

BEQUIAN WHALING

A Statement of Need

by

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Background. St. Vincent and the Grenadines is an island nation in the eastern Caribbean Sea made up of the eponymous main island of St. Vincent and a number of smaller islands collectively called the Grenadines. The largest of the Grenadines is Bequia, which lies only a few miles from St. Vincent. The 1998 population St. Vincent and the Grenadines was 112,000, of which about 104,000 live on St. Vincent and about 6000 live on Bequia. The main occupations on Bequia are tourism and fishing, and services. Tourism is seasonal, and supports mainly part-time employment. Fisheries have suffered recently owing to new sanitary standards that require rebuilding or constructing new processing and packing facilities in order to export product to the EU and US. Average per capita income from full and part-time employment is about \$2700EC (Eastern Caribbean dollars or \$900 US)¹.

From early on, even before the Europeans arrived, what is now St. Vincent and the Grenadines, in common with the other island states in the eastern Caribbean, used the smaller cetaceans and seals as a source of meat for food. Later, in the late 18th and early 19th century whale oil became the important commodity and item of trade and was much in demand to light homes and buildings in the Americas and Europe. American and European whaling ships passed through the islands using them as transshipment points for whale oil, and also to hire seamen to work on board. These men learnt how to hunt the great whales, and passed the methods on to the islands of the eastern Caribbean (Hisashi 2001).

The islanders learnt to catch whales using the American Nantucket-type whaleboat and hand thrown harpoons. Later, shore stations were established in the islands and the people hunted humpback, sperm and pilot whales or "black fish" (Adams 1971, Ward 1995). In St. Vincent and the Grenadines shore whaling was started by a man named William Wallace who sailed aboard an American whaler in the 1860's, and learnt the trade. He came home to St. Vincent and bought two whaleboats and set up a shore station on Bequia. A few years later Joseph Olliverre built a second station on a tiny island next to Bequia named Petit Nevis. Shortly thereafter the sons of the Olliverres built a third station (Hisashi 2001). Most of the whale oil was exported, and the meat was eaten locally (Ibid.). Even after petroleum replaced whale oil for lighting, whaling continued in Bequia for food and because there were other uses for whale oil in industry.

By the late 1920's humpback whales in the north Atlantic had been hunted to such a low population size by whalers of the industrialized nations that commercial whaling for humpback whales for all purposes stopped; however, small catches by the natives of Greenland and by Bequians of St. Vincent continued.² However, whaling at Bequia also declined and between 1950 and 1984 Price (1985) reported that only 44 whales were caught. Two of the shore stations closed and only the station on Petit Nevis (rebuilt in 1961) continued to operate (Ward 1995).

In 1981 St. Vincent and two other eastern Caribbean nations were recruited to join the International Whaling Commission to vote for the moratorium on commercial whaling, which passed in 1982. As part of the agreement for the moratorium, the IWC allowed St. Vincent to continue whaling under the Aboriginal Whaling provision of the IWC, and St. Vincent was given a quota of three whales a year on condition that

¹ \$1 EC = \$0.37 US

²North Atlantic humpbacks were declared a protected species by the IWC in 1955. The aboriginals of Greenland were allowed to continue to take up to 12 humpback whales annually until 1982, when concern by the Scientific Committee over the estimated low population size of NAH, and the reported kills as bycatch by in the Canadian gill net fishery for cod, resulted in the Committee recommending that the Commission withdraw the Greenland quota. The Bequian fisher was allowed to continue, however, as St. Vincent was a non-member government, and IWC had no control over their take.

none of the products could be exported from the area. This quota was reduced in 1998 to two humpback whales annually at the request of the Government of St. Vincent and the Grenadines (IWC 2000).¹

Aboriginal whaling in Bequia. The Bequian whaleboat is made of wood and locally built to design almost unchanged since the early 19th century. At present there are two boats operating. The boats are about 8.2 m long by 2.1 m wide and 1 m deep. They do not have engines. They have a mast, sails and oars. Each carries a crew of six men: Four oarsmen, a harpooner and the captain (Adams 1971, Hisashi 2001).

When there is wind the boats use their sail while searching for whales and to pursue them. When the boat gets close to the whale the harpooner throw a harpoon. Once the whale is struck the harpooner throws a second and third harpoon if he can, and the bow oarsman lowers the sail and mast. The boat is then hauled close and the whale is killed with a lance, or a bomb lance if needed. The whale is towed ashore to the station on Petit Nevis and flensed. The meat, blubber and bone are shared out to the crew (Hisashi 2001).

Establishing Need. There are three aspects to the exercise of establishing “Need” for whales by Bequia, St. Vincent and the Grenadines. These are: 1) social and cultural, 2) food, and 3) economics.

1. Social and cultural. On Bequia people consider whales to be a resource that should be used as long as the use is sustainable. The whalers are honored because whaling in Bequia is an old tradition that requires skill and bravery on the part of the whalers. The islanders take pride in their success and welcome the contribution of meat and fat to the island diet. Whalers and whale songs are part of the folk-art of Bequia (Ward 1995). Hisashi 2001 has witnessed the blessing of the whaleboats that takes place before the whaling season begins each year. The Anglican priest bless the boats, pays for the safely of the crews, and for a successful hunt before the boats set out.

For the past forty years Athneal Olliverre, the grandson of Joseph, has been the man who kept the whaling tradition alive in Bequia. This despite the fact that catches were few for many years, and the years 1994 to 1998 went by with no whales taken. Athneal was the harpooner in his own boat. He killed many whales, his boat was struck several times by whales, and one once dragged him underwater. He died in July of 2000 at the age of 79, having made his last whaling trip only five months before (Hisashi, 2001). He was a legend on Bequia.

According to Hisashi (op. cit.) Athneal Olliverre was known as “the last harpooner” in the several magazine articles about the Bequian fishery. He was highly revered in Bequia; picture postcards of him are sold in souvenir shops, and a beach on the island was named after him. His fame was increased by the fact that some members of the IWC and some anti-whaling activists in their attacks on Bequian Whaling expressed the desire that it would die out along with the old harpooner.²

When a whale is landed it is a major event in St. Vincent, and people come from the other islands to try to get some fresh whale meat. The fresh meat and blubber are shared out to the crew and owners of the boats, and they give some to friends and relatives, and sell some to the other Bequians. Some of the meat is salted and sent to market on St. Vincent along with blubber.

None of the products can be exported, but the meat is much appreciated as food and so much in demand that there is never enough. The blubber is rendered into oil, which is believed to have medicinal properties, and it too is much in demand. Athneal said it was whale oil that kept him strong, and who can argue with him. In Bequia whale meat that is not given away sells for \$4 EC³ a pound. Blubber sells for the same price (Hisashi 2001).

¹The late Commissioner for St. Vincent and the Grenadines Hon. Stewart Nanton asked for the reduced quota of two whales to discourage the attempt to take a second pair of humpbacks, which would have likely resulted in landing only the larger of the second pair. (S. Nanton, 1998. personal communication).

²See, *inter alia*, discussion of N. Atlantic humpbacks in IWC Rpt 44. The Hon. Stewart Nanton warned the Commissioners that such talk would only make the people of Bequia determined to continue whaling: a prophecy that was fulfilled when a new boat with a younger crew was built and launched in 1996. Since the 1998 season, the quota has been filled every year. Again in March this year (2002) the Bequians took two whales. The fishermen say that there are many more whales now.

³ The selling price for whale meat has been constant since 1993 (Hisashi 2001).

2. Nutrition. Bequia is a low, small island. It lacks the trade wind generated rainfall that high islands like St. Vincent enjoy, so agriculture is limited both from lack of water and lack of suitable land. Most of the foodstuff is imported. Small quantities of goats and chickens are raised on the island, but not enough to contribute appreciably to animal protein sufficiency. Locally caught fish is consumed on the island. The amount available is difficult to estimate, as much of it does not enter established markets that permit tracking. That quantity that does enter the market commands a higher price (\$5-6 EC/lb.) than meat or poultry (\$3-4 EC/lb.) The larger amount of the more valuable species of fish is exported to St. Vincent and to the other Eastern Caribbean islands. Recent HACCP and EU regulations have restricted export to the French and Dutch Antilles, and seriously disrupted trade in fresh fish. At present there are no data on whether or not the disruption of trade has resulted in more fish being available on Bequia and at a lower price.

Table 1 calculates that the inhabitants of Bequia have an estimated annual need of about 610,000 lb. of animal protein expressed as meat equivalent.

Population of Bequia, 2002	6000
Protein need/day/person (note a)	1.5 oz.
Annual need for 6000 people	206,513 lb.
Annual need, meat equivalent (note b)	607,392 lb.

Notes:

- Calculated at 43 gm/person/day
- Assumes half protein need is met from meat (meat est. at 17% protein)

Table 1. Estimated need in 2002 for animal protein in Bequia expressed as meat equivalent.

Meat from whales taken in the Bequia hunt substitute for imported animal protein. Some of the production is sent to St. Vincent, so this estimate of percent substitution is biased. The degree of bias is not estimated. Table 2 provides the calculated percent substitution by the meat from two whales for imported meat. The calculations are for two periods: 1983, the year when the quota of three whales was established, and 2002. The table is calculated for the take of only two whales in 1983 to allow direct a comparison.

Year	1982	2002
Population of Bequia	2800	6000
Protein need/day/person (note a)	1.5 oz.	1.5 oz.
Annual need for 2800 people	96,373 lb.	206,513 lb.
Annual need, meat equivalent (note b)	283,449 lb.	607,392 lb.
Amount of meat from adult whale (note c)	24500 lb.	24500 lb.
Amount of meat from juvenile whale (note c)	2800 lb.	2800 lb.
Amount of oil from adult whale (note c)	14000 lb.	14000 lb.
Need for Bequia – annual	283,449 lb.	607,392 lb.
Whale meat from two whales	27,300 lb.	27,300 lb.
Whale as percent animal protein need (note d)	12%	6%
Cost for imported animal protein (note e)	\$1,133,798 EC	\$2,429,567 EC
Value of whale products from four whales (note f)	\$165,200 EC	\$165,200 EC
Foreign exchange savings as percent	15%	7%

Notes:

- Calculated at 43 gm/person/day
- Assumes half protein need is met from meat and that meat is 17% protein.
- Adult whale weighs 35 tons; juvenile 4 tons. Yields: meat 35%, blubber (adult only) 20%
- Whale meat is 22% protein
- At \$4.00 EC/LB
- Meat and oil at \$4.00 EC/LB

Table 2. Calculated percent substitution meat from two whales for imported meat.

In 1982 the whales are estimated to substitute for 12-percent of the animal protein need. By 2002, the population of Bequia more than doubled, and two whales now substitute for about 6-percent of the annual animal protein need.

3. Economics.

The third aspect to be considered in evaluating the need in Bequia for whale meat is economic. Table 2 indicates that in 1982 the meat from two whales substitute for 15% of the value of the imports in terms of foreign exchange savings. Foreign exchange savings from food produced locally are extremely important to island economies that are not self-sufficient in foodstuffs. By 2002, the foreign exchange savings generated by the distribution of the products of Bequian whaling are calculated to have dropped by 53%.¹

Conclusions. The cultural and nutritional need for whale products by Bequia was established by, and accepted by, the IWC in 1982. There appears to have been no quantitative estimation process used, and instead the level was established to be the level currently taken on average, namely three whales. It should be noted that the take of only two whales in 1982 would have only satisfied 12% of the need in terms of nutritional need, and a similar percent of the foreign exchange savings from substituting whale meat for imported meat and poultry. St. Vincent was allowed a take of three to satisfy a greater need. Three or more whales would have been utilized had the abundance or availability been such that more could readily be taken.

Since that date the need has more than doubled owing to population growth on the island. In order to satisfy an equivalent 12% in terms 2002 of population size, a quota of four humpback whales is needed. The relation between need and population growth may, not be sustainable in the long term, but should not be of concern here where the resource clearly is capable of meeting the need with a sustainable harvest.²

References:

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¹ The selling price for whale meat and blubber has been constant since 1993 (Hisashi 2002). No estimate was given for 1982 prices. Meat prices are likely to have risen since 1982, so the relative decline in foreign exchange savings may be greater than calculated.

² In 1982 the Scientific Committee considered there was a "minimum plausible stock size of 1200" for NAH. At that level the Committee expressed concern with an estimated catch and the bycatch by Canada of NAH on the order of 32, and suggest reducing the Greenland catch quota from 12 to zero. The current estimate for this stock stands at about 10000, which suggests that a take of 4 whales is sustainable, even in the absence of an ASWMP.