

**AGGREGATES LEVY SUSTAINABILITY FUND
MARINE AGGREGATES AND THE HISTORIC ENVIRONMENT**

ENGLAND'S SHIPPING

**Source Appraisal
January 2003**

Ref: 51552.01

1. BACKGROUND

- 1.1. Wessex Archaeology has been commissioned by English Heritage to prepare a Project Design for a project titled 'England's Shipping'. The project aim is to collate documentary information about shipping patterns in a readily accessible format to facilitate the assessment of maritime archaeological potential in the course of preparing Environmental Statements to accompany marine aggregate licence applications.
- 1.2. As stated in the submitted project design (5.5.3) milestone 2 required that a source appraisal be completed by the end of January 2003. This document represents that appraisal.

2. AIMS

- 2.1. The purpose of the source appraisal process was as follows:
 - to identify the extent and general character of the resource;
 - to assess which sources are likely to prove most productive during the recording phase;
 - to identify geographical areas or themes suitable for case study;
 - to obtain data with which to test the recording system.

3. METHODOLOGY

- 3.1. The source appraisal was carried out by the Project Officer with responsibility for the recording phase of the project and was supervised by the Project Manager.
- 3.2. Research was carried out to identify and appraise as many primary and secondary sources as possible, initially by internet, Wessex Archaeology (WA) and personal library searches and then by attendance at Southampton City Library (SCL), the Public Record Office (PRO) and the Caird Library of the National Maritime Museum

(NMM). All four were selected because they have substantial relevant resources. At these venues, searches were conducted using the library/archive catalogues, followed by physical examination of the sources located. The search and therefore appraisal was not exhaustive due to the large number of available sources.

- 3.3. Each source was sampled for relevant data and assessed using the criteria set out below. Some data was selectively recorded for later assessment and to enable the recording system to be tested using real data.
- 3.4. As attendance time was limited, it was not possible to identify and appraise the full range of sources held at each venue. Therefore the search for and examination of sources was biased towards those that were considered more likely to hold pre-1730 data (see Project Design, paragraph 1.5)

4. APPRAISAL CRITERIA

- 4.1. The following criteria were applied:
 - Volume of data - how much relevant data do the sources typically contain?
 - Relevance of data - how well does the data match the requirements of the project?
 - Availability - how easy and efficient is physical access to the sources?
 - Speed of use - how quickly can reliable data be extracted from the source?
- 4.2. No attempt was made to assess data reliability as insufficient time was available. Reliability will be monitored during the recording phase.
- 4.3. The above criteria were applied empirically as it was decided that a mathematical approach would add unnecessary complexity and therefore be unproductive.

5. SOURCE APPRAISAL RESULTS

- 5.1. The results of the source appraisal, conducted during January 2003, are presented in Appendices 1 and 2.

6. CONCLUSIONS

- 6.1. Prior to the 15th Century, knowledge of shipping movements is largely dependent on incomplete customs records and Port Books, occasional references in other contemporary sources to voyages (usually official and/or military) and shipwrecks. Most primary sources tend to be hand written in Latin or French and are difficult to read. References to shipping movements are usually implied and occasional. Details are not usually given. References to shipping movements during this period are most easily and most time effectively accessed by the use of secondary sources.

- 6.2. During the 15th Century and 16th Century the quality and quantity of data improves. Where port books and customs accounts survive it is possible to reconstruct most of the merchant shipping movements into and out of a port (including outports). The amount and quality of information concerning the movement of military shipping improves also.
- 6.3. From the 17th Century onwards the quality of information relating to military shipping movements improves greatly, to the point where it is possible to track individual ships from year to year. The amount and quality of information relating to merchant shipping movements also increases, again to the point where it starts to become possible to track individual vessels from year to year.
- 6.4. In terms of the geographical spread of information, the quantity and quality of the data varies from region to region, particularly in respect of merchant shipping. Prior to the 18th Century the availability of data very largely depends upon the survival of Port Books and customs accounts and is therefore fragmentary.
- 6.5. Data linked to themes, such as the slave trade or trade with North America, rather than specific ports, is also available, particularly in secondary sources. Similarly, much of the primary source data for military shipping movements is recorded from a ship or central command basis and is therefore most easily accessed as a theme rather than through specific ports or regions.
- 6.6. Overall the number of available sources is huge. There are many thousands of relevant and available primary source documents in the PRO and other repositories. Similarly there are likely to be hundreds, if not thousands of secondary sources.
- 6.7. The database is therefore likely to be very large but the amount and range of information contained in each shipping movement record will vary greatly. A case study approach is therefore advantageous because of the size of the potential database as it is likely to produce useable results earlier. Lessons learnt in the case studies can then be used to inform the later stages of the recording process.
- 6.8. A substantial proportion of early primary sources is likely to be time-consuming to deal with because of language and handwriting difficulties. Although speed of data collecting is likely to improve with the experience of the recorder, transcripts of these primary sources should be preferred. The choice of case studies should be informed by the availability of these secondary sources.

7. CASE STUDY RECOMMENDATIONS

- 7.1. The sources can be broadly categorised as those offering regional or port specific data and those offering data that is theme relevant. It is therefore recommended that case studies should be selected that reflect this. Based upon the results above it is recommended that the choice of case study is made from the following:

7.0.1. Ports

- Southampton and outports- particular relevance to South Coast and English Channel licensed areas
- Bristol, Gloucester and outports - relevance to Bristol Channel licensed area
- Plus one of:
 - Hull and outports - particular relevance to Humber licensed area
 - East Anglia and Suffolk - particular relevance to East Coast and Humber licensed areas
 - Liverpool Bay ports, including the rivers Dee and Mersey - particular relevance to Liverpool Bay and Mersey licensed areas
 - London - particular relevance to Thames licensed area

7.0.2. Themes

- Royal Navy in England prior to 1750 - relevant to all above areas
- Coastal trade in the Bristol Channel - relevant to Bristol Channel licensed area
- Plus one of:
 - Trade with North America prior to 1750 - relevant to South Coast, English Channel, Bristol Channel, Liverpool Bay and Thames licensed areas
 - Slave trade with Africa/North America – ditto

8. DATABASE TESTING

- 8.1. Copies of representative documents were taken to enable the database recording system to be tested. Documents were chosen that were representative of different types of data as opposed to different types of document.
- 8.2. A report upon the database recording system is annexed as Appendix 3.

APPENDIX 1 - PRIMARY SOURCE APPRAISAL RESULTS

Abbreviations:

WA Wessex Archaeology
PRO Public Record Office, Kew
NMM National Maritime Museum, Greenwich
SCL Southampton City Library (Maritime Collection)
RN Royal Navy

Sources are listed in order of appraisal

1. Lloyds Register of Shipping

Lloyds of London have published an annual register of shipping since at least 1764.

A copy of the register for 1764 was appraised at SCL. It contained details of vessels, including home port and intended destination.

The above criteria were applied as follows:

- a. Volume of relevant data – moderate
- b. Relevance of data – low (post-1730)
- c. Availability - very good, one venue
- d. Speed of use – moderate

Given that the relevance of data was low, it is not recommended that this document should be considered a priority source.

2. Lloyds Marine Lists

A register of vessel arrivals exists from at least 1740.

A copy of the list for January 1740 was appraised at SCL. It contained details of vessel names, ports of arrival and dates.

The above criteria were applied as follows:

- a. Volume of relevant data – high
- b. Relevance of data – low (post-1730)
- c. Availability - very good, one venue
- d. Speed of use – moderate

Given that the relevance of data was low, it is not recommended that this document should be considered a priority source.

3. Port Books 16C - 18C

Port Books are local records of customs duties paid on overseas trade between 1565 and 1799. They are recorded by port and by year. Smaller ports are usually included under and undifferentiated from a larger head port. Entries normally included the name, tonnage and home port/port of departure of the arriving or departing ship; the destination or next port of call (not necessarily correct); the name of the merchants and whether they were aliens; and details of the cargo. The date was that of the payment of duty and therefore probably not the date of arrival, although the dates are likely to be roughly proximate. Coastal movements were also recorded and a certificate stating that a cargo was not subject to duty was issued. They are usually recorded in a separate list. Theoretically all movement of vessels carrying dutiable cargo into and out of a port should be recorded in them, although this will rarely have been the case because of smuggling, corruption and other evasion.

A total of approximately 20,000 Port Books have survived, although many are in a poor state of preservation and there are many gaps. They are hand-written and those compiled before 1600 tend to be written in Latin. There are a small number of similar documents for the period before 1565. Most Port Books are held in the PRO.

Two sample documents were selected at random. E190/825/2 comprised the Port Book for Southampton 1643-1644. The document was hand written in English but could not be read in the time available. E190/1323/9 comprised the Port Book for Chester for part of the year 1566. This document was hand written in English but only fragments could be read in the time available.

Other sources, including secondary studies of these documents, were therefore consulted in order to apply the above criteria as follows:

- a. Volume of relevant data - very high
- b. Relevance of data - directly, very high correlation
- c. Availability - very good, mainly one venue
- d. Speed of use - very slow, improving with time as the recorder develops the necessary paligraphic skills

The appraisal indicated that serious difficulties of legibility and translation will arise in respect of Port Books. It is therefore recommended that, where available, secondary studies of these records, most particularly transcriptions, be used.

Port Books are one of the few classes of primary document available for the study of shipping movements prior to 1700. Although the data that they contain will be slow to record and their survival is not complete, it is recommended that they be considered a priority source. It is also strongly recommended that the choice of case study areas and themes be informed by the availability of secondary studies of these documents.

4. Early Customs Records 13C -17C

These are records created locally for central government. It was normal practice for the Exchequer to send out books for the customs officers of each port to enter the 'official' record

of dues paid on imported or exported goods such as wool, cloth, lead and wine. As with Port Books, all movement of vessels carrying dutiable cargo into and out of a port should have been recorded in them, although this will rarely have been the case for the same reasons. Entries normally include the name of the ship, master and merchants; the date of arrival or departure; and details of the cargo. The surviving documents of various types, a small percentage of those created, date from the late 13th Century to the early 19th. Approximately 8000 documents survive in the PRO and an unknown number in other record offices. They are hand written in English or Latin.

Three sample documents were randomly selected at the PRO and appraised. E122/17/5 comprised of wool trade customs accounts for Bristol and regional ports for the period 1402-03. The document was hand written in Latin and could not be read in the available time. E122/4/3 comprised of the account of customs outwards and inwards from the port of Blakeney for March-June 1589. The document was hand written in English but could not be read in the time available. E122/233/81 comprised of customs accounts outwards and inwards from Yarmouth for the years 1644 and 1648. The document was hand written in English but only fragments could be read in the time available. Some reference to shipping movements was apparent, with some detail.

Other sources, including secondary studies of these documents, were therefore consulted in order to apply the above criteria as follows:

- a. Volume of relevant data - very high
- b. Relevance of data - directly, very high correlation
- c. Availability - very good, mainly one venue
- d. Speed of use - very slow, improving with time as the recorder develops the necessary palaeographic skills

The appraisal indicated that similar difficulties of legibility and translation will arise in respect of customs accounts as with port books. It is therefore recommended that, where available, secondary studies of these records be used.

As with Port Books, customs accounts are one of the few classes of primary document available for the study of shipping movements prior to 1700. Although the data that they contain will be slow to record and their survival is fragmentary, it is recommended that they also be considered a priority source. It is also strongly recommended that the choice of case study areas and themes be informed by the availability of secondary studies of these documents.

Document series E209, comprising Coast Bonds issued in respect of goods that were not being imported or exported, were temporarily unavailable during the appraisal visit to the PRO. They are likely to be of similar high value.

In addition to national customs, a wide range of dues were imposed and recorded locally. Records of some of these dues are held in the PRO, whilst others are held in county record offices. These have not been appraised but are likely to contain relevant information. These documents are likely to pose similar difficulties in terms of legibility and/or translation.

5. Later Customs Records

From the mid-17th Century, records exist for the Board of Customs and Excise and its predecessors. These records are of very varied type and content but include documents containing records of imports and exports from Britain and its colonies. The PRO is the main repository for these records. The total number of documents held there, which date from 1660 to 1990, is not known but is very substantial.

Two sample documents were randomly selected at the PRO. Document CUST 2/6, comprising London customs records for Christmas 1698-99, recorded full details of dutiable goods but appeared to contain no reference to vessel movements. Documents CUST 18/1A and 18/14 were both internal accounts for the customs service and contained no reference to vessel movements.

The above criteria were applied as follows:

- a. Volume of relevant data – low/nil
- b. Relevance of data - indirectly
- c. Availability - very good, mainly one venue
- d. Speed of use – moderate

It is recommended that this class of document should not be regarded as a priority source. However, given the size of this resource and the small sample size, it is recommended that this conclusion should be reviewed on a case study by case study basis.

6. Board of Trade Shipping Returns

These are records prepared for the Board of Trade and record the movement of ships into and out of colonial ports. They survive for the period 1699 onwards and consist of a register of entries. Each entry typically lists date, port, name of vessel and home port/port of registration, master's name, type of vessel, burthen, where built and when, where and when registered, owner's name, cargo details, place of departure and when and where any bond was given. Theoretically, they should, like Port Books, be a comprehensive record. Most documents are held at the PRO.

Two sample documents were randomly selected at the PRO and appraised. Document CO5/1441 comprised the Virginia Naval Office Accounts for 1700-1706. Document CO5/1445 comprised Shipping Returns for South Potomac & Accomack Districts. Both documents were hand-written in English and a significant number of entries in both recorded vessel movements to and from England.

The above criteria were applied as follows:

- a. Volume of relevant data - high
- b. Relevance of data - directly, very high correlation
- c. Availability - very good, mainly one venue
- d. Speed of use – moderate

It is recommended that these documents should be regarded as a priority source and that the choice of themed case study should be informed by their existence.

7. Passenger Lists

State records of emigration and immigration have been kept since the medieval period, typically in the form of licences to “pass beyond the seas” or, more recently, passenger lists kept by ships’ masters. Very few emigration and immigration lists survive for the period prior to 1878 and 1890 respectively and documents that do survive for all periods are largely for journeys that begin or end outside of Europe and the Mediterranean, although ports of call within Europe are sometimes included. Most of these documents are held in the PRO.

Two sample documents, one for the period prior to 1878 and one more recent but otherwise randomly selected, were appraised. Document E157/13 comprised of a Register of licences to pass beyond the seas for the period April to December 1624. This document was hand-written in English but could not be read in the time available. Document BT26/7 comprised Board of Trade immigration passenger lists for Southampton for the period January to June 1890. This generally listed dates of arrival, names and captains of vessels, tonnage, departure points, onward destinations and lists of passengers.

Using other sources in respect of Document E157/13 (see Appendix 2), the above criteria were applied as follows:

- a. Volume of relevant data - high
- b. Relevance of data - directly, moderate correlation (largely post-1730)
- c. Availability - very good, mainly one venue
- d. Speed of use – very fast but very slow in respect of 17th Century documents, improving with time as the recorder develops the necessary paligraphic skills

Most surviving passenger lists are for the period post-1878. It is therefore recommended that these documents should not be considered a priority source. Pre-1730 documents, particularly in respect of travel to North America, are generally available in secondary source transcripts (see Appendix 2).

8. Ship Registers

Official registration of English shipping commenced in the 1660s and was made compulsory in 1786, although some earlier records survive amongst the State Papers. Most documents are held at the PRO.

Two sample documents were selected at the PRO. Document SP15/22, comprising a register of merchant ships in England compiled in 1572 by Thomas Colshill, surveyor of the port of London, is one of the early survivals. This document listed the names, masters, burthen and port of registration. A degree of completeness is presumed but unknown. The document was hand-written in English. Document BT107/1 comprised a register of London coasting trade ships for 1786-96 with various details of the vessels, masters and owners. In neither document was there any reference to vessel movements, either directly or implied.

The above criteria were applied as follows:

- a. Volume of relevant data - nil
- b. Relevance of data – not applicable
- c. Availability - very good, mainly one venue
- d. Speed of use – moderate

It is recommended that ship registers should not generally be considered to be a source of information concerning vessel movements. Nevertheless they are likely to have considerable value in providing data about the vessels identified in other sources.

9. Merchant Shipping Musters

Masters or owners of merchant ships were required from 1747 to keep and file a Muster Roll giving details of the crew and voyages. These records survive for only a few ports for the period 1747-1834 and are held at the PRO.

One sample document was selected at the PRO. Document BT98/112 comprised muster rolls for the port of Shields and others for 1771-3. Details of vessel name, tons and crew were given. There was only occasional reference to voyage dates and details.

The above criteria were applied as follows:

- a. Volume of relevant data - low
- b. Relevance of data – high (mid-18th Century)
- c. Availability - very good, one venue
- d. Speed of use – moderate

Given that data volume was low, it is not recommended that merchant shipping musters should be considered a priority source.

10. Registers of Merchant Seamen

Government registration of individual merchant seamen was introduced in 1835. With the exception of recent records, these records, of which there are a very large number, are held at the PRO.

One sample document was selected for appraisal at the PRO. Document BT 112/74 was one of 83 volumes covering both home and foreign trade for the period 1835-44. The entries contained outline details of voyages made by registered seamen, including approximate date and name of ship.

The above criteria were applied as follows:

- a. Volume of relevant data - low
- b. Relevance of data – low (mid-19th Century onwards)
- c. Availability - very good, one venue
- d. Speed of use – slow

Given that data volume was low, it is not recommended that registers of merchant seamen should be considered a priority source.

11. Merchant Ship Logs

Official logs were required by law after 1850. A log was a record of certain notable events on board ship kept for each foreign-going voyage or half-yearly for home trade. A large proportion of these documents have not survived but there are 2046 volumes at the PRO, covering the period 1857-1972.

One sample document selected at random was appraised at the PRO. Document BT 165/not recorded comprised three official log books for voyages in 1901-2. The logs included name of vessels, registration numbers, gross and net tonnages, masters' names, departure and return ports, ports of call and crew and conduct records.

The above criteria were applied as follows:

- a. Volume of relevant data – very high
- b. Relevance of data – low (mid-19th Century onwards)
- c. Availability - very good
- d. Speed of use – moderate

Given that the relevance of the data is rated as low, it is recommended that this class of document should not be considered a priority source.

12. RN Masters' Logs

Logs were kept for navigational purposes by the sailing masters of RN ships. A total of approximately 5000 exist for the period 1672-1871 and most are held at the PRO. They contained navigational data and also information concerning discipline and other aspects of on-board life.

One sample document was selected for appraisal at the PRO. Document ADM 52/1117, the master's log for the sloop Zephyr for 1757-61 gave detailed daily position and course details.

The above criteria were applied as follows:

- a. Volume of relevant data – very high
- b. Relevance of data – moderate (mid-18th Century onwards)
- c. Availability - very good, one venue
- d. Speed of use – very slow (many entries per voyage)

Given that data volume was high and gave daily positions, it is recommended that masters' logs should be considered a priority source. However as there were a great number of entries per voyage, the use of alternatives (see Appendix 2) is recommended where available.

13. RN Abstracts of Ships' Journals

The Abstracts are Admiralty documents covering the period 1736-95. They are shortened accounts of the positional entries in ship journals. They include names of vessels, masters' names, and a detailed record of the ships' voyages, including dated way points. The documents are held at the PRO.

One document was selected for appraisal at the PRO. Document ADM 7/569 comprised of abstracted logs for the period 1736-42. It recorded the movements of vessels including Stratford in 1738 and the sloop Otter in 1787. Detailed dated itineraries were given, together with some notes on activities and orders. Document 7/570 comprised abstracted logs for 1740-7, which were similar.

The above criteria were applied as follows:

- a. Volume of relevant data – very high
- b. Relevance of data – moderate (mid-18th Century onwards)

- c. Availability - very good, one venue
- d. Speed of use – moderate

Given that data volume was very high, it is recommended that this type of document should be regarded as a priority source.

14. RN Stations of Ships 1696-1822

Station records list the names and other details of ships at different worldwide stations. These documents are held at the PRO.

One document was selected for appraisal at the PRO. Document ADM7/550A comprised a list of ship stations for 1696-1714. This document listed the names of RN vessels at various stations. It contained very few and generally incidental references to vessel movements.

The above criteria were applied as follows:

- a. Volume of relevant data – very low
- b. Relevance of data – high (late 17th Century onwards)
- c. Availability - very good, one venue
- d. Speed of use – moderate

Given the very low data volume it is recommended that this type of document should not be regarded as a priority source. However this type of document is likely to enhance the movement-specific data available in other sources.

15. List Books

These List Books contain monthly returns upon RN vessel disposition prepared by the Admiralty Office. These documents are held at the PRO.

One document was selected for appraisal at the PRO, the earliest available. Document ADM8/1 comprised the 1687 lists. It contained lists of vessel names at each station but no reference to vessel movements.

The above criteria were applied as follows:

- a. Volume of relevant data – nil
- b. Relevance of data – not applicable
- c. Availability - very good, one venue
- d. Speed of use – moderate

Given the nil level of data volume it is not recommended that this type of document be regarded as a priority source. However this type of document is likely to enhance movement related data available in other sources.

16. Daily Returns to the First Lord 1812-1830

Daily Returns were the regular reports sent to the First Lord of the Admiralty.

The single document was appraised at the PRO. It comprised the returns made between March and July 1812. It contained dates of vessel movements, ship names, departure points, destinations, and some waypoints.

The above criteria were applied as follows:

- a. Volume of relevant data – low (high density but source limited)
- b. Relevance of data – moderate (post-18th Century)
- c. Availability - very good, one venue
- d. Speed of use – moderate

Given the low volume of data it is not recommended that this document be regarded as a priority source.

17. Admiralty Miscellaneous Documents

Two documents of miscellaneous material were appraised at the PRO. Document ADM 7/777 comprised, amongst other documents, of logs of three individual 17C RN vessels, giving detailed daily positional information.

The above criteria were applied as follows:

- a. Volume of relevant data – low (high density but source limited)
- b. Relevance of data – high (pre-18th Century)
- c. Availability - very good, one venue
- d. Speed of use – moderate

Given that the relevance of data is high because of a pre-1800 bias, it is recommended that this document should be treated as a priority source for the purposes of any case study of the Royal Navy.

Document ADM7/782 comprised of convoy records for 1793-7.

The above criteria were applied as follows:

- a. Volume of relevant data – high
- b. Relevance of data – low (post-1730)
- c. Availability - very good, one venue
- d. Speed of use – moderate

Given that the relevance of the data is low, it is not recommended that this document be considered a priority source.

APPENDIX 2 - SECONDARY SOURCE APPRAISAL RESULTS

Abbreviations as Appendix 1.

Sources are listed in order of appraisal.

1. Rodger N A M, *Safeguard of the Sea, a Naval History of Britain, Vol. 1*, 1997

General text dealing with the history of the early navy appraised at WA.

The above criteria were applied as follows:

- a. Volume of relevant data – low (high number but low density)
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – slow

2. Hutchinson G, *Medieval Ships and Shipping*, 1994

General text appraised at WA.

The above criteria were applied as follows:

- a. Volume of relevant data – low
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – slow

3. Burwash D, *English Merchant Shipping 1460-1540*, 1947

General text appraised at WA.

The above criteria were applied as follows:

- a. Volume of relevant data – moderate
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – moderate (some information in tabular format)

4. Unger R W, *The Ship in the Medieval Economy 600-1600*, 1980

General text appraised at WA.

The above criteria were applied as follows:

- a. Volume of relevant data – low
- b. Relevance of data – high (pre-1730)
- c. Availability - very good

d. Speed of use – slow

5. Lewis A R & Runyan T J, *European Naval and Maritime History 300-1500*, 1985

General text appraised at WA.

The above criteria were applied as follows:

- a. Volume of relevant data – low
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – slow

6. Padfield P, *Maritime Supremacy and the Opening of the Western Mind*, 1999

General text appraised at WA.

The above criteria were applied as follows:

- a. Volume of relevant data – low
- b. Relevance of data – high (pre-19C)
- c. Availability - very good
- d. Speed of use – slow

7. Friel I, *The Good Ship*, 1995

General text dealing with the development of medieval ships appraised at WA.

The above criteria were applied as follows:

- a. Volume of relevant data – low
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – slow

8. Duffy, M and others (ed.), *The New Maritime History of Devon, Vol. 1 & 2*, 1992 & 1994

Collections of specialist papers, appraised at WA.

The above criteria were applied as follows:

- a. Volume of relevant data – moderate
- b. Relevance of data – moderate (partly pre-1730)
- c. Availability - very good
- d. Speed of use – slow

9. Wilson I, *The Columbus Myth*, 1991

Investigative text dealing with the ‘discovery’ of America appraised at WA.

The above criteria were applied as follows:

- a. Volume of relevant data – low
- b. Relevance of data – high (pre-1730)
- c. Availability - very good

d. Speed of use – slow

10. Black J, *The Guernsey Wrecks and their involvement in Medieval Trade*, unpublished MA Thesis, 2000

Specialist text appraised at WA.

The above criteria were applied as follows:

- a. Volume of relevant data – low
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – slow

11. Cunliffe B, *Facing the Ocean, The Atlantic and its Peoples*, 2001

General text dealing mainly with the prehistoric period appraised at WA.

The above criteria were applied as follows:

- a. Volume of relevant data – low
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – slow

12. Kenton P J & Parsons H G, *Early Routings of the Royal Mail Steam Packet Co. 1842-79*

Specialist text appraised at SCL. Contained details of vessels, schedules and waypoints, with dates.

The above criteria were applied as follows:

- a. Volume of relevant data – high
- b. Relevance of data – low (mid-late 18C)
- c. Availability - very good
- d. Speed of use – slow

13. Larn, R & B, *Shipwreck Index of the British Isles Vol. 2*

Specialist index appraised at SCL and NMM. Includes details of pre-wrecking movements were known.

The above criteria were applied as follows:

- a. Volume of relevant data – high
- b. Relevance of data – high (includes pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

It is recommended that this series of documents be treated as a priority source.

14. Wiggs J L, *The Seaborne Trade of Southampton in the Second Half of the Sixteenth Century*, 1955

Specialist text appraised at SCL.

The above criteria were applied as follows:

- a. Volume of relevant data – high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

It is recommended that this document be treated as a priority source.

15. Hussey D (ed.) *Coastal and River Trade in Pre-Industrial England 1680-1730*, 2000

Collection of specialist papers appraised at SCL.

The above criteria were applied as follows:

- a. Volume of relevant data – high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

It is recommended that this document be treated as a priority source.

16. *The English Coasting Trade 1600-1750*

Specialist text appraised at SCL.

The above criteria were applied as follows:

- a. Volume of relevant data – high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

It is recommended that this document be treated as a priority source.

17. Starkey and others (ed.), *England's Sea Fisheries*, 2000

Collection of specialist papers appraised at SCL.

The above criteria were applied as follows:

- a. Volume of relevant data – moderate
- b. Relevance of data – low (mainly post -1730)
- c. Availability - very good
- d. Speed of use – moderate

18. Studer P, *The Port Books of Southampton 1427-30*, 1913

Transcriptions (translated) appraised at the PRO.

The above criteria were applied as follows:

- a. Volume of relevant data – high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

Translated transcriptions of Port Books are likely to represent the best source of information concerning medieval merchant shipping movements.

It is recommended that this document be treated as a priority source.

19. Quinn D B, *Port Books of Southampton Vol. 1 1469-71 and Vol. 2 1477-81, 1937 & 1938*.

Transcriptions (translated) appraised at the PRO.

The above criteria were applied as follows:

- a. Volume of relevant data – very high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

Translated transcriptions of Port Books are likely to represent the best source of information concerning medieval merchant shipping movements.

It is recommended that this document be treated as a priority source.

20. Lewis E A, *The Southampton Port and Brokerage Books 1448-9, 1993*

Transcription (not translated) appraised at the PRO.

The above criteria were applied as follows:

- a. Volume of relevant data – very high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – slow

It is recommended that this document be treated as a priority source.

21. Cobb H S , *The Local Port Book of Southampton 1439-40, 1961*

Transcription (not translated) appraised at the PRO.

The above criteria were applied as follows:

- a. Volume of relevant data – very high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – slow

It is recommended that this document be treated as a priority source.

22. Platt C, *Medieval Southampton, The port and trading community, AD 1000-1600*, 1973

General text appraised at the PRO.

The above criteria were applied as follows:

- a. Volume of relevant data – high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

It is recommended that this document be treated as a priority source.

23. Hotten J C, *The Original Lists of Persons of Quality.....Particulars*, 1874

Specialist text listing emigrants to North America and the Caribbean 1600-1700 appraised at SCL and the PRO.

The above criteria were applied as follows:

- a. Volume of relevant data – very high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

It is recommended that this document be treated as a priority source.

24. AMDG, *Index of Ships, Merchants and Passengers to the New World 1618-68*

Specialist text listing aiming claiming to list all sailings from English ports to the American mainland, appraised at the PRO.

The above criteria were applied as follows:

- a. Volume of relevant data – very high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

It is recommended that this document be treated as a priority source.

25. Coldham P W, *The King's Passengers to Maryland and Virginia*, 1997

Specialist text listing felons transported between 1718 and 1776, appraised at the PRO.

The above criteria were applied as follows:

- a. Volume of relevant data – moderate
- b. Relevance of data – high (some pre-1730)
- c. Availability - very good
- d. Speed of use – fast

26. Williams N J, *The Maritime Trade of the East Anglian Ports 1550-1590*, 1988

Specialist text, including transcriptions of primary sources, appraised at the NMM.

The above criteria were applied as follows:

- a. Volume of relevant data – very high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – fast

It is recommended that this document be treated as a priority source.

27. Vanes J (ed.), *Documents Illustrating the Overseas Trade of Bristol in the 16th Century*, 1979

Specialist text, including translated transcriptions, appraised at the PRO.

The above criteria were applied as follows:

- a. Volume of relevant data – very high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – fast

It is recommended that this document be treated as a priority source.

28. Childs Dr W R, *The Customs Accounts of Hull 1453-1490*, 1986

Transcriptions (untranslated) appraised at the NMM.

The above criteria were applied as follows:

- a. Volume of relevant data – very high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – slow

It is recommended that this document be treated as a priority source.

29. Cobb E S (ed.), *The Overseas Trade of London, Exchequer Customs Accounts 1480-1*, 1990

Transcriptions appraised at the NMM.

The above criteria were applied as follows:

- a. Volume of relevant data – very high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – slow

It is recommended that this document be treated as a priority source.

30. Dietz B (ed.), *The Port and Trade of Early Elizabethan London, Documents*, 1972

Transcription of Port Book for 1567-8, appraised at the NMM.

The above criteria were applied as follows:

- a. Volume of relevant data – very high
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

It is recommended that this document be treated as a priority source.

31. Bailey M, *The Bailiff's Minute Book of Dunwich 1404-30*, 1992

Transcription and commentary appraised at the NMM.

The above criteria were applied as follows:

- a. Volume of relevant data – low / nil
- b. Relevance of data – high (pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

32. Hooton J, *The Glaven Ports*, 1996

General text on the history of North Norfolk ports, appraised at the NMM.

The above criteria were applied as follows:

- a. Volume of relevant data – moderate
- b. Relevance of data – moderate (some pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

33. Jackson G, *Hull in the 18th Century, a Social and Economic History*, 1972

General text appraised at the NMM.

The above criteria were applied as follows:

- a. Volume of relevant data – very high
- b. Relevance of data – moderate (some pre-1730)
- c. Availability - very good
- d. Speed of use – fast

It is recommended that this document be treated as a priority source.

35. Place G, *The Rise and Fall of Parkgate*, 1994

General text appraised at the NMM.

The above criteria were applied as follows:

- a. Volume of relevant data – low
- b. Relevance of data – moderate (some pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

36. Parkinson C, *The Rise of the Port of Liverpool*, 1952

General text appraised at the NMM.

The above criteria were applied as follows:

- a. Volume of relevant data – low
- b. Relevance of data – moderate (some pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

37. Barrow T, *The Whaling Trade of N E England 1750-1850*, 2001

Specialist text appraised at the NMM.

The above criteria were applied as follows:

- a. Volume of relevant data – low
- b. Relevance of data – moderate (some pre-1730)
- c. Availability - very good
- d. Speed of use – moderate

38. [www/Nautica/Ships/Clippers/Teaclippers.html](http://www.Nautica/Ships/Clippers/Teaclippers.html)

Internet site inventory of teaclippers.

The above criteria were applied as follows:

- a. Volume of relevant data – high
- b. Relevance of data – low (post -1730)
- c. Availability - very good
- d. Speed of use – fast

APPENDIX 3 – DATABASE REPORT

1. METHODOLOGY

- 1.1. The database design process was carried out by the Archaeological Systems Development Officer and the Project Officer, and supervised by the Project Manager.
- 1.2. The system was developed using Microsoft Access 97. The system has been designed to be MIDAS/INSCRIPTION compliant and compatible with the NMR maritime database and SMRs.
- 1.3. The system has been continuously tested during the design process using original data recorded during the source appraisal process.

2. DATABASE STRUCTURE

- 2.1. A relational diagram is presented in Appendix 4. Specified fields (see Project Design paragraph 4.1.2) were incorporated with modifications.

3. DATABASE DOCUMENTATION

- 3.1. See Appendix 5.

4. DATABASE TESTING

- 4.1. The database was continuously tested during the design process. Additionally the final version of the database was tested using the sample data set out in Appendix 3. Results of the testing were used to inform the database design.
- 4.2. Testing using the sample data set out in Appendix 6 suggested that the database required further modification and this will be reported upon separately.
- 4.3. The source appraisal process indicated that a problem of duplicate entries could arise when more than one source referred to a single shipping movement. Typically a primary source, such as a Port Book, might record the arrival of a ship on 3rd April 1490. A secondary source, based upon an analysis of various primary sources including the same Port Book, might record that 10 vessels entered that port during 1490 but give no other details. Recording data from both sources without taking the duplication into account would result in the recording of a misleading total of 11 shipping movements. A protocol is being devised to avoid duplicate entries and will be reported upon separately.

5. GIS

- 5.1. The GIS system will be linked to the database. The GIS system will be designed using MapInfo or ArcView, to be confirmed.

- 5.2. Very few sources of data provide substantial route information other than departure and arrival points and occasional waypoints. A GIS system relying only upon this raw data will interpret shipping movements as straight line journeys between these points. Such straight lines are likely to be misleading in that they are unlikely to reflect the actual route followed. As anticipated in the Project Design (paragraph 1.7), it is therefore recommended that a means of route modelling be devised, based upon route hazards, vessel capabilities, and contemporary pilotage/sailing directions. Route modelling will be reported separately.

6. CONTROL WORDS

- 6.1. A list of control words is being compiled and will form the basis of a separate report. The relevant sections of the NMR Thesaurus will be incorporated.

7. COMPLIANCE

- 7.1. The database has been designed to be MIDAS / INSCRIPTION compliant and to be compliant with the NMR maritime database and SMRs.

8. DATA TRANSFER PROTOCOLS

- 8.1. To be designed in consultation with the relevant section of English Heritage.

APPENDIX 5 – DATABASE DOCUMENTATION

TABLE: LUT_FLEETTYPE

Lookup table for fleet types

Name	Type	Size	Description
FleetTypeID	Number (Long)	4	ID
FleetType	Text	50	Categories: "Single Ship", "Group", "Fleet"
FleetDefinition	Text	80	Specification of the categories

TABLE: LUT_JOURNEYLOCTYPE

Lookup table for journey location types

Name	Type	Size	Description
JourneyLocTypeID	Number (Long)	4	ID
JourneyLocType	Text	20	Categories: "Home Port", "Departure", "Destination", "Return Destination", "Place of Battle"

TABLE: LUT_JOURNEYTYPE

Lookup table for journey types

Name	Type	Size	Description
JourneyTypeID	Number (Long)	4	ID
JourneyType	Text	30	Categories: "Trade", "War", "Discovery"

TABLE: LUT_LOCCOORD

Lookup table for spatial data

Name	Type	Size	Description
PlaceID	Number (Long)	4	ID
Place	Text	50	Name of place
GridRef	Text	50	
Easting	Number (Long)	4	
Northing	Number (Long)	4	
NGR_Easting	Number (Long)	4	
NGR_Northing	Number (Long)	4	
Precision	Number (Integer)	2	

TABLE: LUT_PERIOD

Lookup table for historic periods

Name	Type	Size	Description
Period	Text	3	Name of period
Desc	Text	50	Description
From	Number (Long)	4	Beginn of period
To	Number (Long)	4	End of period
Notes	Text	200	Comments

TABLE: LUT_PROPTYPE

Lookup table for vessel specifications

Name	Type	Size	Description
PropID	Number (Long)	4	ID
Properties	Text	25	Categories: "Construction Date", "Destruction Date", "Tonnage", "Length", "Construction Material", "Rig", "Propulsion", "Armament", "Ammunition", "Cargo", "Crew", "Soldiers", "Passengers"

TABLE: LUT_ROLE

Lookup table for peoples' role types

Name	Type	Size	Description
RoleID	Number (Long)	4	ID
Role	Text	30	Categories: "Master", "Owner", "Charterer/In Service of", "Customer", "Crew", "Soldiers", "Passengers", "Opponents", "Others"

TABLE: LUT_VESSELTYPE

Lookup table for vessel types

Name	Type	Size	Description
TypeID	Number (Long)	4	ID
VesselType	Text	30	Categories:

TABLE: TBL_FLEET

Information about units sailing together as a fleet or sailing separate as a group or single ship

Name	Type	Size	Description
FleetID	Number (Long)	4	ID
FleetType	Number (Long)	4	Categories: lut_FleetType
FleetName	Text	50	Name
AmountVessels	Number (Long)	4	Amount of vessels

TABLE: TBL_FLEETSOURCELINK

Link table assigning information from different sources to a specified ship (unit) movement

Name	Type	Size	Description
FleetID	Number (Long)	4	Reference to tbl_Fleet
SourceID	Number (Long)	4	Reference to tbl_Source
Page	Number (Long)	4	Relevant page

TABLE: TBL_JOURNEY

Information about ship (unit) movement

Name	Type	Size	Description
JourneyID	Number (Long)	4	ID
FleetID	Number (Long)	4	Reference to tbl_Fleet
JourneyTypeID	Number (Long)	4	Categories: lut_JourneyType
FromDate	Text	50	Start date of journey
ToDate	Text	50	End date of journey
Period	Text	50	Categories: lut_Period
BattleName	Text	20	Name of battle if different from battle location
AddInfo	Memo	-	Comments

TABLE: TBL_JOURNEYLOC

Information about named locations associated with individual ship (unit) movement

Name	Type	Size	Description
JourneyLocID	Number (Long)	4	ID
JourneyID	Number (Long)	4	Reference to tbl_Journey
JourneyLocation	Number (Long)	4	Name of location: lut_LocCoordinate.Place
LocQualifier	Yes/No	1	Accuracy of information
JourneyLocTypeID	Number (Long)	4	Categories: lut_JourneyLoc Type

TABLE: TBL_LOSS

Information about ship wrecks at known places

Name	Type	Size	Description
LossID	Number (Long)	4	ID
LossLoc	Number (Long)	4	Name of location: lut_LocCoordinate.Place
MannerOfLoss	Text	20	Manner of loss
AmountLoss	Number (Long)	4	Amount of vessels lost

TABLE: TBL_LOSSSOURCELINK

Link table assigning information from different sources to a specified ship wreck

Name	Type	Size	Description
LossID	Number (Long)	4	Reference to tbl_Loss
SourceID	Number (Long)	4	Reference to tbl_Source
Page	Number (Long)	4	Relevant page

TABLE: TBL_LOSTVESSELS

Link table assigning individual vessels to specified loss locations

Name	Type	Size	Description
VesselID	Number (Long)	4	Reference to tbl_Vessel
LossID	Number (Long)	4	Reference to tbl_Loss

TABLE: TBL_PEOPLE

Information about people related to specific vessels

Name	Type	Size	Description
NameID	Number (Long)	4	ID
VesselID	Number (Long)	4	Reference to tbl_Vessel
Name	Text	20	Name of the person
RoleID	Number (Long)	4	Role of the person

TABLE: TBL_SOURCE

Information about reference sources

Name	Type	Size	Description
SourceID	Number (Long)	4	ID
Category	Text	10	Categories: "Primary", "Secondary"
Descr	Text	255	Description
Title	Text	255	Source title

Author	Text	75	Author
OrigDate	Text	12	Publishing date
ISBN	Number (Long)	4	ISBN
Location	Text	50	Library
LocReference	Text	20	Library code
Comment	Text	255	Comment

TABLE: TBL_USEDPRIMARYSOURCE

Primary sources used in secondary sources

Name	Type	Size	Description
USSID	Number (Long)	4	ID
SecondarySourceID	Number (Long)	4	Secondary source
PrimarySourceID	Number (Long)	4	Primary source

TABLE: TBL_VESSEL

Information about specific vessels

Name	Type	Size	Description
VesselID	Number (Long)	4	ID
FleetID	Number (Long)	4	Reference to tbl_Fleet
Name	Text	20	Vessel name
TypeID	Number (Long)	4	Vessel type (Categories: lut_VesselType)
Comment	Text	255	Comment

TABLE: TBL_VESSELPROPERTIES

Information about vessels' specifications

Name	Type	Size	Description
VesselPropID	Number (Long)	4	ID
VesselID	Number (Long)	4	Reference to tbl_Vessel
PropID	Number (Long)	4	Categories: lut_PropType
PropValue	Text	30	Specification data
PropQualifier	Yes/No	1	Quality of information

APPENDIX 6 – SAMPLE DATA





























