken a total of seven and has not landed any since 2011.

Conclusion

Greenland cannot justify an increase in its ASW quota simply on the basis that the population of Greenland has increased since the 1980s, but ignore the composition of that population, demographic trends, decreases in consumption of whale meat, and increased availability (and consumption) of alternative sources of protein.

Instead, Greenland should base its ASW quota request on the number of native Inuit living in Greenland and use current data on consumption rates and patterns rather than data that is more than 30 years old. Furthermore Greenland could obtain more whale meat for native Inuit living in Greenland from its existing quota by prohibiting sales to tourists and limiting exports to Denmark.

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²² Answer 17th July from Ministry of Foreign Affairs to question no. 495 from Parliament Environment Group dated 20th June 2014 (translated by Birgith Sloth).

¹⁸ Greenland in Figures 2014, 11th revised edition. March 2014.

Published by Statistics Greenland. www.stat@stat.gl

¹⁹ Kapitel 4, Krydstogtturisme 4. kvartal 2008-3.kvartal 2013.

<http://www.stat.gl/publ/da/TU/201303/pdf/Turisme%20i%20periode%201.%20oktober%202008-30.%20september%202013.pdf>

²⁰ BEK nr 1165 af 08/10/2010, § 37, stk. 5.

²¹ <http://marinesciencetoday.com/2012/12/11/whale-meat-being-sold-illegally-in-greenland-and-denmark/>