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The Dundee-St. John's Connection: Nineteenth Century Interlinkages Between Scottish Arctic Whaling and the Newfoundland Seal Fishery

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The Dundee-St. John's Connection: Nineteenth Century Interlinkages Between Scottish Arctic Whaling and the Newfoundland Seal Fishery

C.W. SANGER

THE EVOLUTION of commercial whaling and sealing has been characterized by recurring cycles of exploitation and relocation, of interdependence and adaptation. Both trades evolved through a sequence of stages, each of which began with discovery and hopeful enterprise, passed through a phase of rapid expansion, intense competition and ruthless exploitation, and ended in declining resources and failure (Fig. 1). While the discovery of new grounds or the introduction of innovative technology could rejuvenate an ailing trade, overexpansion, unregulated hunting practices and resource depletion invariably led to further decline and decay.

Not surprisingly, the development of both trades was intricately intertwined. Companies, vessels and men were commonly engaged in both sealing and whaling, with time, species and place defining seasonal occupations. Nevertheless, there were many instances where the timing and character of individual stages within one trade reflected independent decision-making in the other. Such was the case in Newfoundland in the mid-nineteenth century. While the Newfoundland seal fishery had developed separately from whaling, attempts to rejuvenate Scottish Arctic whaling which was in decline at that date accelerated the pace at which change would likely have occurred had the local sealing industry been permitted to evolve naturally.

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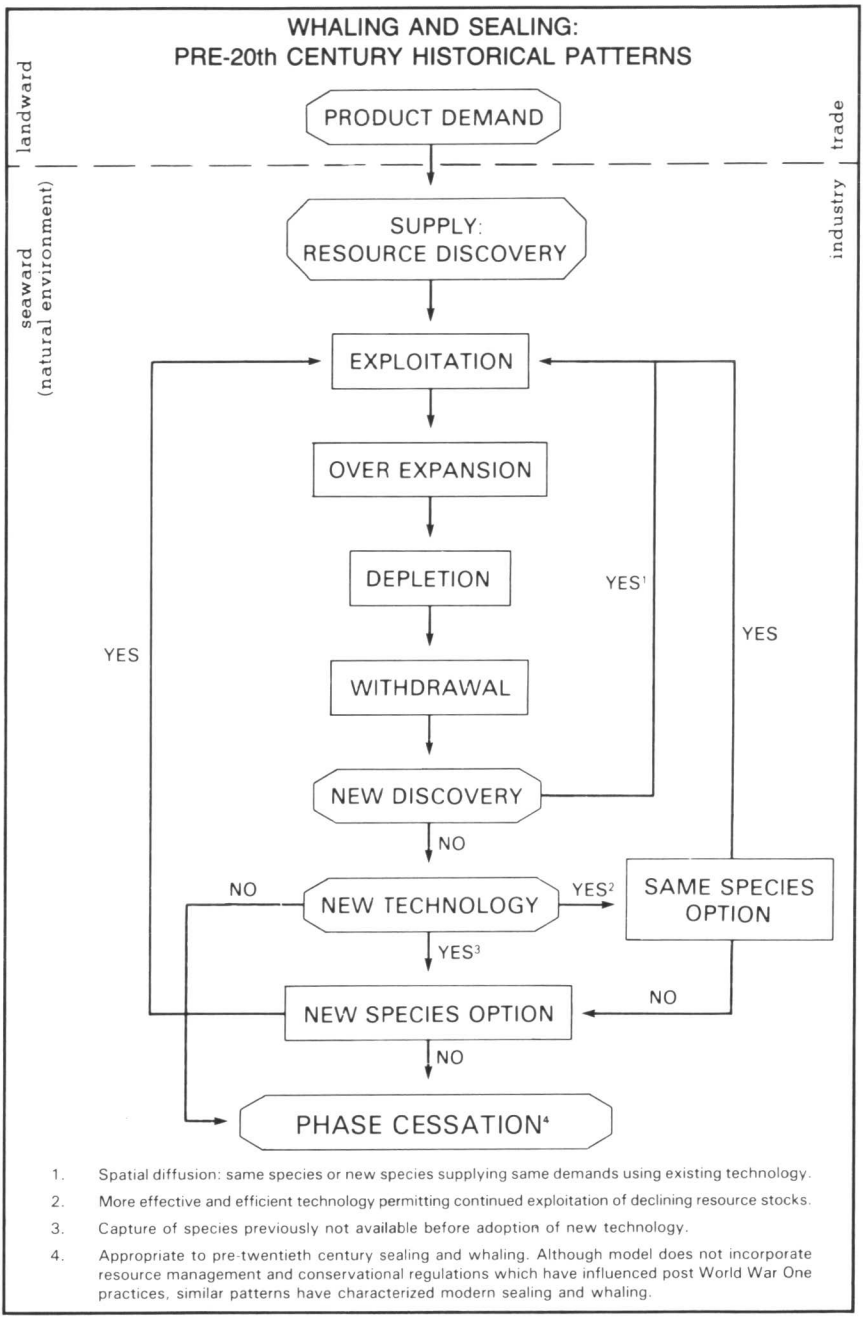
Fig. 1



1. Spatial diffusion: same species or new species supplying same demands using existing technology.
2. More effective and efficient technology permitting continued exploitation of declining resource stocks.
3. Capture of species previously not available before adoption of new technology.
4. Appropriate to pre-twentieth century sealing and whaling. Although model does not incorporate resource management and conservational regulations which have influenced post World War One practices, similar patterns have characterized modern sealing and whaling.

The tendency to overexploitation and decline has been a constant since the beginning. A Basque whaling industry flourished at Labrador during the sixteenth century, but was on the wane by the early 1580s. Increasingly longer voyages were yielding declining cargoes of whale oil and bone. It gave way to an English/Dutch Arctic shore-based fishery at Spitsbergen from which the Basques were excluded. This venture, in its turn affected by declining catches, evolved during the latter half of the seventeenth century into an offshore ice-edge operation in the Greenland Sea. This fishery was dominated by the Dutch who, with the English, were emerging as a leading maritime nation in Europe. The Greenland fishery spread westwards round Cape Farewell and incorporated both ice and strand whaling operations in Davis Strait and Baffin Bay (Fig. 2). By the late 1780s the English had wrested control of the Northern trade away from the Dutch. In their turn, early in the nineteenth century, the English were supplanted by the Scots. It was they who became involved in the harvesting of harp and hooded seals (as well as lesser whales), thereby expanding the resource base. In 1857, in an attempt to gain advantage in increasingly competitive trades, the Scottish whaling industry, now focusing more upon Dundee and Peterhead, introduced

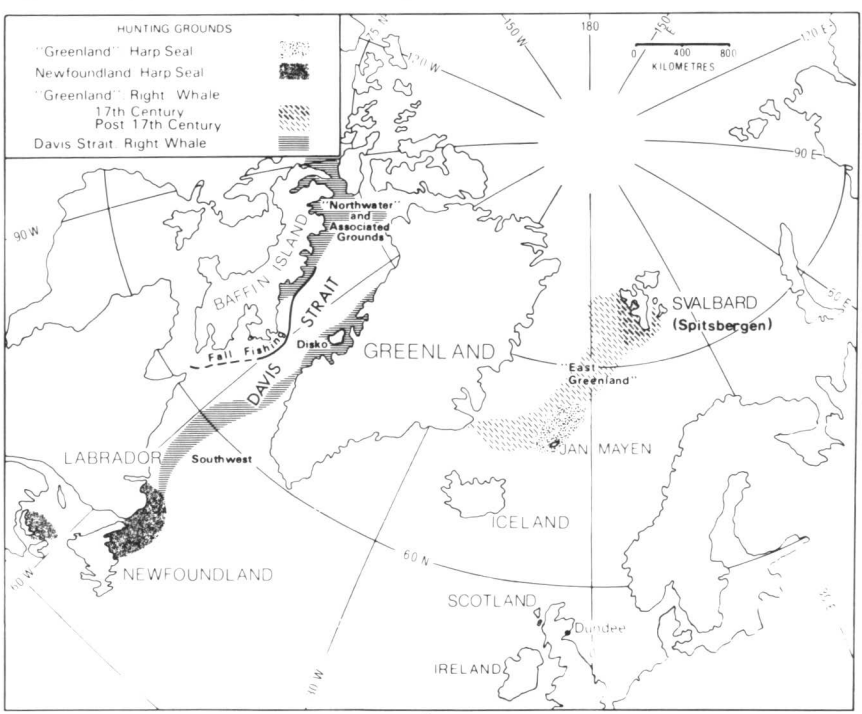


Fig. 2 Newfoundland and Scottish Harp Seal and Right Whale Hunting Grounds

steam-powered vessels. They also opened land stations, fitted out an Antarctic whaling expedition, and eventually turned to bartering with indigenous populations before withdrawing from the Northern trade at the beginning of the present century. In the process, the brief appearance of two Dundee whaling steamers on the Newfoundland sealing grounds in 1862 had a dramatic and immediate impact on the local seal fishery.[1]

The Newfoundland Seal Fishery

Following the decline of the Basque whale fishery at Labrador during the early seventeenth century, the commercial exploitation of marine mammals in Newfoundland waters focused principally upon the pursuit of harp and hooded seals.[2] The annual spring seal fishery, primarily a shore-based operation at first, conducted mostly with nets and frames, had an important influence on the location and subsequent growth of many settlements to the north of Conception Bay. Seals could be captured from land with relatively little capital investment in a fashion that neither required the participants to leave home for extensive periods nor forced them to face the risks associated with the large-vessel seal fishery. This landsmen prosecution compensated for the obvious disadvantages of increased isolation and a shorter summer cod fishery due to the frequent presence of ice along the northeast coast in spring.

As British settlers to the south of Cape St. John began to build larger vessels which enabled them to fish along the vacated French "Treaty" shore during the Napoleonic Wars (*Journal*, 1837:541) and subsequently further north on the coast of Labrador when French rights were again entrenched in the Treaty of Versailles (Thornton:157-59), the seal fishery quickly evolved into a large-scale vessel operation which depended upon the harvesting of newly whelped whitecoats.

The sailing ships employed in the search for the whelping patches were schooners, seasonally fitted out and adapted for sealing prior to their summer fishing voyages northward along the Labrador coast. This symbiotic relationship between cod and seal fishing served many Newfoundland schooner outfitters, owners and crews well throughout the first half of the nineteenth century. The vessel seal fishery had a far greater impact than did the landsmen operation. Fleets of well-equipped sealing vessels represented not only significant amounts of capital investment, but also involved large numbers of local inhabitants. Coincident with the growth of the resident cod fishery in the more populous southeastern areas of the island, traditionally visited by the migratory English fishing fleet, the Newfoundland seal fishery began to play a more important role in the overall economy of the colony. A local

historian writing in 1819, for example, commented that "the habitants of Conception Bay [had] contrived a method to consolidate the interests of both the seal and cod fisheries without any prejudice to the latter" (Anspach:415). While the Labrador floater fishery and offshore sealing were mainly centered in St. John's and Conception Bay, these enterprises were also important economic footings for virtually all settlements along the "sealing shore" stretching from Cape Race in the south to Cape St. John in the north. A measure of the importance of sealing can be seen in the fact that from this area "45 per cent of the male population aged between ten and fifty" (Hiller:52) went to the hunt in the late 1850s.

As can be seen in figure 3, the seal fishery grew rapidly. While fewer than 5,000 skins had been exported from the colony in 1793, the number had increased to 53,468 in 1803, to 279,670 in 1819 and to 685,530 in 1844, the highest total ever recorded (Ryan:226; and Templeman:133). It soon became clear, however, that harp seal stocks both in the gulf and at the "front" were being overexploited. While the climax of the Newfoundland sailing vessel seal fishery in terms of numbers of men and vessels occurred in 1857, for example, when upwards of 370 vessels, carrying 13,600 sealers, killed 500,000 seals valued at £ 425,000 (Carroll:7), seasonal harvests had been dwindling since the late 1840s. Because of reduced numbers of seals without a corresponding improvement in the industry's ability to locate and reach the whelping patches, the venture by the late 1850s and early 1860s was in a state of decline (Fig. 3).

Scottish Northern Whaling and Sealing

The Scottish Northern whale and seal fisheries, meanwhile, were also entering a period of retrenchment during the middle decades of the nineteenth century (Fig. 4). While the Muscovy Company had initiated whaling at Spitsbergen in 1611, by the late 1620s Holland had gained control of the industry and within thirty years Dutch whalers had replaced the Basques as the principal suppliers of oil and bone.

Over the course of the next hundred years the English and Scots periodically attempted to wrest control of the Arctic fisheries from the Dutch. On July 28th, 1625, for example, a Royal licence was granted to "Nathaniel Edwards [Udwart] and his partners, to fish and trade in Greenland for twenty-one years, for the provision of Scotland, and the soap works [at Edinburgh] of the said Nathaniel Edwards with oils" (*Calendar of State Papers*, 1625-1626:386). The most ambitious of numerous attempts by the English to regain control of the Northern whale fishery occurred in 1725 when the directors of the South Sea Company decided to become involved ("Court

Fig. 3

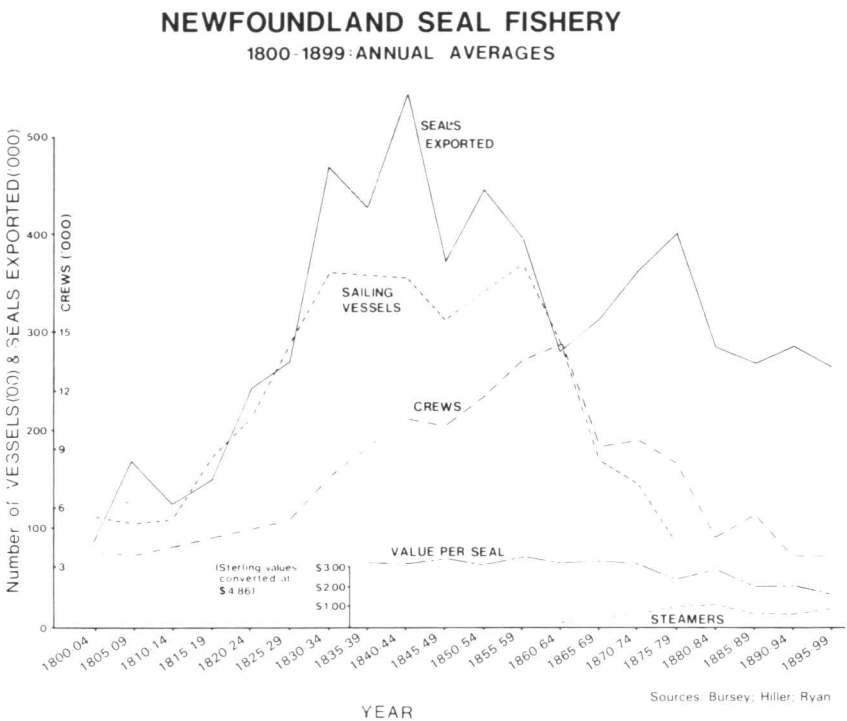
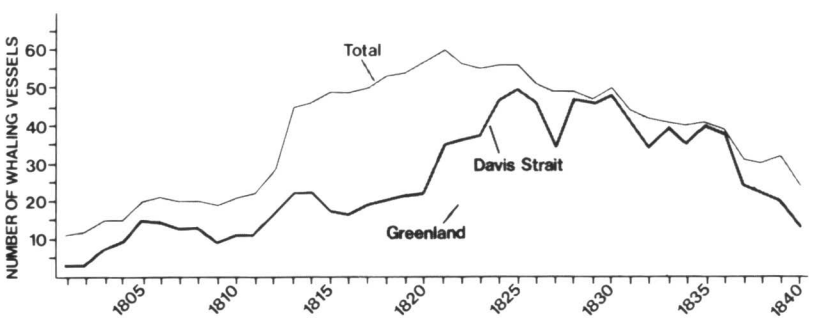


Fig. 4



Scottish Whaling Fleet at East Greenland and Davis Strait: 1801-1840

Minutes," February 4, 1724—June 26, 1726). Twelve new vessels returned with twenty-five and a half whales, an encouraging beginning (Macpherson, v. 3:130-31). No subsequent expeditions, however, yielded any profits (Scoresby, v. 2:66-72), and the Company, finding that in eight years they had expended an immense sum without the least prospect of recouping their investment, decided to withdraw following the 1732 season ("Court Minutes," February 25, 1731—July 30, 1733).

The failure of the powerful South Sea Company had one positive effect in that politicians were at last motivated to take a more active interest in supporting the establishment of a viable British whaling industry. Parliament, in response to the Company's determination to abandon the Northern fishery, provided a bounty designed "to incite the merchants to speculate in the trade" (Scoresby, v. 2:109). Although first offered in 1733 in conjunction with tax and import duty incentives, it was not until whaling bounties were raised to 40s per ton in 1749 that British companies were able to mount a successful challenge (Macpherson, v. 3:268). Thereafter, Scottish involvement, although relatively insignificant at first compared to the whaling fleets fitted out from London and English outports such as Hull and Yarmouth, continued uninterrupted into the second decade of the present century ("Kinnes Lists").

Having destroyed or captured virtually the entire Dutch whaling fleet in 1798 (*Edinburgh Advertiser*, May 11, 1798; *Aberdeen Journal*, August 20, 1798), British whalers were finally able to gain full control of the Northern trade during the American Rebellion and Napoleonic Wars. Nevertheless, despite the discovery of new whaling grounds in Davis Strait and north of the mid-ice in Baffin Bay after 1818 (Fig. 2), more than two centuries of ruthless harvesting had dramatically reduced North Atlantic stocks of Greenland right whales. The typical whaling cycle (Fig. 1) of discovery, good cargoes and rich profits quickly gave way through overexpansion and unregulated hunting practices to declining average catches of increasingly smaller whales. This then forced the English and Scottish whaling companies to trim the size of their fleets (Fig. 4).

There was also a change in the composition of the British fleet. The Scottish effort during these troubled times surpassed that of the English for the very first time. In 1824 the number of Scottish vessels exceeded that of the English by one when a total of 56 Northern whalers cleared from Leith, Kirkaldy, Dundee, Montrose, Aberdeen, Greenock, Kirkwall and Peterhead. Thereafter the Scots rose quickly to a position of complete dominance within the British Northern whale fishery ("Kinnes Lists"). Peterhead and Dundee entrepreneurs, meanwhile, displaying the initiative and industry which would see these ports control Scottish Arctic whaling during the latter half

of the nineteenth century, began to place greater emphasis on the pursuit of species which had hitherto been secondary.

While harp seal whelping herds at Jan Mayen (Fig. 2) had always been harvested when environmental conditions were favourable, Northern whalers previously had been reluctant to put the more lucrative whale fishery at risk, as it would have been had vessels become entrapped by ice while sealing at the beginning of the season. With declining whaling results, however, and corresponding improvements in seal oil and pelt prices, Northern whaling firms increasingly turned to the East Greenland harp seal rookeries to maximize profits. By the early 1840s the Scots were fitting out smaller and more economically-operated sealing vessels. The lead in this transition was provided by Peterhead. Two of that port's larger vessels, the *Joseph Green* and *Superior*, at 353 and 306 tons respectively, for example, were withdrawn in 1841 and replaced by a single ship, the *Jane*, at just 109 tons, thus reducing the average tonnage of the Peterhead fleet to 240.2, compared to 309.3 and 374.5 tons respectively for the Dundee and Kirkcaldy fleets ("Kinnes Lists").

Although seals quickly became the principal focus of a rejuvenated Northern trade (Fig. 5), it is obvious that the traditional whaling companies and many of the new enterprises viewed sealing primarily as a means whereby they could continue to earn profits equal to those that the capture of even a single Greenland right whale could yield (Fig. 6). Clearly harp and hooded seal catches subsidized continued Scottish involvement in whaling and placed far greater pressure on already depleted whale stocks than if the Northern trade had been supported exclusively by profits from whale oil and bone. However, the bumper trips of the Northern masters during the initial phases of the East Greenland seal fishery could not be sustained in the face of rapidly expanding British and Continental fleets and unregulated exploitation (Fig. 5). By the late 1850s the seal fishery at Jan Mayen, as at Newfoundland, was in decline.

CHANGES WITHIN THE SCOTTISH NORTHERN AND NEWFOUNDLAND SEAL FISHERIES: CRISIS RESPONSE

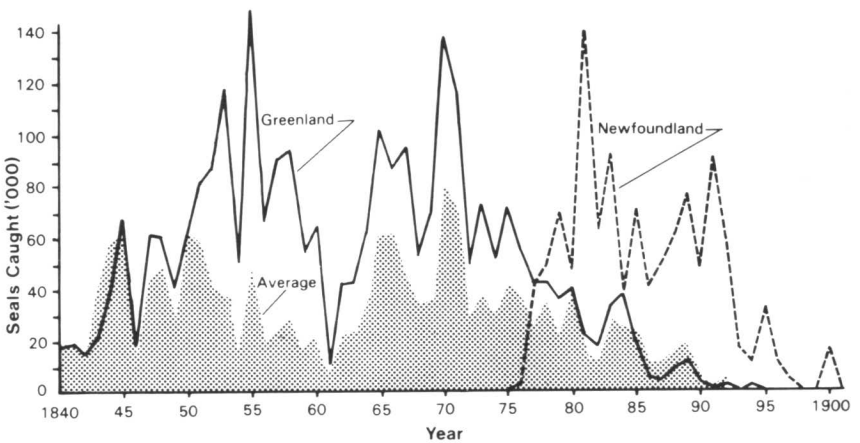
Scotland: The Rise of Dundee

While serious problems confronted the Newfoundland seal fishery during the 1850s, reductions in this trade were less dramatic (Fig. 3) than those occurring in the Scottish sealing industry now centered increasingly on the east coast ports of Peterhead and Dundee. Many of the outports to the north

of St. John's at this date had locally owned, provisioned and crewed sealing schooners clearing for the ice each spring. With a far more restricted economy and a broadly-based enterprise affecting the lives of virtually all inhabitants in northeastern Newfoundland, the response to the downturn in the trade focused on fairly modest adjustments such as the introduction of larger sailing vessels (*Daily News*, March 4, 1861).

Fig. 5

Scottish Sealing Catches at East Greenland and Newfoundland: 1840-1900



The Scots and English, however, operating within increasingly diversified and expanding regional economies and forced to exploit stocks which were far more seriously depleted, took more drastic action. In 1857 Hull and Peterhead entrepreneurs, in an attempt to revitalize the declining Arctic fisheries and, at the same time, gain some advantage against increasing competition, introduced screw steamers. Although adverse environmental conditions restricted the maneuverability of the sailing vessels throughout most of that season, the steamers had moderate success, and other companies in both England and Scotland were quick to follow their lead. The *Dundee Advertiser*, for example, reported on October 1, 1858, that "the advantage of the screw propellor has been demonstrated in enabling the screw ships to make their way to the fishing grounds when the sailing vessels find it impossible to approach them. We hope that the *Tay* [the only Dundee steamer in 1858] will ere long arrive in port still better fished, and be next year only one of a fleet of screws for the whale fishery."

While the 1858 seal and whale fisheries enabled the steamers to achieve some measure of success, it was the following seal fishery at East Greenland, 1859, which proved pivotal in determining the future character of the

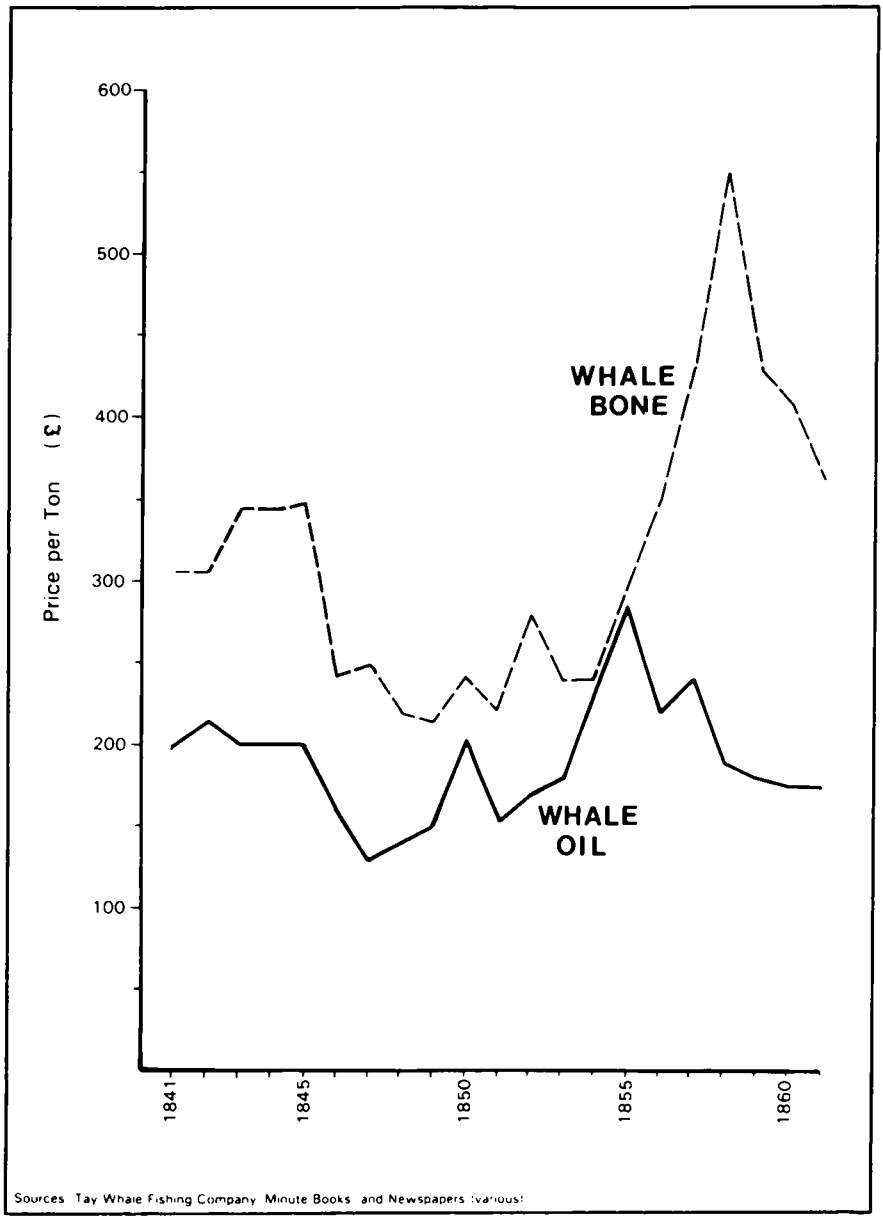


Fig. 6 Price of Greenland Right Whale Oil and Bone Reported at Dundee: 1841-1861

Northern trade. That year environmental conditions were so harsh that all of the British steamers with the notable exception of those from Dundee, were either lost or severely damaged during the early part of the sealing season (*Dundee Advertiser*, May 27, 1859). The *Narwhal*, however, a newly constructed composite steam-powered whaler built specifically for ice navigation by Alexander Stephen and Sons of Dundee, and fitted out for the Northern fisheries by the Dundee Arctic Whale and Seal Fishing Company, not only brought home 2,841 seals, but also rescued portions of the crews of the two wrecked Peterhead steamers (*Dundee* Advertiser, April 28, 1859). More importantly, the *Narwhal* and two other Dundee steamers were able to proceed to Davis Strait where conditions for the very first time allowed them to display fully the superiority of steam propulsion over sail in navigating through ice. The Dundee whaler, *Alexander*, for example, an older sailing vessel, was able to capture fourteen whales on the Baffin Bay hunting grounds because she had been "towed through Melville Bay by the Company's steamship *Dundee* [which took nineteen whales]" (*Dundee Advertiser*, September 2, 1859). Altogether over half of all the 110 whales captured by British vessels in 1859 were brought back by the Dundee fleet ("Kinnes Lists").

Although Hull and Peterhead companies were the first to introduce whaling steamers, a number of factors made it almost inevitable that Dundee would be the leader among British Northern whaling and sealing ports in making the transition from sail to steam. The factors that favoured Dundee included the presence of an innovative and enterprising shipbuilding company committed to the design and construction of wooden composite whaling and sealing steamers, rather than following the lead of those who had selected iron which "was not suitable for the rough work of boring into the Greenland pack" (Lubbock:372); the provision of investment capital by local Scottish textile manufacturers concentrated in Dundee who were at that time converting to jute processing (Lenman, *et al.*), a procedure requiring large quantities of whale and seal oil of which they wanted a secure supply; and the existence of sagacious entrepreneurs, already experienced in the whaling and sealing ventures, who were anxious to take full advantage of the opportunities available. These factors, the success of the Dundee Davis Strait whaling fleet in 1859, and the effective elimination of all other steamer competition, provided the head start and the important impetus which enabled Dundee to quickly achieve not only British but global supremacy as the major supply centre for Arctic whale and seal produce. A Dundee newspaper, in providing information on preparations for the 1861 whaling season, for example, commented on the fact that local companies and individuals were prepared to make substantial investments in the Northern trade thus enabling Dundee to outstrip its chief Arctic rival, the neighbouring port of Peterhead (*Dundee Advertiser*, February 26, 1861). Fifteen years later an editorial

in the same paper lauded local initiatives which had led to the trade's "resuscitation, and to the undisputed recognition of Dundee as the emporium of the Arctic whale fishing" (November 10, 1876).

Nevertheless, a lengthy period of experimentation which included the deployment of two steamers on the Newfoundland sealing grounds in 1862 was necessary before the Dundee companies and masters were able to develop strategies which enabled them to realize the full potential of their ice-strengthened steamers. By the mid-1860s, however, it had become standard practice to deploy them first on the East Greenland sealing grounds. The steamers then returned to Dundee where seal catches were off-loaded and the vessels fitted out for the summer and fall whale fisheries at Davis Strait. Successful employment of the more effective, but substantially more expensive new technology, in other words, required the complementary harvesting of both seals and whales. As can be seen in figure 5, the full commitment of the Dundee steamer fleet to the East Greenland seal fishery revitalized the trade. A sequence of years with favourable weather and ice conditions, the addition of newer and more powerful steamers, accumulated experience and confidence in the capabilities of these new vessels, the growing importance of seal oil, and reduced competition from other ports, all combined to produce a series of exceptional seasons on the sealing grounds off Jan Mayen.

Figure 5 also shows, however, that the steamers were, in a sense, too efficient. Although it quickly became apparent that harp and hooded seal stocks at East Greenland were being rapidly depleted, the Scots and other Europeans were not only unable to regulate the industry, but participants, in "a catching frenzy", actually expanded their fleets, thus increasing pressures already being brought to bear on overexploited stocks. With the industry unable to regulate exploitation practices, depleted seal stocks quickly led to declining total and average catches. By the early 1870s, increasingly uncertain and significantly reduced sealing income once again forced the Dundee owners to consider alternative deployment strategies for their Northern vessels.

The Transformation of the Newfoundland Seal Fishery

The character of the Newfoundland seal fishery, meanwhile, also changed significantly during the 1860s and early '70s. The introduction of ice-strengthened steamers was followed by a sharp reduction in the size of the sailing fleet and the number of men annually employed in the spring seal fishery, but the more effective and efficient steamers were able to rejuvenate the faltering trade.

This metamorphosis began in 1862. While Newfoundlanders, as noted previously, had been concerned about dwindling total and average seal catches throughout the 1850s, modifications, rather than radical alternatives, had been offered as remedies. The introduction of larger sailing vessels, the favored solution, for example, would still have permitted virtually every settlement along the northeast coast to continue to be represented in the industry, from owner/outfitter to ordinary crewman. Before this evolutionary process could work its way through the Newfoundland trade, however, forces beyond the control of the local participants interceded to alter drastically the nature of the industry.

The strategy of having the new Scottish steamers seal at East Greenland prior to the commencement of the Davis Strait whale fishery had not yet proven successful when, in 1862 Dundee owners decided to deploy two of their vessels, the *Polynia* and *Camperdown*, at Newfoundland where a local fleet then consisting entirely of sailing vessels had obtained relatively good catches in 1860 and 1861. The steamers were to discharge their seal produce at St. John's and then proceed northward to the Baffin Bay whaling stations. This "bold new strategy", it was hoped, would permit the Scots to engage in four, rather than just two, fisheries in one season (*Dundee Advertiser*, January 17, 1862).

Unfortunately, however, because of heavy ice and strong onshore winds, the 1862 Newfoundland seal fishery was one of the most disastrous in years. Despite their larger size, greater strength, and steam propulsion, the two Dundee visitors proved to be just as vulnerable to the onslaught of the elements as the local sailing vessels (*Daily News*, April 2, 1862). The Dundee Seal and Whale Fishing Company's Newfoundland experiment, consequently, was an unqualified failure (*Dundee Advertiser*, May 16, 1862) and the Dundonians, as noted previously, then focused their attention on the exploitation of the harp seal whelping rookeries off Jan Mayen.

Nevertheless, while direct Scottish participation in the Newfoundland seal fishery had been restricted initially to one year, 1862,[1] the appearance of the *Polynia* and *Camperdown* had a profound and long lasting effect on the local venture. Although they had not been able to reach the seal herds, the maneuverability of the two Scottish steamers still enabled them to demonstrate clearly their superiority over the Newfoundland sailing vessels.

Two Newfoundland companies, consequently, purchased ice-strengthened steamers in time for the 1863 sealing season. Walter Grieve and Company bought the *Wolf*, built by Alexander Stephen and Sons, Dundee (*Dundee Courier*, January 23, 1863), and Baine, Johnston and Company obtained the *Bloodhound* from Greenock owners (*The Newfoundland Express*, February 28, 1863). While there was an initial reluctance to incur the expenses associated with the new technology, all of the larger sealing enterprises centered

primarily in St. John's were forced to follow their lead in order to remain competitive. As can be seen in figures 3 and 7, the transformation from sailing ship to steam had been virtually completed by 1876 when the Scots, who at this date were seeking an alternative source of income to replace the East Greenland seal fishery which was now entering its final stage of decline (Fig. 5), again decided to send a steamer to Newfoundland. The arrival of the *Arctic* marks the beginning of a second phase of Scottish involvement in the Newfoundland Seal Fishery — direct participation.

Direct Scottish Involvement in the Newfoundland Seal Fishery

The period of renewed prosperity brought by steam-powered vessels to the Scottish harp seal fishery at Jan Mayen was short-lived (Fig. 5). While international agreement on a closed season at East Greenland had been finally reached at the end of the 1876 fishery (*Dundee Advertiser*, December 12, 1876), it was ineffective and too late. By the middle of the 1870s, the East Greenland sealing vessels were taking increasingly smaller numbers and a larger proportion of the fleet was returning clean.

Reports received at Dundee during the 1875 season, meanwhile, indicated that the Newfoundland seal fishery had been highly successful. It is not surprising therefore that, despite the debacle of fourteen years earlier, a Dundee company again decided to deploy a steamer on the Newfoundland sealing grounds. Although the *Arctic* was able to capture only 3,872 seals in 1876 ("Kinnes Lists"), its captain, William Adams, one of Scotland's most successful whaling and sealing masters, was still pleased with the initial effort and reported that he considered "Newfoundland a very good sealing ground, and would be quite willing to go again" (*Dundee Advertiser*, May 3, 1876).

The Newfoundland sealing fleet, however, now seventeen steamers strong, was again experiencing declining catches. Larger, more efficient steamers only aggravated the problems brought about by unregulated killing and an overexpanded catching capability. Nevertheless, Adams' favourable reports encouraged his employers. It is clear that Newfoundland harp and hooded seal stocks, though declining, were still far more numerous than those that remained at East Greenland. Furthermore, his experience indicated the potential profits which could be earned, if the Scots were prepared to accept Newfoundland sealing methods, and especially to employ local sealers. Adams, for example, conceded that the Newfoundland sealers he encountered on the local sealing grounds in 1876 were "very smart men — infinitely superior to the Shetlanders [who were always signed on by Scottish masters to seal at East Greenland]" (*Dundee Advertiser*, May 3, 1876). Another of the early Dundee sealing captains sailing out of St. John's provides further

indication of the character and capabilities of the Newfoundland sealers who "were perfectly wonderful in the way they jumped from 'pan' to 'pan,' barely touching some of the smaller ones in passage" (Fairweather:11).

Alexander Stephen and Sons, consequently, decided to send their newly launched steamer, *Aurora*, in company with Adams in the *Arctic*, to Newfoundland in time for the 1877 seal hunt. Large numbers of local sealers were hired to complement the Scottish whaling crews and, more importantly, the Scots purchased land in St. John's and erected buildings suitable for boiling oil and storing equipment and supplies (*Dundee Advertiser*, February 7, 1877). The decision to establish a permanent base with its concomitant capital expenditure, and the hiring of a sizable number of Newfoundlanders, did much to dampen criticism which had followed previous Scottish attempts to participate in the colony's seal fishery — on the part of the populace, if not the local sealing companies. As one St. John's newspaper commented in an editorial just prior to the departure of the sealing fleet: "We do not exclude our Dundee friends ... the fact that the *Arctic* and *Aurora* are manned by nearly 500 of our men calls for our very best wishes respecting them" (*The Morning Chronicle*, March 8, 1877).

The Scots had now demonstrated that they were willing to work within the local system and for the first time sentiment ran strongly in their favour. For the ordinary Newfoundland sealer in general and the tradesmen, outfitters, and merchants of St. John's in particular, an expanded and more efficient sealing fleet represented a significant and welcome improvement in economic opportunities.

As can be seen in figures 5 and 8, the two Dundee vessels did very well and news of their success was widely covered in the Scottish press. The *Dundee Advertiser*, for example, reported that the two local vessels at Newfoundland "had between them considerably more than the united catch of the Dundee fleet at Greenland" (April 24, 1877). The catches of the *Arctic* and *Aurora* in 1877 not only ensured the acceptance of these steamers by the local trade, but more importantly in terms of the future course the Scottish Arctic fisheries would follow, they guaranteed an expanded Dundee presence on the Newfoundland sealing grounds.

Encouraged by the success of their principal rival, the Dundee Seal and Whale Fishing Company, initiators of the first Newfoundland experiment in 1862, sent two of their ships, the *Esquimaux* and *Narwhal*, to Newfoundland in 1878. They also purchased waterfront property at St. John's in order to construct a new boiling-yard (*Dundee Courier*, October 29, 1877). This decision, in effect, was a signal that the Dundee sealing emphasis had switched from East Greenland to Newfoundland. While the expanded Scottish presence at St. John's had a favourable impact on the local trade, these benefits were short-lived. Despite the East Greenland experience, little consideration was

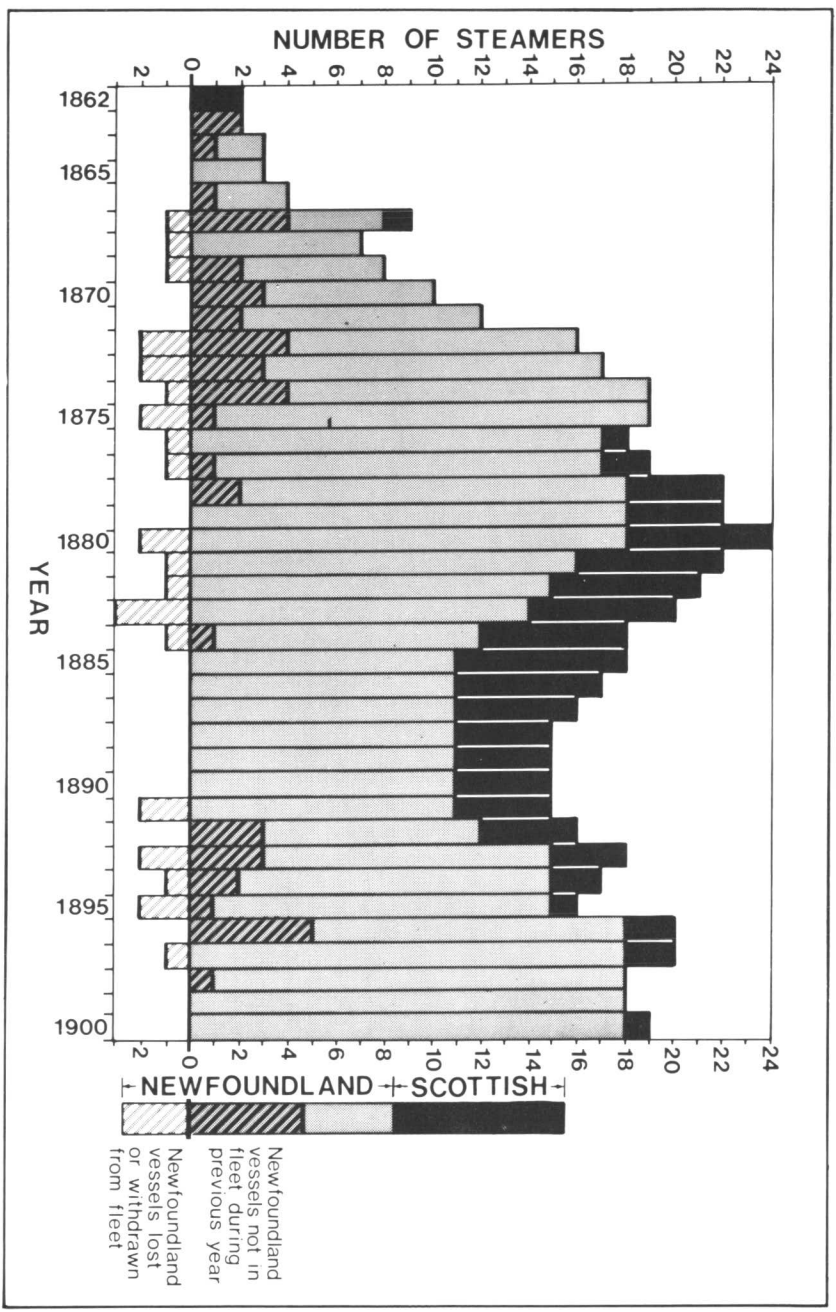


Fig. 7 Steam-powered Sealing Vessels at Newfoundland: 1862-1900

Fig. 8

Year	CAMPERDOWN	POLYNIA (D. S.W.F. Co.)	ESQUIMAUX (D. S.W.F. Co.)	ARCTIC (A.S. & Sons)	AURORA (A.S. & Sons)	NARWHAL (D. S.W.F. Co.)	RESOLUTE (D. S.W.F. Co.)	XANTHUS	THETIS (A.S. & Sons)	JAN MAYEN	TERRA NOVA (A.S. & Sons)	ECLIPSE	TOTAL CATCH
1862	0	0	–	–	–	–	–	–	–	–	–	–	–
1863	–	*	–	–	–	–	–	–	–	–	–	–	–
1864	–	–	–	–	–	–	*	–	–	–	–	–	–
1865	–	–	–	–	–	–	–	–	–	–	–	–	–
1866	–	–	–	–	–	–	–	–	–	–	–	–	–
1867	–	–	156	–	–	–	–	–	–	–	–	–	156
1868	–	–	–	–	–	–	–	–	–	–	–	–	–
1869	–	–	–	–	–	–	–	–	–	–	–	–	–
1870	–	–	–	–	–	–	–	–	–	–	–	–	–
1871	–	–	–	–	–	–	–	–	–	–	–	–	–
1872	–	–	–	–	–	–	–	–	–	–	–	–	–
1873	–	–	–	–	–	–	–	–	–	–	–	–	–
1874	–	–	–	–	–	–	–	–	–	–	–	–	–
1875	–	–	–	–	–	–	–	–	–	–	–	–	–
1876	–	–	–	3,872	–	–	–	–	–	–	–	–	3,872
1877	–	–	–	27,585	16,230	–	–	–	–	–	–	–	43,815
1878	–	–	3,576	33,678	11,439	738	–	–	–	–	–	–	49,431
1879	–	–	13,176	19,756	26,614	10,809	–	–	–	–	–	–	70,355
1880	–	–	6,425	17,011	9,578	13,769	497	532+	–	–	–	–	47,812
1881	–	–	25,439	3,040	24,875	31,557	40,979	–	14,095	–	–	–	139,985
1882	–	–	8,421	24,663	8,250	4,805	6,467	–	10,598	–	–	–	63,204
1883	–	–	17,739	8,235	12,821	11,291	20,124	–	22,144	–	–	–	92,354
1884	–	991	1,830	101	28,153	2,759	4,227	–	–	–	–	–	38,061
1885	–	159	83	375	12,458	–	39,307	–	–	100	18,534	–	71,016
1886	–	12,095	7,352	11,363	642	–	#	–	–	–	10,154	–	41,606
1887	–	7,398	6,174	6,578	5,324	–	–	–	–	–	25,684	–	51,158
1888	–	7,135	22,824	–	24,693	–	–	–	–	–	11,895	–	66,547
1889	–	19,350	20,036	–	11,166	–	–	–	–	–	25,734	–	76,286
1890	–	7,414	10,098	–	12,496	–	–	–	–	–	18,075	–	48,083
1891	–	16,505	20,563	–	16,723	–	–	–	–	–	35,239	–	89,030
1892	–	–	34,123	–	12,266	–	–	–	–	–	12,369	3,595	62,353
1893	–	–	1,754	–	7,719	–	–	–	–	–	7,458	–	16,931
1894	–	–	7,226	–	–	–	–	–	–	–	6,232	–	13,458
1895	–	–	–	–	–	–	–	–	–	–	33,886	–	33,886
1896	–	–	8,457	–	–	–	–	–	–	–	5,339	–	13,796
1897	–	–	1,903	–	–	–	–	–	–	–	3,501	–	5,404
1898	–	–	–	–	–	–	–	–	–	–	–	–	–
1899	–	–	–	–	–	–	–	–	–	–	–	–	–
1900	–	–	18,040	–	–	–	–	–	–	–	–	–	18,040
							TOTALS						
Catch	–	71,047	235,395	156,275	241,447	75,728	111,601	532	46,837	100	214,100	3,595	1,156,639
Voyages	1	9	21	12	17	7	7	1	3	1	13	1	93
Averages	0.0	7,894.1	11,796.8	13,021.4	14,202.8	10,818.3	15,943.0	532.0	15,612.3	100.0	16,469.2	3,595.0	12,436.0

*Unable to reach Newfoundland sealing grounds.
#Lost on sealing voyage in Notre Dame Bay.
+Lost on subsequent whaling voyage to Baffin Bay.

D. S.W.F. Co. – Dundee Seal & Whale Fishing Company
A.S. & Sons – Alexander Stephen & Sons

Records of Scottish Whaling Vessels Sealing at Newfoundland: 1862-1900

given to the detrimental effects this increased effort would have on the Newfoundland seal stocks and consequently on the whole Newfoundland economy which relied heavily on the annual seal fishery.

As can be seen in figures 5 and 8, the Scots initially continued to do well. In 1881, for example, Dundee had its greatest success in the Newfoundland seal fishery when five of the six Scottish vessels under the command of local ice-masters (Fig. 9) captured more than 100,000 seals. This catch included 40,979 pelts landed by the *Resolute* — the single largest catch taken by a Dundee steamer in Newfoundland waters (Mosdell:55).

By 1882, the Scots were firmly established on the Newfoundland sealing grounds (Fig. 7). Their vessels were often commanded by experienced local ice-masters and were manned by skilled Newfoundland crews. The hiring

SEALING AND WHALING MASTERS OF SCOTTISH STEAMERS SEALING AT NEWFOUNDLAND PRIOR TO MAKING WHALING VOYAGES: 1862-1900

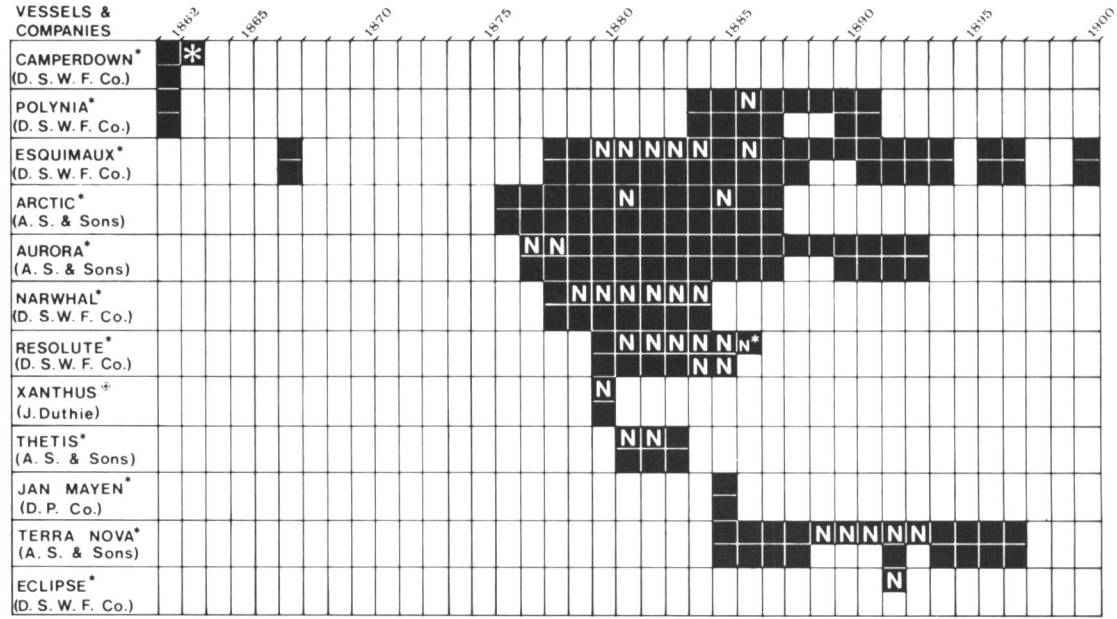
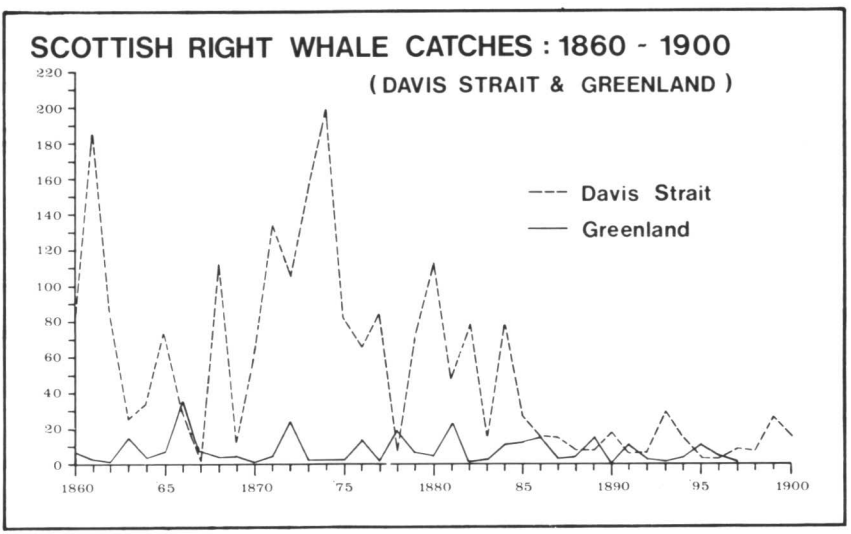


Fig. 9

of Newfoundland captains to serve as ice-masters was largely to ensure that the Scottish vessels would be crewed by the best of the skilled local sealers. As Captain James Fairweather explained, "the Newfoundland masters were all more or less chieftains in their way, and drew their crews from the districts they came from themselves. The men were also to a great extent dependent on their Masters for their summer's work at the cod fishing, so that they viewed the advent of Dundee Masters as a breaking-up of old customs" (Fairweather:11).

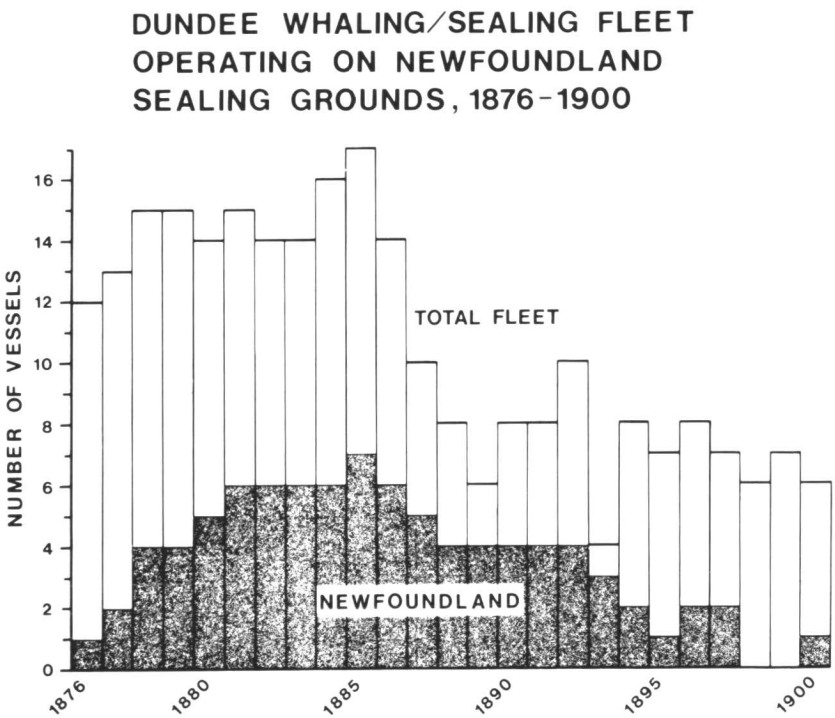
Fig. 10



Nevertheless, throughout the remainder of the 1880s the overall success rate of the sealing fleet began to decline (Fig. 3). As can be seen in figures 5 and 10, all of the sealing and whaling grounds traditionally utilized by the Scots had been seriously depleted by the mid-1880s, so much so that whenever a good sealing voyage was made at Newfoundland, the two Dundee companies became increasingly reluctant to risk the profits by outfitting the same vessels for late season whaling which was unlikely to be remunerative. The combined Scottish Northern exertions by the late 1880s, therefore, were declining, and while success on the Newfoundland sealing grounds prolonged the total Arctic effort from Dundee (Fig. 11), the returns from this quarter by the last decade of the century did not provide sufficient enticement to prevent the eventual withdrawal of the Dundee enterpreneurs from St. John's. An indication of the declining state of the Arctic trade in both Peterhead and Dundee at this date is provided by an editorial carried in the *Peterhead Sentinel* which reads, in part:

This year [1888] the seal and whale fishing enterprise is likely to be on a very contracted scale. Two of the largest Peterhead whalers are in the market, and are practically laid up; and of the regular whaling fleet only the *Eclipse* is likely to be sent to sea this season. In Dundee things are no better ... the trade has been getting less remunerative year by year ... the whaling companies are trying to reduce the heavy expenditure necessary for the employment of their vessels. With this view the Dundee Seal and Whale Fishing Company, while sending their two steamers ... to the Newfoundland seal fishery, are to send the *Esquimaux* only to Davis Straits [Alexander Stephen and Sons do the same]... (January 17, 1888).

Fig. 11



The Dundee presence in St. John's dwindled to just one or two vessels annually by the mid-1890s. The departure of the *Esquimaux* following the 1900 season brought Scottish involvement in the Newfoundland seal fishery to a close. Altogether, twelve Scottish whalers, over a 40 year period, had made 93 sealing voyages to the Newfoundland grounds which yielded 1,156,639 seals (Figs. 8 and 12).

SCOTTISH SEALING VESSELS AT NEWFOUNDLAND
RANKED BY FIRST APPEARANCE: 1862-1900

VESSELS	PORT	COMPANY	YEAR OF LAUNCH	WHERE BUILT	WHALING SEALING SEASONS	NFLD SEALING VOYAGES	NFLD. SEAL CATCH	RANK	AV. SEAL CATCH (NFLD.)	RANK	COMMENTS
CAMPERDOWN	DUNDEE	D.S.W.F.Co.	1860	DUNDEE*	19	1	0	12	0.0	12	LOST WHEN DAMAGED BY ICE OFF C. KATER, B. ISLAND, OCT. 10, 1878
POLYNIA	DUNDEE	D.S.W.F.Co.	1861	DUNDEE*	31	9	71,047	7	7,894.1	8	CRUSHED BY ICE AT ENTRANCE TO LANCASTER SOUND, JULY 11, 1891
ESQUIMAUX	DUNDEE	D.S.W.F.Co.	1866	DUNDEE*	34	21	236,395	2	11,796.8	6	SOLD TO ST. JOHN'S FIRM FOR 1901 SEALING SEASON
ARCTIC (2)	DUNDEE	A.S. & SONS	1875	DUNDEE*	13	12	156,275	4	13,021.4	5	ABANDONED AT CUMBERLAND GULF IN FALL, 1887
AURORA	DUNDEE	A.S. & SONS	1877	DUNDEE*	17	17	241,447	1	14,202.8	4	SOLD TO ST. JOHN'S FIRM FOR 1894 SEALING SEASON
NARWHAL	DUNDEE	D.S.W.F.Co.	1859	DUNDEE*	26	7	76,728	6	10,818.3	7	LOST OFF CAPE SEARLE, BAFFIN ISLAND ON SEPTEMBER 2, 1894
RESOLUTE	DUNDEE	D.S.W.F.Co.	1879	DUNDEE*	7	7	111,801	5	15,943.0	2	LOST WHILE SEALING OFF FOGO ISLAND IN MARCH, 1896
XANTHUS	PETERHEAD	J. DUTHIE	1846	PETERHEAD	29	1	532	10	532.0	10	LOST IN MELVILLE BAY IN JUNE, 1860
THETIS	DUNDEE	A.S. & SONS	1881	DUNDEE*	3	3	46,837	8	15,612.3	3	SOLD TO U.S. NAVY FOR 1884 SEARCH FOR THE GREELY EXPEDITION
JAN MAYEN	DUNDEE	D.P.Co.	1873	HAMBURG	12	1	100	11	100.0	11	LOST AT DAVIS STRAIT IN 1884
TERRA NOVA	DUNDEE	A.S. & SONS	1884	DUNDEE*	13	13	214,100	3	16,469.2	1	SOLD TO ST. JOHN'S FIRM. USED BY SCOTT FOR 1910 ANTARCTIC EXPEDITION
ECLIPSE	DUNDEE	D.S.W.F.Co.	1867	ABERDEEN	16	1	3,595	9	3,595.0	9	LAST WHALING VOYAGE IN 1908. SOLD TO NORWAY.

*BUILT BY ALEXANDER STEPHEN AND SONS
D.S.W.F.Co. = DUNDEE SEAL AND WHALE FISHING COMPANY
A.S. & SONS = ALEXANDER STEPHEN AND SONS
D.P.Co. = DUNDEE POLAR COMPANY

Fig. 12

Dundee steam-powered whalers had a profound impact on the Newfoundland seal fishery. Compelled to also adopt steam propulsion following the brief appearance of the *Polynia* and *Camperdown* in 1862, the character of the local trade changed dramatically, while direct Scottish participation after 1876 helped accelerate the pace at which those changes were occurring. Prior to the introduction of the first Newfoundland sealing steamer in 1863, nearly every community on the northeast coast of the island sent sailing vessels to the seal hunt and processed oil and prepared hides on their return. As steam replaced sail, however, the socio-economic and spatial distances between owner/outfitters and ordinary sealers became greater. Fewer more expensive, but incomparably more effective, steamers placed additional pressures on an already over-exploited resource. The steamers, while permitting a brief rejuvenation in terms of the numbers of seals captured, only served to hasten the overall decline of the trade. By the end of direct Scottish involvement at the turn of the century, then, and as the number of sealers declined and the total population increased, the Newfoundland seal fishery, which had been such a significant factor in the development of the island throughout the nineteenth century, had diminished in importance.

In Dundee, the eventual success of the steam-propelled whaling fleet on the Newfoundland sealing grounds not only prolonged the life of the Arctic trade for a longer period than would have been the case if East Greenland and Davis Strait had been the only resource areas available to them, but the Newfoundland seal stocks actually contributed towards an expansion of killing capacity. The Newfoundland sealing profits, in other words, subsidized the Dundee whaling efforts at both East Greenland and Davis Strait and contributed significantly to the virtual elimination of Greenland right whale stocks in both regions.

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Notes

[1]This paper builds upon earlier work on the Newfoundland Sealing-Scottish whaling connection (1980a; 1980b) and research conducted specifically on the Newfoundland Seal Fishery (1973; 1974; 1977; 1986a) and Scottish Northern Whaling (1986b). These works are based primarily

upon ships' log-books, diaries and related material; newspapers, magazines, and pamphlets; manuscripts; unpublished papers; port records; bounty documentation; public and private petitions; oil manufacturer lists; personal communications; company letter-books, co-partnery contracts, charters, minutes, subscription lists and statistical data; government acts, documents, as well as records, reports, correspondence and petitions. Much of the statistical information used in this paper for the Scottish end of the British Northern Whaling trade is derived from the "Kinnes Lists," i.e. annual lists giving details of British whaling voyages for 1790-93 and between 1814 and 1911 in the possession of Robert Kinnes and Sons, Dundee. Although incomplete and often inaccurate, the data represent the best single collection of summary statistics for the British Arctic whale and seal fisheries published by various oil and bone factors. Each list is organized by individual port and provides for each ship the name of captain, whaling and/or sealing grounds visited, catch and quantity of oil and bone obtained (see Ross, 1979). Other statistical lists as well as log-books, newspapers, bounty payment documents and sundry other sources have been used to verify, update and complete this Scottish whaling inventory, and the period covered extended back to 1750. Unless otherwise specified, however, this information is referred to simply as the "Kinnes Lists."

[2]After almost three centuries, new technology permitted a brief rejuvenation of the whaling industry in Newfoundland. Between 1864 and 1868, Svend Foyn, a Norwegian sealer, developed a system which used a powerful cannon mounted on the bow of a steam-powered chaser to fire an explosive harpoon which was attached to a winching system strong enough to retrieve the very largest of the rorquals. The first "modern" whaling station in Newfoundland was opened at Snook's Arm in 1898. In the first ten years the average annual catch was four hundred. By 1907, however, the mean catch of fourteen vessels had declined to just thirty-four.

[3]Despite the complete failure of the two Scottish steamers at Newfoundland in 1862, the Dundee Seal and Whale Fishing Company again decided to deploy one of their vessels, the *Camperdown*, on those grounds in 1863 (see, for example, the *Dundee Advertiser*, January 23, 1863). Strong westerly gales inhibited her progress, however, and "the voyage had to be relinquished [in favour of East Greenland sealing] after one or two days' sailing" (*Dundee Courier*, November 13, 1863).

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