

An Overview of the British Southern Whale Fishery

[Note: Wherever possible this ‘overview’ uses data from the British Southern Whale Fishery data set in preference to figures quoted in secondary sources. In some instances variances of near 50% have been noted from previously published figures.]

The Phases of English Whaling

For 350 years until the early 1960s the British were involved in several types of whaling. This involvement was divided into three distinct trades; the northern whale fishery between 1610 and 1914; the southern whale fishery or ‘south seas trade’ from 1775 to 1860; and the modern whaling trade, from 1904 to 1963. Each of these trades was distinguished by the geographical location in which it was undertaken, the types of whales pursued and to some extent by the methods and techniques used to capture whales. The northern and southern whale fisheries were even differentiated and defined by law.

The northern whale fishery was always conducted in the waters to the north and west of Britain and its prime objective was the capture of northern right and bowhead whales of the Right whale (*Balaenidae*) family. Until 1811 the main northern fishery port was London, but in the years that followed the trades centre moved first to the English provincial ports of Hull and Whitby and, following the demise of the trade in these centres, became purely the province of a number of east coast Scottish ports. Capture of Bowhead and Right whales was undertaken from both ships and shore-based whaling stations and until almost the end of the northern fishery, there was no direct competition from the Americans.

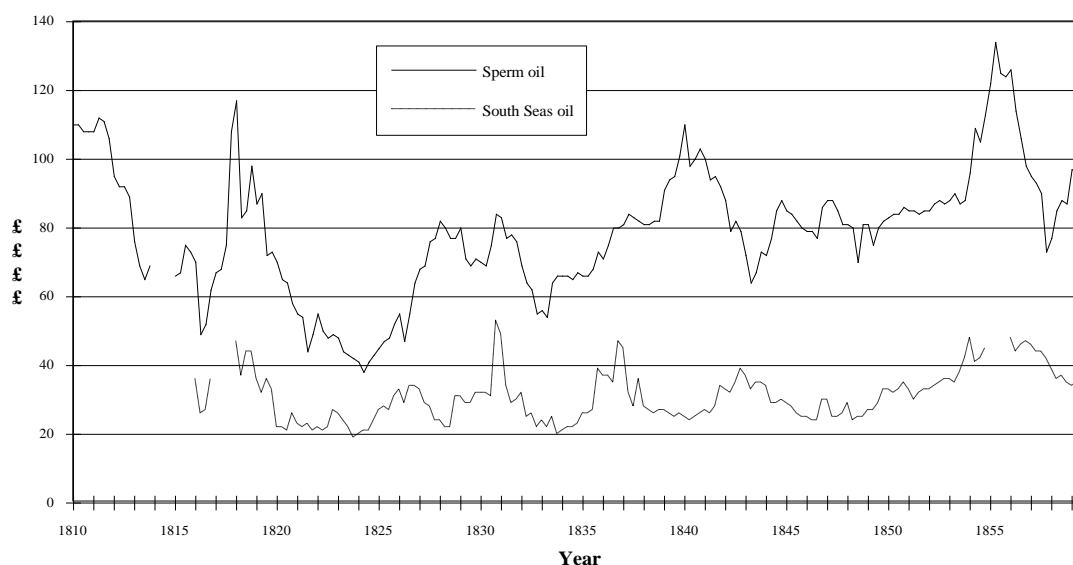
The English southern whale fishery, to the south and west of England, commenced from London in 1775 and for the next eighty years the trade was almost exclusively carried out from London to the South Seas. For the first fifteen years the trade was conducted primarily in the mid to south Atlantic but by the mid-1790s it had moved to the Pacific and Indian Oceans. Initially, the move was limited to the areas off the coasts of Africa, South America and the east coast of Australia. But by 1815 the trade had spread to the wider Pacific, encompassing areas in the south, central and north Pacific, as well as the rim areas between Japan and New Guinea. In the Indian Ocean the trade extended north to the Seychelles and into the waters around Timor and the Moluccas.ⁱ

Transplanted United States whalers, especially men from Nantucket, supplied owners, masters and mates on English whaleships in the trade's early years. As the trade developed, ownership and leadership passed into English hands though the link between the two countries continued well into the nineteenth century. As late as the 1840's there were still English whaleships commanded by Nantucket born masters.ⁱⁱ

From the outset the English southern whale fishery was in direct competition with the fleets out of the eastern ports of the United States although the competition was not necessarily always on the same whaling grounds.ⁱⁱⁱ During the first 25 years of the trade the main quarry was the shore-hugging southern right whale but by the early 1800s it had shifted to the sperm whale. Some 'black whalers' were also ‘bay whalers’ or involved in sealing, or, when new seal grounds were discovered, pursued sealing as their primary objective.

Sealing and whaling were quite different trades though they were often undertaken by the same people. More complex technological requirements and the higher capital costs of outfitting a whaling ship precluded sealers from going whaling, but not whalers from going sealing. The navigational and sailing skills required to pilot a ship in the pursuit of the sperm whale at sea were also considerably greater than the skills required in sealing and to a lesser extent, shore-based bay whaling. The pursuit of the sperm whale had its rewards, however. For much of the life of the trade sperm oil was worth on average twice as much (sometimes even three times as much) as seal or black oil.

Price of South Seas Whale Oils in London 1810 to 1859



Sperm oil always remained in demand as it had a number of unique qualities. It was more portable than gas and burnt more purely and with less smoke than animal, vegetable and other whale oils.^{iv} As a lubricant its fine qualities resulted in much less wear on moving parts^v and it was not until the mid-1840s that developments in the refinement of other oils (and lard) improved them to a level where they could replace sperm oil.^{vi} Sperm oil also played a key role in lighting the better-class houses of London and contemporaries correlated the spread and use of gas lighting in streets with the increased use of Argand lamps in private homes. A price for sperm oil by the gallon was always quoted in the London papers.^{vii}

The lower capital costs involved in establishing sealing and shore-based whaling stations, encouraged colonial entrepreneurs in Australia and South Africa to become involved from the outset in the sealing and shore based whaling components of the southern fishery. Australian involvement in sperm whaling, however, did not commence in earnest until the 1820s despite the colony being right next to major sperm whaling grounds. Prior to this date the combination of tariffs, capital costs and the lack of suitable locally based ships hindered colonial participation. The entry of the colonial Australians into sperm whaling in great numbers in the 1830s helped hasten the demise of the English southern whale fishery as they competed directly with the English fleet. Colonial whaleships

operated with a number of distinct advantages, the most important being their proximity to the whaling grounds and cheaper operating costs.

The third and final phase of British whaling, the modern trade bore little resemblance to the methods and techniques of either the northern or southern whale fisheries. By the first decade of the twentieth century a whale's speed in the water, size or geographic location, were no protection from modern whale catchers based at sea or shore-based, and all large whales were at risk. With the use of modern whaling techniques, more whales were taken in two or three years by the combined whaling fleets than were taken by the English southern sperm whale fishery in its entire eighty year existence.

The Beginnings and Expansion of the Southern Whale Fishery to 1815

The initial impetus for a British southern whale fishery arose out of the American colonies' quest for independence, when a number of London based oil merchants and their suppliers on the east coast of America sought relocate the business, some ships and crews from New England to London. Before this time a small number of New England ports, particularly Nantucket, had exclusively supplied sperm oil to the British market.

The first ships which sailed from London met with little success. However, it did not take the English ships long to acquire the skills and knowledge necessary to make a success of the fishery. The driving force behind the push to conduct whaling out of London at this time is credited to the firm of Samuel Enderby & Co., and there is no doubt that Enderby vessels were amongst the most enterprising of those seeking the whale.^{viii} In response to the need to ensure a continuing supply of oil for Britain the Government instituted an incentive scheme which offered premiums to the most successful ships, ranging from £500 to £100.^{ix} The premiums were designed to encourage success rather than simply reward participation, as was the case with the bounty system employed in the northern whale fishery.^x

Attempts by loyalist or neutral Nantucketers to avoid becoming embroiled in the conflict between the mother country and the colonies were unsuccessful and the island was unable to protect or maintain its stated neutral status in the years following 1775. When the British Government introduced its Prohibitory Act in 1783, implementing a punitive tariff of £18.3.0 on American oil, Nantucket was effectively excluded from the British market. In response, some Nantucketers left the island and relocated to Nova Scotia, Britain, and even France.

Following the American war, the new owners in the southern fishery capitalised on the advantage offered by the tariff on alien oil and continued to expand. Ten years after the trade had commenced the number of vessels clearing had increased and by 1795 the number had settled in the low thirties having peaked at over 90 departures in 1791. At the same time a shift in government interest from the northern to the southern fishery saw the trade benefit from some remarkable support at the highest levels of Government.^{xi} In what Margaret Steven has described as 'an indulgence that has few parallels in British economic history', south sea whaling came to occupy a political and economic priority out of all proportion to its size.^{xii} The driving force behind this support was a desire to make England independent of foreign caught oil.^{xiii} The support was so strong that when the East India Company attempted to forestall the fishery's extension past the Cape of Good Hope, the Company's objections were dismissed and the request granted. In these negotiations, the Prime Minister,

William Pitt and his great supporter, Henry Dundas, the 1st Viscount Melville, took up the case of the whaleship owners, and with their continued political support the whaleship owners were able to continue to extend their interests up to the early 1800s.^{xiv}

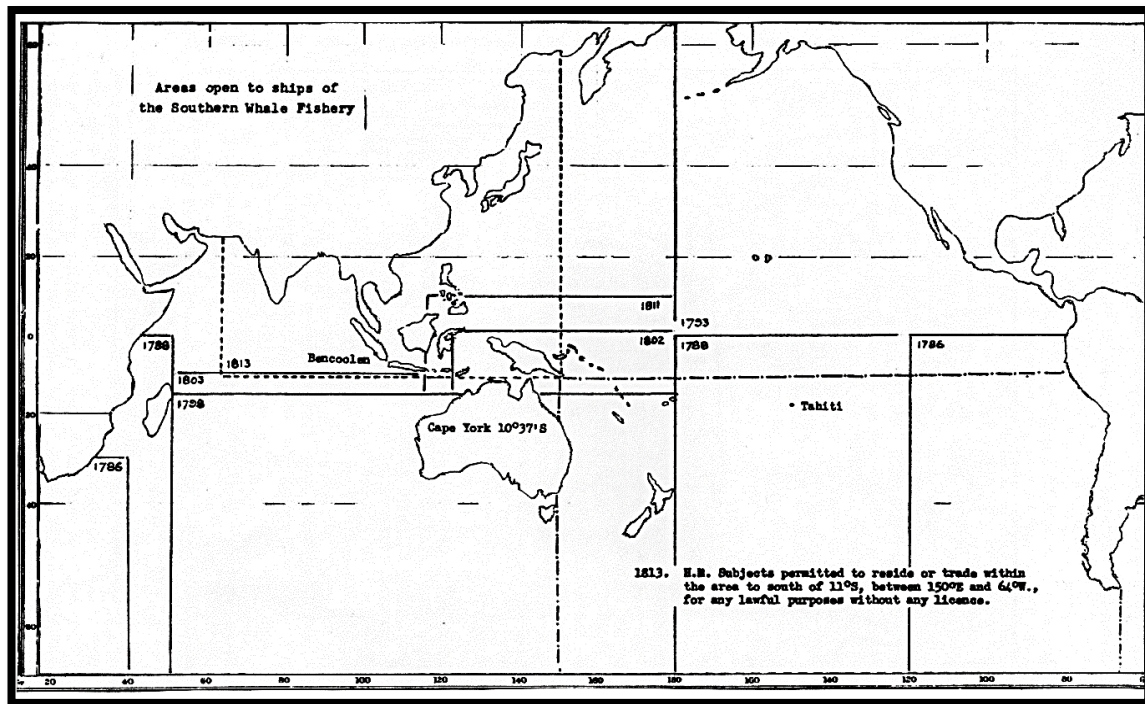
In 1786 an 'Act for the encouragement of the southern whale fishery' cemented for the trade its privileged position. In addition to the existing premiums, further 'prize' premiums, ranging down from £700 to £300 this time, were to be offered to the five most successful ships returning each year.^{xv} In recognition that if the trade was to continue to develop and expand it would require experienced seamen, a special clause was inserted to promote wholesale movement of Nantucket whalers and their families to England. Disagreements between the Government and the Board of Trade, on the extent of encouragement to be offered to the Nantucketers, resulted in a more favourable offer from the French enticing the Nantucketers to move instead to the French port of Dunkirk. However, the process of individual Nantucket seamen moving to England to take command or sail on English whaleships continued unabated over the life of the English fishery.^{xvi}

Buoyed by a continuing rise in the price of sperm oil and encouraged by the Act of 1786, the London based southern fishery flourished and the owners continued their push towards the Pacific. In 1789-90 the value of the southern fishery's catch surpassed that of the northern fishery for the first time,^{xvii} and between 1791 and 1793 the official value of the annual catch virtually doubled.^{xviii} It is important to note that the trade at this time was heavily focused on 'black' whaling. In 1788 only 22 per cent of production was sperm oil and until 1800 the main product of the southern fleet was black oil.^{xix}

The political influence of the London based southern whaleship owners, now calling themselves the Committee of Southern Whalers (comprising Samuel Enderby, Alexander Champion and John St Barbe), was tested in the early 1790s by the resurrection of plans to re-locate Nantucket whalers to the Welsh port of Milford Haven. Although an Act was passed in 1795 to promote the movement of the Nantucketers, objections and the slow workings of the bureaucracy delayed the process so much that the expected transfers never came about in the numbers anticipated. A small group did eventually re-locate to Milford Haven and pursued whaling from the port; but the trade there ceased by 1815.^{xx}

London remained the centre of the southern whale fishery, the owners' efforts supported by an agreement concluded on the trade's behalf with the Spanish (the Anglo-Spanish Convention of 1790) and government support in pushing back the boundaries of the East India Company (see map below). These agreements provided access to Spanish ports on the west coast of South America, Sydney on the east coast of Australia and much of the Pacific. With provisioning and refreshment ports on both sides of the South Pacific now guaranteed, greater expansion could occur.

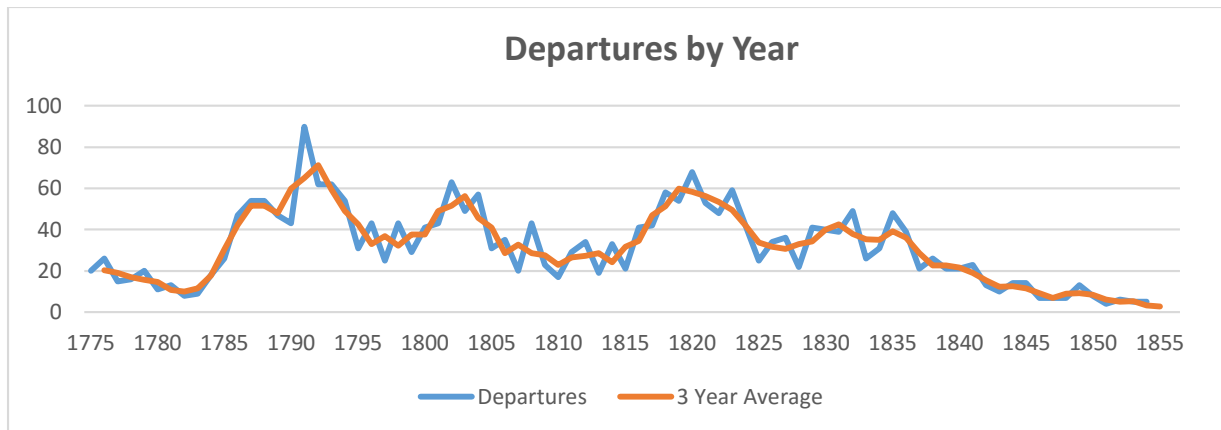
As early as 1791, English whaleships involved in delivering cargo and convicts to the NSW colony had sailed from Sydney to undertake whaling. With support from the local authorities and now the British Government, this continued. Many of the ships which visited Port Jackson in the years up to 1800 were whaleships.^{xxi}



Expansion into areas previously the exclusive preserve of the East India Company to ships of the Southern Whale Fishery – reproduced with permission from 'Shipping Arrivals & Departures Sydney, 1788-1825' (1977) p. 17

After 1800 the trade experienced its first major setback when the war in Europe became more widespread. The southern whaling trade was seriously affected by the spread of hostilities to the trade routes and colonies, unlike the northern trade which continued to pursue its business uninterrupted. English whaleships were taken by the Spanish off the west coast of South America and the Dutch off Capetown in 1804^{xxii} and losses continued over the next ten years. The situation became especially bad when war broke out with the Americans in 1812. The US frigate *Essex* captured twelve English whaleships after rounding Cape Horn in 1812,^{xxiii} and, though English warships similarly damaged the interests of the American whaling fleet neither country benefited, as the business of whaling was interrupted. Replacing losses was expensive and difficult, for in wartime conditions ships were expensive to obtain or build.^{xxiv}

The result was that by the end of the French Wars the southern whaling fleet was smaller than it had been ten years earlier due to the losses and owners withdrawing from the trade. In contrast, the northern whale fishery expanded during the latter phase of the French wars.^{xxv} But the growth in the northern trade did not occur because of an increase in the number of vessels sailing out of London. It was entirely due to increasing departures from Scottish ports and from the English ports of Hull and Whitby.^{xxvi} London based owners of southern fishery ships did not redeploy their vessels to the northern fishery, as voyages out of the port of London to the north held fairly steady after 1810. In 1810, London despatched fifteen ships to the northern fishery, in 1811 sixteen ships and in 1814 twenty ships. South sea owners instead contracted the size of their operations, most likely selling off the ships they were unable to deploy or risk in the wartime conditions.



The jagged nature of yearly departures from the mid-1790s reflects the growing length of voyages, the cycles in arrival and departure, events such as the outbreak of war or resumption of peace as well as rises in the demand for oil. Use of a 3 Year average smooths the impact of longer voyages and more clearly shows the peak eras in the fishery.

Consolidation, Change and Failure in the Southern Whale Fishery post 1815

The end of the war saw a rapid expansion in the size of the trade, as owners, new and old, sought to exploit existing whaling and sealing grounds as well as new grounds discovered during the war years. Within four years the number of vessels engaged in the southern fishery doubled and in 1820 the number of vessels employed peaked (see Departures graph above). Not all of these vessels were engaged in chasing the sperm whale; some were sealers, some were 'black' whalers, and others combined all trades.

In the five years between 1816 and 1820 production of sperm oil averaged 3,053 tuns per year in comparison to the last five years of the war when production had averaged 2,409 tuns. Expansion continued as ships began to exploit new whaling grounds around Japan, New Zealand and the Central Pacific. These grounds contained more whales than had ever been encountered before, and sperm oil production nearly doubled to an average 5,353 tuns per year between 1821 and 1825, an increase of over 2,300 tuns per year on the previous five years annual average (see Appendix A).

The increases caused a glut in the market. Between 1819 and 1824 the price of sperm oil halved, falling to around £40 per tun, a low point from where some owners found it difficult to remain in the trade. In a dramatic shake-out the number of ships employed in the trade decreased by almost half. This drop in the number of whaleships deployed has been identified as the beginning of the decline of the southern fishery.^{xxvii} But the trade was not in decline. By 1830 the number of whaleships operating in the trade had increased to 104 and the vessels being used were much larger, on average, than those operating in the trade in the peak year of 1820.^{xxviii} Existing and new owners were investing in new ships and some were even increasing the size of their fleets. Thirty newly built whaleships were added to the English whaling fleet between 1826 and 1840; between 1815 and 1825 there had been no new building at all.

Despite the high costs of outfitting from London, the trade continued to expand.^{xxix} By 1833, one hundred and ten ships were deployed, and Charles Enderby was able to inform the 1833 Select Committee that there were now more ships engaged in the sperm fishery than ever before and that

the number of houses engaged in the fishery had increased of late.^{xxx} Enderby also referred to the consolidation of the trade on London and the diminished nature of the whaling trade in the north.^{xxxi}

The real problems for the English fleet did not become noticeable until the late 1830s. By 1838 the number of whaleships had decreased to 84, and by 1844 the number had halved to somewhere around 40 ships. The reduction in the duty on Colonial oil, which was made in order to promote the Colonial fisheries based at the Cape of Good Hope and New South Wales was having its desired effect. By the end of the 1820s, the Australian and North American colonies, spurred on by their success in finding an export commodity that was in demand in London, had already become a major source of common oil. For the Australian colonies, which were close by the whaling grounds, it did not take much longer to get sperm whaling underway, and by the late 1820s the ports of Sydney and Hobart had entered the sperm oil trade.

By late 1830 the Australian colonies whaling fleets tonnage was equal to that of the English fleet and its oil was making inroads into the London market. Though some believe many of the ships involved in the colonial whale fishery had formerly been registered as whaleships in London or other English ports in reality very few of the forty or so ships which transferred registration and operated as whaleships out of the colonial ports between 1830 and 1850 had ever previously landed a cargo of oil in London. In the process of creating a colonial whaling trade, the role of imported English capital and imported whaling expertise in terms of men was more vital than ships. Also, surprisingly, the investment capital which financed the colonial whaling trade did not come from those involved in the English fishery. It came instead from other areas of the mercantile interest in London.^{xxxii} In a way, the investment provided by these merchants undermined the English fishery in the late 1830s by promoting the fledgling colonial fishery.

At home, the greatest burden faced by owners were the many duties levied on a ship's outfit. Charles Enderby, when providing evidence to the 1833 Parliamentary Select Committee, declared that English whaleships owners operated at a 'very considerable disadvantage' as whaleships, unlike other foreign-going vessels of the period, were not permitted to sail 'in bond'.^{xxxiii} Owners continued to voice their concern all through the 1830s about the amount of duties levied on outfit and provisions. The author of an article in 'The Times' of 19 November 1840 estimated the cost of direct and indirect duties when outfitting a 400 ton whaleship at £1,250.^{xxxiv}

What was lost in the period following the French Wars, despite two Parliamentary Select Committee Inquiries into Shipping, was government interest in the southern whaling trade. Following the advantageous position achieved by the early 1800s, and, apart from some success in forestalling the development of a locally-based fishery out of NSW, the trade received little political support. In some sense, its success after the war contributed to its eventual decline. In 1820 it was announced that the £20 a tun duty on colonial oil was to be repealed (this did not occur until 1823) and in 1821 the premiums payable to southern whaleships were removed.

The concentration of English ships on the sperm fishery can be linked to the reduction in duty on imported colonial oil in 1823. The reduction promoted further expansion of bay whaling in the colonies and as this form of whaling was overwhelmingly a trade in 'black' oil, the colonies quickly became the major source of 'black' oil. With this part of the market now in the hands of the colonial whalers south sea owners instructed their masters to take sperm whales only.

A consequence of the increased number of ships in the trade in the early 1830s, and the importation of some colonial-caught sperm oil, was a drop in the price of oil. Between 1830 and 1834 an average of 6,425 tuns of sperm oil per year was landed in London. Imports from the colonies over the period comprised 28 per cent of this total. But the high level of production could not be maintained, even with the support of colonial imports, and the price of sperm oil began to rise to levels much higher on average than those returned to owners during the 1820s. This was despite the amount of oil imported being 20 per cent higher than in the previous decade.

By the end of the 1830s, it was obvious to owners that the trade was experiencing problems. Voyage lengths and competition on the whaling grounds were now affecting the productivity of the English vessels and ships were now returning to London with less than a full cargo, even after three to four years at sea.

Competition from the colonial and American whaling fleets was part of the problem, though it was not completely to blame. Many of the problems were internal. During the 1830s many English whaleships favoured grounds and ports not frequented by the American whaling fleet but which were dangerous to the health of the crew (e.g. Kupang, Timor). At the same time the calibre of men employed was also judged to be deteriorating badly: so much so that the shipowner Joseph Somes described them as of the 'worst description'.^{xxxv}

The effect of the problems can be seen in the amount of oil brought in by English whaleships between 1840 and 1842 - production from the home fishery averaged 2,260 tuns of sperm oil, whereas the corresponding figures for 1820 to 1822 had been 4,111 tuns and for 1830 to 1832 a figure of 5,224 tuns.

The push towards 'free trade' and the move to lower tariffs on raw material in the early 1840s compounded the effect of these poor years for the English fishery. The result was, as Somes' put it in his evidence to the 1844 Parliamentary Select Committee, 'since the taking off of the duty on American oil, I should say five ships out of every six, when they have arrived here, have been withdrawn from the trade'.^{xxxvi} Thus, a major consequence of the removal of the tariff and the falling prices which accompanied it was the wholesale withdrawal of many of the established owners in the early 1840s. This reflected a general realisation that the trade had become too risky and unremunerative for owners to remain in it.

In 1844, on the death of its principal, the family of one of the oldest and likely the largest company to participate in the trade, Daniel Bennett & Sons, withdrew completely. The first established company in the trade, Enderby's, were by 1844 reduced to one ship, and even that was mortgaged. Around the same time the new houses which had entered the trade in the late 1820s and early 1830s reduced their commitment. The Green, Wigrams & Green partnership, which had only recently been dissolved, sold five of its six whaleships, with only the Greens deciding to retain an interest in whaling. Joseph Somes was desperate to get out of the trade completely as he could not compete.^{xxxvii} This left the trade in the hands of one large remaining whaling house and several small speculators. This one remaining House snapped up many of the bargain whaleships on sale with a number remaining in the trade over the next ten to fifteen years.

The tremendous loss in experience that the exit of these experienced owners represented was recognised at the time and a number of pamphlets addressing the declining nature of the fishery and suggesting solutions to correct it, were circulated by members of the shipping interest.^{xxxviii}

Those with an interest in the trade now fell into two camps: those who believed that success could only be achieved by employing an extensive number of ships based on the whaling grounds, and those who believed the trade could continue out of London, but in a much more limited form.

Over the next ten years the disastrous losses incurred by the Enderby led Southern Whale Fishery Co. proved that a grandiose scheme of the first type was unsuitable. The existing technologies and the growing scarcity of whales following continuous exploitation of the fishery since the early part of the century, worked against such an approach. Meanwhile, individual English whaleships continued to meet with varying degrees of success, although the size of catches and the number of ships in the trade continued to fall as voyage lengths continued to increase. By the late 1850s whaling attracted little interest, and, as American oil was so readily available, the trade, which since the early 1850s comprised little more than ten ships, ceased.

Conclusion

The actions by the Government in 1821 to remove the subsidy of 'premiums' and in 1823 to equate colonial oil with home oil were in stark contrast to the supportive policies which had prevailed in the period before and during the Napoleonic Wars, when the trade had operated from what can only be described as a very advantageous position. In the 1820s the trade, in accordance with the less restrictive policies which were being generally implemented across shipping under revisions to the Navigation Acts, was seen to be strong enough to stand by itself. From then on, until the end of the fishery, whaleship owners contributed as much as any other shipping trade in terms of duties on outfitting and provisions, in some instances more. Offsetting the burden of these high costs until the end of the 1830s was the knowledge that there was a strong demand for oil, that the market was still protected from the rapidly growing American trade and that the great majority of ships would return home with a 'full' cargo within a reasonable period of time.

In a short time, though, around the end of the 1830s and early 1840s, the trade suffered a collapse. Growing competition on the whaling grounds from the growing colonial and American fleets placed the English fleet under considerable pressure as its ships failed to match the productivity of the Americans. Many English ships failed to return with a full cargo, or took so long that the commercial viability of the voyage was compromised. The effect of these poor years was compounded by crewing problems and when the tariff on foreign oil was lowered in July 1843 within three years 50 per cent of sperm oil being imported was from America.

It is interesting to contrast the two sets of government decisions which put pressure on the fishery after 1815 - the equating of colonial oil with home oil in 1823 and the lowering of protection against foreign oil in 1843 - with the many arrangements, exceptions and exemptions which characterised support of the whaling industry before 1815. The decisions taken after 1815 were made in the context of improving conditions in the whole economy rather than attempting to protect the interests of a small sector of an industry which, though specialised, had no special advantage over foreign rivals.

Footnotes

- i Thomas Beale *The Natural History of the Sperm Whale*, pp. 189-191.
- ii Charles Scammon *The Marine Mammals of the Northwestern coast of North America: together with an account of the American Whale-Fishery*, p. 222 n. Scammon records that more than 500 ship-masters from the island of Nantucket captained ships in the English fishery over its lifetime. This is definitely an over-estimation - the BSWFDB records around 500 voyages captained by Nantucket born whaleman or 1 in 5 voyages. Samuel Swain, a Nantucket born whalermen, commanded the *Bermondsey* out of London as late as 1842.
- iii Winds, friendly ports and knowledge of the migratory habits of whales all played a part in determining what routes were taken to the whaling grounds. In the 1830s when it became well known that whales were plentiful in the waters around Timor many English ships began to prefer the route via the Cape of Good Hope to that of Cape Horn. American ships had to sail halfway around the world to reach the grounds around Timor. Whaling grounds via Cape Horn were closer and were chosen for this and other reasons.
- iv The introduction of vegetable oils (ie. rape oil) certainly affected the commercial viability of the northern fishery which exclusively took black oil. So much so, that by the mid 1830s the northern trade had effectively ceased out of English ports. The risks, the lack of whales, gas lighting and the growing inability to compete with vegetable oils combined to make the northern trade unprofitable.
- v *Select Committee on New Zealand* 1840 (582) vii, Q. 1047. Evidence of Charles Enderby.
- vi *Select Committee on New Zealand* 1844 (556) xiii, Q. 1940. Evidence of G. B. Earp, 'sperm oil has now been replaced in lubrication of machinery by an oil manufactured from lard'.
- vii Frederick Debell Bennett *Narrative of a Whaling Voyage round the globe from the year 1833-1836, Vol. II*, p. 188, correlates the spread of gas lighting with the increased use of oil lamps. T. O'Dea *The History of Lighting*, p. 51, record's that 'Argand lamps were everywhere to be found in the better-class homes in Britain'. *The Globe* for 23 October 1824 recorded 'chamber sperm' selling at 2/6d per gallon.
- viii Bennett *Narrative of a Whaling Voyage ... Vol. 2*, p. 185.
- ix Vincent T. Harlow *The Founding of the Second British Empire 1763-1793 Vol. II*, p. 301.
- x Jackson *The British Whaling Trade*, pp. 54-55.
- xi Harlow *op. cit.*, pp. 300-301.
- xii Margaret Steven *Trade, Tactics and Territory; Britain in the Pacific, 1783-1823*, p. 67.
- xiii *ibid*, p. 68.
- xiv Harlow *op. cit.*, pp. 304-305.
- xv *ibid*, pp. 303-306.
- xvi Charles M. Scammon *op. cit.*, p. 222 n.
- xvii Steven *op. cit.*, p. 76.
- xviii *ibid*, p. 83.
- xix Jackson *op. cit.*, p. 114.
- xx A. B. C. Whipple *The Whalers*, p. 56.
- xxi Steven *op. cit.*, p. 84.

- xxii Jackson *op. cit.*, p. 132. Four whaleships were lost.
- xxiii Whipple *op. cit.*, p. 72. Two of these whaleships belonged to William Mellish
- xxiv Ville, Simon *English Shipowning during the Industrial Revolution*, pp. 49-50.
- xxv Jackson *op. cit.*, p. 118. The figures are 97 ships in 1810; 98 ships in 1811; 110 ships in 1812; 137 ships in 1814; and, 147 ships in 1815. Northern whalers had to complete their voyage within the more favourable sailing months of the year or risked becoming ice bound.
- xxvi *ibid*, p. 117. Thirty-four ships sailed from Hull in 1810; in 1811 forty-three ships; in 1812 forty-nine ships; in 1813 fifty-five ships; and, in 1814 fifty-eight ships. Other northern ports sent less ships than London but their combined total pushed the number of ships departing each year to the northern fishery from English ports to up around one hundred vessels.
- xxvii *ibid*, p. 136.
- xxviii J. R. McCulloch *op. cit.*, p. 1404. McCulloch records that the average tonnage in 1822 was 340 tons and that in 1832 the average tonnage was 390 tons. This suggest that although the number of ships had declined, total tonnage was greater, 41,340 tons in 1832 versus 40,120 tons in 1822.
- xxix *Select Committee on Manufactures, Commerce and Shipping* Q. 8372. Charles Enderby.
- xxx *Select Committee on Manufactures, Commerce and Shipping* Q. 8458 & Q. 8459. Charles Enderby. Enderby estimated the cost of outfitting in London, independent of the price of the ship, at £7,000.
- xxxi *Select Committee on Manufactures, Commerce and Shipping* Q. 8470. Evidence of Charles Enderby. Over this period the trade became nearly exclusively concentrated out of London as outports like Liverpool and Hull ceased to be involved in the trade. A. G. E. Jones records that the last vessel to sail out of London to the northern fishery departed in 1834.
- xxxii Broeze, F. J. A. *Mr Brooks and the Australian Trade* p. 42 & p. 107.
- xxxiii *Select Committee on Manufactures, Commerce and Shipping* Q. 8373. Charles Enderby.
- xxxiv *The Times* 19 November 1840, p. 6, col. 5-6.
- xxxv *Select Committee on British Shipping* Q. 531. Evidence of Joseph Somes.
- xxxvi *Select Committee on British Shipping* Q. 523. Evidence of Joseph Somes.
- xxxvii *Select Committee on British Shipping* Q. 519 & Q. 524. Evidence of Joseph Somes.
- xxxviii William Lance *Address to the Owners of Ships engaged in the South Sea Fishery... and Charles Enderby Proposal for re-establishing the British Southern Whale Fishery through the medium of a Chartered Company*. Surprisingly, in the last few years of its life the southern fishery received much more coverage in the media as a result of the development of the Southern Whale Fishery Co. project than it had in the previous thirty years.

Appendix A : Statement of the Southern Whale Fishery carried on from Great Britain since 1800; exhibiting the total number of ships annually absent from great Britain on whaling expeditions; the total Number of ships that annually returned to Great Britain; the annual Imports of sperm and common Oil, with the Prices of each; [and] the average tonnage of the Ships at sea

Source: J. R. McCulloch *A Dictionary, Practical, Theoretical, and Historical of Commerce and Commercial Navigation*, 2nd ed. plus supplement (1839) and New edition with supplement (1854)

Year	Ships at sea	Ships returned	British Sperm oil imported	British Common oil imported	Price of Sperm Oil per Tun	Price of Common Oil per Tun	Total value of imports
1800	64	26	1351	2836	70	30	179,650
1801	78	25	555	3538	84	40	188,140
1802	90	36	1106	5948	80	29	260,972
1803	92	32	1770	4496	80	35	298,960
1804	99	37	1952	4210	78	32	286,976
1805	86	32	2413	3099	75	30	273,945
1806	66	38	2338	3739	70	26	260,874
1807	43	20	1351	1473	78	24	140,730
1808	55	20	1681	2140	93	34	229,093
1809	53	15	1824	805	100	40	214,600
1810	45	16	1410	765	105	42	180,180
1811	59	27	3404	966	100	37	376,142
1812	62	12	1899	633	90	42	206,496
1813	41	23	2598	2131	82	50	319,586
1814	48	29	2965	1977	66	40	256,950
1815	56	15	1181	1897	66	36	146,238
1816	54	31	3505	2928	53	28	267,749
1817	76	24	1969	3009	65	30	218,255
1818	91	33	3398	4267	75	36	408,462
1819	112	40	3678	4885	85	33	473,835
1820	137	39	2717	5061	71	25	319,432

Year	Ships at sea	Ships returned	British Sperm oil imported	Colonial Sperm oil imported	British Common oil imported	Colonial Common oil imported	Price of Sperm Oil per Tun	Price of Common Oil per Tun	Total value of imports
1821	123	58	3606		4570		60	19	303,190
1822	118	41	6011		1970		54	22	356,934
*1823	114	57	6891	296	1723	668	45	21	383,626
1824	96	42	5928	150	742	618	40	22	273,040
1825	83	32	4331	65	1104	412	48	30	256,488
#1826	78	38	5695	388	454	289	55	34	359,827
1827	80		4476	334	665	474	70	27	367,453
1828	83	20	3216	116	136	338	79	25	275,078
1829	92	26	4485	818	102	478	74	27	408,082
1830	104	25	4157	498	419	904	72	43	392,049
1831	108	27	5939	1576	192	1462	75	43	634,747
1832	106	30	5576	1589	402	1785	61	28	498,301
1833	110	19	3451	2608	220	2245	62	25	437,283

1834	99	27	4021	2710	149	2394	65	23	496,044
1835	89	33	5631	2260	311	3137	75	28	688,369
1836	82	26	4285	2716	99	4180	80	32	697,028
1837	86	18	3118	2661	381	4223	84	35	646,576
1838	84	21	3801	2434	20	7904	84	25	721,840

* The ships for this and the succeeding years, as for the previous ones, do not include colonial ships, but those from Britain only.

From this year commenced the Imperial measure. The old measure equated one gallon to 231 cubic inches. The new measure equated one gallon with 277.5 cubic inches.

Note accompanying the Tables: 'We are indebted for the above valuable table, the only one of its kind that has ever been published, to a gentleman connected with a house that has been largely engaged in the trade since its commencement. The details may, therefore, be safely depended upon.'

NB The McCulloch tables includes figures for common oil imported from the southern fishery only. Northern fishery oil was not included. Oil taken by the whaleships employed in the colonial trade of Newfoundland were included only if the oil was taken in the southern fishery. The likely source of the information was Charles Enderby.