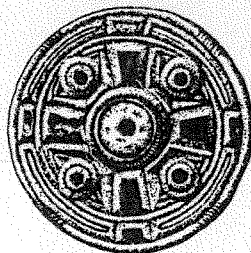


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Archaeological Field Unit

Ely Ware Project Design

Paul Spoerry

January 2000

Cambridgeshire County Council

Report No. PXA18

Commissioned by English Heritage

The Characterization of Ely Ware and a study of its Distribution

Project design

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Cascade chart

Map of fenland showing major towns including those from which ceramics will be included

The Characterisation of Ely Ware and a study of its Distribution

Project Design

Paul Spoerry
Archaeological Field Unit,
Cambridgeshire County Council
January 2000

1 Background

1.1 Scope of work

It is suggested that Ely ware be examined from excavated collections and museum facilities relating to Cambridgeshire and the key international ports of the Fenland system (Kings Lynn and Boston).

In addition to macroscopic recognition and record, samples from the major collections, plus samples from apparently similar fabric types, will be subjected to thin section analysis to determine whether linkage can be confirmed.

A paper discussing the manufacture, use and distribution of Ely ware will be written and this will be published alongside the Potters Lane kiln group in either *Proc. Cam. Arch. Soc.* or *Med. Ceram.*; both refereed journals.

1.2 Previous work

Ely ware is a term that has been adopted since 1995 for pottery of a type now known to have been manufactured in the Potters Lane area of Ely during the medieval period. This identification derives from the recovery in 1995 of small kiln waste assemblages from two periods of production, very generally dated to the periods 1200-1350 and 1350-1500, following a small evaluation on a single house development on Potters Lane.

The Potters Lane assemblage is the subject of a small post-excavation project soon to be funded by English Heritage.

Soon after the Potters Lane site was completed the author recognised that Ely ware, as well as being the dominant ware in several medieval assemblages resulting from recent post-PPG16 work in Ely, was also present in assemblages from other locations in the county. It also seemed that its distribution was primarily influenced by the medieval fenland waterways. In addition the author recognised that the unprovenanced but well published 'Grimston Software' found to be quite common at Kings Lynn (Clarke and Carter 1977) seemed, from all published information, to be in fact Ely ware. Again its presence there was presumed to be a direct consequence of trade contact between primary and secondary ports of the Fenland system.

1.3 Reasons for and circumstances of the project

The ever increasing amount of archaeological material of the post-PPG16 era presents a particular problem in Cambridgeshire. The lack of an established local field unit in the County before the late 1980s means that there is no modern synthetic background to post-PPG16 data, unlike neighbouring counties such as Norfolk, Suffolk and Northants. Although the Cambs. Fenland Project provides an excellent basis for understanding rural landscapes, urban archaeology, artefact type series and the kinds of archaeological economic data that derive from major excavated collections, have received little attention until very recently. This situation is compounded by the recent economic boom in the Cambridge sub-region, which is expected to continue for several decades. Without a proper background of previous synthetic work each development-derived excavation potentially resides in a near vacuum, a situation compounded by the great variety of operators carrying out the work.

The situation with medieval ceramic studies in Cambridgeshire is a good example of the above general scenario. No kiln sites were recognised in the county until 1991 and the MPRG/ English Heritage assessment of medieval ceramic studies in England in (Mellor 1994) identified only one key published report for the whole county and described Cambridgeshire and the region around it as "a ceramic void" (op. cit., 71).

As described in the previous section, Ely ware has only recently been provenanced, but is now known from more than a dozen recent excavations in towns around the County, as well as from innumerable evaluations, including some rural locations. These projects will reach differing levels of completeness, but none can individually address the problem that the full range and variation of Ely ware is not defined. The individual reports cannot address such issues, but a synthetic study could draw on this great mass of data and quickly provide a sound basis for identification, comparison and analysis. In addition information on the geographic distribution of Ely ware will advance Fenland studies in a way that no other artefact type currently can. For the whole of the medieval period there is currently no other artefact type that has a known local provenance. This attribute gives Ely ware the potential to reveal far more about intra-Fenland economic contact than can be currently gained through any other archaeological means.

It is therefore proposed that a study be made of Ely ware, of its form and fabric variability in sites around Ely, and of any possible variation present elsewhere and whether this can be attributed to a different origin or not. The range of forms and stylistic attributes will be defined and the geographic extent of its distribution be identified, with the relative quantities in other assemblages assessed. On this basis models for its distribution will be made. In addition temporal variation, in terms of fabric, form, style and geographic distribution, will be considered.

This project will build on the results of the Potters Lane Ely ware kiln site post-excavation project, which will obviously provide the key detailed statement on

production site variability, however, it is already evident that this assemblage does not represent the full range of Ely ware types seen in other collections from the town.

- 1.4 The report archive will be deposited in the Cambridgeshire County Archaeological storage facilities.

2 Aims and Objectives

2.1 Research Design

Key Aims

1 The characterisation of the fabric of Ely ware, recognising any variation beyond that inherent in the single kiln group from Potters Lane. Characterisation will be at the macroscopic and microscopic/chemical levels.

2 Identification of the fullest range of vessel types, decorative attributes and technological features that can be recovered from the major excavated assemblages now available.

3. Recognition of the stylistic and technological context for Ely ware by comparison with published studies of other industries.

4 Using all available data from the groups studied, plus all comparable data from similar industries, construct an approximately dated sequence and geographical distribution pattern for the Ely ware industry and its key products.

i) 1. Local Research Priorities

These do not exist as written documents, but the following is deemed by the author to be the key requirement in terms of ceramic studies in Ely. Establishing the degree of variation of Ely products in assemblages from the town as a whole, in contrast to the partial picture available from the Potters Lane site.

2. Regional Research Priorities

The Eastern Counties Research Frameworks documentation is currently in the stage 2 (Agenda and Strategy) editing phase. The draft documents recognise study of rural and urban crafts/industry, and any relationship between the two, as a key area stating "further research on pottery production sites and the dating and distribution of products is fundamental to the research of this period" (Wade in Glazebrook 1999 draft, 45).

3. National Research Priorities

The English Heritage Archaeology Division draft research agenda document (April 1997) has Patterns of Craft and Industry as a key theme, but does not detail pottery production and distribution, specifically. What it does state, however, is the wish to support more synthetic studies, particularly where they

can build on the great increase in site-specific data from post-PPG16 excavations, which may otherwise not be assessed at this higher level.

ii) Research contributions

The Fenland Survey provided an excellent awareness of Fenland settlement over many thousand years, and its inter-relationship with the wetland. In the medieval period, however, urban archaeology is of increasing significance, and the Fenland survey specifically did not tackle the towns. In addition, until the project moved into the assessment phase, the absence of *excavated* data precluded all but the very simplest consideration of economic relationships.

Where possible retrospective recognition of Ely ware in Fenland survey assemblages will help assess the rural element in the marketing of Ely ware; detail from the excavated assemblages from Fenland Management Project excavation sites such as the Parson Drove Site 15 saltern and the Whittlesey Mere fishing cotes will provide an excavated 'control', whilst small collections from a number of evaluations and small excavations on the Fen edge and islands will also contribute.

The main thrust of this study will be, however, in the recognition of Ely ware in larger excavated collections from the towns on the Fenland river system. Any more complete vessels from casual finds and held in Museum collections will also be sought. Excavated collections from the small and medium-sized towns of medieval Cambridgeshire will be critically assessed for the presence of Ely ware, which will then be recorded using the methodology and divisions devised for the Potters Lane production site report. Fabrics that are positively identified as Ely ware through macroscopic means will, in some instances, be verified through thin section study, whilst in addition any fabrics that appear related to Ely ware, but remain recognisably different, will also be thin sectioned in an attempt to determine whether they have a similar, or different, provenance.

Although it will ultimately be of interest to recognise Ely ware at sites in other regions, and elsewhere in Europe, this is beyond the scope of the Cambridgeshire study. It is to be hoped that the proper assessment and publication of Ely ware through this project will result in its recognition by other specialists in other locations. Nonetheless it is important to ascertain the degree to which Ely ware reached the trade entrepot of the Fenland system, particularly Kings Lynn in Norfolk, but also Boston in Lincolnshire. As it is almost certain that the 'Grimston software' identified at Kings Lynn (Clarke and Carter 1977) is in fact Ely ware, this point needs clarification.

Once Ely ware has been recognised and described in other assemblages, and its contribution to those assemblages has been ascertained as far as possible, models for its distribution, and if possible changes over time, will be proposed. The starting point for this analysis will be the models proposed for ceramic supply to Peterborough, resulting from analysis of the major assemblage from the Still (Spoerry 1998).

iii) Linkages to other research

This project will be pivotal in bringing together data from a number of sources across the County of Cambridgeshire, and beyond in some cases, to enable a firm basis of characterisation for Ely ware to be created and to enable a wider analysis and comparison of the data than will otherwise be possible.

During the project there will be close liaison with David Hall, formerly Fenland Survey Officer and now part-time ceramics specialist for the CAU. Mr Hall is the only other researcher specifically interested in the ceramics of medieval Cambridgeshire.

iv) Future research

This project will draw on the results of the Potters Lane post-excavation project, and will provide a basis from which a proposal can be developed for a synthetic study of all evidence for ceramics manufacture, use and supply in medieval Cambridgeshire.

2.2 Publication and Presentation

It is proposed that this project results in a paper that will be published alongside that from the production site at Potters Lane. It is suggested that these be submitted to either of the refereed journals *Proc. Cam. Arch. Soc.* or *Medieval Ceramics* in the first instance.

A first draft of both papers should be available by Spring 2000. Publication may therefore be in 2001-2.

Rough guide to publication sections and textual length

Intro	250 words maxm
Scope of study	500 words
Potters Lane assemblage summary	250 words
Range of fabrics	500 words
Fabric descriptions	1000 words
incl thin sections / photos	
Range of vessel types	1000 words
incl photos/ figures	
Range of treatments/stylistic traits	500 words
incl photos/ figures	
Temporal variation	500 words
Geographical variation	1000 words
Regional context	500 words
Conclusions	250 words
	6,250 words maxm
Bibliography/ Acknowledgements	

3 Methods Statement

i) Components for Investigation

The project aims require that Ely ware be adequately characterised in Ely assemblages, including through thin section analysis linked to ICPS, so that it be better recognised elsewhere in the rest of the study. In addition apparent variations to the basic fabric(s) found in other locations will be thin sectioned to determine whether their provenance can be linked to Ely, or demonstrated as being elsewhere (*Key Aim 1 and 4*). The range of vessel types and stylistic traits will be described, to a basic scheme devised during the Potters Lane post-excavation work, and extended as required to encompass Ely ware in other forms found on other sites (*Key Aim 2 and 3*).

Where Ely ware can be recognised in existing publications, or in recent/unpublished excavation manuscripts, its contribution to period/phase quantification, as well as fabric and form data, will be ascertained wherever this is possible (*Key Aim 4*).

Museum collections probably containing Ely ware will be studied for confirmation and to ensure record of any near complete vessels. A list of museum collections to be accessed is given below. Individual vessels, chance finds and some excavated collections will be scanned.

Museum of Arch and Anth, Cambridge
Boston Museum, Lincs
Cambs. County Council Archaeological store, Landbeach
Ely Museum
King's Lynn Museum
Norris Museum, St Ives
Peterborough Museum
Wisbech Museum

Contextual data will be recovered where possible. In the case of excavated collections, if only partial phase or pottery quantification information is available from publications or archives, in some instances basic sherd count of the material in the collection may be carried out.

In addition site collections in the care of the two local archaeological units (CCC AFU and CAU) will be studied where Ely ware has been recognised from documentation, but description and quantification is only partial. All excavation assemblages will be studied but evaluations/ observations will only be physically scanned where specific pieces interest are identified from records or by the relevant specialist (PSS and D Hall).

Medium and Large site collections held by CCC AFU where Ely ware has been recognised.

Ely	Potters Lane Lisle Lane Jubilee Terrace
Huntingdon	St Clements Passage St Germain Street Orchard Lane Stukeley Road
Peterborough	The Still
Ramsey	Abbey School
Swavesey	Black Horse Lane
Wisbech	Market Mews

A list of the major CAU sites where Ely ware has been recognised will be requested from David Hall. This includes several large sites in Cambridge and Ely, plus the Parson Drove saltern.

ii) Data gathering

1. Publication study

Produce form and style pattern book by developing Potters Lane assemblage records. Quantify where phase-period data allows.

To achieve Key Aim 2 and 3.

2. Site paper archive study; Where possible action as 1. above.

To achieve Key Aim 2.

3. Artefactual study of excavated collections

Visual including fabric, form and style codes and descriptions. Quantification through sherd count and weight (if possible) of selected assemblages where such data is not recoverable from records, but appears of high value for the aims of this project. Photograph and/or illustrate selected examples for pattern book.

To achieve Key Aim 2 and 4.

4. Thin section and ICPS (external specialist contract), where macroscopic fabric variants are recognised and also groups that look similar but are found in other centres (and compare with data from Potters Lane).

To achieve Key Aim 1 and 4.

5. Study of museum collections for complete examples

Photograph and/or illustrate all semi-complete examples for pattern book

To achieve Key Aim 2

6. Macroscopic photographs of surfaces and breaks will be taken where they support the recognition through microscopy, or are deemed of particular value.

To Achieve Key Aim 1 and 2

iii) Analysis of data

AFU in-house database programs, based on Dataease, allow for the analysis of quantification data from excavated collections. This database will be adapted to act as a record of form and fabric types and the locations at which they have been recognised. An assessment of the range, and relative contributions, of different fabrics and forms will be possible, along with analysis of spatial variation based on presence, absence and contribution at different locations across the region.

Where statistics for the whole site, or phase, are available, or can be reconstructed from data gathered during ii) above, any possible temporal variation in the presence of Ely ware, and different form and fabric types, that can be recognised will be quantified. In addition, from these statistics and also from more general data relating to smaller groups and individual pieces, any other temporal or functional trends that can be recognised will be identified.

iv) Report writing

The consultant specialists report on the thin sections will provide a fundamental element in the consideration of the distribution of Ely products. Assuming some success in their characterisation both at source, and in comparison with other similar types from elsewhere, textual descriptions of the fabrics will be provided, accompanied by thin section photographs and macroscopic photographs where these assist recognition (*Key Aim 1*).

Any detail regarding the temporal spans of fabrics and their relationship with specific types will be described to support attempts to achieve *Key Aim 4*.

The range of forms and stylistic traits and treatments will be discussed, with reference to any bias to particular locations or types of site. Temporal changes in these data will be addressed (*Key Aim 3 and 4*).

Data indicating the potters technological know-how, and any temporal, or other, variation will be described and discussed (*Key Aim 3*).

All key forms and stylistic and technological traits will be discussed in their regional context, with reference to the full range of published data relating to other medieval pottery industries (*Key Aim 3*).

Variations over time and with any geographic significance, plus the relative contribution of Ely ware to assemblages in different locations, will be considered in the light of Fenland trade/ economic contacts and understanding of development of the Fen river transport system. The models for cross Fenland ceramic supply presented in the Still Peterborough monograph will be critically assessed, and any variations or alternatives proposed (*Key Aims 3 and 4*).

Written and drawn explanations of the development over time of the major forms of the Ely ware industry will be produced if possible (*Key Aim 2 and 4*).

Selected vessels and stylistic details will be drawn to illustrate in detail key types and developments in the products of this industry. Photographs of key vessels and technological details will be presented in the report (*Key Aim 2 and 4*).

4 Resources and Programming

4.1 Staffing and Equipment

- i) There will be two key AFU staff utilised in this project, plus an external thin section specialist and external specialist artefact photographer.

Dr Paul Spoerry	Medieval Ceramics Specialist (Project Manager) Pottery specialist with research (incl. PhD) and publications stretching back over 15 years.
Ms Carole Fletcher	Ceramics Assistant / Finds Supervisor HND and Degree in Archaeology plus 9 years of fieldwork and, more recently, finds and pottery support for the AFU.
Mr Jon Cane	Illustrator (also a craft potter) Degree in Archaeology, several years fieldwork, several years illustration work in archaeology, plus several years as a craft potter. AFU illustrator for the last 3 years.

The thin section specialist will be Dr Alan Vince. Dr Vince has recently conducted thin section and ICPS work, funded by English Heritage, on pottery from Forehill in Ely, which represent the products of this industry. Dr Vince has been able to describe the local product using a combination of thin section work and ICPS. Dr Vince is also earmarked to carry out a programme of thin section and ICPS on the Potters Lane kiln waste assemblage through which characterisation of the one known Ely ware production site group will be achieved. A backwards comparison to the Forehill group and continuation of investigation of Ely ware type sherds from other Fenland centres in this project, will enable a wider comparison to be made of kiln waste and products.

Liaison with David Williams has confirmed his support for the involvement of Dr Vince in this work.

The Specialist photographer will be Gwil Owen , photographic technician for the University of Cambridge McDonald Institute for Archaeological Research.

Work on the CAU excavated collections will be carried out in conjunction with David Hall who will provide access and information

ii) Tasks

Task Number	Key Aim	Task	Key Staff	Duration
1	2 3	Study publications and develop pattern book from ELYPL95 archive.	PS	1 133.1
2	2 4	Study AFU site paper archives and calculate quantification for unpub projects	PS	1 133.1
3	2 4	Study AFU excavated collections, recover Ely ware, provide descriptions and quantify if necessary/ possible	PS CF	3 399.3 3 281.1
4	2 4	Study CAU excavated collections, recover Ely ware, provide descriptions and quantify if necessary/possible	PS DH	3 399.3 3 393.9
5	2 4	Visit museums, study and photograph/ draw examples	PS (and photo cons)	6 798.6 contract for c. 10 shots 263
6	1	Thin section and ICPS programme on about 7 groups from other locations	Consultant /	Up to 42 samples 929.2
7	1 2 3 4	Analyse data to determine trends	PS	2 266.2
8	3 4	Produce form/style pattern book to publication standard	JC	5 545.5
9	2	Photograph excavated examples	Photo cons	contract for c. 30 shots 799
10	1 2 3 4	Write text sections	PS	4 532.4
11		Internal and external reading /editing	Field Unit Manager	0.5 90
12		Respond to editorial	PS	1 133.1
13		Project management/ administration	PS	3 399.3

iii) Materials and equipment

No new purchasing is required, although a range of consumables, plus microscope, computer software and hardware, will be utilised.

The Specialist photographer will be Gwil Owen , photographic technician for the University of Cambridge McDonald Institute for Archaeological Research.

Work on the CAU excavated collections will be carried out in conjunction with David Hall who will provide access and information

ii) Tasks

Task No.	Key Aim	Task	Key Staff	Duration	Cost (£)
1	2 3	Study publications and develop pattern book from ELYPL95 archive.	PS	1	133.1
2	2 4	Study AFU site paper archives and calculate quantification for unpub projects	PS	1	133.1
3	2 4	Study AFU excavated collections, recover Ely ware, provide descriptions and quantify if necessary/ possible	PS CF	3 3	399.3 281.1
4	2 4	Study CAU excavated collections, recover Ely ware, provide descriptions and quantify if necessary/possible	PS DH	3 3	399.3 393.9
5	2 4	Visit museums, study and photograph/ draw examples	PS (and photo cons)	6 for c. 10 shots	798.6 263
6	1	Thin section and ICPS programme on about 7 groups from other locations	Consultant /	Up to 42 samples	928.2
7	1 2 3 4	Analyse data to determine trends	PS	2	266.2
8	3 4	Produce form/style pattern book to publication standard	JC	5	545.5
9	2	Photograph excavated examples	Photo cons	for c. 30 shots	789
10	1 2 3 4	Write text sections	PS	4	532.4
11		Internal and external reading /editing	Field Unit Manager	0.5	90
12		Respond to editorial	PS	1	133.1
13		Project management/ administration	PS	3	399.3

iii) Materials and equipment

No new purchasing is required, although a range of consumables, plus microscope, computer software and hardware, will be utilised.

4.2 Timetable

The suggested duration of all tasks is given in the table above.

The project cascade chart has been attached .

Timeframe

This project naturally follows on from the Potters Lane post-excavation project. It is suggested that this project be initiated in January 2000, following on from the completion of the first draft of Potters Lane.

Project Initiation	1 May 2000
Tasks 1-4	complete by 9 June 2000
Task 5	complete by 7 July 2000
Task 6	complete by 1 Sept 2000
Task 7	complete by 15 Sept 2000
Task 8-10	complete by 6 Oct 2000
Task 11	complete by 20 Oct 2000
Task 12	complete by 30 Nov 2000

Publication draft submitted to EH for Publication Grant by 12 Jan 2001.

4.3 Budget

Costs are calculated based on 99-2000 prices. The staff costs include a multiplier that accounts for non-productive time at a factor of 85/260 days per annum, on a pro-rata basis. This includes provision for all holidays, sick leave, training, maternity etc. Administrative overheads are calculated at 25% of in-house costs and 10% of external specialist costs. Equipment and consumable costs are calculated as 5% of itemised project costs and in this case represent the cost of background documentation purchase , wear and tear on optical equipment, and general office provisioning and archiving. All overheads percentages represent pro-rata costs for the AFU based on budget projections.

The days required for each named staff member are divided by task as shown on the table in section 4.1 above. The totals for each individual are as follows:-

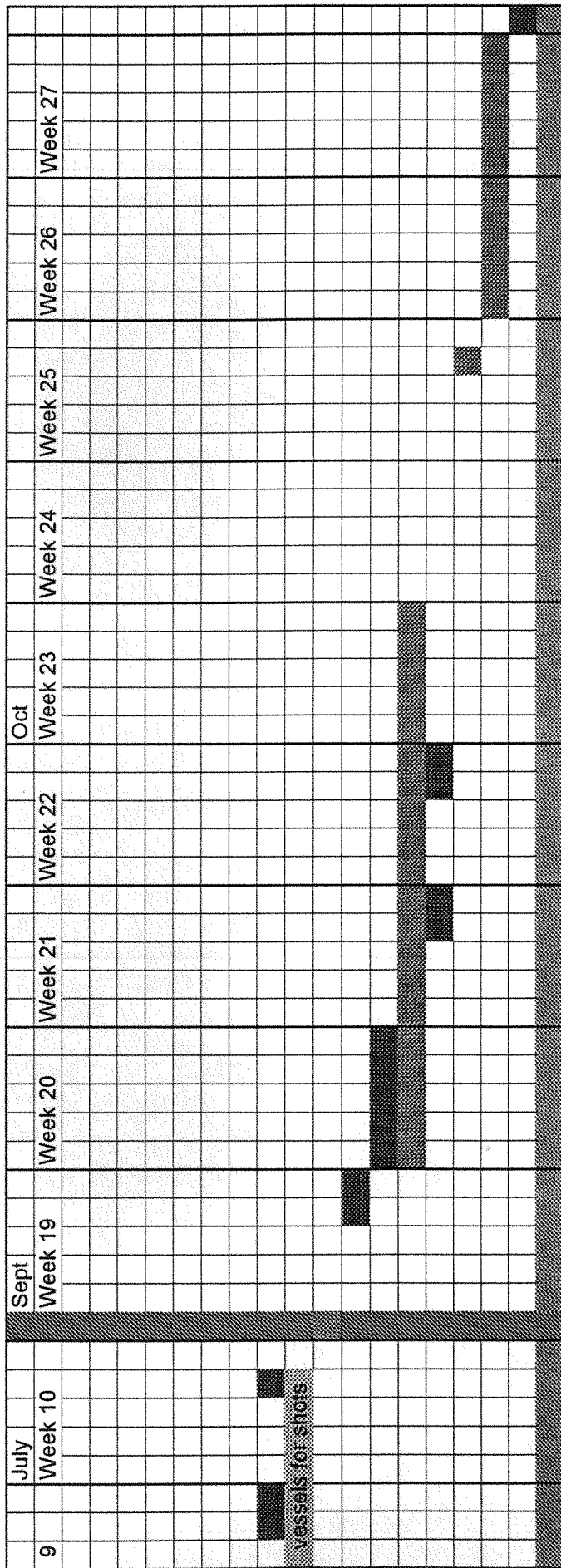
Unit Staff	Per day	Days	Cost	Total
FUM	180.0	0.5	90.0	
PM	133.1	24.0	3194.8	
PO	109.1	0.0	0.0	
ILL	109.1	5.0	545.7	
SUP	93.7	3.0	281.0	
FINDS SUP	93.7	0.0	0.0	
ENV SUP	93.7	0.0	0.0	
SA	83.5	0.0	0.0	

Total salary costs for project			4111.5
Specialist Fees			
Ceramics	22.1	84.0	1852.2
Photo	26.3	40.0	1050.0
D Hall	131.3	3.0	393.8
Total specialist fees for project			3296.0
Non-staff costs			
Transport			365.4
Equipment consumables			372.1
Graphics materials			40.0
Plant/storage/accommodation			0.0
Hire			
Insurance			0.0
Total non-staff costs			779.5
Overheads			
Unit overheads @ 25%			1222.8
Overhead on specialist fees @ 10%			329.6
Total overheads			1552.4
Capital Equipment			
Description			0.0
Description			0.0
Total capital equipment			0.0
Gross total for project			9896.3

References

- Clarke, H. and Carter, A. 1977, *Excavations in King's Lynn 1963-70*, Soc Med Arch Mon Ser. 7 (London).
- Spoerry, P. 1998, 'Pottery Evidence' in P. Spoerry and M. Hinman *The Still, Peterborough; Medieval Remains Between Cumbergate and Westgate*, CCC AFU Mon. No. 1 (Cambridge).

Ely ware project; cascade diagram		May	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week
Task No	Task	Resource									
1	Background study	PS	■								
2	Unpub projects	PS		■							
3	AFU collections	PS			■						
		CF									
4	CAU collections	PS						■			
		DH									
5	Museums visits	PS									
		Photo Con									
6	Thin section/ICPS	Cons									
7	Analyse data	PS									
8	Illustrations	JC									
9	Photograph excv mat	Photo Con									
10	Text sections	PS									
11	Internal edits	TM									
12	EH editorial	Eng Her									
13	Respond to edits	PS									
14	Project management										
			Admin time of around 10min per week								





The Fenland: peat and silt areas, 1877.

From S. B. J. Skertchly, *The geology of the Fenland* (Mem. Geol. Survey, 1877). Skertchly noted that the precise boundaries between peat and silt were 'very obscure, for the peat thins out insensibly along its borders' (p. 129). Moreover, much peat had entirely vanished 'within the last 20 years' (p. 154). For subsequent changes see pp. 188 and 236 below, and Fig. 140.

(from Darby 1983)



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