"Dodging in the Bight, A Good Place for a Whale:" Environmental Factors Affecting Eighteenth- and Nineteenth-Century Whaling in Davis Strait[1]

Chesley W. Sanger

Introduction

The eighteenth- and nineteenth-century Davis Strait whale fisheries were heavily influenced by the nature and habits of the Bowhead or North Atlantic Greenland Right whale, *Balaena mysticetus*, upon which they were based.[2] This article examines seasonal features of the natural environment which helped shape such behaviour and largely determined the strategies used on the two principal whaling grounds.

The Davis Strait whale fisheries were basically ice edge operations, requiring both an intimate knowledge of whales and a thorough understanding of the dynamics of pack ice.[3] Temperatures, currents, and especially the direction, strength and duration of winds were the principal agents that affected the ice. Observations and data from Scottish whaling logs, journals, and diaries are used to provide specific examples of how different environmental elements influenced both seasonal and daily whaling operations.

Whaling Documents

A general view of ice conditions can be reconstructed from data provided by satellite imagery (see figure 1). Although useful, these maps detect neither extreme conditions nor the important annual and seasonal fluctuations. Fortunately, however, annual variations are discernible from evidence in logs, journals and similar documents kept by whaling crews. Although Koch argues that such sources provide only a rough picture of ice conditions because longitude readings were not always recorded, fog was frequent, and captains tended to be secretive,[4] masters' and first officers' logs, as well as journals kept by ships' surgeons and supernumerary passengers, in fact yield excellent information on ice structure and extent, both within and between seasons, and permit long-term comparisons. Numerous whaling logs and journals are housed in British, American and Canadian archives;[5] while they vary tremendously in detail and accuracy, they are more dependable, particularly in regard to longitude, in the latter part of the era. Collectively, these documents provide an indispensable record of the whaling environment.

The Northern Mariner/Le Marin du nord, IV, No. 1 (January 1994), 17-33.

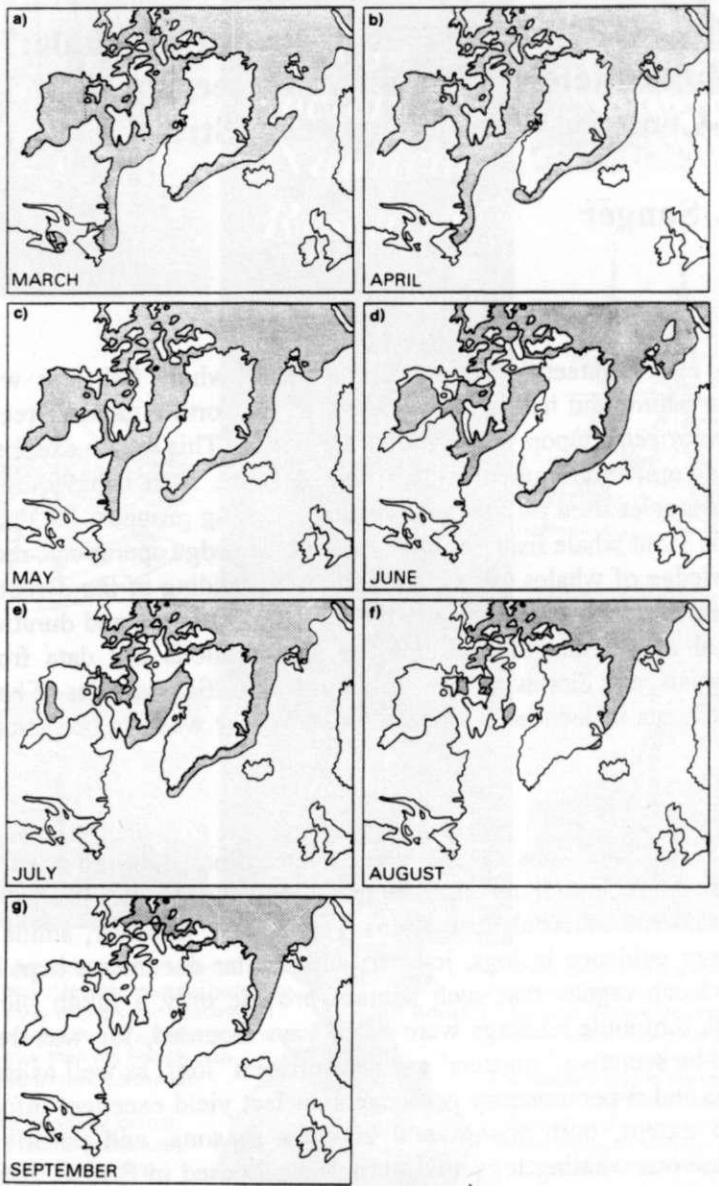

Figure 1: Sea Ice Normals: Mean Limits, 4/10 Concentration, End-of Month (March 1966-February 1974).

Source: Monthly Ice Charts, Meteorological Office, Bracknell, Berkshire. See, also, Oceanographic Atlas of the Polar Seas, Pt. 2, "Arctice;" and Arctic Pilot, Vol. 2, Taunton, Somerset.

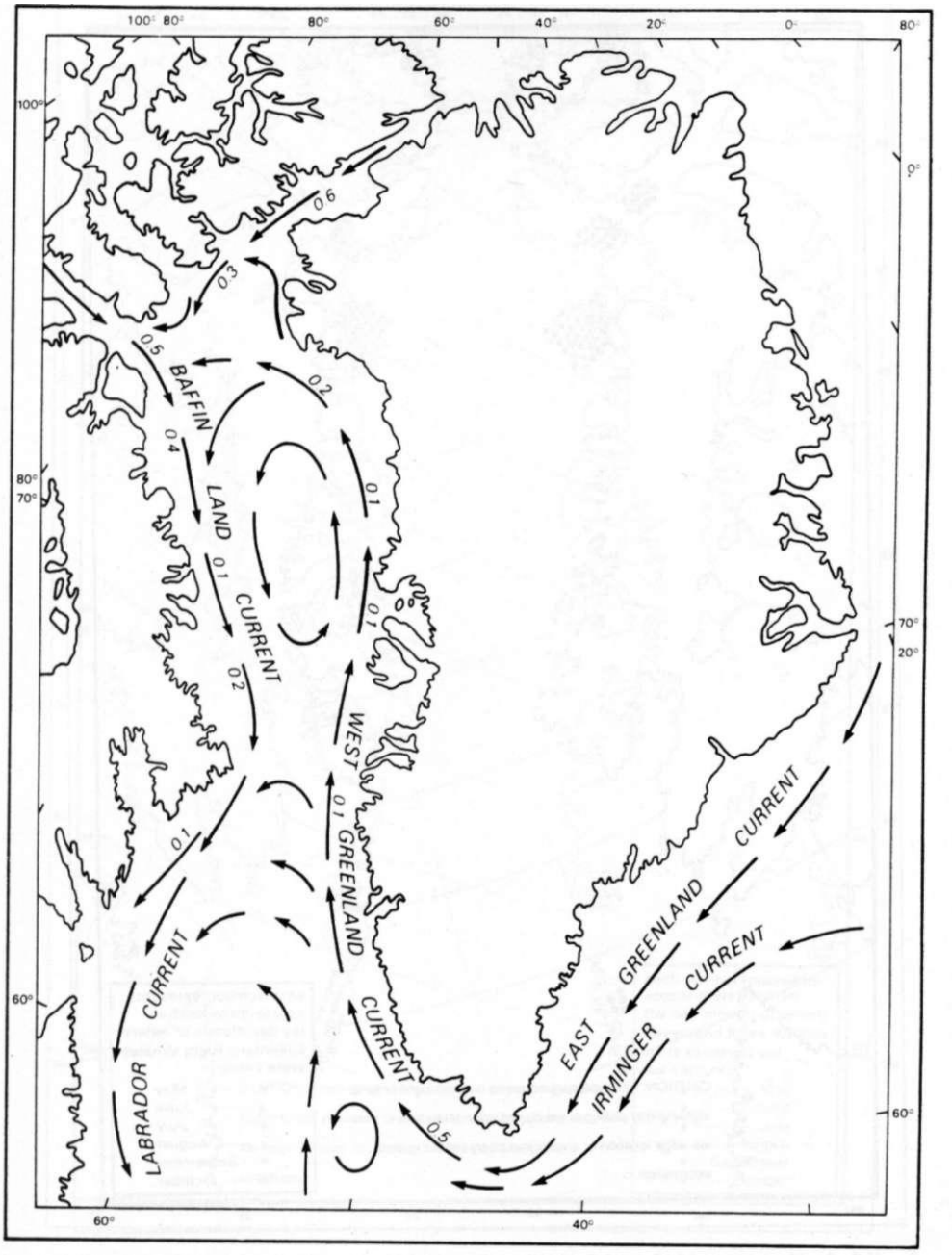

Figure 2: General Surface Circulation (Knots): Davis Strait and Baffin Bay.

Source: Oceanographic Atlas of the Polar Seas, Pt. 2, "Arctic."

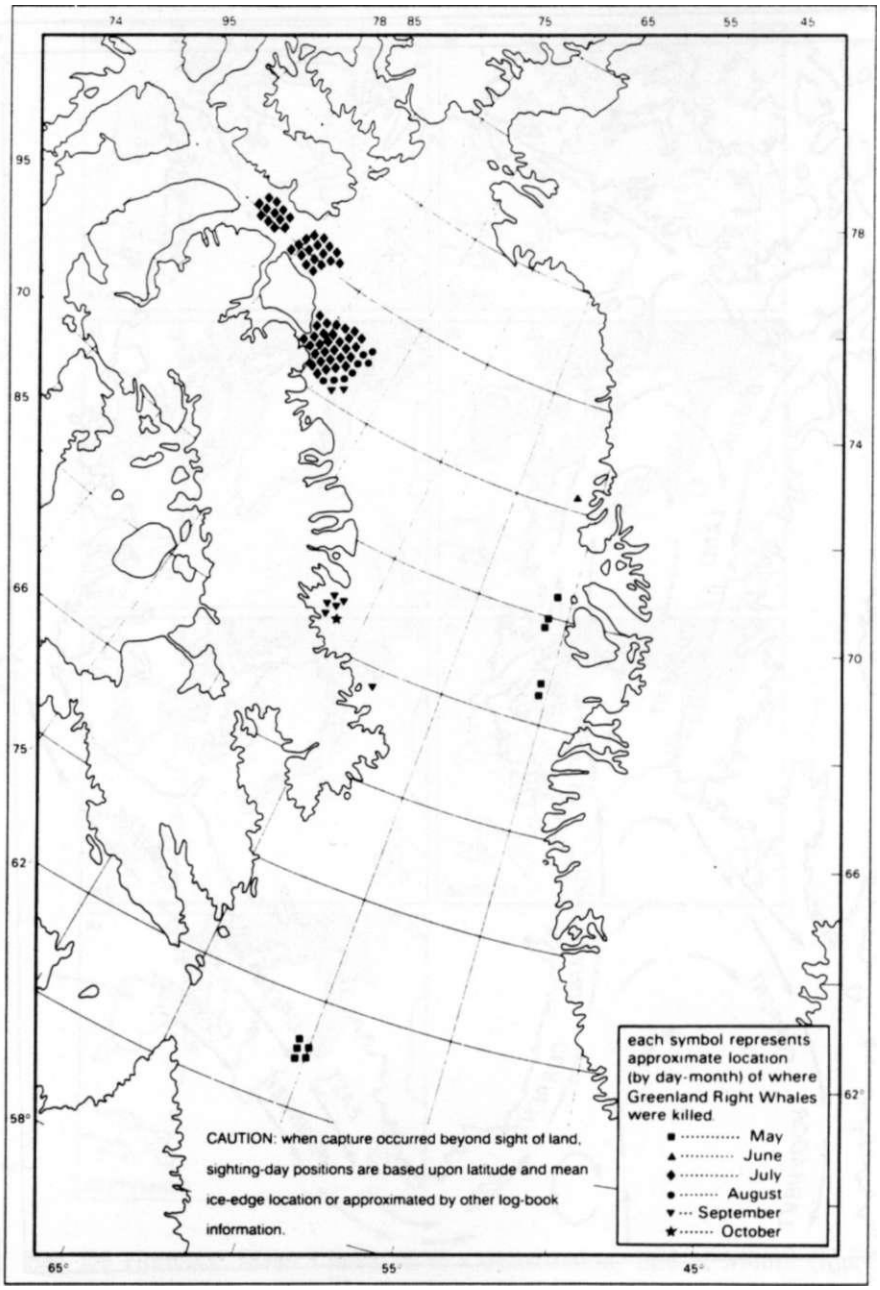

Figure 3: Whale Captures: 10 Scottish Sailing Vessel Voyages on the Davis Strait - Baffin Bay Hunting Grounds (1830-1853).

Source: Log-books; and Monthly Ice Charts, Meterological Office, Bracknell, Berkshire.

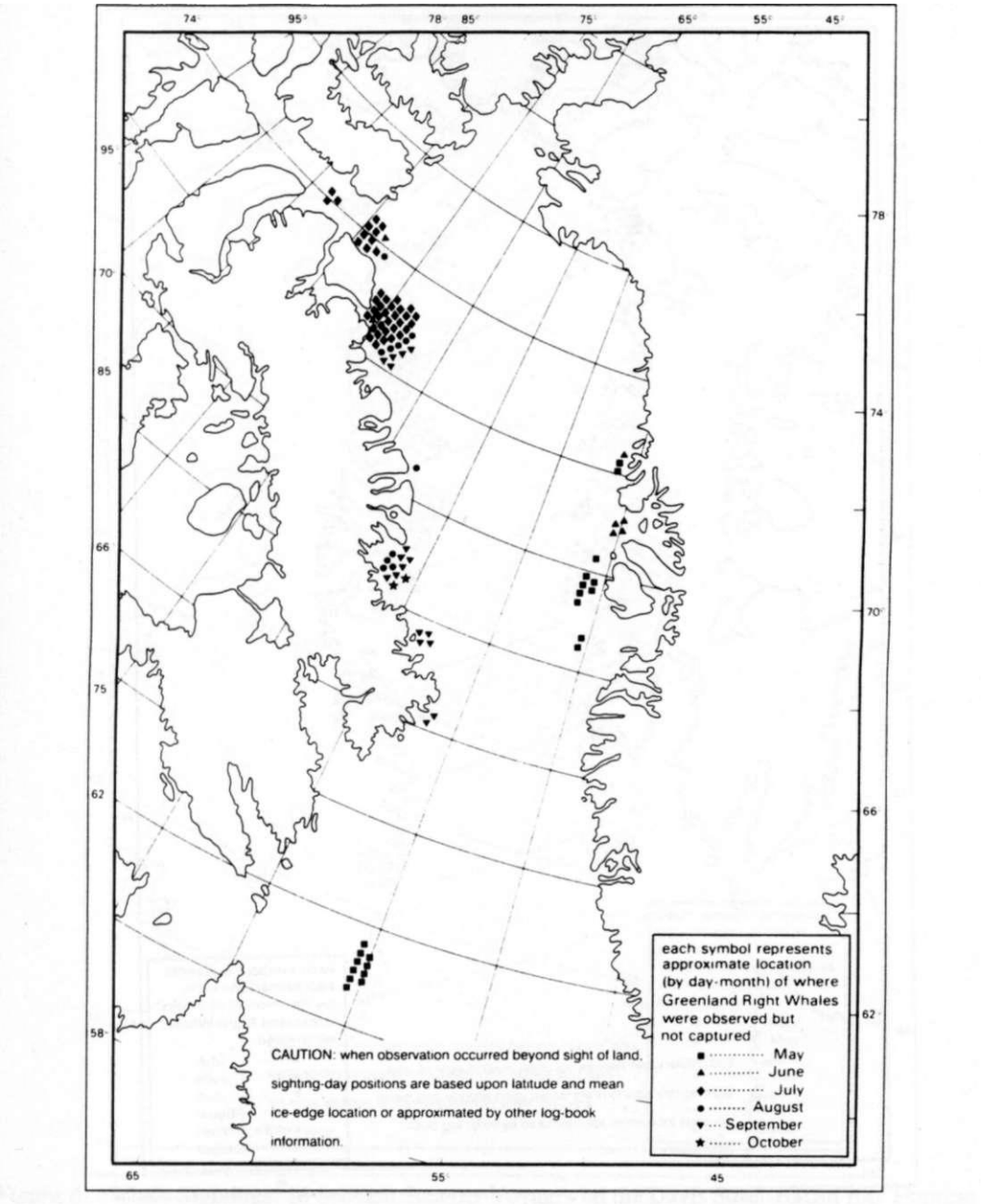

Figure 4: Whale Sightings: 10 Scottish Sailing Vessel Voyages on the Davis Strait - Baffin Bay Hunting Grounds (1830-1853).

Source: See figure 3.

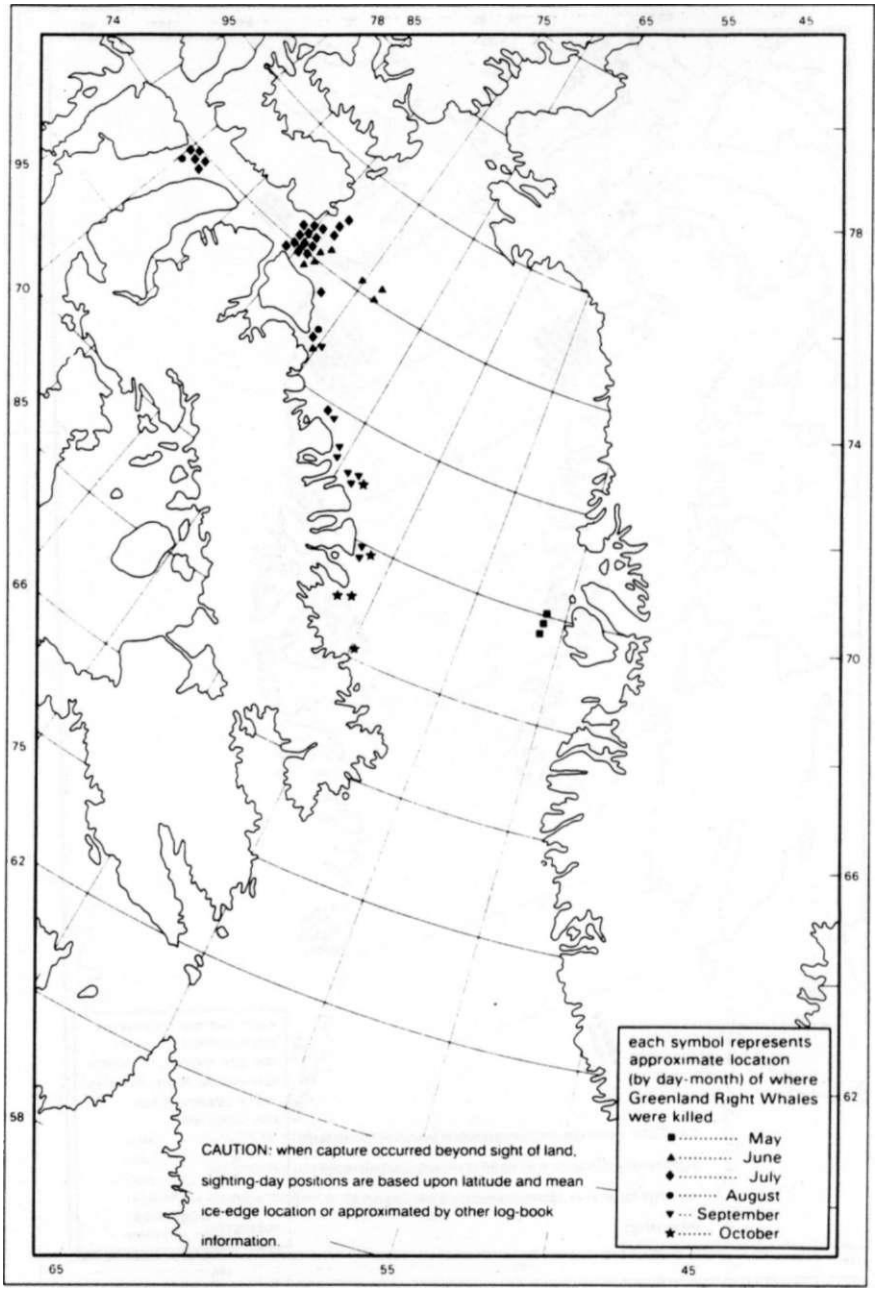

Figure 5: Whale Captures: 16 Scottish Steamer Voyages on the Davis Strait-Baffin Bay Hunting Grounds (1885-1900).

Source: See figure 3.

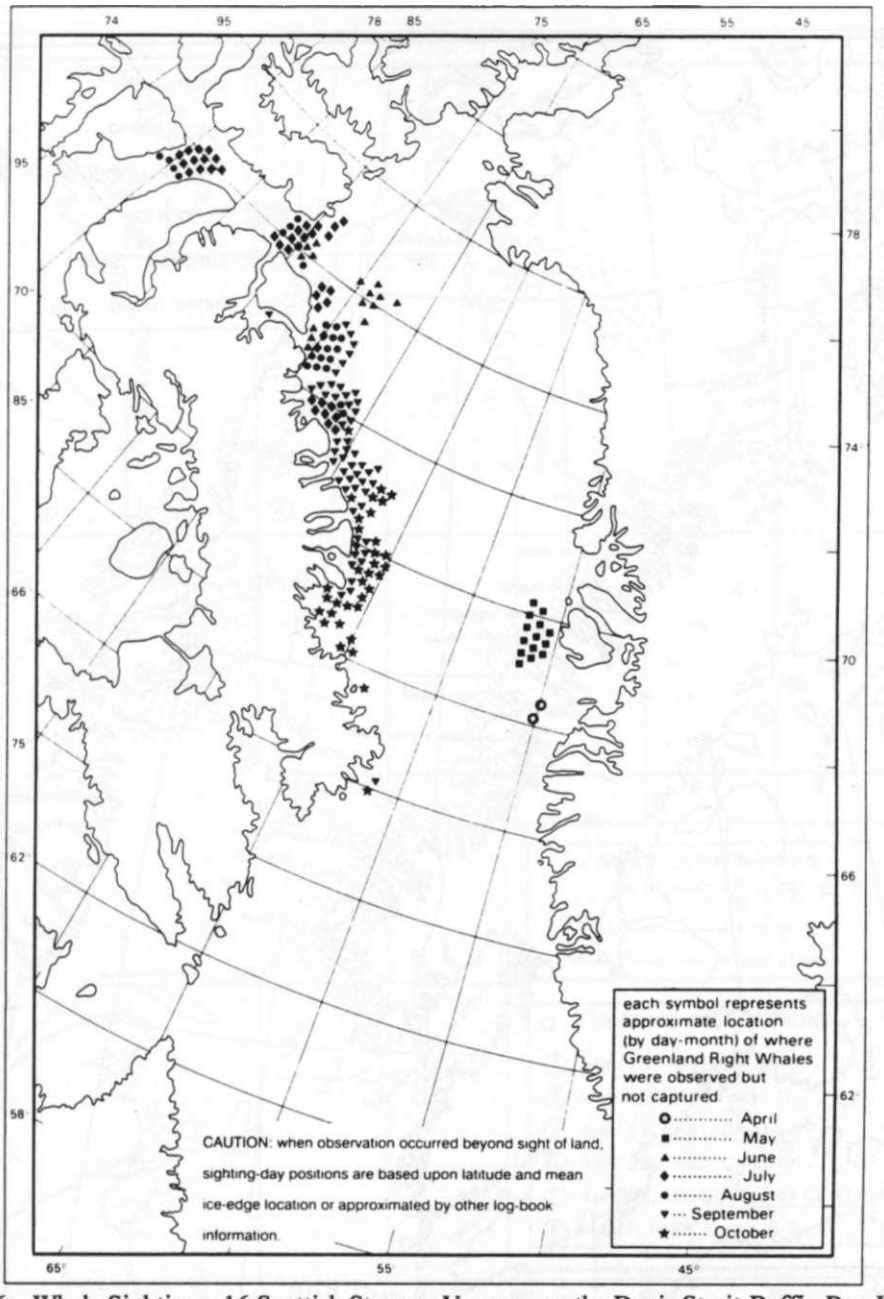

Figure 6: Whale Sightings: 16 Scottish Steamer Voyages on the Davis Strait-Baffin Bay Hunting Grounds (1885-1900).

Source: See figure 3.

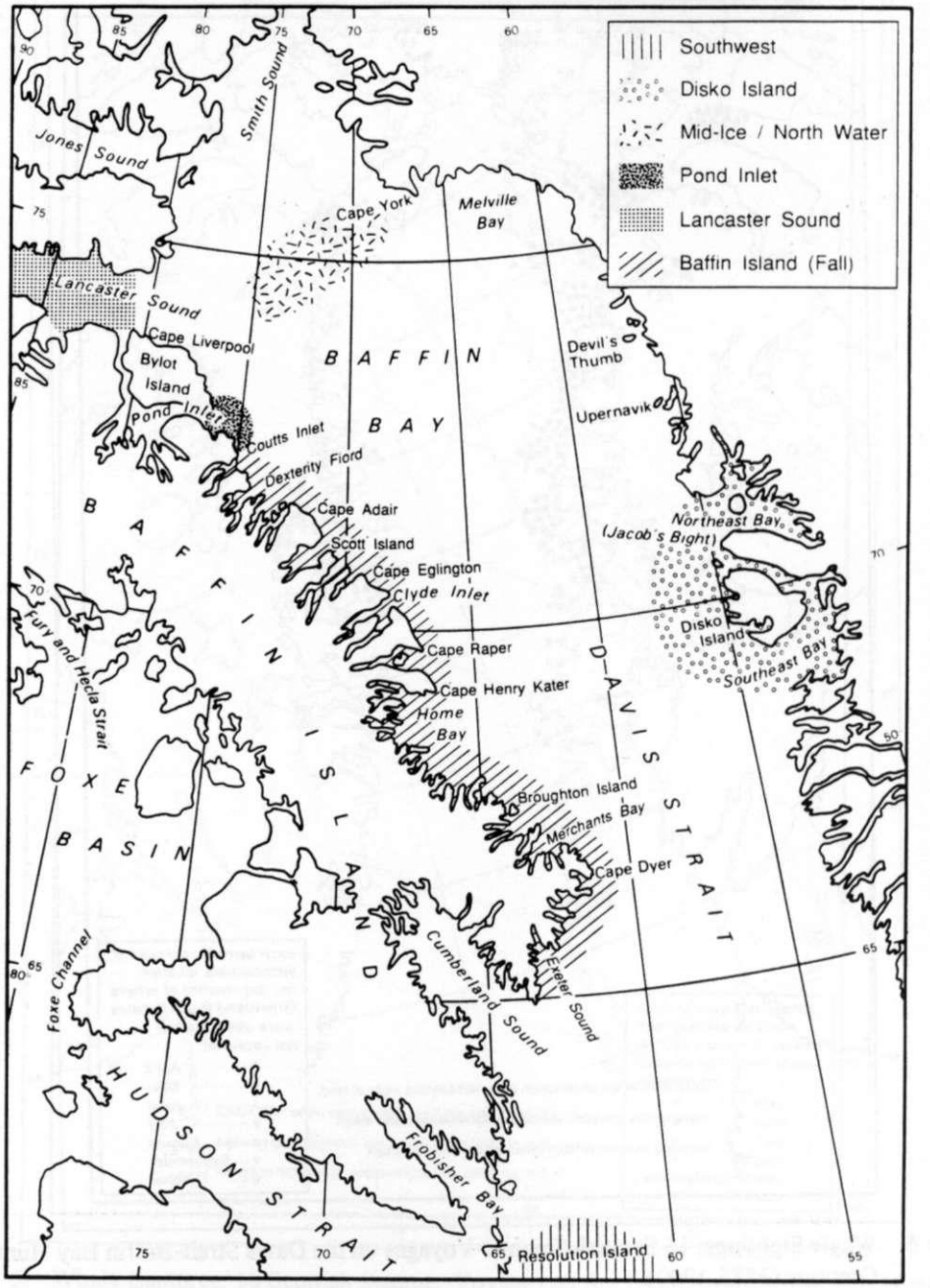

Figure 7: Baffin Bay - Davis Strait Whaling Grounds.

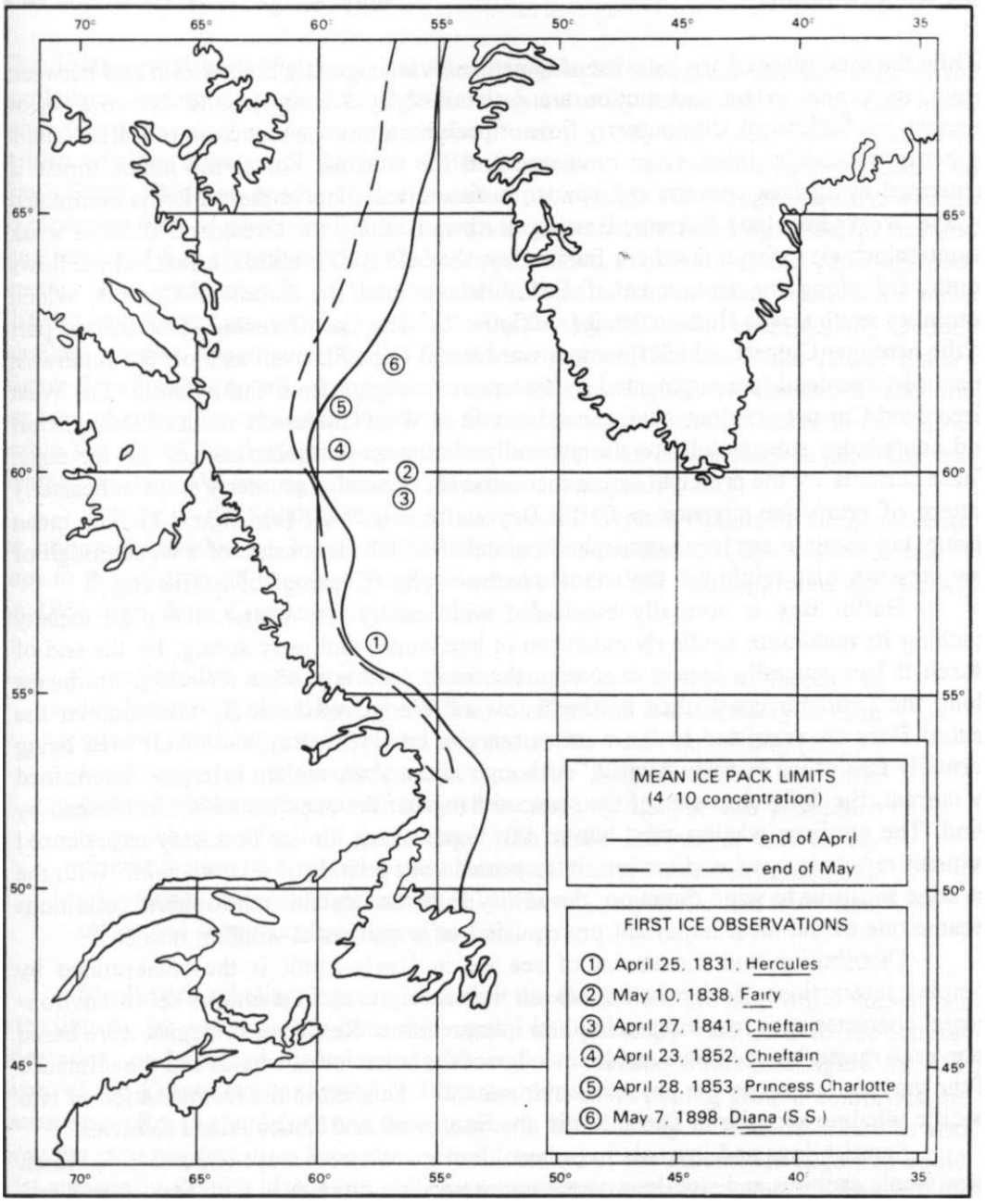

Figure 8: Southwest Whaling Grounds.

Source: See figure 3.

Sea Ice Movements

While the total mass of sea ice west of Greenland varies greatly both within and between years, its annual extent and motion are determined by a complex and dynamic set of interactions.[6] Although the southerly flow of pack ice along the east coast of Baffin Island is partly caused by tides, river discharge and the Coriolis Force, the major thrust is generated by surface currents and winds. Surface circulation in the region is dominated by the West Greenland Current, flowing northward along the Greenland coast; a weak counterclockwise gyro in northern Baffin Bay; the cold Baffin Land Current, which flows southward along the east coast of Baffin Island; and the Labrador Current, which continues south across Hudson Strait (see figure 2).[7] The East Greenland Current and part of the Irminger Current, which flow westward round Cape Farewell and, off the southwest coast of Greenland, are augmented by streams converging from the Atlantic. The West Greenland Current dominates the coastal waters of West Greenland south of Davis Strait and contributes substantially to the generally southwest-northeast cant of the ice edge. These currents are the principal forces that cause the generally southerly and southeasterly pattern of yearly ice advance in Baffin Bay and Davis Strait (see figure 1). The mean spring and summer sea level atmospheric circulation, which consists of a weak trough of low pressure, also reinforces the annual southwesterly "flushing" of Baffin Bay.[8]

Baffin Bay is normally blockaded with ice by late winter, the pack usually reaching its maximum southerly extension in late winter and early spring. By the end of March it has generally begun to recede, the most southerly edge retreating northwest along the Labrador coast, then northeast toward West Greenland. By mid-summer the central floes are restricted to the western margins of Baffin Bay, the whole area being normally free of ice by early August.[9] Although seasonal movement is largely determined by current, the daily character of the seaward fringe of the pack is heavily influenced by wind. The northern whalers who hunted bowheads along the ice boundary experienced frequent reversals in wind direction, interspersed with periods of relative calm. With the ice edge sensitive to wind direction, the ability to assess unstable atmospheric conditions became one of the most important prerequisites of a successful whaling master.[10]

Distribution and movement of sea ice in Davis Strait is thus determined by complex interactions. Each whaling season therefore presented a unique set of environmental characteristics requiring individual interpretation. Resulting strategies were based upon each master's experience and knowledge of the behavior of whales and the influence of the various factors on the physical environment." This led to the identification of two specific whaling grounds at Davis Strait: the Southwest and Disko Island fisheries.

Scottish logs and journals have been used to construct maps (figures 3-7) which show whale captures and sightings on the major whaling grounds at both Davis Strait and Baffin Bay during periods dominated first by sail and then by steamers. These maps clearly delineate a substantial portion of the seasonal migrations of the Greenland Right whale and identify the temporal and spatial dimensions of the Davis Strait/Baffin Bay fisheries.[12]

The Southwest Whaling Grounds

The Southwest fishery (figures 7 and 8) was conducted along the seaward edge of the southward flowing ice pack. Although these grounds may have been used by Dutch and other Europeans during the early eighteenth century, they did not become a focus of British whaling effort until the late 1790s. Seasonally, this was the earliest fishery in Davis Strait. This fact, combined with the need for a longer sea voyage, required whalers to clear port well in advance of those prosecuting later whale fisheries in Baffin Bay and the Greenland Sea (Spitsbergen).[13] Cold temperatures, shorter days, and generally poor weather also made pursuit of the Greenland Right whale in small open boats more difficult and hazardous on these grounds. On 8 May 1899, for example, the Dundee whaling steamer *Esquimaux* left the Southwest grounds for the Disko Island fishery (figure 7), since "after talking the matter over with the Captain we decided to abandon our idea of trying for whales on the S.W. Ground so that we can get north to the walrus before the rest of the fleet get there; another consideration is that there is generally bad weather on the S.W. fishing ground at this time of the year."

Timing on the Southwest ground was crucial. Captain Adams of the *Esquimaux,* for example, recorded on 7 April 1895, while still to the east of Cape Farewell, that "I hope to get a fair wind soon as I would like to be at the SW fishing ground this week." An 1861 diary from *Camperdown* also showed that:

> Vessels in this trade, it is well known, require for a chance of success, to reach a certain place, by a given date, to affect this it is necessary to push onwards with all possible speed and precaution never ommitting [sic] an opportunity to obtain their object, nor be intimidated by any little difficulty intervening at the same time guarding against rash procedure — or running blindfold into danger...To make the proper and timely discrimination, it required some amount of discretion and skill, coupled with perseverance, and even with this it is very uncertain, and the wisest concocted schemes may happen to fail.

Six British whaling logs indicate that the Southwest ground, while sometimes extending as far south as the Labrador coast, was generally restricted to the natural indentation, or "whalers' bight," usually located off Hudson Strait (see figure 8). The owner of the *Esquimaux* confirmed in 1899 that "the S.W. fishing ground comprises the waters round Resolution Island and the entrance to Hudson Bay." These observations also show the extreme deviation from the normal location of the eastern ice edge that could exist seasonally. On 10 May 1898, for instance, Captain Adams of the Dundee whaler *Diana* reported that "there is no use staying here as the ice is 150 miles too far east for whaling so I intend to go north." At the other extreme, the surgeon of *Hercules* recorded on 25 April 1831 that the vessel was "now within a short distance of the Coast of Labrador but far to the westward [and southward?] of the South West fishing ground."

Although seasonal variability was partially due to the total amount of ice leaving Baffin Bay, the major controlling factors were the strength and duration of easterly or westerly winds. These also determined whether the ice edge would hinder or facilitate whaling on the Southwest ground. Easterly winds, especially in light years for ice, usually caused the edge to lie west of its normal position. On 23 May 1842, for example, the log of the Kirkcaldy whaler *Chieftain* indicated that in latitude 61° 41' N. "the West Land of Davis Strait" was in sight. Easterlies also compressed the floes into a compact mass, as was the case in 1831 when *Hercules* was also able to approach the coast of Labrador. The 4 May log entry, which followed a prolonged southeasterly gale, claimed that the ice was "closely packed." Similarly, the *Princess Charlotte* of Dundee reached the Southwest ground on 28 April 1853. During the four previous days, strong south-southeasterly and east-southeasterly "gales" had prevailed. On 29 April the wind shifted to the northeast and throughout the next day the vessel was able to ply northward "with all sail set" along an extremely compact and uniform ice edge.

Easterly winds seldom posed a serious threat on the Southwest station, since masters were reluctant to enter the pack for fear of missing the more lucrative northern part of the fishery. Because a successful ice edge operation required the formation of indentations, or whaling bights, whalers invariably left the Southwest fishery as soon as easterly winds began to create unfavourable conditions. Captain Adams of *Diana,* for example, having just arrived on the Southwest grounds, observed on 8 May 1898 that "there is not any use staying here as the ice is too far East and the ENE gale will make the ice straight."

Conversely, westerly winds loosened the Southwest pack and extended the seaward boundary farther east than normal (figure 1), providing the best whaling opportunities. This was due particularly to the formation of indentations, which were the favourite resorts of the Greenland Right whale. In April 1893, for instance, the Dundee whaler *Eclipse* reported a force-six southwesterly gale which swung around to the northwest, eventually fragmenting the ice into "streams and lakes." Similarly, Captain Milne of the *Maud* recorded on 17 April 1891, following five days of strong westerlies, that he was "cutting through heavy streams of ice." On the following day, with "strong" west-northwesterly winds prevailing, the ship was "dodging in a hole of water."

The Kirkcaldy whaler *Chieftain* in 1841 provided a further example of the importance of westerlies to a successful Southwest fishery. The ice edge at the beginning of the season was farther east than usual (figure 8); on 1 May, five days after encountering the pack, and with winds blowing from the west, the log recorded that the vessel had "dodged into a bight." Light, variable winds prevailed over the next two weeks, during which many whales were sighted and three were taken. Although the ice edge undulated throughout, easterly winds in the middle of the month again tightened the pack. Subsequently, the wind swung around to north-northwest and then to west-northwest, so that the vessel was "dodging and plying amongst streams." The final entry of that date read: "No fish seen this Day the Ice apparently slack owing to the changed wind."

By mid-May, most masters had usually begun working their vessels in a northeasterly direction, following the cant of the ice (figures 1 and 8) to the traditional hunting grounds off Disko Island. The surgeon of *Hercules*, for example, reported on 20 May 1831 that they were "Reaching NE and [would] cross the Straits towards the East Land [Greenland]." Similarly, *Chieftain*'s log observed on 22 May 1841 that "There Being little Prospect of much good to be done at the SW ice this season now we therefore Think it most proper to proceed to the Northward Taking the Edge of the Ice along with us." Consequently, the whalers followed the migratory path of the Greenland Right whale and were often able to augment their Southwest catches.

The Disko Island Whaling Grounds

The first commercial whale fishery at Davis Strait occurred off Disko Island (figures 3-7); with the Southwest ground, it continued to be the only area west of Greenland visited by European whalers during the eighteenth century. Although three additional fisheries were developed in Baffin Bay during the first quarter of the nineteenth century, the Disko grounds continued to attract many European whalers.[14]

The early Disko fishery had three different phases, all focused on capturing Greenland Right whales during the brief period when their northern migration to summer feeding grounds had been arrested temporarily by the pack. The May, or early, fishery was normally confined to the restricted "whaling bight" to the south of Disko Island. Bounded by the ice pack to the west and the coast of Greenland to the east, this fishery in most seasons included Southeast Bay (figure 7). In 1853, for example, the Dundee whaler *Princess Charlotte* reached the Whale Fish Islands just south of Southeast Bay on 12 May; the log entry for the following day, with winds from the east-southeast, indicated that the vessel was plying into Southeast Bay "with all sail set." Similarly, *Fairy*, also of Dundee, reached the Southwest grounds on 10 May 1838 and proceeded "ENE" and "NE" along the ice edge, arriving at the Whale Fish Islands on 16 May. Four days later, the captain reported that the ship was "in S. East Bay."

The ice edge gradually retreated north and west during late May and June (figure 1), and the fishery expanded to include the eastern margins of the pack, which in most years lay west of Disko Island. Easterly and westerly winds had a similar influence on this phase of the Davis Strait fishery as on the Southwest grounds. Although the amount of open water between the pack and Disko Island normally was controlled largely by prevailing winds and the total quantity of ice, there was considerable seasonal variation. In 1893, for instance, the *Eclipse* operated on 19 May at the ice edge, approximately ninety-five miles due west of Disko Island. At the other extreme, Captain Adams, having decided not to remain on the Southwest grounds, arrived at Disko Island in *Esquimaux* on 17 April 1895. This early arrival was due primarily to westerlies, and the log entry recorded: "I wish a NE wind would come as I would like to get off to the fishing ground." His 4 May entry, however, clearly indicated the relatively rigid temporal and spatial parameters that defined the whale fisheries in Davis Strait and Baffin Bay: "I wish

we would get a whale and we have only a fortnight here now." As with all northern offshore ice edge whaling, westerly winds provided optimum hunting conditions. The Dundee whaler *Diana,* operating west of Disko on 18 May 1898, was buffeted by southwesterly gales, which produced a large indentation in the eastern margin of the pack. That evening the ship was "dodging in the bight, a good place for a whale."

Depending upon ice conditions and the delay before the Greenland Right whale pods resumed their northward migration, Northeast Bay sometimes provided a third whaling phase at Disko. This, however, was not nearly as certain as the "Southeast Bay" and "offshore" operations. The *Diana* was at the mouth of Northeast Bay on 6 June 1898, for example, but was unable to make any further progress against the westerlies; Captain Adams commented: "I wish we could get a strong easterly wind to put this ice out of the Bay." Similarly, *Fairy,* although "weaving amongst loose ice" on 28 May 1838, was compelled to remain off Northeast Bay. Sometimes, however, Northeast Bay was accessible to whalers, *Chieftain* reported on 3 June 1852 that it was "dodging in Jacob's Bight [Northeast Bay]." This was also supported by the Kirkcaldy whaler *Caledonia,* which recorded "about 30 sail in NE Bay" on 28 May 1834.

Although Northeast Bay whaling became increasingly important as the stocks were rapidly depleted during the second half of the eighteenth century, only the first two phases of the Disko fishery continued to be prosecuted on a regular basis. From 1818, most whalers tried to make the northern passage through Melville Bay when the "Northeast Bay fishery" would normally have been prosecuted (see figures 3-7).

Conclusions

While previous experience at Davis Strait and knowledge from elsewhere might condition expectations at the outset of a new voyage, every trip brought its own challenges and problems. The quantity, character, and location of the pack in general, and the ice edge in particular, stamped a unique identity on each year's whaling on the Southwest and Disko Island grounds. A master therefore formulated general hunting strategies based upon his understanding of both the long- and short-term influences of temperatures, currents and winds. Meanwhile, he still had to be prepared to deal with the unforeseen; his chances of success, as at East Greenland and Baffin Bay, depended greatly on the ability to adjust and adapt.[15]

NOTES

* Chesley W. Sanger is a professor of geography and a member of the Maritime Studies Research Unit at Memorial University of Newfoundland. A previous contributor to *The Northern Mariner/Le Marin du nord,* he has written extensively on the histories of whaling and sealing.

1. I would like to thank A. Small of the Department of Geography at the University of Dundee and W.G. Handcock of the Department of Geography at Memorial University of Newfoundland for advice and assistance. The comments and suggestions of Lewis R. Fischer also helped in the revision of the paper. Particular thanks are due to

C. Conway and G. McManus of Memorial's Cartographic Laboratory for drawing the figures, and to Sharon Wall for typing the manuscript. The research was funded by the Social Sciences and Humanities Research Council of Canada.

2. Chesley W. Sanger, "'Saw Several Finners But No Whales': The Greenland Right Whale (Bowhead) — An Assessment of the Biological Basis of The Northern Whale Fishery during the Seventeenth, Eighteenth and Nineteenth Centuries," *International Journal of Maritime History,* III, No. 1 (1991), 127-154; Sanger, "'On Good Fishing Ground But Too Early for Whales I Think': The Impact of Greenland Right Whale Migration Patterns on Hunting Strategies in the Northern Whale Fishery, 1600-1900," *AmericanNeptune,Ll* (1991), 221-240.

3. Chesley W. Sanger, "Environmental Factors Affecting 17th-19th Century Whaling in the Greenland Sea," *Polar Record,* XXVII (1991), 77-86; Sanger, "The Origins of the Scottish Northern Whale Fishery" (Unpublished PhD thesis, University of Dundee, 1985).

4. L. Koch, "The East Greenland Ice," *Meddelelserom Granland,* CXXX (1945), 13-373.

5. See, for example, Stuart C. Sherman, *Whaling Logbooks and Journals, 1613-1927: An Inventory of Manuscript Records in Public Collections* (New York, 1986).

6. J.O. Fletcher, "Ice on the Ocean and World Climate," *Symposium on Beneficial Modifications of the Marine Environment* (Washington, DC, 1972), 4-49.

7. For greater details on surface circulation within Baffin Bay and Davis Strait see, for example, "Arctic," *Oceanographic Atlas of the Polar Seas,* (Washington, DC, 1970); and R.S. Pritchard (ed.), *Sea Ice Processes and Models: Proceedings of the Arctic Ice Dynamics Joint Experiment International Commission on Snow and Ice Symposium* (Seattle, 1980).

8. For additional information concerning surface pressure and winds in Davis Strait and Baffin Bay, see R.G. Barry and F.K. Hare, "Arctic Climates." in J.D. Ives and R.G. Barry (eds.), *Arctic and Alpine Environments* (London, 1974), 28-33: D.F. Batty, "Aspects of the Climatology of Baffin Bay-Davis Strait in The Early Nineteenth Century" (Unpublished BA thesis, University of Southampton, 1969); J.P. Newell, "The Influence of Meteorological Factors on the Clearing of Sea Ice from Baffin Bay" (Unpublished MA thesis, University of Windsor, 1979); and E. Vowinckel and S. Orvig, "The Climate of the North Polar Basin," in S. Orvig (ed.), *Climates of the Polar Regions. Vol. 14: World Survey of Climatology* (New York, 1970), 209-214.

9. For additional information on the drift and composition of the Baffin Bay and Davis Strait ice pack, see B.B. Dey, "Seasonal and Annual Variations in Ice Cover in Baffin Bay and Northern Davis Strait," *Canadian Geographer, XXIV* (1980), 368-384; M.J. Dunbar, "Increasing Severity of Ice Conditions in Baffin Bay and Davis Strait and its Effect on the Extreme Limits of Ice," in T. Karlsson (ed.), *Sea Ice: Proceedings of an International Conference* (Reykjavik, 1972), 87-93; C.W.M. Swithinbank, *Ice Atlas of Arctic Canada* (Ottawa, 1960); and Swithinbank, "An Ice Atlas of the North American Arctic," in *Arctic Sea Ice: Proceedings of the Conference Conducted by the Division of Earth Sciences and Supported by the Office of Naval Research* (Washington, DC, 1958), 22-28.

10. See, for example, W.I. Wittmann, "Notes on the Time-Space Variations in the Features and Dynamics of the East Greenland Pack Ice," in *International Commission for the Northwest Atlantic Fisheries,* Special Publication No. 9, *Special Session on Ice* (Dartmouth, NS, 1976), 41-45; F. Nusser, "Distribution and Character of Sea Ice in the European Arctic," in *Arctic Sea Ice,* 1-10.

11. See, for example, Sanger, "'Saw Several Finners But No Whales;'" Sanger, "'On Good Fishing Ground But Too Early for Whales I Think;'" Sanger, "Environmental Factors Affecting 17th-19th Century Whaling in the Greenland Sea."

12. After 1818 an increasing proportion of masters combined traditional whaling at Davis Strait with trips to recently discovered fishing grounds to the north in Baffin Bay. This new "circuit" extended the hunting season into the late fall; increased the risk significantly; and placed additional pressure on already depleted stocks. See Sanger, "The Origins of the Scottish Northern Whale Fishery." The maps which indicate the temporal and spatial features of traditional European whaling at Davis Strait confirm in essential details the important work of E. Mitchell and R.R. Reeves, who have drawn on historical evidence to provide information on the nature, distribution and migration of bowheads which supported commercial whale fisheries in Hudson Bay, Davis Strait and Baffin Bay. See, for example, R.R. Reeves, *et ai,* "Distribution and Migration of the Bowhead Whale, *Balaena mysticetus,* in the Eastern North American Arctic," *Arctic,* XXVI (1983), 5-64; and E. Mitchell and R.R. Reeves, "Catch History and Cumulative Catch Estimates of Initial Population Size of Cetaceans in the Eastern Canadian Arctic," *Report of the International Whaling Commission,* XXXI (1981), 645-682. D.F. Eschricht and J. Reinhardt used Danish West Greenland settlement records to compile a comprehensive data set which, when used with whaling information, also provides a fairly reliable indication of the Greenland Right whale's range during the "non-hunting seasons" of the year; see Eschricht and Reinhardt, "On the Greenland Right whale *{Balaena mysticetus),"* in D.F. Eschricht, *et al.* (eds.), *Recent Memoirs on the Cetacea* (London, 1866), 1-150. See also Sanger, "'Saw Several Finners But No Whales;'" and Sanger, "'On Good Fishing Ground But Too Early for Whales I Think.'"

13. Sanger, "The Origins of the Scottish Northern Whale Fishery;" Sanger, "Environmental Factors Affecting 17th-19th Century Whaling in the Greenland Sea."

14. Sanger, "The Origins of the Scottish Northern Whale Fishery."

15. Sanger, "Environmental Factors Affecting 17th-19th Century Whaling in the Greenland Sea;" Sanger, "'We Are Now in a Splendid Position for Whales': Environmental Factors Affecting 19th Century Whaling in Baffin Bay," *Mariner's Mirror,* forthcoming.

Appendix

The following logs, journals and related publications, in the archives of Broughty Castle Museum, Dundee (BCM); Dundee Public Library, Dundee (DPL); Glasgow University Library, Glasgow (GUL); Kirkcaldy Public Library, Kirkcaldy (KPL); Scottish Fisheries Museum, Anstruther (SFM); and University Library, King's College, University of Aberdeen (ULKC), were used in the preparation of this article.

Aurora (1893); Dundee; Steam; Captain McKay; Newfoundland and Davis Strait; Journal kept by Dr. J.W. Allen, medical officer, "On Board the *'Aurora'* in '93. The Record of a Sealing and Whaling Voyage." GUL.

Caledonia (1834); Kirkcaldy; Sail; Captain Gray; Davis Strait. SFM.

Camperdown (1861); Dundee; Steam; Captain W. Bruce; East Greenland and Davis Strait; Journal kept by A. Smith, Engineer. DPL.

Chieftain (1841); Kirkcaldy; Sail; Captain R. Tod; Davis Strait; Log kept by D. Kerr, first mate. KPL.

Chieftain (1842). Kirkcaldy; Sail; Captain R. Tod; Davis Strait; Log kept by D. Kerr, first mate. KPL.

Chieftain (1852); Kirkcaldy; Sail; Captain W. Archibald; Davis Strait. KPL.

Diana (1898); Dundee; Steam; Captain Adams; Davis Strait. BCM.

Dorothy (1834); Dundee; Sail; Captain D. Davidson; Davis Strait. DPL.

Eclipse (1893); Dundee; Steam; Captain Milne; Davis Strait. BCM.

Eclipse (1896); Dundee; Steam; Captain Milne; Davis Strait. BCM.

Eclipse (1897); Dundee; Steam; Captain Milne; Davis Strait. BCM.

Esquimaux (1885); Dundee; Steam; Captain Milne; Newfoundland and Davis Strait. BCM.

Esquimaux (1886); Dundee; Steam; Captain Milne; Newfoundland and Davis Strait. BCM.

Esquimaux (1887); Dundee; Steam; Captain Milne; Newfoundland and Davis Strait. BCM.

Esquimaux (1888); Dundee; Steam; Captain Milne; Newfoundland and Davis Strait. BCM.

Esquimaux (1891); Dundee; Steam; Captain J. Phillips; Newfoundland and Davis Strait; Log kept by W. Stenhouse, first mate. BCM.

Esquimaux (1895); Dundee; Steam; Captain Adams; Davis Strait. BCM.

Esquimaux (1899); Dundee; Steam; Captain H. McKay; Davis Strait; Journal kept by A.B. Walker, principal financial backer of the trip, and used as the basis for the book, *Cruise of the Esquimaux* (1906). BCM.

Esquimaux (1900); Dundee; Steam; Captain H. McKay; Newfoundland and Davis Strait; Log kept by R. Davidson, first mate. BCM.

Fairy (1838); Dundee; Sail; Captain D. Davidson; Davis Strait. DPL.

Hercules (1831); Aberdeen; Sail; Captain Allan; Davis Strait; Journal kept by medical officer. ULKC.

Maud (1891); Dundee; Steam; Captain Milne; Davis Strait. BCM.

Maud (1892); Dundee; Steam; Captain Milne; Davis Strait; Lost in heavy ice off Coutt's Inlet on 10 October, crew rescued. BCM.

Polynia (1890); Dundee; Steam; Captain Milne; Davis Strait. BCM.

Princess Charlotte (1853); Dundee; Sail; Captain G. Deuchars; Davis Strait. DPL.

Thomas (1833); Dundee; Sail; Captain Thorns; Davis Strait; Journal (incomplete) kept by medical officer. BCM.

William and Ann (1830); Leith/Edinburgh; Sail; Captain Smith; Davis Strait. SFM.