

‘More private gain than public good’: Whale and Ambergris Exploitation in 17th-century Bermuda

Aldemaro Romero, PHD
Arkansas State University
Department of Biological Sciences
P.O. Box 599
State University, AR 72467, U.S.
aromero@astate.edu

ABSTRACT: The history of marine mammal exploitation (ambergris utilisation and whaling) in Bermuda represents a unique source of information for understanding the practices of natural resource utilisation not only in that colony but also for the West Indies and New England. The history of whaling in particular was quite different of that developed in the rest of the West Indies and reflected the peculiar economic, social, and political conditions of Bermuda in the 17th century. The scarcity of natural resources and the rigid economic control that The Bermuda Company was trying to impose upon Bermudians resulted in local illegal whaling and circumvention of rules and regulations. Yet, earlier Bermudians were not only resourceful in their political and economic practices to gain financial benefits from this activity but also were able to develop whaling techniques so successful that were later exported directly or indirectly to other colonies in the area. I believe that the tactic of targeting mother-calf pairs was key in successfully hunting humpback whales, which was the most common species in the area.

INTRODUCTION

The history of whaling in the “Greater Caribbean” (Romero & Kannada, 2006b) represents a source of very valuable information in the areas of environmental, ecological, and maritime history. Whaling in this region was always a marginal activity because it was localised in space and time; yet, its practice largely reflected the history and culture of the people who carried it out (Romero & Creswell, 2005).

The research I present in this paper shows that Bermuda was a place where ambergris and whale exploitation became one of the initial reasons for the colonisation of the islands and greatly influenced the economic, political, and social structure of the colony. By investigating the history

of the exploitation of marine mammals in 17th-century Bermuda in this paper I suggest that shore whaling by Europeans in the Americas was first developed by the third generation of Bermudans and later exported to the West Indies and possibly New England. This exploitation concentrated almost exclusively on humpbacks (*Megaptera novaeangliae*), sperm whales (*Physeter macrocephalus*) and a by-product of the latter, ambergris. Based on archival research I have reconstructed that history.

AMBERGRIS

The first marine mammal product exploited in Bermuda was ambergris. Ambergris is a waxy substance produced by the sperm whales' stomachs and intestines, probably as the result of irritation caused by the beaks of cuttlefish (*Sepia medinales*) these cetaceans consume (Dannenfeldt, 1982). A single chunk of ambergris can weight more than 400 kilograms (about 882 pounds) (Clarke, 1954). Because it is less dense than seawater, ambergris is found either floating in the ocean or washed up on beaches after being excreted by the sperm whales.

Ambergris has been used since antiquity for medicinal purposes by many cultures around the world (Murphy, 1933; Lev, 2003, 2006). Ambergris most common use since the Middle Ages was as a key ingredient in the manufacturing of perfumes by the Arabs in order to slow down the evaporation rate of the perfume and add fragrance to it. Because of its rarity, natural ambergris has always commanded a high price. Today the ambergris that is used in perfumery is largely synthetic (Sell, 1990). Because of this, and the prohibition by the United States (through its Marine Mammal Protection Act of 1972) against trading any marine mammal product, natural ambergris has decreased in value and when sold elsewhere, the price fluctuates around US \$20 per gram, depending upon its quality.

The first Englishmen who arrived in Bermuda encountered ambergris. On July 28, 1609, the *Sea Venture*, under the command of Sir George Somers, wrecked near the islands during a hurricane. The castaways, colonists en route to Virginia, came ashore in what is now St. George's Parish and set up a camp. They noticed the presence of ambergris on Bermuda's shores. According to Silvester Jourdain, member of the Somers party: "there hath beene likewise found, some good quantity of Amber Greece, and that of the best sort" (Jourdain, 1610:16-17).

Somers and his men built two new vessels, the *Deliverance* and the *Patience*, from local cedar and the remains of the *Sea Venture*, and in May 1610 they gathered provisions to continue their journey to Virginia. Two men from Somers' crew stayed on the island: Christopher Carter and Robert Waters (Smith, 1624:176). Edward Chard joined them late in 1610, after Somers had returned from Virginia.

In 1611 or 1612, Chard found a piece of ambergris at least 80

pounds in weigh (Smith, 1624:176) valued at about £9,000 at that time (Norwood, 1945:lxvi). Besides that large piece he also found other small lumps. After some wrangling, Chard and his two companions worked on building a boat to take the piece of ambergris to either Virginia or Newfoundland for sale. However, in July 1612, shortly before they were ready to leave, agents of the Virginia Company on board of the *Plough* arrived at the island to begin its settlement. Waters and Carter tried to convince Captain Davis of the *Plough* to take the piece privately to London, but Carter told Richard Moore, also on board of the *Plough* and new governor of Bermuda, about the scheme. Moore had specific orders to procure ambergris (Lefroy, 1877:60). As top representative of the Virginia Company in the island, Moore claimed the ambergris for the company, since the company had been chartered by King James to control Bermuda's commerce (Smith, 1624:176-177; Anonymous, 1797).

By 1614, the Virginia Company gave up its jurisdiction over Bermuda and in June 1615 an offshoot of the Virginia Company was chartered by King James as The Somers Island Company (also known as the Bermuda Company). In order to attract investors (and regular shipments with provisions) the first settlers greatly exaggerated the financial potential of Bermuda's natural resources. They sent information to London about abundance of pearls, whales, and ambergris. Apparently, in order to give the impression that ambergris was common in Bermuda, Moore ordered the large chunk found by Chard cut in pieces and sent in instalments to England (Smith, 1624:177-180). In 1616, a number of Virginia Company stockholders invested £2,000 to have the colony fully established in Bermuda in the hope that more ambergris could be found (Bernhard, 1985).

The shareholders in London had the authority to name the governors and send magazine ships to supply the island. In return they expected to receive pearls (which did not exist), whale oil (from whales nobody knew how to hunt), tobacco (that ended up being in meagre amounts and lower quality than the one from Virginia), silk (that was never produced), and above all ambergris (whose supply was small, irregular and far apart). Thus, ambergris occupied the same position as gold for colonists that thought of Bermuda as El Dorado.

The investors soon realised that ambergris was not as abundant as initially thought: "the Amber Greece, Pearles, nor Tobacco, are of that quantity and certainty to be relied vpon to gaine wealth" (Smith, 1624:172).

Despite the fact that the finder's fee for ambergris was 13s 4d per ounce (Lefroy, 1877:116), reported findings of ambergris were rare and far between: in 1617 a seven-ounce piece was found by a Mr. Woolverston (Ives, 1984:58); in 1620 an eight-ounce piece was found (Smith, 1624:192); in 1625 a one-ounce and a nine-ounce pieces

(Lefroy, 1877:365, 373); in 1626 two pieces: one of 19.5 ounces and another of two ounces (Lefroy, 1877:385). However, findings of ambergris may have been more common than previously acknowledged: by 1656, ambergris was being used as currency valued at 25s per pound (Lefroy, 1879:86) and it is doubtful that such practice was taking place unless findings were more common than actually reported in order to avoid paying taxes.

Since 1616, Governor Daniel Tucker had imposed serious restrictions on the commerce of ambergris by prohibiting its trade among Bermudians or with visiting seamen (Lefroy 1877:121).

The illegal commerce of this substance must have got so bad that in the Laws of the Bermuda Company enacted in 1662, instead of prohibiting its trade, the new policy sought to regulate it:

There is likewise and shall be forever reserved to the Company a fifth part of all the Ambergreece that shall be found; and the reast shall be divided eaqually betweene the finder and the owner of the land where the same is found; save that three shillings four pence upon every ounce of the said Ambergreece shall be allowed to the Governour of the said Islands. And whoever shall not discover to the said Governour and Sheriffe and some one ofther of the Coulcell, the true quantity of the Ambergreece so found, within five days after the finding of the same, shall forfeit his owne intire part to the Company; and be subject to such other punishment as the Generall Court shall award.

No other significant finding of ambergris has taken place in Bermuda since that time probably as a result of the intense hunting of sperm whales by Yankee whalers that may have caused the depletion of these animals in its waters.

FIRST ATTEMPTS AT SHORE WHALING

The first colonists in Bermuda noticed an abundance of whales off-shore during the springtime. Two of the passengers in the *Sea Venture* mentioned them: William Strachey (1625:29) as well as Silvester Jourdain. The latter (Jourdain, 1610:16–17) noted that “There are also great plenty of Whales, which I concave are very easie to be killed, for they come so usually, and ordinarily to the shore, that we heard them oftentimes in the night at bed; and have seene many of them neare the shore, in the day time.” Smith (1624:172), who compiled information from contemporary colonists in Bermuda, wrote that they were found “in great numbers.” Furthermore, the first detailed map of Bermuda drawn by George Somers in 1610 depicts a whale in Bermuda’s major sound (Fig. 1).

It was the adventurer John Smith (*b.* Willoughby, Lincolnshire, England, 1580; *d.* London, England, June 21, 1631), of the famous

Pocahontas tale, who became the first European to attempt exploitation of this resource in New England, and knew of its existence in Bermuda. Indeed, he wrote that the purpose of his 1614 voyage to New England was “to take whales” (Smith, 1616:1). He knew that his fellow Englishmen were not skilful enough at hunting those animals as evidenced by the many failed attempts at whaling in the early years of the Virginia colony. Since he knew that the Basques were the real experts in the trade, he requested in 1616 to accompany the Spanish Basques in whaling expeditions to the North Sea (Barbour, 1986:322–323), a goal he never accomplished. He had a deep interest in this matter as evidenced by the use of the proper names for the different species. For example he employed the name of “Jubarta” (Smith, 1630:45) for the “lively” whales: an old name for humpbacks, which are known for their breaching behaviour.

That whaling was of great interest to the shareholders of the Virginia Company is without a doubt: when Richard Moore was dispatched by the Virginia Company with 50 settlers to Bermuda in 1612, in his commission we can read that “Yf you can procure any Pearle Ambergreece Tobacco Silke or Oyle arisinge by whale fishinge to be sent by this next ship, for examples, they will give much encouragement, wch are Commodoties reserved as royalties to the vndertakers of the Plantacon” (Lefroy, 1877:60). In a letter of Henry Earl of Northampton, dated probably August 2, 1612, to the King he said: “Whales there are in great store at that time of the yeare, when they come in, which time of their coming is in Febuarie and tarry till June” (Lefroy, 1877:71) which is when the humpbacks visit Bermudian waters.

This interest was not a sporting one but rather part of a major industrial fishery activity of that period. By the time of the settling of Bermuda, whaling by the British and the Dutch was becoming a major industry in the North Atlantic (Romero & Kannada, 2006a). Therefore, mention of abundance of whales was another incentive for investors into the Bermuda Company. This led the early colonists to try exploiting that resource from at least 1616 (see below). There are no records on how they tried to do it but most likely it had to be very primitive since shore whaling had not been developed in the western North Atlantic, with the exception by Native Americans in the eastern coasts of North America (Acosta, 1590; Clark, 1887; Stackpole, 1953:15–16).

Despite the fact that Moore and his fellow colonists had not been successful in their whaling ventures, the Virginia Company did not relent. In 1616, the new governor of the colony, Daniel Tucker, received instructions to look into the matter of whaling (Lefroy, 1877:111–116). The next year Tucker sent out three shallops that struck several sperm whales (“trunk whales”) but killed none. As soon as they returned from the whaling expedition, they found the *Neptune*, a tall ship that had been sent by the Virginia Company for whaling.

The skipper named Willmoth or Willmott accompanied by a harpooner, John Headland, and his mate, Henry Hughes, went out whaling, but they were not successful either (Smith, 1624:366).

This lack of success was apparently a combination of attempting to whale at the wrong time of the year, but mostly due to sheer incompetence, which created a great deal of disconcert and bitterness among the first colonists as well as among the investors as we can see from the contemporary reports on this activity. One of those reports was from Richard Norwood.

Norwood (*b.* Stevenage, Hertfordshire, England, October 1590; *d.* Bermuda, 1675) was a largely self-educated polymath who invented a diving bell to search for pearls and treasures from wrecks. He carried out the first extensive and detailed survey of Bermuda that resulted in the first precise map of the islands that was used to divide the colony among investors. Norwood first arrived in Bermuda in 1613 in the capacity of technical specialist. Returned to England in 1617 where he acquired some reputation as a mathematician and went back to Bermuda sometime between late 1637 and early 1638 where he became a school master and a planter (Norwood, 1945: xi-xii). Therefore, Norwood was probably the most scientifically prepared mind among the earliest colonists and writing about the whales in Bermuda said:

They (Willmoth and company) arrived there too late, to wit, about the midst of Aprill, so that before they could make ready for the Shallops and fit themselves, the principall reason for Whale-fishing was past : For the Whales come thither in January, and depart againe toward the latter end of May : yet they stricke some, but found them so lively, swift, and fierce after they were stricken that they could take none. They yeeld great store of Oyle, as appeared by one that drave to shoare on Sommerset Iland, in Sandys Tribe: and ny another that we found not farre from thence dead upon a rocke (Norwood, 1945: lxxvi).

This story was repeated by Smith (1624:366).

A more critical assessment of this attempt came from one of the original Bermuda Company investors. Robert Rich (*b.* ?, between 1586–1587; *d.* Bermuda, 1620) was the representative of his family in Bermuda. He, his older brother Nathaniel and his cousin Robert were involved in these early stages of colonisation of the New World. It is possible that the young Richard was on board the *Sea Venture* and for sure he was among the first settlers of Bermuda in 1612 (Ives, 1984:15, 389). As such he encouraged his family to invest in the Bermuda enterprise and was committed in following the progress of the financial investments his family had made.

In a letter dated February 22, 1617 to his older brother Nathaniel, Robert Rich pointed out that:

Concernyng the matter wherof I told you of att my last departure, you wrote unto mee [that] your self was ignorant. [It] was thus I told you: I heard of [from] Mr Canning that Sir Thomas Smith with [and] the Greenland Company hadd among themselves consulted [and] that for the hindering of [to prevent] theyre utterance [disposal] of the oyle from Greenland they caused the harpers not to kill any. Since which time Mr [Richard] Day, at his last being here, would have ventured to take some but the Governor would not permit him, and as you did employe Mr Day therabout I am verily perswaded hee would take some." (R. Rich in Ives, 1984, p. 58).

This letter seems to indicate that commercial interests got on the way of whaling in Bermuda. A critical figure in this saga is Sir Thomas Smith, (*b.* England, 1588; *d.* Ashford, Kent, England, 1624). Smith was the first treasurer of the Virginia Company (1607–1619) and the first Governor of the Somers or Bermuda Company (1615–1621) and again from 1623 until 1624. He had been very much involved in the British efforts to discover a Northwest Passage to the Far East; his name was given by William Baffin to Smith's Sound on the Canadian coast of British Columbia, which means that he knew about the great financial potential of whaling from the early efforts off what are today Canadian coasts. He had invested heavily in the Bermuda adventure (£20,000). As special British Ambassador to Russia, he was also heavily involved with the Muscovy or Russia Company, which had whaling as one of its major financial activities. As early as 1613, he and others had sent ships to Greenland after whales, which may explain why they did not wish competition from Bermuda whaling (Brown, 1989:1013). William Canning was deputy governor of the Bermuda Company under Smith and was involved in slave trading. Richard Day was a seaman (Lefroy, 1877:351) and apparently someone who claimed could kill whales.

These machinations, however, could not stop attempts for whaling since it was clear that such enterprise was of great interest to the Bermuda adventurers. Thus, in a letter dated May 25 (19?), 1617 from Robert Rich to his brother Nathaniel, we can read:

First: For our whalles. The Shipp [Neptune] which was sent Cam in a very good time for the takeing of them; there hath been much tryall made for the kylling of them. There bee whales in aboundance with us of all sorts. Them that were sent over for the stricking of them, hath struck divers but to noe purpose; there is a great faultin some. I have, and will ever wish with Captane Tucker and the best peart of the people that Mr Richard Day had suplyed Willmoth[s] place. And then should you, with the rest of the Adventurers, [have] given more contentment unto the Governor that they have doune, for hee is very much agrived that hee could not obtaine that

request from them, in that hee knewe the sufficientie of Mr Day, and the insufficiente, of Wilmoth, whoe is more in wordes than in action, and seek more after a privat gaine than a publike good." (Ives, 1984:16)

About the same time (22 May 1617) Governor Daniel Tucker wrote a letter to Nathaniel Rich where he said:

Sir, our whale voyage beinge not prosperous, I doubt will Draw back many of our Adventurers: but your selfe (with some others) I hope so noble that this worthy accord shall not Dye with so many a scarr." (...) I fynde wee have bad members for this Plantaction: as the husband [Company accountant] in England & Mr Willmoth the [Pylatt?] (Ives, 1984:38-39).

And in another letter dated 19 May 1617 from Lewis Hughes (one of the first two ministers in Bermuda and a member of Governor's Tucker Council, Lefroy, 1877:705) to Sir Robert Rich (a cousin of the Robert Rich in Bermuda) Hughes wrote:

I wish that if there be occasion to send a ship to Virginea the next spring, she may leave some men here and at her returne to touch here in hope that God will teach us how to take some whales. Our Fisher men are often times troubled with them, and come within an oares length of them, and sometimes the whales will follow them so neare as they are afaride of them. Therefore I think that God for our triall did make them so wilde to the men that were appointed for the taking of them" (Ives, 1984:13).

From all this correspondence it is clear that the Bermudian colonists were growing impatient with the pilot Willmoth or Willmott, who had been sent by the Company (Lefroy, 1877:115) but after a year in Bermuda during which the humpback whale season (January-April) had come and gone, everybody seemed to be convinced by then that this Willmoth was incompetent and of dubious character. As mentioned earlier Tucker had tried to get the whaling initiative going by sending three boats after whales, without success, 'though they strucke many.' (Lefroy, 1877:137). Thus the letter from Reverend Hughes hoping that someone could come to Bermuda and tech them how to whale.

In another letter, dated August 12, 1619 to Nathaniel Rich, Hughes keeps his hopes high that whaling will be possible soon:

About three months ago, the paunch [carcass] of a whale was cast up on the shore. The fatt which covered the paunch proved to be right spermaceti, a goodsfull whereof I have sent your worship to see, by the bearer hereof, Mr. Elford, who is very desirous to tric his skill in killing. If it shall please the company to use him, he will put in 40 pounds adventure or lose his wages for the viage [voyage] if he kill none. The people here have a good

opinion of him. For my part, I am loth to perswade or diswade and so, with remembrance of my dutie unto your worship, and (if I may be so bould) to the right honourable the Earle of Warwick, I humblie take my leave, beseeching Almighty God to blesse you both" (Ives, 1984:138).

From the description the animal that beached was a sperm whale. The "Mr. Elford" referred to in this letter is probably Captain Daniel Elfrey or Elfrith who was a seaman whose first record in Bermuda dates to 1616 and the last to 1629. He was involved in trading (including slaves) and tobacco planting.

The early failures of shore whaling are not surprising and could be attributed to the lack of the appropriate technology and skills. Shore whaling by Europeans in the American continent began somewhere between 1650 and 1672 in Long Island and Massachusetts, particularly in Nantucket (Tower, 1907:22; Jenkins, 1921:224). Early colonists observed how Native Americans went out to sea in their canoes and hunted whales with spears made out of bones and the Europeans soon followed suit, using harpoons with metal heads (Starbuck, 1876). They sometimes hired these Native Americans (Tower, 1907:22–23). The main usage of whales was the oil for lighting and as an ingredient in the tanning of leather, as well as for manufacturing candles and soap (Macy in Clark, 1887; Ellis, 1991:98–99).

What was the method whalers employed at that time? We do not have a direct account of how it happened in Bermuda, but we do have a contemporary account of how the British did it at that time from Robert Fotherby (Purchas, 1613, vol. 12:26, 28–30; Pressly, 1930:9–10).

When he (the whale) comes into the souds (sounds), our whal-killers doe presentlie sallie forth to meet him, either from our ships, or else from some other place more convenient for that purpose where to expect him; making very speedie wale towards him with their shallops. Then coming neare him, they rowe resolutelie towards him, as though they intended to force the shallop upon him, (who stands up redie, in the head of the boat) darts his harping-iron at him out of both his hands; wherewith the whale being stricken, he discends to the bottom of the water.

These sources continue by saying that the whale was harpooned "with long launces, which are made purposelie for that use," and the whale would be towed ashore. The animal was butchered, with the blubber being sliced "in square pieces, three or four feet long, with a great cutting knife" and the blubber taken to a copper pot where the oil was boiled out and poured into hogsheads. The baleens were extracted, cleaned and packed fifty in a bundle that were later used for dresses' whale-bones.

Initial attempts of whaling by Europeans other than the Basques

were futile and both the British and the Dutch had to hire Basque whalers to learn the art of hunting and processing whales (Romero & Kannada, 2005a). The names mentioned by Lefroy and Norwood as the first whalers in Bermuda are all British and it is clear that they lacked the skills. Who were they, what kind of expertise they had and what kind of ship the *Neptune* was is not known and will not probably be ever known: all records of the Muscovy Company that was in charge of promoting whaling in the North Atlantic at that time were destroyed in the London Fire of 1666 (Pressley, 1930).

Also the economic and political circumstances of Bermuda at that time did not help to develop whaling as an enterprise. Unlike other British colonies in the new continent, whales were declared the Governor's perquisite and the Bermuda Company forbade Bermuda's tenants and landowners to engage in whaling without a license. Even with that license they had to pay heavy taxes on each whale caught. The heavy taxation of whaling, as well as the highly regulated nature of the economy in general, stemmed from a combination of several circumstances: (1) natural resource utilisation was closely controlled, due to the limited land area and thus limited quantities of resources available; for example, as early as in 1622, Bermudians established a conservation law restricting the killing of young tortoises as well as indiscriminate cutting of the island's cedar forest (and therefore prohibition of shipbuilding), probably the first conservation measures established in North America (Smith, 1624:194; Sterrer, 1998); (2) The strong Puritan influences on the islands kept discipline and encouraged family values and high taxes (Bernhard, 1985); (3) since 1324 a Royal Decree by Edward II had established that whales were 'Royal Fish' and therefore they were property of the Crown (Fraser, 1977); and (4) from early on Bermuda was a poor colony and local investors wanted to entice prospective governors into the position by promising potential revenues from a resource whose profitability had yet to be demonstrated.

This explains a letter written in 1625 by Governor Henry Woodhouse to The Bermuda Company complaining that he had tried unsuccessfully to capture whales: "I have made assay in chasinge the whales 3 or 4 dayes together but without good successe they were so shie that they will not abide our boats to come up with them" (Lefroy, 1877:345).

It would take several decades before whaling in Bermuda became successful.

FIRST SUCCESSFUL WHALING SEASON

By the 1630s, the land in Bermuda had worn out by growing tobacco whose quality dropped and so did prices. Thus is not surprising that within a few decades many residents were making their livelihood out of the sea, not the land, so whaling was looked on as an alternative again.

On October 10, 1662, The Bermuda Company instructed the new governor Florentius Seymour (who did not arrive to Bermuda until January 12, 1663) to set up a whaling enterprise by 1663 (Lefroy, 1879:181). However, in a letter to governor Seymour dated November 14, 1663 Bermudians complained against William Righton and John Summersall the Elder for being “principal encouragers of this disturbance [pirate whaling] in our Whale Fishing” (Lefroy, 1879:202), which suggests that whaling was already going on. Therefore, it seems logical to assume that if The Bermuda Company was instructing Captain Seymour to set up a company was because whaling was already happening in the colony.

The whaling initiative of 1663 was set up as a subsidiary of The Bermuda Company under the name of “Adventurers of Whales Fishing.” The initial capital was £2,000 and included about 40 shareholders of England-based investors from the original members of the Bermuda Company as well as a few local Bermudian investors. Among the former we can find members of the British nobility such as the Earl of Manchester and the Earl of Devon.

The first official step taken to formalize this initiative took place on November 16, 1663, when the General Court for the Sommer Islands Company enacted laws aimed at regulating and protecting the Company’s monopoly on whaling (Lefroy, 1877:203). According to this new set of regulations, nobody could whale unless properly authorised by the Governor and the Council and under the supervision of James Goulding, presumably an agent of the Company. If breaking the law, these illegal whalers would have the whale (or its parts) and the boat seized, they will be fined the double of the value of the parts taken, and would be imprisoned for up to six months. The seized parts of the whales would be given to the “Company of Adventurers” (investors). Informants would be rewarded.

However The Bermuda Company had other ideas about who should be in charge of whaling and on December 4, 1663, the Company appointed Hugh Wentworth, to become its agent (“husband”) while investing £2,000 in the whaling enterprise. As a factor for the Rich family, Wentworth arrived in Bermuda sometime between the 1620s and 30s as an indenture servant, *i.e.*, given a seven-year contract to work the land, partly to pay off the costs of transporting him to the colony and supporting him during that time (Lefroy, 1877:689; Lefroy, 1879:209–210; Maxwell, 1999).

The two almost concurrent decisions of establishing whaling regulations and a whaling venture seem to indicate that by then an effective method of whaling had been developed, otherwise it would not make any sense for both to happen. Furthermore, it seems that Bermudians already engaged in whaling had little enthusiasm for joining the new company since on December 4, 1663 the officers of the

Bermuda Company sent a letter to Governor Seymour saying that very few Bermudians wanted to join the venture and that from now on the governor had to make sure that the proceeds of whaling, which were an exclusive right of the Company, had to be distributed fairly among the investors of the whaling venture only (Lefroy, 1879:211).

The decision to start whaling was taken officially on March 21, 1664 (towards the end of the time humpbacks visit Bermuda). That day Hugh Wentworth asked the Governor and the Council on behalf of the investors in the whaling venture whether or not the fishery should start immediately. The Council approved of Captain James Goulding, William Wilch and Miles Ffrith to be the harpooners and to start whaling the next day for 20 days. Goulding had been mentioned in their November 16, 1663 regulations proclamation as the only person authorised to practice it and there is no information about William Wilch (or Welch) and Miles Ffrith (or Frith).

On April 19, 1664 (shortly after the expiration of the whaling license for that year) Wentworth asked for continuing whaling which was granted and then asked if a pinnace that belonged to James Sayles could be employed "as formerly" for whaling. The Council considered that the pinnace was "more unhandie & unfit" and that shallops should be used because the latter could be rowed to where the whales were (Lefroy, 1879:214). Shallops (about 27 feet in length) were a bit smaller than pinnaces and therefore considered more manoeuvrable in the shallow waters where the humpbacks were; therefore, the decision made sense.

Although there is no documentation directly pointing to the exact date at which actual whaling began in Bermuda nor who initiated it, the above-related series of events suggests that it began shortly before or in 1663. Otherwise, there would not have been so many regulations put in place and no mention of a pinnace being employed "as formerly" in 1664.

Who carried out this first whale hunts? The first name is obviously that of James Goulding, another is James Sayles since his pinnace had been used "formerly," a third is Richard Stafford who in a letter published in the *Philosophical Transactions* (Stafford, 1668) claims to have been involved in the harpooning of these animals from the beginning; although his formal position on the island had been that of Sheriff, because he was in charge of law enforcement it is quite logical that he had first hand knowledge of this operation.

The first officially recorded captures took place in 1664 when 18 whales were killed, and after the local demand was satisfied, oil was exported to London (Verrill, 1902:110; Jarvis, 1998:457). These shore-whalers targeted mostly mother-calf pairs of humpbacks for oil (Anonymous, 1665a,b; Norwood, 1667; Stafford, 1668). Whaling probably took place in the Great Sound by Warwick, not far from

Hamilton Harbour. Between 1664 and 1665 92 tons of whale oil were exported from Bermuda (Kennedy, 1971:269). On September 9, 1666, the *Hercules* sailed from Bermuda with 29 tons of whale oil. In 1668 the *Relief* sailed with 41.5 tons and the Bermudian owned barque *Elizabeth and Marie* with 13.5 tones of whale oil (Packwood, 1993:26).

In two notes published in the *Philosophical Transaction of the Royal Society* (Anonymous, 1665a,b) we can find a description of the first successful (*i.e.*, “official”) whaling season in Bermuda. According to that description given by an anonymous correspondent, they killed in 1664 two “old Females—Whales and 3 Cubs” which are called “Jubatees.” That name and the description of the anatomy of behaviour of the animals in that article, including body proportions, suggest that they captured humpback whales. From that narration is also possible to conclude that the reason why they were successful this time around was because they targeted mother-calf pairs. In fact, this procedure was used and continues to be used throughout the Caribbean by both Yankee whalers and local shore whalers (Romero *et al*, 1997; Romero and Hayford, 2000; Creswell, 2002; Romero *et al*, 2002; Kannada, 2006). This is because once the calf is hit, the mother gets closer to it and does not try to escape; a behaviour that the whalers take advantage of to strike the mother that otherwise would try to escape by going to deeper waters. The anonymous author/correspondent of the above-mentioned notes also points out that the main product extracted from those whales was oil which was used not only for internal consumption in Bermuda but also exported to Ireland.

Who was the author of these anonymous notes? A search in the archives of the Royal Society in London did not yield any clue, but given the highly sophisticated description of the animals and the fact that he himself published later on another note in the *Philosophical Transactions* (Norwood, 1667), it seems quite possible that such notes were written by Richard Norwood.

In another note published in the *Philosophical Transactions* in 1667, Norwood goes into further details regarding this new enterprise by asserting that whaling only takes place during the Spring (the season in which humpbacks appear in Bermuda), with the hunting expeditions killing from one to three whales per sortie. He described the boats as manned by six oarsmen and a harpooner. The harpoons have an iron head which detaches itself from the harpoon pole but remains attached to a rope handled by the harpooner. As the whale weakens after being harpooned, lances are furthered directed to the animal until it finally dies.

PIRATE WHALING

From the beginning pirate (unauthorised) whaling was a problem. During the Council meeting of May 9, 1665, eight Bermudians were found guilty of illegal whaling the previous month off the west coasts

of the islands and condemned to make restitution to the Company for all the blubber taken and to be imprisoned from six days up to six months (depending upon the individual involvement in this act). Among those imprisoned were James Sayle and Samuel Sommersall (Lefroy, 1879:223–224) from whom we will hear later.

Despite these actions, The Bermuda Company grew increasingly impatient with pirate whaling in the colony as well as with the Governor's either inability or unwillingness to act decisively in this matter. And that was on top of the unwillingness of the locals to join the "official" venture. This time the Company, in a November 28, 1666 meeting, decided to impose a tax on the local land owners of £50 per share of land, while inviting them again to join the venture and if they decided not do so they would be excluded for good. The instructions went on admonishing those who were whaling without being investors in the venture by either claiming that by being land owners they had the right to do it or by simply killing whales without any pretence of legality. The letter from the Company ends ordering the Governor to prosecute the offenders and to restore order in this matter (Lefroy, 1879:245–246).

This may have had some effect because by 1667, among the registered Bermuda-based investors of the whaling venture we find Captain Thomas Richards, Captain Florentius Seymour, Captain John Stowe, Captain Richard Jennings, and a dozen or so others, all of them prominent Bermudian citizens (Bernhard, 1999:150). The term "captain" does not necessarily mean that they were all navy officers, since that seemed to have been an honorific title given to people of certain importance on the island (Bernhard, 1999:134).

The occupations of some of these investors give us an idea of the social class to which they belonged. For example, Richards was a member of the first generation of Bermuda colonists who arrive to the islands in the 1620s. He was a Southampton resident and became one of the wealthiest merchants making part of his fortune out of shipwrecking (Bernhard, 1999:129, 150, 155–157, 178). Thus, it is not surprising that he had an interest in whaling. Seymour from Southampton Tribe was the Governor from 1662 to 1668 and from 1681 to 1682 and as such expected to receive proceeds of the whaling venture as part of his salary. Jennings from Smith's Tribe was another colonist who had been in the islands since the 1620s and was heavily involved in wrecking, local politics, and illegal trading (Bernhard 1999:126; 164–165). Stowe, from Pembroke Tribe, was a boat maker and a merchant who traded everything possible (including slaves) with Barbados, England, and New England (Bernhard, 1999:117, 163–4). These and other Bermudians interested in whaling such as the Darrells, Durhams, Trotts, Leacrofts, Sayles, Wainwrights, Whites, and Woods, and represented the "wealthy group" that by 1663 made up 10 percent of

the Bermudian population (Bernhard, 1999:131).

On January 17, 1668, the Bermuda Company abandoned its stiff approach of coercion by taxation and apparently decided that if you cannot beat the enemy, then better join him. In a meeting on that date the Company decided to offer a lease on local whaling to “managers” who, in exchange for carrying it out, would receive one third of the profits for three years and if they “behave” appropriately (*i.e.*, did not cheat), the lease would be extended (Lefroy, 1879:257–258).

But not everybody behaved as expected. All the whale oil from this enterprise was supposed to be sent directly to London in the magazine ship of the Bermuda Company but there were those who shipped it elsewhere, probably profiting 100 percent in the interim as occurred with 20 tons of whale oil shipped by a Captain Morley to an undisclosed destination in 1668 (Lefroy, 1879:275). In successive letters (Lefroy, 1879:282–284) to the new Governor, Samuel Whalley, the Company kept insisting that all the whale oil had to be shipped to London and gave specific instructions of what to do with it between the time the whales were killed and the magazine ship from the Company arrived, a clear indication that pirate whaling continued to occur.

With the arrival of the new governor, John Heydon in May 1669, Bermudian whaling politics changed radically. Under Heydon, who lasted more than 10 years in the governorship and who was known for paying very little attention to the orders from London, local whaling became “official.” Thus, on February 24, 1670 a group of locals decided to create their own whaling Company. The company included among its shareholders members of the Sayle family (James had been imprisoned previously for pirate whaling), Hugh Wentworth (the former accountant for the Bermuda Company in matters regarding whaling), and...governor Heydon himself as the largest shareholder (Lefroy, 1879:302–303). In other words, pirate whaling had now become legalised and it included the governor himself as the major beneficiary of this operation.

Now with the governor in full control of the whaling industry in Bermuda, he started to regulate everything, from the disposal of the whale carcasses to personally inspecting the accounts of the enterprise (Lefroy, 1879:310–311).

This new set of circumstances annoyed the officials of the Bermuda Company who seemed to have local informers. In a letter dated November 9, 1670, they demanded that the governor follow their instructions and account for 28 tons of whale oil produced in 1668 which never reached London (Lefroy, 1879:327). By February 14, 1671, the Bermuda Company was demanding reparations in money for the lost income (Lefroy, 1879:357), but there is no evidence that anyone was paying any attention. In the meantime the local whaling enterprise continued doing business as usual (Lefroy, 1879:358–35).

And as Governor Heydon was ignoring the Bermuda Company's authority on whaling, some locals felt that they also had the right to develop their own ventures and so several of them led by Samuel Trott decided to establish a new company in 1676 and when questioned by the Governor and his Council about it, they asserted the old argument that as landowners they had the right to whale based on a 99-year lease. Those who produced documentation were temporarily allowed to continue whaling, while those who did not were ordered to cease their operations (Lefroy, 1879:437).

The issue of whether landowners and shareholders had the right to whale went to the General Court of Bermuda and on October 17, 1676, the court decided that such shareholders did not have any rights on whaling because such rights had never been explicitly given by the Bermuda Company to them and required that any person interested in whaling in the future must receive a license (Lefroy, 1879: 443-444). One wonders how Heydon's Company fit into all this, but since he was the Governor he could claim that he was the authority and, therefore, there was nothing wrong with licensing himself and his partners.

That does not mean that all legal issues were now resolved. In June 1676 a dead sperm whale was found floating near a beach and the question was, to whom did it belong? After much quarrel, the Governor decided that half of the whale belonged to the finder and the other half was to be delivered to him (Lefroy, 1879:437-441).

In 1679 several Bermuda residents sent a petition to the King asking, among other things, that whaling be allowed (Lefroy, 1879:469) to which they received a laconic response from the Bermuda Company that year according to which whaling was allowed under lease but due to quarreling among current holders of those leases, such activity had been prohibited (Lefroy, 1879:472). This issue was resolved in October 1682 when the now dwindling Bermuda Company granted a lease to John Stringer and William Keele (Lefroy, 1879:510-511).

One of the London-based investors, a Sir Robert Clayton, for whom a receipt for an installment on the whale company shares dated February 21, 1664 can be found at the Bermuda Archives (Fig. 2), filed a complaint dated October 17, 1682 addressed to Governor Seymour and the Island Council, against those who had been whaling without the whaling venture consent, claiming that he and the other shareholders had a 99-year lease on that activity. The year 1682, the same year that Robert Clayton complained about illegal whaling, was a bad year for Bermudians. That summer there was a severe infestation of insects on the corn, causing shortage of food, a hurricane and mildew damage to orange trees and cedar forests, and there was also a slave revolt (Bernhard, 1999:196), so it is not surprising that many resorted to illegal whaling in order to make ends meet.

A new governor, Richard Coney, took office in 1683 and the Company

Received this 21st of February 1664 of Mr Robert Clayton by the hands of Mr Bentley
 the sum of ten pounds being the first ^{share} of the first share
 subscription for 150 whale fishing tickets to the Summer Islands
 for six one share of ten years a Southern share as in
 the bylaws of the company by order of the Company for the
 Adventure

Done more this 21st of February 1664 of Mr Clayton by the hands of
 Mr Bentley by Sir Robert Clayton

Jno. Jones
 Jno. Jones

Fig. 2: A receipt issued to Sir Robert Clayton for installment on the whale company shares, dated February 21, 1664

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kept reminding him that he should not allowed pirate whaling (Lefroy, 1879:520). On June 4, 1685 Governor Coney informed the Company that 14 whales had been caught and that despite his order to the Sheriff to account for how much oil was produced he received no information. He indicated that the locals operated on the basis of alliances and would not divulge that kind of information and that, further, they kept claiming that they had the right to keep whaling because they were landowners (Lefroy, 1879:549), all that despite of both orders from the Bermuda Company and the General Court decision of the contrary.

In 1687 (three years after the dissolution of the Bermuda Company), Sir Robert Robinson, first Governor of the British Government for the colony, allowed whaling without heavy penalties and Bermudians were granted permission to build their own boats (Dunn, 1963; Schortman, 1969). This resulted in an increased in whaling activity and the increased use of whale products on the islands: oil for lamps and lanterns, meat ('sea beef') for food (cherished by blacks but despised by whites), and skin for shoes. There are records of Bermuda exporting whale oil to Barbados and Jamaica (70 and 9 barrels, respectively) in the 1680s (Jarvis, 1998, p. 334).

So it seems that during the seventeenth century whaling in Bermuda was an operation largely carried out under the table and for the sole benefit of the local residents.

THE ORIGIN OF WHALING IN BERMUDA

How did Bermudians suddenly became capable of whale hunting? We need to look at three possibilities: (a) the know-how was imported from England, which in turn they had learned it from the Basques; (b)

it was imported from New England; (c) it was home-grown. I believe that these techniques were developed locally in Bermuda. The reason is that there are no records of any foreign influence neither from England nor from New England. English whalers were using Basque harpooners and pilots (Romero & Kannada, 2006a) in the early stages of their trade, but there is no indication of either of them in Bermuda in the early 1660s. New Englanders had been taking advantage of stranded whales for oil and food and they saw Native American engaged in whaling as well. Although Nantucket was the first place in the continental America where the Europeans and their descendant engaged in whaling, shore whaling did not begin there until 1668, *i.e.*, five years after it was carried out successfully in Bermuda (Anonymous, 1874; Walton, 1915). Therefore, it seems that this type of shore whaling was originally developed in Bermuda.

Although many descendants of Native Americans would later be involved in whale fishing and many went on to work for families that were investors in whale ventures (Bragdon, 1998), there is no conclusive evidence that they influenced whaling techniques in Bermuda.

Furthermore based on Norwood's description, I suggest that Bermuda's whaling method of targeting the mother-calf pairs and using small boats manned by six men plus the harpooner, was the one exported to the rest of the West Indies. The first shore whaling operations in the Caribbean proper took place in Trinidad and began around 1826 when a C.A. White, a retired sea Captain from Bermuda, established a shore whaling operation in that Caribbean island (Romero *et al*, 2002). The whaling techniques were identical of those described for 17th-century Bermuda. I further suggest that both the tactic of going after the mother-calf pair and the whaling techniques employed later everywhere by both Yankee whalers and shore whalers throughout the Caribbean were invented by Bermudians and later exported to both New England and the rest of the British colonies in America.

CONCLUSIONS

The history of shore whaling in Bermuda represents the key to understand the development of shore whaling in both New England and the rest of the West Indies. There is strong circumstantial evidence that the shore whaling that has been practiced in the form of lowering boats from larger ships by Yankee whalers as well as straight shore whaling in the West Indies was directly or indirectly (through Yankee whaling) influenced by Bermudians, who learned that the key of being successful at capturing humpback whales was to target the mother-calf pairs.

The manner by which whaling developed in Bermuda was largely in defiance of the rules and regulations established by the Bermuda Company, largely for the profit of the locals, including some of the

officials in charge of representing the financial interests of the Company or the British government.

In future articles I will describe how whaling in Bermuda developed from the 18th century on, what was the interaction between Yankee whalers and Bermudians and how ethnicity played a major role in the way this activity was carried out during the 19th century.

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