'Interrupting the Pots'
The Excavation of
Cleatham Anglo-Saxon Cemetery,
North Lincolnshire

‘INTERRUPTING THE POTS’
THE EXCAVATION OF CLEATHAM ANGLO-SAXON CEMETERY, NORTH LINCOLNSHIRE

The full data on which this report is based is available online from the Archaeological Data Service website at http://ads.ahds.ac.uk/catalogue/resources.html?cleatham_cba_2007

By Kevin Leahy

CBA Research Report 155
Council for British Archaeology
2007

Published 2007 by the Council for British Archaeology
St Mary's House, 66 Bootham, York YO30 7BZ

British Library Cataloguing in Publication Data

A catalogue for this book is available from the British Library

ISBN-10: 1 902771 71 0
ISBN-13: 978 1 902771 71 7

Cover designed by BP Design, York
Typeset by Carnegie Book Production, Lancaster
Printed by The Alden Press, Oxford

Front cover illustration: Urns (l–r) 58, 66 & 566
Back cover illustration: Seven-urn complex during the course of excavation

'They walked off together; and for a long time Piglet said nothing, so as not to interrupt the pots; and then suddenly he made a squeaky noise…and an oo-noise …because now he began to know where he was; but he still didn't dare say so out loud, in case he wasn't.'

A A Milne, 'Tigger is unbounced'
The House at Pooh Corner, 1928.

Piglet's predicament is one with which I can sympathise; pots are best not interrupted. Having excavated more than a thousand urns I was faced with the task of recording and making sense of a great mass of material. The intercutting of urns made it possible to order these data, phasing the Cleatham cemetery, and with it, it seems, the other cremation cemeteries of Anglian England. This study was a labour of love, carried out with little funding, in my own time. It has been a wearisome task, and I hope that I really do know where I am … because I am about to say so out loud …

For Dianne
who has lived with Cleatham for nineteen years
and without whom it would never have been finished

Contents

List of figures ix

List of colour plates xii

List of tables xiii

Acknowledgements xvi

Summary xvii

1 Introduction 1
The discovery of the site 1
Site location 3
Concordance of illustrated finds from urns and graves 14

2 Cemetery organisation 23
Excavation methodology 23
Boundaries and extent 23
Horizontal stratigraphy and phasing 25
Distribution of grave goods in the urns 30
The number of burials 31
Demography 31
Burial practices 33
Final Phase burials 58
The human remains 60
'Ritual' deposits 61

3 The analysis of the urns 63
The study of early Anglo-Saxon pottery 63
The classification of the Cleatham pottery 67
Decorative style 68
The analysis of the Cleatham urns 69
The use of the decorative elements 71
The forms and proportions of the Cleatham urns 73
Correlation of forms and urn groups 75
Base and rim forms 75
The pottery stamps 77
Stamp classification 77
The quality of the pottery 81
Perforation and lead plugs 82
The pottery fabrics 82
Sooting on urns 86

4 The urns: dating and comparisons .. 89
Pottery dating .. 89
Urn developmental sequence .. 123
Decoration: inter-site comparisons .. 123
Romano-British type vessels used as urns .. 126
Regional 'potters' .. 127
Special vessels .. 129

5 The associated finds .. **133**
Dress fittings .. 133
Beads .. 160
Adornments .. 168
Tools and utilities .. 172
Weapons .. 213
Accessory vessels .. 217
Textiles .. 222
Faunal remains .. 223
Collected objects .. 225
Summary .. 227
Catalogue of finds from inhumations .. 231

6 Conclusions .. 263
Further work .. 264

Bibliography .. 265

Index .. 272

List of figures

1 The kingdoms of Early Anglo-Saxon England, with Lindsey and the Cleatham cemetery 3
2 The location of Lindsey, with Roman roads and ancient routeways 4
3 The Cleatham cemetery in its local setting 5
4 Map showing metal detector finds from Lindsey set against settlements recorded in the Domesday Survey 9
5 The locations of known Anglo-Saxon cremation cemeteries in Lindsey 11
6 The ditch marking the northern boundary of the Cleatham cemetery 24
7 Detail of the main section of the northern boundary ditch 25
8 The distribution of the urns across the Cleatham site, all phases 26
9a The distribution of Phase 1 urns 26
9b The distribution of Phase 2 urns 27
9c The distribution of Phase 3 urns 27
9d The distribution of Phase 4 urns 28
9e The distribution of Phase 5 urns 28
10 Location of dated graves at Cleatham 30–31
11 Plans of Graves 01–05 34
12 Plans of Graves 06–07 35
13 Plans of Graves 08–11 36
14 Plans of Graves 12–15 37
15 Plans of Graves 16–19 38
16 Plans of Graves 20–22 39
17 Plan of Grave 23 40
18 Plans of Graves 24–25 41
19 Plans of Graves 26–27 42
20 Plans of Graves 28–30 43
21 Plans of Graves 31–33 44
22 Plans of Graves 34–35 45
23 Plans of Graves 36–37 46
24 Plans of Graves 38–41 47
25 Plans of Graves 42–45 48
26 Plans of Graves 46–47 49
27 Plans of Graves 48–50 50
28 Plans of Graves 51–53 51
29 Plans of Graves 54–55 52
30 Plans of Graves 56–57 53
31 Plans of Graves 58–60 54
32 Plans of Graves 61–62 55
33 The alignment of the Cleatham graves 56
34a The skull from Grave 11 found next to Urn 115 57
34b Urn 115 57
35 Interpretive diagram of the seven-urn complex 70
36 Dimensions recorded in the analysis of urn forms 73

37 Base and rim forms of the Cleatham urns 76
38 Cleatham pottery stamps, Groups 1–5 79
39 Cleatham pottery stamps, Groups 6–7 80
40 Representative urns from Cleatham Group 01 and 01b 90
41 Representative urns from Cleatham Group 01p 91
42 Representative urns from Cleatham Group 02a, 02b, 02s 92
43 Representative urns from Cleatham Group 03a, 03b, 03s 93
44 Representative urns from Cleatham Group 04a, 04b, 04s 96
45 Representative urns from Cleatham Group 05a, 05b, 05n, 05s 97
46 Representative urns from Cleatham Group 06s. 99
47 Representative urns from Cleatham Group 07a, 07b, 07s 100
48 Representative urns from Cleatham Group 08a. 102
49 Representative urns from Cleatham Group 09b, 09n. 103
50 Representative urns from Cleatham Group 10a, 10b, 10s 104
51 Representative urns from Cleatham Group 11a, 11s.. 107
52 Representative urns from Cleatham Group 12a, 12n, 12s 108
53 Representative urns from Cleatham Group 13b, 13n. 110
54 Representative urns from Cleatham Group 13b, 13n. 111
55 Representative urns from Cleatham Group 14a, 14b.. 112
56 Representative urns from Cleatham Group 15s. 113
57 Representative urns from Cleatham Group 16b, attributed to the 'Sancton/Elkington potter'. 115
58 Representative urns from Cleatham Group 17s, attributed to the 'Sancton/Baston potter'. 116
59 Representative urns from Cleatham Group 18a, 18s.. 117
60 Representative urns from Cleatham Group 19b 118
61 Representative urns from Cleatham Group 20n 119
62 Representative urns from Cleatham Group 20n 120
63 Representative urns from Cleatham Group 21, wheel-thrown urns in the Romano-British tradition.. 121
64 Representative urns from Cleatham Group 22, unclassified vessels. 122
65 Map showing the locations of the comparable Anglo-Saxon cremation cemeteries in eastern England.. 124
66 'Roman' urn 262 from the Millgate, Newark, Anglo-Saxon cemetery 125
67 Urns by the Cleatham/Spong Hill potter.. 129
68 Brooches from the Cleatham urns 135
69 Brooches from the urns.. 136
70 Unstratified brooches I 139
71 Unstratified brooches II.. 140
72 Miscellaneous metal objects.. 152
73 Miscellaneous unstratified metal objects. 153
74 Pendants from Cleatham 159
75 Conventions used in drawing the Cleatham finds 161
76 Beads from Cleatham.. 163
77 Roman coins perforated for use as pendants 169
78 Iron objects 174
79 Finds from Graves 1–7 175
80 Finds from Grave 9.1.. 176
81 Finds from Graves 9.2–12. 177
82 Finds from Graves 13–15.. 178
83 Finds from Graves 17–19 179
84 Finds from Graves 20–23.. 180
85 Finds from Grave 24 181

86 Finds from Grave 25 .. 182
87 Finds from Graves 27–30.1 .. 183
88 Finds from Grave 30.2 .. 184
89 Finds from Grave 30.3 .. 185
90 Finds from Graves 31–32 .. 186
91 Finds from Grave 34.1 .. 187
92 Finds from Grave 34.2 .. 188
93 Finds from Graves 34.3–35 .. 189
94 Finds from Graves 36–38 .. 190
95 Finds from Graves 39–40 .. 191
96 Finds from Grave 41 .. 192
97 Finds from Graves 42–45 .. 193
98 Finds from Grave 46 .. 194
99 Finds from Graves 47–48 .. 195
100 Finds from Graves 50–53 .. 196
101 Finds from Graves 54–57 .. 197
102 Finds from Graves 58–62 .. 198
103 Whetstones .. 201
104 Bone/antler combs from Cleatham .. 205
105 Comb classification .. 207
106 Spindle whorls .. 210
107 Bone objects .. 211
108 Gaming pieces .. 212
109 Rims from copper alloy bowls .. 218
110 Possible saddle fitting from Urn 639 and associated finds .. 219
111 Glass vessel from Urn 815 and associated finds .. 220
112 Superimposed Urns 71 and 242 with associated finds .. 224
113 'Collected' objects .. 226
114 Urn heights compared with the number of grave goods they contained .. 229
115 Core relationships and Harris Matrix .. broadsheet
116 Urn sequence .. broadsheet
117 Tabulated finds from the graves .. 244

List of colour plates

(between pp 246 and 263)

1 Urns from the 1856 discovery
2 Aerial photograph taken in 1985 showing the Cleatham site from the north-west
3 View from the site looking towards the west
4 The excavation in progress
5 Excavated urns at Cleatham
6 Pair of associated urns
7 Intercut urns
8 Plan of the Cleatham cemetery overlain by the results of intensive field walking
9 Colour-temperature plan showing the preservation of urns
10 Number of find-types found in the urns
11 Colour-temperature plan showing the distribution of copper alloy from the urns, by mass
12 Colour-temperature plan showing the mass of burnt bone in the urns
13 Colour-temperature plan showing the mass of antler comb fragments in the urns
14 Colour-temperature plan showing the mass of glass beads in the urns
15 Human remains in Grave 30
16 Grave 31, prone male burial, accompanied by a spearhead and buckle
17 Roman masonry in the fill of Grave 36
18 Line of stones marking the northern edge of Grave 41
19 Stones forming the sides of a possible chamber in Grave 59
20 A group of urns with covering stones
21 Seven-urn complex during the course of excavation
22 The seven-urn complex fully exacavated
23 Urn 238 with sooting
24 Two decorated urns showing typical Cleatham fabrics
25 Wheel-thrown 'Roman' Urn 702
26 Urn 889 Cleatham/Spong vessel
27 Urn 566 with lead plug
28 Urn with the perforations typical of many of the Cleatham urns
29 Burnt copper alloy
30 Burnt cowrie shell and burnt ivory bag ring fragments
31 Sample of silica frit
32 Burnt bone comb
33 Bone comb, unburnt
34 Gilt copper alloy and garnet buckle
35 Bone objects from urns: gaming counters, amulets, pendants, spindle whorl
36 Burnt glass beads from urns
37 Burnt glass from a vessel
38 Burnt coral beads
39 Textile and beads on the back of a cruciform brooch

List of tables

1 Cremation deposits found without an urn .. 29
2 Age and sex profile of the Cleatham inhumations .. 60
3 Relationship between age, sex and the number of find types .. 61
4 Summary of J N L Myres' classification of Anglo-Saxon urns .. 64
5 Classification of the pottery .. 69
6 Total number of urns attributed to each of the five phases .. 71
7 Proportion of urns in each phase bearing stamped or bossed decoration .. 71
8 Proportion of Cleatham urns bearing motifs and medallions in each phase .. 71
9 Proportion of urns having complex or grouped decoration .. 72
10 Number of urns with grooved and incised decoration in each phase .. 72
11 Number and proportion of urns decorated with bows .. 72
12 Amount of variation between pairs of associated urns .. 73
13 Averages, standard deviations (σ) and variances (v) for urn diameters, heights and for Ratios 1, 2, 3 and 4 over the five phases .. 74
14 Rim forms used in each of the five phases .. 75
15 Base forms used in each of the five phases .. 76
16 Stamp Group 1 .. 78
17 Stamp Group 2 .. 78
18 Stamp Group 3 .. 78
19 Stamp Group 4 .. 78
20 Stamp Group 5 .. 78
21 Stamp Group 6 .. 79
22 Stamp Group 7 .. 80
23 Proportion of urns in each phase stamped using an object, compared with the number of stamped urns .. 81
24 Proportion of urns in each phase seen as being of accomplished or poor workmanship .. 81
25 Number and proportion, in each phase, of urns with perforations and lead plugs .. 82
26 Number and proportion of urns containing additives .. 83
27 Number and proportion, in each phase, of urns containing feldspar, mica and quartz .. 83
28 Number and proportion, in each phase, of urns containing slag and haematite .. 84
29 Number and proportion, in each phase, of urns containing calcareous fillers .. 85
30 Number and proportion, in each phase, of urns containing organic materials .. 85
31 Number and proportion, in each phase, of urns with sooting .. 86
32 Number of urn groups present in each phase .. 123
33 Comparative percentages of urns decorated using specified techniques .. 124
34 Number of urns at other cemeteries which can be accommodated within the Cleatham classification .. 125
35 Romano-British type pots used as urns at Cleatham .. 126
36 Breakdown of brooch types and contexts .. 133
37 Finds of burnt cruciform brooches from urns .. 134
38 Finds of cruciform brooches from graves .. 136–7
39 Unstratified cruciform brooches .. 137

40 Great square-headed brooches 142
41 Small-long brooches 143
42 Annular brooches, unstratified 144
43 Annular brooches from urns 144
44 Annular brooches from graves 144
45 Graves containing annular brooches and phased sherds 146
46 Proportion of graves containing brooches at comparative inhumation cemeteries 147
47 Percentage of brooch types at Cleatham and other cemeteries in the region 148
48 Dress and brooch pins 148
49 Proportion of graves containing pins in inhumation cemeteries 149
50 Copper alloy buckles 150
51 Iron buckles 150
52 Bone buckles 150
53 Strap-ends from the Cleatham cemetery 154
54 Sleeve-clasps 155
55 Associations of sleeve-clasps from the Cleatham graves 156
56 Rings from the Cleatham cemetery 157–8
57 The location in the graves of the rings and their associations 158
58 Percentage of urns containing beads in each phase 160
59 Cleatham beads by material 160
60 Percentage of beads of defined colours in each phase 162
61 Phased urns containing polychrome glass beads 164
62 Numbers of beads classifiable by shape per phase 164
63 Beads from Cleatham graves as classified and dated by Dr Birte Brugmann 165
64 Numbers of beads of specified materials found in phased urns 165
65 Comparison of the colour of the beads from the Cleatham urns with finds from the graves 167
66 Beads from inhumations at Cleatham and other cemeteries 168
67 Numbers of bone pendants by phase 168
68 Bone pendants by type and phase 169
69 Burnt cowrie shells from Cleatham 171
70 Classification of Anglo-Saxon knife shapes based on Evison 1987 172
71 Knives found with cremations at Cleatham, and their phasing 172
72 Knives found in graves at Cleatham, and their dating by association 173
73 Number of graves with knives by sex of accompanying remains 199
74 Context of the knives found in Cleatham graves 200
75 Unstratified knives from the Cleatham cemetery 200
76 Whetstones from the Cleatham urns 201
77 Girdle hangers 202
78 Numbers of girdle hangers and latch lifters found with inhumations at comparable Anglian cemeteries 203
79 Number and proportion of urns in each phase containing ivory rings 203
80 Number and proportion of urns in each phase containing bone/antler combs 204
81 Number and proportion of urns in each phase containing single- and double-sided bone/antler combs 206
82 Numbers of combs of each form by phase 206
83 Comb terminal forms by phase 208
84 Average tooth pitch and the standard deviation shown by combs by phase 208
85 Number and proportion of urns containing toilet equipment in the five phases 208
86 Number and proportion of urns containing spindle whorls 209
87 Number of gaming pieces found in urns 211
88 Miniature and dummy objects 212

89 The phasing of miniature objects by type. 213
90 Cleatham spearheads 214
91 Number of graves containing weapons at comparable inhumation cemeteries 216
92 Male stature at Cleatham and the lengths of associated spearheads. 216
93 Cleatham accessory vessels. 217
94 Fittings from wooden vessels 218
95 Stratified glass vessels from Cleatham 221
96 Glass fragments from urns 221
97 Sheet-metal vessel fragments 221
98 Copper alloy vessel fragments from Cleatham per phase 222
99 Cleatham animal bones 223
100 Number and percentage of urns containing worked flints and Romano-British sherds. 225
101 Number and percentage of urns containing silica frit. 226
102 Finds of iron slag in funerary contexts at Cleatham 227
103 Cleatham urns dated by associated finds 227
104 Cleatham graves dated by associated finds 228
105 Number of find types from urns over the phases 229
106 Comparison of the proportion of urns containing selected grave goods 230

Acknowledgements

If justice were done this would be a very long list indeed. The Cleatham cemetery was excavated by volunteers, all of whom freely gave their time, strength and patience, often working in dreadful conditions. Most are known only by initials on mud-stained record cards but they are remembered with affection and gratitude. The contribution of some individuals merits special mention: Freda Berisford spent five winters cleaning and reconstructing the excavated urns; without her patience and scrupulous record keeping this report would not have been possible; farmers John and Reg Brumby whose co-operation went far beyond what could have reasonably been expected; Margaret Cammish who acted as finds assistant for the first three seasons and whose persuasive powers brought many of her students as volunteers; Chris Dyson whose skill as a surveyor re-established the site grid for each season's work; Irene McGrath whose abilities with a metal detector were only eclipsed by her skill with a trowel; Ron and Elsie Newton whose experience was invaluable; Dianne Gardner (now Leahy) was finds assistant for the last two seasons; Alison Williams was site assistant for four seasons and kept coming back. Valuable assistance in the post-excavation process was given by Wallace Collyer who worked out site co-ordinates for the urns. The British Academy provided funding to assist with the drawing of the finds from the graves and the grave plans. This task was started by Marina Elwes, whose pencil drawings formed the basis of the grave plans and some of the drawings of the finds from the graves. Simon Savage prepared the graphics of the north ditch complex and gave valuable assistance with the layout of the charts. The final drawings and all other illustrations are the work of the author. The conservation of the metalwork was carried out with great skill by staff at the former Doncaster Conservation Agency.

This report was made possible by the help of Mike Hemblade, without whose expertise and calm assurance the database would not have existed and the cemetery could never have been understood. Mike also undertook the photography of the objects. I would also like to thank Catrina Appleby, the CBA's Publications Officer, for her help in getting this report into print, and Frances Mee who edited it, for whose skill and patience we must all be grateful. The site was on land owned by the then Humberside County Council who kindly gave permission for the excavation to be carried out. All of the finds are now in the collection of the North Lincolnshire Museum.

This volume was published with the aid of a grant from the Marc Fitch Fund, which is gratefully acknowledged. Scunthorpe Museum Society, kindly sponsored the colour images, which is also appreciated. It is also pleasant to record a grant received from the Friends of North Lincolnshire Museums which allowed the full site to be made available online. A prize presented to the writer for winning the 2006 'Awards for the Presentation of Heritage Research' competition has also been used to support the publication.

This report would have never been completed without the help, encouragement and tolerance of my wife, Dianne, who has lived with Cleatham for nineteen very long years.

Summary

Between 1984 and 1989 the Anglo-Saxon mixed-rite cemetery at Cleatham, in the parish of Manton, North Lincolnshire, was excavated in advance of its destruction by ploughing. This work resulted in the recovery of 1204 urns and 62 inhumations, together with boundary ditches and other features. Cleatham originally contained an estimated 1528 burials, making it the third largest Anglo-Saxon cemetery in England. It was in use throughout the early Anglo-Saxon period, terminating with later 7th-century 'Final Phase' burials. There are indications that the Cleatham site contained a sub-Roman element.

This study describes and classifies the urns from the cemetery, together with the associated finds. The graves and grave goods are also described and, in view of the degree of overlap between the two rites, the discussion of the associated finds is combined. Many of the urns were intercut or found with other vessels, making it possible to construct a Harris Matrix showing their stratigraphic relationships. This allowed the decorative styles of the urns to be placed into sequence. The sequence was found to be internally consistent and correlated well with dated grave goods from Cleatham and other cemetery sites. It was also possible to look at the frequency with which certain types of object were used over the period during which the cemetery was in use. No developmental sequence was identified for urn shapes although there appear to have been changes in the pot fabrics used. An examination of urns from other cemeteries suggests that the Cleatham sequence is generally applicable throughout Anglian England.

The Cleatham cemetery is considered in its historical context, using an integrated, multi-disciplinary approach and it appears that the site was associated with Kirton in Lindsey, which was an important manorial centre at Domesday and into early modern times.

Résumé

Le cimetière anglo-saxon de Cleatham, dans la paroisse de Manton, dans le Nord du Lincolnshire, qui contenait et inhumations et urnes, avait fait l'objet de fouilles entre 1984 et 1989, avant sa destruction par labourage. Suite à ce travail, 1204 urnes et 62 inhumations ont été retrouvées, ainsi que des fossés de bornage et autres caractéristiques. On estimait que Cleatham, à l'origine, contenait 1528 sépultures, ce qui en fait, de par la taille, le troisième cimetière anglo-saxon en Angleterre. Il avait été utilisé pendant tout le début de l'époque anglo-saxonne, utilisation qui a pris fin avec les sépultures de « dernière phase » de la fin du 7ème siècle. Il y a des indications que le site de Cleatham contenait un élément sub-romain.

Cette étude décrit et classifie les urnes provenant du cimetière, ainsi que les découvertes associées. Les tombes et le matériel funéraire sont également décrits et, étant donné le degré de recoupement entre les deux rites, la discussion des découvertes associées est combinée. De nombreuses urnes étaient entrecoupées ou découvertes avec d'autres urnes, ce qui a donné la possibilité d'élaborer une matrice de Harris indiquant leurs rapports stratigraphiques. Ceci a permis de mettre les styles décoratifs des urnes en séquence. On a trouvé que la séquence avait une cohérence interne et qu'elle avait une bonne corrélation avec du matériel funéraire daté provenant de Cleatham et d'autres sites de cimetières. Il était également possible d'étudier la fréquence d'utilisation de certains types d'objets durant toute la période d'utilisation du cime-

tière. On n'a identifié aucune séquence de développement en ce qui concerne les formes des urnes, bien qu'il semble y avoir eu des changements au niveau des matières utilisées pour les urnes. L'étude d'urnes provenant d'autres cimetières suggère que la séquence de Cleatham est, en général, applicable dans toute l'Angleterre anglienne.

Le cimetière de Cleatham est pris en considération dans son contexte historique, en employant une approche pluridisciplinaire intégrée, et il semble que le site avait des liens avec Kirton in Lindsey, qui était un important complexe seigneurial à l'époque du Domesday Book et jusqu'au début des temps modernes.

Übersicht

Zwischen 1984 und 1989 fand in der Gemeinde Manton in Nord Loncolnshire eine Ausgrabung eines, vom Pflug bedrohten Angelsächsischen Gräberfeldes in Cleatham statt, in dem verschiedene Bestattungsriten praktiziert wurden. Während dieser Studie wurden 1204 Urnen und 62 Gebeine geborgen, sowie Grenzgräben und andere Strukturen aufgezeichnet. Cleatham bestand wahrscheinlich ursprünglich aus 1528 Gräbern, was es zum drittgrößten Angelsächsischen Gräberfeld in England macht. Es wurde während der gesamten frühen Angelsächsischen Periode genutzt, die letze Phase bestand aus Gräbern aus dem späten 7. Jahrhundert. Es gibt Hinweise darauf, daß Cleatham von römischen Bestattungsriten beeinflußt war.

In dieser Arbeit werden die Urnen zusammen mit deren Nebenfunden aus dem Gräberfeld beschrieben und klassifiziert. Die Gräber und deren Beigaben werden auch beschrieben. Da es zwischen den beiden Riten erhebliche Überschneidungen gibt, werden die Nebenfunde gemeinsam diskutiert. Viele der Urnen wurden von anderen Funden durchkreuzt oder mit anderen Gefäßen zusammen gefunden. Mit Hilfe einer Harris Matrix, konnte die jeweilige stratigraphische Zugehörigkeit eingeordnet werden und eine dekorative Stileinordnung der Urnen wurde ermöglicht. Die Stilistische Einordnung war innerhalb dieser Fundserie übereinstimmend und es konnte eine enge Beziehung mit datierten Grabbeigaben aus Cleatham und anderen Gräberfeldern hergestellt werden. Es wurde in dieser Studie auch erreicht, die Häufigkeit, mit der bestimmte Gegenstände benutzt wurden zu untersuchen. Eine Entwicklungsfolge für Urnenformen konnte nicht identifiziert werden, es gab jedoch Hinweise, daß das Tonmaterial sich zeitlich verändert hat. Aus einem Vergleich mit Urnen aus anderen Gräberfeldern geht hervor, daß die Entwicklungsfolge aus Cleatham allgemein typisch für das Angelsächsische England ist.

Das Gräberfeld von Cleatham wird in seinem historischen Zusammenhang dargestellt indem eine integrierte und multidisziplinäre Methode angewandt wurde. Es scheint, daß dieser Standort mit Kirton in Lindsey in Verbindung stand, der von der Domesday Periode bis in die Neuzeit ein wichtiges herrschaftliches Zentrum war.

1

Introduction

The discovery of the site

The Cleatham Anglo-Saxon cemetery was discovered in 1856 and an account of the find was published by Edward Trollope[1] in the following year. He wrote:

> *During the year 1856, an interesting discovery was made on the property of T. B. Richardson, Esq, of Hibaldstow,[2] just within the northern limit of the parish of Kirton-in-Lindsey. Mr Richardson, in making a road on his land, had occasion to cut through a slightly rising mound, situated on a high ridge of ground running north and south through the greater part of the county, called the 'Cliff'. Here the labourers suddenly turned up a group of dark-grey Saxon sepulchral urns, from fifty to sixty in number, greatly varying as to size and pattern, but filled with bones. From one of them (most unfortunately) a pair of brass tweezers were extracted, for as this article shone when cut with a knife, it was immediately pronounced by the finder to be gold, and the doom of the urns quickly followed, for henceforth they were dashed to pieces as soon as found, in the vain hope of finding more of such golden treasures. Thus some fifty of these interesting relics were ruthlessly and irreparably broken to pieces. Happily, however, the proprietor, when he visited the spot at a later hour, was able to rescue seven or eight from destruction. Of six of these urns I have been enabled to take drawings, through the courtesy of Mr Richardson, and of the Rev. J. White, of Grayingham, who directed my attention towards them … A small vase or drinking cup was found within one of the urns, and some thin circular pieces of metal in a very decayed condition in another (probably fibulae), also a portion of a comb, an object not infrequently found in the Saxon urns of Lincolnshire, but never in an entire state. I am satisfied that they were deposited in a fragmentary condition, and it is possible that the remaining portion was retained by some near relative of the deceased as a memento of the departed. On the northern side of the vases a quantity of stones were found – perhaps connected with the* Ustrina *and above them from 4 to 5 feet of soil had been heaped to form a tumulus* (Trollope 1857, 275–6 and pl opposite page 275).

The date of the discovery can be further defined by the diary of Edward Peacock.[3] He recorded on 20 September 1856: 'Breakfasted with Thos. Richardson. He showed me some urns found on Kirton Hill Top'.

Two days later, on 22 September Peacock noted: 'Drove to Kirton to see if any more urns were found in Mr T Richardson's field'.

On 12 January 1893, Peacock exhibited and presented to the Society of Antiquaries photographs of 'two Saxon urns found with several others in a very flat barrow at the northern limit of the same parish (Kirton in Lindsey), in or about 1857. These two urns are in Mr Peacock's possession' (Proc Soc Antiq London, **14**, 1891–93, 257). A footnote records that 'Two of these were given to the British Museum by the late Mrs Peacock'.

In addition to the note published by Trollope there is what may be one earlier reference to the site. Norden's *Survey of the soke of Kirton in Lindsey* of 1616 contains a reference to: 'One peece of waste lande there to buylde a melting hous (for ther hath bene sometimes a brasse mine as it seemeth) which piece is in length 30 yards and in bredth 30 yards granted to Thomas Sambye …'.[4]

Brass is an alloy and not mined, and Cleatham is in eastern England and a long way from any source of non-ferrous metals. It is, however, possible that the fragments of burnt copper alloy brooches, etc, found on the site of the Cleatham cemetery had been interpreted as a 'brasse mine'. The reported location of the brasse mine, in Kirton in Lindsey, not Manton parish, need not be a problem; the cemetery itself was formerly reported as being in Kirton in Lindsey (see below). There is, however, a small field to the south of the village of Kirton in Lindsey that was known as 'Brass Close' (Russell and Russell 1982, 114–16) and it is possible that finds of copper alloy melt came not from the cemetery but from a pyre site on this field.

There appears to be a conflict of evidence in that the excavated cemetery was found, not in the histori-

cally recorded Kirton in Lindsey location, but immediately to the north in the neighbouring parish of Manton, close to the former township of Cleatham. The report on the 1856 find gives the location as: 'situated on a high ridge of ground running north and south through the greater part of the county, called the "Cliff" … just within the northern limit of the parish of Kirton-in-Lindsey' (Fig 2). It is known that the Richardsons owned no other land which crossed the scarp and could reasonably be described as 'Kirton Hill Top'. The field in which the recent excavation took place was not owned by the Richardsons in 1856. The 1845 Cleatham Tithe Award Map[5] gives the landowner as Charles Metcalf and records that the field was under the tenancy of Edmund Tickler. What may have happened in 1856 was that the road, running along the parish boundary, cut through an outlying group of urns on the southern edge of the cemetery. These were assumed to be the *northern* edge of a cemetery lying in the parish of Kirton in Lindsey. Intensive field walking carried out along the northern boundary of Kirton parish in August 2000 failed to produce any Anglo-Saxon material. In spite of this conflict there is little doubt that the site excavated during the 1980s is the one known in the literature as 'Kirton in Lindsey' and that this should now be known as the Cleatham cemetery.[6]

Of the seven urns which survived from the 1856 massacre two, Urns 1101 and 1102, found their way into the collection of Lincoln Museum in 1915, from the estate of Edward Peacock (Pl 1).[7] Three vessels (Urns 1103, 1104 and 1105) were acquired by the British Museum,[8] Urn 1103 being 'presented through the Trustees of the Christie Collection in 1871', having been transferred from the Literary and Philosophical Society of Sheffield.[9] Urns 1104 and 1105 were presented to the British Museum in June 1880, by Mrs Edward Peacock. There was also an urn in the Royal Museum, Salford (Urn 1100). This was presented to the museum in 1856 by Hugh Higson of Salford who, at the time of the discovery, was staying with Mr Richardson in Hibaldstow.[10] In 1981 Scunthorpe Museum acquired a further vessel, Urn 1106, from the descendants of Matthew Maw, who, in 1856, owned Cleatham Hall Farm, 1km to the north of the findspot, and who would have been well placed to share in his neighbour's find.[11] When the surviving 1856 vessels were drawn it was found that they still bore traces of the characteristic Cleatham soil, confirming their origin. A further urn said to be from the Kirton in Lindsey cemetery should correctly be ascribed to Ancaster.[12]

Over the years which followed, the Kirton in Lindsey cemetery appeared in the archaeological literature on a number of occasions but these references were restricted to quotes or paraphrases of Trollope's account.[13] The surviving vessels were illustrated for the first time by Myres in 1951 (Myres 1951, 65–99) some being included in his 1969 study where Urn 1100 graced the dust jacket. The surviving vessels were also included in Myres' 1977 magnum opus, *A Corpus of Anglo-Saxon Pottery of the Pagan Period* and in Bruce Eagles' 1979 regional study, *The Anglo-Saxon settlement of Humberside*.

No further work was carried out on the Kirton in Lindsey cemetery until August 1978 when a quantity of Anglo-Saxon sherds were brought to Scunthorpe Museum for identification. These had been found by a Mrs K P Brumby on land farmed by relatives at Cleatham House Farm, in Manton parish, North Lincolnshire (then South Humberside). On visiting the site it was found that a large area was covered with broken pottery and fragments of burnt bone, all indicative of the presence of an Anglo-Saxon cremation cemetery. In view of the quantity of debris on the field it was decided to carry out an evaluation to assess the amount of damage that the site had suffered. In a short season of work in September 1979 a small area was opened alongside the east–west track – presumably laid in 1856. When nothing was found further areas were opened to the north, where the sherd scatter was most dense. Here, ten urns were found, of which only three were represented by anything other than their bases. The level of plough damage appeared to confirm our worse fears and it seemed unlikely that anything survived. A short obituary on the site was published in the county journal (Leahy 1980, 72–3).

In 1984 it was decided to look again at the Cleatham site. This renewed interest came as a result of the writer's growing interest in the Anglo-Saxon period and an appreciation of the cemetery's potential. As three of the 1979 vessels had been relatively complete it was thought possible that some areas of the site might be better preserved. Finds made by metal detector users on the site also suggested the presence of inhumation burials in addition to the cremations.[14] These considerations persuaded the writer to carry out more work at Cleatham cemetery, if only to improve the sample of sherds.

Work recommenced in August 1984 with a much larger team than had been involved in the 1979 excavation. Initially the finds confirmed the dismal results of the earlier evaluation, with the urns being

represented only by their bases. The pattern of test-pits was extended to the north, away from the trackway. Here, it was found that many of the urns lay beneath the plough soil and were well preserved (Pl 5). In the following year (1985) a change in agricultural practice had led to the start of deep ploughing. This threatened the surviving urns and it was decided to undertake the total excavation of the cemetery. No external funding was received and the cemetery was excavated by voluntary labour, but with the invaluable help of Miss Alison Williams, a site assistant seconded from the Humberside Archaeological Unit. The post-excavation processing of the urns was carried out by Miss Freda Berisford. The conservation of the metal finds was funded by Scunthorpe Borough Council and the Yorkshire and Humberside Area Museum Council, the work being undertaken by the Doncaster Conservation Agency. The finds and site archive are held by the North Lincolnshire Museum in Scunthorpe.

Site location

The Cleatham Anglo-Saxon cemetery is in the parish of Manton at National Grid reference SE932008 (Figs 1 and 2; Pls 2–3). Until 1974 it lay within the Parts of Lindsey in the historic county of Lincolnshire but, in the 1974 local government reorganisation, it was included in the new county of Humberside. In the subsequent 1996 reorganisation Manton became part of the unitary authority of North Lincolnshire.

The cemetery is on the crest of Lincoln Edge or 'Cliff', the Jurassic limestone escarpment which runs north–south down the western side of Lincolnshire. Immediately to the west of the site the land drops abruptly and the 'Cliff' is well named; to the east the landscape slopes gently down to the River Ancholme, 7km away. Until a sluice was constructed at South Ferriby in the early 17th century the Ancholme was a tidal creek of the Humber and, with its flanking marshes, presented a serious obstacle to east–west movement (Neumann 1998, 75–6). Cleatham is at a height of 73m OD but its relatively low-lying surroundings allow wide views across towards the Trent Valley and Pennines to the west, and the Vale of Ancholme and the Lincolnshire Wolds to the east. It is, in its quiet way, a magical place.

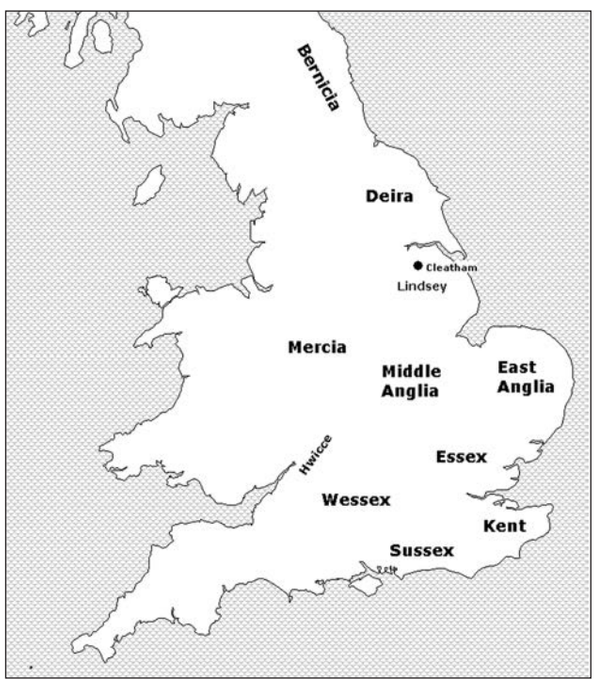


Fig 1 The kingdoms of Early Anglo-Saxon England, with Lindsey and the Cleatham cemetery

The River Trent runs 10km to the west of the Cleatham site. Twenty-two kilometres to the north is the Humber, one of Europe's great estuaries, its 14km-wide mouth opening into the North Sea and towards Europe. The Humber has a strong tidal flow and a maximum rise and fall of 7.2m (Penthick 1990, 54–5) but, if taken on the appropriate stage of the tide, it is navigable. Along its southern bank are a series of creeks where the Ancholme and smaller streams enter the estuary. These would have offered safe landing places to the shallow-draughted craft of the early medieval period. Around 25% of England is drained into the Humber through its main tributaries, the Ouse and Trent, an area extending to Birmingham in the south, the Pennine watershed in the west and Swaledale to the north. As a corollary of this, large areas of England's interior could be reached by water via the Humber. Three kilometres to the south-west of the cemetery is the river Eau which flows west, entering the Trent just north of Susworth. The river name is interesting; despite its spelling Eau is pronounced 'E' coming from *ēa*, the Old English word for river (Gelling 1984, 20). Gelling makes the point that this term is, on the whole, used for streams which are larger than a brōc or burna or in Lindsey, a beck.

The soil at Cleatham is an intractable calcareous brown earth overlying limestone. Parts of the Cliff are overlain by late glacial deposits of wind-blown cover sands which form the heathland 'warrens'.[15] These are

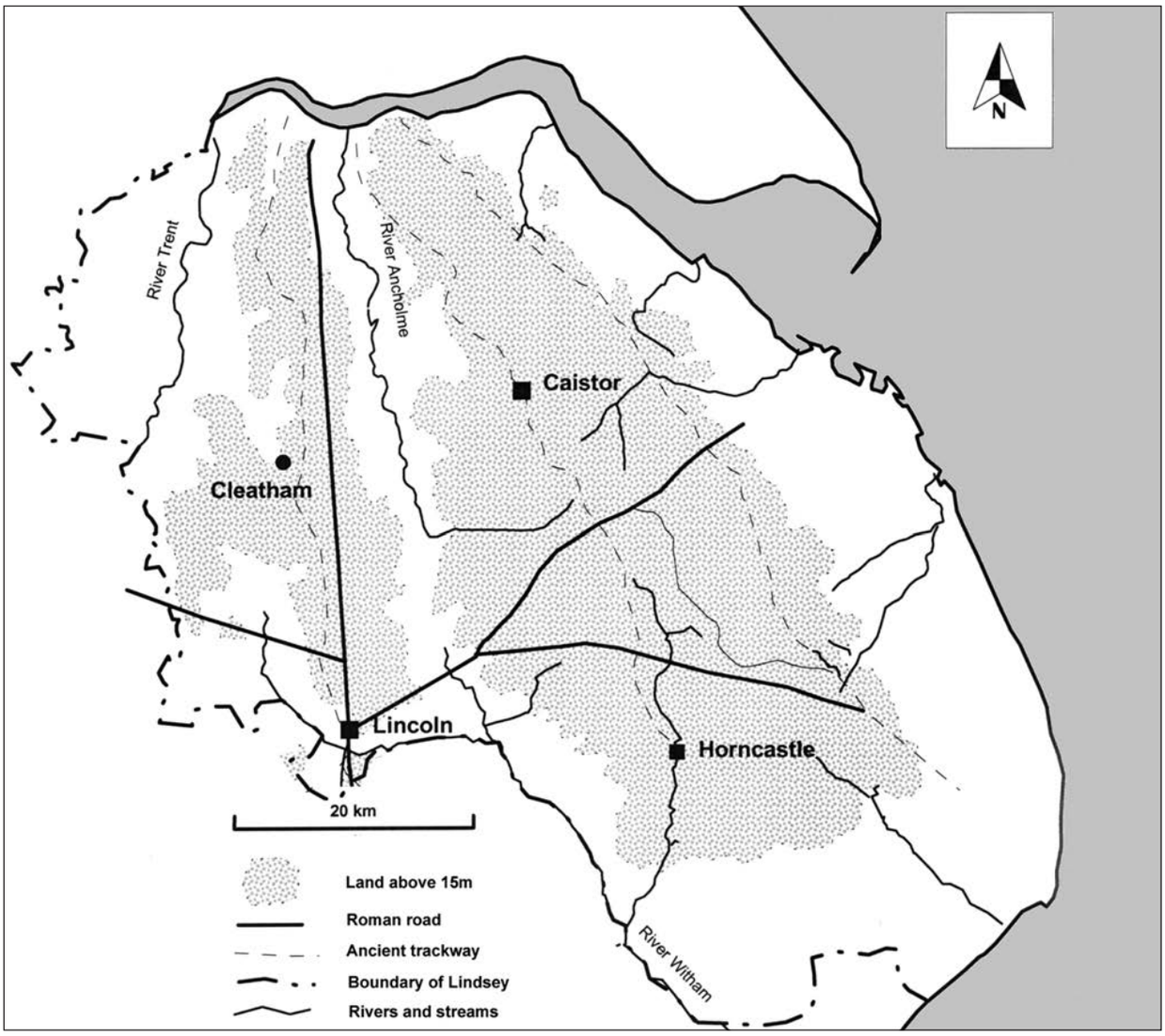


Fig 2 The location of Lindsey, with Roman roads and ancient routeways. Contours in metres. Map based on Ordnance Survey data. Reproduced by permission of the Ordnance Survey on behalf of HMSO. © Crown Copyright 2006. All rights reserved. Ordnance Survey Licence Number 100023560

particularly extensive to the north of the site between Risby (Roxby cum Risby) and Manton. This is an unstable environment, on which sand-blows frequently occur, but there are areas of open pine, oak and birch woodland with some small pools and areas of bog (Gibbons 1975, 10). The cover sands are useless for agriculture but contain deposits of bog iron ore. A series of streams flow east, down the dip-slope to the River Ancholme, and provide a good water supply to the east of the Cliff. To the west, water is provided by a line of springs issuing from the face of the escarpment, on which lie the modern villages (Eagles 1979, 6). Although there are ponds on the top of the cliff most of the zone is dry and dependent on wells for its water supply.

Cleatham (pronounced Cleath'am) now consists of just two farms; it was originally a township within the parish of Manton. It appeared as a place of some substance in the Domesday Survey[16] and, as late as 1856, the year of the cemetery's discovery, White's *Lincolnshire Directory* described Cleatham as 'a township with a population 96 souls'. Enclosure took place between 1624 and 1710 during which time the Darwin family of Cleatham[17] acquired and enclosed land piecemeal building up an estate (Russell 1991, 115–20). Mrs Russell's reconstruction of the parish in 1624 shows the area containing the cemetery to have been called 'Furse Leys', suggesting that this poor land was waste. It was still unenclosed in 1710.

Ancient monuments

The location of Anglo-Saxon cemeteries has been discussed by Howard Williams (1997, 1–32; 1998, 90–108)[18] who drew attention to the relationship between the cemeteries and earlier monuments. It is possible that there was a tumulus on the site of the Cleatham cemetery. In his description of the 1856 discovery of the cemetery Trollope recorded that 'Mr Richardson, in making a road on his land, had occasion to cut through a slightly rising mound', adding later, 'On the northern side of the vases a quantity of stones were found – perhaps connected with the Ustrina and above them from 4 to 5 feet of soil had been heaped to form a tumulus' (Trollope 1857, 275–6, pl opposite page 275).

While no trace of a mound was found during the excavation of the Cleatham cemetery, Trollope's statements leave little doubt that the initial discovery was associated with a tumulus, or what appeared to be a tumulus. Howard Williams found that, while the reuse of monuments was most common in the 7th century, the practice started in the 5th–6th century. He suggested that the reuse of earlier monuments was a way in which the incoming Anglo-Saxons could legitimise claims over the land. In addition to this possible barrow, the Cleatham cemetery is within 500m of the Mount Pleasant Roman villa (Fig 3) from which masonry was taken for use in the cemetery.

Parish boundaries

The Cleatham cemetery is on the boundary between the parishes of Manton and Kirton in Lindsey (Fig 3). The siting of Anglo-Saxon cemeteries on parish boundaries is a well-known phenomenon and occurs throughout the country, with South Elkington, and West Keal, two of Lindsey's other cremation ceme-

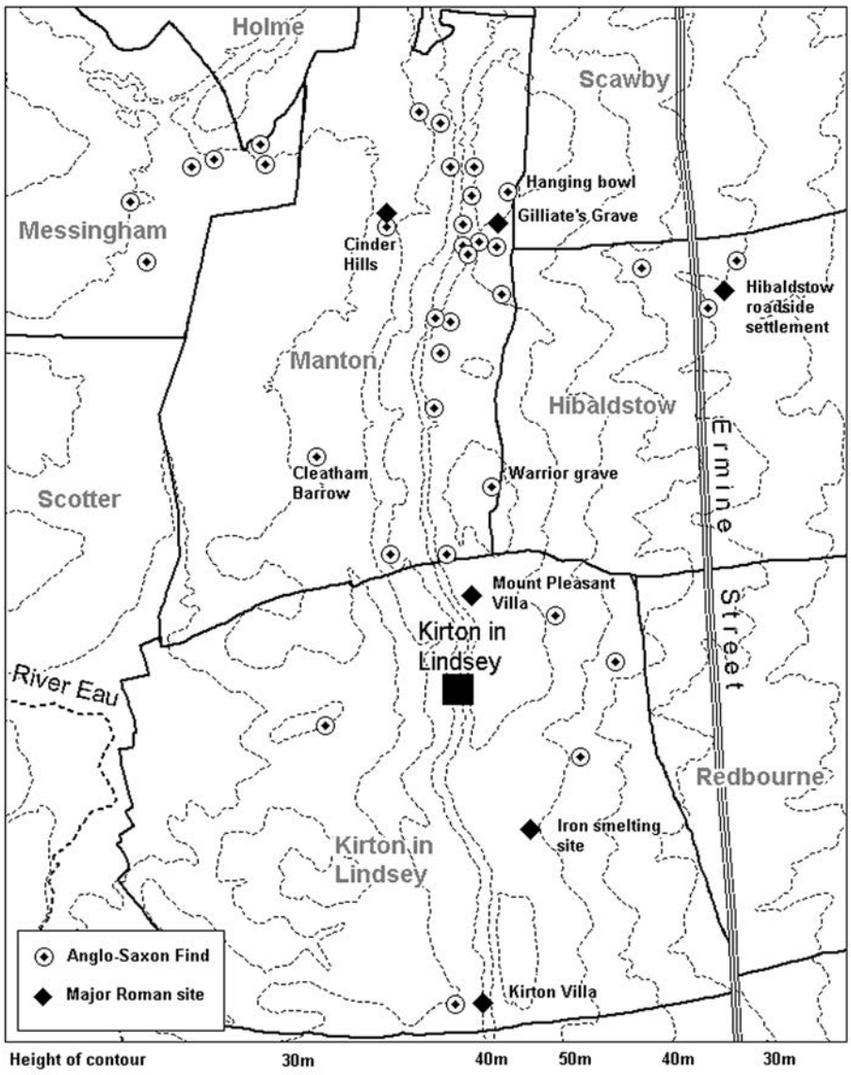


Fig 3 The Cleatham cemetery in its local setting. Intensive field walking has gone some way to putting the cemetery into its context. Reproduced by permission of the Ordnance Survey on behalf of HMSO. © Crown Copyright 2006. All rights reserved. Ordnance Survey Licence Number 100023560

teries, both lying on parish boundaries. A statistical study of the evidence by Goodier (1984, 1–31) showed that 17.9% of Anglo-Saxon cemeteries lay within 100m of a parish boundary. She went on to show that the number of cemeteries located on parish boundaries increased through the early Anglo-Saxon period suggesting that burial was being focused on the edges of estates which formed the basis of what become parishes. It is possible that the now lost 'tumulus' on the cemetery site played some part in the definition of the estate boundary. Both a 7th-century warrior grave and the Manton hanging bowl were found near the boundary between Manton and Hibaldstow, and may also have come from mound burials.

The cemetery site

Howard Williams has drawn attention to a small group of large cemeteries in eastern England which he has argued were central places, important to the production of group identities in the early Anglo-Saxon period (Williams 2002, 341–62). Each of Lindsey's large cremation cemeteries is located near to a place which went on to become an important centre (Everson 1993, 98). Cleatham is adjacent to the important soke centre of Kirton in Lindsey, South Elkington is adjacent to Louth, and West Keal to Bolingbroke. The only cemetery to have presented problems was Elsham but with the discovery of an important manorial site and soke centre at Barnetby le Wold (Leahy 2003, 138–54) this problem is resolved.

The Domesday survey provides some insights into the later history of the Cleatham area. As part of the Danelaw, Lindsey was divided into wapentakes, each of which was divided into hundreds.[19] At Domesday Cleatham was listed independently of Manton and was in Corringham wapentake while Manton was in the neighbouring wapentake of Manley (Foster and Longley 1921). This placed Cleatham in the same wapentake as the important soke centre at Kirton in Lindsey. Cleatham was on the eastern side of a double hundred (23 carucates) which included Scotter, Scotton and Scotterthorpe, and extended west to the Trent. Kirton in Lindsey was, by itself, a half hundred of eight carucates but was also the centre of the 'Soke of Kirton' with holdings amounting to 67 carucates throughout the West Riding of Lindsey (Hart 1992, 236–8, map 8.2b). It is likely that the Kirton Soke[20] was once still larger, extending south to include Well (Stow), and possibly Newark, wapentakes. At Domesday it was owned by the Crown but had formerly belonged to Earl Edwin of Mercia. One can only speculate as to the relevance of this massive holding to the Cleatham cemetery which appears to have been purposefully included within its wapentake.

The names of a number of Lindsey wapentakes suggest that they were centred on places which contained mounds which would have acted as the folk moot.[21] In addition to the possible mound on the Cleatham site, the great Cleatham barrow lies 1300m to the north-west. Now sadly denuded, this mound once measured 23m east–west by 35m north–south and was 2m high.[22] The presence of this conspicuous monument near to a soke centre suggests that it may have been the moot for the wapentake.[23] The Loveden Hill cemetery was the centre of the Loveden wapentake and was based around a burial mound (Meaney 1964, 158). A similar relationship exists between the Elsham cemetery and the eponymous moot for the Yarborough wapentake, Yarborough Camp, which is 3.5km away (Leahy 2003, 150–2).

Settlement evidence in the area of the Cleatham cemetery

While metal detector finds are revealing the distribution of Anglo-Saxon cemeteries, our knowledge of settlement patterns is, as yet, limited. Over recent years the work of the North Lincolnshire Community Archaeology Project has led to great advances in our knowledge of Anglo-Saxon settlement. Intensive field walking has been undertaken in two study areas: the parishes of Manton and Kirton in Lindsey and to the west of the Trent, on the Isle of Axholme. Anglo-Saxon settlements have been found in both areas, but a remarkable density of settlement has been revealed in the Kirton/Manton area (Fig 3). Most sites are represented by sparse scatters of sherds, best interpreted as farmsteads although some sites, most notably to the south of Kirton in Lindsey and on Manton Warren, have produced large quantities of debris and could be seen as settlements. Fieldwork in the Fens to the south of the West Keal cemetery produced evidence for Anglo-Saxon settlement (Lane 1993) and evidence for settlements has been found in the vicinity of other Anglo-Saxon cemeteries. At Irby on Humber four sunken features were found, with a large quantity of undecorated domestic pottery, near to the excavated cemetery at Welbeck Hill (Whitwell 1967, 42). Settlement debris has been found in the area of the inhumation cemetery at Melton Ross (Leahy 2003, 138–54) and a scatter of sherds found around the Sheffield's

Hill cemeteries suggested the proximity of a settlement (Leahy and Williams 2001, 310–13). Excavations at Nettleton Top in 1986–87 resulted in the discovery of three *Grubenhäuser* with associated pottery and loom weights in an area which has produced a number of burials (Field and Leahy 1993, 9–38). It is likely that these represented part of a larger settlement destroyed by sand extraction.

Industrial activity

A further feature of the Cleatham area is a series of sites which are known locally as the 'cinder hills' (Fig 3). These are slag heaps from iron extraction and probably represent an industry which was in operation over some considerable time. A fragment of slag was found in one of the Romano-British urns at the Gilliate's Grave cemetery and many of the urns in the early phases of the Cleatham sequence contain crushed slag. In view of the very low iron content of the local ore it is likely that this industry was based on rich bog iron from the heathlands of Manton Warren. It is possible that iron extraction was the basis of the Cleatham community.

The cemetery's regional setting

During the time the Cleatham cemetery was in use it lay within the Anglo-Saxon kingdom of Lindsey, or in the area of one of the folk-groupings which were to coalesce to form the kingdom. Lindsey was never a powerful kingdom and, for most of its existence must have been under the domination of its stronger neighbours, Northumbria to the north and, later, Mercia to the south-west. Unlike other, better-known Anglo-Saxon kingdoms, Lindsey had well-defined boundaries (Fig 2). To the north was the Humber Estuary and to the east the North Sea. Its southern boundary was the River Witham and the fens around it, the boundary deviating near the sea to follow what must have been an ancient course of the river. The southern section of the western boundary followed the Trent but further north the line disappeared into the marshes of Hatfield Chase (Stenton 1970, 133; Foster and Longley 1924, 237–60). Like Yorkshire, Lindsey was divided into three Ridings,[24] suggesting that its boundaries were in existence in the Anglo-Scandinavian 10th century (Stenton 1971, 49). As all of the places referred to by Bede[25] as being in Lindsey lie within this area, its form may have been established, at the latest, by the early 8th century.

There is evidence for early political and cultural links across the Humber and it has been suggested that there was a Humbrensian tribal grouping based around the estuary, which perhaps included Deira, Elmet and Lindsey. The names of all three kingdoms have Celtic roots and may have been sub-Roman British kingdoms before passing under the control of the English (Jackson 1953, 701–5, Smyth 1984, 19–21). Elmet, which approximated to the West Riding of Yorkshire, survived as a British enclave into the 7th century (Faull 1981, 171–24; Taylor 1992, 111–29). Barbara Yorke has drawn attention to parallels between the administrative structures and religious practices in Lindsey and those of Deira and Elmet (Yorke 1993, 141–2) again suggesting that they may have shared a similar early development based on the survival of late Roman organisation. It is also worth noting that the dialect of medieval Lindsey is seen as part of a northern linguistic group while that of Holland and Kesteven is more closely linked with the Midland dialect of English (Kristensson 1967, 241). While links exist between the Humber kingdoms it is thought unlikely that they ever represented a single polity; they were kindred kingdoms, similar, but separate.

Historical evidence

Although the historical sources we have for Anglo-Saxon Lindsey are limited, recent work has gone some way towards evaluating them and allows us to use this material with some confidence, or at least with a knowledge of its limitations. Lindsey is an obscure kingdom whose very existence as an independent entity has been questioned (Davies and Vierck 1974, 237). More recently the evidence for Lindsey's status has been reviewed by Sarah Foot who supports Lindsey's existence as an independent kingdom (Foot 1993, 128–40). Her argument is based on a number of points:

1. That we have a genealogy of the kings of Lindsey.
2. That Lindsey appears in the 7th-century tribute assessment known as the *Tribal Hidage* where the *Lindesfarona* are assessed, along with Hatfield Chase, at 7,000 hides.
3. That Lindsey had its own bishops.
4. That Bede, when discussing Lindsey, uses the term *prouincia* which he generally (but not invariably) uses for independent peoples.

None of the individuals on the Lindsey pedigree can be dated with any degree of certainty. Stenton

equated Aldfrith with the *Ealfrid Rex* who witnessed a charter of confirmation made by Offa of Mercia between 772 and 796 (Stenton 1970, 127–35). It has now been convincingly argued that the name should read not *Ealfrid Rex*, but *Ecgfrid Rex* and refers to Offa of Mercia's son, and brief heir, Ecgfrith (Foot 1993, 133). Ecgfrith was anointed king of the Mercians in 787, nine years before his succession and death, in 796, and would have been correctly styled Rex (Stenton 1971, 218). This leaves the Lindsey genealogy without any chronological fixed points but its very existence is significant. One of the individuals named is interesting: '*Cædbæd*', a British name and equivalent to the Old Irish *Cathbad*, Primitive Irish *Cattabuttas* (Foot 1993, 133). The presence of this British name in the genealogy of the kings of Lindsey suggests a relationship between the incoming Anglo-Saxons and the native British at the highest level of society.

The first recorded event in the history of Lindsey is Bede's account of the mission of St Paulinus to the kingdom in AD 627/8 (Bede, *HE*, **2**, 16). This occurred as an offshoot of Paulinus's mission to Northumbria, suggesting that Lindsey was at that time under the domination of Edwin of Northumbria. In his discussion of events in Lindsey Bede refers to its people as the *Lindisfari* and describes their territory as a *prouincia*, a term which he generally uses for independent peoples. He does, however, occasionally use this term for subdivisions of kingdoms, units that he elsewhere describes as *regiones*. In Lincoln Paulinus was met by a man named Blaecca whom Bede describes as *praefectus Lindocolinae civitatis*. It would, however, be wrong to read too much into this post-imperial title. The city may, as a former Roman provincial centre and possible seat of a Roman bishop, have held more significance for the Christian missionaries than for the Anglo-Saxons. Whatever was going on in Lincoln it is unlikely that it would have been recognisable as urban life to a 2nd-century citizen.

The later history of Lindsey

St Paulinus's mission to the north came to an end with the defeat and death of King Edwin at the Battle of Hatfield Chase, to the west of Lindsey, in 632. Following the battle, Penda of Mercia and his ally King Cadwallon of Gwynedd moved north to devastate Northumbria and a period of instability ensued, ended by Oswald of Bernicia's destruction of Cadwallon at Rowley Burn near Hexham in the final months of 633 (Stenton 1971, 81–3).

The succession of King (later Saint) Oswald resulted in a period of peace during which Lindsey remained under the domination of Northumbria. Oswald died in battle against Penda at *Maserfelth* (probably Oswestry) in 642 and in the years that followed the fortunes of the two kingdoms fluctuated (ibid). For some years after Maserfelth Mercia was dominant until, in 655, the pagan Penda was defeated by Oswiu and Mercia was again under Northumbrian domination. In 658 a revolt centred around Wulfhere, a son of Penda, expelled the Northumbrians from Mercia and, in 679, Mercian forces under King Aethelred achieved a final victory at the Battle of the Trent (Stenton 1971, 85). Following this battle Lindsey was settled as a Mercian province. It is likely that Lindsey's own royal line ended around this date and the kingdom was henceforth administered by a Mercian ealdorman.

We know little of the part played by Lindsey in the struggle between Mercia and Northumbria. Although Lindsey lies on the boundary between the two protagonists, its island-like position may, to a large extent, have insulated it from the conflict. The major frontier battles between the two warring kingdoms (Idle, 616; Hatfield Chase, 632; Trent, 679) were fought, not in Lindsey, but to the west on the road from Lincoln to Castleford. This would have spared Lindsey the suffering caused by the passage of an invading army and, indeed, the depredations of 'friendly' forces. It is impossible to gauge the sympathies of Lindsey during these times but some indication might be provided by the action of the monks at Bardney. Fifty years after Oswald's death in 642 the saint's niece Osthryth, queen of the Mercians, decided to have his remains translated to Bardney. The monks refused to accept them because 'although they knew him to be a saint they pursued him dead, with ancient enmities, as one sprung from another province who had taken rule over them' (Bede, *HE*, **3**, 11). If we are to believe this hagiographic account, the grudge was still strong after a generation.

Recent finds by metal detector users and the excavation of the major settlement site at Flixborough near Scunthorpe have done much to reveal Middle Saxon Lindsey and the emerging picture is one of prosperity. The kingdom was under the control of Mercia and, while it no longer had a king, it retained its own bishop until the Viking takeover in 877.

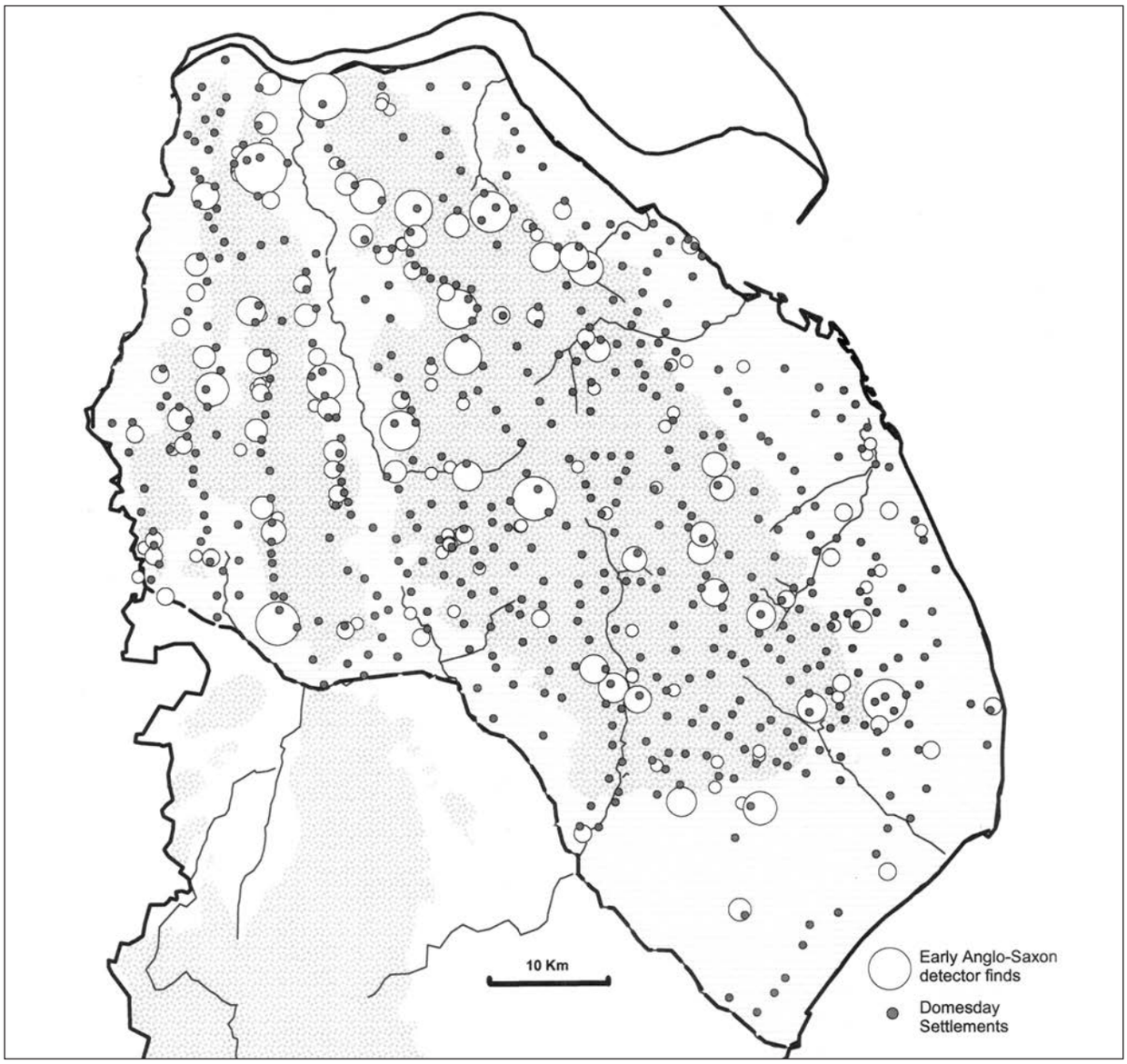


Fig 4 Map showing metal detector finds from Lindsey set against settlements recorded in the Domesday Survey

Burial in Early Anglo-Saxon Lindsey

The history of the study

Only one volume of the projected *Victoria History of the County of Lincolnshire* was published, but that volume is of inestimable value and high scholarship (Page 1906, 246). However, its account of the Anglo-Saxon settlement of Lincolnshire is as brief as it is despairing: 'The English conquest of Lincolnshire can only be stated as a fact; it cannot be described, for all details are lacking'.

This cheerless comment was reiterated by Baldwin Brown in 1915, but he went on to present a useful review of what little evidence existed (Brown 1915, 796–801). Much of what he wrote concerned the great Sleaford (Kesteven) cemetery which, with an estimated 600 burials, remains the largest inhumation cemetery in Lincolnshire (Thomas, 1887, 383–406). Baldwin Brown also discusses the then little known Lindsey Anglo-Saxon cemeteries: Searby, *Kirton in Lindsey* (Cleatham) and the Caenby mound burial. Mention is made of stray finds at Candlesby and Flixborough.

A survey of the archaeology of Lincolnshire was undertaken by C W Phillips in 1933–34, a work which included a review of the Anglo-Saxon period (Phillips 1934, 137–51). Phillips commented on the obscurity of Anglo-Saxon Lindsey but included a résumé of the history of the kingdom based, in the

main, on Stenton's 1927 paper on Lindsey and its kings (Stenton 1927/1970, 127–35). Phillips commented on the paucity of 5th-century material from Lincolnshire but his survey began, at last, to address the legendary lack of Anglo-Saxon finds in Lindsey. Phillips was able to describe five cremation and ten inhumation cemeteries, the records of which had, in the main, lain hidden in earlier literature. A still more thorough search conducted by Audrey Meaney for her 1964 gazetteer increased the count to eighteen (Meaney 1964, 151–66). A short but useful assessment of what was known of early Anglo-Saxon Lindsey was published by Kenneth Fennell in 1974 (pp 283–93). The first major work of synthesis on the Anglo-Saxon period in Lindsey was Bruce Eagles' London PhD thesis, published as *The Anglo-Saxon Settlement of Humberside* (Eagles 1979). This detailed study surveyed the evidence for the late Roman and early Anglo-Saxon periods in an area that included the kingdoms of Lindsey and Deira. Eagles was able to list sixteen inhumation cemeteries, together with six single burials, some of which were under barrows.

More recent work has increased the number of known cemeteries to 42, an increase due, in the main, to the use of metal detectors and finds made during developer-funded excavations, particularly on pipelines. While the activities of some detectorists has been the subject of much criticism their important contribution to the study of the early Anglo-Saxon period in Lindsey must be recognised. In recent years we have effectively seen a level of data recovery previously unimagined and our distribution maps may, at last, be starting to represent the true picture (Fig 4).

Anglo-Saxon burial rites in Lindsey

Three burial rites were employed in early Anglo-Saxon Lindsey: cremation, inhumation and, more rarely, single inhumations beneath mounds. The relationship between the two main rites is both important and interesting. Whenever the two rites were associated at Cleatham, the graves always cut the urns, with 29 of the Cleatham graves containing urn fragments. This follows a presumed trend away from cremation in Anglian England, described by Myres as 'the flight from cremation'. Some of the graves contained large sections of urns but early burials, like Grave 9, contained no sherds, suggesting that the cemetery was relatively clear when they were placed.

In earlier papers the writer has claimed, on the basis of the intercut graves at Cleatham, that cremation was the primary rite in Anglo-Saxon Lindsey and was, from the last quarter of the 5th century, increasingly supplemented by, and later replaced with, inhumation (Leahy 1993, 37; 1999, 130). It is, however, impossible to prove this by associated finds. Early brooches of Åberg's Group I are found both in the graves (Grave 9) and in Phase 1 urns (Urn 140). A burnt supporting arm brooch was found in the topsoil at Elsham cemetery but there is nothing so early from Cleatham. As early graves are greatly outnumbered by Phase 1 urns it is believed that cremation was the dominant (but not the exclusive) rite used in the early part of the Anglo-Saxon settlement of Lindsey.

The two rites were used in parallel for some time. At Cleatham urns were found to contain the remains of developed 'florid' cruciform brooches of Åberg's Group V which must date to the 6th century. None of the cremations could be demonstrated to be of 7th-century date, which is as expected, the absence of cremations being a feature of 'Final Phase' cemeteries (Boddington 1990, 180). If, however, Geake's dating of hanging bowl graves is correct, the cremations found in bowls at Loveden Hill must be 7th-century (Geake 1999, 1–18). This important burial, however, remains difficult to interpret on the basis of the surviving records.

Few, if any, of the Lindsey cemeteries employ only one rite, but in most cases one rite predominates:

- Cleatham: *c* 1200 identified cremations and 62 inhumations (19:1)
- Elsham: 625 cremations and five inhumations (125:1)
- South Elkington: 204 cremations and no known inhumations.

A similar mixing occurs at the smaller/inhumation cemeteries:

- Welbeck Hill: 72 inhumations and five cremations (1:14)
- Castledyke, Barton on Humber: 201 excavated inhumations and one cremation (1:201)
- Sheffield's Hill I: 43 6th-century graves and two cremations (1:22)
- Worlaby: twelve graves and one cremation (1:12).
- Fonaby was a salvage excavation, but 49 graves were excavated along with 28 vessels, of which twelve contained burnt bone and a further five have the appearance of having been urns.

It can be seen that the use of the two rites was mixed and most communities were practising both. It might

perhaps be better to divide the cemeteries into large (regional), and small (local), rather than cremation and inhumation. However, the latter division has some basis: inhumation is the predominant rite in the smaller cemeteries and most of the small cemeteries date from the 6th century. The move to small cemeteries might reflect the coalescence of the original folk groupings into the Kingdom of Lindsey, where there was less need to support folk loyalty by use of the central burial place. The move to small local cemeteries could have been due to the change from cremation to inhumation and the difficulties of transporting a corpse.

The distribution of cemeteries

Figure 4 shows the distribution of Anglo-Saxon cemeteries in Lincolnshire supplemented by metal detector finds known to the writer in 2006.[26] Most detector finds will have come from ploughed-out cemeteries, but isolated objects, perhaps representing casual losses, have also been included. It can be seen that although Anglo-Saxon cemeteries occur over most of Lincolnshire, gaps exist around the Wash, along the coastal margins and in the Witham Fen to the south of Lincoln. These former marshlands were also devoid of settlement in the Domesday Survey (Fig 4), lending support to the distribution of detector finds.

It is notable that, unlike other Romano-British cities, there are no Anglo-Saxon cremation cemeteries close to Lincoln and the writer has argued that this might be explained by the city (or whatever sub-Roman power controlled the city) being able to dominate its surroundings in the 5th and early 6th centuries (Leahy 1993, 36, fig 4.1). Cleatham is 30km to the north of Lincoln. The lacuna extends to the south of the city, there being no cremation cemeteries closer than Loveden Hill, 25km to the south (Fig 5). This supports the suggestion that Lincoln once administered an area to the south of the city, perhaps part of its original Roman *territorium* (Bassett 1989b, 2). There are inhumation cemeteries closer to Lincoln but these, in the main, date to the 6th century.

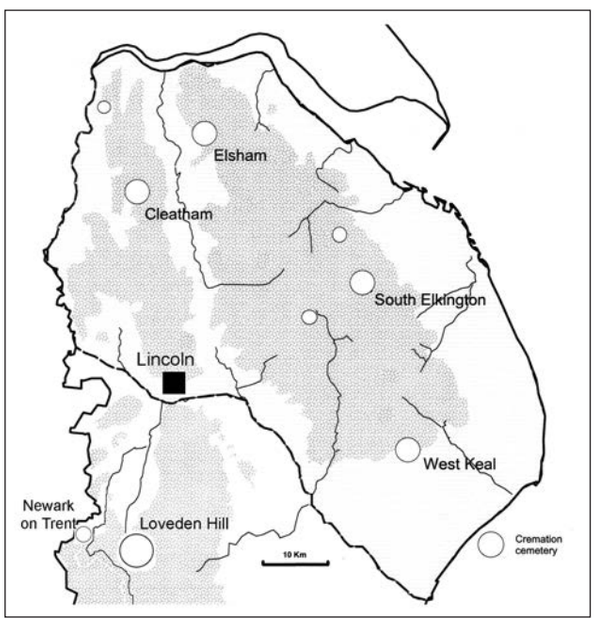


Fig 5 The locations of known Anglo-Saxon cremation cemeteries in Lindsey

Inhumation cemeteries are more common and widespread than the cremation cemeteries, but most are small and contain fewer than 100 burials (Fig 4). The exceptions are Castledyke, Barton on Humber, with an estimated 436 graves (Leahy and Boylston 1998, 338) and, to the south, Sleaford (Kesteven) with 600 graves (Thomas 1887). These are unusual and are likely to be products of local circumstances, for example at Castledyke where access to marine resources may have allowed a concentration of population.

Excavated cemeteries in Lindsey

The cremation cemeteries (Fig 5)

South Elkington

The first large-scale work on a cremation cemetery in Lindsey was carried out by Graham Webster at South Elkington on the Lincolnshire clay wolds in 1946–47. The work resulted in the discovery of 204 urns but no inhumations (Webster and Myres 1952, 25–64). Intensive field walking carried out by the writer in the autumn of 1998 showed that Webster's assessment that he had dug about a quarter of the cemetery was broadly true.

West Keal

Excavations in 1954 at West Keal were on a small scale and only 21 vessels were found, although sherds were said to have been scattered over an area of 2 acres suggesting that the cemetery was large (Thompson 1956, 189–92; Meaney 1964, 156). An iron latch-lifter found in the plough soil points to the presence of inhumations. The West Keal cemetery lies on Hall Hill on the southern end of the Lincolnshire Wolds with superb views over the Fens to the south.

Elsham

The Elsham cemetery lay on the western side of the Lincolnshire Wolds. It was excavated by Chris Knowles and Freda Berisford in 1975–76 in advance of the construction of the Humber Bridge approach road. Although part of the cemetery extended under Middlegate Lane and could not be investigated, it is likely that most of the site was excavated. The excavation produced 625 cremations and five inhumations (White 1976, 60; Eagles 1989, 209). Many of the urns were cut into the fill of a substantial prehistoric ditch, the nature of which was not determined. Two Early Bronze Age beakers were found which may suggest that there had been a barrow on the site.

In addition to the large urn fields there are indications that Lindsey contained small cremation cemeteries, although none has been excavated. In 1828 'more than 20 urns' were found along the line of a round barrow at Wold Newton (Meaney 1964, 166). 'Many urns' were said to have been found at Bagmore, Burton Stather during ironstone mining in the 1920s, of which two survive (Dudley 1949, 224–6; Eagles 1979, No 4 and 32). The size and composition of this cemetery is unknown although the discovery of an early axe of *francisca* type and a complete antler comb show that inhumations were also present. Single cremations are known from Burton Stather, where the urn may have been under a mound (Eagles 1979, 360, No 145), Bottesford and Great Limber (Leahy 1993, 39–42).

While many additional inhumation cemeteries have been discovered, no new cremation cemeteries have been found. These sites are highly distinctive and, apart from sherds, produce a distinctive range of objects that could be found with a metal detector (copper alloy melt and funerary tweezers), and it seems likely that their full number is now known.

The inhumation cemeteries

While large numbers of Anglo-Saxon cemeteries have been found in Lindsey, our knowledge of most of them is poor, and many are known only from antiquarian records or metal detector finds. The few cemeteries which have been excavated and published form a context into which the work at Cleatham can be placed.

Fonaby

Archaeological fieldwork on Lindsey's Anglo-Saxon cemeteries started with the excavation of the Fonaby cemetery during the course of its destruction by sand extraction in 1956–58 (Cook 1981). Aided by local people, Peter Gathercole, then Curator of Scunthorpe Museum, recovered 49 grave groups and at least twelve cremations. In addition to the grave groups there was a substantial amount of unstratified metalwork, much of which was attributed to graves by the assiduous work of Sonia Chadwick (later Mrs Chadwick Hawkes) who replaced Mr Gathercole at Scunthorpe Museum. Bone was poorly preserved at Fonaby which precluded a detailed pathologist's report. Iron was badly corroded and was probably missed by the sand diggers, resulting in the graves of males being under-represented as, in the absence of bones, they could only be recognised by the presence of iron weapons. The Fonaby cemetery was on the Lincolnshire Wolds 2km to the north of the Roman fortification at Caistor. There were other cemeteries in the area (Field and Leahy 1993, 9–38) and the discovery of a fragment of a high-quality, 8th-century, monumental inscription on Castle Hill in the town points to its continued importance (Radford 1947, 95–9; Everson and Stocker 1999, 121–5).

Welbeck Hill

Systematic excavation on Lindsey's cemeteries began with the work of Gordon Taylor at Welbeck Hill, Irby on Humber, in 1962.[27] This cemetery lies on the eastern side of the chalk wolds at their interface with the boulder clay of the marsh. Work carried out over a period of seventeen years resulted in the location of 72 graves and five cremations (Gordon Taylor, pers comm). The graves were scattered in a north–south band measuring 300 × 130 feet. There appears to have been a preference for a north–south alignment of the graves although there was a group of west–east burials. Most of the cremation deposits were on the eastern side of the excavated area.

Castledyke South

The Castledyke South cemetery lies on the northern edge of the Lincolnshire Wolds within the town of Barton on Humber. It was discovered in 1939 during the construction of an air raid shelter, when five burials were found (Sheppard 1939, 257; Sheppard 1940). These contained some important and exotic objects including 7th-century cylindrical workboxes, a gold bead, a hanging bowl, a set of scales and weights, a trivet ring (Watkin 1980, 88–9) and a die for making foil mounts decorated in Anglo-Saxon Style II (Speake 1980, 68, 71, fig 13q, pl 13p).

This material was acquired for Hull Museums by the acquisitive Tom Sheppard. Further fieldwork was carried out between 1975 and 1990, culminating in large-scale rescue excavations in 1989 and 1990 in advance of building development. These excavations led to the discovery of 196 graves from a cemetery that is likely to have contained around 436 graves.[28] Castledyke is on chalk which resulted in the good preservation of human bone (Boylston et al 1998). On the eastern side of the cemetery was a massive ditch of probable prehistoric date. Graves were crowded against this ditch and there was much intercutting. A single cremation was inserted into the ditch fill. The Castledyke cemetery had a long period of use, starting in the late 5th century and continuing into the late 7th-century 'Final Phase'. Its main importance is its size and the outstanding quality of the published report on the excavation and the finds (Drinkall and Foreman 1998).

Sheffield' s Hill

Excavations directed by the writer and his colleague David Williams at Sheffield's Hill, Roxby cum Risby, between 1993 and 1998 (Leahy and Williams 2001, 310–13) achieved the total excavation of two Anglo-Saxon cemeteries. Sheffield's Hill I contained 47 6th-century graves and two cremations and, 10m to the south, Sheffield's Hill II, contained 72 7th-century graves. The highly acidic sandy soil meant little skeletal material survived but many of the bodies were represented by pseudomorphs in the sand.[29] In spite of the absence of bone, other organic materials were well represented, appearing both as stains and preserved by contact with metal objects. This allowed coffins and wooden vessels to be traced in the graves.

In the 6th-century cemetery the graves were irregularly aligned although there was some segregation by age, with infants' graves lying on the western edge. This area of the cemetery also contained three burials set within ring ditches. While well equipped, none of these graves could be described as rich. Sheffield's Hill II contained rows of orientated, extended burials typical of the late 7th-century 'Final Phase', discussed below. Both cemeteries appeared to have been defined by irregular parallelograms, a pattern also exhibited by a Romano-British field system observed on the eastern side of the field and represented by traces of ditches and trees forming boundaries along the edges of the cemeteries.

Single graves

The third group of Anglo-Saxon burials in Lindsey are single burials some, at least, of which lay beneath mounds and date from the 7th century. These are likely to represent the rise of an élite whose status was reflected in their graves (Shephard 1979, 47–79). The most important single burial was found in 1849 beneath a large mound at Caenby, and which may represent a princely grave (Eagles 1989, 212; Everson 1993, 97). The body was recorded as being in a sitting position on the original ground surface, accompanied by a sword, a shield and a series of fine metal mounts (Jarvis 1850, 36–44). The 'seated' position of the body can be paralleled by the armed man found in Grave 174 at Castledyke (Drinkall and Foreman 1998, 86). Some of the surviving metalwork from Caenby is paralleled by finds from aristocratic burials (Speake 1980, 38–9) and a foil bearing a figure wearing a horned helmet invites comparison with Sutton Hoo (Bruce-Mitford 1978, 206–7). We must, however, await the re-evaluation of these finds before we can assess their importance. Everson (1993, 94–8) has drawn attention to the geographical importance of the Caenby location within Lindsey, making it a convincing site for a royal burial.

There are two single graves in the area of the Cleatham cemetery: a 'warrior grave' (sword, spearhead, seax, bridle bit, knives) was found in a quarry around 1920, 700m to the north-east and in 1939 a hanging bowl was discovered in sand pit 3km to the north.[30] It is not known if either burial was covered by a mound but both were near the Manton side of the boundary with Hibaldstow parish (Fig 3) and mounds would have formed useful markers. While these burials are significant, it would be difficult to argue that any of them was aristocratic.

In 1998 a single grave was found during pipe-laying at Bracebridge Heath, just to the south of Lincoln. The grave had been disturbed and no details of the burial are known but the finds consisted of a 7th-century spearhead, a 5th-century pattern-welded sword, a hanging bowl and what may have been a sugar loaf type shield boss (unpublished developer report by the writer). Like the Manton single graves, this burial lay on a parish boundary.

Conventions used in drawing the Cleatham finds

Pottery is shown with dot stippling and cross-hatched sections. Vessels are shown at 33% of full size but the drawings of stamps are at 66%. Stone objects are depicted using the same conventions but are illustrated at 50% of full size. Bone, antler and ivory are not stippled but light, irregular hachures may be used. These materials are shown at 50% of full size. Copper alloy is stippled with black cross-sections and is usually shown at full size. Iron objects are hachured and have black sections. They are shown at 50% of full size.

Concordance of illustrated finds from urns and graves

Find Number	Urn Number	Inhumation Number	Figure
1		US	Fig 73
5	0	US	Fig 70
12	0	US	Fig 70
14	0	US	Fig 70
16	0	US	Fig 73
17	0	US	Fig 73
19	0	US	Fig 73
29	0	US	Fig 73
38	0	5.002	Fig 79
39	0	US	Fig 73
43	0	US	Fig 70
50	0	US	Fig 73
57	0	US	Fig 70
69	0	US	Fig 70
73	0	US	Fig 73
75	0	US	Fig 73
76	0	US	Fig 73
79	0	US	Fig 73
80	0	US	Fig 70
84	0	US	Fig 70
91	0	US	Fig 71
97	0	US	Fig 70
105	0	US	Fig 73
110	0	US	Fig 73
111	0	US	Fig 73
112	0	US	Fig 71
113	0	US	Fig 71
114	0	US	Fig 71
115	0	US	Fig 71
116	0	US	Fig 71
125	0	US	Fig 70
126	0	US	Fig 70
131	0	US	Fig 70
132	0	US	Fig 71
133	0	US	Fig 71
157	10	0	Fig 104
158	10	0	Fig 76
171	37	0	Fig 76
177	43	0	Fig 109
211	52	0	Fig 103
212	52	0	Fig 78
217	55	0	Fig 68
224	60	0	Fig 104
237	62	0	Fig 113
240	63.03	0	Fig 76
241	63.04	0	Fig 76
242	63.05	0	Fig 76
243	63.06	0	Fig 76
250	66	0	Fig 106
272	71.01	0	Fig 112
273	71.02	0	Fig 112
274	71.03	0	Fig 112
275	71.04	0	Fig 112
285	81	0	Fig 74
293	82	0	Fig 76
328	96	0	Fig 113
336	101	0	Fig 113
373	109.11	0	Fig 77
374	109.12	0	Fig 77
375	109.13	0	Fig 77
381	112	0	Fig 109
396	116	0	Fig 68
432	140	0	Fig 68
443	145	0	Fig 113
450	147	0	Fig 69
469	163	0	Fig 104
519	173	0	Fig 107
539	188.01	0	Fig 76
540	188.02	0	Fig 76
541	188.03	0	Fig 76
553	196	0	Fig 76
572	211	0	Fig 75
579	216	0	Fig 107
580	216	0	Fig 74
587	219	0	Fig 104
705	261	0	Fig 109
720	265	0	Fig 107
721	265.03	0	Fig 108
722	265.04	0	Fig 108
723	265.05	0	Fig 108

Find Number	Urn Number	Inhumation Number	Figure
724	265.06	0	Fig 108
725	265.07	0	Fig 108
734	270.01	0	Fig 72
735	270.02	0	Fig 72
791	288	0	Fig 74
795	292	0	Fig 78
860	325	0	Fig 78
870	330	0	Fig 68
873	334	0	Fig 68
877	336	0	Fig 113
889	350.01	0	Fig 78
890	350.02	0	Fig 78
891	350.03	0	Fig 78
895	353	0	Fig 104
900	355	0	Fig 72
908	357	0	Fig 76
918	364	0	Fig 113
931	367	0	Fig 106
941	370	0	Fig 68
942	370	0	Fig 106
944	371	0	Fig 109
948	374.01	0	Fig 76
949	374.02	0	Fig 76
950	375	0	Fig 104
951	375	0	Fig 78
952	375	0	Fig 107
971	383.03	0	Fig 108
972	383.04	0	Fig 108
973	383.05	0	Fig 108
974	383.06	0	Fig 108
979	383.11	0	Fig 108
980	383.12	0	Fig 108
994	384	0	Fig 72
998	386.01	0	Fig 76
999	386.02	0	Fig 76
1000	386.03	0	Fig 76
1001	386.04	0	Fig 76
1072	444	0	Fig 68
1073	444	0	Fig 106
1075	444	0	Fig 74
1077	445	0	Fig 113
1089	452	0	Fig 104
1098	458	0	Fig 104
1106	458.09	0	Fig 76
1107	458.10	0	Fig 76
1108	458.11	0	Fig 76
1109	458.12	0	Fig 76
1110	458.13	0	Fig 76
1111	458.14	0	Fig 76
1112	458.15	0	Fig 76
1113	458.16	0	Fig 76

Find Number	Urn Number	Inhumation Number	Figure
1114	458.17	0	Fig 76
1145	459	0	Fig 104
1146	459	0	Fig 68
1149	460	0	Fig 104
1156	464	0	Fig 113
1165	466	0	Fig 74
1167	466	0	Fig 106
1190	468	0	Fig 107
1247	470	0	Fig 74
1255	471	0	Fig 103
1273	483	0	Fig 106
1380	509	0	Fig 106
1431	527	0	Fig 72
1523	550	0	Fig 106
1563	557.01	0	Fig 78
1564	557.02	0	Fig 78
1568	557.06	0	Fig. 055
1581	565	0	Fig 103
1584	566	0	Fig 74
1609	579.01	0	Fig 76
1610	579.02	0	Fig 76
1611	579.03	0	Fig 76
1612	579.04	0	Fig 76
1613	579.05	0	Fig 76
1614	579.06	0	Fig 76
1690	605.01	0	Fig 76
1691	605.02	0	Fig 76
1692	605.03	0	Fig 76
1693	605.04	0	Fig 76
1694	605.05	0	Fig 76
1695	605.06	0	Fig 76
1696	605.07	0	Fig 76
1697	605	0	Fig 68
1702	606	0	Fig 106
1727	622	0	Fig 78
1728	623	0	Fig 68
1774	636	0	Fig 106
1777	636	0	Fig 68
1788	639.01	0	Fig 110
1789	639.02	0	Fig 110
1790	639.03	0	Fig 110
1791	639.04	0	Fig 110
1819	656	0	Fig 104
1826	658	0	Fig 106
1848	679.01	0	Fig 78
1849	679.02	0	Fig 78
1857	686	0	Fig 68
1894	706	0	Fig 104
1914	719.04	0	Fig 108
1915	719.05	0	Fig 108
1922	719.12	0	Fig 108

Find Number	Urn Number	Inhumation Number	Figure
1923	719.13	0	Fig 108
1924	719.14	0	Fig 108
1925	719.15	0	Fig 108
2024	761.01	0	Fig 69
2025	761.02	0	Fig 69
2061	785	0	Fig 109
2065	787.01	0	Fig 76
2066	787.02	0	Fig 76
2067	787.03	0	Fig 76
2068	787.04	0	Fig 76
2069	787.05	0	Fig 76
2070	787.06	0	Fig 76
2071	787.07	0	Fig 76
2072	787.08	0	Fig 76
2073	787.09	0	Fig 76
2074	787.10	0	Fig 76
2075	787.11	0	Fig 76
2076	787.12	0	Fig 76
2077	787.13	0	Fig 76
2078	787.14	0	Fig 76
2079	787.15	0	Fig 76
2080	787.16	0	Fig 76
2081	787.17	0	Fig 76
2082	787.18	0	Fig 76
2083	787.19	0	Fig 76
2084	787.20	0	Fig 76
2123	798	0	Fig 74
2148	815.01	0	Fig 111
2149	815.02	0	Fig 111
2150	815.03	0	Fig 111
2151	815.04	0	Fig 111
2152	815.05	0	Fig 111
2153	815.06	0	Fig 111
2154	815.07	0	Fig 111
2155	815.08	0	Fig 111
2168	824	0	Fig 107
2177	839	0	Fig 74
2197	859	0	Fig 69
2202	862	0	Fig 72
2211	865	0	Fig 107
2217	871	0	Fig 74
2218	871	0	Fig 107
2219	873	0	Fig 103
2222	876.01	0	Fig 108
2223	876.02	0	Fig 108
2241	882	0	Fig 76
2263	894	0	Fig 72
2268	895	0	Fig 75
2288	907	0	Fig 69
2318	918.01	0	Fig 108
2319	918.02	0	Fig 108

Find Number	Urn Number	Inhumation Number	Figure
2320	918.03	0	Fig 108
2321	919	0	Fig 109
2326	922	0	Fig 69
2339	925.01	0	Fig 75
2342	925.04	0	Fig 75
2358	930.01	0	Fig 74
2359	930.02	0	Fig 74
2360	930.03	0	Fig 74
2361	930.04	0	Fig 74
2390	947	0	Fig 75
2404	961.01	0	Fig 78
2405	961.02	0	Fig 78
2406	961.03	0	Fig 78
2407	961.04	0	Fig 78
2417	976	0	Fig 72
2418	976	0	Fig 69
2419	977	0	Fig 113
2420	977.02	0	Fig 72
2421	977.03	0	Fig 72
2422	977.04	0	Fig 72
2428	982.06	0	Fig 77
2429	982.07	0	Fig 77
2430	982.08	0	Fig 77
2431	982.09	0	Fig 77
2432	982.10	0	Fig 77
2478	1058	0	Fig 106
2486	0	1.001	Fig 79
2487	0	1.002	Fig 79
2488	0	4.001	Fig 79
2489	0	4.002	Fig 79
2490	0	5.003	Fig 79
2491	0	6.001	Fig 79
2492	0	7.001	Fig 79
2493	0	9.001	Fig 80
2494	0	9.002	Fig 80
2495	0	9.003a	Fig 80
2496	0	9.004	Fig 80
2497	0	9.008	Fig 80
2498	0	9.007	Fig 80
2499	0	9.006	Fig 80
2500	0	9.009	Fig 81
2501	0	9.003b	Fig 80
2502	0	9.005	Fig 80
2503	0	9.010	Fig 81
2504	0	9.011	Fig 81
2505	0	9.012	Fig 81
2506	0	9.013	Fig 81
2507	0	9.014	Fig 81
2508	0	9.015	Fig 81
2514	0	9.021	Fig 81
2515	0	9.022	Fig 81

Find Number	Urn Number	Inhumation Number	Figure
2516	0	9.023	Fig 81
2517	0	9.024	Fig 81
2519	0	9.026	Fig 81
2523	0	9.030	Fig 81
2527	0	9.034	Fig 81
2528	0	9.035	Fig 81
2535	0	10.001	Fig 81
2538	0	12.001	Fig 81
2539	0	12.002	Fig 81
2540	0	12.003	Fig 81
2541	0	13.001	Fig 82
2542	0	13.002	Fig 82
2543	0	13.003	Fig 82
2544	0	13.004	Fig 82
2545	0	13.005	Fig 82
2546	0	13.006	Fig 82
2548	0	13.008	Fig 82
2549	0	13.009	Fig 82
2550	238	13.010	Fig 82
2553	0	14.001	Fig 82
2554	0	14.002	Fig 82
2556	0	15.001	Fig 82
2557	0	15.002	Fig 82
2558	0	15.003	Fig 82
2559	0	15.004	Fig 82
2560	0	15.005	Fig 82
2561	0	15.006	Fig 82
2562	0	15.007	Fig 82
2564	0	17.001	Fig 83
2565	0	17.002	Fig 83
2566	0	17.003	Fig 83
2567	0	17.004	Fig 83
2569	0	18.001	Fig 83
2570	0	18.002	Fig 83
2571	0	18.003	Fig 83
2572	0	19.001	Fig 83
2573	0	19.002	Fig 83
2574	0	19.003	Fig 83
2575	0	20.001	Fig 84
2576	0	20.002	Fig 84
2580	0	23.001	Fig 84
2581	0	23.002	Fig 84
2582	0	23.003	Fig 84
2583	0	24.001	Fig 85
2584	0	24.002	Fig 85
2585	0	24.003	Fig 85
2586	0	24.004	Fig 85
2587	0	24.005	Fig 85
2588	0	24.006	Fig 85
2589	0	24.007	Fig 85
2590	0	24.008	Fig 85

Find Number	Urn Number	Inhumation Number	Figure
2591	0	24.009	Fig 85
2592	0	24.010	Fig 85
2593	0	24.011	Fig 85
2594	0	24.012	Fig 85
2595	0	24.013	Fig 85
2596	0	24.014	Fig 85
2597	0	24.015	Fig 85
2598	0	24.016	Fig 85
2599	0	24.017	Fig 85
2600	0	24.018	Fig 85
2601	0	24.019	Fig 85
2602	0	24.020	Fig 85
2603	0	24.021	Fig 85
2604	0	25.001	Fig 86
2605	0	25.002	Fig 86
2606	0	27.001	Fig 87
2607	0	27.002	Fig 87
2609	1159	29.001	Fig 87
2610	0	29.002	Fig 87
2611	0	29.003	Fig 87
2612	0	29.004	Fig 87
2614	0	30.001	Fig 87
2615	0	30.002	Fig 87
2616	0	30.003	Fig 87
2617	0	30.004	Fig 88
2618	0	30.005	Fig 88
2619	0	30.006	Fig 88
2620	0	30.007	Fig 88
2621	0	30.008	Fig 88
2622	0	30.009	Fig 88
2623	0	30.010	Fig 88
2624	0	30.011	Fig 88
2623	0	30.012	Fig 88
2625	0	30.013	Fig 88
2626	0	30.014	Fig 88
2627	0	30.015	Fig 88
2628	0	30.016	Fig 89
2629	0	30.017	Fig 89
2630	0	30.018	Fig 89
2631	0	30.019	Fig 89
2632	0	30.020	Fig 89
2633	0	30.021	Fig 89
2638	0	30.026	Fig 89
2645	0	30.033	Fig 89
2649	0	30.037	Fig 89
2656	0	30.044	Fig 89
2658	0	30.046	Fig 89
2661	0	30.049	Fig 89
2705	0	30.093	Fig 89
2706	0	30.094	Fig 89
2718	0	30.106	Fig 89

Find Number	Urn Number	Inhumation Number	Figure
2719	0	30.107	Fig 89
2720	0	30.108	Fig 89
2721	0	30.109	Fig 89
2722	0	30.110	Fig 89
2723	0	30.111	Fig 89
2724	0	30.112	Fig 89
2725	0	30.113	Fig 89
2726	0	30.114	Fig 89
2727	0	30.115	Fig 89
2728	0	30.116	Fig 89
2729	0	30.117	Fig 89
2730	0	30.118	Fig 89
2731	0	30.119	Fig 89
2732	0	30.120	Fig 89
2733	0	31.001	Fig 90
2734	0	31.002	Fig 90
2735	0	31.003	Fig 90
2736	0	31.004	Fig 90
2737	0	31.005	Fig 90
2738	0	31.006	Fig 90
2740	0	32.001	Fig 90
2741	0	32.002	Fig 90
2742	0	32.003	Fig 90
2743	0	32.004	Fig 90
2744	0	32.006	Fig 90
2745	0	32.005	Fig 90
2746	0	32.007	Fig 90
2747	0	34.001	Fig 91
2748	0	34.002	Fig 91
2749	0	34.003	Fig 91
2750	0	34.004	Fig 91
2751	0	34.005	Fig 91
2752	0	34.006	Fig 91
2753	0	34.007	Fig 91
2754	0	34.008	Fig 91
2755	0	34.009	Fig 91
2756	0	34.010	Fig 91
2757	0	34.011	Fig 91
2758	0	34.012	Fig 91
2759	0	34.013	Fig 92
2760	0	34.014	Fig 92
2761	0	34.015	Fig 92
2762	0	34.016	Fig 91
2765	0	34.019	Fig 93
2772	0	34.026	Fig 93
2777	0	34.031	Fig 93
2780	0	34.034	Fig 93
2783	0	34.037	Fig 93
2786	0	34.040	Fig 93
2789	0	34.043	Fig 93
2792	0	34.046	Fig 93

Find Number	Urn Number	Inhumation Number	Figure
2795	0	34.049	Fig 93
2798	0	34.052	Fig 93
2801	0	34.055	Fig 93
2811	0	34.065	Fig 93
2817	0	34.071	Fig 93
2830	0	34.084	Fig 93
2839	0	34.092	Fig 93
2843	0	34.096	Fig 93
2853	0	34.107	Fig 93
2862	0	34.115	Fig 93
2865	0	34.118	Fig 93
2877	0	34.130	Fig 93
2880	0	34.133	Fig 93
2888	0	34.141	Fig 93
2895	0	30.121	Fig 88
2896	0	35.001	Fig 93
2897	0	35.002	Fig 93
2898	0	35.003	Fig 93
2899	0	35.004	Fig 93
2900	0	35.005	Fig 93
2901	0	35.006	Fig 93
2902	0	35.007	Fig 93
2903	0	35.008	Fig 93
2905	0	35.010	Fig 93
2907	0	35.012	Fig 93
2922	0	36.001	Fig 94
2923	0	36.002	Fig 94
2924	0	36.003	Fig 94
2925	0	36.004	Fig 94
2928	0	36.007	Fig 94
2935	0	36.014	Fig 94
2936	0	36.015	Fig 94
2937	0	36.016	Fig 94
2944	0	36.023	Fig 94
2947	0	36.026	Fig 94
2949	0	36.028	Fig 94
2954	0	36.033	Fig 94
2955	0	36.034	Fig 94
2956	0	36.035	Fig 94
2957	0	36.036	Fig 94
2958	0	37.001	Fig 94
2959	0	37.002	Fig 94
2960	0	38.001	Fig 94
2961	0	38.002	Fig 94
2962	0	38.003	Fig 94
2963	0	38.004	Fig 94
2964	0	39.001	Fig 95
2966	0	39.003	Fig 95
2968	0	39.005	Fig 95
2969	0	39.006	Fig 95
2970	0	39.007	Fig 95

Find Number	Urn Number	Inhumation Number	Figure
2971	0	39.008	Fig 95
2972	0	39.009	Fig 95
2976	0	40.001	Fig 95
2977	0	40.002	Fig 95
2978	0	40.003	Fig 95
2979	0	40.004	Fig 95
2980	0	41.001	Fig 96
2981	0	41.002	Fig 96
2982	0	41.003	Fig 96
2983	0	41.004	Fig 96
2984	0	41.005	Fig 96
2985	0	41.006	Fig 96
2986	0	42.001	Fig 97
2987	0	42.002	Fig 97
2988	0	42.003	Fig 97
2989	0	43.001	Fig 97
2990	0	43.002	Fig 97
2991	0	43.003	Fig 97
2992	0	44.001c	Fig 97
2993	0	44.001b	Fig 97
2994	0	44.001a	Fig 97
2996	0	44.003	Fig 97
2997	0	44.002	Fig 97
3001	0	45.001	Fig 97
3002	0	45.002	Fig 97
3003	0	46.001	Fig 98
3004	0	46.002	Fig 98
3005	0	46.003	Fig 98
3006	0	46.004	Fig 98
3007	0	46.005	Fig 98
3008	0	46.006	Fig 98
3009	0	46.007	Fig 98
3010	0	46.008	Fig 98
3011	0	46.009	Fig 98
3015	0	46.013	Fig 98
3018	0	46.016	Fig 98
3019	0	46.017	Fig 98
3025	0	47.001	Fig 99
3026	0	47.002	Fig 99
3027	0	48.001	Fig 99
3028	0	48.002	Fig 99
3029	0	48.003	Fig 99
3030	0	48.004	Fig 99
3031	0	48.005	Fig 99
3033	0	48.006	Fig 99
3035	0	48.008	Fig 99
3036	0	48.009	Fig 99
3037	0	48.010	Fig 99
3038	0	48.011	Fig 99
3039	0	48.012	Fig 99

Find Number	Urn Number	Inhumation Number	Figure
3040	0	48.013	Fig 99
3041	0	48.014	Fig 99
3042	0	48.015	Fig 99
3043	0	48.016	Fig 99
3044	0	48.017	Fig 99
3046	1227	46.023	Fig 98
3047	0	50.001	Fig 100
3048	0	50.002	Fig 100
3049	0	50.003	Fig 100
3050	0	50.004	Fig 100
3051	0	50.005	Fig 100
3052	0	51.001	Fig 100
3053	0	51.002	Fig 100
3054	0	53.001	Fig 100
3055	0	53.002	Fig 100
3056	0	53.003	Fig 100
3057	937	53.004	Fig 100
3058	753	39.013	Fig 95
3059	0	54.001	Fig 101
3060	0	54.002	Fig 101
3061	0	54.003	Fig 101
3062	0	54.004	Fig 101
3063	0	54.005	Fig 101
3064	0	54.006	Fig 101
3065	0	54.007	Fig 101
3066	0	55.001	Fig 101
3067	0	55.002	Fig 101
3071	0	57.001	Fig 101
3072	0	57.002	Fig 101
3073	0	57.003	Fig 101
3074	0	57.004	Fig 101
3075	0	57.005	Fig 101
3077	0	58.001	Fig 102
3079	0	61.001	Fig 102
3080	0	62.001	Fig 102
3081	0	62.002	Fig 102
3082	0	62.003	Fig 102
3083	0	62.004	Fig 102
3084	0	62.005	Fig 102
3085	0	62.006	Fig 102
3097	0	62.018	Fig 102
3098	0	62.019	Fig 102
3099	1219	48.018	Fig 99
3170	0	5.001	Fig 79
3173	56	0	Fig 78
3182	0	0	Fig 77
3186		25.003	Fig 86
3187		25.004	Fig 86
3188		25.005	Fig 86

Notes

1. Edward Trollope, 1817–93, Archdeacon of Stow, later Bishop Suffragen of Nottingham (diocese of Lincoln). The leading figure in architecture, archaeology, ecclesiology and fine art within Lincolnshire through much of the second half of the 19th century (Leach 1992).
2. White's *Lincolnshire Directory* of 1856 lists Thomas Richardson as of Cliff Farm, Hibaldstow. The owner and occupier of Mount Pleasant Farm, the location described by Trollope, is given as Mrs Elizabeth Richardson. Thomas Richardson does not appear in the 1851 Census Enumeration Return but the farmer at Mount Pleasant is given as Elizabeth Richardson, widow, aged 37. In view of the age of his mother, Thomas Richardson may have been away at school. Slater's *Directory* of 1859 places Thomas Martinson Richardson, gentleman, in Kirton in Lindsey. Hibaldstow and Kirton in Lindsey are adjacent parishes.
3. Edward Peacock, FSA (1831–1915), antiquary and philologist, lived at Bottesford Manor, 5.7km north-west of Cleatham. (I am indebted to Mr N J Lyons for bringing Peacock's diary to my attention).
4. From a transcription by Edward Peacock of Norden's 1616 *Survey of the Soke of Kirton in Lindsey*, John Ryland's Library, Manchester English MS 216.
5. Lincoln Record Office.
6. It is possible that common land shared between Cleatham and Kirton in Lindsey led to some ambiguity as to the line of the boundary (Russell 1991, 118).
7. Lincoln Museum Accession Number 302.15. On loan to the North Lincolnshire Museum (2002).
8. British Museum Accession Numbers 71 5-13 2; 80 6-20 1; 80 6-20 2.
9. Urn 1103 bears a large handwritten label '*Funeral urn (supposed Anglo-Saxon) containing burnt bones – found 1856 near Kirton in Lindsey Lincolnshire. Presented by Mr G Dalton June 1858'.*
10. The urn was later deposited at the Manchester University Museum (Green 1932, 174) but is now on loan to the North Lincolnshire Museum.
11. North Lincolnshire Museum, Code MTDE 3. Matthew Maw made his own venture into archaeology with his 1867 excavation of the Cleatham barrow (Peacock 1868, 224–6; Jewitt 1870, figs 95–6; Leahy 2005, 29–30; North Lincolnshire Museum, Parish File).
12. Eagles, 1979, No 257; Trollope 1857, 276, pl opposite page 275.
13. Baldwin Brown 1915, 4, 800; Phillips 1934,139; Dudley 1949, 226; Meaney 1964, 156–7.
14. The metal detector finds from Cleatham have been included with the unstratified finds in this report.
15. Conditions on the warrens of North Lincolnshire were eloquently described by Abraham de la Pryme in June, 1695: '*Having passed over the Trent at Althorpe … I saw nothing observable but the barreness of the country, and the sandy commons that I passed over; which I no sooner saw, but it brought into my mind the sandy desarts of Egypt and Arabia … For here the sand is driven away with every wind, and when the wind is strong it is very troublesome to pass, because that the flying sand flys into one's face, and shoos, and pockkets and such like, and drives great drifts like snow-drifts. I have observed huge hedges quite sandyd up with it to the very top …*' (Jackson 1870, 58).
16. At Domesday Cleatham was valued at 90 shillings, the same as in 1066. There were three manors and some sokeland. The total assessment was three carucates. The landowners were the Bishop of Bayeux (Foster and Longley 1924, 4/14), St Peter of Burg (Peterborough) (ibid, 8/19, 21, 24), Gocelin son of Lanbert (ibid, 28/18) and 'Sortebrand and other Thanes' (ibid, 68/32).
17. The Darwin family was *the* Darwin family, being closely linked with Elston Hall in Nottinghamshire where Charles Darwin's grandfather, Erasmus Darwin, was born in 1731. Although he was unaware of it, Charles Darwin had pots on both sides of his family!
18. The writer is indebted to Dr Williams for many hours of stimulating conversation and a tour of the Anglo-Saxon cremation cemeteries of Lindsey.
19. Each hundred contained a nominal 12 carucates. These Danelaw hundreds should not be confused with the large hundreds found south of the Welland, each of which contained 100 hides and was more akin to the Danish wapentakes into which Lindsey was divided (Hart 1992, 287–8). The double hundred which included Cleatham contained only 23 carucates which causes no surprise, but the half-hundred of Kirton in Lindsey with eight, rather than the expected six carucates, is odd and may relate to Kirton's status as a the centre of a major royal soke centre.
20. 'Soke' is a difficult concept but is best described as land over which the lord of the manor had jurisdiction without directly owning the soil.
21. These wapentake names all terminate in the element *haugr* (Old Norse) or *Hlâw* (Old English) as in the case of Aslacoe, Candleshoe, Haverstoe, Langoe, Threo and Wraggoe (Pantos 2001, 66).
22. Excavations carried out in 1867 produced the remains of three Bronze Age urns (Peacock 1868, 224–6; Jewitt 1870, 92, figs 95–6; Leahy 2005, 29–30).

23. The moot was eventually held at the eponymous Corringham 11km to the south, with the Cleatham barrow perhaps representing an earlier site.
24. Following Scandinavian practice Lindsey was divided into Ridings with North, West and South Ridings which were, in turn, divided into wapentakes and hundreds. Each hundred was rated (artificially) 12 carucates and each Riding appears to have originally contained 50 hundreds (Yorke 1993, 147). While this system is late, some aspects of it may date from the early Saxon period.
25. Bede refers to Bardney, Barrow on Humber, Lincoln and Partney as being in Lindsey.
26. This map is based on the distribution of metal detector finds recorded as part of the Portable Antiquities Scheme up to March 2006. Details of earlier excavation finds have been added to this map.
27. I am indebted to Mr Gordon Taylor for discussing his work with me and making his results available.
28. At Castledyke the graves were found in five widely scattered areas. From these an estimate of the size of the cemetery was made (Leahy 1998, 338–41). This assumed that the total extent of the cemetery was defined by a polygon based on the graves on the edges of each excavated area. It was also assumed that the density of graves in the excavated areas was typical of the cemetery as a whole. This suggested a cemetery population of 436 graves. If, however, the polygon defining the extent of the cemetery is based, not on the edges of the excavated groups, but on outlying graves found during building work, the Castledyke cemetery may have contained as many as 800 burials.
29. The mechanism by which these dark stains are produced is not understood but this writer believes it to be the result of the decomposition of the bones changing the pH locally and allowing the precipitation of mineral salts.
30. The warrior grave contained a long sword, a seax, a spearhead, two knives and a bridle bit (unpublished notes by Glyn Coppack, North Lincolnshire Sites and Monuments Record). The hanging bowl was said to have been wrapped in a cloth when found (Bruce-Mitford 1993, 54–6, fig 5.8, pl 8; 2005, 147–54).

2

Cemetery organisation

Excavation methodology

The fieldwork at Cleatham was carried out in five three-week seasons, after the harvest, in late August–early September between 1984 and 1989 (Pl 4). The topsoil was removed by hand, which offered a number of advantages:

- It removed the danger of urns being further damaged by the use of earthmoving equipment.
- It allowed for the recovery of sherds from the topsoil, many of which were reunited with their bases.
- It reduced the area open at any one time, making it difficult for the site to be looted at night.

The site was excavated in 2 × 2m square boxes (4m^2) each of which was given an alpha-numeric code. Each of the main areas of the site was given its own grid which was fixed on the base-line. During the process of writing up all of the findspots were converted to base grid co-ordinates.[1]

Problems were encountered in distinguishing archaeological features on the site and it was rarely possible to define the edges of urn pits. Because of this the subsoil was excavated in 100mm spits. When an area had been fully excavated the remaining natural soil was broken with a pick to ensure that no urns had been missed. No urns were found by this process, although some graves were located. The fill of the northern boundary ditch was found to consist of re-deposited subsoil which was only differentiated from undisturbed natural by its increased moisture-retaining properties. In the dry conditions of the summer of 1984 the ditch was not visible and it was necessary to re-excavate an area in 1985 in order to trace its line. Attempts to locate the ditch using geophysical methods failed, as did all attempts to record it from the air. Aerial photography was carried out over a number of seasons using both visible light and infra-red film and, although peri-glacial features appeared as crop marks, the ditch could not be seen.

The urns were lifted as earth blocks with their contents still in place. These were then treated as table-top excavations during the following year. While the position of grave goods within the urns was noted, no attempt was made to record the fills in detail. This level of recording has been carried out elsewhere but it was not considered time-effective to repeat the exercise. It was necessary to excavate some of the groups of intercut urns on site to determine their relationships.

Boundaries and extent

The burials at Cleatham were concentrated on a band of deeper subsoil which ran north–south across the field (Pl 2). To the west of this there was no subsoil and the plough soil lay directly on the limestone basement; still further west the ground fell away to form Lincoln Edge. While some graves had been cut into the limestone, urns were absent. The northern boundary of the cemetery was marked by a ditch complex (Figs 6 and 7). Although some tip-lines could be seen these ditches contained a single, undifferentiated fill consisting of redeposited subsoil and with no indication of either rapid silt or a stabilisation layer. The shape of the ditch profiles suggested that repeated recutting had been carried out. No boundaries were found on the other sides of the cemetery. However, these may have consisted of hedges, as seems to have been the case at Sheffield's Hill cemeteries, where a hedge line was indicated by the traces of a shallow ditch and the holes left by tree roots (Leahy and Williams 2001).[2]

While the ditch defined the northern limits of the cremation cemetery it did not mark the extent of the graves which extended over a larger area. Sherds from Anglo-Saxon urns and redeposited grave goods found in the ditch showed it to be contemporary with the cremation cemetery. However Grave 13, which dated to the later 6th century, was cut through the ditch fill showing that the ditch was no longer in use at that

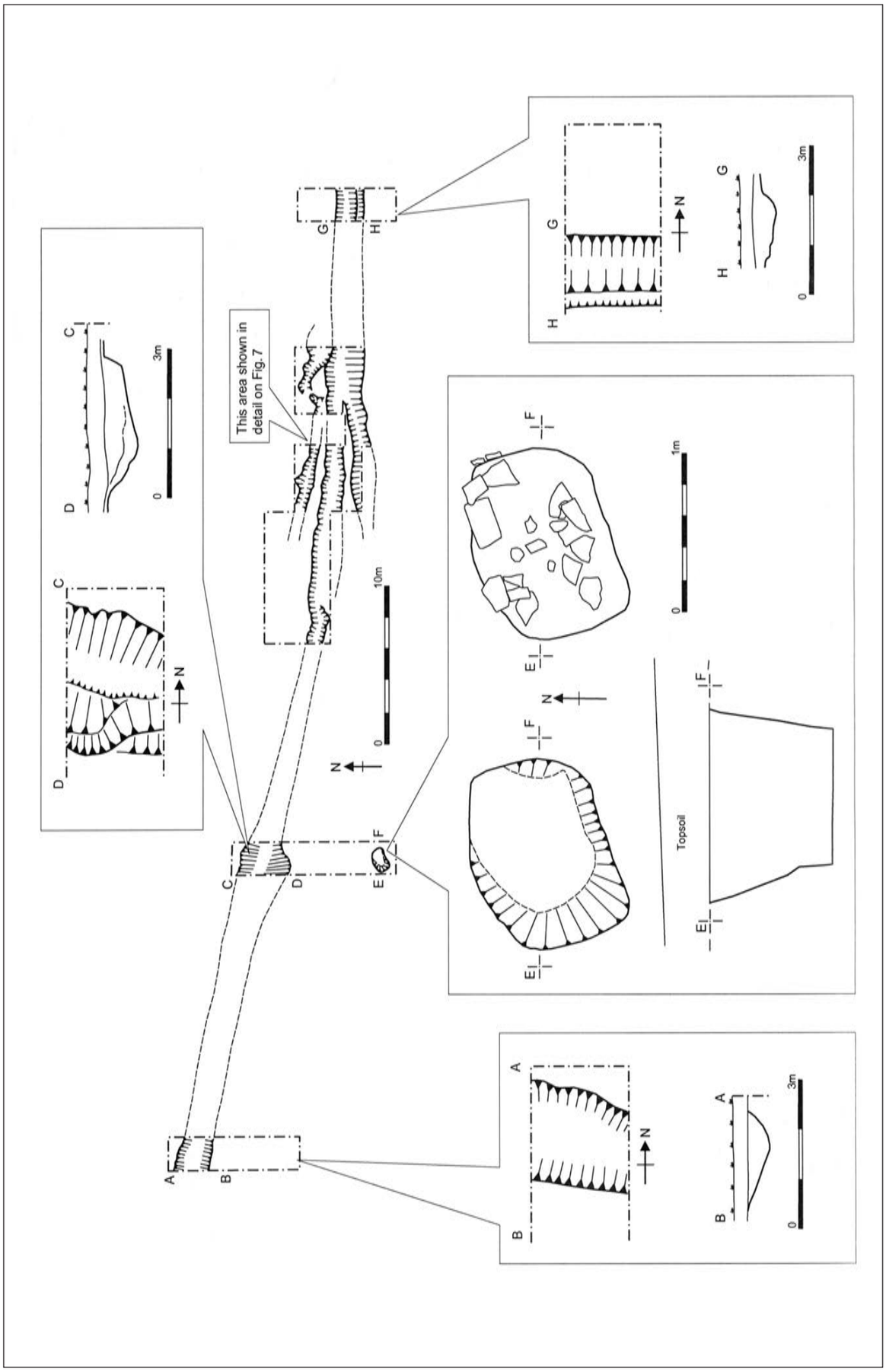


Fig 6 The ditch marking the northern boundary of the Cleatham cemetery

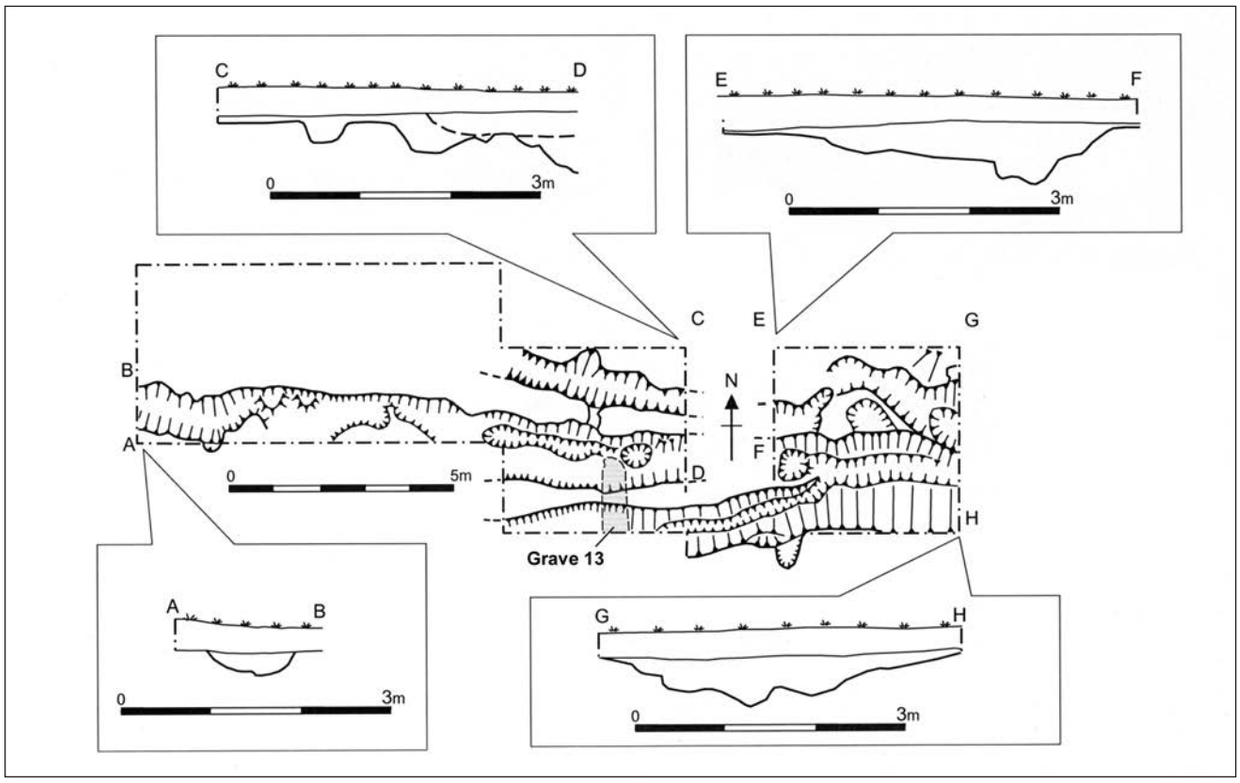


Fig 7 Detail of the main section of the northern boundary ditch

time. A further burial, Grave 21, was found 13m to the north of the ditch. This grave contained no finds and was very shallow; it may have lain outside the limits of the cemetery, perhaps representing the burial of a felon or a stranger.

The Spong Hill, Norfolk, cemetery had clearly defined boundaries, deviating only along the northern edge where the cremations extended amongst the 57 inhumations (Hills 1980, 203). Graves at Spong Hill were cut through the ditches of a Romano-British field system although cremations, on the western side of the cemetery, respected an earlier ditch, leaving a 4m-wide berm on either side of it (Hills *et al* 1984, 11, fig 111). At Elsham, a 6m-wide prehistoric ditch acted as the focus for a tightly packed group of urns, perhaps because its fill made for easy digging (Chris Knowles, pers comm).

The urns at Cleatham were concentrated in two main areas in the northern part of the site, separated by 5m of clear ground. Both of these concentrations extended south, but contained progressively fewer urns, neither reaching the trackway which seems to have been the site of the 1856 discovery. Due to the reduced depth of subsoil the degree of plough damage was progressively more severe to the south of the main areas. Intensive field walking was carried out in order to locate any further clusters of urns (Pl 8). None was found, suggesting that the limits of the cemetery had been located. It appears that 86% (1204/*c* 1400)[3] of the urns had been recovered.

Horizontal stratigraphy and phasing

The cremations

It had been hoped that it would be possible to define a pattern of horizontal stratigraphy on the Cleatham cemetery with the five phases spreading out from an original nucleus. There is evidence for this at Spong Hill where earlier objects were found towards the centre of the cemetery and stamp-linked pots towards its edges (Hills 1980, 204–6, figs 9.1–2). This was not the case at Cleatham. Urns of Phase 1 are found over the full area of the site and their distribution is shared by successive phases (Figs 8 and 9). There is a concentration of Phase 1 urns in the northern part of the north-east area which may have abutted the ditch that runs across the top of the cemetery. On reflection the lack of horizontal stratigraphy is not surprising; the

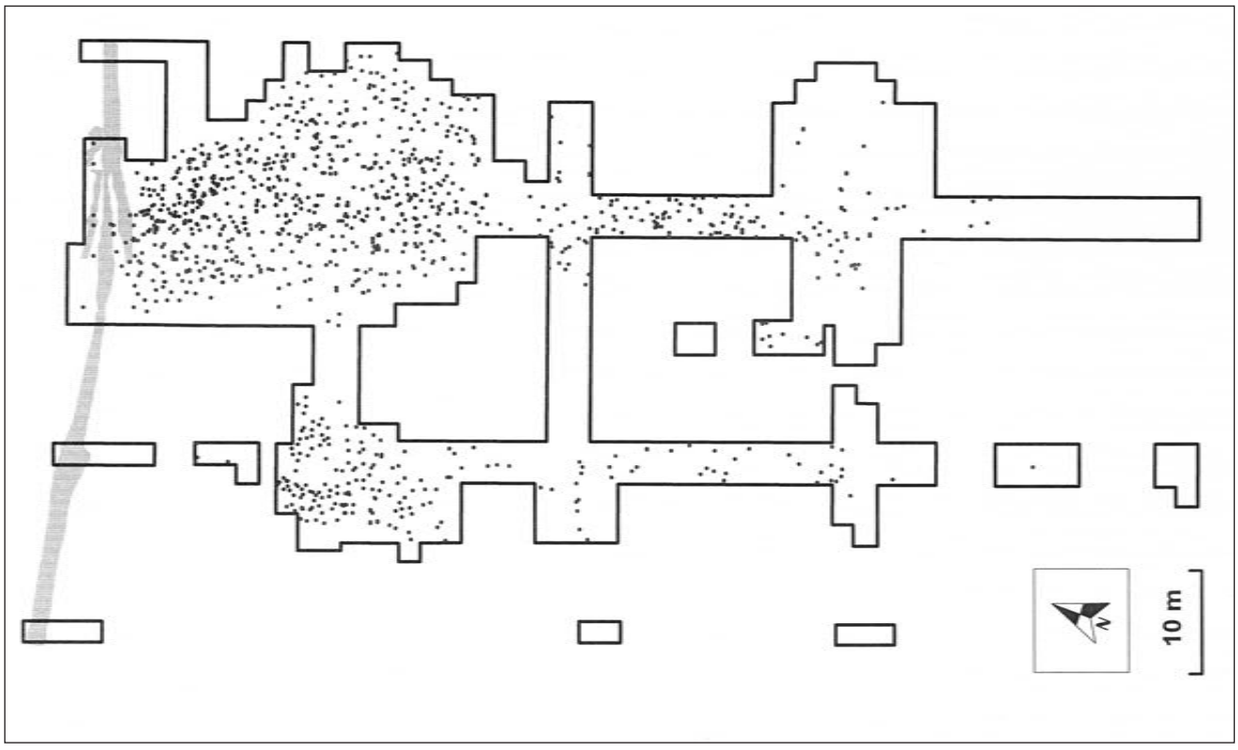
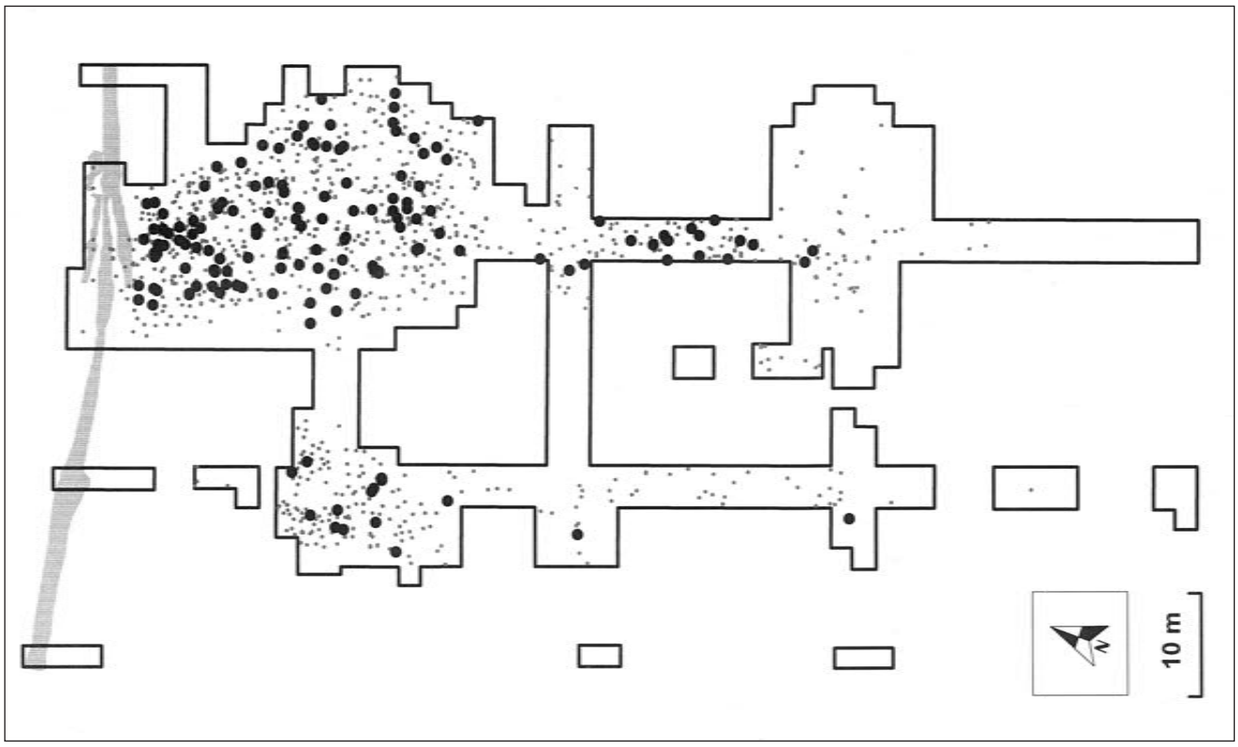


Fig 8 (left) The distribution of the urns across the Cleatham site, all phases
Fig 9a (right) The distribution of Phase 1 urns



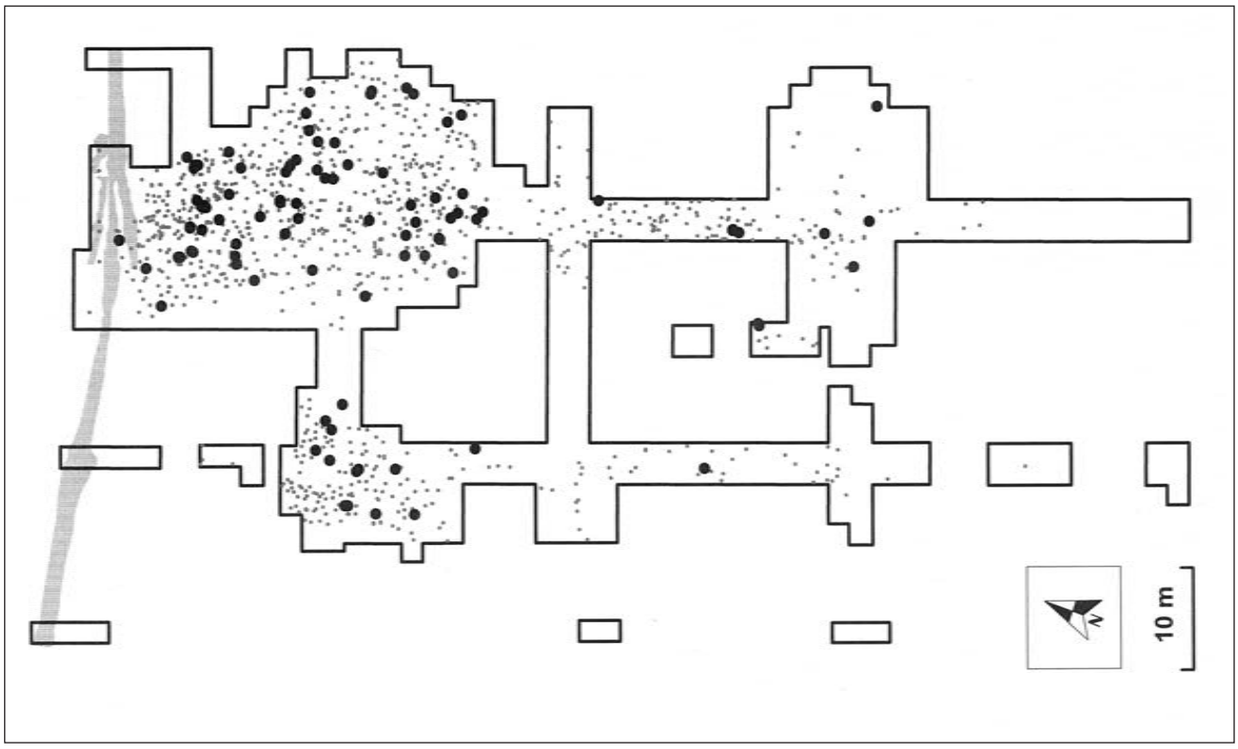
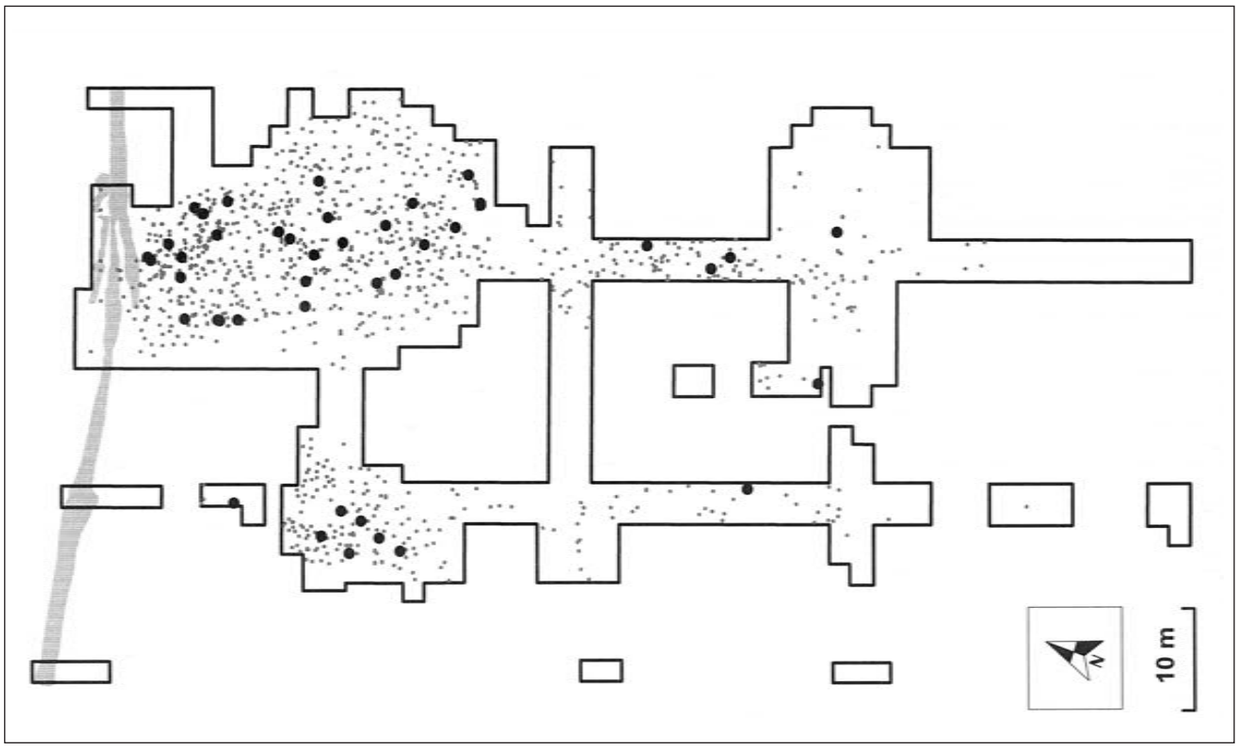


Fig 9b (left) The distribution of Phase 2 urns
Fig 9c (right) The distribution of Phase 3 urns



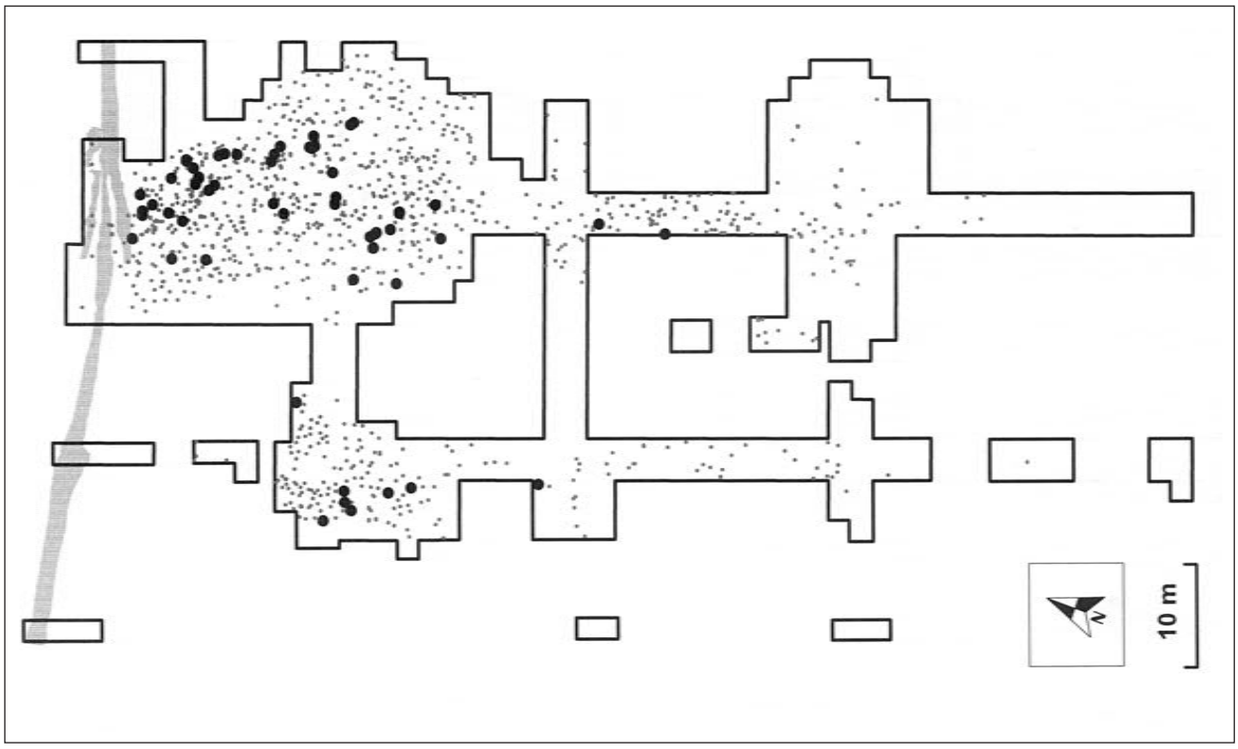
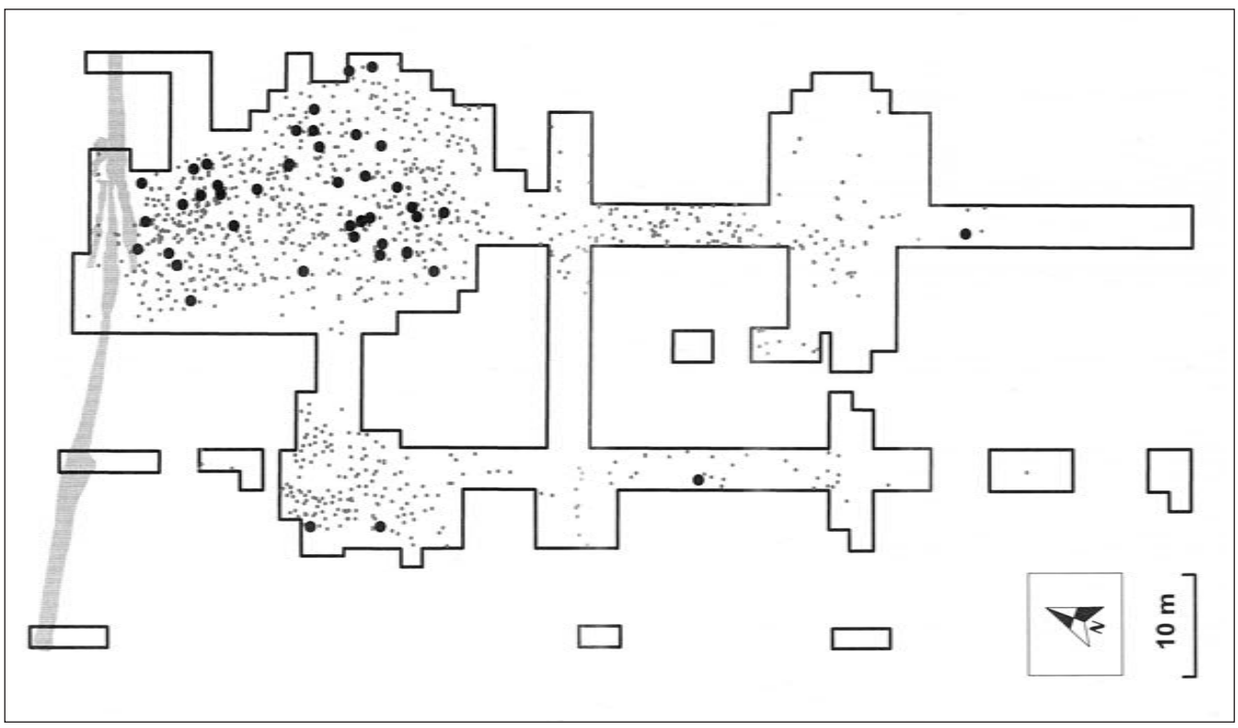


Fig 9d (left) The distribution of Phase 4 urns
Fig 9e (right) The distribution of Phase 5 urns



intercutting of the urns which allowed the Cleatham cemetery to be phased on stratigraphic grounds was a result of an absence of spatial expansion. While intercutting occurs on other cemetery sites (at South Elkington it was reported that 'in many cases three or four urns were jammed in together'; Webster and Myres 1952, 26) the degree to which it occurs at Cleatham is unusual. At Spong Hill, Hills was cautious about accepting superimposed urns as being successive (Hills 1980, 203) as were Lethbridge at Lackford (1951, 3) and Fennell at Loveden Hill (1964, 105). Having looked at Hills' published plans of the urn pits at Spong Hill one can only agree with her interpretation: at Spong Hill we are looking at superimposed, but contemporary, burials. This was not the case at Cleatham and there was no doubt about the relationship: later urns were hacked through earlier burials with up to seven vessels being intercut. The intercutting was not coincidental and appears to have been a deliberate act on the part of people who used the cemetery, and who may have been constrained by the shallow soil in many areas of the field.

Fifty-three of the Cleatham urns were associated with stones which may represent the remains of cairns marking particular locations (Pls 17–19). Both field stone and pieces of dressed Roman masonry were used. Stones were also found on and around some of the urns at Loveden Hill and, as at Cleatham, had sometimes smashed the urns they covered (Fennell 1964, 103). In addition to the intercut urns, examples were found of urns that had been buried together in groups of up to five. Intercutting was also a marked feature of the Castledyke, Barton on Humber, inhumation cemetery. Clusters of urns on the Cleatham plan suggest that the cemetery was divided into at least three, and possibly more, zones but the phasing and the distribution of finds did not allow these to be separated on anything other than spatial grounds.

In every instance at Cleatham where a relationship existed between the cremations and inhumations it was found that the graves cut the urns, sherds and the remains of smashed urns being found in 32 of the graves. At Spong Hill, seventeen urns were cut into the fill of graves, but only two urns were cut by graves (Hills *et al* 1984, 11), and it is reported that cremation was the later rite at Loveden Hill.

While cremation is stratigraphically earlier, a comparison of the grave goods found in the urns and in the graves shows that the two rites were in simultaneous use over much of the history of the Cleatham cemetery. The site plan shows that, like the Phase 1 cremations, the early graves are found over the whole area of cemetery (Fig 10). A change occurred in the latter part of the site's history with both later 6th- and 7th-century graves being restricted to north-eastern part of the site.

Cremations found without an urn

Nine cremations were found at Cleatham which had been interred without an urn, or at least not in a container which had survived. In some cases the globular shape of the bone deposit suggested that the remains had been placed in a bag.

'Urn' No	Bone mass	Grave goods
46	700	Bone comb fragments
74	770	
248	510	
266	20	
392	180	
530	680	Bone comb fragment
688	300	
761	390	Annular brooch and comb fragments
840	400	Fragment of iron shears

Table 1 Cremation deposits found without an urn

The burial of burnt bones without an urn has been noted on a number of Anglo-Saxon cemetery sites (Wilson 1992, 162). At Spong Hill they represented a maximum of 42 out of around 2000 burials (McKinley 1994, 103), but the practice was much more common at Portway, Hampshire, where they represented 22 out of the 86 cremation deposits (Cook and Dacre 1985, 43–50, 57–9). The practice was also observed at Loveden Hill but these deposits were rejected as having come from disturbed urns (Fennell 1964, 102). This may be the case at these cemeteries but at Cleatham the bone deposits were securely placed in the subsoil and formed tight, compact masses. They were deposited without an urn. Other than the absence of an urn these burials are not exceptional; grave goods are present with some of the deposits and the quantity of bone collected appears normal. Cremation is a more complex and expensive rite (both in terms of time and materials) than inhumation and these apparently un-urned burials may have been deposited in an organic container.

A final unusual burial is 'Urn' 687 which consisted of a mass of burnt bones in an unfired clay envelope. The bones were accompanied by fragments of a pair

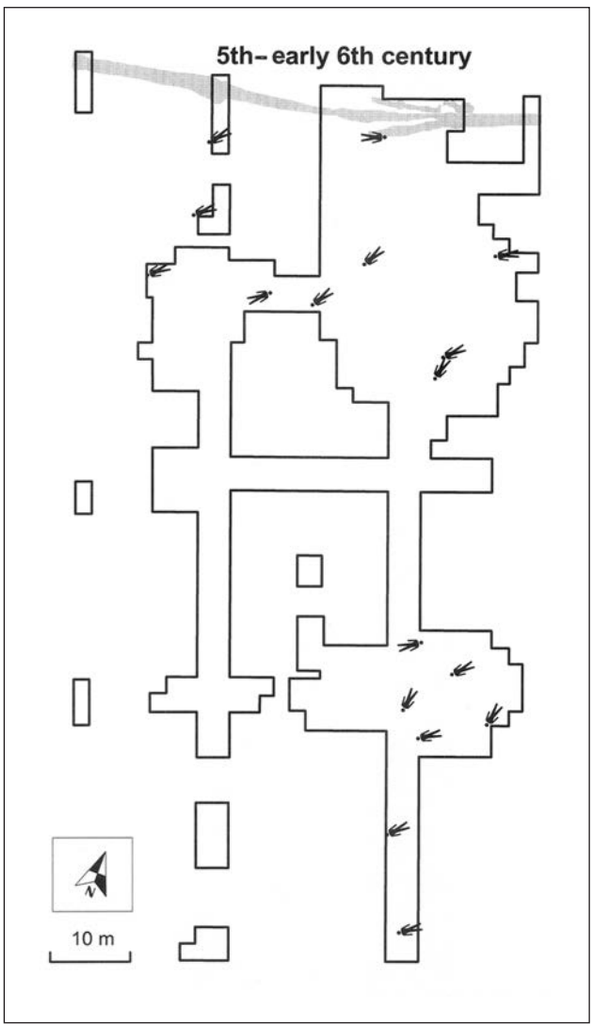


Fig 10a Location of dated graves at Cleatham: 5th–early 6th century

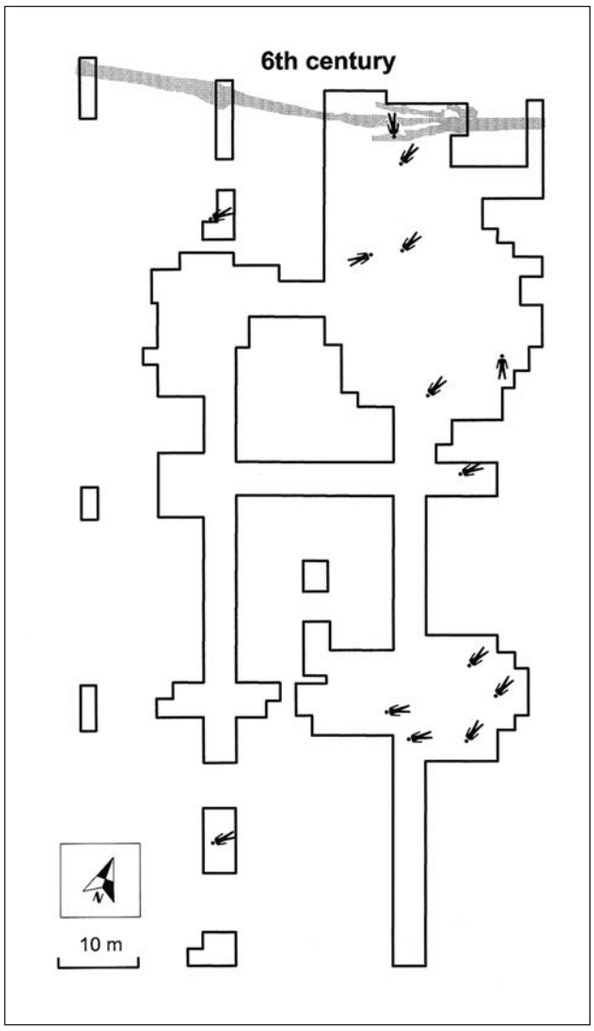


Fig 10b Location of dated graves at Cleatham: 6th century

of iron tweezers (Find 1858). The clay was found to contain small quantities of grass (5%) and mica (biotite, 2%). The latter may have already been present in the clay. This practice was also encountered at Loveden Hill where two cremations were found in pits lined with blue clay (Fennell 1964, 102).

Distribution of grave goods in the urns

Having the whole of the Cleatham archive on an electronic database allows the analysis of the pattern of find deposition in a way not previously possible. The computer is able to generate distribution maps of any find, or combination of finds. It is believed that what the writer has done with these data has merely touched on their potential and that a more systematic analysis will produce new insights into burial practice in the Early Anglo-Saxon period.

Even at the rather naive level at which the writer analysed the data it was possible to see, if not understand, some interesting phenomena. Figure 8 shows the distribution of urns across the site. This must form the basis of our study as it is variations from this pattern that are of interest. Plate 11 shows the distribution of copper alloy finds from the urns. As much of this material had been burnt beyond recognition, the plan shows the mass of copper alloy in grammes. A comparison of Figure 8 and Plate 11 shows that there is much less copper alloy in the urns at the northern end of the north-eastern area. While there is little evidence for horizontal stratigraphy at

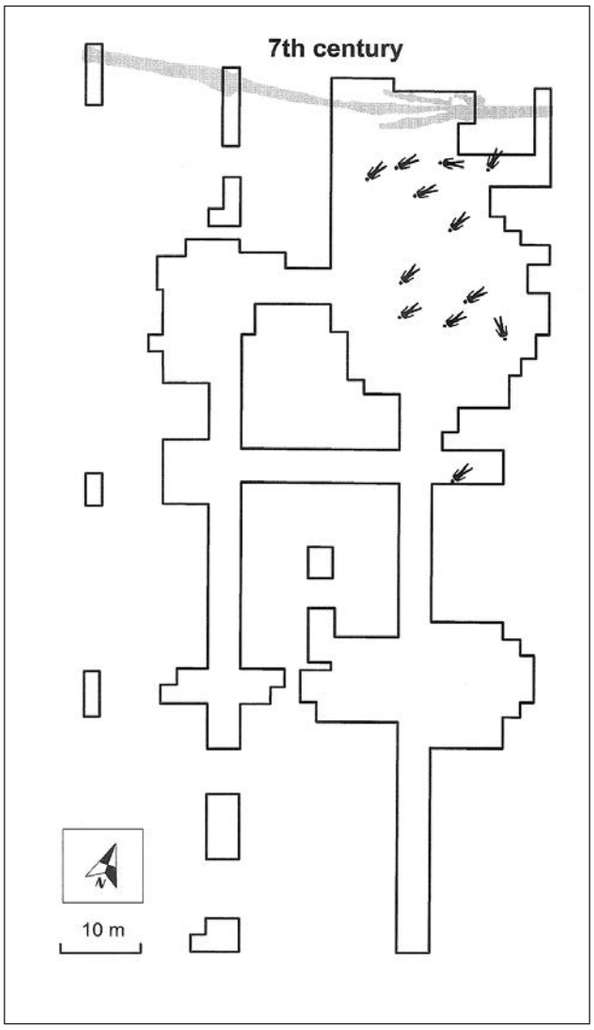


Fig 10c Location of dated graves at Cleatham: 7th century

Cleatham it is noticeable that there is a concentration of Phase 1 urns in this part of the site (Fig 9a) and it possible that less copper alloy was available during the site's early stages. It is also notable that most of the urns that contained sherds of Roman pottery were in this area of the site. A plot of the number of 'find types' occurring in the urns failed to indicate that any part of the cemetery was 'richer' than the rest (Pl 10) although a cluster of rich burials may be present in the north-west area of the site.

The mass of burnt bone contained in the urns is examined on Plate 12. This is not particularly informative but does show the level of destruction that had occurred in the south-east area of the site where few of the urns retained the full burial deposit. The mass of burnt ivory from the urns is also not informative although it does seem that the pattern of deposition does not simply follow that of the urns; other factors may have been involved. Bone combs (Pl 13) and glass beads (Pl 14) have interesting distribution patterns in that the combs are concentrated on the western side of the north-east area while beads appear to be more common on the eastern side of the area. Why this should be the case is difficult to understand; the phasing of the cemetery suggests that the difference is not chronological, all areas of the sites being in use over the five phases. It is impossible to tell if other factors such as gender or status played any part in generating the difference.

The number of burials

If limits of the inhumation cemetery are taken as the outlying graves and used as the basis of an irregular polygon this would have an area of 4919m^2. Assuming that this polygon contained the same density of burials[4] as the excavated area, it would seem that the Cleatham cemetery contained, in addition to the 62 graves found, a further 66, giving a total of 128 inhumations. Similarly, if the area of the cremation cemetery is calculated to include those destroyed areas to the east and west of the main site axis, the cemetery would have contained 1342 cremation burials. To these we can add the '50 or 60 urns' destroyed in 1856, giving an original total of around 1400 cremations. The Cleatham cemetery therefore, probably contained around 1528 burials. Cleatham is the third largest Anglo-Saxon cemetery in England, the two larger being Spong Hill, Norfolk, with *c* 2700 burials (McKinley 1994, 66) and Loveden Hill, Lincolnshire, with *c* 1700 burials.

Demography

In calculating the size of the population represented by the *c* 1528 burials, there are some unknowns which should be recognised, even though it is difficult to take them into consideration. The cemetery contained 1400 urns, but some will contain the remains of more than one individual. Elsewhere it has been found that between 1.9% (Illington) and 7.2% (Sancton) of urns contained multiple burials

(McKinley 1994, 100). In the absence of a bone report, each Cleatham urn was counted as a single burial when calculating the population size. The lack of a bone report also made it impossible to take children into consideration and the figures quoted are for the adult population. A further unknown in calculating the population size is the length of time the cemetery was in use. It is clear that Cleatham was being used throughout the early Anglo-Saxon period from the 5th century into the 7th but the low number of Final Phase graves suggests that activity was at a low level during the later part of the site's history. In view of this, estimates were made of the population based on the cemetery having either a 150- or a 200-year period of use.

To estimate the population represented by a cemetery a *Crude Mortality Rate* (CMR) is used; this is the number of deaths that would be expected to occur per thousand people in each year. The calculations below follow the work of Jacqueline McKinley on the Spong Hill cremations (McKinley 1994, 69–71) using a CMR taken from the work of Ubelaker (1974). This suggests a CMR of 24.6 per 1000 per year. The population was then calculated using the formula:

$$P = \frac{1000\ N}{MT}$$

Where P = the population
N = the number of burials
M = the Crude Mortality Rate
T = the period over which the burials took place.

- Assuming that the Cleatham cemetery was in use for 150 years the 1528 burials represent a population of 414 adults.
- Assuming that the Cleatham cemetery was in use for 200 years the 1528 burials represents a population of 311 adults.

This is not a large number of people but is comparable with the populations of 595 (150 years) and 446 (200 years) which McKinley suggested for Spong Hill. It must be recognised that this is a simplistic estimate, based on the assumption that the population size remained constant throughout the history of the cemetery.

If we take the demographic estimate a little further and extend it to the whole of Lindsey some interesting observations may be made. Lindsey contains 49 known Anglo-Saxon cemeteries of which five are large (Castledyke, Cleatham, Elsham, Elkington and West Keal), the others being much smaller. If we assume that:

- Castledyke contains 436 burials
- That each of the four cremation cemeteries contains, like Cleatham, 1528 burials,

  4 x 1528 = 6112
- That all 44 of the smaller inhumation cemeteries contain 150 graves (probably an overestimate):

44 x 150 = 6600 then the Anglo-Saxon cemeteries of Lindsey contain a total of **13,148**.

- Assuming that burial took place over 150 years the 13,148 burials represent a population of 3562 adults.
- Assuming that burial took place over 200 years the 13,148 burials represent a population of 2672 adults.

These figures are unsound for many reasons but they do serve to show the inadequate size of the population represented by the cemeteries. If the number of cemeteries was to be doubled, tripled or quadrupled the population represented would still not be sufficient to prevent large-scale woodland regeneration in the post-Roman period.

There is some evidence for farmland falling out of use in the sub-Roman period. Recent work has shown there was a sharp increase in tree and shrub pollen and a corresponding fall in herb pollen in the period AD 420–1200 (Van de Noort and Ellis 1998, 28–9). This appears to represent a decline in cultivation, followed by a long period of continuous clearance. This is supported by the evidence of dendrochronology which points to reafforestation following the departure of the Romans (Tyers *et al* 1994). While there is some evidence for the reversion of farmland to its natural state in the post-Roman period this is not on the massive level that would result from a population falling to only 3562 adults. At Domesday, Lindsey had a population of about 60,000 people and we should be looking at something in that order. One might suspect that there was a large section of the community which does not appear in the burial record, and that these people were the surviving sub-Roman population.

Burial practices

Grave structures (Figs 11–32)

The depth to which the Cleatham graves were cut into the subsoil varied between from 20mm to 950mm. It appears that the depth of the graves was not related to the age or sex of the person buried or to the date at which burial took place, but there was a correlation between depth and grave goods. No grave with a depth of more than 500mm lacked grave goods. It was found that 25 of the graves contained stones or pieces of masonry in their fill (Pls 17–19). Many of the stones had been squared and are likely to have come from the Mount Pleasant Roman villa, 500m to the south of the cemetery (Fig 3). No correlation was found between the use of stones in the fill of graves and the age or sex of the person in the grave. The use of stones in the fill of the graves was also unrelated to the finds. A rich burial, like Grave 34 might lack stones while Graves 52 and 56 contained stones but no grave goods. It was also found that the inclusion of stones was unrelated to the date of the burial, occurring in graves dating to both the late 5th and the 7th century. The reason for the inclusion of stones in the fill of graves is not understood but it may have been to protect the body from disturbance. At Castledyke only 10% of the graves with stone in their fills had been disturbed compared to 20% of the others (Drinkall and Foreman 1998, 212). Some of the Sheffield's Hill graves were found to contain traces of intertwined branches which may have performed a similar protective function. Limestone blocks were found surrounding and covering the bodies at Loveden Hill and, in one case, two bodies had a Roman stone column laid over them (Fennell 1964, 87). At the South Elkington, Lincolnshire, cemetery the urns appeared to have been covered by large flint nodules (Webster and Myres 1952, 25–6).

No trace of any coffins was preserved at Cleatham nor was it possible to detect postholes relating to any above-ground elements of the graves. Grave 59 contained two rows of stones along its sides that probably supported a plank roof forming a chamber (Pl 19). This grave was 410mm deep and, at 104°, could be described as a west–east burial. It contained the unaccompanied remains of a young adult male. The chamber in Cleatham Grave 59 is comparable with the chamber in Spong Hill Grave 40. This was a rich weapon burial in which the plank roof was supported by stacks of flints and turves at its ends (Hills *et al* 1984, 91–4, figs 49, 95–6). The form of this grave may also be compared with a Romano-British burial practice or 'long cist' burials found in the north and west of Britain. Three of the other Cleatham graves contained a line of masonry blocks down their northern sides (Graves 34, 41 and 47: Pl 18). The pre-excavation grave plans showed that this line of stones could be seen at the top of the subsoil. The stones may have originally extended above the ground surface as a wall, marking the grave. All of the graves were aligned west–east (Grave 34: 111°, Grave 41: 116°, Grave 47: 104°)[5] and were of 6th-century date.

Grave alignments

As there has been some discussion of the alignment of Anglo-Saxon graves (Rahtz 1978, 1–14) the orientation of the Cleatham graves was examined but no correlation between the alignment of the graves and the age, sex or dating of the burial could be found. It can be seen from Figure 33 that most of the Cleatham graves had an alignment of between 86° and 155°. Below 155° the graves seem to show a continuous variability; the eight graves above this show a greater degree of divergence. It would seem that, for the most part, the people using the Cleatham cemetery aspired to a general west–east alignment but were not too bothered about some variation.

Body positions

It was possible to determine the position of the body in 55 of the 62 Cleatham graves. Four (6.5%) of the bodies were crouched, 28 (45.2%) were extended, 20 (32.3%) were flexed and 3 (4.8%) were prone.[6] Crouched burial was used for two children, an adult and a mature adult. In no case was the sex determined but three were found with female dress fittings. No children were found in an extended position which seems to have been favoured for the burial of young adults: they represented 36.6% of the buried population but occupied 66.7% (16/24) of extended graves. Of the remaining graves, five (20.8%) contained the bones of adolescents, and three contained mature and old adults. Both males and females were found in the extended position (fourteen males, eleven females, three undeter-

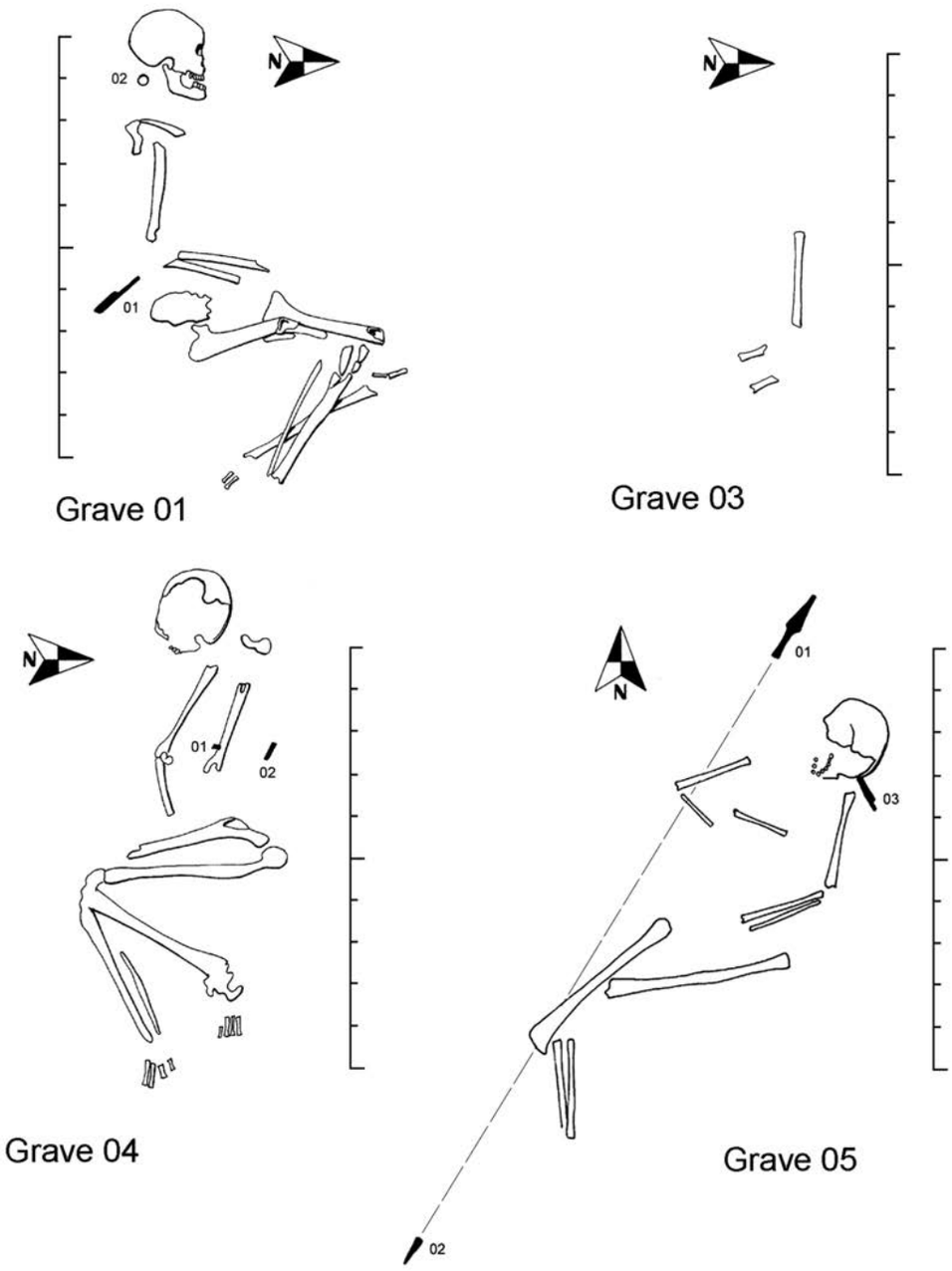


Fig 11 Plans of Graves 01–05. Scale bar 1m

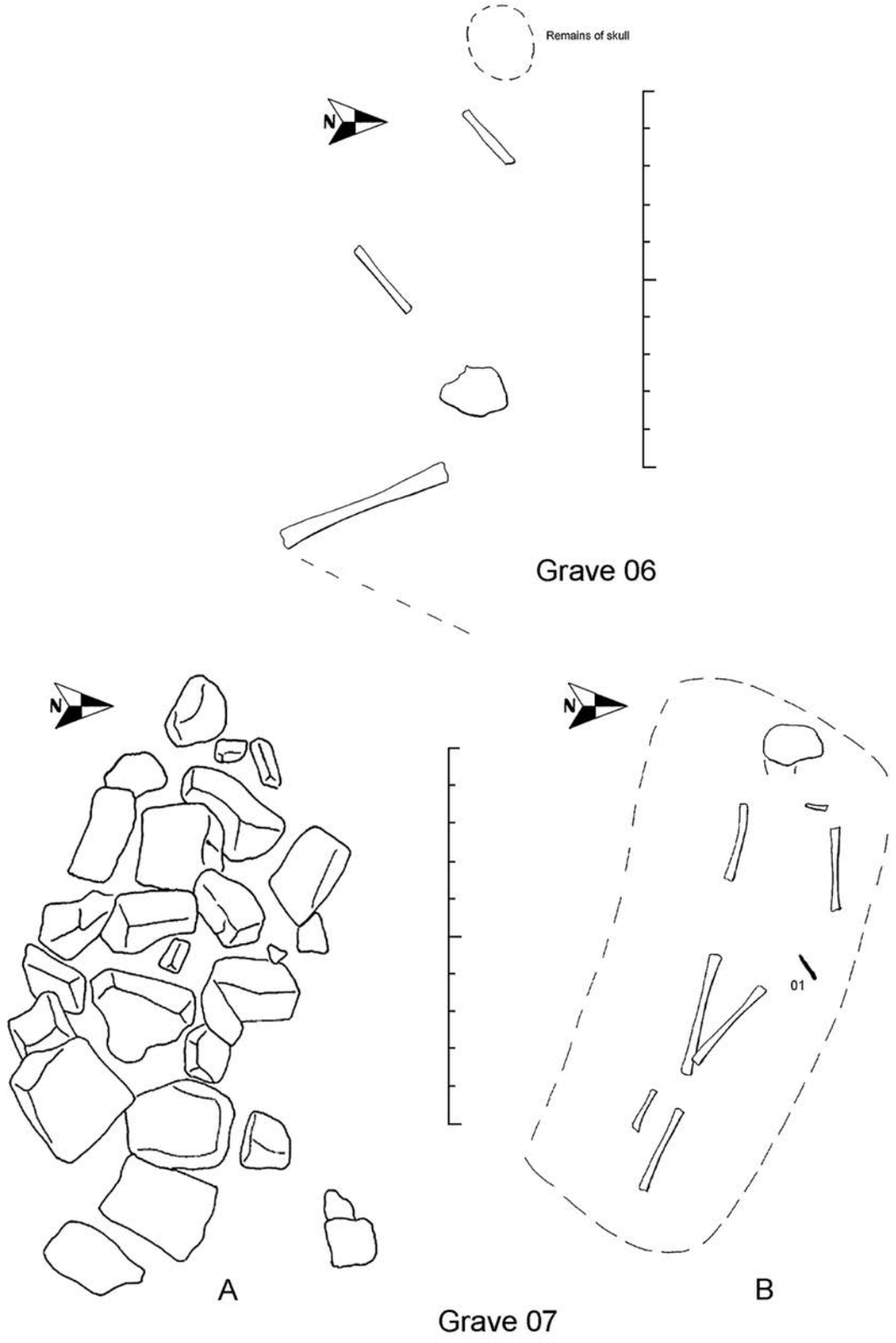


Fig 12 Plans of Graves 06–07. Scale bar 1m

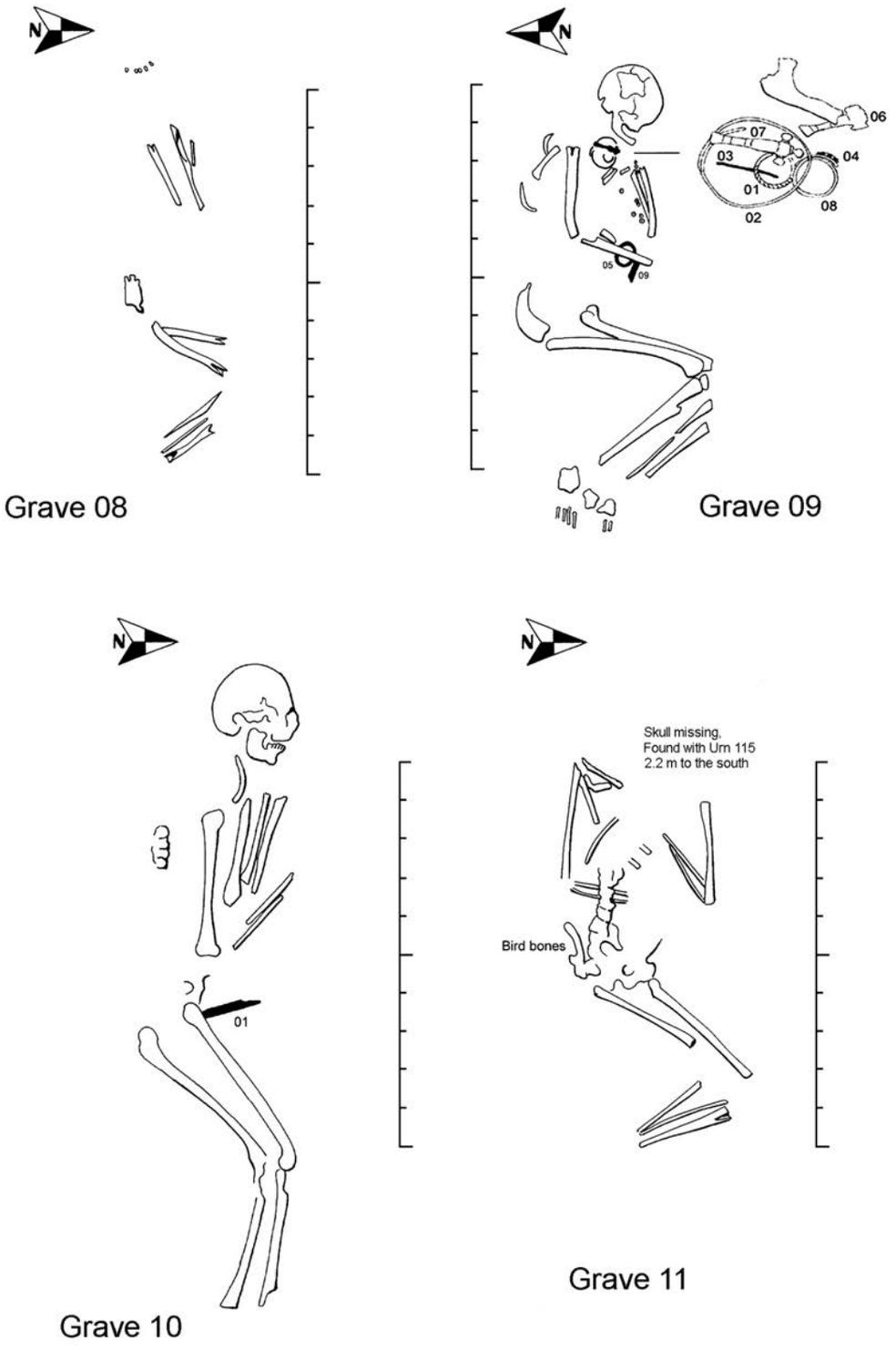


Fig 13 Plans of Graves 08–11. Scale bar 1m

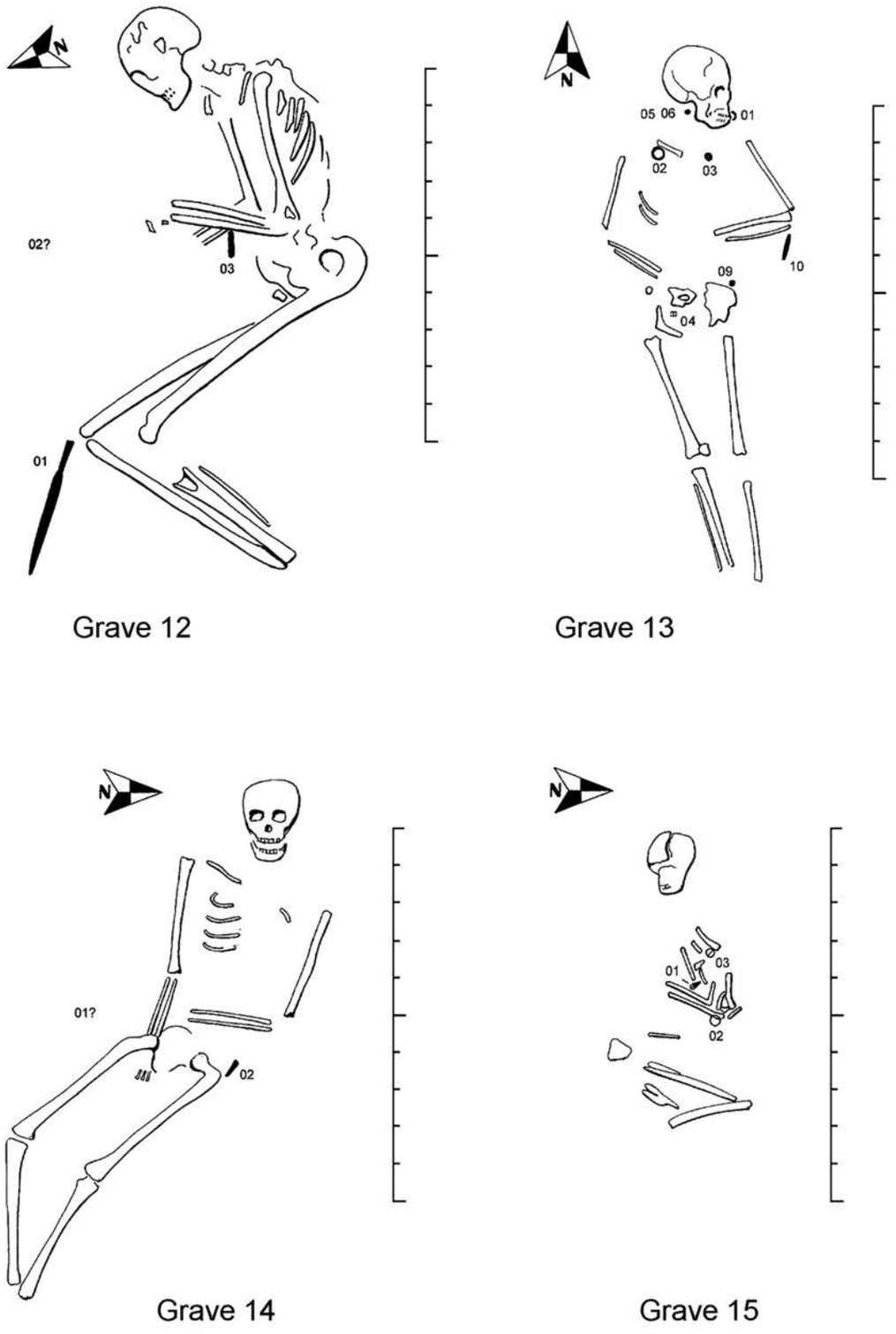


Fig 14 Plans of Graves 12–15. Scale bar 1m

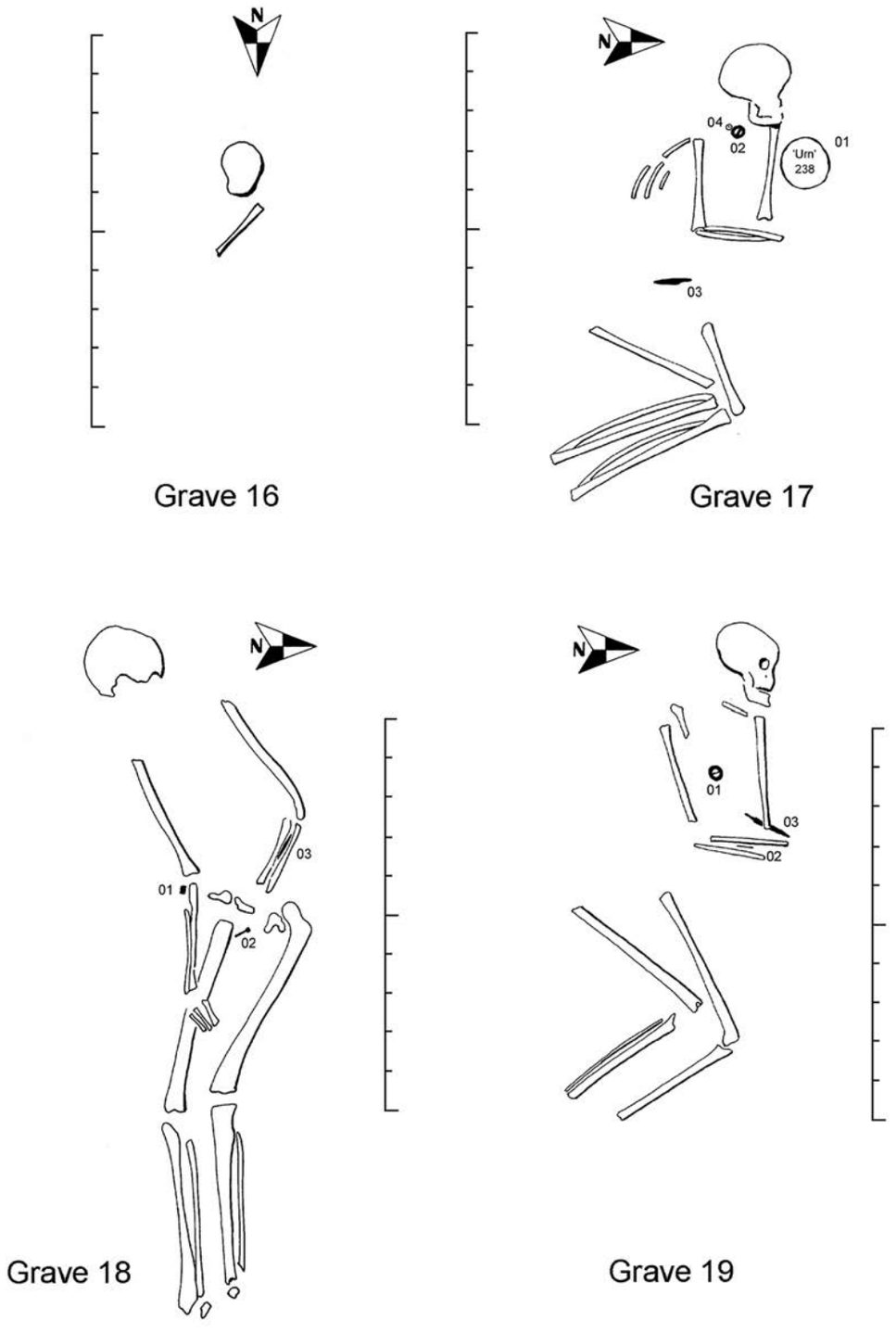


Fig 15 Plans of Graves 16–19. Scale bar 1m

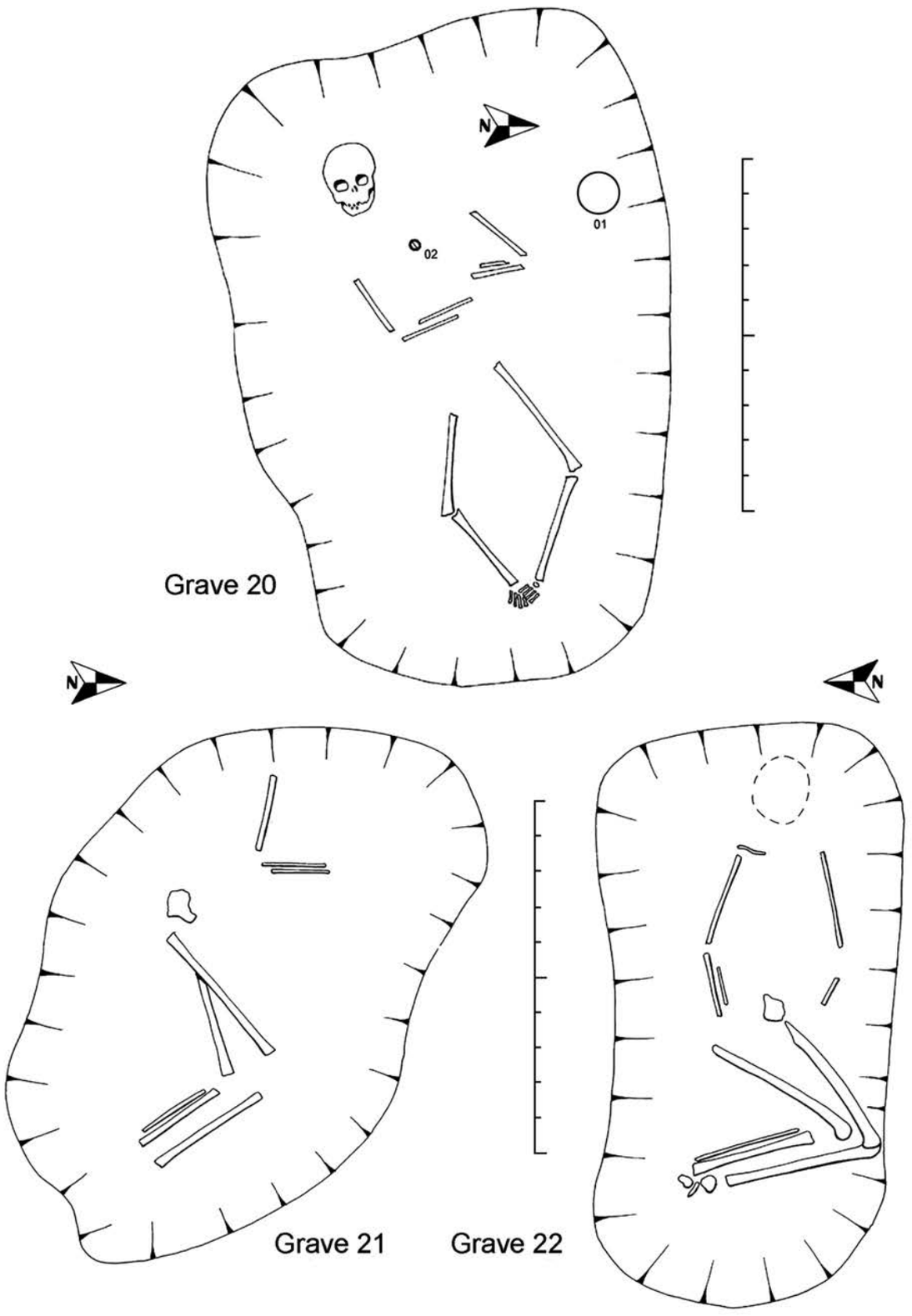


Fig 16 Plans of Graves 20–22. Scale bar 1m

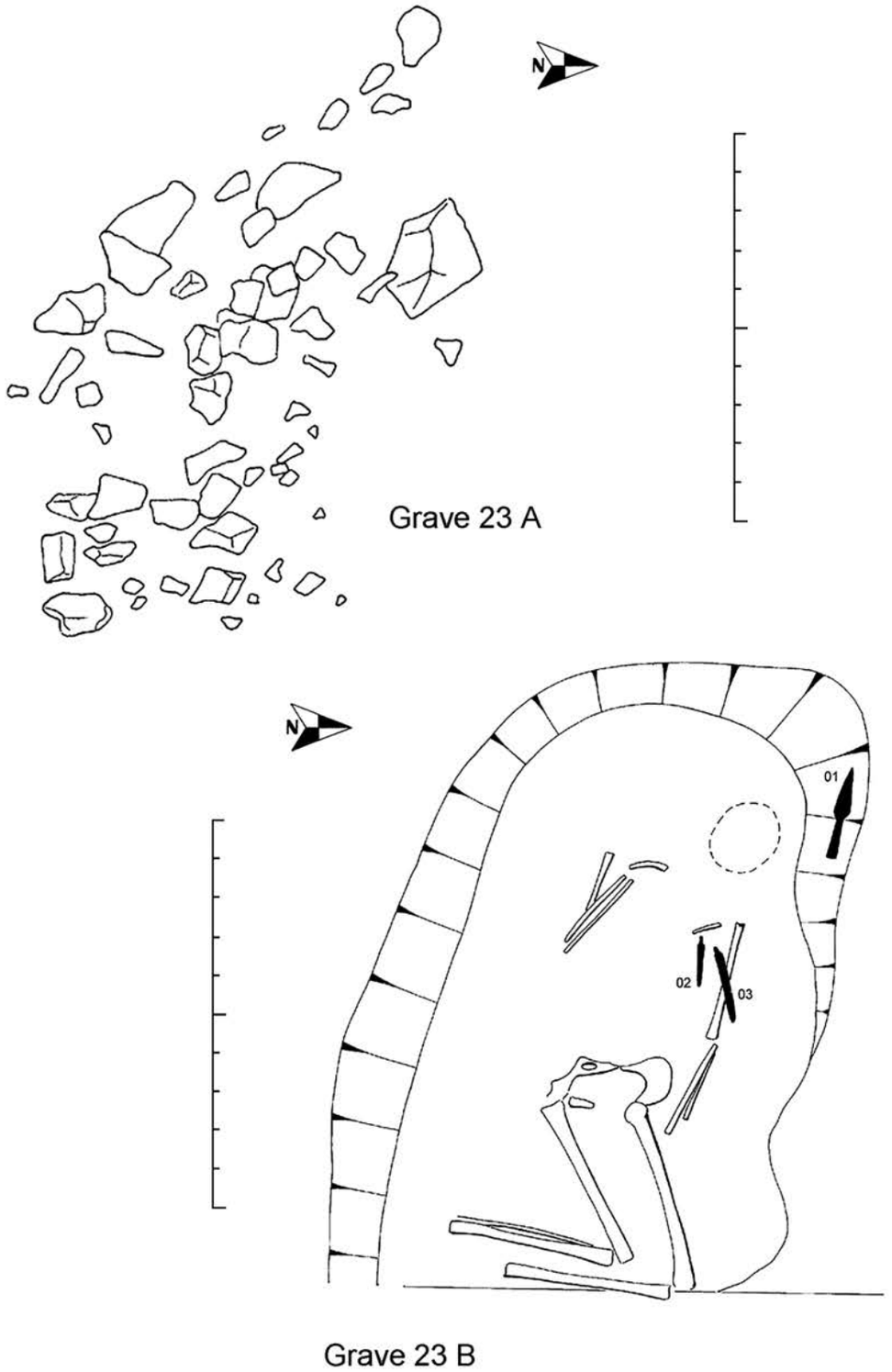


Fig 17 Plan of Grave 23. Scale bar 1m

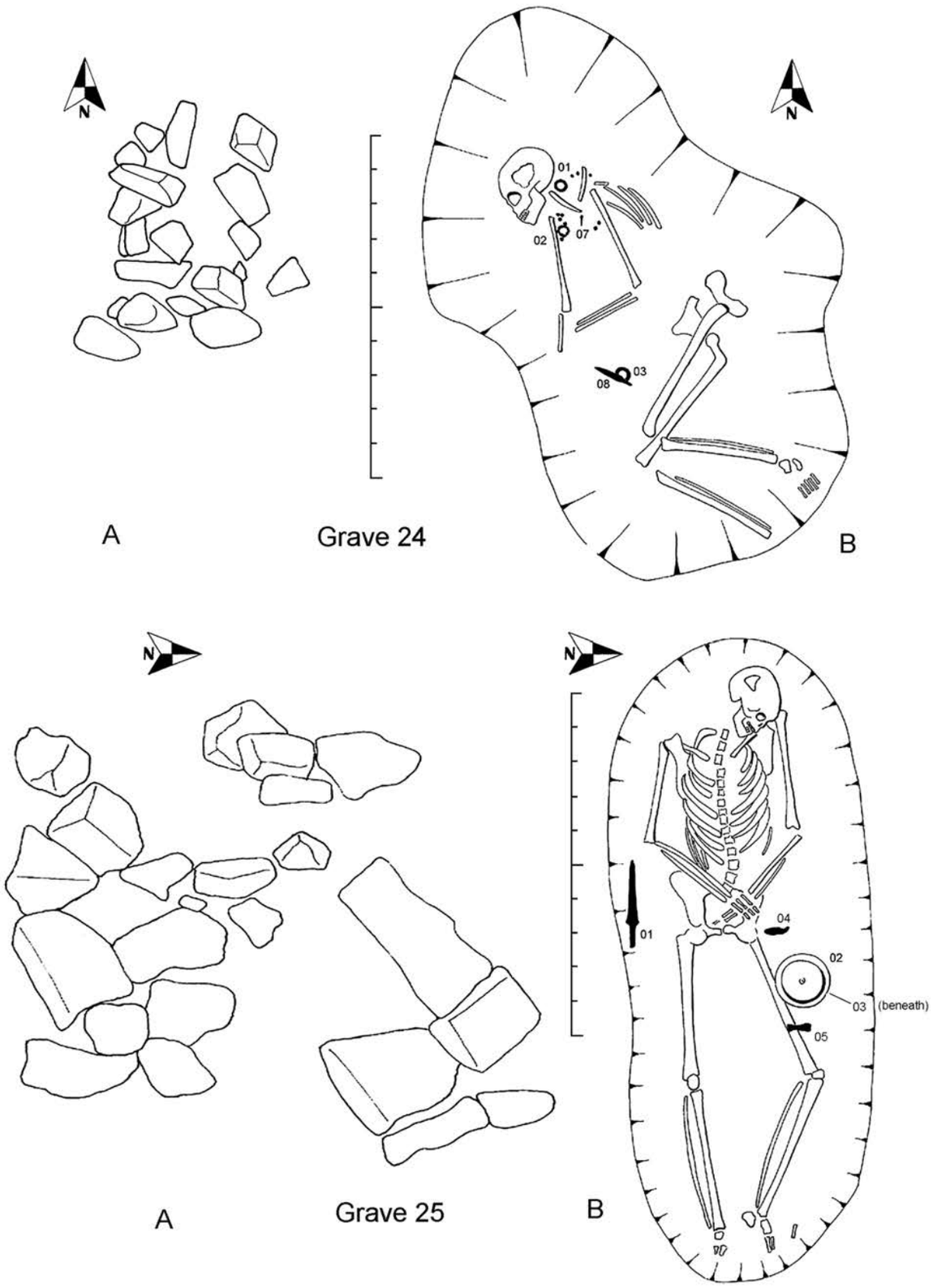


Fig 18 Plans of Graves 24–25. Scale bar 1m

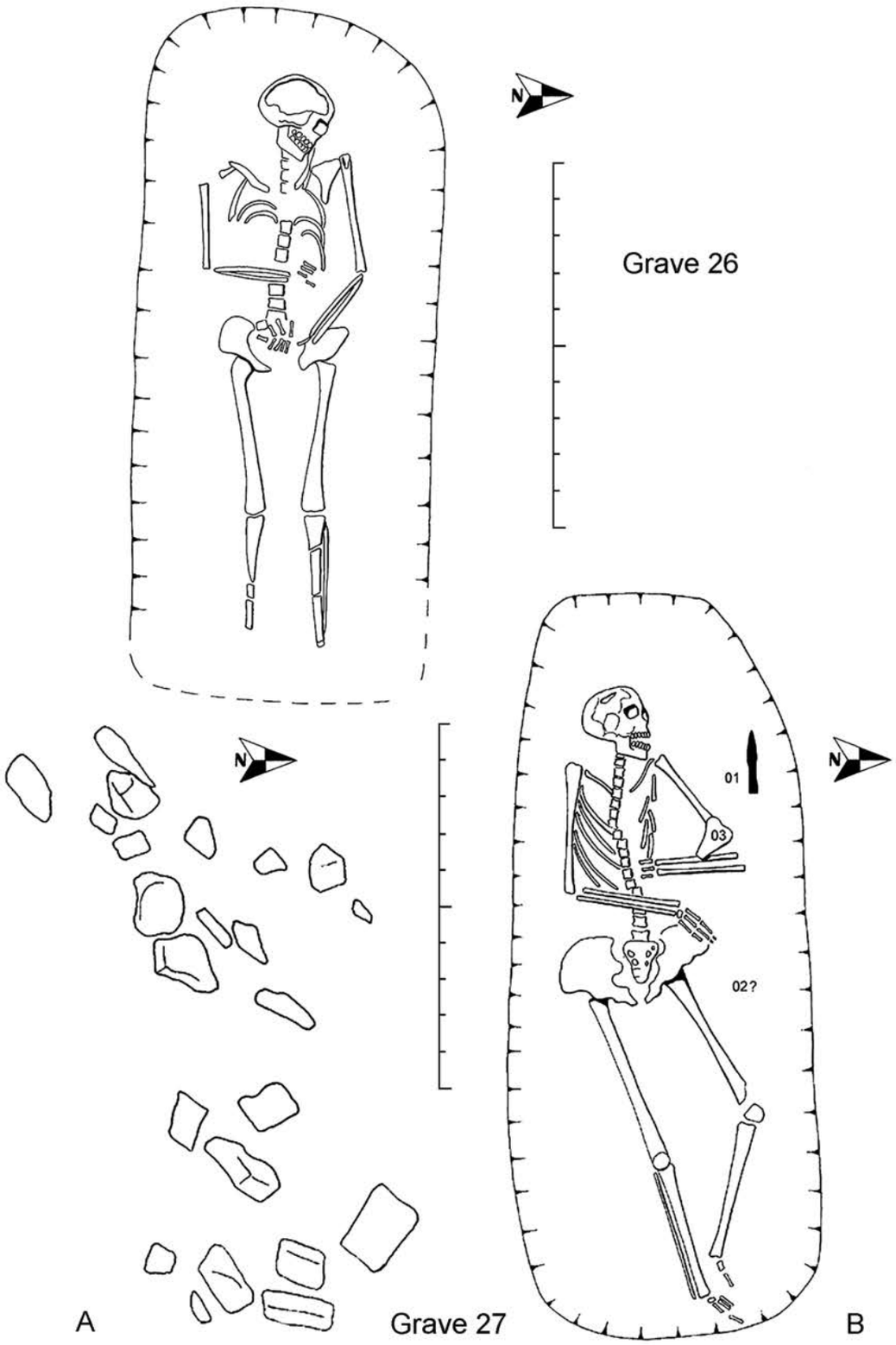


Fig 19 Plans of Graves 26–27. Scale bar 1m

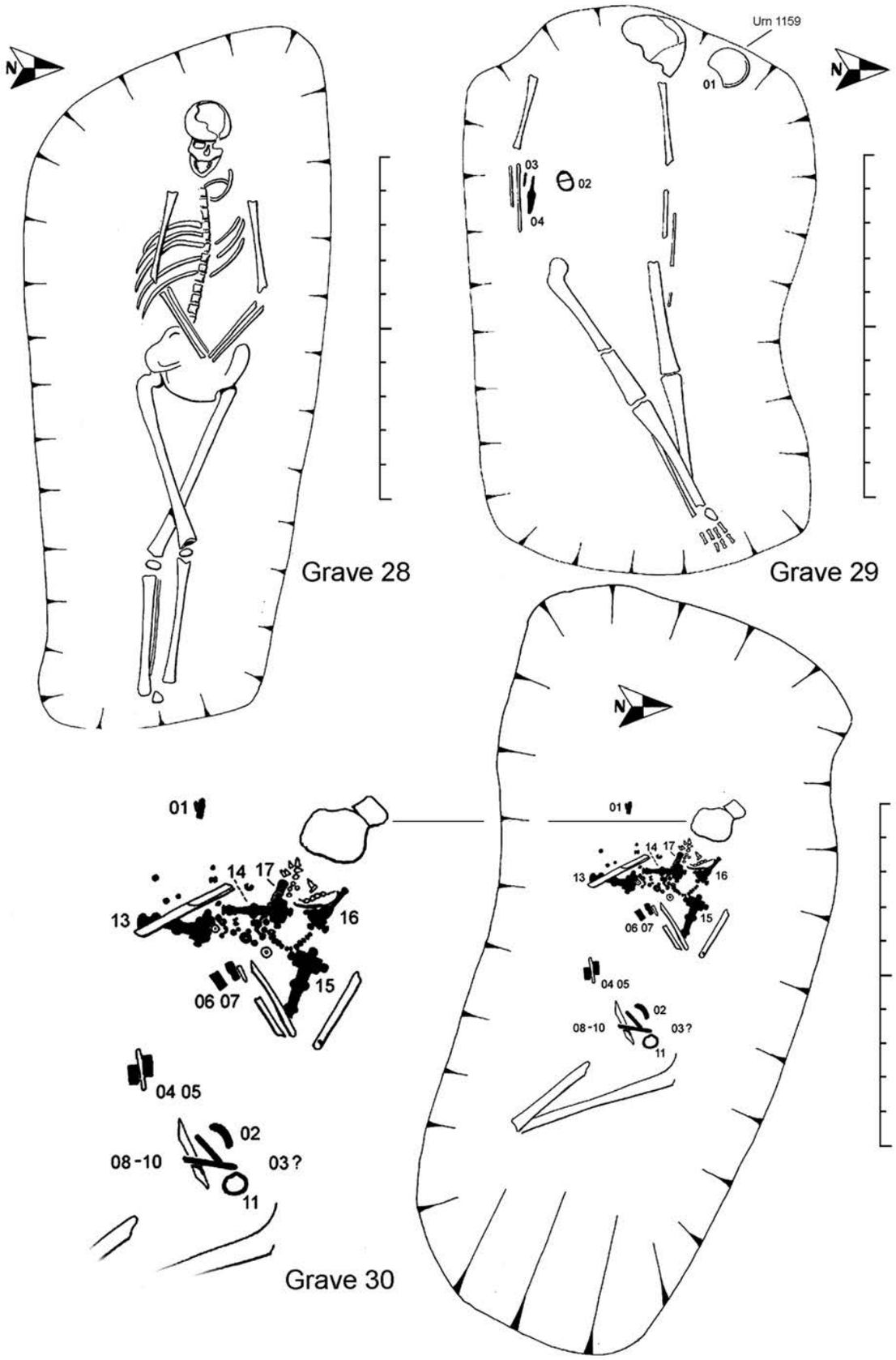


Fig 20 Plans of Graves 28–30. Scale bar 1m

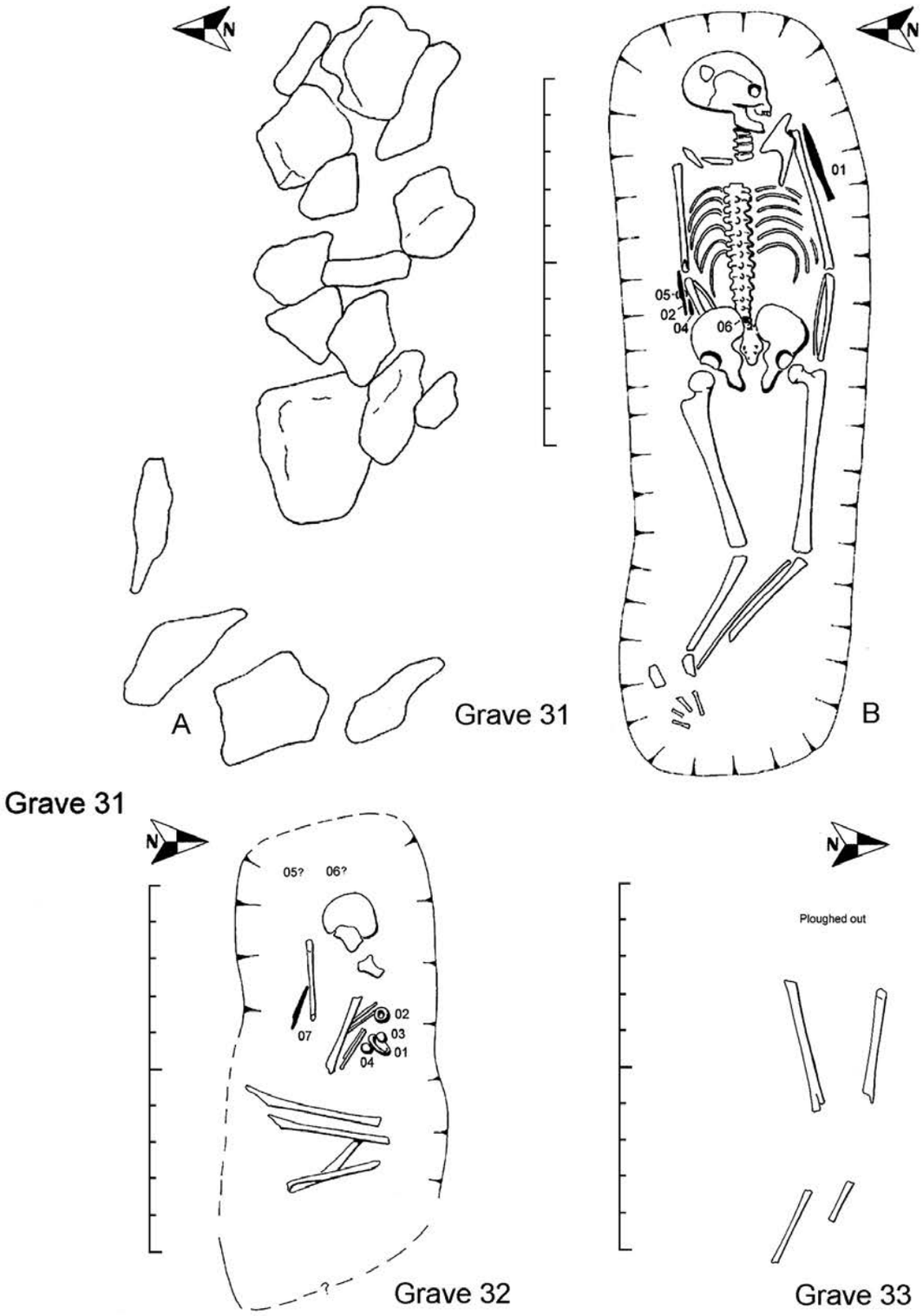


Fig 21 Plans of Graves 31–33. Scale bar 1m

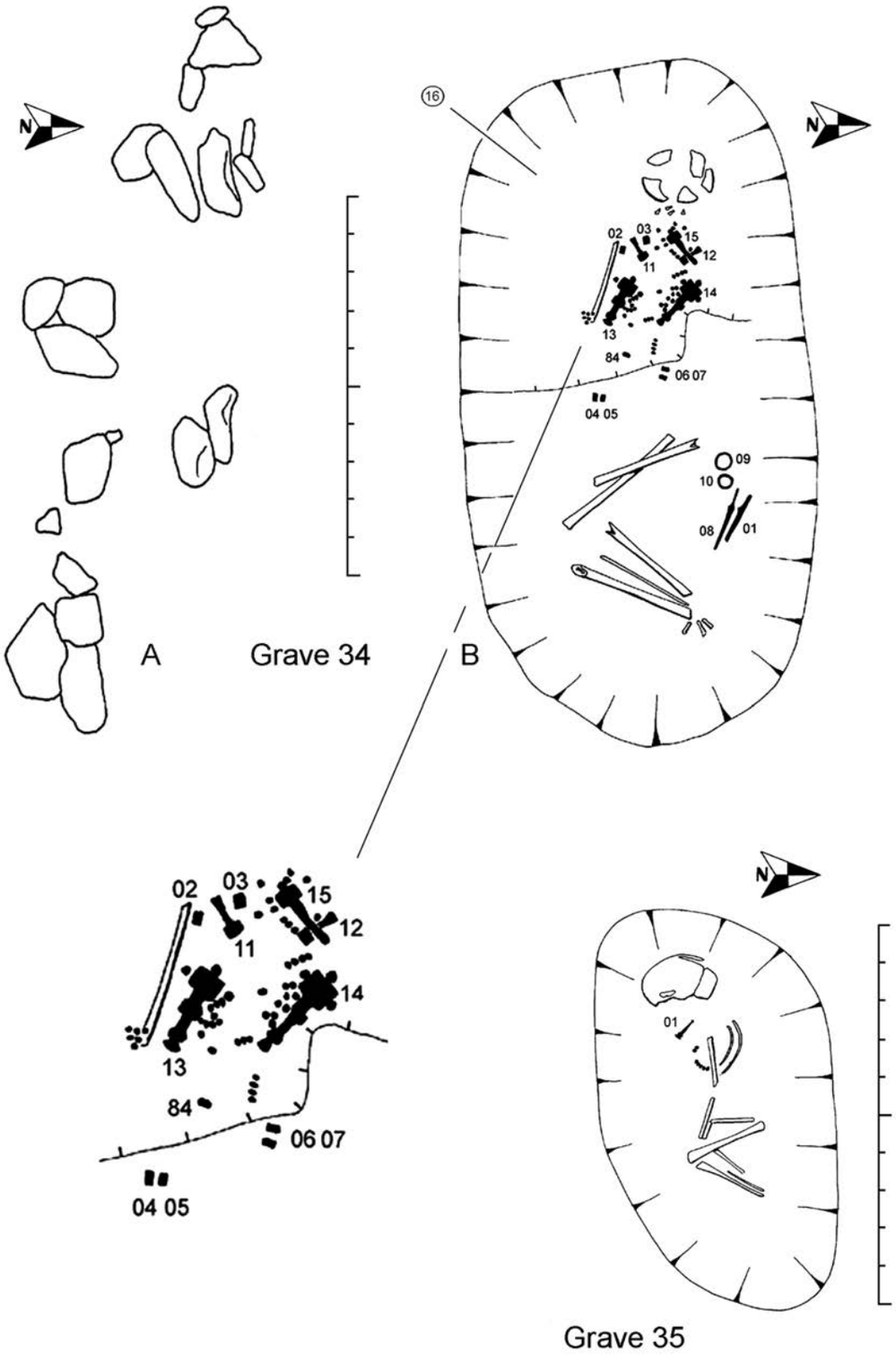


Fig 22 Plans of Graves 34–35. Scale bar 1m

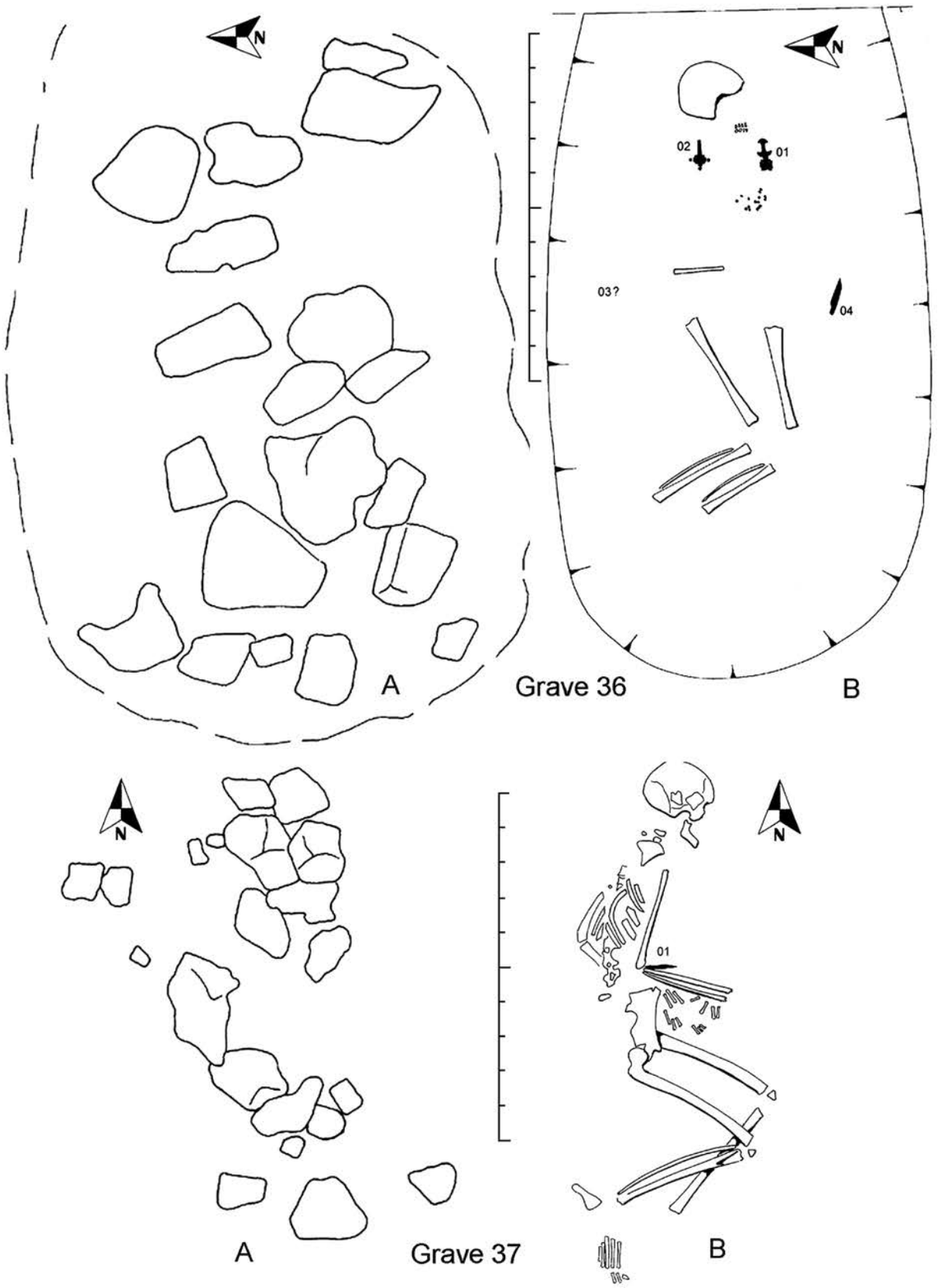


Fig 23 Plans of Graves 36–37. Scale bar 1m

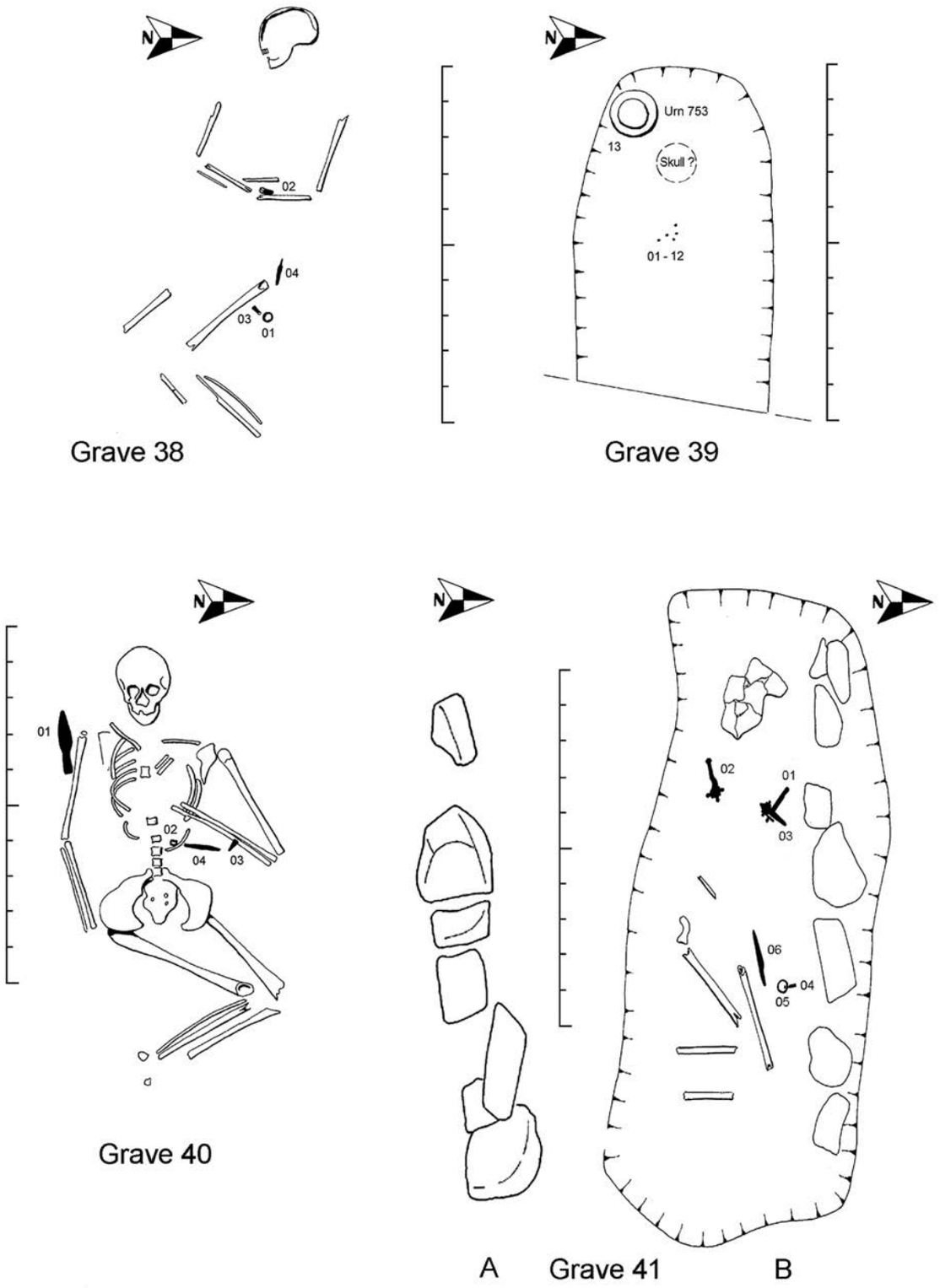


Fig 24 Plans of Graves 38–41. Scale bar 1m

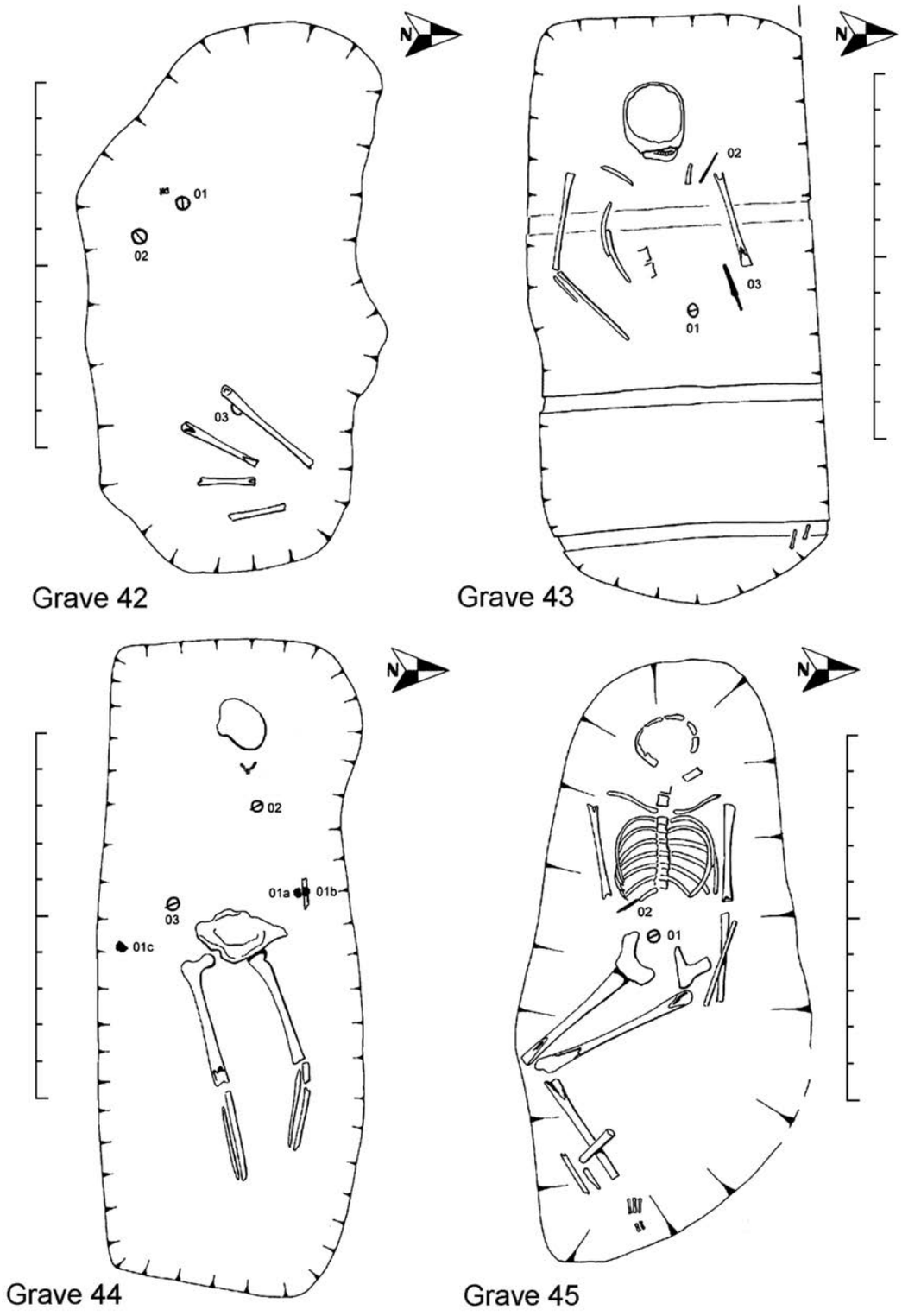


Fig 25 Plans of Graves 42–45. Scale bar 1m

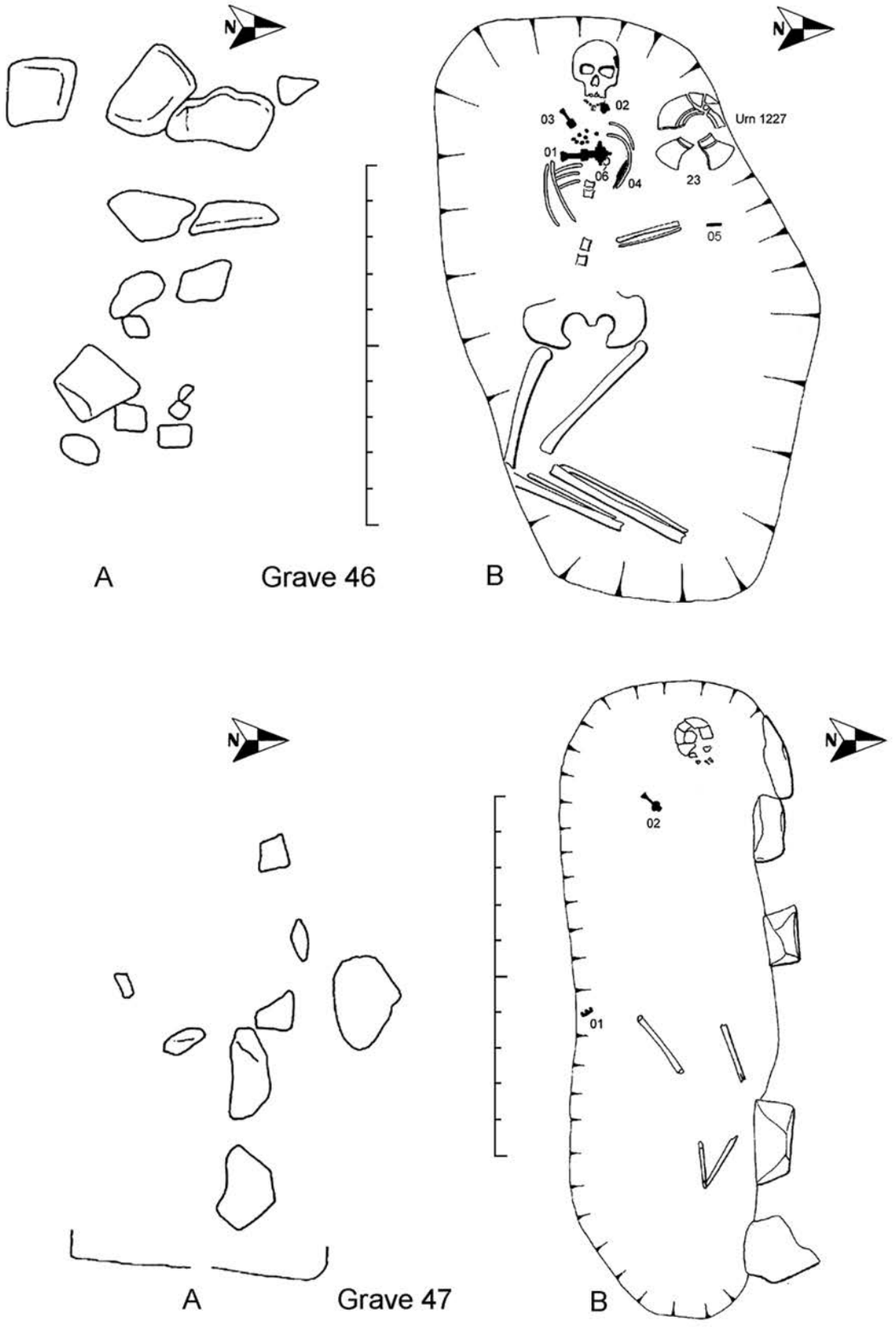


Fig 26 Plans of Graves 46–47. Scale bar 1m

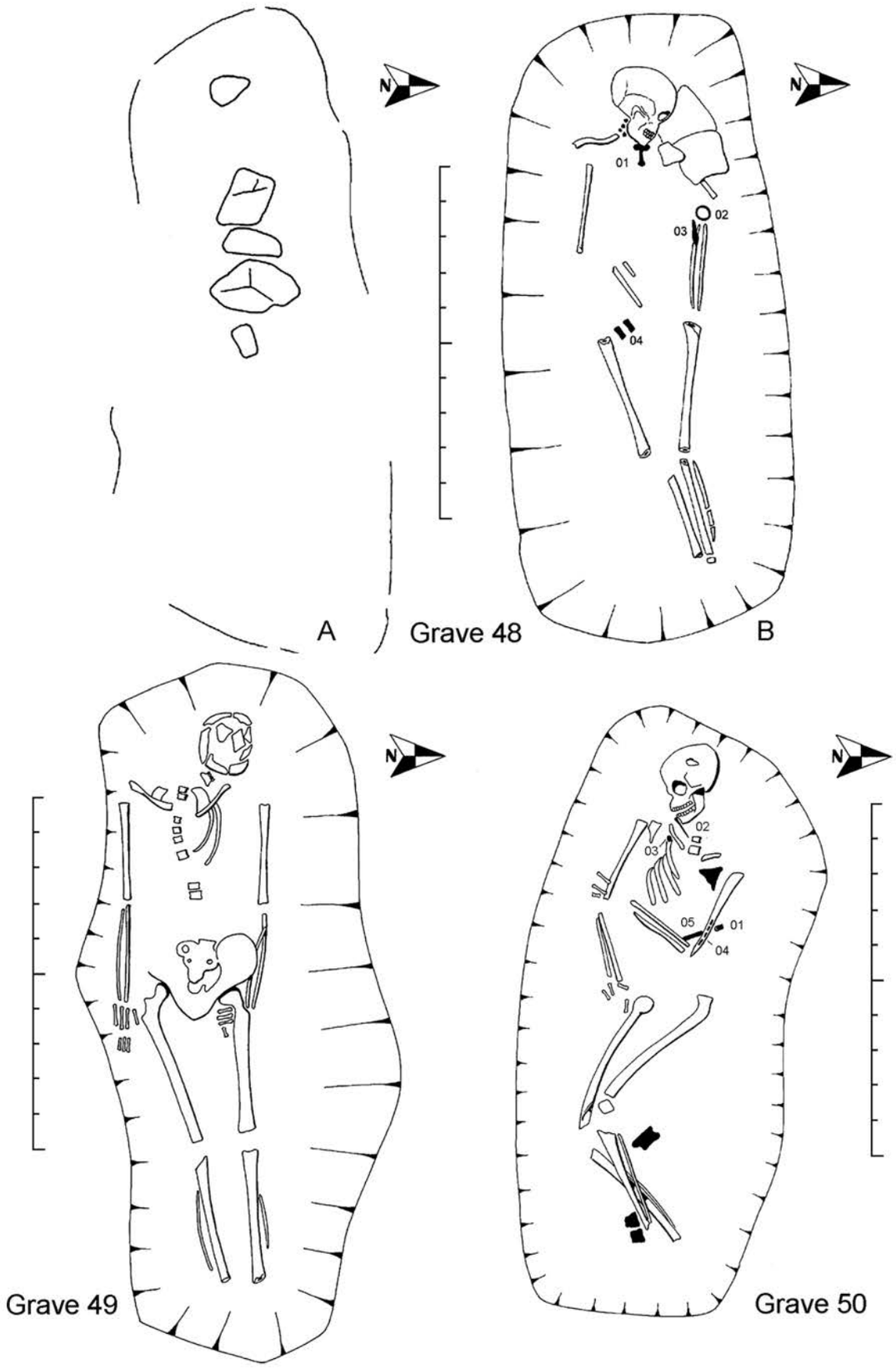


Fig 27 Plans of Graves 48–50. Scale bar 1m

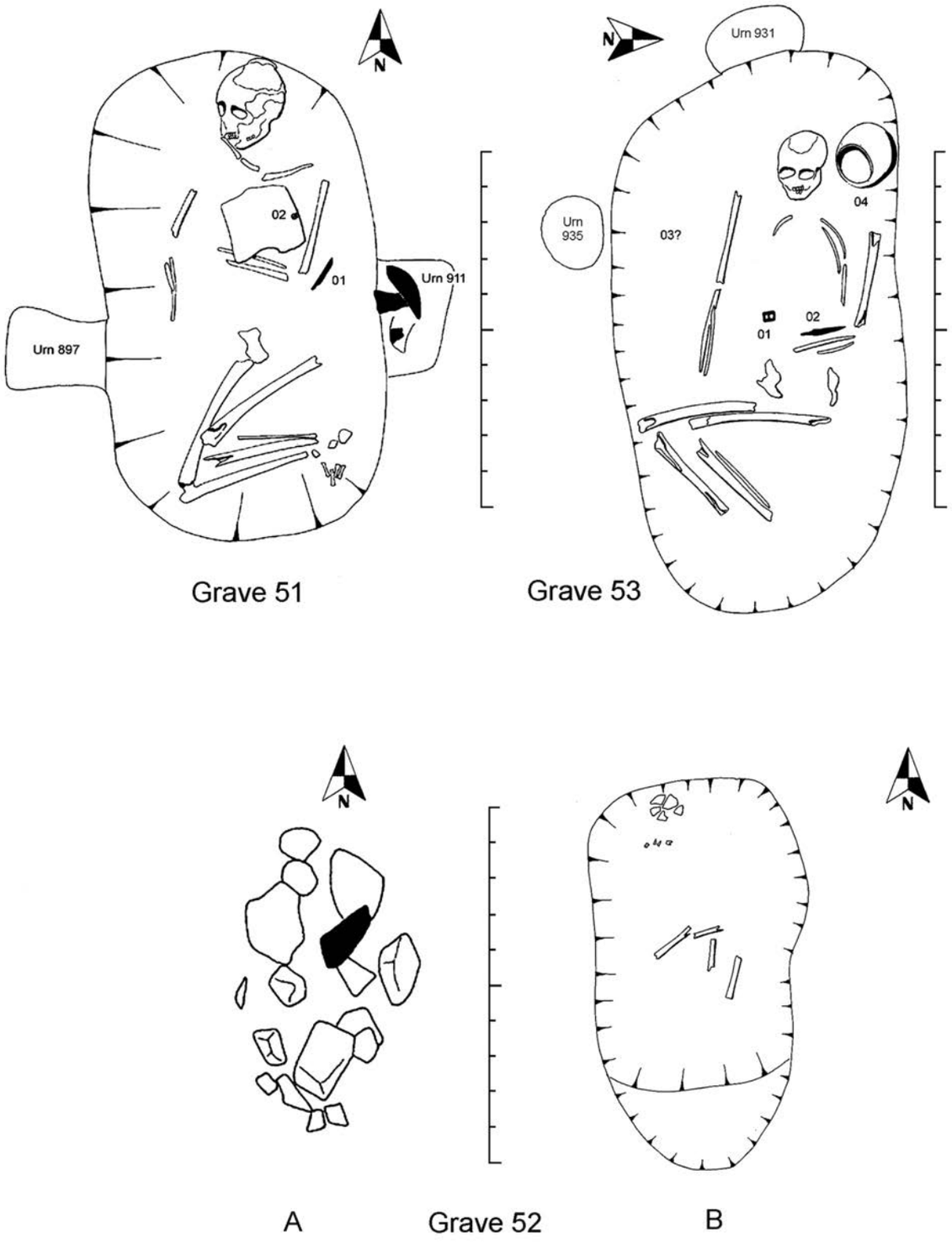


Fig 28 Plans of Graves 51–53. Scale bar 1m

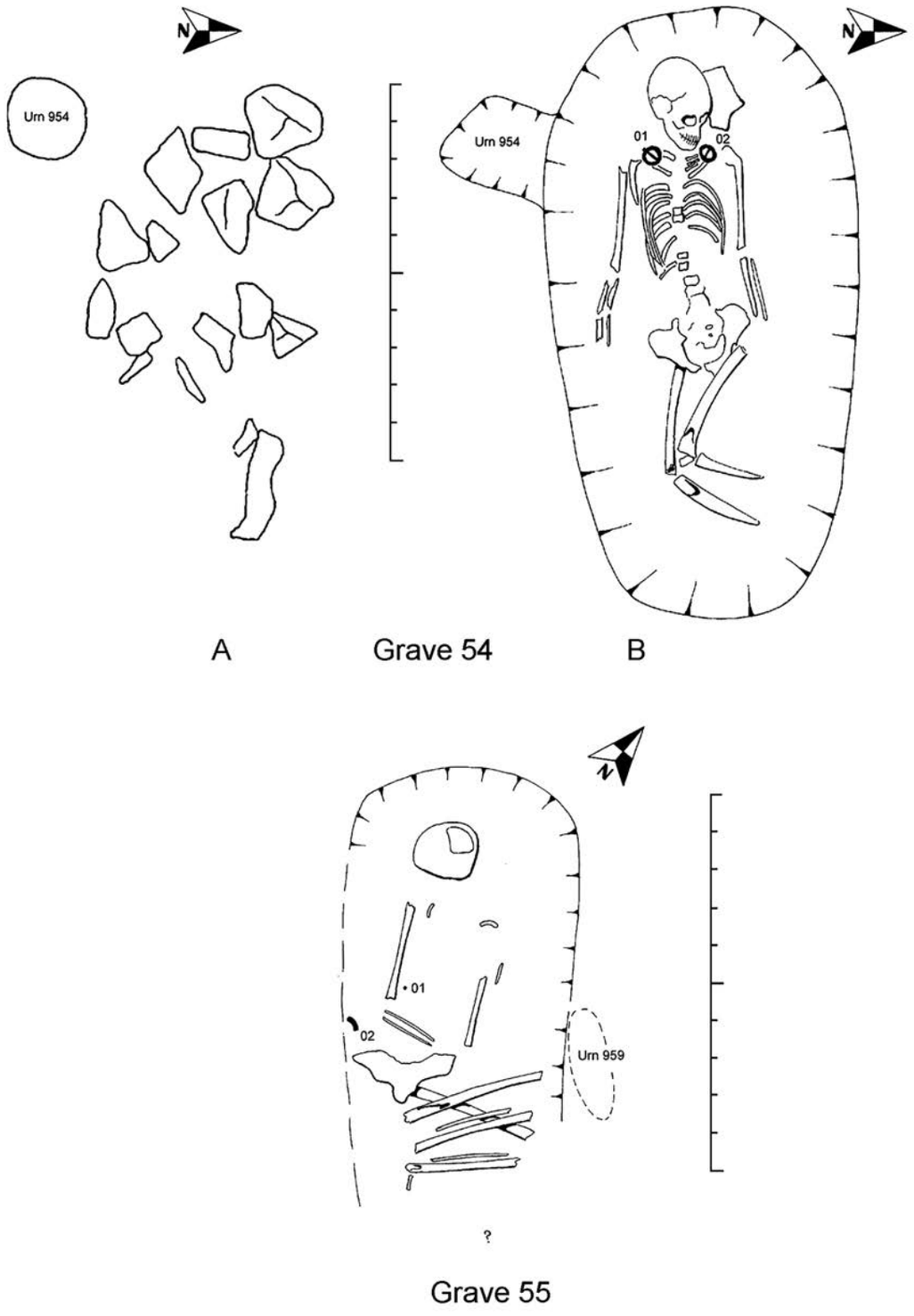


Fig 29 Plans of Graves 54–55. Scale bar 1m

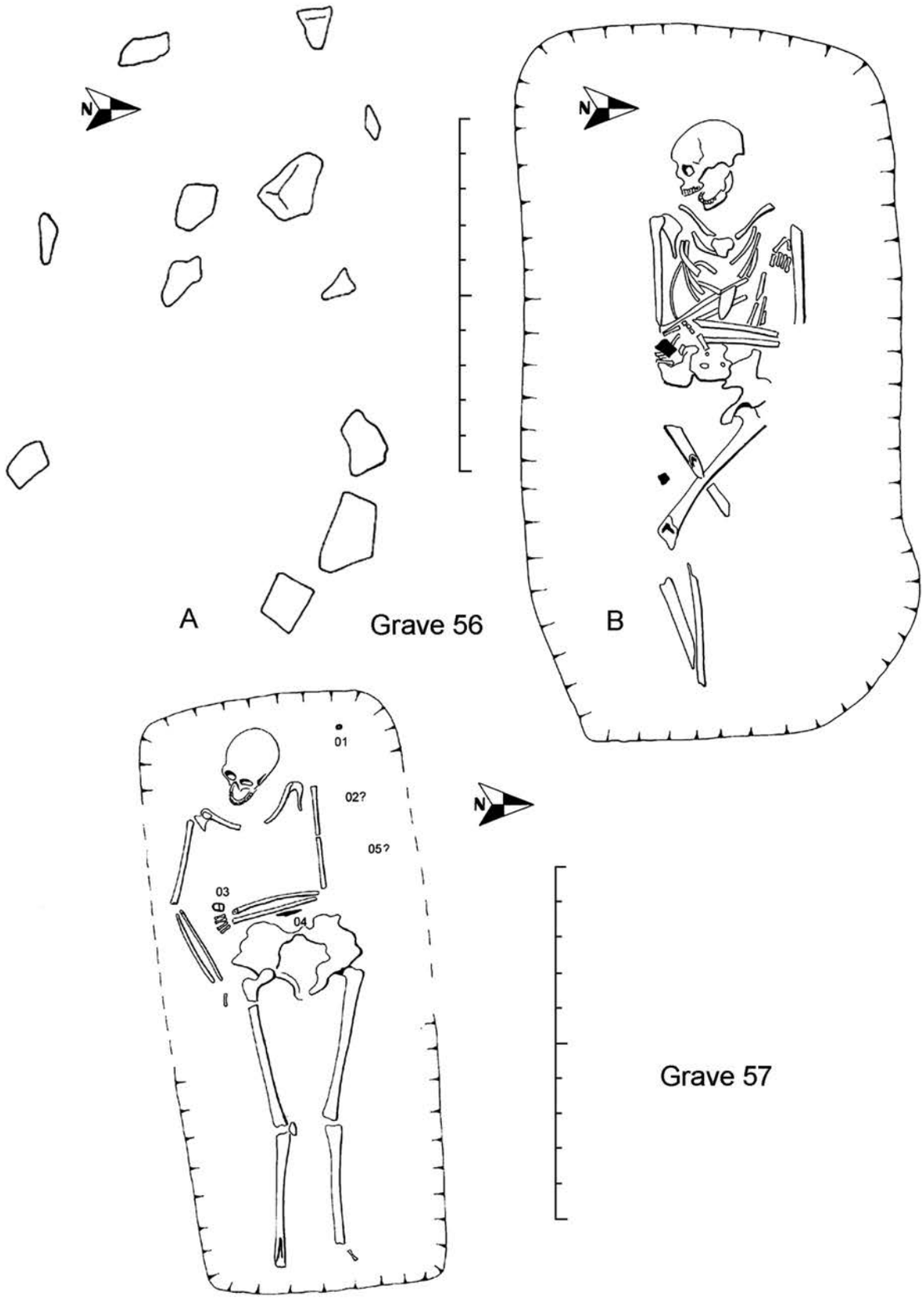


Fig 30 Plans of Graves 56–57. Scale bar 1m

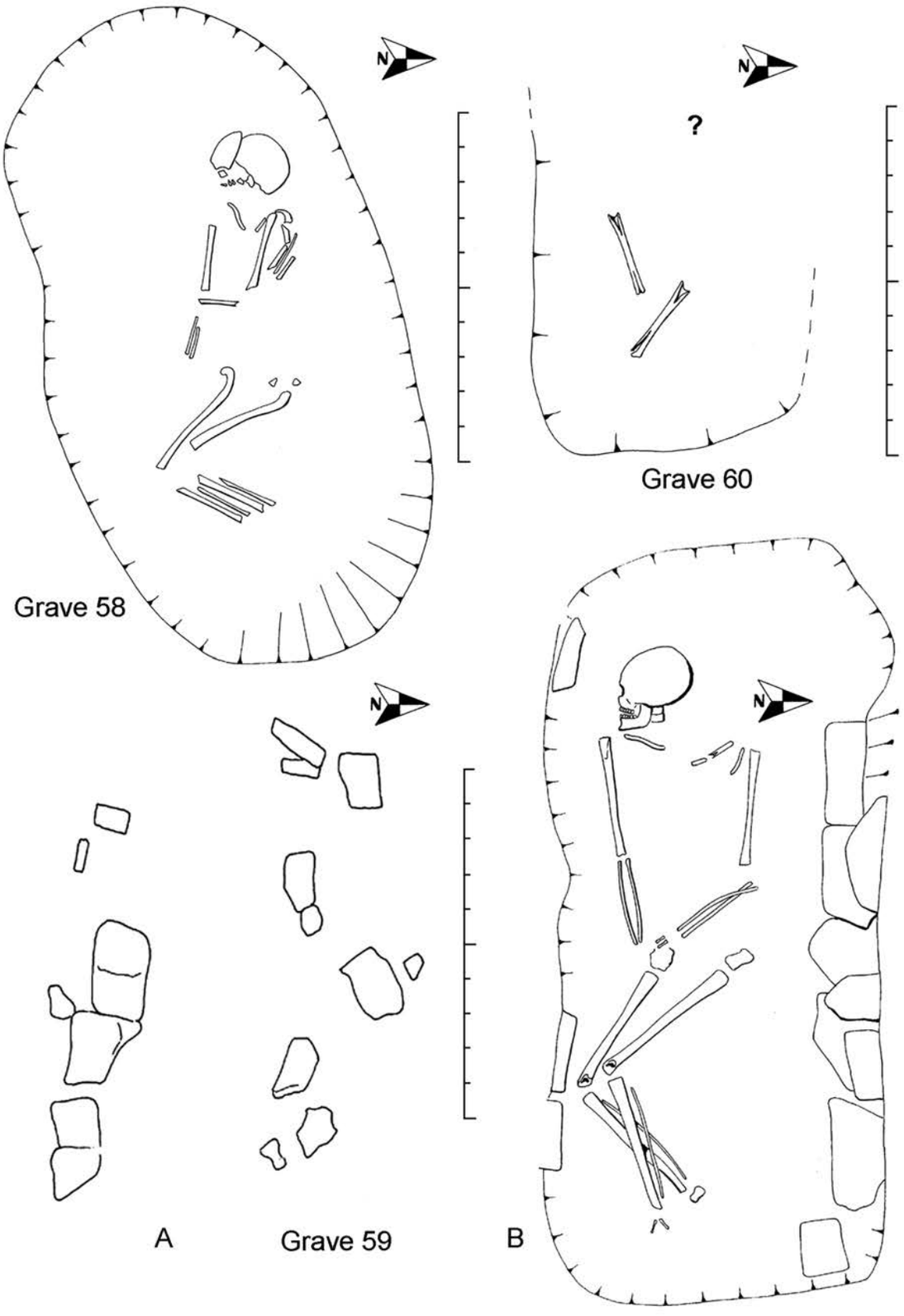
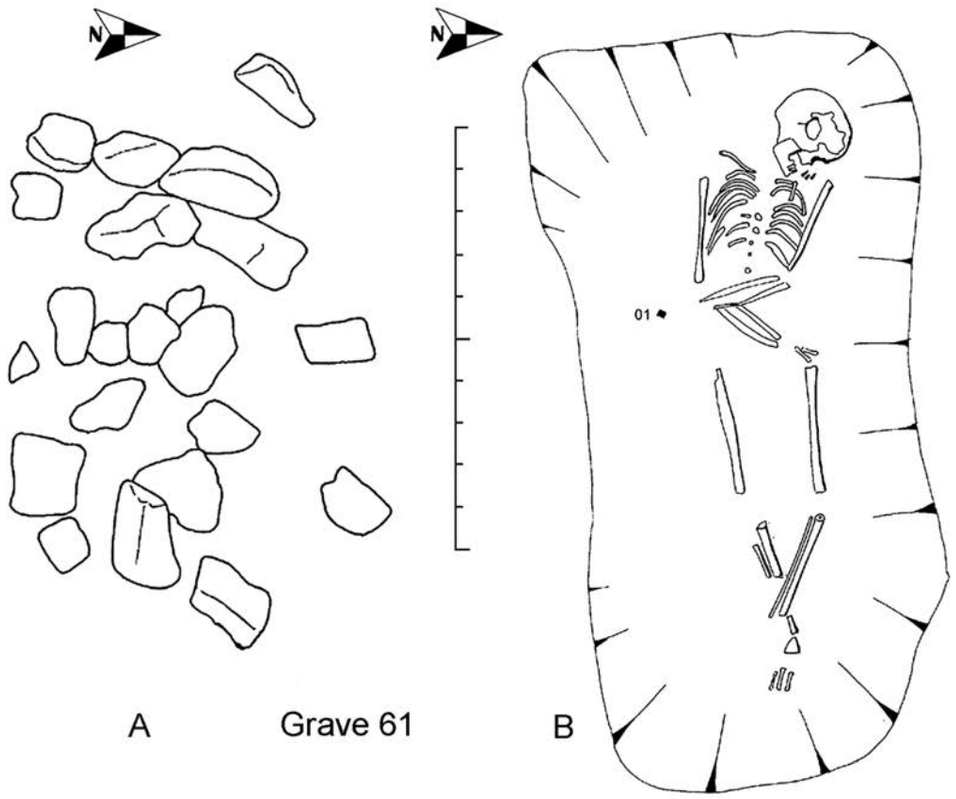


Fig 31 Plans of Graves 58–60. Scale bar 1m



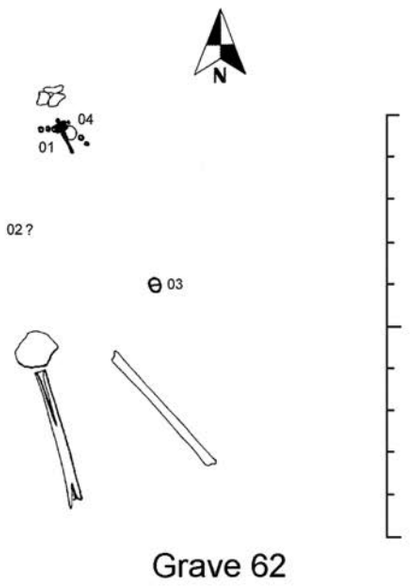


Fig 32 Plans of Graves 61–62. Scale bar 1m

mined). The body was flexed in twenty of the Cleatham graves. Of these, nine contained the bones of males and five of females. Six were undetermined. This body position may have been considered more appropriate for adults, having been used for two old adults, six mature adults, six adults, five young adults and one child/adolescent. The remaining flexed burials were one child/adolescent, three adults, four mature adults and one old adult. Again, it was not possible to link this form of burial with a dating but there are indications that it is more common in the later graves. It would seem, on the basis of the admittedly small number of graves from Cleatham, that while certain body positions were favoured for some sections of the community, they were not used exclusively.

Prone burials

The bodies of the adult male found in Cleatham Grave 31 (Pl 16; Fig 21) and the young adult females in Grave 11 and Grave 55 (Figs 13 and 29) were in a prone position. Prone burials are not uncommon in Anglo-Saxon cemeteries: at Castledyke eight (5%) of the graves were found to contain bodies in this position (Drinkall and Foreman 1998, 333). Prone burials have attracted much attention, speculation and, indeed, fantasy as it is considered that people interred in this position were buried alive (Hirst 1985, 40–3; Hawkes and Wells 1975, 18–22). Cleatham Grave 31 was, by the standards of male graves, well equipped, containing an iron buckle, a knife, an animal bone and a spearhead (see Fig 90). The latter object was of particular significance as, in the Germanic world, it was the badge of a free warrior (Swanton 1973, 3), and it is unlikely to have been placed in the grave of an executed felon. Prone male burials are not uncommon: Wilson (1992, 81) knew of 16 prone burials that were probably male, 19 females and 11+ that were undetermined. The young woman in Grave 55 appears to have been bundled into the ground, her legs tightly flexed. No goods could be directly related to this burial, although a segmented bead, a fragment of an annular brooch and a large number of Anglo-Saxon sherds were found in the grave fill.

The prone burial in Cleatham Grave 11 is particularly interesting. This body was found with the lower right arm in front of, and below, the body. In this case it seems likely that life was extinct at the time of burial as the skull was found, not in the grave, but 2.2m away, standing next to Urn 115, a fine vessel of Group 05b, Phase 2 (Fig 34). It was impossible to define the urn pit although it appears that the skull grazed and damaged the urn, suggesting that the skull may have been a later insertion. The skull was standing upright on the mandible but the atlas and axis vertebrae

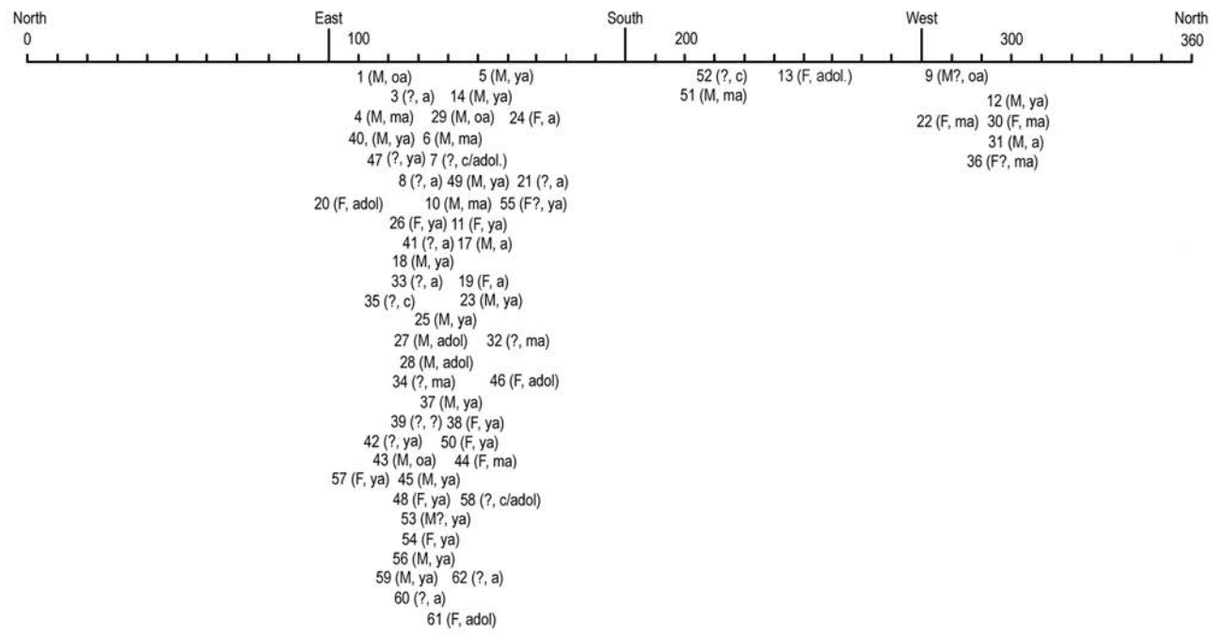


Fig 33 The alignment of the Cleatham graves. M: Male; F: Female; c: child; adol: adolescent; ya: young adult; ma: mature adult; oa: old adult

Fig 34a The skull from Grave 11 (Fig 13) was missing from the burial and was found, standing upright, next to Urn 115, 2.2m to the south

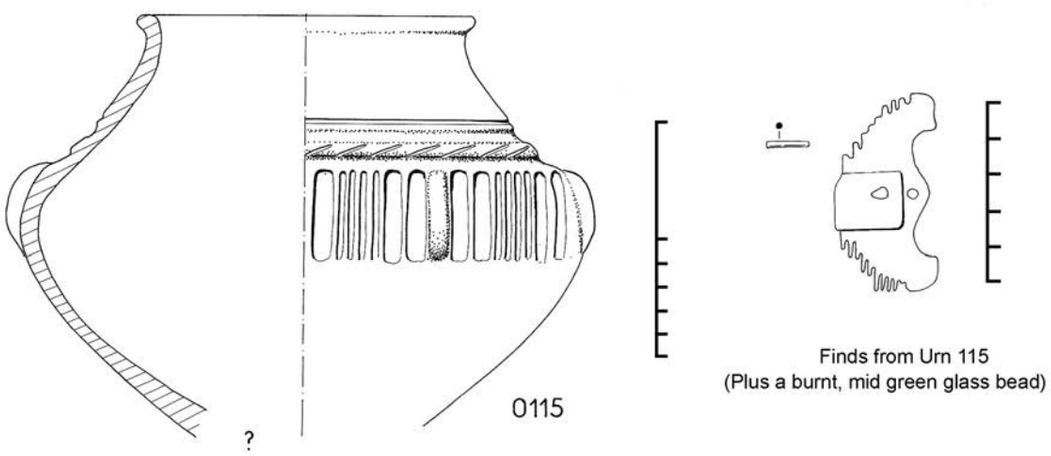


Fig 34b Urn 115 (Group 05b, Phase 2) next to which the skull from Grave 11 was found

unfortunately did not survive. Grave 11 contained no grave goods but on the left side of the pelvis were the bones of a chicken-sized bird, the remains not being well enough preserved for a more detailed identification. Urn 115 was found to contain a fragment of a double-sided bone comb and an iron rivet. Traces of mid-green opaque glass adhering to some of the bones are best interpreted as burnt beads suggesting that Urn 115 contained the remains of a female. Grave 11 could be interpreted as an example of human sacrifice in which the young woman had been killed to accompany the individual in Urn 115. The evidence for

human sacrifice amongst the Germanic peoples prior to the Viking Age is, however, meagre (Hirst 1985, 42). Decapitated burials are known from other Anglo-Saxon cemeteries. In one of the Loveden Hill graves the head was found to have been placed on the stomach and replaced with an urn (Meaney 1964, 158). This burial was surrounded by stones which were clustered around the shoulders. Four further urns were found placed at the hips and shoulders. Loveden Hill also produced associations between cremations and inhumations but, unfortunately, the relationships are now difficult to unravel (Geake 1999, 11–12). At Winnall II, Hampshire, the body in Grave 23 was thought to have lacked a skull and the head of the individual in Winnall II Grave 11 may have been detached prior to burial (Meaney and Hawkes 1970, 30, fig 7). Grave 23 at Portway, Andover, Hampshire, was thought to contain only the skull together with a knife and a group of beads (Cook and Dacre 1985, 56, fig 33). Closer to Cleatham and with a possibly related rite is Grave 12 at the Welbeck Hill cemetery which contained the remains of an old man with a bucket, knife and magnificent ornamented Type H3 spearhead (Swanton 1973, 207). Lying over him, reversed head to foot, was the decapitated skeleton of a woman who was buried with a knife. Perhaps the best known decapitated burials are those found amongst the abused burials in the eastern cemetery and around Mound 5 at Sutton Hoo (Carver 1992, 353–5, fig 67) which are interpreted as executions/sacrifices. So far as can be determined, all of the aberrant burials discussed above are 7th century or later, while Cleatham Grave 11, if associated with Urn 115, is likely to be earlier.

Further possible parallels for the decapitated prone burial occur in late Roman cemeteries, with examples at Cassington and Stanton Harcourt in the upper Thames Valley (Harman *et al* 1981, 159–68). These two practices are found in the Midlands and South of England and, while sometimes used together, they were more often employed separately. The practice of prone burial might be better interpreted as a sub-Roman rite rather anything more dramatic. It is a pity that we lack a report on the bones in Urn 115 and that so little is known of late Roman burial rites in Lincolnshire.

Animal bones in graves

Four Cleatham graves were found to contain animal bones. In two of these, Graves 31 (adult male) and Grave 44 (mature adult female), the animal remains consisted of a tooth or jawbone of a sheep. While these could have got into the graves by accident it is notable that sheep were the most common animal remains in the graves at Castledyke, where 16% of the graves contained animal bone (Nicholson 1998, 239–40). It is likely that the low pH at Cleatham resulted in a poor survival of animal, as well as human, bone. In Grave 27 an animal scapula was found against the left elbow; while its state of preservation made identification difficult its size would be in keeping with a sheep, suggesting a shoulder of mutton. This may be paralleled by Burial 4 at Little Wilbraham, Cambridgeshire, where a young man was found with weapons and the articulated shoulder and foreleg of a sheep (Lethbridge 1931, 73). Grave 11, which contained the decapitated body of a young adult female discussed above, contained bird bones which were lying on the right side of the pelvis. The decay of the bones made identification difficult but they were of a size appropriate for a domestic fowl, as were found in six graves at Castledyke, Barton on Humber (Nicholson 1998, 239). At Castledyke the bird bones were found on the right-hand side of the body (the viewer's left). The bird bones in Cleatham Grave 11 would have been in this position had the body not been prone. In addition to the finds from Castledyke bird bones have been found in graves at Sancton (Bond 1993, 300–9) and Spong Hill (Bond 1994b, 134). The inclusion of bird bones in graves was a Romano-British practice, examples being found at Roman graves at Trentholme Drive, York (Wenham 1968, 104), and, more locally, with Roman cremation burials at the Gilliate's Grave cemetery, 3km to the north of Cleatham. This cemetery is of some interest as some of the urns have been perforated, with lead plugs cast into the holes, a common practice at Cleatham.

Final Phase burials

Eleven of the Cleatham graves date from the 7th century and belong to what is known as the 'Final Phase'. This term was used by E T Leeds to describe a group of late 7th-century cemeteries that he believed to represent the last stage of early Anglo-Saxon burial, which was influenced by Christianity (Leeds 1936, 96–114). Leeds was concerned to show that Christianity did not bring an end to the use of grave goods,

so allowing him to extend the date range of his material. The evidence on which this was based came from work carried out by Tom Lethbridge at Burwell, Shudy Camps and other cemeteries in Cambridgeshire (Lethbridge 1931, 36). Lethbridge first saw Burwell as merely a poor pagan cemetery but over five seasons' work he realised the atypical nature of the burials, concluding in his final report that,

> *It might be thought that the explanation was staring one in the face, but it was not till I had nearly completed the excavations in the cemetery at Holywell Row that I came to the conclusion that Burwell was undoubtedly a Christian and not a pagan cemetery* (Lethbridge 1931, 48).

Lethbridge continued to develop his ideas and, at the end of the report on his work at Shudy Camps, he attempted to summarise what defined these cemeteries (Lethbridge 1936, 27–9).

1. Most of the bodies were unaccompanied by grave goods.
2. No object of typical pagan form had been found, with the possible exception of two annular brooches reused on chatelaines and a few Roman coins. Both weapons and brooches were absent, and belts, if used, were narrow.
3. The cemetery appeared to date from a time when the ordinary pagan cemeteries close.

In addition to coining the term 'Final Phase' as the heading for the last chapter of his book, Leeds extended the range of these late burials, including examples from Kent, Derbyshire, Wiltshire, Yorkshire, and Lincolnshire, where the cemeteries at Riby Park and Searby were placed in this group (Leeds 1936, 100).

Excavations since the last war have produced new evidence for the Final Phase cemeteries with the work of Hyslop at Chamberlain's Barn, Bedfordshire (Hyslop 1963, 160–200), and that of Meaney and Hawkes at Winnall, Hampshire (Meaney and Hawkes 1970), stimulating further discussion of these late cemeteries. Boddington (1990, 181) summarised the attributes of Final Phase cemeteries as:

1. New cemeteries were established under Christian influence.
2. These cemeteries are close to the settlements, whereas their pagan predecessors tended to be further afield, often on boundaries.
3. Burial is entirely by inhumation, cremation being absent.
4. The graves are consistently west–east.
5. Some graves are in, or under, barrows.
6. The proportion of graves without artefacts, or with only a knife, is high.
7. Artefacts are predominately small dress fittings or small personal tokens.
8. Weapons are rare.
9. Some objects, notably crosses, have a possible Christian significance.

In addition to these traits, Hyslop had commented on the appearance of a general cultural homogeneity in these cemeteries: regional styles of dress can no longer be defined, probably as a result of the strengthening of ties with the Continent through Christianity (Hyslop 1963, 193). It must also be noted that in many of the cemeteries the graves are laid out in rows and, while grave goods are much less common, some graves are rich and include gold, silver, garnets and amethysts. This focusing of grave goods suggests the rise of an aristocracy, with wealth being concentrated into fewer hands. None of the Final Phase graves at Cleatham could be described as rich, although there was some interesting material, including the garnet set buckle in Grave 15. Other graves were placed in the Final Phase by their more limited, but characteristic, associations.

There was no Final Phase relocation of the Cleatham cemetery, although the 7th-century graves were grouped in the north-eastern part of the cemetery (Fig 10c). At Castledyke, burial also continued in the same area with many of the 7th-century graves being cut though earlier burials. The most notable example of this was Castledyke Grave 179, which contained the bones of a youth aged around 14–16 years, together with a sword and a bronze bowl (Drinkall and Foreman 1998, 88). This grave was dug through an earlier spear burial and had then acted as a nucleus for other burials. The age of this young man might suggest inherited rather than acquired status, pointing again to the rise of an aristocracy in 7th-century Lindsey, but it is difficult to define the age of military majority in Anglo-Saxon England (Crawford 1999, 156–74).

The best example of a 'Final Phase' cemetery in Lindsey is Sheffield's Hill II. Its 6th-century counterpart (Sheffield's Hill I) was abandoned and, in the 7th century, a new cemetery was opened 10m to the south.[7] In the new cemetery the graves were orientated and laid in rows in the classic Final Phase style (Leahy and Williams 2001, 310–13). While grave goods were, as is characteristic, uncommon, three of the 7th-century burials contained gold jewellery and amethysts, and two held swords with pattern-welded blades.

The human remains

A deficiency in this study is the lack of a report on the skeletal material from the urns. Costings were obtained for this work and repeated attempts made to obtain funding. While these efforts met with favourable responses from all of the official bodies approached, none was able to offer funding and it was decided to proceed with this archaeological report alone. It is hoped that the publication of this report will stimulate interest in the bones from Cleatham which remain, cleaned, catalogued, curated and awaiting future study.

A report was compiled on the bones from the 62 inhumations.[8] The soil conditions at Cleatham were acidic with a pH of *c* 5.5, leaving most of the skeletons poorly preserved and with no surviving bone in Graves 2 and 39, the former being severely plough damaged and the latter probably the grave of a child. It was found that the condition of the bones was better in those graves which penetrated the limestone bedrock. An exception was Grave 34, where the upper part of the body was in the fill of a rock fissure and, in contrast to the legs, had almost totally dissolved. The sex could be determined for 37 of the 60 skeletons: there were 15 females, 22 males, plus 5 unsexed children. It was found that the correlation between biological sex and the gender represented by the grave goods was good which, in view of the poor preservation of most of the bones, is an achievement. The remains in Grave 9 were identified as an 'old male?' but was female by gender and, in view of the poor condition of the bones, this burial has been counted as female. Grave 17 had been identified as a young adult male but the gender suggests that it was a young adult female.

	Female	Male
Young adult	8 (57.1%)	13 (56.5%)
'Adult'	2 (14.3%)	2 (8.7%)
Mature adult	4 (28.4%)	4 (17.4%)
Old adult	–	4 (17.4%)

Table 2 Age and sex profile of Cleatham inhumations[9]

The age at death shows that most of the adult population were dying as 'young adults' (57.1% females and 56.5% of males). This stands in contrast to Castledyke where 25.0% females and 12.1% males were young adults (Boylston *et al* 1998, 221–36) but resembles Norton's 48.3% female to 47.0% male young adults (Marlow 1992, 107–18). More women than men were dying as mature adults (28.4% to 17.4%) which is in contrast to Castledyke where the proportions were reversed (17.2% females to 29.3% males). At Norton the numbers of mature adult deaths were nearly at parity (34.5% female to 35.4% male). There were no 'old adult' females at Cleatham and 17.4% of men died in this age range. This again stands in contrast to Castledyke where 26.6% of the women and 23.4% of the men died as old adults, and 31.3% of the women and 34.1% of the men lived to beyond the 45-year limit of our ageing techniques (Boylston *et al* 1998).

The ratio between the sexes appears to be slightly unbalanced with more males than females. Other cemeteries have shown a lack of balance between the sexes but no pattern can be determined (Boylston *et al* 1998, 221–2). The number of children and adolescents found in the graves at Cleatham is, at 16.7% (10/60), low. At Castledyke, where the number of children's graves was also low, they represented 23% of the population. It is unlikely that the low number of children's graves represents low infant mortality and this may be due to the poor survival of small bones in shallow graves dug into the acid soil or to a tendency to cremate children's bodies.

Stature

It was possible to make an estimate of stature in only ten cases. It was found that male height varied between 1.744m and 1.871m with an average of 1.806m (δ 0.038m). The stature could be calculated of only one female who was 1.633m tall. Both of these figures are tall for Anglo-Saxons and, indeed, are taller than the modern English population (males 1.730m, females 1.610m). At Castledyke, Barton on Humber, it was found that the males had an average height of 1.720m and the females 1.600m (Boylston *et al* 1998, 225–6). Jacob, however, was rightly cautious about accepting figures based on such a small sample as we have from Cleatham.

Pathology

Degenerative joint disease was identified in 21 skeletons of which all but five were male. The joint most commonly affected was the hip, but eight individuals showed signs of degenerative disease of the spine. This level of joint disease is linked to the heavy work

involved in the cultivation of the land. It was found that six of the men with degenerative joint disease had been buried with spearheads, but their status as 'warriors' did not remove them from the rigours of agriculture.

None of the Cleatham skulls showed any sign of trauma although six individuals (five males and one female) had suffered breaks to other bones. All fractures were well healed and smoothed over and are best interpreted as the results of accidents. Two individuals had suffered fractures of the clavicle: a middle-aged female in Grave 19 had healed well, but an adolescent male (female by gender) in Grave 17 had suffered an infection and eventually the bone had healed 50mm too short. A young adult male in Grave 40 had suffered a broken arm, with damage to both radius and ulna that had only healed with difficulty. The humerus had atrophied suggesting that the limb had gone out of use. This arm was positioned across the body and on it lay a small iron fitting (Find 2978) which may have been part of a brace or sling supporting the weak arm. Injuries of this type are known as 'parry fractures' as they occur in defending against a blow. While the man in Grave 40 was accompanied by a spear, a parry fracture may also be the result of an accident. A middle-aged man in Grave 10 had suffered at least three broken bones in his life, a 'Colles' fracture to the right arm (usually the result of falling on an outstretched arm) and fractures to the right tibia and fibula which had led to the shortening of the leg. This, in turn, may have led to problems with the spinal column. Two young men (Graves 5 and 18) were found to have suffered fractures to the lower leg. Of the thirteen skulls in which the eye orbits were preserved one was found to show signs of *Cribia orbitalia*, the adolescent female in Grave 20. There may also have been traces of *Cribia* in the eye orbits of the young adult female in Grave 50. *Cribia orbitalia* is caused by iron deficiency anaemia and was found in 16.6% of juvenile skulls at Castledyke compared with the 25% (1/4) at Cleatham, although the numbers at Cleatham are too small to be meaningful.

It would appear that the Cleatham inhumations represent the remains of a community which was relatively well fed, achieving full stature, and were not subject to unusual levels of trauma. Evidence for hard manual work was found. These skeletons are best interpreted as the remains of agricultural workers and not a pampered aristocracy. The limited nature of this interpretation must be emphasised; we know nothing of the individuals whose burnt bones were found in the urns.

Age, sex and grave goods

	Number of graves	Percent of population	Average number of find types
Females[10]	15	41.9	5.7
Males	22	58.1	2.8
Children	5	8.3	1.6
Adolescents	5	8.3	3.4
Young adults	23	38.3	3.3
Mature adults	10	16.7	5.5
Old adults	4	6.7	4.5

Table 3 Relationship between age, sex and number of find types in graves

To examine the use of grave goods the graves were considered in terms of

- The total number of finds in a grave (20 blue glass and two polychrome beads would count as 22).
- The number of types of find within a grave (20 blue glass and two polychrome beads would count as two).

It was found that the number of find types was more useful as it prevented graves with large numbers of beads from distorting the results. However, if looked at in terms of the total numbers of finds in the graves, the results remained the same, with mature and old adults having the largest numbers of finds. It is no surprise to see that large numbers of different object types are more common with females than males, and that children had fewer than the adults. Adolescents, it appears, had taken on an adult level of types and there is little difference between them and young adults. Mature and old adults received more grave goods than the younger groups.

'Ritual' deposits

In addition to the ditches and graves, some other archaeological features were found. Five metres to the south of the boundary ditch was found a stone-filled pit (Fig 6). This was initially interpreted as a grave but on excavation no human remains or grave goods were found and its proportions were unusual for a burial

(1.2 × 0.9m). It was 800mm deep and was cut into the limestone, which usually gave good bone preservation. Elsewhere on the site all deep graves contained grave goods. This pit may have been related to the ditch complex and it is possible that it may have been part of a line of pits running parallel to it. On the western side of the site a small pit was found lined with red clay. This contained a spearhead, Find 102, set vertically in the ground, a pair of shears, Find 103, lying at 45°, and a sherd, Urn 1226. The pit appears to have been dug for this purpose. In the case of both pits we must be looking at some ritual practice.

Empty 'urn'

Urn 314, a vessel of Group 01p with three perforated lugs, was found without any contents. It was standing upright in the ground and had not been disturbed. It was found that the Group 01p vessels tended to occur in unusual circumstances (see below, page 91). Like many of the urns, this pot had been perforated, having a hole through the middle of its base. Empty urns were also found at Loveden Hill and were described by Fennell as 'token burials' (1964, 107).

Notes

1. This painstaking work was carried out by Wallace Colyer whose assistance is much appreciated.
2. Aerial photographs suggested that the Sheffield's Hill ditches represented the boundaries of a Romano-British 'ladder'-type field system. Similar fields exist in Kirton in Lindsey.
3. When quoting percentages the figures on which they are based have been included, for example: 33% (3/9) three being the number of observed examples and nine being the total sample. This allows the more poorly based statistics to be identified.
4. The total area excavated was 2386m^2. This produced 62 graves giving a density of 0.026 graves per square metre. 0.026 x 4919 = 128 graves. On the same basis it was found that the density of urns at Cleatham was on average 0.5046 urns/m^2.
5. The alignment of the graves is given in degrees clockwise from north.
6. Extended burials were taken to be those with the shoulders flat in the grave; the legs may be bent. Flexed burials lay on one side with the legs bent. Crouched burials were in a tight, huddled position and prone burials lay on their faces.
7. This relocation follows a pattern noted elsewhere. At Chamberlain's Barn, Bedfordshire, the two cemeteries were 75m apart (Hyslop 1963, 160–200) and at Winall, Hampshire (Hawkes and Meaney 1970, 3, fig 3), the cemeteries lay within 350m of each other.
8. This study was carried out by Betina Jacob as an MSc dissertation at the University of Sheffield in 1999. The research, *The inhumations from the mixed rite Anglo-Saxon cemetery 'Kirton in Lindsey' Cleatham, North Lincolnshire*, was conducted under the supervision of Dr Andrew Chamberlain. The assistance of both Ms Jacob and Dr Chamberlain is gratefully acknowledged. The short discussion included here considers only those aspects of the site which are relevant to the interpretation of the archaeology and the writer takes full responsibility for any misinterpretation of the pathology.
9. The terms used for the age at death can be interpreted as: Infant, 0–1; Young Child, 1–6; Older Child, 6–12; Adolescent (adol), 12–18; Young Adult (ya), 18–25; Mature Adult (ma), 25–45; Old Adult (oa), 45+ (Andrew Chamberlain, pers comm).
10. It was possible to determine the sex of 37 of 62 inhumations, and in two graves no human remains survived and no age at death or sex could be determined.

3

The analysis of the urns

The study of early Anglo-Saxon pottery

The earliest description of Anglo-Saxon urns appeared in Sir Thomas Browne's *Hydriotaphia or Urn Burial* of 1658 in which he describes finds from near his home at Old Walsingham, Norfolk (Jessup 1975, 48). Browne thought that the urns were Roman but did not rule out them being Anglo-Saxon or Danish. It was not until 1855 that Anglo-Saxon pottery was recognised for what it was. Drawing on continental material, Kemble was able to link this pottery with the historically attested Anglo-Saxon migrants (Kemble 1855, 309–37). He believed that the cremations represented the graves of heathens whilst the inhumations were the resting places of Christian Anglo-Saxons.

The study of early Anglo-Saxon pottery in England was, through much of the 20th century, dominated by one man, J N L Myres (1902–89). In 1931 Myres was invited to contribute a section on the English Settlement for inclusion in Collingwood's volume of the *Oxford History of England* which dealt with the Roman period (Collingwood and Myres 1936). Whilst working on this he recognised the need for a survey of the pottery of the period and embarked on a lifetime's study. Myres believed that, in order to understand this mass of ceramic evidence, three things were needed: firstly the excavation of a large English cremation cemetery; secondly, a review of the continental evidence to place the English material into a wider historical context; and, finally, the publication of a corpus of Anglo-Saxon pottery. The first requirement was satisfied by Mann's excavation of the Caistor by Norwich cemetery in the years between 1932 and 1937, although this was not published until 1973 (Myres and Green 1973). To this Myres was able to add material from his involvement with other cemeteries including Sancton, East Yorkshire (Myres and Southern 1973), South Elkington, Lincolnshire (Webster and Myres 1952), and Loveden Hill, Lincolnshire (unpublished, but Myres had access to this material). The publication of a number of important northern European cemeteries allowed the English material to be placed into context. Myres summarised his work in two important publications: *Anglo-Saxon Pottery and the Settlement of England* (1969) and the two-volume *A Corpus of Anglo-Saxon Pottery of the Pagan Period* (1977) which contained the data on which the earlier book was based. While both of these works remain useful, they were products of their time and both the chronology and some of the interpretations must now be seen as untenable. In particular Myres' dating of some of the pottery to the 4th century and his attempts to place the ceramic sequence into an historical and cultural framework are questionable. Myres' dating was based on the premise that those urns with good continental parallels were likely to be early and directly linked with migrants from across the North Sea, while those vessels lacking continental parallels were later, insular developments. While this assumption is valid in itself, he used it in an uncritical manner to support his own interpretation of the evidence.

The main requirement in understanding a group of material as large and as disparate as early Anglo-Saxon pottery is to have some method of classification. Myres looked at earlier continental classifications such as that by Plettke (1921) which were based on urn form, but argued that the English material could not be treated in this way and that decorative styles were important as he considered the Anglo-Saxon potters to be:

> *…no longer the expert exponents of customary skills commonly accepted among a whole people: they could often be a chance assortment of uprooted amateurs doing their best to improvise for immediate needs on the basis of half remembered forms, and misunderstood techniques of manufacture. In such conditions they would be most likely to recall and to imitate the simpler schemes of decoration familiar in their former homes, and to apply them to vessels of any shape that might emerge from their unskilled efforts. They would certainly be unlikely to maintain a typological exactitude of form above all else* (Myres 1969, 24).

Why the crossing of the North Sea should lead to a technological collapse is not stated, and, as Richards points out (1987, 26), it is unclear why the ability to

make a particular form was lost, but not the ability to decorate vessels. Myres went on to argue that:

> … *it follows that in any attempt to classify our pottery in this country at least as much attention must be paid to types of decoration as to the forms of the pots which carry them. It is in fact possible to establish a rough typology of schemes of decoration for our English pottery,* ***and it will be found that this typology is broadly applicable over the whole range of material, regardless of the precise shapes taken by the vessels concerned*** (Myres 1969, 24–5) (my emphasis).

He went on to add:

> *This brief description of the three main decorative elements – lines, bosses stamps – employed on Anglo-Saxon pottery may be summarised by saying that, whereas all three may be found throughout the period of the settlement,* ***there is a change of character and emphasis in the use of each as time passes***. (Myres 1969, 34) (my emphasis).

Myres was highly perceptive in this: while the motifs used remained the same they were combined in different proportions and in different ways to produce the decorative groups used to classify them in this study. He then went on in his study to define some urn shapes as early and others late on the basis of the decoration found on them. In describing the undecorated pottery he classifies the shapes of the urns but defines no parameters separating the groups. His groups were:

Biconical urns, marked by a sharp carination near to the mid-point of the profile. These are said to be 5th-century on the continent.

Hollow-necked urns, a variation of the biconical type which has markedly concave neck. These, too, are said to be early.

Sub-biconical pots, with a more rounded profile than the true biconicals. The type had a long life and is particularly difficult to define.

Shouldered pots, distinguished from the biconical vessels by having their centre of gravity set higher on the vessel's profile. The type was dated to the years around and following AD 500.

Bowls, defined as vessels with a rim diameter which is at least equal to its height. The forms of bowls allow them to be placed in any of the groups described above. They were thought to be early.

Globular vessels, dated to the 5th and early 6th centuries.

Tall bag-shaped vessels, seen as one the latest forms of vessel found in the cemeteries.

In addition to these vessel forms Myres makes reference to domestic pottery, most of which he describes as extremely crude and formless. These vessels are undecorated and remained unchanged through the early Anglo-Saxon period. In short Myres' classification saw decoration as the prime factor, followed by decorative technique (incised, grooved, stamped etc.) and finally by form.

Dating	Vessel Shape	Decorative Elements
AD 600		Random stamping, rouletted lines
	Tall bag-vessels	Linear stamped decoration, often complex Increasing use of stamps Bosses going out of use, used mainly on shoulders
AD 500	Shouldered urns	*Buckelurnen*
	Globular urns	Bossed decoration becoming more elaborate Restrained use of bosses and stamps
	Sub-biconical	Simple linear decoration, furrowed lines, finger-tip marking, raised and slashed collars, *Stehende Bogen*
	Hollow-necked urns Biconical urns	
AD 400		

Table 4 Summary of J N L Myres' classification of Anglo-Saxon urns

There is considerable overlap between the different vessel shapes and the decorative elements, and Myres believed that some forms had a long period of use. He attempted to trace the origins of the urns back to the Continent but recognised that a large amount of cultural intermixing had occurred even before the Anglo-Saxons left the European mainland (1969, 42). In his review of Myres' report on the urns from the Sancton cemetery, Dafydd Kidd (1976, 203) expressed the opinion that:

> *The ascription of pieces to central or south German influence is feasible only if the differences between them and the rest of the group are so extreme as to fall outside of what might normally be expected, and be capable of explanation by direct influence rather than by development from a common impulse.*

The pursuit of the cultural origins of the peoples who settled in England, while important at the time when Myres was writing, has lost much of its significance, due mainly to the recognition that the Anglo-Saxon settlers were culturally mixed even before they

left the Continent (Hills 1979, 317) and to 'Saxon'-type pots being found in Anglian areas of England and *vice versa*. As an historian, Myres was also concerned to place the Anglo-Saxon settlement into an historical framework which he defined in terms of five phases, based on the few dates available to him:

I. The phase of overlap and controlled settlement, *c* AD 360–410
II. The phase of transition, *c* AD 410–50
III. The phase of invasion and destruction, *c* AD 450–500
IV. The phase of reaction and British recovery, *c* AD 500–550
V. The phase of consolidation, after *c* 550

The early dating of some of the urns was taken still further in his publication of the Caistor by Norwich and Markshall, Norfolk, cemeteries (Myres and Green 1973). In this he claimed that some urns echo ceramic fashions prevalent on the Continent in the 4th century, and that the decoration of a few even suggest that: 'their makers were conversant with styles that were largely obsolete at that time but had been popular in the second and third centuries' (*ibid,* 13).

Myres considered that it was 'quite possible' that the Caistor cemetery came into use in the 3rd century and it was 'used on an increasing scale from at least the middle of the fourth century'. This suggestion was of great importance for our understanding of the *Adventus* but was treated with some scepticism. In a detailed review of the Caistor report John Morris discussed the dating of the German urns on which Myres' chronology was based (Morris 1974). Myres' method was to find a continental parallel for an English urn and then to give the dating of the continental vessel. The continental parallels are not figured and the nature of the parallel drawn is not clear. This problem was also identified by Kidd in his review of the Sancton report in which he questioned:

> *how far and in what respects two vessels must resemble each other to be called parallels, and what implications it is justifiable to draw from such an observation. Since this is never defined formal comparisons are largely subjective, and criteria for accepting or rejecting them will vary with individual students* (Kidd 1976).

Morris had also pointed out that the dating of the continental urns was far from secure, being based, at least in part, on 'historical' events around the settlement of England. The dangers of circular arguments are clearly evident.

In concluding his review Morris (*op cit*) said that the Caistor volume was the precursor to Myres' great work, his *Corpus of Anglo-Saxon Pottery of the Pagan Period* which 'was likely to remain the standard reference work for a century or more'. Unfortunately when this did appear it came as something of a disappointment as few, if any, of the criticisms made of Myres' earlier works had been taken into consideration (Dickinson 1978). Dickinson drew attention to Myres' 'intuitive and hierarchical approach to classification' which led to undue emphasis being placed on some aspects of the urns at the expense of others. Some features, such as the use of a footring, were used to link widely differing decorated urns together as a class while excluding other urns with which they had a clear affinity (Dickinson 1978, 333). This classification of the urns is highly subjective. Myres argued that precise methods of analysis could not be used on this disparate mass of material and that mutually exclusive groups cannot be defined. Dickinson, however, pointed out that Myres assigns dates to his material without making it clear whether the date is applicable only to a single vessel or to an undefined group. This lack of differentiation between groups makes it extremely difficult to use Myres' work or to extend his classification to new material, one of the expressed aims of his study.

A further weakness in Myres' work is his cavalier attitude to the finds associated with the urns. Dickinson drew attention to the alarming number of errors and omissions in Myres' catalogue (1978, 334), some of which relate to the dating of the urns. In the introduction to his *Corpus,* Myres claimed that many of the associated finds are uninformative and that some the associations are dubious or unreliable (1977, xix–xx). Myres fails to define his dating of the urns as phases or to give date ranges, instead presenting dates in an *ad hoc* manner and leaving a strong impression of subjectivity.

Even as a source of comparenda Myres' *Corpus* is limited by the standardisation of the illustrations. Myres claimed that it was his intention to show what the potters intended to achieve while struggling in their 'uprooted amateur way' to decorate the urns. He stated that:

> *It is always necessary in drawing Anglo-Saxon pottery to keep these blunders and mistakes as far as possible in the background, and always to hold in the forefront of one's mind the question what did the potter intend this pot to look like?* (1951, 70).

Needless to say this approach is now seen as unacceptable and in this report an attempt is made to show the urns 'warts and all'.

Kenneth Fennell based his 1964 thesis on 400 urns from his excavations at the Loveden Hill, Lincs, cemetery (Fennell 1964). He selected a sample of 216 vessels which he sorted into three groups: those with no decoration, those with linear decoration and those urns which bore stamped decoration. He then classified these urns by shape, taking two ratios, **height/diameter** and **rim diameter/maximum diameter**, in an attempt to define what are, effectively, Myres' urn shapes. A 'wide mouthed bowl' for example, is a vessel with a height/diameter ratio of less than 0.8 and a mouth/diameter ratio greater than 0.7. A comparison was then made between shapes of the plain urns, those with linear and those with stamped decoration. Finally Fennell defined thirteen hierarchical subgroups, but as Richards (1987, 28) points out, the reasoning behind this classification is not given and it is unclear why linear decoration should take priority over stamping, and why bossed urns were considered only as subgroups. Fennell's simple, unilinear classification was unable to deal with the more complex decorative schemes, something that remains a problem when dealing with a body of material as varied as Anglo-Saxon urns.

Catherine Hills has long been engaged in the study and publication of the finds from her excavation of the great Spong Hill, Norfolk, cemetery. In her 1976 thesis she analysed 355 urns from her 1972–74 excavations (Hills 1976), attempting to rationalise Myres' classification and to place it on a more objective footing. The size, shape and decoration of urns are treated separately, firstly by dividing the urns into three groups: small (<200mm diameter and <150mm high), large (>250mm diameter and >200mm high) and normal (the majority of urns, falling between 'small' and 'large'). The definition of the shape of the vessels generally followed Myres but the terms are clearly expressed. Hills treated decoration of the urns in a simple way, subdividing them as to whether they were plain, or bore linear, indented or plastic decoration. Work has continued on the Spong Hill cemetery, with a series of reports being published (Hills 1977; Hills and Penn 1981; Hills *et al* 1984, 1987, 1994). The final volume, which will contain the analysis of the site, has not yet appeared but the volumes published so far suggest that the urns are classified into stamp groups linked by shared stamps used in their decoration.

An important contribution to the study of early Anglo-Saxon pottery was made by Julian Richards in his 1987 publication *The Significance of Form and Decoration of Anglo-Saxon Cremation Urns*. Richards was critical of Myres' classification of the urns and argued that the crucial problem was Myres' attempt (and indeed need) to impose a unilinear classification on material that has multiple attributes (Richards 1987, 27). Richards' study drew on the finds from eighteen cemeteries which gave him a total of 2440 urns.[1] A pilot study was carried out on material from three sites with the aim of determining if correlations could be made between urn forms, decoration and the associated finds to identify which were significant (*ibid,* 54). The study then went on to a second stage where all eighteen cemeteries were analysed, looking at those variables showing significant correlations. Richards worked from published illustrations which made him reliant on the accuracy of the work of others; this, however, is unlikely to have greatly affected the validity of his results.

An important aspect of Richards' work was his attempt to systematise the classification of urn shapes. He was critical of the use of ill-defined categories by Myres and others but recognised that 'With the pottery … the continuous gradation of forms means that types must be arbitrarily defined' (Richards 1987, 47). At attempt was made to describe the shapes of the urns by means of multiple radii but this was found to be inappropriate, as the aim of the project was to examine variability, not to compare profiles. It was abandoned in favour of the analysis of the urns by measurement and the determination of ratios. The process of analysing the forms of the urns was simplified by the use of a process of *Principal Component Analysis* which identified those components which accounted for most of the variability (*ibid,* 72–6). In an analysis of 100 urns from Spong Hill it was found that three of the components accounted for 93% of the variation. These were:

1. Maximum diameter/height
   (which accounted for 79% of the variability)
2. Height of maximum diameter/height
   (which accounted for 9% of the variability)
3. $\frac{\text{Maximum diameter - rim diameter}}{\text{Height - height of maximum diameter}}$
   (which accounted for 5% of the variability).

The other components were found to account for such small amounts of variability that they were rejected. This study was repeated on a group of urns from Mucking which produced similar results (*ibid,* 76). Richards' work was concerned, in the main, with identifying the social significance of the attributes of the urns and their contents. He was sceptical of the

possibility that the urns could be phased or dated, writing that:

> *Whilst pottery styles may have changed over the 200–300 years of the study period, it is argued that most of the design attributes would have remained in use throughout the period … In the absence of any secure chronology for Anglo-Saxon pottery their chronological development will be ignored in the present study*'.

Richards supported this position with the observation that the same range of types was found on most of the sites included in his study, despite differences in starting date and period of use (*ibid,* 49).

In addition to the pottery from cemeteries, work has been carried out on large settlement assemblages. While much of this material is fragmentary the presence of closed groups of sherds, particularly those from the fills of *Grubenhäuser*, is potentially useful. The excavation of the settlement and cemeteries at West Stow, Suffolk (West 1985), produced 53,570 sherds, together with evidence for pottery manufacture. While the report contains a discussion of the pot fabrics and the decoration of the vessels, no attempt was made to classify their forms. Excavations on the Anglo-Saxon settlement at Mucking, Essex, produced 32,000 sherds of domestic pottery which were analysed by Helena Hamerow (1993, 22–59). As she was dealing with sherd material from a settlement site Dr Hamerow had difficulties in interpreting the forms of the Mucking pottery not present at Cleatham where most of the vessels were complete. She broke down the forms of the Mucking vessels into a series of descriptions, such as 'bowls' which she then further subdivided. Like the Cleatham classification, this system is subjective but served as a short-hand in describing the site.

The classification of the Cleatham pottery

Above all, previous work shows the difficulties involved in classifying Anglo-Saxon pottery. We are presented with a range of forms that appear fluid, their decoration drawing on a wide repertoire of motifs combined into elaborate designs. Some vessels are clearly the products of skilled workers, while others appear to be first ventures into the ceramic art. To understand the 1204 vessels found at Cleatham it was necessary to classify them so that the data set could be analysed.

The drawings of the Cleatham pottery attempt to show what the potters achieved and no attempt was made to second-guess their intentions (*contra* Myres 1951, 70). On urns bearing a non-repeating design the decorative scheme has been expanded to show it as it appears on the surface of the vessel. Some adjustments were made due to the difficulty of representing a conical surface on a sheet of paper. Little attempt has been made to show the effect of the pot's curvature on the design as it was felt that this would hinder, rather than help, the understanding of the decorative scheme. While the colours of the pot fabrics were recorded, they were not included on the database as they were considered to be incidental to the firing. Anglo-Saxon potters seem to have aspired to a black, reduced, fabric but frequently there are oxidised areas where the fabric is brown or buff. These are likely to be the result of areas of fierce heat burning out organic material in the clay.

In addition to the 1012 vessels recorded on site, urn numbers were given to other vessels identified during the post-excavation stripping of the earth blocks, to urns recognised amongst the unstratified sherds and to diagnostic sherds found in stratigraphically useful contexts. For reasons of control 'urn numbers' were also given to the nine, un-urned cremation deposits and the accessory vessels found in graves. Excluding this material the Cleatham corpus stands at 1204[2] urns. Of these 652 (54.1%) had fully reconstructable profiles, but as all are potentially useful, the catalogue is fully inclusive.

Faced with the mass of data presented by the Cleatham urns it was decided to analyse the main attributes of the urns separately.

- Each urn was first classified on the basis of its decoration.
- The shapes of the urns were then analysed.
- The pot fabrics were described and classified.
- A search was made for urns which could be linked by the stamps used in their decoration.

When this had been carried out it was possible to attempt to phase the urns and, using the database, to look at the relationships between the various attributes across the cemetery as a whole. Having criticised Myres for his lack of objectivity in classifying Anglo-Saxon pottery, it was with some feelings of hypocrisy that I classified the Cleatham pottery using intuitive methods. Approaches such as correspondence analysis were considered, but these present their own problems, particularly for the

non-statistician working without support. An inappropriate application of correspondence analysis would, as Sonja Marzinzik stated in her study of Anglo-Saxon buckles, 'put the validity of any results at risk' (Marzinzik 2003, 15). With an intuitive approach it is possible to see what I have done and reject anything that seems unreasonable. It is appreciated that some urns could be placed in more than one group depending which attribute is considered to be the most important. This is highly subjective and even in the final stages of this work some urns were moved between groups. However, although urns could be moved between groups, these groups were found to belong to the same phase. The full data on which this report is based is available online from the Archaeological Data Service website at: http://ads.ahds.ac.uk/catalogue/resources.html?cleatham_cba_2007. It is my hope that systematic analyses of the urns will be undertaken by people comfortable with correspondence analysis.

Decorative style

This is the most complex aspect of the Cleatham pottery but the most rewarding. The method adopted for the classification is hierarchical, beginning with plain urns and, so far as possible, taking each additional decorative element as the marker of a group. The basic concept behind the classification was one of increasing complexity: Group 01 urns were plain; Group 02 had decorative rings around their necks and so on. Suffixes were added to show different decorative techniques: Group 01b was plain but had bosses; Group 02s had rings around them but these included stamps. A Group 02**n** urn was decorated with both bosses and stamps. With material as complex as Anglo-Saxon pottery a system like this eventually breaks down and urns had to be placed in classes on the basis of shared decorative schemes but it is hoped that these have been clearly defined. All of the terms used have been defined which, it is hoped, will separate this work from Myres' *ad hoc* classification. As far as is possible, the groups are mutually exclusive and no vessel can be placed in more than one decorative group.[3] No claim is made that this classification would have meant anything to the makers of the pottery; it is merely a way of codifying the decorative styles to allow urns to be analysed. This stylistic, rather than motif-based, approach to the decoration of Anglo-Saxon pottery was suggested by Richards in the conclusions to his study when he says, with great honesty:

> *With the benefit of hindsight, a more appropriate classification might have paid more attention to how the different motifs were combined, and less to individual items. It is frequently the combination of motifs that produces the overall visual effect rather than whether a pot has lines sloping to the left or right … The current work attempted to be rigorously analytical; a future researcher might be recommended to proceed more intuitively, at least in the definition of styles of Anglo-Saxon pottery* (Richards 1987, 208).

This is the approach that was adopted in the classification of the Cleatham pottery and the results obtained suggest that it was successful. Following classification and phasing it was decided that the analysis of the Cleatham pottery would be carried out using graphical, rather than statistical, methods. The writer is more comfortable with graphical methods and the computer database allowed large numbers of graphs and charts to be generated which were examined for trends that stood out against the site mean. In this way the evidence could be evaluated and judgements made as to its significance and validity. During the process of re-evaluation of the data for publication the number of phases was reduced from nine to five, and it became possible to present the data in a tabular form that allows the actual figures to be seen. This is how most of the data are presented here.

The decoration used on the urns is presented as a suffix to the Group number:

a. Plain incised or impressed decoration

b. Vessels decorated with bosses.

m. Vessels with modelled decoration

n. Vessels decorated with both stamps and bosses

p. Vessels bearing perforated bosses

q. Vessels related to a group but which cannot be assigned to it with full confidence

s. Vessels decorated with stamps

x. Vessels with complex decoration.

Urn Group	Attributes	Figure
	No record, used for cremation deposits found without an urn	
00	Urns which are not reconstructable	
01, a b p	Plain, undecorated vessel	40, 41
02, a b s	Horizontal rings around the vessel's neck	42
03, a b s	Defined horizontal band containing decoration	43
04, a b n s	Multiple horizontal bands containing decoration	44
05, a b n s	Continuous band of vertical, or angled, grooves or bosses around vessel	45
06, n q s	Massed or random stamping	46
07, a b n s	Grouped vertical and angled grooves or bosses	47
08, a b m s	Counter-angled lines or matting	48
09, b n s	Urns decorated with bows which contain decoration	49
10, a b s x	Rings and chevrons, not defined in a band	50
11, a q s	Hanging bows	51
12, a b n s	Standing bows	52
13, b n	Panelled decoration	53. 54
14, a b n	Incised cursive designs	55
15, s	'Daisy/grid pots' often with filled pendant triangles	56
16, b	Sancton-Elkington style	57
17, s	Sancton-Baston urns.	58
18, a s	Urns decorated with chevrons and hanging bows	59
19, b n	Asymmetrical band of decoration, non-repeating	60
20, n	Chevron and boss decoration	61, 62
21	'Roman' vessels	63
22, n s x	Unclassified urns with no parallels on site	64

Table 5 The classification of the Cleatham pottery: the urn groups

The analysis of the Cleatham urns

The most important aspect of the Cleatham cemetery was the number of urns between which it was possible to determine a stratigraphic relationship. Urns found together with their bases at the same level were assumed to be contemporary and if an urn cut another it was assumed to post-date the vessel that it cut (Pls 6–7, 20–22; Fig 35). On the basis that an urn could be in multiple relationships and that each relationship was compounded (A cut B and therefore B was cut by A = two relationships) the Cleatham urns exhibited 775 relationships or contexts. Of these, 259 relationships were considered to be 'uncertain' and were not used in the construction of the matrix. While stratigraphically useful, the three pots and 78 sherds found in the fills of the graves, and the thirteen sherds found in the fill of the North Ditch were also not used in the matrix. The phasing of the site was therefore based on 422 relationships, the most important of which are included in the 50 key complexes shown on Figure 115. These included urns found in contemporaneous groups of up to five vessels and in sequences of up to seven successive intercut vessels. Other, secondary, relationships were between undecorated or incomplete vessels that could not be classified. These relationships are recorded in the database and were used in the analysis of the site. Sherds found close to urns may have been incorporated into the fill of the urn pits but, in view of the difficulty in defining features in the Cleatham subsoil, it was considered unsafe to include this material. Only those relationships where there was no reasonable doubt were included: to have included doubtful relationships would have risked the integrity of the whole matrix. It must be emphasised that, although the relationships between urns can be determined, the length of time separating successive burials remains unknown.

Having determined the 50 key complexes existing between decorated urn groups, the individual relationships were used to construct a Harris Matrix (Fig 115). In developing the matrix intercut urns were considered as vertical relationships and urns found together, and therefore contemporary, were consid-

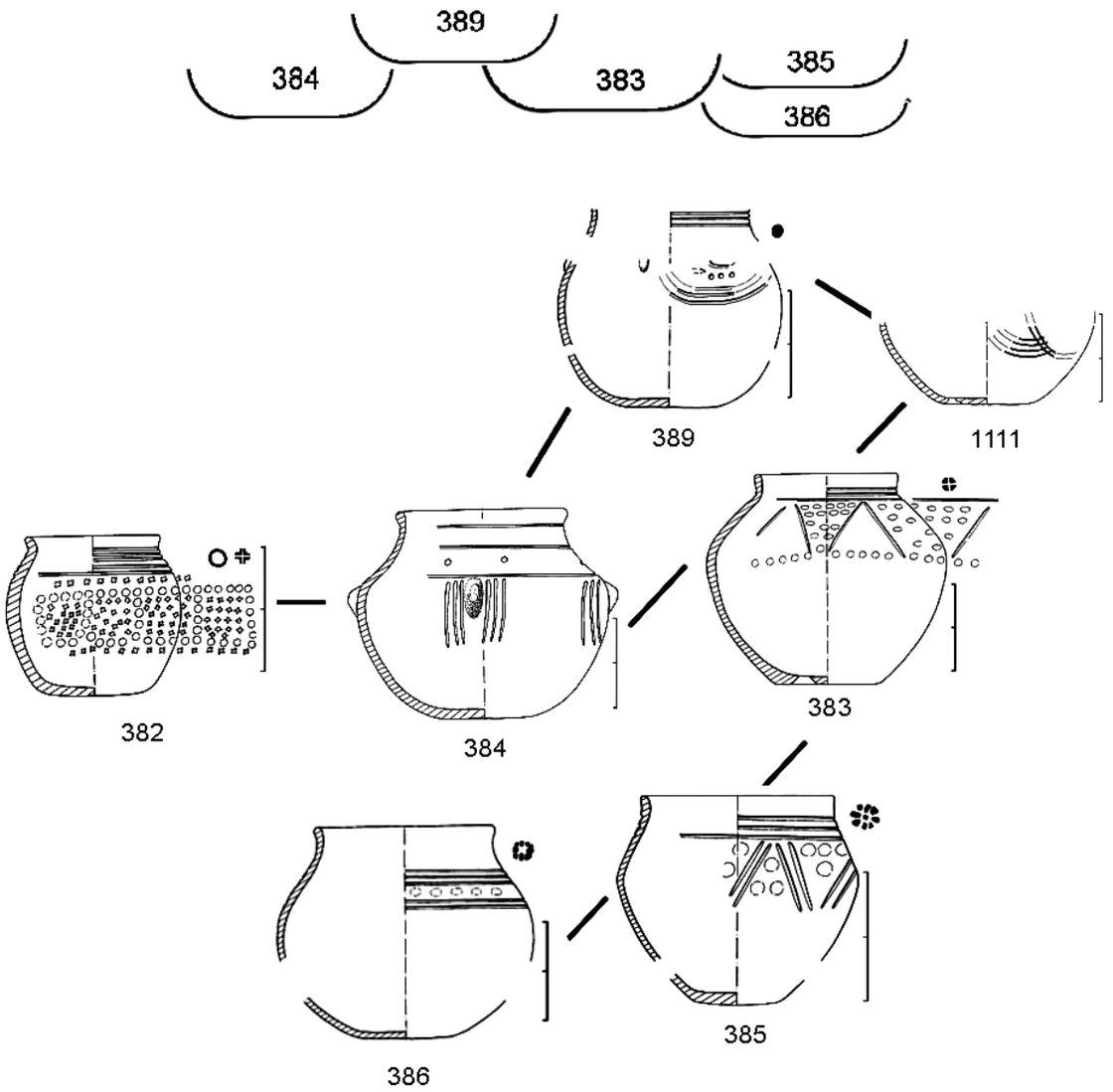


Fig 35 Interpretive diagram of the seven-urn complex

ered as horizontal relationships. Urns of the same decorative group or subgroup were considered to be contemporary and placed on the same horizontal row which allowed links to be made between groups. The matrix shows relationships, not urns, but reference numbers of the urns used in the matrix may be found on the Relationship Diagrams on Figure 115. Only decorated vessels were considered, urn shapes and fabrics being examined elsewhere in this study. For clarity, unclassified urns and undecorated urns of Group 01 have been included only when directly phased by association.

It must be emphasised that considerable time and thought has gone into the construction of this matrix. In the original analysis carried out for a PhD thesis there were nine phases. While these were useful in the investigation of the data it is believed that the retention of nine phases could not be justified and they have been consolidated into a tighter, five-phase structure. This was produced by a long process of checking and reworking. The matrix is fully integrated, with relationships supporting and substantiating each other throughout. Conflicts were found, but the resolution of each of them produced a clearer and more robust sequence.

The resultant matrix was found to be remarkably consistent and the groups cascade in a coherent way. While many decorative groups can be assigned to a single phase, others were in use over a number of phases. This comes as no surprise and, indeed, it is

unlikely that the phases are quite as sharply defined as the matrix suggests. The Harris Matrix was used to construct the urn sequence shown on Figure 116.

It is believed that the Cleatham sequence is correct and provides a basis for the analysis of other aspects of the urns and the cremation deposits. On the basis of the phased urns other classified, but unassociated, urns could be placed in the sequence. This allowed a total of 608 urns to be phased to a greater or lesser extent. Cleatham provides, for the first time, the basis for a chronology for some important aspects of early Anglo-Saxon material culture.

The use of the decorative elements

The classification of the Cleatham urns was based, in the main, on the way in which the decorative schemes were arranged and the techniques (bosses, stamping, etc.) employed. Having carried out this exercise, some decorative elements were looked at in detail to determine if they could be used to characterise trends. Urn groups in use over a number of phases presented a problem. The number of urns in each phase was estimated by apportioning the number of urns in each multi-phase group over the phases during which the group was in use. In some analyses it was more appropriate to include only those urns that could be assigned to a single phase; judgement was used, but it is believed that the statistics presented accurately reflect trends present over the phases.

	Urns attributed to a single Phase	Urn count including groups spread over Phases
Phase 5	45	58.3
Phase 4	59	113.7
Phase 3	44	102.5
Phase 2	95	137.7
Phase 1	160	192.5

Table 6 The total number of urns attributable to each of the five Cleatham Phases. Urn groups that cover more than one phase have been spread out over the phases

Stamp decoration and bosses

	Urns in Phase	No Bossed	No Stamped
Phase 5	58.3	23.3 (40.0%)	49.5 (84.9%)
Phase 4	113.7	20.2 (17.8%)	83.8 (73.7%)
Phase 3	102.5	13.9 (13.6%)	55.6 (54.2%)
Phase 2	137.7	47.4 (34.4%)	63.3 (46.2%)
Phase 1	192.5	76.4 (39.7%)	39.6 (20.6%)

Table 7 Proportion of urns in each phase bearing stamped or bossed decoration. Urn groups proportionally distributed over the phases. Urns decorated with both bosses and stamps (subgroup n) have been counted both as stamped and bossed; the percentages may therefore exceed 100

The two most common methods of decoration were bosses, which occurred on 225 of the 732 decorated urns (30.7%) and stamps which were used on 372 of the urns (50.8%). Table 7 shows the frequency with which the use of bosses and stamps varied over the phases at Cleatham.

Both methods of decoration were in use at the inception of the Cleatham sequence, although the frequency of stamping was, at first, relatively low, appearing on 20.6% of the urns in Phase 1. The use of bosses was more common, appearing on 39.7% of the urns. Over the five phases the proportion of urns bearing stamped decoration steadily increased reaching 84.9% in Phase 5. The increasing popularity of stamp decoration had been observed by Myres (1969, 34–5) and confirmed at Mucking (Hamerow 1993, 52). The use of bosses was less coherent, dipping from a high of 39.7% in Phase 1 to 13.6% in Phase 3 but recovering over Phase 4 to reach 40.0% in Phase 5. The bosses on the later urns are almost all used in conjunction with stamps, which is much less common at the start of the sequence.

An examination of the methods used to form bosses showed that applied bosses and bosses formed by the plastic modelling of the clay were in use at the same time, although modelled bosses were more common in the early phases. It was found that the shapes of the bosses used (round, oval, elongated) formed no coherent pattern over the Cleatham sequence.

Motifs and medallions

	Urns in Phase	Motifs	Medallions
Phase 5	58.3	–	16.3 (28.0%)
Phase 4	113.7	0.3 (0.3%)	16.3 (14.3%)
Phase 3	102.5	1.3 (1.3%)	6.8 (6.6%)
Phase 2	137.7	1.8 (1.3%)	7.8 (5.7%)
Phase 1	192.5	24.5 (12.7%)	9.0 (4.7 %)

Table 8 The proportion of Cleatham urns bearing motifs and medallions in each phase. Urn groups that cover more than one phase have been proportionally distributed over the phases

Motifs (discrete drawn elements) were most common in Phase 1, where they appeared on 12.7% of the urns. Considered in a different way, of the 28 phased urns decorated with motifs, 24.5 (87.5%) could be placed in Phase 1, supporting the early dating of cursive decoration. Motifs were represented at very low level in Phase 4, occurring on 0.3% of the urns; they were absent in Phase 5. Unlike motifs, medallions (elements set on a defined field) become much more common at the end of the sequence, being used on 4.7% of the urns in Phase 1 and rising to 28.0% in Phase 5.

Complex and grouped decoration

	Urns in Phase	Complex	Groups
Phase 5	58.3	15.5 (26.6%)	18.5 (31.7%)
Phase 4	113.7	12.3 (10.8%)	34.5 (30.3%)
Phase 3	102.5	6.3 (6.2%)	29.3 (28.6%)
Phase 2	137.7	9.3 (6.8%)	56.3 (40.9%)
Phase 1	192.5	33.8 (17.6%)	81.3 (42.2%)

Table 9 Proportion of urns having complex or grouped decoration. Urn groups that cover more than one phase have been proportionally distributed over the phases

The use of 'complex' decoration appears to sag in the middle of the sequence, being used on only 6.2% of the Phase 3 urns. Although the proportion of urns with complex decoration is at its highest in Phase 5, the most vessels with complex decoration belong to Phase 1 which contained 33.8 (43.3%) of the 78 examples.

'Grouped' (or clustered) design elements were most common in the first half of the sequence, being used on 42.2% of the urns in Phase 1, but this design element continued to be used at a relatively high level throughout the sequence.

Grooved and incised decoration

	Total urns	Number of grooved urns	Incised only
Phase 5	58.3	12.3 (21.1%)	38.7 (66.4%)
Phase 4	113.7	23.4 (20.6%)	72.7 (63.9%)
Phase 3	102.5	27.4 (26.7%)	50.6 (49.4%)
Phase 2	137.7	60.1 (43.6%)	56.6 (41.1%)
Phase 1	192.5	98.8 (51.3%)	74.8 (38.9%)

Table 10 Number of urns with grooved and incised decoration in each Cleatham phase and the percentage of the total they represent. Urn groups that cover more than one phase have been proportionally distributed over the phases

In view of the importance attached to grooved decoration by Myres (1969, 30–1) the Cleatham data were analysed to see if his belief that this decorative technique was early, was justified. This analysis supported Myres' supposition. The technique is most common in Phase 1, where it was used on 51.3% of the phased urns, and steadily declines to 21.1% in Phase 5. At Mucking it was found that pots with grooved decoration were found in the southern, early part of settlement (Hamerow 1993, 45). The use of incised decoration seems complementary to that of grooved decoration rising from 38.9% in Phase 1 to 66.4% of the urns in Phase 5.

Applied linear decoration

Applied linear decoration was found on eleven of the Cleatham urns, 7.3 from Phase 1 and three from Phase 5 where it was used in a different way, as applied bows. There were no examples from the intervening phases. The concentration of applied linear decoration in the early phase is in accord with what was found at Mucking where it was a feature of the early part of the settlement (Hamerow 1993, 45).

Standing and hanging bows

	Total urns	Standing bows	Hanging bows
Phase 5	58.3	9.5 (16.3%)	22.8 (39.1%)
Phase 4	113.7	8.5 (7.5%)	15.3 (13.5%)
Phase 3	102.5	3.8 (3.5%)	1.8 (1.8%)
Phase 2	137.7	2.3 (1.7%)	0.8 (0.6%)
Phase 1	192.5	13.8 (7.2%)	10.5 (5.5%)

Table 11 Number of Cleatham urns decorated with bows and the percentage of the total they represent. Urn groups that cover more than one phase have been proportionally distributed over the phases

The use of bows has also been seen as a feature of early urns and this proposition is examined above. It would seem that while the use of hanging bows increases over the sequence, the use of standing bows declines over the early phases, recovering later.

In conclusion, while it is clear that some decorative elements were at their most frequent in particular phases, none of these were linked solely to a single period. It seems that most elements were in use at varying levels of frequency throughout the sequence.

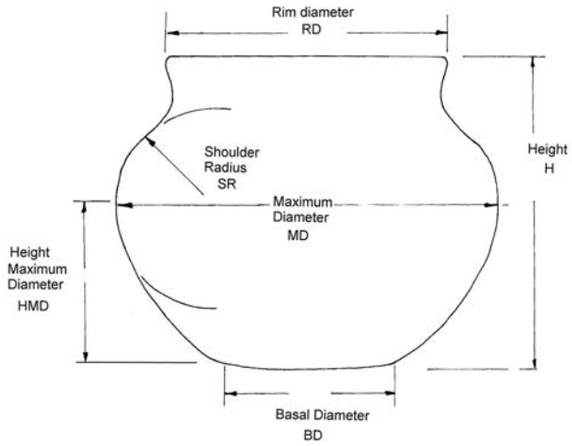


Fig 36 Dimensions recorded in the analysis of urn forms

Ratio 1 $\frac{\text{Height}}{\text{Maximum Diameter}}$ $\frac{H}{MD}$

Ratio 2 $\frac{\text{Height of Maximum Diameter}}{\text{Height}}$ $\frac{HMD}{H}$

Ratio 3 $\frac{\text{Maximum Diameter-Rim Diameter}}{\text{Height-Height of Maximum Diameter}}$ $\frac{MD\text{-}RD}{H\text{-}HMD}$

Ratio 4 $\frac{\text{2 x Shoulder Radius}}{\text{Maximum Diameter}}$ $\frac{2SR}{MD}$

The forms and proportions of the Cleatham urns

Having defined the phasing of the Cleatham urns on the basis of their decorative style, an attempt was made to establish a sequence based on shapes and proportions of the vessels (Fig 36). This was seen as a matter of importance as it offered the possibility of phasing the 271 undecorated urns from Cleatham. Only 20 of the undecorated vessels were phased in the matrix and no coherent pattern could be defined. The ratios considered were based on those which Richards (1987, 72–6), using principal component analysis, had identified as being most significant, together with an additional ratio (Ratio 4) which, it is believed, expresses the profile of a vessel in a single figure. These ratios are:

Before looking for variations in urn form over the five phases of the Cleatham sequence a comparison was made between the urns found in association, that is, demonstrably deposited at the same time. This, it was believed, would allow the amount of variation that occurred at the same time to be determined. All urns which had been found in association (both decorated and undecorated) were analysed and the amount of variation between the urns calculated. This was determined by comparing the measurements and ratios for each pair of associated urns and calculating the percentage difference between them. From these percentages, averages and standard deviations (σ) were calculated.[4]

	Population Σ	Average smaller/ larger urn	Greatest variation	Standard deviation σ	Coefficient of variation
Diameter	52	79.8%	46%	15.2%	0.19
Height	34	79.1%	47%	13.6%	0.17
Ratio 1	33	89.2%	73%	7.0%	0.08
Ratio 2	33	87.3%	59%	9.5%	0.11
Ratio 3	32	61.2%	29%	20.5%	0.33
Ratio 4	33	60.7%	29%	23.8%	0.39

Table 12 Amount of variation between pairs of associated urns

It was found that the smaller urns in the pairs had, on average 79.8% (σ 15.2%) of the diameter of the larger, and had 79.1% (σ 13.6%) of the height with coefficients of variation[5] of 0.19 and 0.17 respectively. These figures suggest that paired urns were generally of similar size. Ratios 1 and 2 again suggested that paired urns were of similar proportions with variations of 0.08 and 0.11, but the other two ratios (3 and 4), which actually give a better indication of the shape of the vessels (see below), have variations of 0.33 and 0.39

showing that paired urns were often of different shapes. **This would suggest that it is unsafe to use shape as a criterion on which to sequence the urns.**

The development of urn forms over the five phases

As previous classifications of Anglo-Saxon urns have been based on the shapes of the vessels the shapes of the Cleatham urns were analysed in an attempt to define trends (Table 13). The figures for the average urn diameters and heights over the five phases both show a decline in the size of the urns in the middle phase of the sequence, recovering in the last two phases. It is difficult to suggest a reason for this, but as the change is only around 18–20mm it would perhaps be wrong to place too much emphasis on it. Ratio 1 (H/MD) was found by Richards to be responsible for 79% of the variability between urns and was thus important. At Cleatham it was found that this ratio showed too little variation over the phases to be useful and no trends can be identified. Ratio 2 (HMD/H), which relates the height of the maximum diameter to the overall height, was found by Richards to be responsible for 9% of the variation; this, too was not found to be useful in identifying any trends at Cleatham. Ratio 3 (MD-RD/H-HMD) draws together a number of factors but was only found to be responsible for 5% of the variability. Again this failed to be useful.

Phase	Diameter	Height	Ratio 1	Ratio 2	Ratio 3	Ratio 4
5 (Σ45)	Av 229 σ 51 v 0.22	Av 201 σ 49 v 0.24	Av 1.16 σ 0.15 v 0.13	Av 0.51 σ 0.07 v 0.14	Av 1.04 σ 0.52 v 0.50	Av 0.48 σ 0.27 v 0.56
4 (Σ59)	Av 225 σ 43 v 0.19	Av 197 σ 40 v 0.20	Av 1.13 σ 0.15 v 0.13	Av 0.54 σ 0.06 v 0.11	Av 0.86 σ 0.44 v 0.51	Av 0.43 σ 0.28 v 0.65
3 (Σ44)	Av 207 σ 39 v 0.19	Av 177 σ 35 v 0.20	Av 1.17 σ 0.15 v 0.13	Av 0.53 σ 0.05 v 0.09	Av 0.96 σ 0.39 v 0.40	Av 0.39 σ 0.24 v 0.61
2 (Σ95)	Av 227 σ 43 v 0.19	Av 184 σ 42 v 0.23	Av 1.24 σ 0.15 v 0.12	Av 0.54 σ 0.05 v 0.09	Av 0.98 σ 0.39 v 0.40	Av 0.39 σ 0.23 v 0.59
1 (Σ160)	Av 234 σ 41 v 0.18	Av 197 σ 36 v 0.18	Av 1.19 σ 0.14 v 0.12	Av 0.53 σ 0.06 v 0.11	Av 1.00 σ 0.42 v 0.43	Av 0.42 σ 0.17 v 0.40

Table 13 Averages, standard deviations (σ) and variances (v) for urn diameters, heights and for Ratios 1, 2, 3 and 4 over the five phases, diameters and heights are given in mm. Urn numbers (Σ) include only those urns that can be attributed to a single phase. The variance (standard deviation/average) is a measure of how tightly the variable is clustered around the average. The lower the figure the tighter the clustering and the more satisfactory the grouping

It had been hoped that Ratio 4 (2SR/MD) (Fig 36) would allow us to look at the development of the shapes of the Cleatham urns. This ratio provides a measure of the shape of the urn's body, a globular vessel giving a ratio of 1.00; a biconical vessel with a small shoulder radius will have a very low ratio, while a tulip- or bag-shaped vessel will have a ratio greater than 1.00. If Myres' interpretation of the development of urn shapes was correct we should see an increase in the value of 2SR/MD, as biconical vessels were superseded by sub-biconical, shouldered and, at the end of the sequence, tulip-shaped vessels appeared. The figures for Ratio 4 do not support Myres' interpretation: the averages fail to indicate either low-ratio biconical urns in Phase 1 or high-ratio tulip-shaped urns in Phase 5. The standard deviations and coefficients of variation also point to a lack of standardisation in all phases. It was considered possible that the number of biconical vessels may have been masked by a larger number of more rounded vessels and a count was made of the number of urns in each phase which had ratios of 2SR/MD of less than 0.25. This showed that while in most phases 25–33% of the urns could be described loosely as 'biconical', in Phase 1 only 10.0% (9/95) urns had ratios of less than 0.25,; the reverse of what was expected. At Mucking it was found that carinated and biconical vessels occurred in the earliest (5th-century) part of the site where over 40 examples were found (Hamerow 1993, 42). This stands in contrast to the Mucking cemeteries, where only one example was found, leading Hamerow to suggest that this form was not seen as being suitable for funerary use.

It was considered possible that an overview of the whole assemblage might reveal clusters of urns that were grouped by form. To look for clusters in the size of the urns, the heights and diameters were plotted in 10mm bands, the number of urns occurring in each band being plotted as a percentage of the total population. The resultant charts showing diameters had three peaks, with urns of diameters of around 200, 220 and 240mm. While it might be argued that these peaks were linked to the site's chronology or to social conventions, it is unlikely that they have any significance. Their sharply defined nature suggests that they are products of the way in which the data were recorded. Richards (1987, 70–1) noted that some of his charts showed a pattern of alternating high and low bars. This, he suggested, was an effect of the recorder's perception when examining a continuous spectrum of urn dimensions. With the Cleatham material this problem has been exacerbated by the inclusion of many incomplete vessels on which it was necessary to estimate dimensions. When estimating there will have been a presumption in favour of '200mm' as opposed to a questionable '187mm'. The three apparent groupings of urn diameters can safely be ignored. The chart showing the height of the Cleatham urns showed two peaks. As with the recorded diameters, it is unlikely that these peaks are significant and these charts have not been included here.

Correlation of forms and urn groups

Having looked at the sizes and shapes of the urns over the five phases an attempt was made to determine if the decorative groups could be correlated with any particular urn forms. To compare the forms exhibited by each of the decorative groups, averages (means), standard deviations and coefficients of variation were calculated for the diameters, heights and ratios of urn groups containing more than ten urns. It was again found that the diameters, heights and Ratios 1 and 2 conformed fairly well to the means, with a low coefficient of variation, but there was more variation in Ratios 3 and 4. Some correlation was found for Ratio 3 amongst the urns of Groups 01b, 07a, 07s, 13b and 20n where the variation was relatively low but there was much less correlation for Ratio 4. The results of this analysis were disappointing as it was found that there was insufficient difference between proportions of the urns to allow any group to be defined in terms of its shape or dimensions. A comparison between the forms of the decorated and undecorated vessels showed Ratios 1 and 2 were broadly similar on both decorated and plain urns but Ratios 3 and 4 were much more widely scattered. This is likely to reflect the inclusion amongst the plain urns of domestic pottery, made for a range of non-funerary purposes.

Base and rim forms (Fig 37)

Rim forms

Phase	Site average Σ 598 rims	1 (100 rims)	2 (62 rims)	3 (27 rims)	4 (41 rims)	5 (31 rims)
Beaded	102 (17.1%)	22 (22.2%)	12 (19.4%)	3 (11.1%)	4 (9.8%)	6 (19.4%)
Bodyline	51 (8.5%)	3 (3.0%)	3 (4.8%)	–	4 (9.8%)	–
Everted	384 (64.2%)	71 (71.7%)	44 (71.0%)	19 (70.3%)	29 (70.7%)	23 (74.2%)
Vertical	61 (10.2%)	4 (4.0%)	3 (4.8%)	5 (18.5%)	4 (9.8%)	2 (6.5%)

Table 14 Rim form use in each of the five Cleatham phases. The number of rims quoted for each phase is the number of surviving rims that can be directly attributed to that phase

Of the Cleatham urns, 598 had surviving rims. An attempt was made to correlate the forms of rims used with urn groups but, although some trends were identified, this proved to be of limited value. Some urn groups were excluded as too few vessels retained their rims to provide a valid sample. The largest

group was the undecorated urns of Group 01 of which 169 had rims. While the proportion with beaded rims was similar to the site average (15.3% cf 17.1%), the use of simple bodyline rims was significantly higher (20.0% cf 8.5%) and the use of everted rims lower (45.6% cf 64.2%). This is likely to be due to the inclusion of domestic pottery with the Group 01 urns. With the other groups the small sample size made it difficult to identify any correlations of rim forms and urn and no one rim form was used exclusively on a single group.

An analysis of rim forms by phase revealed some correlations. Everted rims were the most common and represented around 70% of all of the surviving rims in each phase. Beaded rims were the second most common, representing around 20% of the rims in Phases 1, 2 and 5 but declining in popularity in Phases 3 and 4 with a corresponding increase in the use of vertical rims.

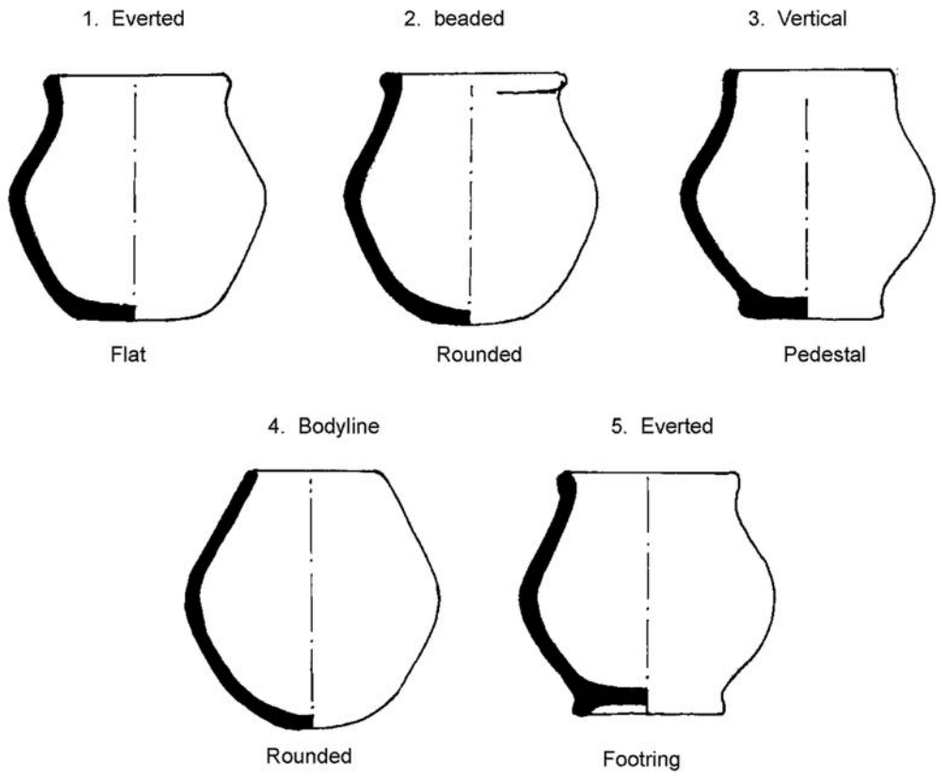


Fig 37 Base and rim forms of the Cleatham urns

Basal forms

Phase	Site average Σ 836	1 (120 bases)	2 (76 bases)	3 (25 bases)	4 (51 bases)	5 (42 bases)
Sagging	13 (1.6%)	5 (4.2%)	4 (5.3%)	–	–	–
Rounded	203 (24.3%)	35 (29.2%)	25 (32.9%)	5 (20.0%)	15 (29.4%)	11 (26.2%)
Footring	9 (1.1%)	1 (0.8%)	–	–	1 (2.0%)	1 (2.4%)
Flat	593 (70.9%)	77 (64.2%)	46 (60.5%)	20 (80.0%)	35 (68.6%)	27 (64.3%)
Decorated	10 (1.2%)	2 (1.7%)	1 (1.3%)	–	–	1 (2.4%)
Plinth	8 (1.0%)	–	–	–	–	2 (4.8%)

Table 15 Base form in use in each of the five Cleatham phases. The number of bases quoted for each phase is the number of surviving bases that can be directly attributed to that phase

An attempt was made to correlate the forms of the urn bases with particular urn groups but it was found that only one basal form could be convincingly linked to an urn group. This was Group 01p, plain vessels with perforated bosses, 37.5% (3/8) of which had footring bases. Flat and rounded bases were used on urns of most groups and it was not possible to define any pattern, the proportions of these two basal forms

remaining more or less constant over the phases. A temporary decline in the proportion of rounded bases used in Phase 3, and a corresponding rise in the use of flat bases, may be significant but it is difficult to attach any meaning to it. Of the ten decorated bases found at Cleatham no two were associated with the same urn group. The same was true of the eight plinth bases.

The pottery stamps (Figs 38 and 39)

It had been hoped that it would be possible to extend the phasing of the cemetery by using linked sets of dies to make connections between groups and show relationships. Much effort was put into the classification of the stamps and the search for linked groups. This approach proved successful at Spong Hill (Hills 1977; Hills and Penn 1981; Hills *et al* 1987; Hills *et al* 1994) but the analysis of the Cleatham stamps was disappointing. This was due to many of the Cleatham stamps being of simple form (annular, ring-cross etc.) and only in the case of the more unusual stamps was it possible to suggest links. It appears that, while attempts were made to use similar combinations of stamped motifs, different dies were employed. These have been included as stamp groups, as it seems that the makers at least aspired to the same suite of stamps. It is likely that there were more stamp groups than are defined below, but, in view of the difficulty in defining them, these have been omitted.

Stamp classification

While the stamps were initially classified using the national system established by the late Lady Teresa Briscoe (1981), this was found to be difficult to use in the sorting of the Cleatham pottery and a local classification was established. The stamps used on all of the Cleatham urns have been recorded by Lady Briscoe's team. A detailed, metrical analysis of the distinctive stamps used by the Sancton/Baston potter did allow individual dies to be recognised (Arnold 1983, 17–30).

The aim of the Cleatham stamp classification was to allow impressions which come from the same die to be recognised. This is difficult as different clay bodies and firing temperatures affect the amount of the shrinkage during drying and firing, resulting in the same die presenting impressions of varying size. In view of the problems involved in linking dies a process of exclusion was used in which the aim was to demonstrate which stamps **could not have come off the same die**. Once this was done die links could be identified. The coding used to describe the dies consists of two or three elements: an upper case letter defining the shape of the stamp, a lower case letter defining its internal detail, and a final digit. This digit allows some of the more common stamps to be differentiated; in the case of a grid the total number of lines is given (four horizontal lines and five vertical lines, giving 9). With annular stamps and the ubiquitous ringed-cross, a diameter is given. While this is subject to the problems caused by variable shrinkage described above, it does at least make in clear that an Rc5 impression and an Rc12 impression are not off the same stamp.

Stamp shapes

A	Annular	O	Oval
B	Bow	P	Palm/hand
C	Cross	Q	Miscellaneous shapes
D	Diamond	R	Round
F	Framed	S	Square/rectangular
G	Gear wheel (toothed)	T	Triangular
H	Horseshoe	V	Rectangular
I	Object impression	W	Wave
L	Shield	X	Rouletted
M	Motif	Y	Whorl
Z	Star		

Internal elements of stamps

b	Barred	m	Motif
c	Cross	p	Plain, undecorated
d	Double lines	s	Segmented
f	Flower, petalled	v	Void
g	Grid	y	Whorl

A 6 × 5 grid could not come from the same die as a 6 × 6 grid.

Stamp Group 1 (Table 16, Fig 38)

This is characterised by two large stamps, one a square or rectangular grid and the other daisy-like. Some stamp sets have been recognised, one consisting of the square grid stamp Sg14 and the daisy Rf15.

The grid Sg14 appears in combination with daisy stamps other than Rf15 (for example Rf11, Rf16, Rf17), suggesting that the grid/daisy combination was of interest to the makers of pots but that variations in the dies used were acceptable. In five cases, the grid/daisy was used in combination with other stamps, a voided cross, Cv1, a circular grid Rg8 and, in three cases, a ringed cross, Rc7 (Rc6 is probably from the same die).

Urn No	Stamp	Stamp	Stamp	Urn Group	Phase
134	Rf?	Sg10		15s	4–5
265		Sg10		13n	1
330		Sg14	Gf1	15s	4–5
387	Rf?	Sg15	Cv1	15s	4–5
429	Rf15	Sg14		15s	4
431	Rf11	Sg14		15s	4–5
479	Rf11	Sg10		09n	5
498	Rf16	Sg14	Rc6	15s	4–5
519	Rf15	Sg14		15s	5
883		Sg11	Gv3	15s	4–5
1018	Rf?	Sg?	Rg8	15s	4–5
1058	Rf17	Sg14	Rc7	15s	4
1074	Rf14	Sg?	Rc7	15s	4–5
1110	Rf16	Sg?		15s	5
1187	Rf17	Sg16		15s	4

Table 16 Stamp Group 1

Fourteen of the fifteen urns which belong to Stamp Group 1 belong to Urn Group 15s and can be placed in Phase 4–5. Of the remaining vessels, Urn 265 bears only an Sg10 stamp, which is much smaller that those used on the other Stamp Group 1 vessels. As the form of Urn 265 is quite different from the rest of the vessels in Stamp Group 1 its place in Phase 1 seems acceptable.

Stamp Group 2 (Table 17, Fig 38)

Urn No	Stamp	Stamp	Urn Group	Phase
129	Bg1		13n	1
137	Bg1	Tg1	13n	1
819	Bg1	Tg1	13n	1
868	Bg1	Tg1	13n	1

Table 17 Stamp Group 2

This Group is marked by the use of two distinctive stamps, a crescent (Bg1) and a triangle (Tg1). Slight variations exist but these may be a result of the die becoming clogged with clay. This is an interesting early group, which includes the magnificent Urn 137, which shares a stamp with the other urns listed above. The other urns in Group 13n are included due to their shared panelled decoration.

Stamp Group 3 (Table 18, Fig 38)

Urn No	Stamp	Stamp	Urn Group	Phase
284	Rs7	Lb1	18s	4
492	Rs7	Lb1	18s	4
693	Rs7	Lb1	10s	3–4

Table 18 Stamp Group 3

This Group contains only three urns which are linked by a barred shield stamp (Lb1) and a segmented annulet (Rs7). There are some differences between the stamp impressions but these, again, could be due to clogging of the die. These urns present a coherent group and appear over two phases of the Cleatham cemetery. They are well made which may be the mark of a practised hand.

Stamp Group 4 (Table 19, Fig 38)

Urn No	Stamp	Stamp	Stamp	Urn Group	Phase
708	I	Yy1		20n	1–3
807	I	Yy1	Qm2	20n	1–3
954	I	Yy1		20n	1–3

Table 19 Stamp Group 4

Group 4 is characterised by the use of a distinctive stamp in the form of a double whorl (Yy1) which appears in association with a simple round impression, Stamp I, perhaps from a utilised object. In one case these were supplemented by a comet-like stamp (Qm2). This is a small coherent group from the beginning of the Cleatham sequence.

Stamp Group 5 (Table 20, Fig 38)

Urn No	Stamp	Stamp	Urn Group	Phase
513	Hp2	Rc9	02s	2–4
590	Hp2	Rc9	02s	2–4

Table 20 Stamp Group 5

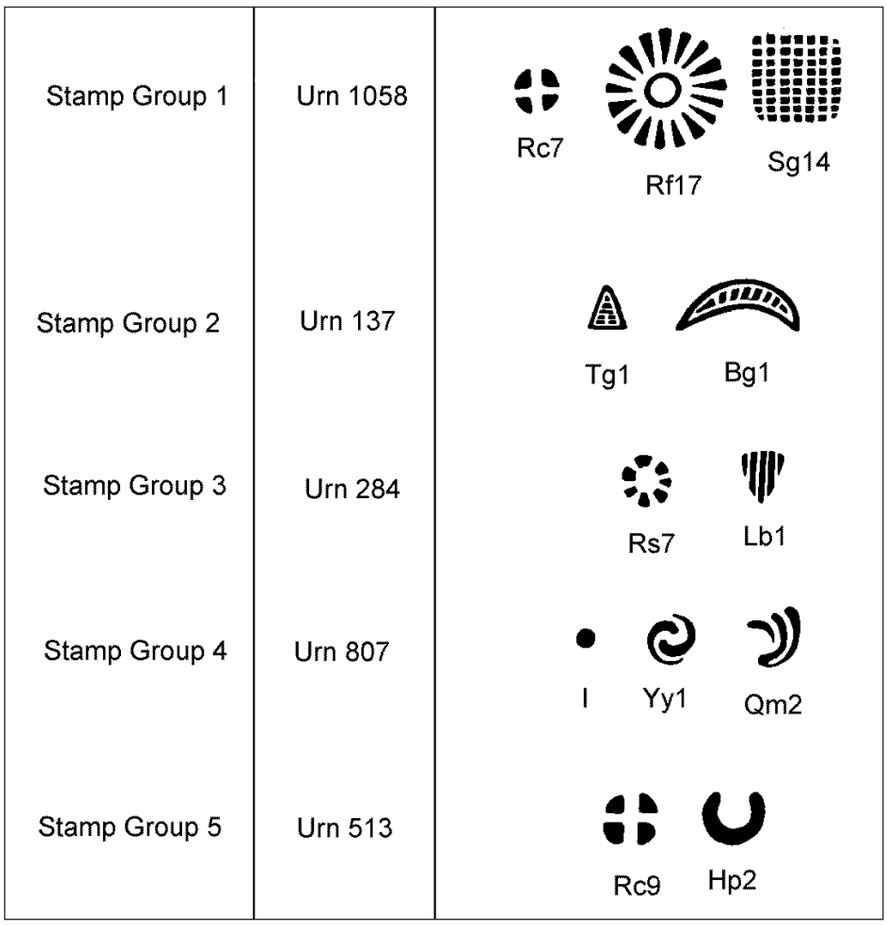


Fig 38 Cleatham pottery stamps, Groups 1–5

This group contains only two urns sharing the same pair of stamps, a ring cross (Rc9) and a horseshoe (Hp2). The two vessels are also similar in shape but not in size. In Urn 639 and Urn 242 other stamps with a similar horseshoe shape are associated with the burnt bones of large animals (almost certainly horses).

Stamp Group 6 (Table 21, Fig 39)

This is a large and heterogeneous group of stamps linked by the use of a double-lined cross, Cd*. It is clear that subgroups are present amongst these stamps but they are difficult to define, although Urns 422 and 870, and Urns 259 and 1166 may be linked. The link between the first of the two groups (Urns 422 and 870) is not strong, as the stamps differ in detail. The relationship between Urns 259 and 1166 is stronger but the two urns belong to different groups and phases. Urn 1166 is poorly preserved and is only placed into Group 06s on the strength of its apparently random stamping. All that can be said of the rest of the impressions in Stamp Group 6 is that the cross motif appears to have been used on a wide range of urn types over the whole period of the site's use.

Urn No	Stamp	Stamp	Stamp	Stamp	Urn Group	Phase
125	Cd2				00n	?
141	Cd2	Xp2			10s	3–4
202	Cd3				02s	3–4
259	Cd4		Rs13		10x	5
323	Cd1				09n	5
326	Cd3				07s	2
382	Cd2	Ap1			06s	2
422	Cd4			Ad	04s	2
425	Cd2	Lg6			10s	3–4
428	Cd5				06s	2
650	Cd1				03s	2
700	Cd5				02s	2–4
870	Cd4			Ad	07s	1–2
921	Cd1				03s	1–3
1107	Cd5	Rg6			02s	1–4
1166	Cd4		Rs13		06s	2
1212	Cd1				00s	?

Table 21 Stamp Group 6

Stamp Group 7 (Table 22, Fig 39)

Urn No	Stamp	Stamp	Stamp	Stamp	Urn Group	Phase
269	Ad9	Rs6	Sq4	Wm3	11s	5
634	Ad13	Rs6	Sg6	Wm3	02s	3–4

Table 22 Stamp Group 7

This is one of few instances where Cleatham urns bear the impressions of four stamps. It is interesting to note that while the forms of the stamps are the same they are all from different dies. The two vessels resemble each other in form and decoration although Urn 269 has some additional elements in its decorative scheme. They both belong to the later phases of the Cleatham cemetery.

In addition to the stamp groups defined above there were a few other cases where urns could be linked by single, distinctive stamps. Urn 257 (Group 09s, Phase 3) and Urn 273 (Group 10s, Phase 4) are linked by the small hand-shaped stamp, Pm2. While they belong to different groups these two vessels share a similar shape, are both in slagged fabrics and are likely to be products of the same hand. It might also be argued that Urn 403 (Group 12s, Phase 4) and Urn 892 (Group 09n, Phase 5) share the same stamp (Pn2). Again the two vessels share a similar shape and fabric.

Surprisingly, even making allowances for variations caused by shrinkage, a lengthy study failed to

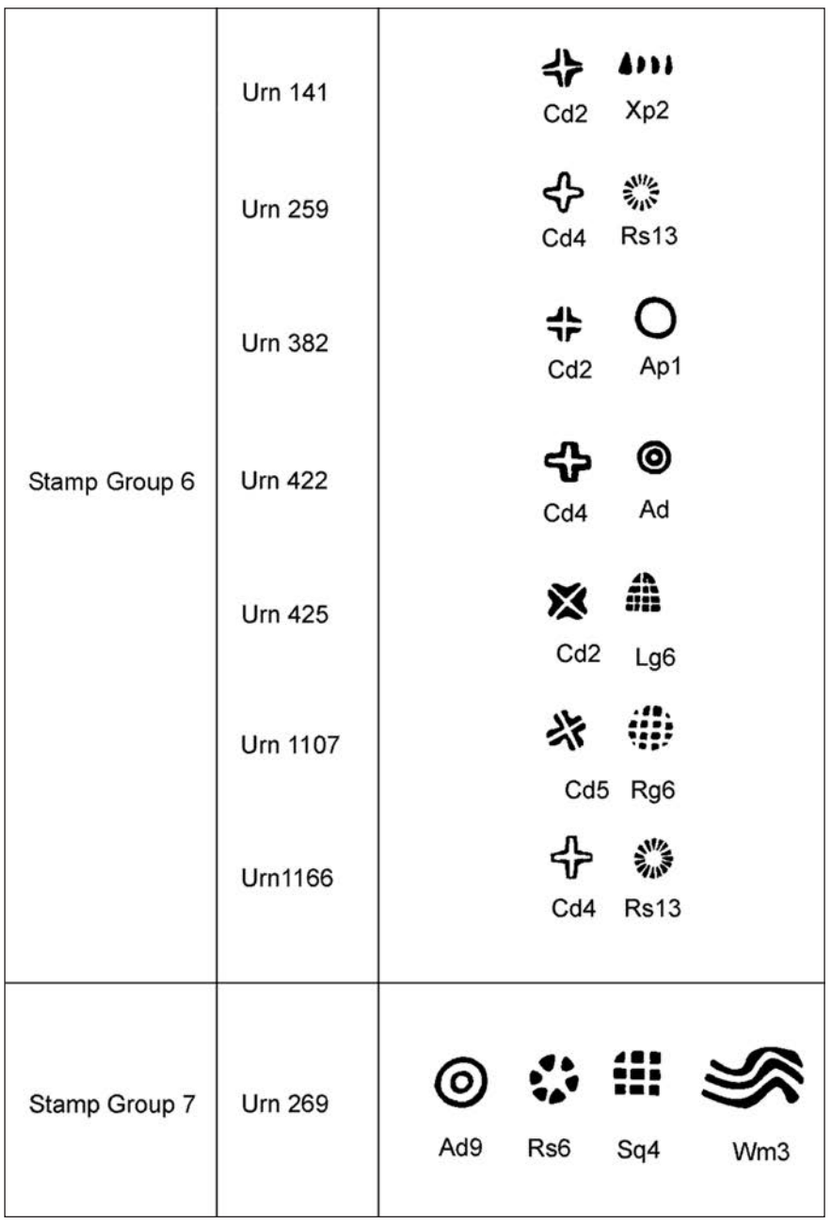


Fig 39 Cleatham pottery stamps, Groups 6–7

produce any further stamp groups amongst the Cleatham urns. The classification system used for the Cleatham stamps allowed an estimate to made of the number of urns on which each of the dies was used. Of the 162 classified dies from Cleatham it appears that 76 were used on one pot only. A further 24 dies were possibly used on two urns, 13 on three, 16 on four, and 15 were used on between six and 21 urns. This latter figure is unreliable as it includes some stamps, like the double-ringed type (Ad) which present a continuum of sizes which could not be satisfactorily separated. In the case of the Ad stamps it is probable that at least five dies would be required to make the recorded impressions. Contrary to what was expected, it appears that many of the stamps used to make the Cleatham urns were often used only once. This is particularly clear with Stamp Group 1 where the fifteen urns employ at least ten different dies to make the two main types of impressions (five Rf dies and five Sg dies).

The lack of die-links at Cleatham may be paralleled at South Elkington. In his discussion of the pottery from the site Myres (1951, 63–4) was forced to conclude

> *Apart from one or two not altogether convincing cases there are no instances in this cemetery even of two stamped pots being attributable to one potter, certainly nothing remotely resembling evidence for a specialised industry. In this respect Elkington is unique among the great cemeteries of the period, in all of which the work of several professional potters can be isolated … At Elkington it would appear that, even quite late in the sixth century, the modest degree of specialisation implied by the existence of professional potters had hardly been reached, and most households may have continued to make and decorate their own requirements in pottery, often perhaps cutting fresh stamps for the purpose on the ends of sticks every time a new batch was baked.*

What this means in terms of pottery production is difficult to ascertain. Surviving Anglo-Saxon pottery dies were cut into antler tines and would have survived long use (West 1985, 125, fig 254). However, as West suggests, is possible that dies were made from hardwood. His objection to this, that the wood would swell in contact with the wet clay, need not be a problem. Stamping would be best carried out when the clay was no longer sticky but still malleable, and a smear of grease on the face of the die would prevent water penetration and ensure that the die came away cleanly.

Impressions made without the use of a die

The use of objects to make impressions on Anglo-Saxon pottery has been discussed by Briscoe (1985, 136–42) and some attempts have been made to use it as a way to date urns. Of the 373 stamp-decorated urns, 74 (19.8%) were found to have been decorated using objects rather than stamps (irregular stamps, Group I). It was not possible to identify what had been used to make any of the irregular impressions on the Cleatham urns although in some cases it is likely to have been the point of a knife.

It appears that the use of irregular stamp impressions was most common in the initial phases of the Cleatham sequence when they appear on 40.0% of the stamp-decorated urns. After this the use of irregular stamping underwent an intermittent decline to 19.5% in Phase 5.

Phase and number of stamped pots	Phase 1 (24)	Phase 2 (39)	Phase 3 (12)	Phase 4 (42)	Phase 5 (41)
Urns stamped using irregular stamps	10 (41.7%)	11 (28.2%)	3 (25.0%)	4 (9.5%)	8 (19.5%)

Table 23 Proportion of urns stamped using object in each phase compared with the number of stamped urns

The quality of the pottery

Phase and number of urns	1 (160)	2 (96)	3 (44)	4 (59)	5 (45)
Accomplished	8 (5.0%)	4 (4.2%)	1 (2.3%)	–	5 (11.1%)
Poor	5 (3.1%)	6 (6.3%)	4 (9.1%)	2 (3.4%)	–

Table 24 Proportion of urns in each phase seen as being of accomplished or poor workmanship. Number of urn per phase does not include urns spread out over more than one phase

While the level of expertise shown by most of the Cleatham pots was described as 'average', there are a small number of vessels which stand out from the rest

by reason of their fine thin bodies and symmetry. Other vessels could be the sad products of Myres' 'uprooted amateurs' with over-thick sections and poor shaping. Of the 1204 urns from Cleatham, 1071 (89.0%) were described as being of 'average' quality; 42 (3.5%) were 'accomplished' and 71 (5.9%) 'poor'. The residue could not be classified. Only Group 01 contained enough urns to make analysis worthwhile. Of the 225 urns in this group for which the quality of manufacture could be defined, 194 (84.7%) were of 'average' manufacture, four (1.8%) were 'accomplished' and 27 (11.8%) were 'poor'. The higher proportion of poorly made undecorated vessels may represent the use of roughly shaped domestic wares.

There appears to have been a slight decline in the quality of the urns after the early phases of the cemetery's use. The recovery in Phase 5 in which 11.1% of the urns were described as 'accomplished' with no 'poor' urns is reflected in the style of the decoration used on many of the urns of this phase in which the urns tend to be neatly decorated with carefully executed geometric designs.

Perforations and lead plugs (Pls 27–8)

It was found that 81 of the Cleatham urns had been deliberately perforated prior to burial. In the context of the 827 classified urns these represent 9.8% of the total, a figure comparable with 10% at Spong Hill. In addition to these vessels, fifteen urns had had their perforations filled with molten lead to form crude plugs, and seven unstratified lead plugs were recovered from the topsoil and one from the fill of Grave 37. It must be emphasised that these lead plug are not repairs but form part of a deliberate act. Perforations were associated with 37 of the 70 urn groups and subgroups. There were twelve examples in undecorated Group 01, representing 5.3% of the 226 urns. Four of the bossed urns in Group 01b were perforated, representing 25.0% of the sixteen urns in this group and it was found that two of the urns in Group 01p were perforated (2/8, 25.0%). In many cases a larger proportion of urns in the smaller groups had been perforated with, for example, 37.5% (3/8) of the urns in Group 10x having holes through them. It is thought that the fact that these smaller groups tend to contain the more highly decorated, distinctive urns accounts for their receiving this special treatment. In the large groups like Group 10a and Group 10s only 4.1% (2/49) and 7.6% (4/53) respectively were perforated, and in Group 02s only 2.5% (1/40) of the urns had been perforated.

The frequency of perforated urns over the five phases of the Cleatham cemetery shows a fall in the use of perforations over Phases 1–3 followed by a strong increase in Phases 4 and 5. Lead plugs were used at a low level throughout the sequence, occurring in 1.0–2.0% of the urns in Phases 1–4; the absence of them in Phase 5 may only reflect the low number of urns in this phase. One of the Group 21 'Roman' style urns (Urn 649, Phase 2) had been perforated and the hole filled with a lead plug.

Phase and number of urns	1 (192.5)	2 (137.7)	3 (102.5)	4 (113.7)	5 (58.9)
Perforations	17.3 (9.0%)	7.3 (5.3%)	6.1 (6.0%)	11.8 (10.4%)	15.3 (25.9%)
Lead plugs	1.9 (1.0%)	2.7 (2.0%)	1.2 (1.2%)	1.5 (1.3%)	–

Table 25 Number and proportion, in each phase, of Cleatham urns with perforations and lead plugs. Urns not attributed to a single phase have been distributed over the phases

In addition to the lead plugs, one of the Cleatham urns was fitted with a small glass window in the centre of its base (Urn 433, Group 04b). This urn is unusual and could not be phased. Window urns were found at Elsham where windows were found in both the base and sides of vessels (Freda Berisford, pers comm) and an example was found at Loveden Hill (Fennell 1964, 114). The basal window seen on the Cleatham urn can also be paralleled on a vessel found with Inhumation 42 at Spong Hill (Hills *et al* 1984, 95–6, fig 98).

The pottery fabrics

As it was not found possible to correlate the phasing based on decoration with urn forms and proportions, the pottery fabrics were examined as a possible method of ordering the undecorated and incomplete urns. A feature of the Cleatham urns was the wide range of materials, 'fillers' or 'temper' added to the clay bodies. These are significant as they represent deliberate selections on the part of the potters. When cataloguing the

urns an attempt was made to record the pot fabrics in an objective way to allow comparisons to be made. To sort these descriptions electronically, an alphabetic coding system was used to describe, rather than classify, the fabrics, eg 'S' abundant slag, lower case 's' sparse slag. Elsewhere classification systems broke down; at Mucking it was found that some joining sherds had been placed in different classes (Hamerow 1993, 27).

While it was found that 540 (44.8%) of the 1204 Cleatham urns contained two or more additives, none of the combinations was repeated with sufficient frequency to allow any patterns to be defined. Fillers were used in the Cleatham urns with the following frequencies:

Additive	Number of urns	Percentage (Σ1204)
Calcareous	160	13.3%
Chaff	80	6.6%
Chamocite	7	0.6
Feldspar	46	3.8%
Grog	1	0.1%
Grass	61	5.1%
Gypsum	2	0.2%
Haematite	155	12.9%
Glauconite	8	0.7%
Quartz, angular	508	42.2%
Mica	83	6.9%
Quartz, sub-angular	297	24.7%
Quartz, rounded	259	21.5%
Quartz, compound	44	3.7%
Shell	26	2.2%
Slag	214	17.8%

Table 26 Number and proportion of urns containing additives. As an urn may contain more than one inclusion the total percentages will exceed 100

Quartz is by far the most common additive occurring in 1108 (92.0%)of the 1204 urns. It was found in combination with other materials in 465 cases. The most common form of quartz had an angular grain form which was used in 42.2% of the Cleatham urns and continued throughout the sequence although its use dipped in Phase 4 (Table 27). Some urn fabrics contained more that one type of quartz, indicating that different, or mixed, sources were in use simultaneously. However, in view of its ubiquity, quartz was of disappointingly little value in defining fabric groups and effort was concentrated in looking at the less common, but potentially more informative, additions.

To determine if any of the decorative groups were associated with specific additives the frequency with which each additive occurred was examined in some detail but it was found that none of the decorative groups were made in only one fabric. There was a high level of variation, with similar vessels being made in quite different fabrics. This lack of standardisation is likely to be the mark of non-specialist potters using whatever was to hand.

Phase and number of urns	1 (192.5)	2 (137.7)	3 (102.5)	4 (113.7)	5 (58.9)
Feldspar	5.2 (2.7%)	4.5 (3.3%)	7.0 (6.8%)	3.8 (3.3%)	5.7 (9.7%)
Mica	10.5 (5.5%)	8.3 (6.0%)	5.7 (5.2%)	4.8 (4.2%)	5.7 (9.7%)
Quartz, angular	71.9 (37.4%)	61.7 (44.8%)	42.5 (41.5%)	44.8 (39.4%)	25.2 (42.8%)
Quartz, sub-angular	49.1 (25.5%)	27.1 (19.7%)	25.9 (25.3%)	24.6 (21.6%)	13.0 (22.1%)
Quartz, rounded	35.1 (18.2%)	32.9 (23.9%)	20.1 (19.6%)	31.3 (27.5%)	14.7 (25.0%)
Quartz, compound	8.2 (4.3%)	4.1 (3.0%)	7.1 (6.9%)	7.4 (6.5%)	2.2 (3.7%)

Table 27 Number and proportion, in each phase, of Cleatham urns containing feldspar, mica and quartz. Urn groups covering more than one phase have been spread over the phases

Acid igneous rock

Perhaps the most significant additive to Anglo-Saxon pot fabrics is acid igneous rock which occurs in all five of the Cleatham phases, reaching a peak in Phase 5 when it was used in 9.7% of the urns.

The presence of this material in the early Anglo-Saxon pottery of the East Midlands was recognised by John Walker in the mid 1970s (Vince and Young 1992). He found that pottery containing this additive occurred over a wide area of southern Lincolnshire and Cambridgeshire but was unable to determine whether it had been moved by human or natural agencies. Many of the findspots were close to glacial deposits which contained igneous rock and provided a possible source. Petrological work on thin sections taken from Anglo-Saxon pottery led Alan Vince to confirm the source of the igneous rock as the Mount-

sorrel Granodiorite of the Charnwood Forest area of Leicestershire, some 90km to the south-west of Cleatham. Fieldwork showed that detritus from this outcrop occurred to the south and south-west but was absent in the Soar valley, making it unlikely that glacial action could move it to the north and north-east. It has also been observed that the quantity of pottery found to contain acid igneous rock makes it unlikely that the makers were relying on glacial drift as their source (Williams and Vince 1997, 214–20). It seems that this pottery was being manufactured in the area to the south-east of Charnwood and 'traded' throughout the region (*ibid*, 219). While the evidence offered by the petrological examination can not be refuted, this writer found the concept of this pottery being centrally produced difficult to accept. The urns were seen as too varied to be the products of a centralised industry and the mechanics of the distribution of these vessels were thought to present problems. In an examination of Bronze Age pottery and briquetage from Tetney, Lincs, Vince (1995, 83–4) identified both acid and basic igneous rock. Both materials were present in the glacial drift around Tetney but it was considered more likely that this Bronze Age pottery was an import from the Charnwood area of Leicestershire. Acid igneous rock is also present in some of the Iron Age pottery in the region (Williams 1992, 96), suggesting that either we are looking at a formidably ancient and long-lived tradition of potting in the East Midlands or that acid igneous rock was widely distributed in the drift. More recently Vince (1998, 244) suggested that it was more likely that the acid igneous rock in pottery from Castledyke, Barton on Humber, is best seen as coming from locally found glacial erratics.

The most outstanding characteristic of acid igneous rock is feldspar; of its other components, quartz was ubiquitous and, while mica was frequently found associated with feldspar, it occurred by itself in the undecorated urns of Group 01a and is not a reliable marker for acid igneous rock. Feldspar was found in 47 Cleatham urns but in only three cases was it present at more that 10%. It appeared as a minor additive in urns of seventeen of the 59 decorative groups and subgroups but in eleven cases only one urn in the group was found to contain feldspar; in four cases it was found in two members of a group and two groups had three urns containing feldspar. Four groups showed a relatively high frequency of acid igneous rock as an additive, Groups 02a, 14.3% (3/21); 09n, 12.5% (2/16), and 11s, 25% (3/12). It is notable that other urns in these same groups contained slag, suggesting that they were made in the area around the cemetery. No example was found of acid igneous rock and slag or haematite being used in the manufacture of the same pot.

Slag and haematite

Phase and number of urns	1 (192.5)	2 (137.7)	3 (102.5)	4 (113.7)	5 (58.9)
Slag	48.1 (25.0%)	25.6 (18.6%)	17.1 (16.7%)	17.3 (15.2%)	5.7 (9.7%)
Haematite	28.8 (15.0%)	23.7 (17.2%)	11.2 (10.9%)	8.4 (7.4%)	2.7 (4.6%)

Table 28 Number and proportion, in each phase, of Cleatham urns containing slag and haematite. Urn groups covering more than one phase have been spread over the phases

As these two materials are both linked with iron extraction their presence in the fabric of the urns may reflect the *raison d'ètre* for the settlements using the Cleatham cemetery which are frequently associated with evidence for iron smelting. Slag was found as a filler in 213 (17.7%) of the Cleatham urns and haematite was found in 154 (12.8%) of the urns. Not surprisingly there was a strong correlation between the use of slag as an additive and the inclusion of the iron ore, haematite. Slag was found to have been used in the manufacture of urns belonging to 38 of the 59 urn subgroups and haematite in 36 subgroups. Twenty-four of the subgroups were found to contain both materials. In no case was any subgroup found to have been made only in a slag/haematite filled fabric. In examining the usage of these fabrics only those groups containing more than ten urns were included and while nothing conclusive came out of this analysis some interesting observations can be made. It was found that 21.2% (48/226) of the plain urns of Group 01 had been made in fabrics that contained slag and 16.4% (37/226) contained haematite. This would suggest that these plain urns were being made locally. It was found that 34.7% (17/49) of the urns in the early Group 10a contained slag and 22.4% (11/49) haematite. The proportion of slag- and haematite-filled fabrics in the urns of Group 10s is lower, at 18.9% (10/53) with slag and 11.3% (6/53) with haematite, supporting their later date. It was found that the proportion of the 40 Group 02s urns that contained these fillers was low, with only one urn (2.5%) containing slag and three (7.5%) haematite.

Additions of slag to the clay body were most common in Phase 1 where slag was present in 25.0% of the urns but fell in frequency throughout the sequence. The frequency of haematite also declines through the history of cemetery.

Calcareous materials

Phase and number of urns	1 (192.5)	2 (137.7)	3 (102.5)	4 (113.7)	5 (58.9)
Calcareous filler	29.4 (15.3%)	22.1 (16.1%)	8.9 (8.7%)	14.2 (12.5%)	8.0 (13.6%)

Table 29 Number and proportion, in each phase, of Cleatham urns containing calcareous fillers. Urn groups covering more than one phase have been spread over the phases

Calcareous fillers (chalk, limestone or shell) were found to have been used in 156 (13.0%) of the Cleatham urns. These fillers occurred in fifteen of the urn groups, being found in 11.5% of the plain Group 01 urns (26/226), 40.0% of the Group 05a urns (4/10), 30.0% of the Group 05n (3/10) urns and 37.5% (3/8) of the Group 16b urns. Calcareous additions appear throughout the sequence, occurring in 8.7% to 16.1% of the urns. As the Middle Saxon period in Lincolnshire was dominated by shell-tempered Maxey-type ware it was thought possible that precursors were present at Cleatham but crushed shell was rare at Cleatham and, disappointingly, there was no indication of it rising in importance at the end of the sequence.

Organic materials

Phase and number of urns	1 (192.5)	2 (137.7)	3 (102.5)	4 (113.7)	5 (58.9)
Barley grains	10.5 (5.5%)	4.5 (3.3%)	1.5 (1.5%)	2.5 (2.2%)	1.0 (1.7%)
Chaff	10.4 (5.4%)	8.7 (6.3%)	6.2 (6.1%)	8.0 (7.0%)	2.5 (4.2%)
Grass	9.3 (4.8%)	3.6 (2.6%)	3.1 (3.0%)	9.8 (8.6%)	3.0 (5.1%)

Table 30 Number and proportion, in each phase, of Cleatham urns containing organic materials. Urn groups covering more than one phase have been spread over the phases

Grass or chaff occurred as a minor additive throughout the sequence, grass being used in 5.2% (62/1204) of the urns and chaff in 6.9% (83/1204) of the urns. Chaff was found in 21 of the 59 urn subgroups but in fourteen cases the group contained only a single urn with chaff filler. Most chaff-filled urns were in Group 01, where chaff was found in 11.1% (25/226) of the urns. Chaff was found in 21.4% (3/14) of the Group 15s urns and 10.2% (5/49) of the Group 10a urns.

The use of grass as a filler occurs in all phases of the cemetery's history but no trends could be defined. It was found in 8.8% (20/226) of the Group 01 urns and 12.2% (6/49) of the Group 10a urns. The only strong relationship was with the urns of Group 15s where 42.8% (6/14) of the urns were found to contain grass. Group 15s was a significant group in other ways as the urns shared stamps (Stamp Group 1) and were made in a similar soft, soapy fabric. This is the only case where it was possible to link a fabric to a decorative group. The use of organic fillers has a low frequency and is incoherent with no patterns emerging. At Mucking it was found that there was an increase in the use of grass-tempered pottery in the 6th and 7th centuries (Hamerow 1993). This fabric, however, was far more important at Mucking where it represented 49% of the pottery from the settlement and 46% from Cemetery II, and it would be unsafe to compare two dissimilar assemblages.

Cereal additions to fabrics

A final, but somewhat different, additive to the clay body were grains of barley which survive either in a carbonised form or as impressions in the fabric of the vessel. Barley was added to the body of 60 of the 1204 urns found at Cleatham (5.0%) of which it was only possible to classify and phase 20. This was due to barley grains being more visible in badly preserved, shattered urns. There is little doubt that the number of urns recorded as containing barley represents only a portion of the true figure but they do, at least, give a sample. Barley grains were found in seventeen of the 59 Urn Groups and subgroups. The number of examples was only significant in Group 01 when it was recorded in 14 out of the 226 vessels (6.2%). Three examples were found in the 49 Group 10a urns (6.1%) and two in Group 10s Urns (3.7%) but in all other groups barley grains were only observed in one vessel.

Barley grains were added to pot fabrics throughout the cemetery's history. The reason for the addition of this material is not understood. If it was simply added as a filler one might expect that it would be associated

with chaff. This is not the case; barley was associated with chaff in only five cases, none of which contained more than 10%. The association with grass was still lower, with only four cases. It would appear that barley was being added to the clay body as something other than a simple filler and some ritual practice seems likely. Grains of carbonised barley, oats and wheat were found in the fill of graves at the Castledyke cemetery (Drinkall and Foreman 1998, 213) and wheat has been found in graves at Portway, Andover (Cook and Dacre 1985, 25, 36), and Sandy, Bedfordshire (Meaney 1964, 18), suggesting that this was a graveside ritual. The impressions of burnt cereal grains were found on urns from Spong Hill where barley also predominated, although wheat, oats and rye were found too (Murphy 1994, 36). It is possible that the grain found in the urns is linked to the ritual of burning grain, following a death, to purify the living and the house, though this was forbidden by Theodore in his Penitentials (Wilson 1992, 97).

Minor additions

Less common additions are present in most of the phases but it was impossible to extract any pattern from this sparse data. Two examples of gypsum were found, both being 'satin spar' which occurs to the west in the Triassic deposits of the Isle of Axholme. Unfortunately neither example was found with an urn which could be classified or phased. Chamocite is a form of ironstone and glauconite occurs in marine sedimentary rocks and, given the local geology, their presence causes no surprise.

While it was not possible to look in detail at the pot fabrics found on other Anglo-Saxon sites in Lindsey some of this material was examined and trends observed. Elsewhere it was found that there was a massive predominance of sandy fabrics, even from the settlement sites in Manton and Kirton parishes, the inhabitants of which must have used the cemetery. Only one example of a slagged vessel was identified in a sample of urns examined from the Elsham cemetery. Other vessels showed a massive preponderance of quartz filler. The remarkable feeding bottle from Grave 133 at Castledyke was in a slagged fabric and a vessel in Grave 104 contained haematite (Didsbury 1998, 301, 310). This suggests that some of the fabrics used at Cleatham were deliberately selected for funerary use.

Sooting on urns (Pl 23)

Phase and number of urns	1 (192.5)	2 (137.7)	3 (102.5)	4 (113.7)	5 (58.9)
Sooting	1.0 (0.5%)	1.3 (1.0%)	3.5 (3.4%)	1.5 (1.3%)	0.6 (1.0%)

Table 31 Number and proportion, in each phase, of Cleatham urns with sooting. Urn groups covering more than one phase have been spread over the phases

Traces of soot were found on 35 of the 1204 Cleatham urns (2.9%). Of these, 27 belonged to Group 01, the plain, undecorated, domestic vessels, many of which could not be placed into phases. Five urns were too poorly preserved to be placed in a group but three could be assigned to a group, one each to Group 01p (Urn 1066, Phase 3), 22s (Urn 914, not phased) and 10s (Urn 567, Phase 3–4). The sooted pottery from Cleatham indicates that the reuse of domestic vessels as urns, while not common, occurred in all phases, but peaked in Phase 3. It has been suggested that reused cooking vessels were most commonly used for the cremated remains of infants and, to examine this, the mean mass of bone was calculated from the 23 sooted urns which had contained bones. It was found that these presented an average of 363.3g of burnt bone against a site average of 517.9g. While this is lower than the average it is not sufficiently low for the argument to be proven and no case can be made for the use of reused domestic vessels as children's urns.

Notes

1. The sites analysed by Richards in Phase One were Elsham, Lincolnshire, 205 urns; Mucking, Essex, Cemetery 2, 77; and Spong Hill, Norfolk, 675. In Phase Two the cemeteries were at Abingdon, Berkshire, 36; Baston, Lincolnshire, 15; Caistor by Norwich, Norfolk, 227; Illington, Norfolk, 94; Lackford, Suffolk, 286; Longthorpe, Huntingdonshire, 14; Loveden Hill, Lincolnshire, 251; Markshall, Norfolk, 7; Newark, Nottinghamshire, 142; Sancton, Yorkshire, 243; Snape, Suffolk, 5; South Elkington, Lincolnshire, 91; Worthy Park, Hamshire, 22; and, in York, Heworth, 42 and The Mount, 8. The number of urns quoted is not the total found but the number that Richards was able to use in his study (Richards 1987, 57–8).
2. The Cleatham urn numbers go up to 1227 but this includes the nine un-urned cremations and some deposits which are now recognised as spurious.
3. A great deal of effort and thought went into the definition of the decorative groups. Thumbnail images of the urns were arranged in groups which were then sorted, over many months, to achieve a best fit. After the completion and acceptance of the PhD thesis the groups were reworked to produce a tighter structure. This did not affect the phasing, which became more robust.
4. The standard deviations were calculated electronically using the 'non-biased' or 'n-1' method.
5. The coefficient of variation is calculated by dividing the standard deviation by the average. A low figure indicates a low level of variation with tightly clustered observations, a high figure shows a high level of variability.

4

The urns: dating and comparisons

Pottery dating

Having placed the Cleatham urns into a sequence, some attempt must be made to anchor this sequence to a chronology. While I, like all students of Early Anglo-Saxon metalwork, am suspicious of dating objects such as brooches, it must be recognised that a great deal of scholarship has been exercised on the topic and it is likely to bear more than a semblance of truth.[1]

In order to anchor the Cleatham sequence, a search was made in the literature for urns which fitted into Cleatham decorative groups and were associated with 'datable' objects. While these dates are useful and tend, in general, to support the Cleatham sequence it must be recognised that, in many cases, the urns are chronologically more sensitive than the objects found with them. An urn was probably buried within a short time of its manufacture but an item of metalwork could remain in use for a generation or longer.

It is striking that objects found with urns elsewhere in the country tend to support the Cleatham sequence: Phase 1-style pots tend to have early grave goods with them wherever they are found, suggesting that the Cleatham sequence is of more than local importance. It appears that there was a high level of uniformity amongst the Anglo-Saxon cremation cemeteries and that we are looking at a parallel ceramic development through the early Anglo-Saxon period. This concordance should not surprise us; it only parallels the uniformity which we see in the metalwork and we do have other evidence for intersite links amongst the pottery.

Group 01, plain undecorated vessels (Fig 40)

Cleatham Phases 0–5

Having found that the Cleatham urns cannot be phased by their shape, discussion of the 226 undecorated vessels is limited, particularly in view of the wide range of shapes exhibited by the plain urns. The stratigraphic relationships showed that Group 01 vessels occurred in all phases at Cleatham. Bruce Eagles (1979, 108–9, table 2) tabulated, by shape, a number of plain urns which could be dated by associated finds. In most cases these dates confirm what was found in the Cleatham sequence: most of the vessel shapes he defined could be dated anywhere between the 4th and 6th century. It was also disappointing to find that, while there are changes in the pottery fabrics used, these are trends and cannot be used to phase any individual group.

Group 01b, plain bossed vessels (Fig 40)

Cleatham Phases 1–5

***Relationships 3, 5, 8, 40,** 81, 105, 115[2]*

Seventeen of the Cleatham urns were decorated with simple bosses. These appeared on a wide range of vessel shapes and forms. Four urns had useful relationships, which showed that urns of Group 01b occurred in all phases of the Cleatham sequence. In view of the simplicity and longevity of the design it was not considered worthwhile to look for dated parallels on other cemetery sites. It is interesting to note that these plain pots were not domestic vessels as they are poorly represented on settlement sites. At Mucking bosses appeared on only 3% of the decorated pottery from the settlement as opposed to 35% from the cemeteries (Hamerow 1993, 45).

Group 01p, vessels with perforated lugs (Fig 41)

Cleatham Phases 3–5

Relationships 17, 32, 34, 46

Eight examples of Group 01p urns were found at Cleatham, four of which had stratigraphic relationships indicating that they were in use in Phases 3–5. These vessels appeared in a range of forms, three of them having footring bases and one a pedestal base.

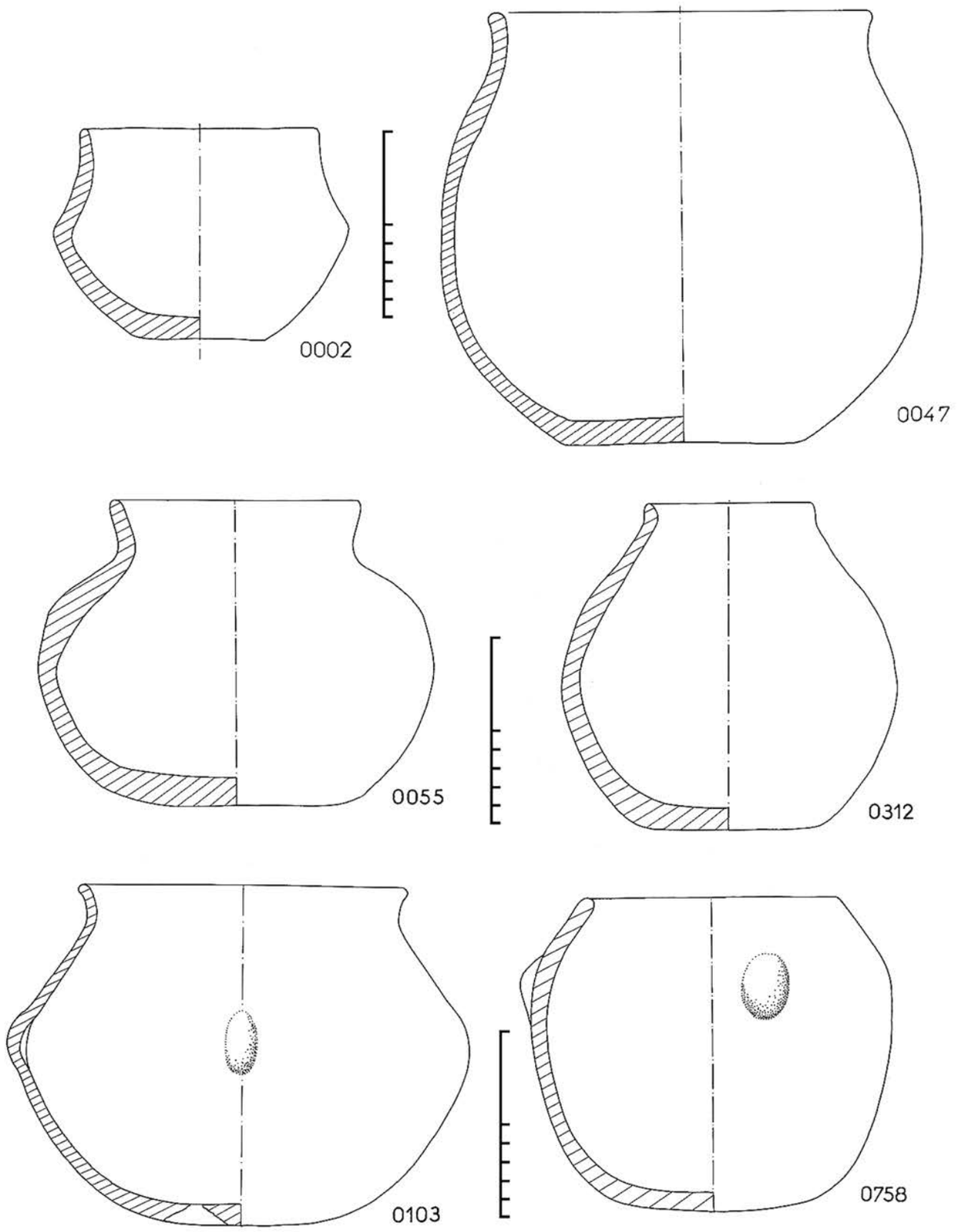


Fig 40 Representative urns from Cleatham Group 01 and 01b. Urn 312 could be placed in Phase 1. All at 33%

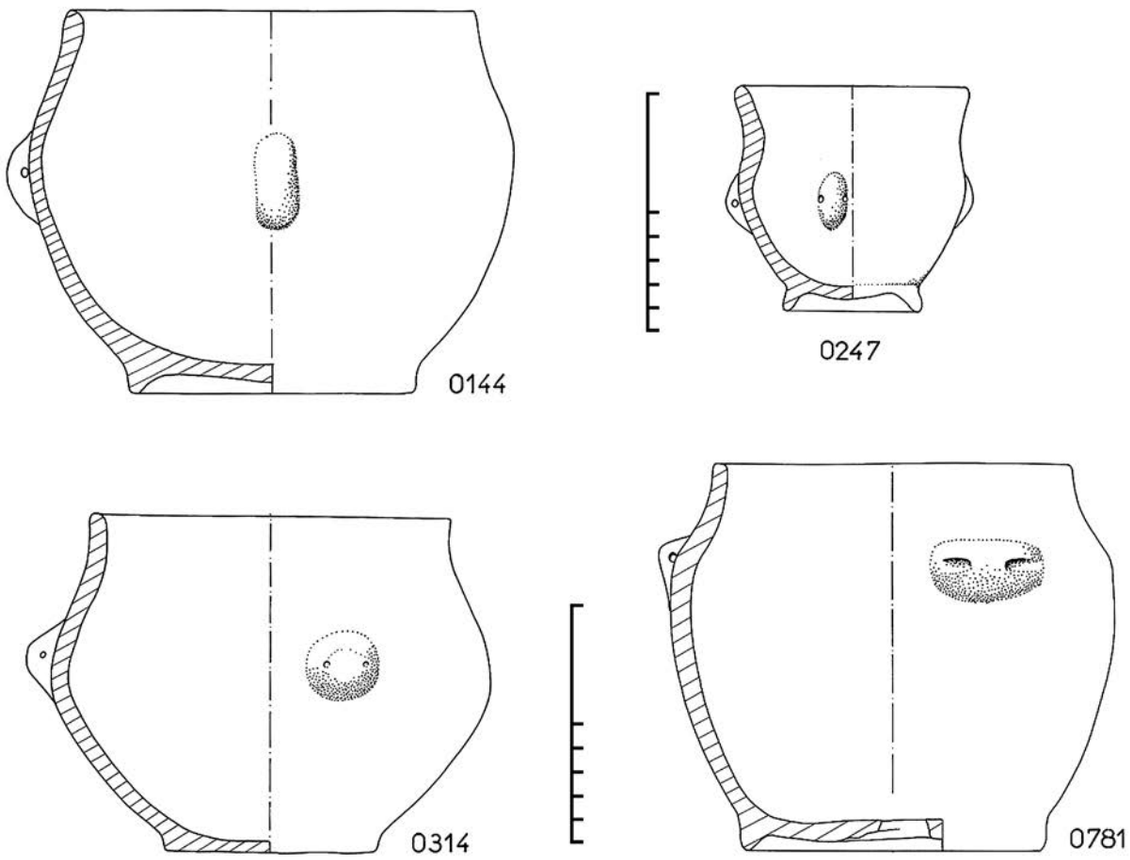


Fig 41 Representative urns from Cleatham Group 01p. Urn 144, Phase 4; Urn 247, Phase 5; Urn 314, Phase 3–4; Urn 781, Phase 3–4. Urns at 33%

It seems that Group 01p vessels were used for special purposes. For example:

- Urn 247 was found as an offering within Urn 114 (Group 10x, Phase 5).
- Urn 144 was found dispersed between Urn 415 (Group 02s, Phase 4), Urn 76 (Group 00, Phase 5) and Urn 87 (Group 01, Phase 4) which was 16m away from Urn 415 and may have been contemporary with all of them.
- Urn 314 lacked any contents and appears to have been buried empty and unassociated (for further discussion of this 'empty urn' see page 62).
- One of the model pots found in Grave 32 (7th century) represented a vessel with perforated lugs.

Parallels and associations

- Lackford, Urn 50.95A (Lethbridge 1951, fig 24), sleeve-clasp of Hines Form B7, 6th century (Hines 1993, 39–43).

Further parallels are given in the discussion of miniature objects on pages 212–13.

Group 02a, horizontal shoulder rings (Fig 42)

Cleatham Phase 3

Relationships 15, 19, 22, 68

Like many simple decorative elements, horizontal rings are difficult to date. Of the 21 Group 02a urns found at Cleatham, three were in useful stratigraphic relationships which placed them in Phase 3.

Parallels and associations

- Great Chesterford, Grave 128 (Evison 1994b, 109–10, fig 50), glass cone beaker, late 5th/earlier 6th century.
- Laceby, Lincolnshire (Myres 1977, No 483, fig 90), Hines Group XVI great square-headed brooch (Hines 1997, pl 65b, 330–1), AD 525–70.
- Cleatham, Urn 288, cowrie shell, late 6th–7th century?

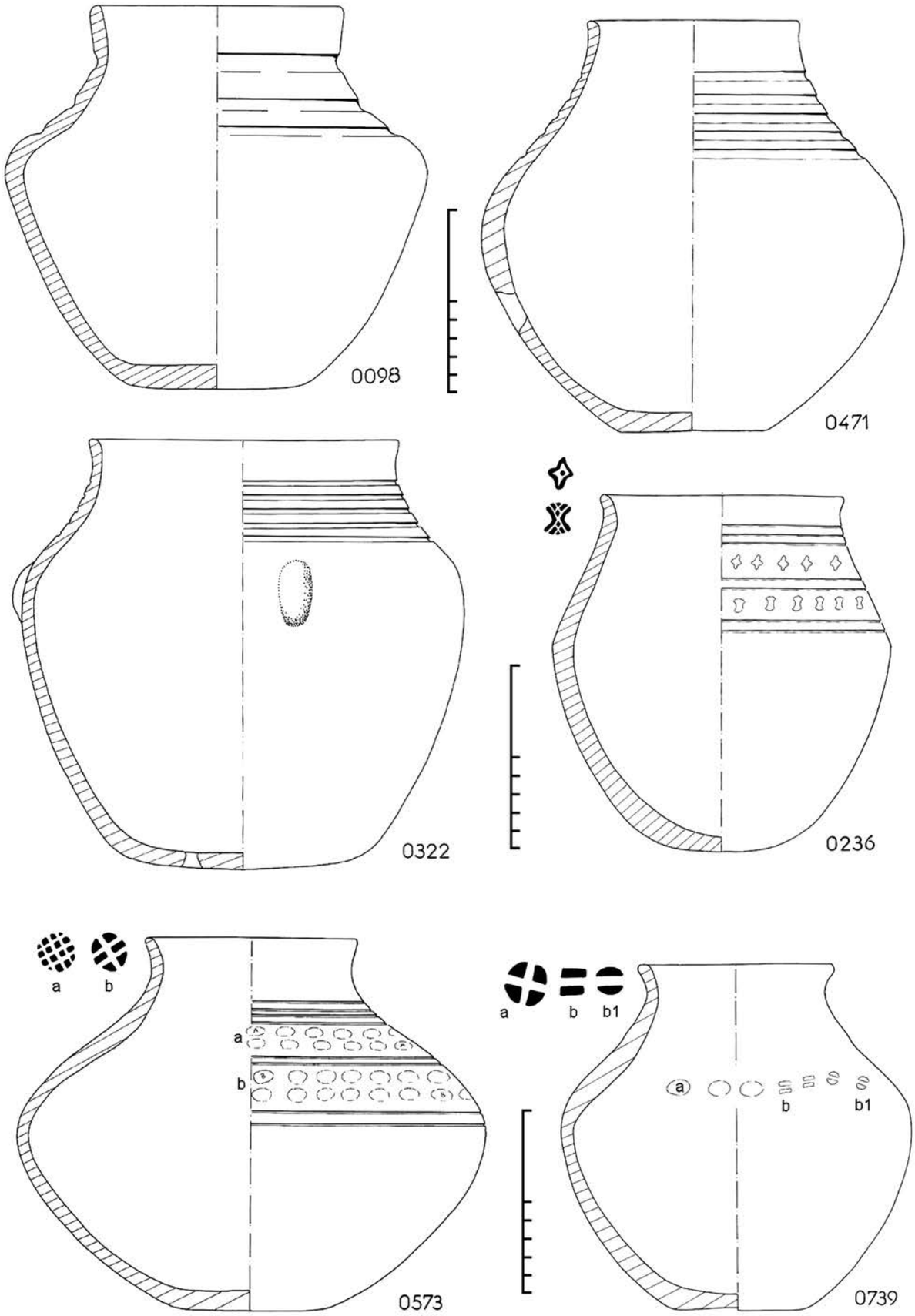


Fig 42 Representative urns from Cleatham Group 02a, 02b and 02s. Urn 098, Phase 3; Urn 236, Phase 4; Urn 322, Phase 1; Urn 471, Phase 3; Urn 573, Phase 2–4; Urn 739, Phase 2–4. Urns at 33%, stamps at 66%

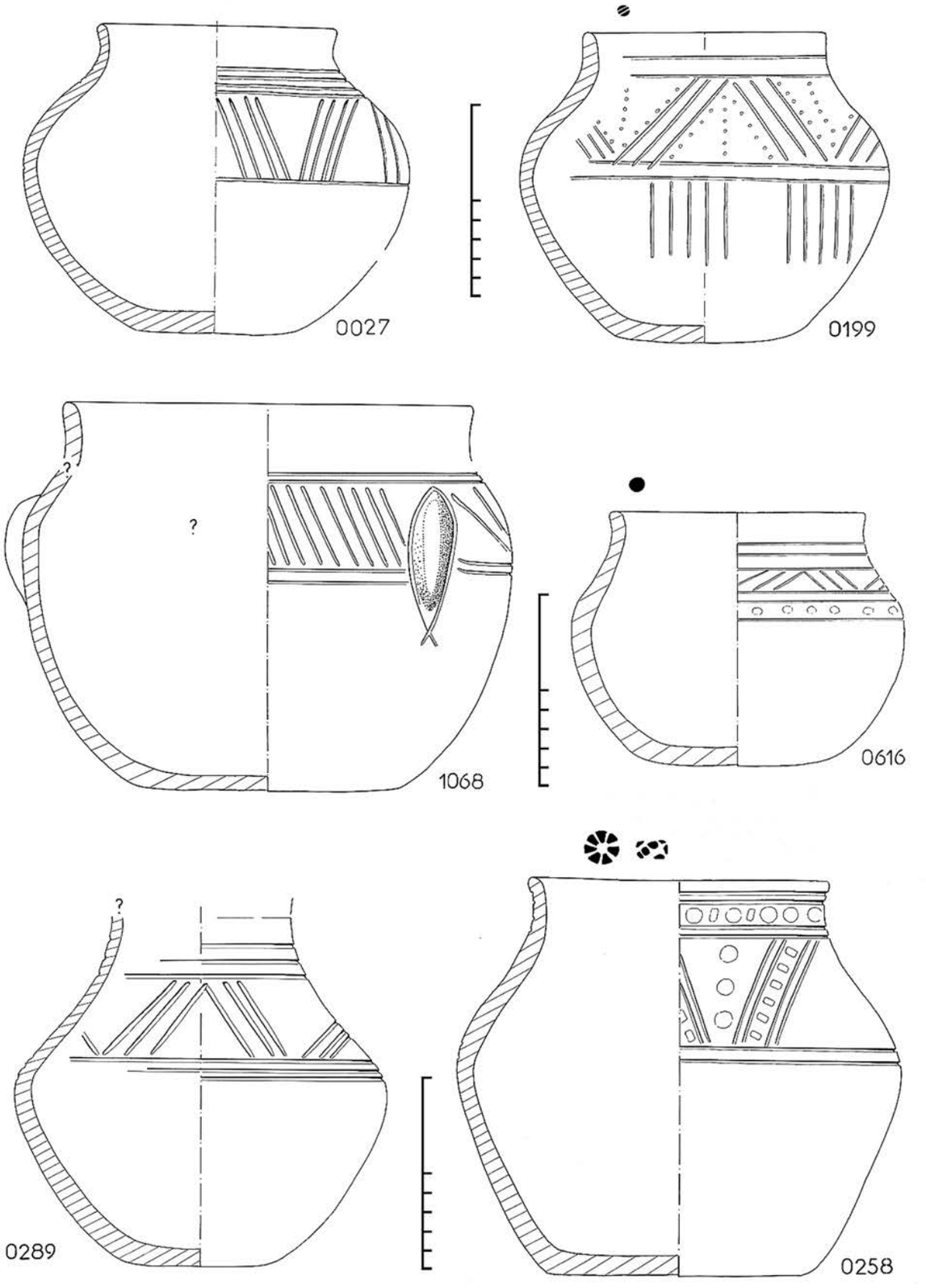


Fig 43 Representative urns from Cleatham Group 03a, 03b, 03s. Urn 027, Phase 2; Urn 199, Phase 2; Urn 258, Phase 1–3; Urn 289, Phase 2; Urn 616, Phase 1–3; Urn 1068, Phase ? Urns at 33%, stamps at 66%

Group 02b, horizontal shoulder grooves and bosses (Fig 42)

Cleatham Phase 1

Relationships 7, 10, 14, 97

Nine Group 02b urns were found at Cleatham forming a coherent group with both round and oval bosses being used. These had three useful relationships placing the Group in Phase 1. This early phasing is in keeping with dated objects associated with Group 02b at Cleatham and elsewhere.

Parallels and associations

- Loveden Hill, Lincolnshire, Urn 60/212, cruciform brooch, Åberg Group I or II (Eagles 1979, fig 30, No 156), AD 450–525.
- Cleatham, Urn 488, Åberg Group I brooch, AD 450–525.
- Cleatham, Urn 459, Åberg Group II brooch and a barred comb, 5th century.

Group 02s, horizontal shoulder grooves and stamps (Fig 42)

Cleatham Phases 2–4

Relationships 1, 3, 11, 17, 25, 28, 44, 59, 61, 65, 68, 91, 96, 107, 109, 111, 128, 147

Of the 40 Group 02s urns found at Cleatham, seven had useful stratigraphic relationships which placed the group in Phase 2–4. Urn 255 contained a fragment of the late 5th- to early 6th-century brooch but, unfortunately, this urn cannot be stratigraphically sequenced. Two Cleatham graves contained fragments of Group 02s urns which provide *termini ante quem*: Grave 20 (7th century) and Grave 55 (5th or 6th century). Elsewhere in England Group 02s have associations (listed below) that tend to support its use over a long period of time.

Parallels and associations

- Lackford, Urn 50.78 (Lethbridge 1951, fig 16), cruciform brooch Åberg Group III–IV, AD 500–550.
- Sancton, Urn 135 (Myres and Southern 1973, fig 10), sleeve-clasps of Form B10 (Hines 1993, 45, fig 87), early 6th century?
- Spong Hill, Urn 1389 (Hills 1977, figs 77, 130), barred comb, 5th century.
- Morning Thorpe, Grave 370 (Green *et al* 1987, 76–7, fig 430), spearhead of Swanton's group C2, reticella beads, 7th century.
- Morning Thorpe, Grave 396 (Green *et al* 1987, 154–5, fig 447), sleeve-clasps of Hines form A, first half of 6th century.
- Cleatham, Urn 255, Åberg Group II cruciform brooch, AD 475–525.

Group 03a, defined horizontal band containing decoration (Fig 43)

Cleatham Phase 2

Relationships 13, 52, 73, 74, 140, 141

Of seventeen Group 03a urns from Cleatham, six were found in stratigraphic relationships and the remains of two more were found in the fill of graves. Only one relationship was useful, Urn 73 being found with a vessel of Phase 2, but this was supported by other relationships. Sherds from Group 03a urns were found in the fills of Graves 45 (5th–6th century?) and Grave 46 (early–mid-6th century) supporting an earlier date. Elsewhere in England Group 03a urns had associations that support an early dating but cowrie shells, as found in Cleatham Urn 470, are usually taken to be a 7th-century phenomenon, but see the discussion of the Associated Finds page 171.

Parallels and associations

- Sancton, Urn 2579 (Myres and Southern 1973, fig 12), zoomorphic/barred bone comb, 5th century.
- Spong Hill, Urn 1743 (Hills and Penn 1981, figs 35, 139), fragment of an early cruciform brooch, AD 475–530.
- Cleatham, Urn 922, Åberg group II–IV cruciform brooch, AD 500–550.
- Cleatham, Urn 470, cowrie shell, late 6th–7th century.

Group 03b, defined band containing decoration with bosses (Fig 43)

Cleatham Phase ?

Of the three urns in this group from Cleatham none had a stratigraphic relationship.

There are no independently dated parallels.

Group 03s, defined horizontal band containing linear decoration and stamps (Fig 43)

Cleatham Phases 1–3

Relationships 2, 10, 18, 24, 29, 89, 126

The eighteen Group 03s urns from Cleatham were placed in Phases 1–3 on the strength of five relationships and the remains of an urn found around, and probably cut by, the 7th-century Grave 18.

The dating of Salin's animal Style I, as found in Spong Hill Urn 1823, is problematical. Conventionally, it appears in Germanic art around 475 and continues until the introduction of Style II around 560–70 (Hines 1997, 233–4). This wide date range is of little value in the present study although this, and the association of a Group 03s urn with an early brooch in another Spong Hill urn, is in accord with the wide phasing suggested by the Cleatham sequence.

Parallels and associations

- Loveden Hill, Urn 58/109 (Eagles 1979, fig 41, No 238), buckle fitting with Style I decoration, AD 500–570.
- Loveden Hill, Urn 59/164 (Eagles 1979, fig 40, No 232), brooches with Style I decoration, AD 500–570.
- Spong Hill, Urn 1823 (Hills 1981, figs 76, 183), brooch fragment decorated in Style I, AD 500–570.
- Spong Hill Grave 26 (Hills *et al* 1984, figs 83, 74–5), cruciform brooch of Åberg Group I, AD 450–525.

Group 04a, Multiple horizontal bands containing decoration (Fig 44)

Cleatham Phase 4

Relationships 19

Four Group 04a urns were found at Cleatham, one of which, Urn 378, was found to cut two Phase 3 urns.

There are no independently dated examples.

Group 04b, multiple horizontal bands containing decoration, with bosses (Fig 44)

Cleatham Phase 1

Relationships –

Only one of the Cleatham urns was placed in this group. As this had no stratigraphic relationships it could not be phased.

There are no independently dated examples.

Group 04n, multiple horizontal bands containing decoration including bosses and stamps

Cleatham Phase ?

Relationships –

Two urns belonging to this group were found at Cleatham but these lacked relationships and they could not be placed in the sequence.

There are no independently dated examples.

Group 04s, multiple horizontal bands containing stamped decoration (Fig 44)

Cleatham Phase 2

Relationships 13, 43

Six examples of Group 04s were found at Cleatham, two of which were associated with urns of Phase 2. The dating suggested by the spearhead found with a Group 04s style urn at Spong Hill is in accord the Phase 2 sequencing, but seems early for the associated Åberg Group IV brooch at Morning Thorpe.

Parallels and associations

- Spong Hill Grave 27 (Hills *et al* 1984, 76–7, fig 84), spearhead of Swanton's Group H2, late 5th–6th century.
- Morning Thorpe, Grave 208 (Green *et al* 1987, 89–90, fig 360), cruciform brooch of Åberg Group IV, AD 500–550.

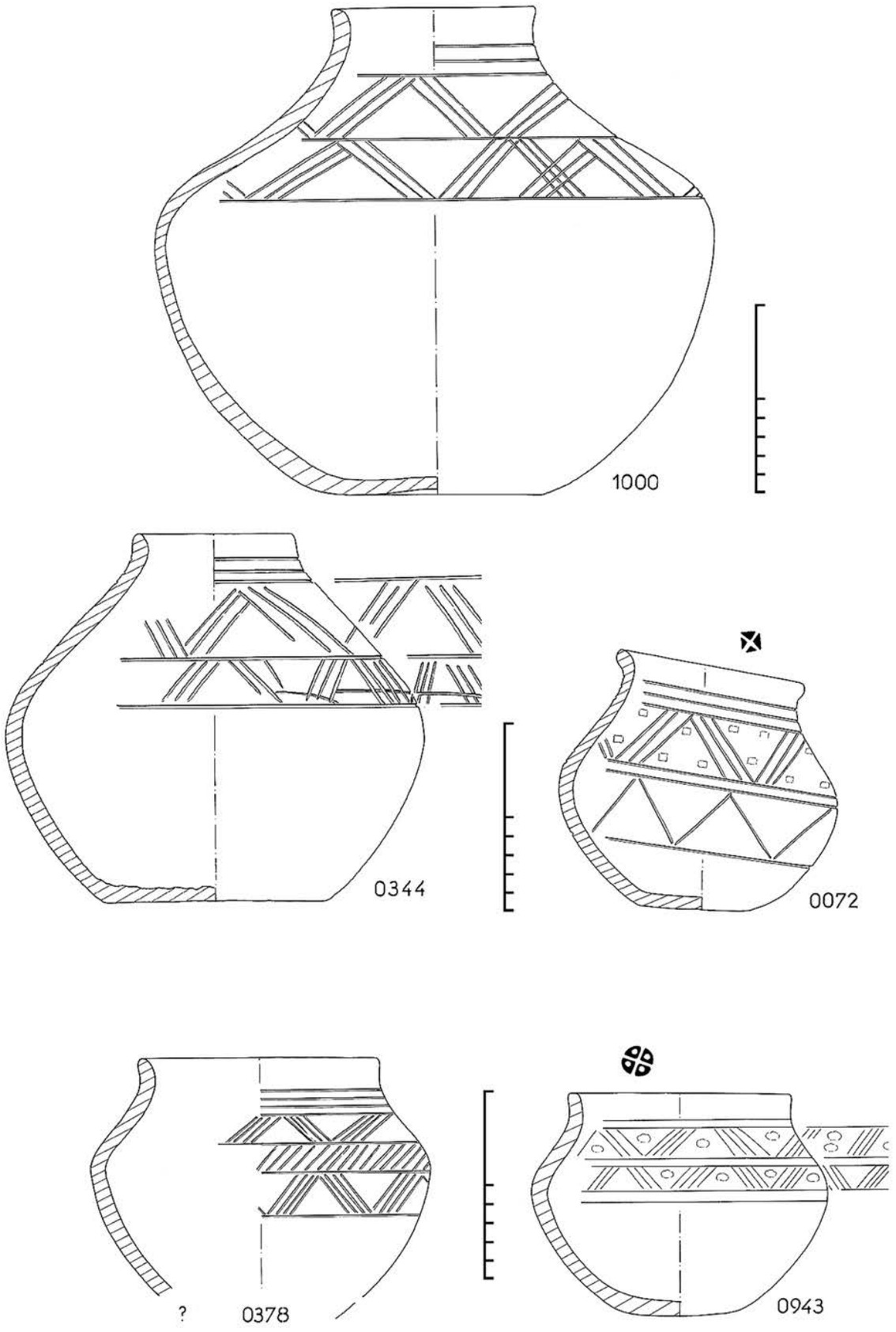


Fig 44 Representative urns from Cleatham Group 04a, 04b, 04s. Urn 072, Phase 2; Urn 344, Phase 4; Urn 378, Phase 4; Urn 943, Phase 2; Urn 1000, Phase 4. Urns at 33%, stamps at 66%

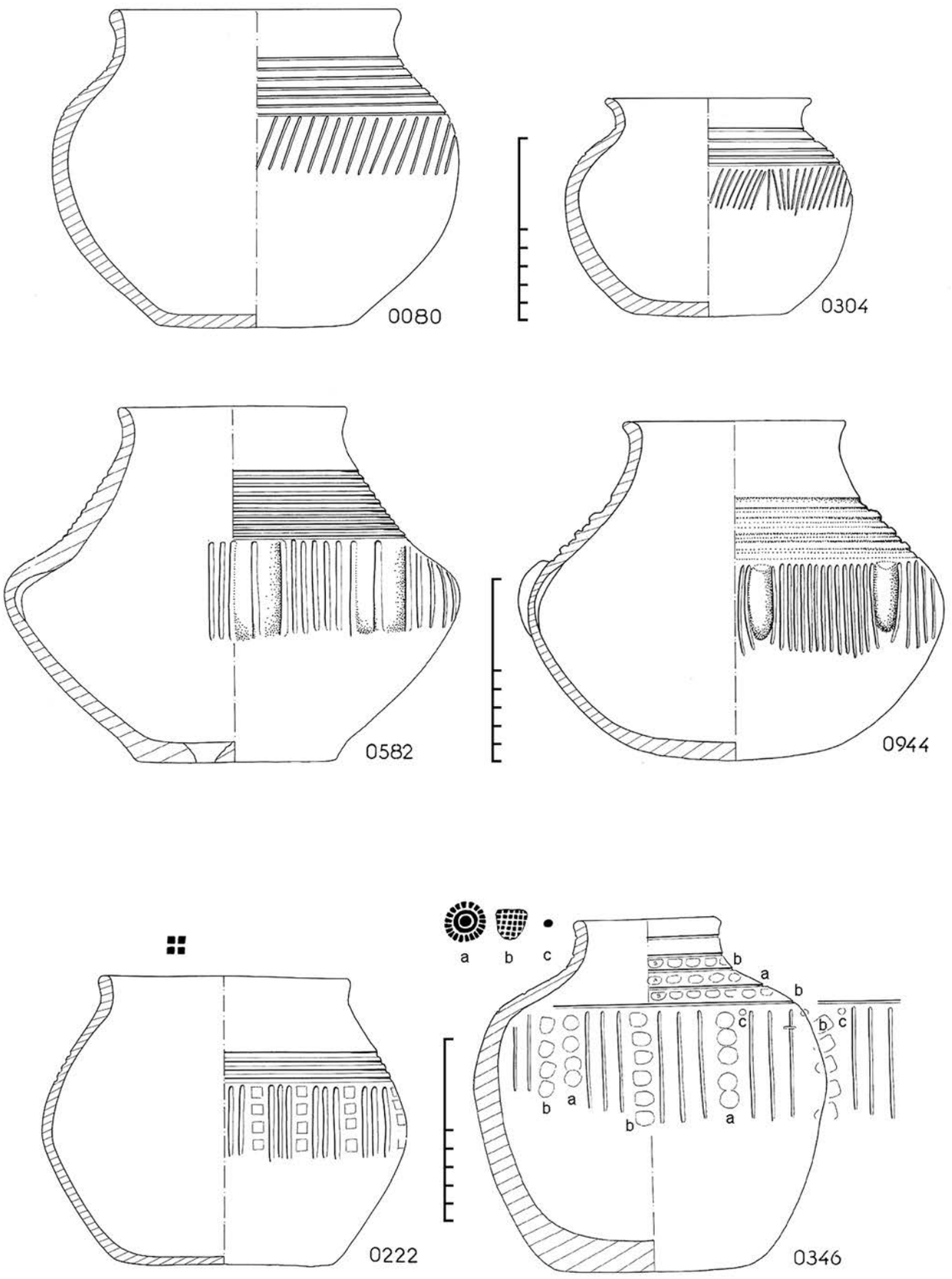


Fig 45 Representative urns from Cleatham Group 05a, 05b, 05n, 05s. Urn 080, Phase 1–2; Urn 222, Phase 2; Urn 304, Phase 1–2; Urn 346, Phase 1–2; Urn 582, Phase 2; Urn 944, Phase 2. Urns at 33%, stamps at 66%

Group 05a, continuous band of vertical, or angled grooves around vessel (Fig 45)

Cleatham Phases 1–2

Relationships 6, 9, 27

Ten examples were found at Cleatham, three with useful relationships. One was associated with a vessel of Phase 2 and another was found to cut an urn of Phase 1. An urn of Phase 2 contained a sherd from a Group 05a urn. The phasing of these urns is in keeping with the dates of the associated finds.

Parallels and associations

- Loveden Hill, Urn 62/296 (Myres 1977, 38, 255, fig 209, No 1411), 'three early 6th-century cruciform brooches'.
- Spong Hill, Urn 2997a (Hills *et al* 1994, fig 38, 102), Åberg Group II cruciform brooch, AD 475–525.
- Cleatham, Urn 356, cruciform brooch of Åberg Group II, AD 475–525.

Group 05b, continuous band of vertical, or angled bosses around vessel (Fig 45)

Cleatham Phase 2

Relationships 33, 38, 47, 70, 77, 114, 122, 127, 133

There were 21 examples of Group 05b urns from Cleatham, with three useful relationships showing Group 05b cutting an urn of Phase 1 and being cut by an urn of Phase 3. Sherds of Phase 1 urns were found with Group 05b Urn 83. The remains of Group 05b Urn 1129 were found in the fill Cleatham Grave 13 (later 6th century) and sherds from Urns 1138 and 1139 were found in Grave 19 (6th century). Grave 31 (5th–early 6th century) contained sherds of Group 05b Urn 1160.

Parallels and associations

- Newark, Urn 50 (Kinsley 1989, fig 27), barred comb, 5th century.
- Spong Hill, Urn 1765 (Hills 1981, figs 58, 168), barred comb, 5th century.
- Springfield Lyons, Grave 4909 (Tyler and Major 2005, fig 35), annular brooch, square-headed small long brooch, AD 500–550.
- Cleatham, Urn 216, cowrie shell, late 6th–7th century?

Group 05n, continuous vertical or angled grooves around vessel, with bosses and stamps (Fig 45)

Cleatham Phase 4

Relationships 39, 42

Ten examples of Group 05n urns were found at Cleatham. These had 14 relationships, only two of which were useful. An urn of Group 05n (536) was cut by an urn of Phase 5 and Urn 325 was found to be associated with an urn of Phase 4.

Parallels and associations

- Spong Hill, Urn 2160 (Hills 1981, figs 44, 169), barred comb, 5th century.
- Cleatham, Urn 325, Group D1 knife, late 6th–7th century.

Group 05s, continuous vertical grooves around vessel, with stamps (Fig 45)

Cleatham Phases 1–2

Relationships 22, 36, 40, 48

Six examples of Group 05s were found at Cleatham, with four relationships. Group 05s cut urns of Phase 1 and one was cut by an urn of Phase 3. A further example was associated with three urns of Phase 1 or 2, again suggesting that Group 05s is early.

There are no independently dated parallels.

Group 06n, massed or random stamping and bosses

Cleatham Phase 2

Relationships 6

Three examples of Group 06n urns were found at Cleatham. These had only one useful relationship which showed an association with Phase 2. This is a weak group and the urns are linked only by the use of massed stamp decoration.

Parallels and associations.

- Cleatham, Urn 859, contained the remains of an Åberg Group III cruciform brooch, AD 500–550.

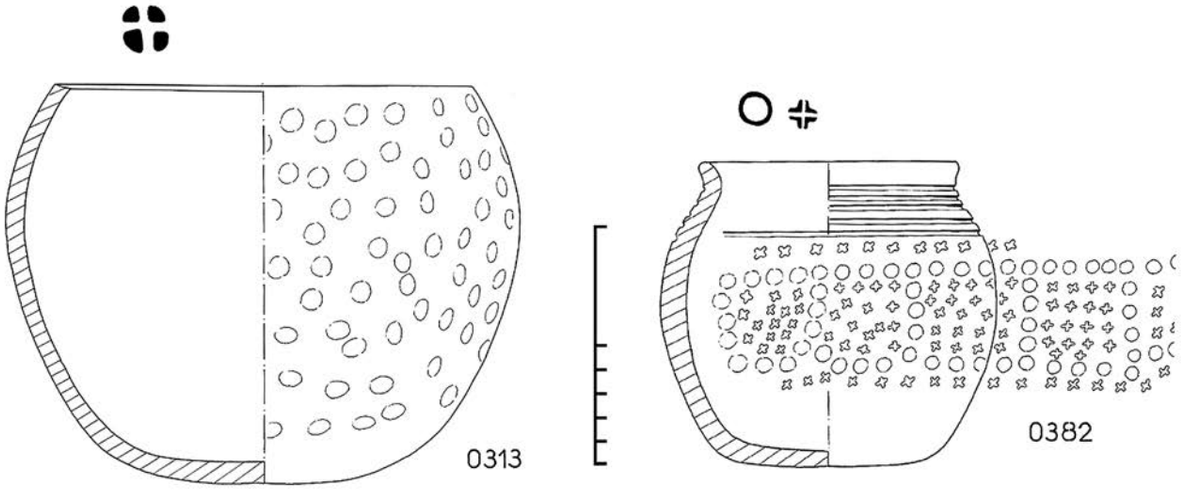


Fig 46 Representative urns from Cleatham Group 06s. Urn 313, Phase 2: Urn 382, Phase 2. Urns at 33%, stamps at 66%

Group 06q, urns probably related to Group 06, with massed or random stamping

Cleatham Phase 3

Relationships 25

Three examples from Cleatham with one useful relationship showing Group 06q urns being cut by urns of Phase 5. Other relationships, while 'uncertain', suggest that these urns were current in Phase 3 as would the Group's likely links with Group 06n. This group is not well defined and all three of the urns were badly preserved.

There are no independently dated parallels.

Group 06s, free random stamping and zones defined by stamps (Fig 46)

Cleatham Phase 2

Relationships 44, 143

Seven examples of this group were found at Cleatham with one useful relationship, an association with an urn of Phase 2. In addition to this the remains of Group 06s Urn 1166 were found in the fill of Cleatham Grave 50, which was dated to the 7th century. The sequencing of Group 06s to Phase 2 is considered secure but, in the light of the Great Chesterford and Riby finds, it seems likely that this decorative style was in use over a considerably longer timespan.

Parallels and associations

- Great Chesterford Grave 37 (Evison 1994b, 97, fig 28), radiate-headed brooch and developed small-long brooch, amber beads, AD 500–550.
- Great Chesterford Grave 148 (Evison 1994b, 6, 112–13, fig 55), small-long brooch, glass beads, 'perhaps as early as the mid-5th century'.
- Riby, Lincs (White 1982, 80–2, figs 4–5), tall bottle-like vessel while there were 7th century graves on the site, this probably came from an earlier burial.
- Welbeck Hill, Irby on Humber, Lincs, Grave 31 (Myres 1977, fig 139, No 3832), Hines Form B7 sleeve-clasps, two annular brooches and a disc-headed pin, 6th century.
- West Garth Gardens, Bury St Edmunds, Suffolk, Grave 27, Hines Group XVI great square-headed brooch (West 1988, 26–7, fig 67; Hines 1997, pl 57b, 343), AD 525–70.

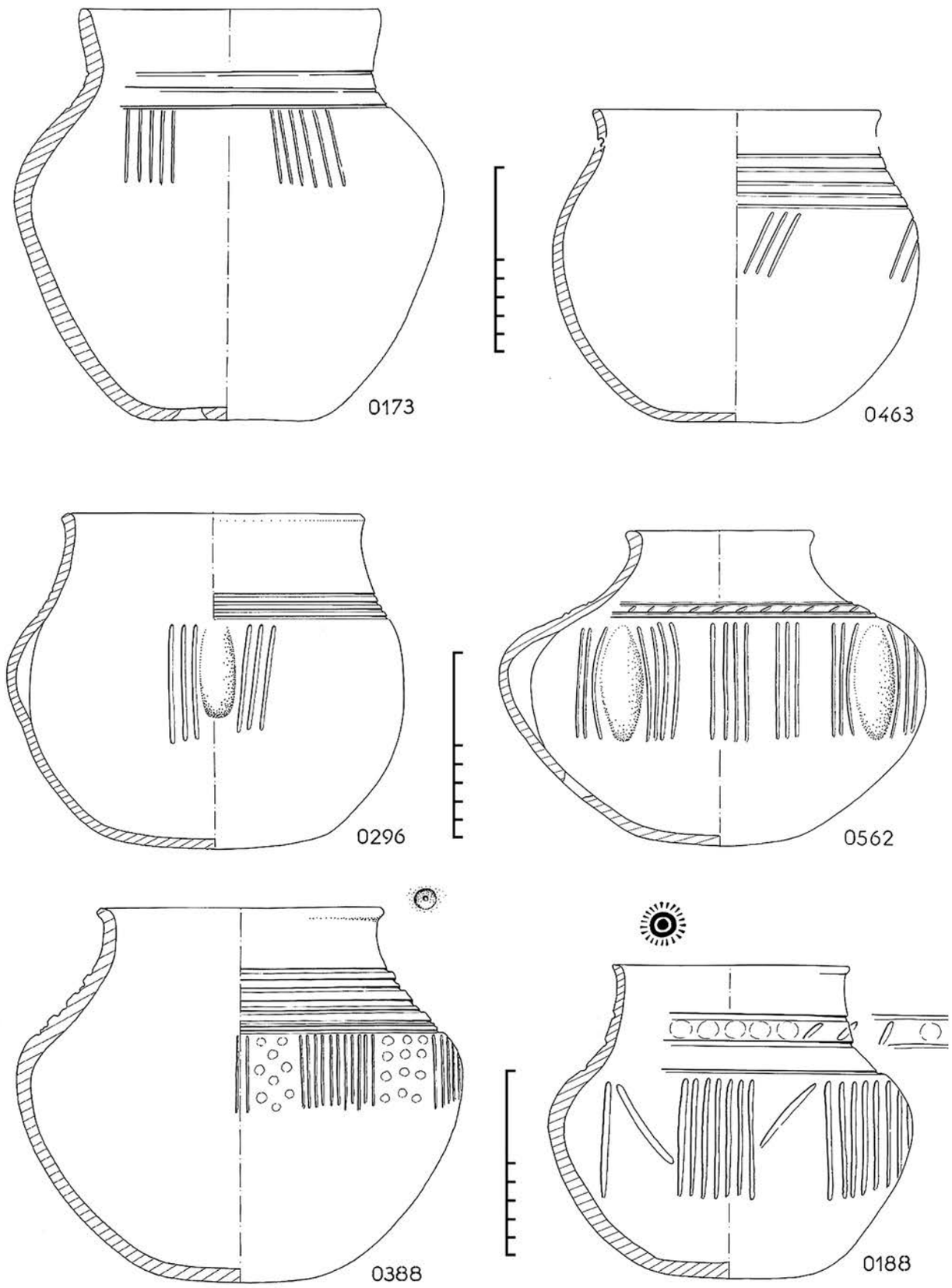


Fig 47 Representative urns from Cleatham Group 07a, 07b, 07s. Urn 173, Phase 1; Urn 188, Phase 2; Urn 296, Phase 2; Urn 388, Phase 2; Urn 463, Phase 1; Urn 562, Phase 1–2. Urns at 33%, stamps at 66%

Group 07a, grouped vertical and angled grooves, sometimes combined (Fig 47)

Cleatham, Phase 1

***Relationships 7, 26, 31, 33, 48,** 120*

Seventeen examples of Group 07a urns were found at Cleatham, five with useful relationships with other urns and one with a grave. A Group 07s urn was cut by an urn of Phase 4. Other urns were associated with Phase 1 and one with Phase 2. Sherds of Urn 1124 were found in the fill of 7th-century Grave 10. These relationships showed that Group 07a urns belonged to Phase 1, which is in accord with the associations found on other sites.

Parallels and associations

- Spong Hill, Urn 1183 (Hills 1977, figs 54, 132), barred comb, 5th century.
- Spong Hill, Urn 2640 (Hills *et al* 1987, figs 40, 111), barred comb, 5th century.
- Spong Hill, Urn 2765 (Hills *et al* 1987, figs 48, 92), clasp of Hines form B12, late 5th–mid-6th century.

Group 07b, grouped vertical or angled grooves with bosses (Fig 47)

Cleatham Phases 1–2

***Relationships 21, 24, 41, 43, 48,** 64, 105, 130*

Nineteen urns of Group 07b were found at Cleatham. These had six useful relationships with other urns which suggested that the group was current in Phases 1–2. Sherds from Urn 1154 were found in the fill of 7th-century Grave 23. The early phasing is in accordance with the dated finds from other sites. It is sometimes difficult to separate the grouped decoration on some urns of Group 07b from the continuous angled or linear decoration of Group 05b. As the two groups are contemporary this convergence is not a problem.

Parallels and associations

- Spong Hill, Urn 1469 (Hills 1977, figs 38, 107), Åberg group I cruciform brooch, AD 450–525.
- Spong Hill, Urn 1160 (Hills 1977, figs 41, 107), early cruciform brooch, AD 450–525.
- Spong Hill, Urn 2796 (Hills *et al* 1987, figs 49, 93), small-long brooch, AD 475–550.
- Springfield Lyons, Grave 4882 (Tyler and Major 2005, figs 33–4), pair of disc brooches, Åberg Group II cruciform brooch, AD 475–525.
- Springfield Lyons, Grave 4923 (Tyler and Major 2005, fig 35), spearhead of Swanton type H2, late 5th–early 6th century.

Group 07n, grouped vertical or angled grooves with bosses and stamps

Cleatham Phase 2

***Relationships 9, 41, 44,** 103, 147*

There were ten examples of Group 07n from Cleatham, with three useful relationships. Sherds of Group 07n Urn 1216 were found in the fill of Grave 55 (5th–6th century). Group 07n was cut by urns of Phases 4 and 5, and associated with an urn of Phase 2. The stratigraphic relationships were in accord with the objects found in association with Group 07n on other sites.

Parallels and associations

- Caistor by Norwich, Urn M47 (Myres and Green 1973, fig 34), cruciform brooch, AD 450–525.
- Lackford, Urn 48.2486 (Lethbridge 1951, fig 22), developed small-long brooch, AD 500–550
- Sancton, Urn 2571 (Myres and Southern 1973, fig 25), small-long brooch, AD 475–525; sleeve-clasp of Hines' Form B4 (Hines 1993, 37, fig 75a), later 5th century.
- Spong Hill, Urn 1216 (Hills 1977, figs 89, 107), Åberg Group I cruciform brooch, 5th century.
- Spong Hill, Urn 2376 (Hills *et al* 1987, figs 66, 91), equal-armed brooch, 5th century

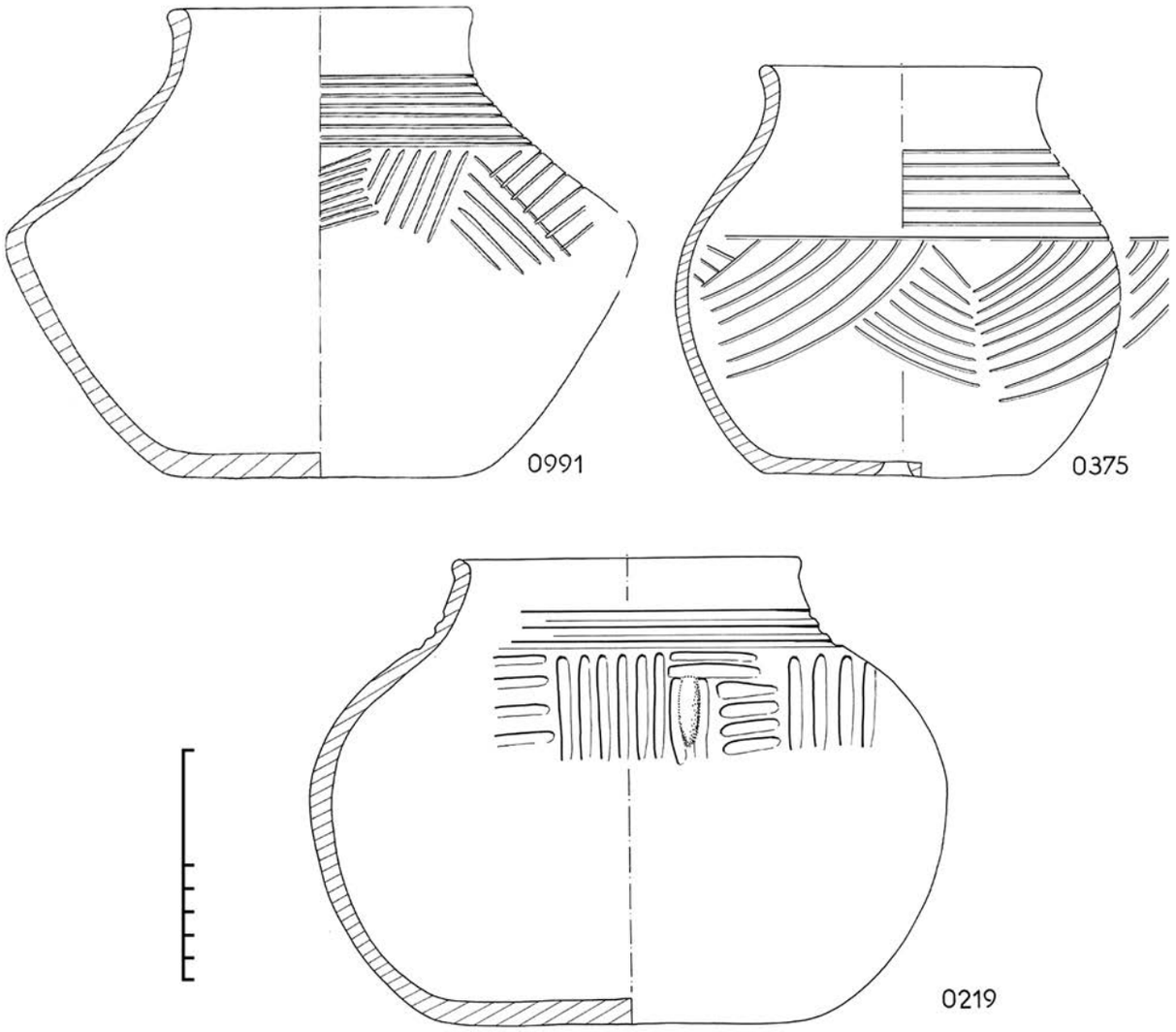


Fig 48 Representative urns from Cleatham Group 08a. Urn 219, Phase ?; Urn 375, Phase 3; Urn 991, Phase 3. Urns at 33%

Group 07s, grouped vertical or angled lines with stamping (Fig 47)

Phase 2

Relationships 11, 16, 21, 60, 75

Ten Cleatham urns were placed into Group 07s. These had three useful relationships, placing the group in Phase 2.

No independently dated examples were found.

Group 08a, panelled or counter-angled decoration (Fig 48)

Phase 3

Relationships 18, 47, 115, 135

Eight examples of this group from Cleatham. These had two useful relationships, showing Group 08a cutting an urn of Phase 2 and in association with an urn of Phase 3. Sherds of Urn 1163 were found in the fill of Grave 34 (early–mid-6th century) and sherds of Urn 1168 in Grave 57 (6th century). The phasing seems to be in accord with the dating offered by the associated finds.

Parallels and associations

- Lackford, Urn 50.109A (Lethbridge 1951, fig 29), found with metalwork bearing Style I decoration, AD 500–570.
- Spong Hill, Urn 3055 (Hills *et al* 1994, figs 42, 102), Åberg Group III–IV cruciform brooch, AD 500–550.

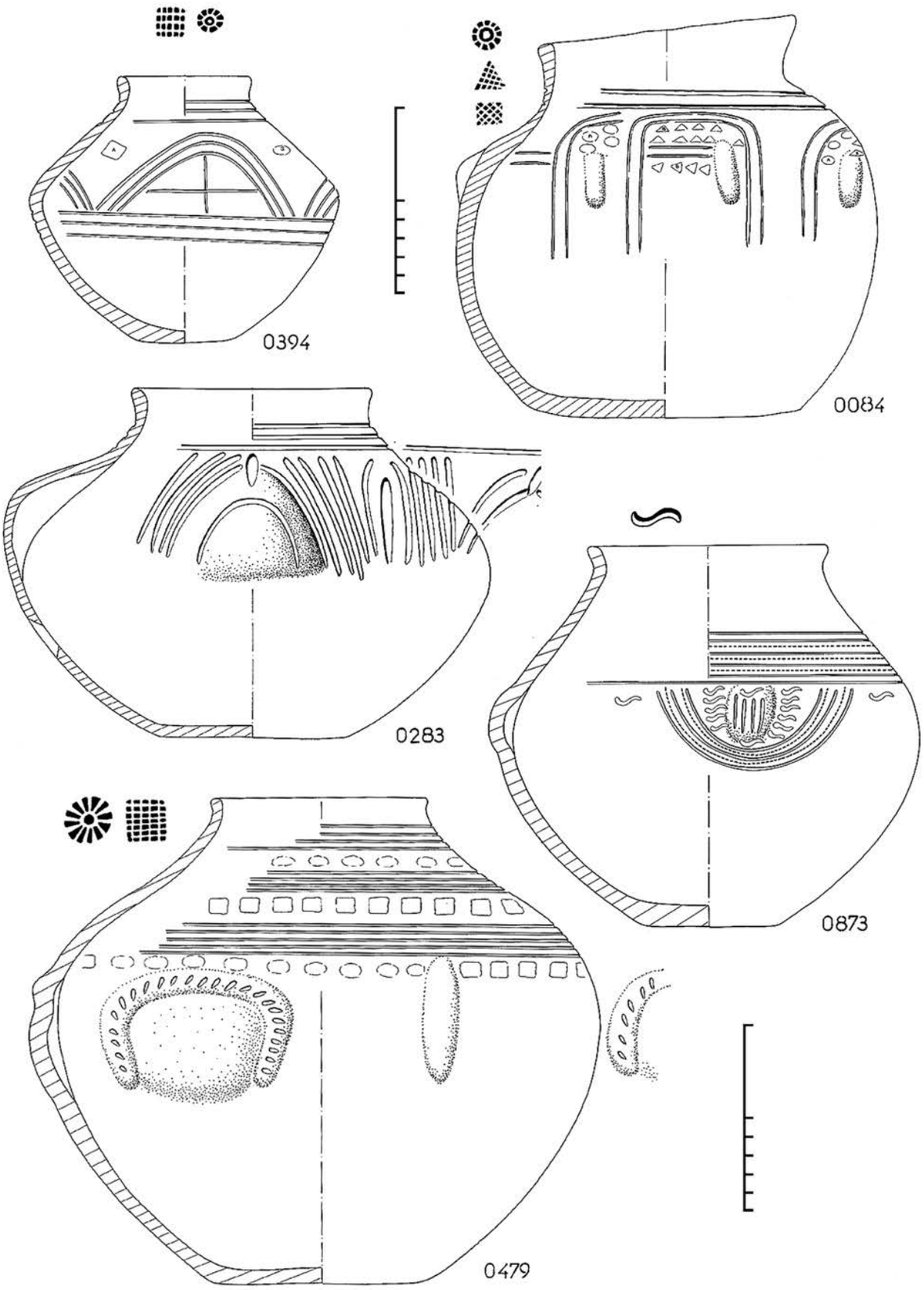


Fig 49 Representative urns from Cleatham Group 09b, 09n. Urn 084, Phase 5; Urn 283, Phase 1; Urn 394, Phase 3; Urn 479, Phase 5; Urn 873, Phase 5. Urns at 33%, stamps at 66%

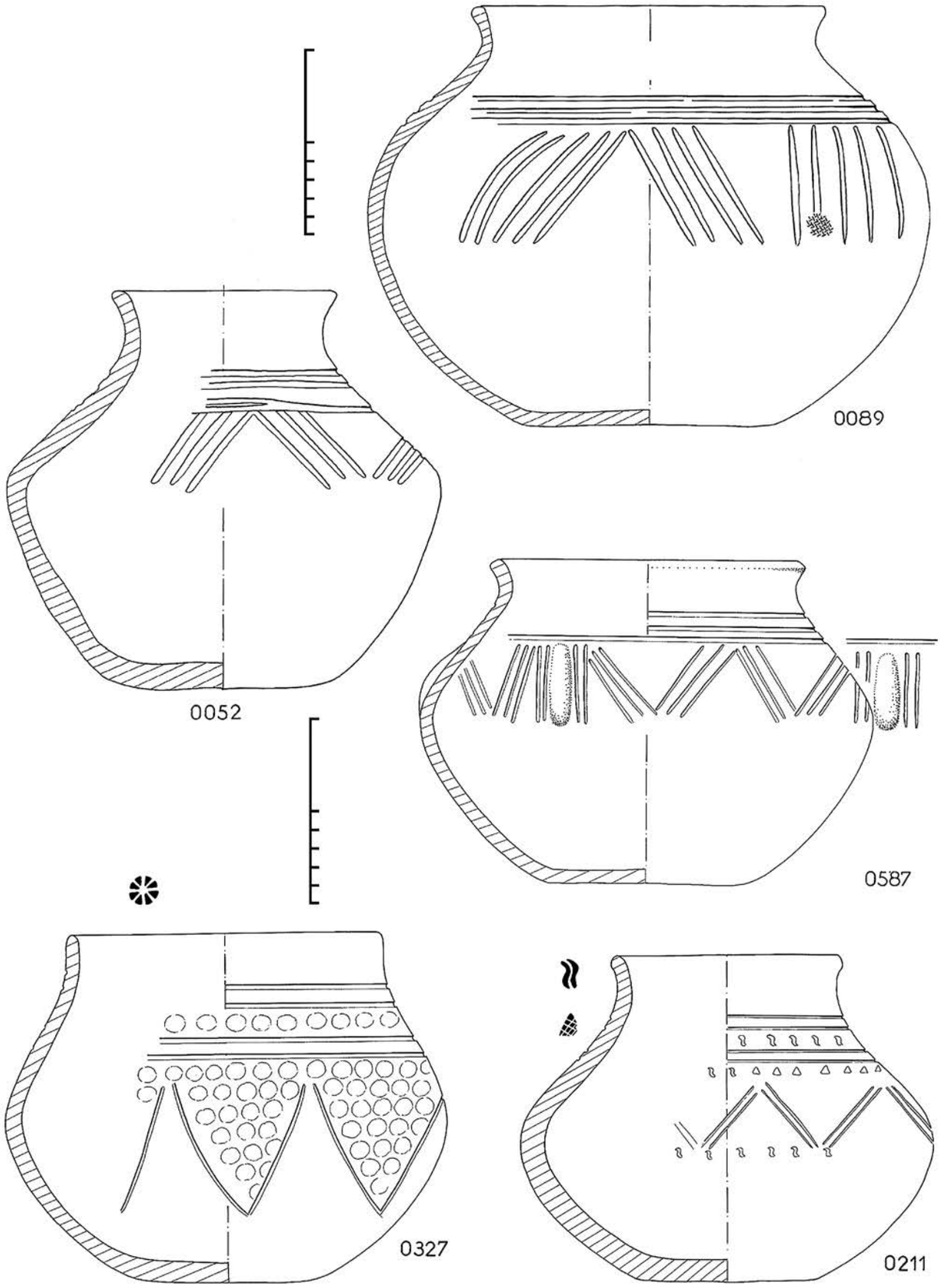


Fig 50 Representative urns from Cleatham Group 10a, 10b, 10s. Urn 089, Phase 1; Urn 052, Phase 1; Urn 211, Phase 3–4; Urn 327, Phase 4; Urn 587, Phase ?; Urns at 33%, stamps at 66%

Group 08b, panelled or counter-angled decoration and bosses

Cleatham Phase ?

Relationships –

Four examples from Cleatham, none of which had a relationship with another urn.

No independently dated examples were found.

Group 08m, panelled or counter-angled decoration in the form of deep grooves

Phase 1

Relationships 45

Four closely related urns of this form were found at Cleatham; Urn 362 was found in association with urns of Phase 1.

No independently dated examples were found.

Group 08s, Panelled or counter-angled decoration with stamps

Cleatham Phase ?

Relationships –

Two urns of this form were found at Cleatham; one of these had four relationships with other urns, but none were useful and it not possible to sequence them.

No independently dated examples were found.

Group 09b, Urns decorated with bows containing decoration (Fig 49)

Cleatham Phase 1

Relationships 38, *72*

Six examples from Cleatham, with one relationship with other urns, showing Group 09b cut by an urn of Phase 2. The urns of Group 09b are considered to be stylistically poorly linked.

Parallels and associations

- Grave 95 at West Heslerton, Yorkshire (Haughton and Powlesland 1999, 151–5), found with a cruciform brooch of Åberg's Group IV and a set of sleeve-clasps of Hines B13c suggesting a date in the 6th century.

Group 09n, urns decorated with bows containing decoration including bosses and stamping (Fig 49)

Cleatham Phase 5

Relationships 44, *78*

Sixteen Cleatham urns were included in Group 09n, one of which had a useful relationship with other urns. This showed Group 09n cutting Phases 2, 3 and 4. The lack of other relationships may be a mark of this group's late place in the Cleatham phasing.

No independently dated examples were found.

Group 09s, urns decorated with bows containing decoration including stamping

Phase 2

Relationships 19

Four urns of this form were found at Cleatham, one of which was cut by an urn of Phase 2.

No independently dated examples were found.

Group 10a, vessels bearing rings and chevrons (Fig 50)

Cleatham Phase 1

Relationships 2, 3, 14, 23, 30, 36, 45, *53, 55, 56, 95, 110, 120, 130*

Forty-nine examples of Group 10a urns were found at Cleatham. These had seven useful stratigraphic relationships and two were found in the fill of graves. All relationships, showed urns of later groups cutting those of Group 10a. Sherds from Group 10a Urn 1125

were found in the fill of Grave 10 (7th century) and sherds of Urn 1156 were found in Grave 23 (7th century). The Cleatham phasing strongly supports the early dating of Group 10a suggested by the associations at both Cleatham, and the other cemetery sites.

Parallels and associations

- Pakenham, Suffolk (Myres 1977, 300, fig 278, No 3365), barred comb, 5th century.
- Sancton, Urn 63 (Myres and Southern 1973, fig 21), sleeve-clasp, Hines Form B10 (Hines 1993, 45, fig 87), late 5th–early 6th century.
- Spong Hill, Urn 1664 (Hills 1977, figs 29, 107), Åberg Group I cruciform brooch, AD 450–525.
- Spong Hill, Urn 1034 (Hills 1977, figs 26, 107), Åberg Group I cruciform AD 450–525.
- Spong Hill, Urn 1450 (Hills 1977, figs 28, 130), found with a barred comb, 5th century.
- Spong Hill, Urn 1730 (Hills 1981, figs 30, 138), Åberg group III cruciform brooch, AD 500–550.
- Spong Hill, Urn 3095 (Hills *et al* 1994, figs 44, 103), found with a small-long brooch, AD 475–525.
- Spong Hill, Urn 1170 (Hills 1977, figs 50, 131), barred comb, 5th century.
- Spong Hill, Urn 2143 (Hills 1981, figs 47, 108), applied disc brooch, AD 450–500.
- Springfield Lyons, Grave 4966 (Tyler and Major 2005, fig 36), spearhead of Swanton type H2, late 5th–early 6th century.
- Cleatham, Urn 458, barred comb, 5th century.

Group 10b, urns with rings, chevrons and bosses (Fig 50)

Cleatham Phase ?

Relationships –

Six urns of this form were found at Cleatham but lacked any relationships and it was not possible to place them in the sequence.

No independently dated examples were found.

Group 10s, rings, with stamps and chevrons (Fig 50)

Cleatham Phases 3–4

Relationships 1, 3, 8, 12, 15, 26, 28, 34, 37, 39, 42, 44, 46, 49, 66, 71, 92, 128, 130, 145, 147

Fifty-three urns belonging to this group were found at Cleatham, of which fourteen had useful relationships and five were found in the fill of graves. These relationships show Group 10s being cut by urns of Phase 5 and, in turn, cutting urns of earlier phases. Sherds of Group 10s Urns 1095 and 1148 were found in the fill of Grave 20 (7th century); sherds from Urn 1155 were found in Grave 23 (7th century); sherds from Urn 915 were found in undated Grave 52, and Grave 55 (5th–6th century) contained sherds from Urn 959. The phasing of Group 10s seems generally to reflect the dating suggested by the associated finds at other cemeteries.

Parallels and associations

- Illington, Norfolk, Urn 47 (Davison *et al* 1993, 38, fig 19), Group III cruciform brooch, AD 500–550.
- Lackford, Urn 50.234 (Lethbridge 1951, fig 17), great square-headed brooch, unclassified by Hines (1997, 331).
- Morning Thorpe, Grave 148 (Green *et al* 1987, 76–7, fig 345), spearhead of Swanton Group J, AD 475–525.
- Mucking, Grave 102 (Eagles 1979, fig 75, No 440), small square-headed brooches, AD 500–550. This grave also contained amber beads, which might suggest a later, rather than an earlier, date.
- Spong Hill, Urn 2355 (Hills *et al* 1987, figs 65, 131) barred comb, 5th century.
- Spong Hill Grave 36 (Hills *et al* 1984, 84, fig 89), spearhead of Swanton's group H1, AD 475–525.
- Spong Hill Grave 42 (Hills *et al* 1984, 95–7, fig 98), sleeve-clasps of Hines form B18b, first half of the 6th century; pair of square-headed small-long brooches.

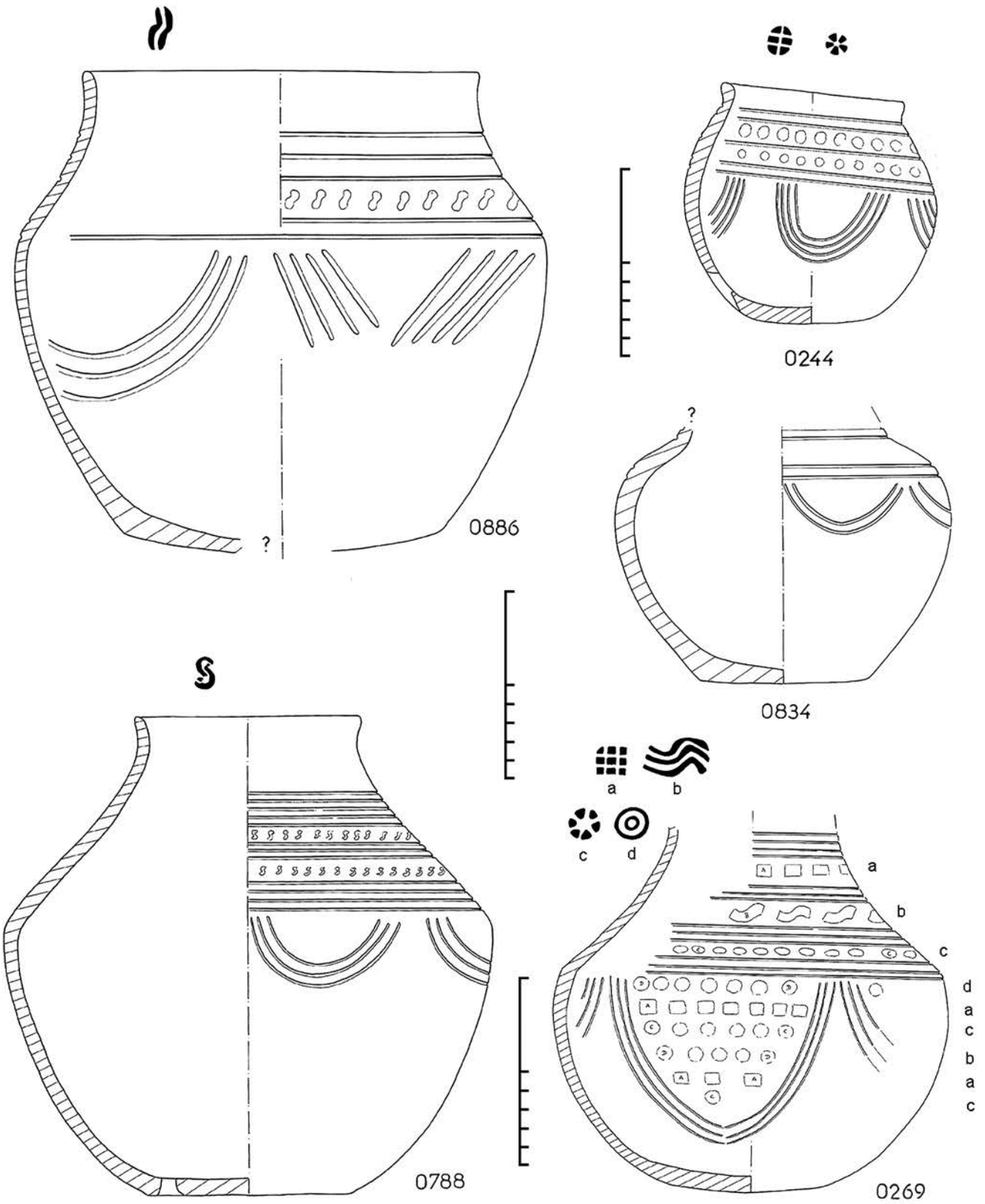


Fig 51 Representative urns from Cleatham Group 11a, 11s. Urn 244, Phase 5; Urn 269, Phase 5; Urn 788, Phase 5; Urn 834, Phase ?; Urn 886, Phase 5. Urns at 33%, stamps at 66%

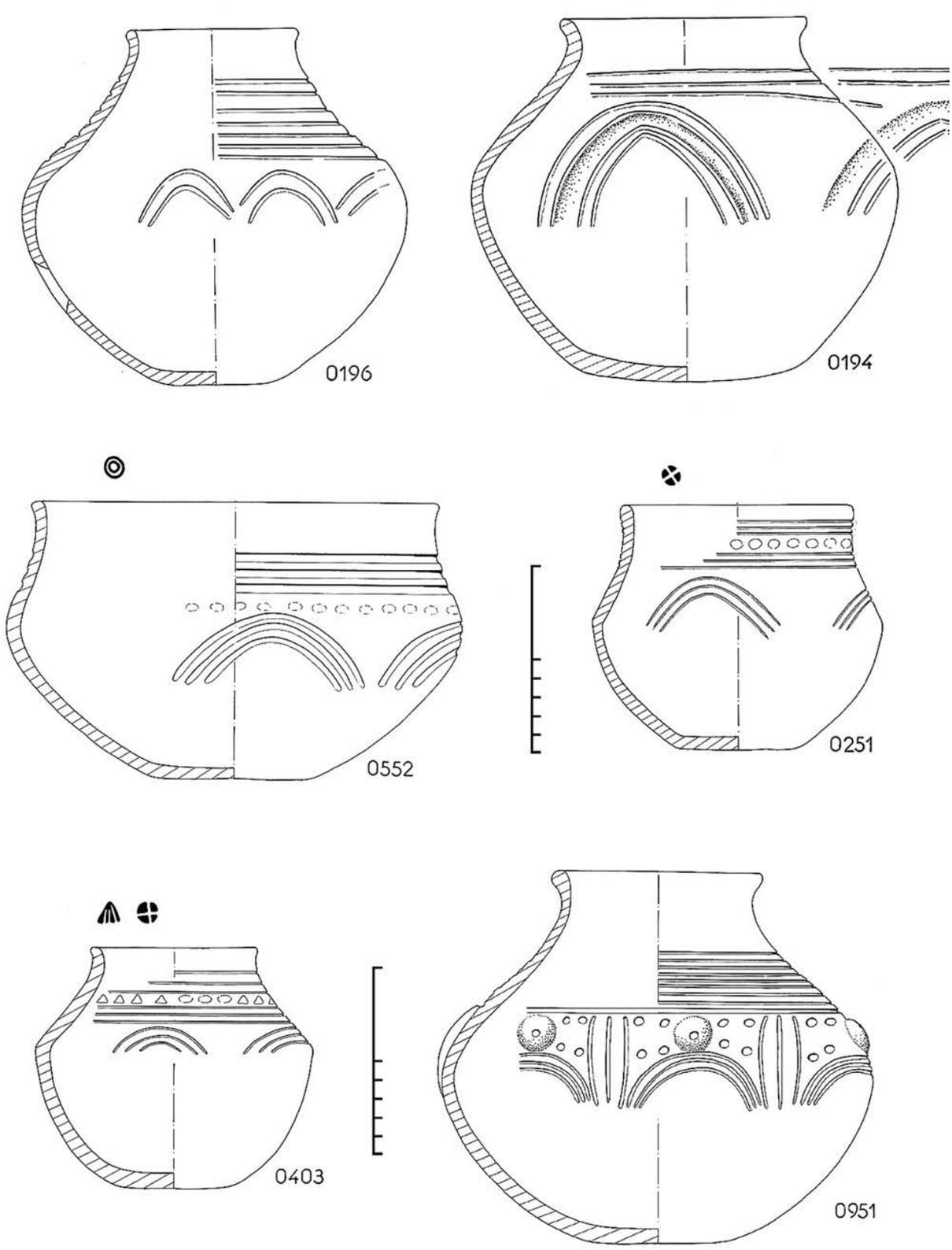


Fig 52 Representative urns from Cleatham Group 12a, 12n, 12s. Urn 194, Phase 1; Urn 196, Phase ?; Urn 251, Phase 4; Urn 403, Phase 4; Urn 552, Phase 4; Urn 951, Phase ? Urns at 33%, stamps at 66%

Group 10x, rings, chevrons and stamps set out in complex designs

Cleatham Phase 5

Relationships 10, 25, 32

Eight urns found at Cleatham can be placed in Group 10x. These had three relationships showing them cutting urns of Phases 2, 3 and 4. These relationships, combined with the lack of other urns cutting Group 10x, suggest that the group is late in the sequence.

No independently dated examples were found.

Group 11a, urns decorated with hanging bows (Fig 51)

Cleatham Phase ?

Relationships –

Three urns of this form were found at Cleatham but lacked useful relationships and it was not possible to sequence them.

No independently dated examples were found.

Group 11q, incomplete urns probably related to those decorated with hanging bows

Cleatham Phase 4

Relationships 44

Seven urns of this group were found at Cleatham, with one relationship: Group 11q cut by an urn of Phase 5 and cutting an urn of Phase 3. These urns were represented only by the truncated decoration on their bases but do form a good group. They may be linked to the Sancton/Baston pots of Group 17s.

No independently dated examples were found.

Group 11s, hanging bows with stamp decoration (Fig 51)

Cleatham Phase 5

Relationships 1, 37, 42

Twelve examples from Cleatham, three with stratigraphic relationships showing Group 11s cutting urns of Phase 4. The associated grave goods found on other sites support the late dating of this group.

Parallels and associations

- Lackford, Urn 50.126 (Lethbridge 1951, fig 17), great square-headed brooch (Hines 1997, 331, pl. 32b), Group IX, Phase 2, AD 510–550. This urn also contained a fragment of a silver bracelet and a bone object that was thought to be a pottery stamp, although this seems doubtful.
- Spong Hill, Urn 1227 (Hills 1977, figs 47, 130), barred comb, 5th century. This urn is decorated, not with stamp impressions, but with marks left by the end of a blunt tool. Evidence from Cleatham suggests that this is a feature of earlier urns.
- Spong Hill, Urn 2087 (Hills 1981, figs 108, 137), developed cruciform brooch, AD 500 550.

Group 12a, urns decorated with standing bows (Fig 52)

Cleatham Phase ?

Relationships –

Four urns of this group were found at Cleatham but, while these had five relationships with other urns, none was useful in sequencing.

No independently dated examples were found.

Group 12b, standing bows with bosses

Cleatham Phase 1

Relationships 48, 51

Four examples of this decorative group, one of which was found in a group with three Phase 1 urns. Urns 194 and 336 share modelled bows and are clearly linked; Urns 666 and 1103 have only a formal link to these urns.

No independently dated examples were found.

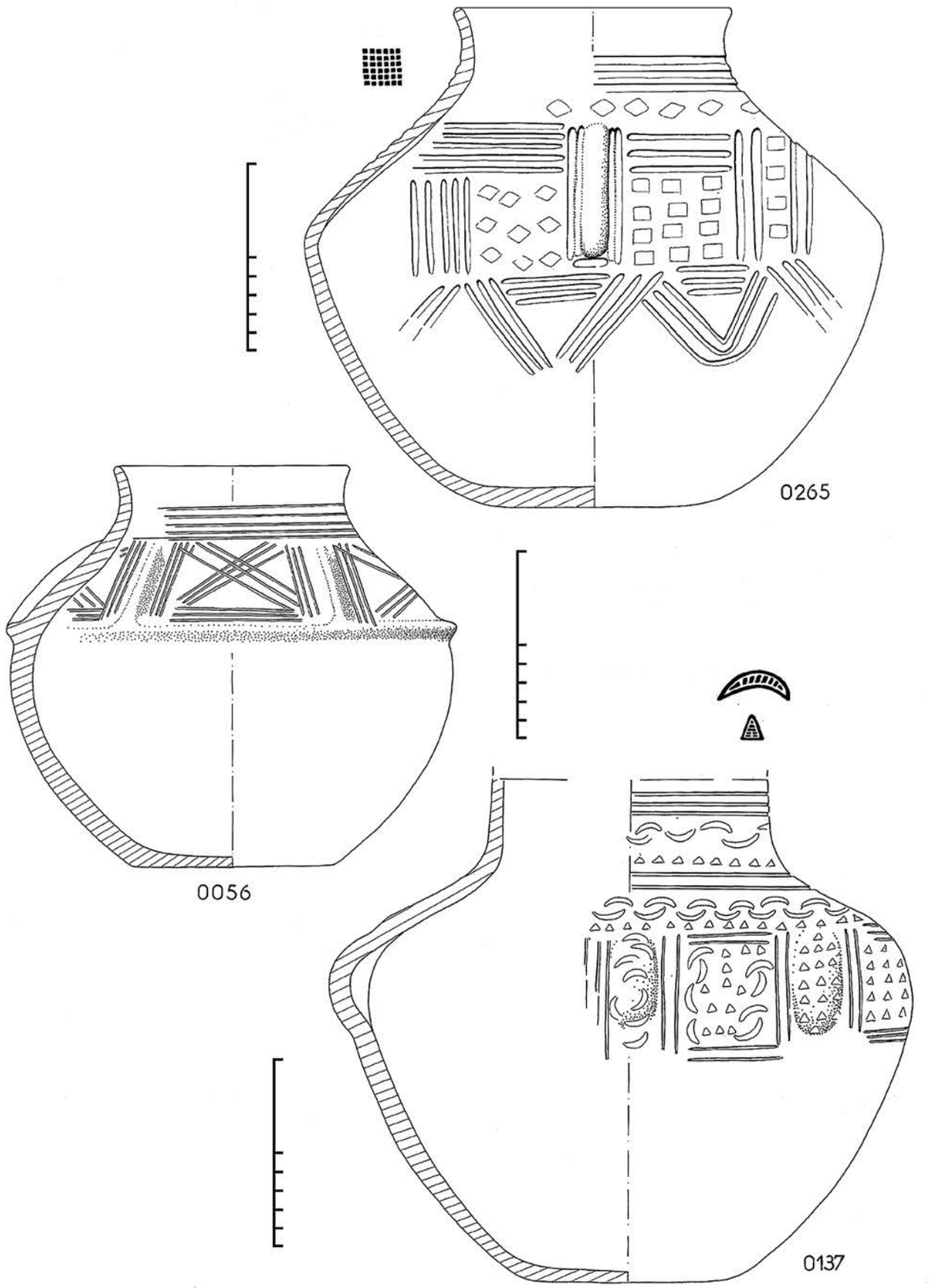


Fig 53 Representative urns from Cleatham Group 13b, 13n. Urn 056, Phase 1–4; Urn 137, Phase 1; Urn 265, Phase 1. Urns at 33%, stamps at 66%

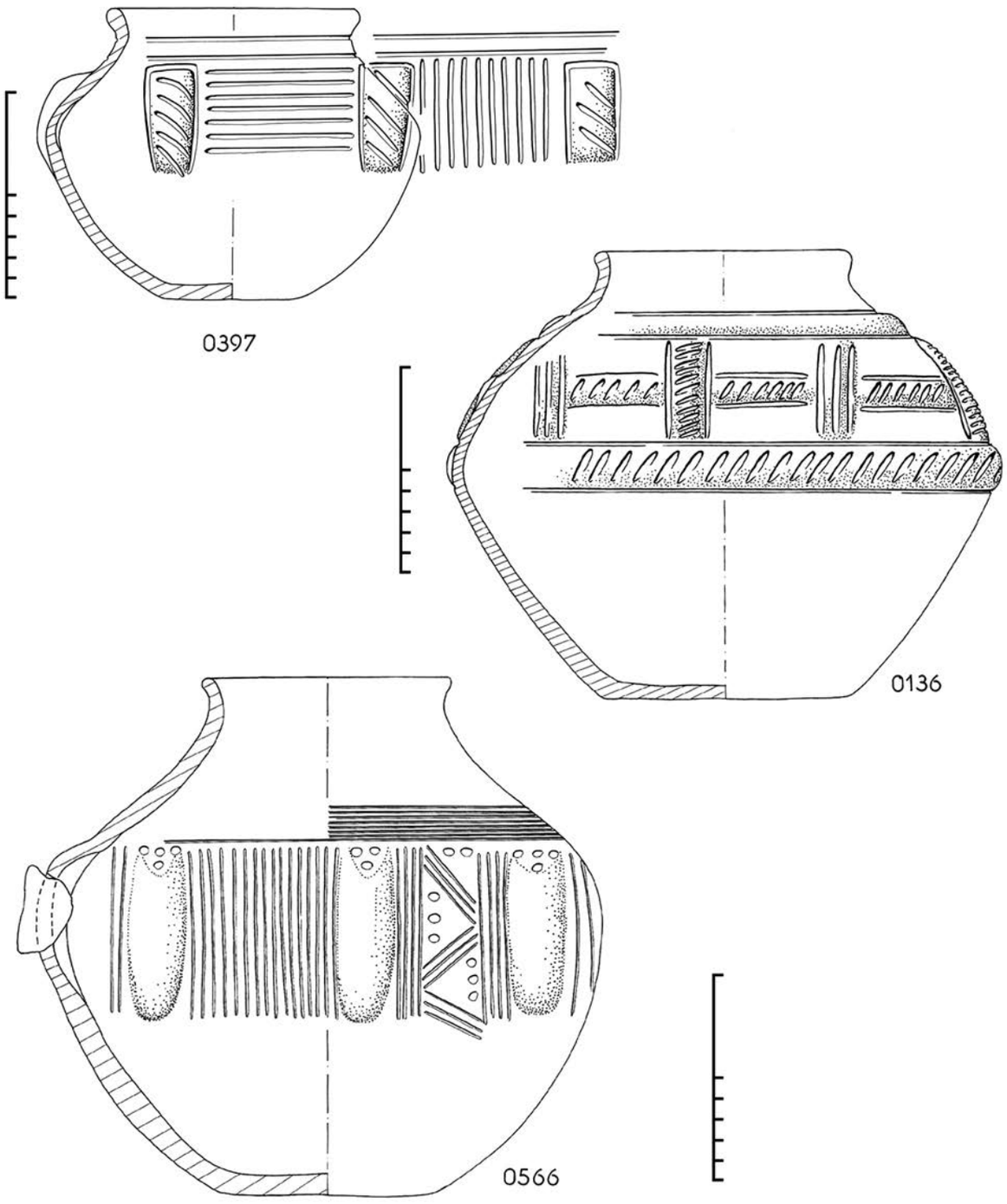


Fig 54 Representative urns from Cleatham Group 13b, 13n. Urn 136, Phase 1–3; Urn 397, Phase 1–4; Urn 566, Phase 1. Urns at 33%, stamps at 66%

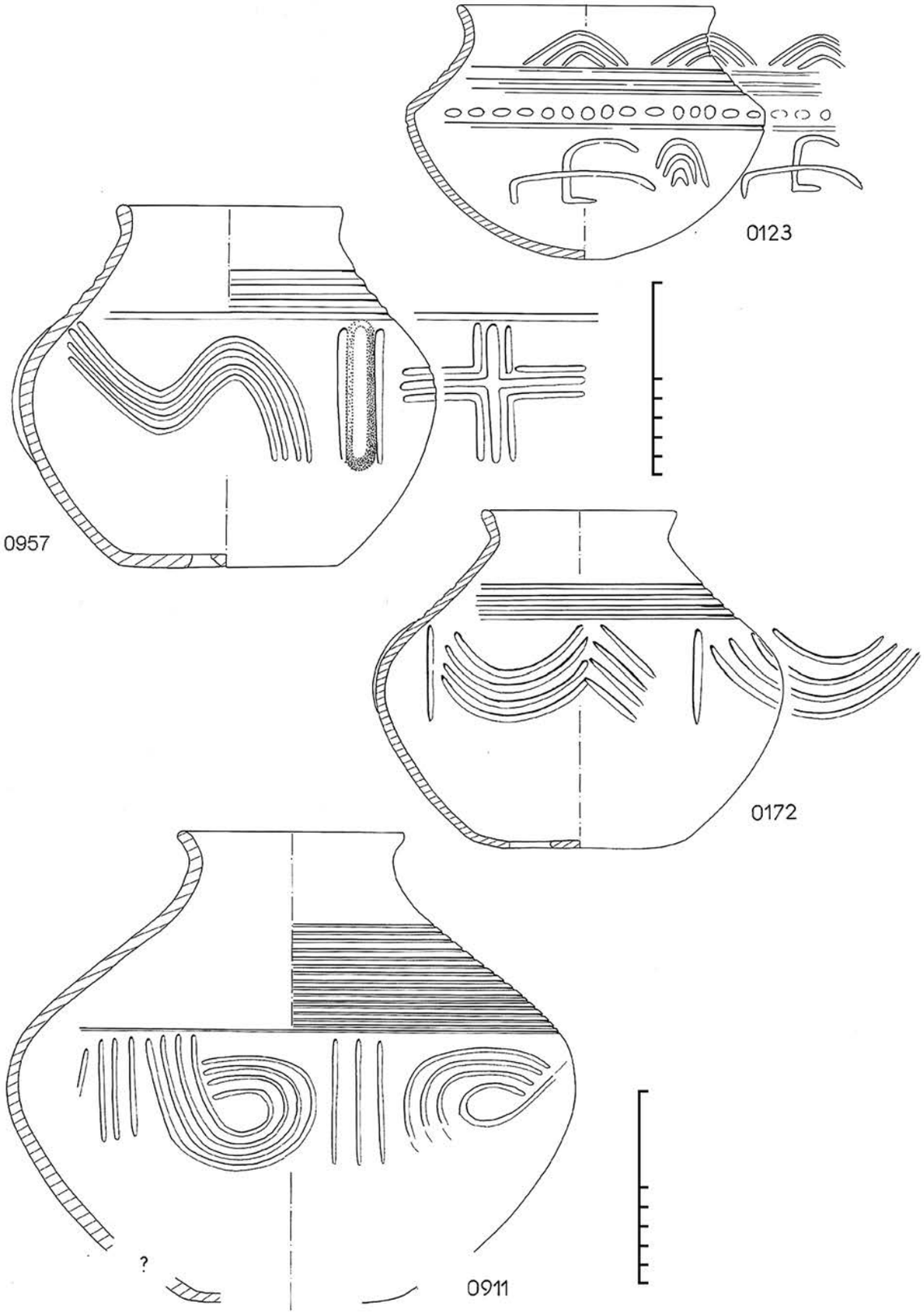


Fig 55 Representative urns from Cleatham Group 14a, 14b. Urn 123, Phase 1; Urn 172, Phase 1; Urn 911, Phase 1; Urn 957, Phase 1. Urns at 33%, stamps at 66%

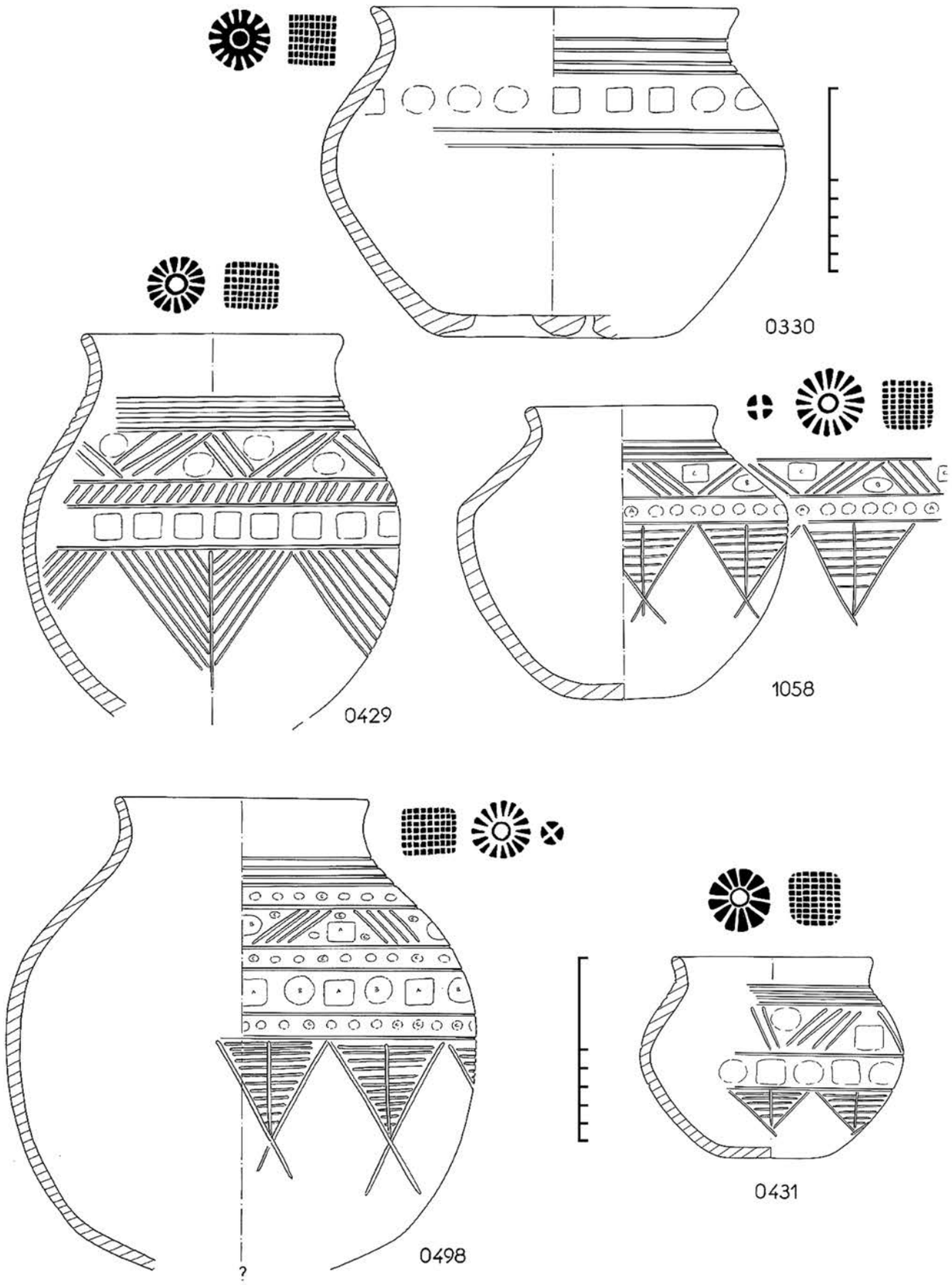


Fig 56 Representative urns from Cleatham Group 15s. Urn 330, Phase 4–5; Urn 429, Phase 4; Urn 431, Phase 5; Urn 498, Phase 4–5; Urn 1058, Phase 4. Urns at 33%, stamps at 66%

Group 12n, standing bows with bosses and stamps (Fig 52)

Cleatham Phase ?

Relationships –

Three urns with no relationships. Not phased.

No independently dated examples were found.

Group 12s, standing bows with stamp decoration (Fig 52)

Cleatham Phase 4

Relationships 10, 58

Seven urns of Group 12s were found at Cleatham, one of which had a relationship with other urns. It was cut by Phase 5 and, in turn, cut Phase 1 itself, placing it in a band between Phases 2 and 4. On stylistic grounds this group is best placed toward the end of the sequence.

No independently dated examples were found.

Group 13b, panelled decoration with bosses (Figs 53, 54)

Cleatham Phases 1–4

Relationships 50

Six examples were found at Cleatham. One Group 13b urn was cut by another vessel but this, itself, was only sequenced by its relationship to Group 13b. Sherds from Urn 191 were found in the fill of Grave 14 (later 6th century). This group is not well defined either stylistically or chronologically.

No independently dated examples were found.

Group 13n, panelled decoration with bosses and stamps (Figs 53, 54)

Cleatham Phase 1

Relationships 16, 57

Nine urns of this form were found at Cleatham one of which was cut by an urn of Phase 2 placing the group early in the series. Some urns have been included in this group on the basis, not of their decorative scheme, but because of direct stamp links between them and the main group (Stamp Group 2).

No independently dated examples were found.

Group 14a, incised, cursive designs (Fig 55)

Cleatham Phase 1

Relationships 7, 63

Eight examples from Cleatham, one of which had a relationship with urns of Phase 1. Sherds of Urn 911 were found in the fill of Grave 51 (7th century?).

No independently dated examples were found.

Group 14b, incised cursive designs with bosses (Fig 55)

Cleatham Phase 1

Relationships –

None of the eighteen urns of Group 14b found at Cleatham had any relationships and it was not possible to sequence them on stratigraphic grounds. Stylistically, however, their cursive decoration is best placed at the beginning of the sequence.

No independently dated examples were found.

Group 14n, incised cursive designs with bosses and stamps

Cleatham Phase 1

Relationships –

Two urns with no relationships. These urns have been assigned to Phase 1 on the basis of their cursive decoration.

No independently dated examples were found.

Group 15s, Cleatham potter, daisy and gridiron stamps, often with incised pendant 'kippers' (Fig 56)

Cleatham Phases 4–5

Relationships 4, 20, 22, 35, 76

Fourteen examples of this group were found at Cleatham, with four useful relationships. These showed Group 15s both being cut by Phase 5 and cutting Phase 4 urns and an urn of Phases 1–3. The association of a developed cruciform brooch with a Group 15s urn supports the late dating of this group.

Parallels and associations

- Cleatham, Urn 330, Åberg Group V cruciform brooch, AD 525–570.

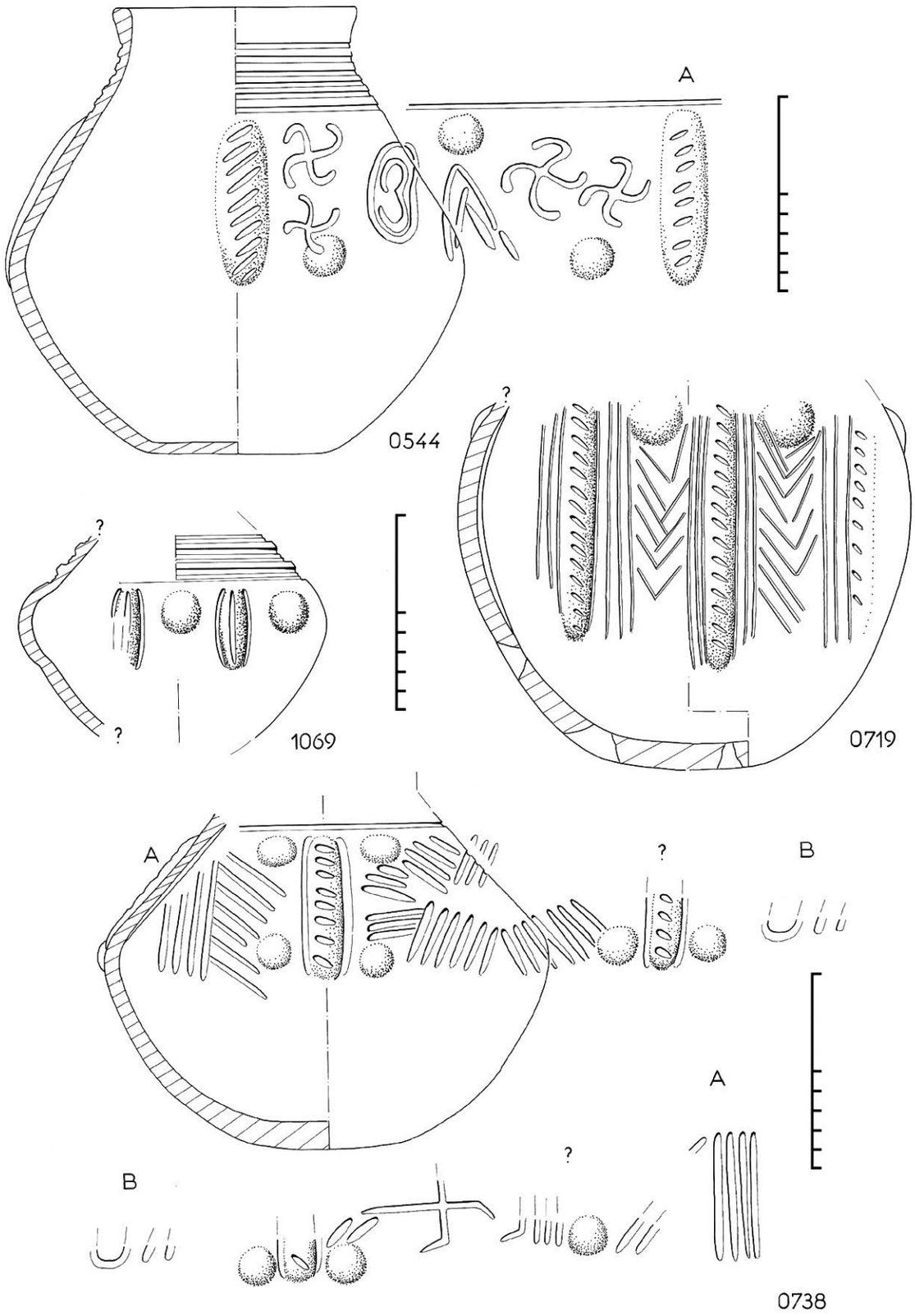


Fig 57 Representative urns from Cleatham Group 16b, attributed to the 'Sancton/Elkington potter'. All Phase 1. Urns at 33%

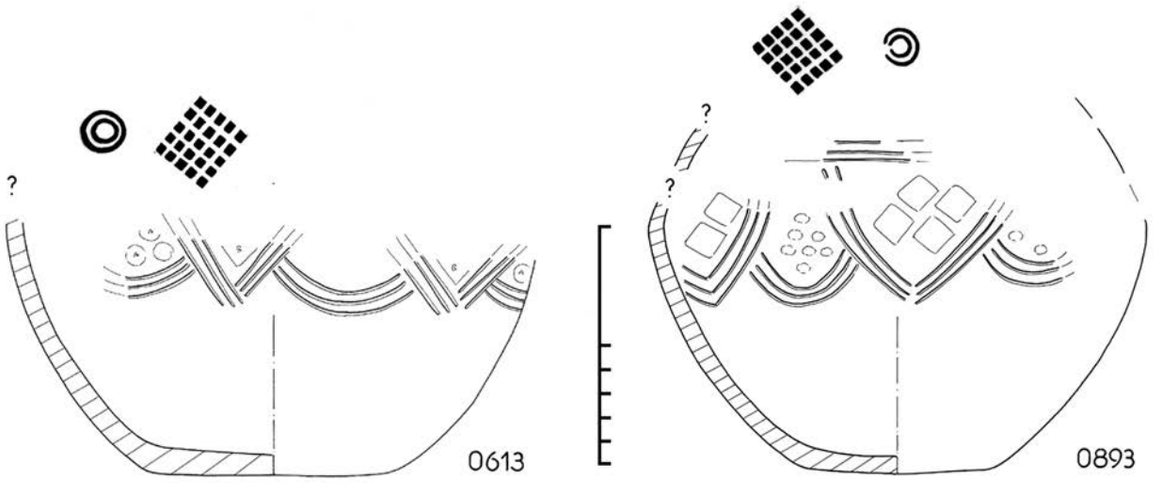


Fig 58 Representative urns from Cleatham Group 17s, attributed to the 'Sancton/Baston potter'. Both Phase 4–5. Urns at 33%, stamps at 66%

Groups 16b, Sancton/Elkington style urns (Fig 57)

Cleatham Phase 1?

Relationships –

Eight of these urns were found at Cleatham but these had no useful stratigraphic relationships. A similarity in style to the freehand decorated urns of Group 14 suggests that they were early. At Sancton, an urn in this style (Urn 2570) was 'apparently buried above Urn 2598' (Myres and Southern 1973, 28, figs 16 and 23). This vessel, at Cleatham, would be placed in Group 10a, of Phase 1. This suggests this vessel may have been later, but it is perhaps more likely that the two vessels were contemporary, but superimposed.

Other than the Sancton find there were no independently dated examples.

Group 17s, urns decorated with conjoined pendant arcs, Sancton/Baston style (Fig 58)

Cleatham Phase 4?

Relationships –

Two urns were found that could be placed in this group, neither of which had a relationship with other vessels. Stylistic parallels with tightly decorated urns of Group 15s suggest that these urns belong to the end of the Cleatham sequence. It is possible that the urns of Group 11q represent the truncated remains of Group 17s urns. If this is the case it would provide stratigraphic evidence for the use of Group 17s urns in Phase 4.

No independently dated examples were found.

Group 18a, urns decorated with hanging bows and chevrons (Fig 59)

Cleatham Phase ?

Relationships –

Six urns could be placed within this group. These had two relationships with other urns, both of which were unclassifiable, but sherds of Urn 1169 were found in the fill of Grave 57 (6th century).

No independently dated examples were found.

Group 18s, urns decorated with hanging bows, chevrons and stamps (Fig 59)

Cleatham Phases 3–4

Relationships 4

Six urns were placed within this group, with one useful relationship. This showed Group 18s being cut by Phase 5 but it was not possible to define the phase at which urns of Group 18s appeared. As the Group 18s urns which feature in 'uncertain relationships' are in Phases 3, 4 and 5 it seems likely that Group 18s belongs towards the end of the sequence.

No independently dated examples were found.

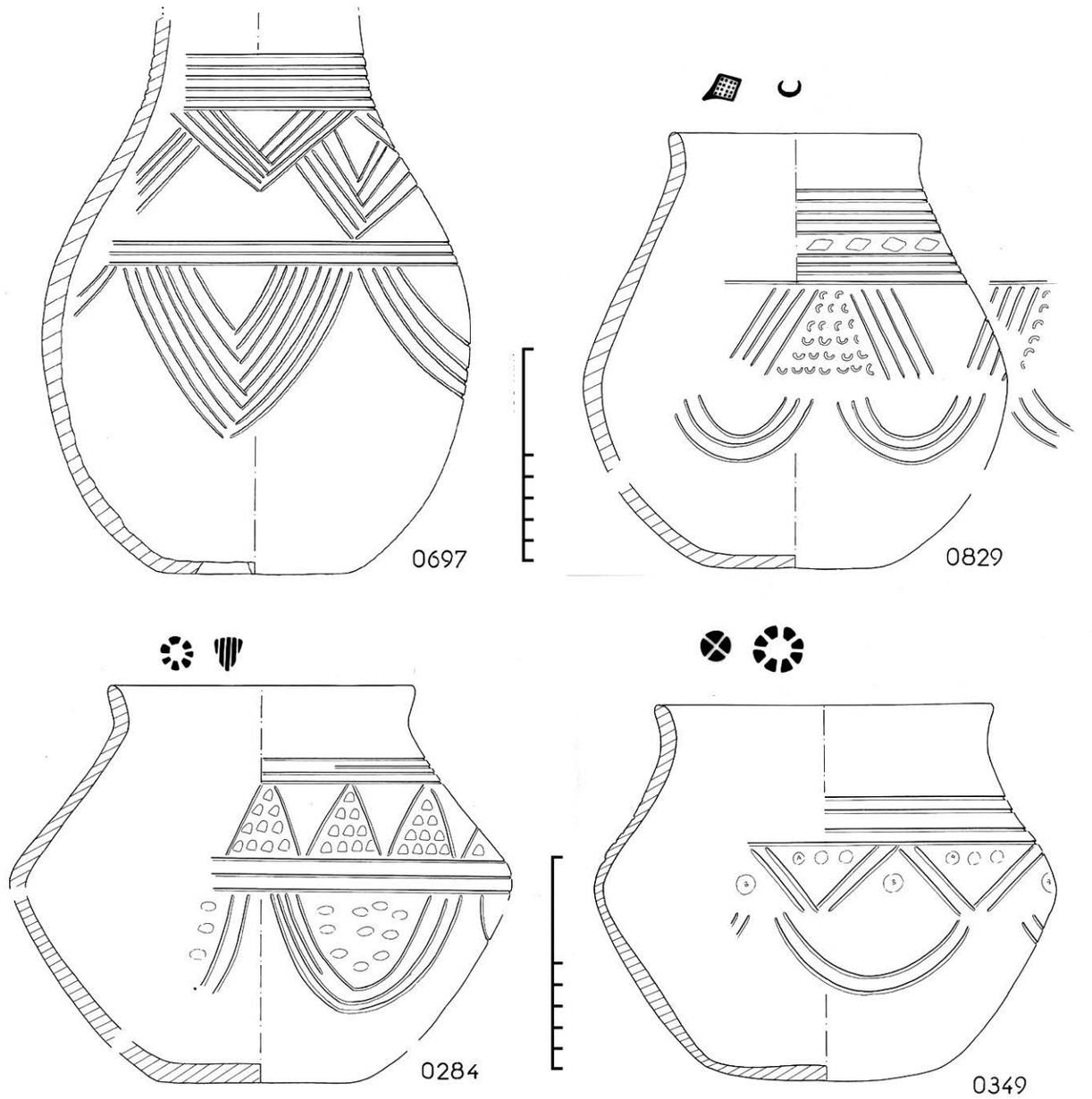


Fig 59 Representative urns from Cleatham Group 18a, 18s. Urn 697, Phase? Others all Phase 4. Urns at 33%, stamps at 66%

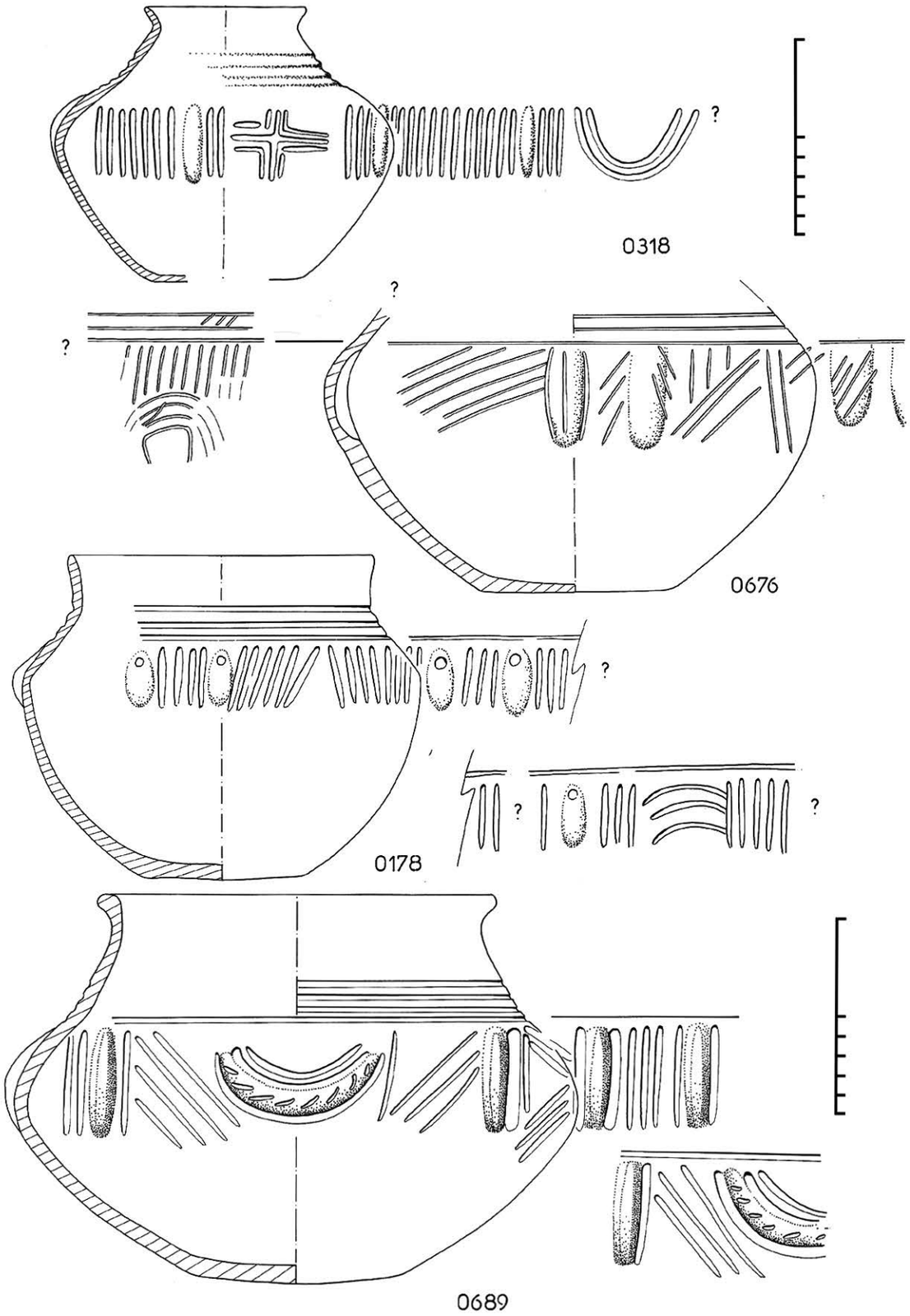


Fig 60 Representative urns from Cleatham Group 19b. All Phase 1. Urns at 33%

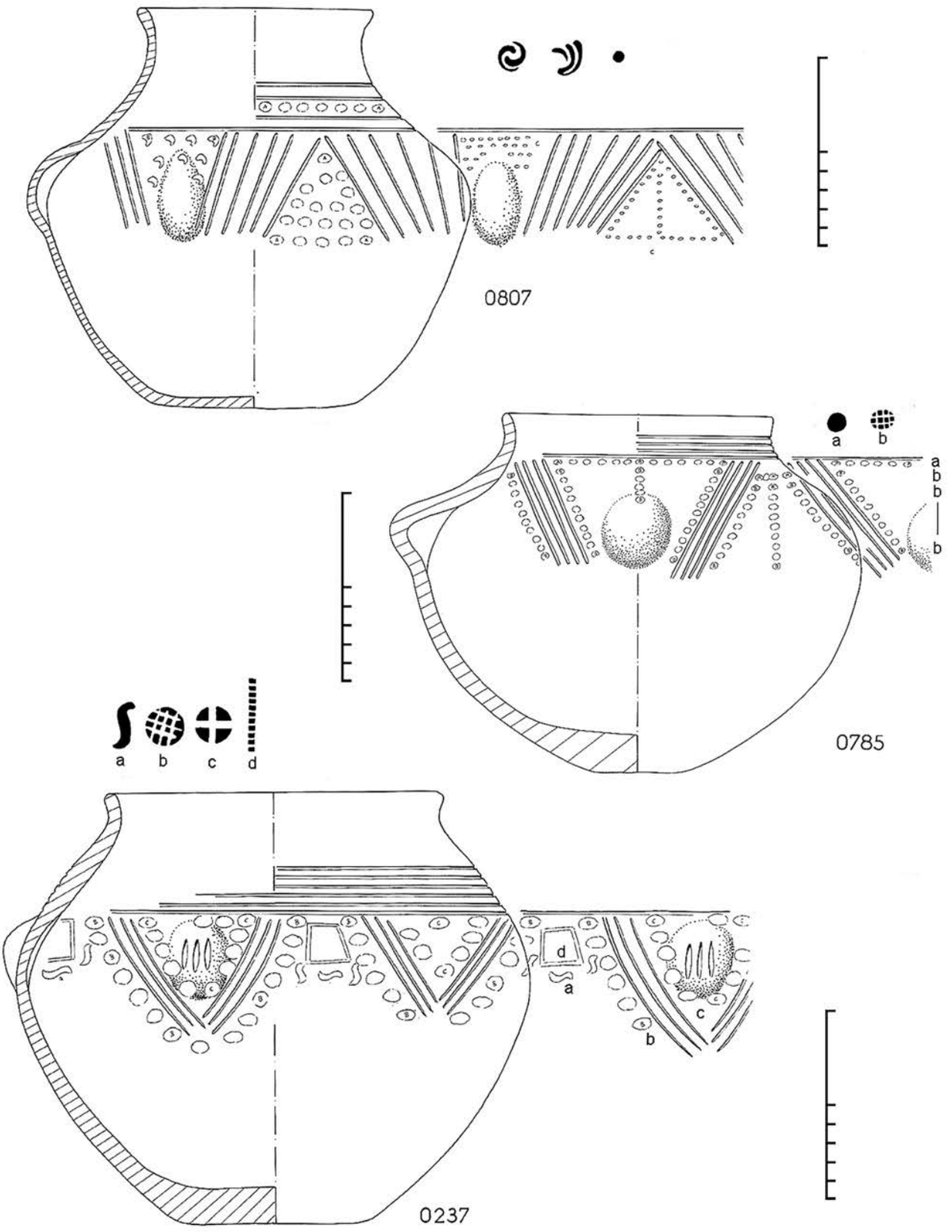


Fig 61 Representative urns from Cleatham Group 2on. Urn 237, Phase 2–3; Urn 785, Phase 1–3; Urn 807, Phase 1–3. Urns at 33%, stamps at 66%

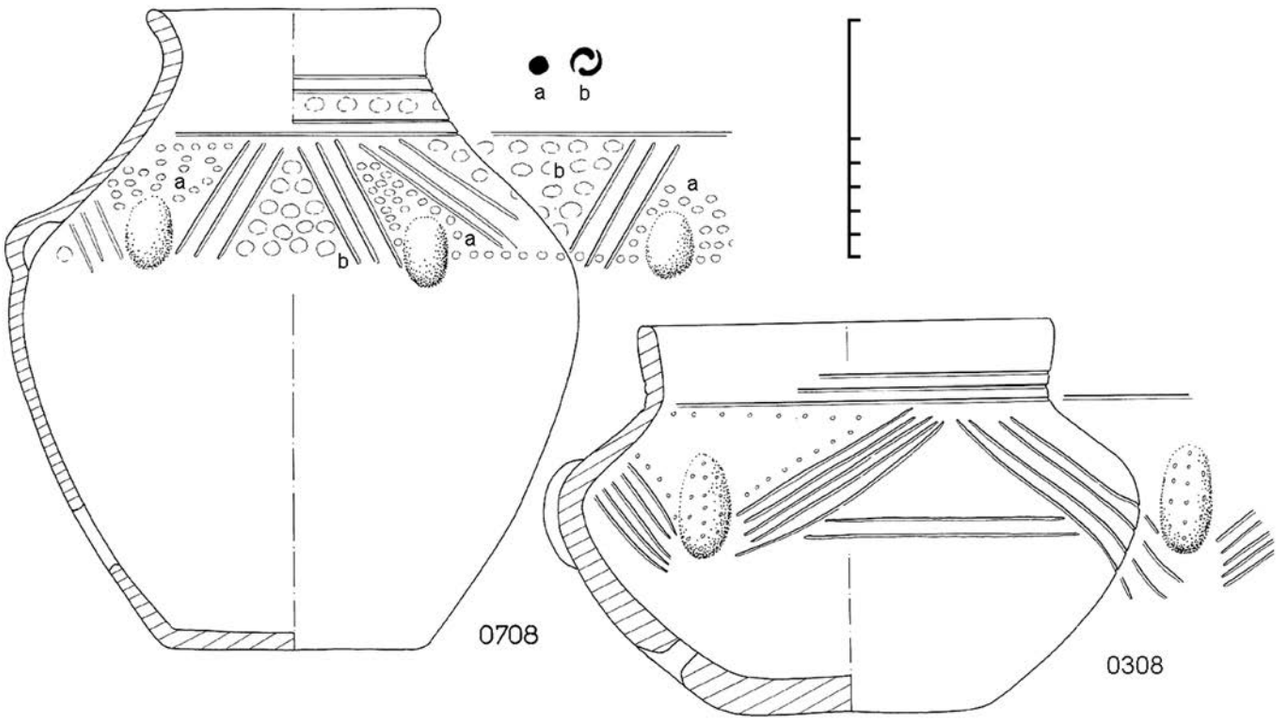


Fig 62 Representative urns from Cleatham Group 20n. Both Phase 1–3. Urns at 33%, stamps at 66%

Group 19b, asymmetrical band of decoration, non-repeating, with bosses (Fig 60)

Phase 1

Relationships 20, 30, 31, 36, 54, 108

Eleven examples of urns belonging to this group were found at Cleatham, four of which had useful relationships with other urns. These show associations with Phase 1, and one Group 19b urn appears to have been cut by an urn of Phase 2. This group includes design elements such as bows and panels that are used on other groups but are drawn together by non-repeating cursive elements.

No independently dated examples were found.

Group 19n, asymmetrical band of decoration, non-repeating, with stamps (cf Fig 60)

Cleatham Phases 4–5

Relationships 5, 12

Eight examples of Group 19n urns were found at Cleatham with two useful relationships, one cutting an urn of Phase 3.

No independently dated examples were found.

Group 19s, asymmetrical band of decoration, non-repeating, with bosses and stamps (cf Fig 60)

Cleatham Phase 2

Relationships 50

This group contains two urns one of which cut an urn of Phase 1. On stylistic grounds these urns are best seen as being early and have been placed in Phase 2.

No independently dated examples were found.

Group 20n, chevron, boss and stamp decoration (Figs 61, 62)

Cleatham Phases 1–3

Relationships 11, 20, 23, 27

Thirteen examples of Group 20n were found at Cleatham with four useful relationships which allowed the group to be assigned to Phases 1 and 2. A single highly decorated vessel, Urn 489, was placed into Group 20x. This lacked any stratigraphic relationship.

No independently dated examples were found.

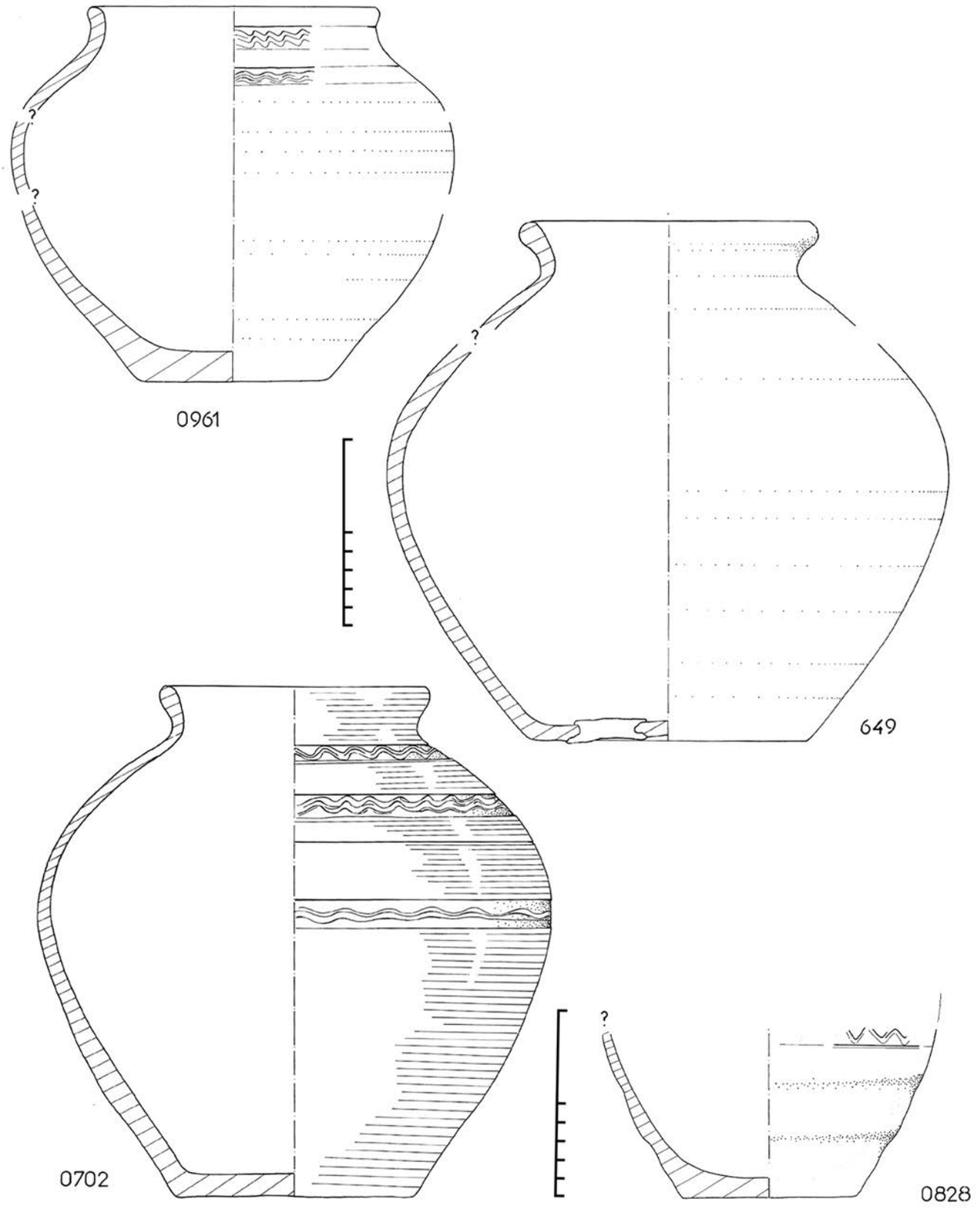


Fig 63 Urns from Cleatham Group 21, wheel-thrown urns in the Romano-British tradition. Phase 2. Urns at 33%

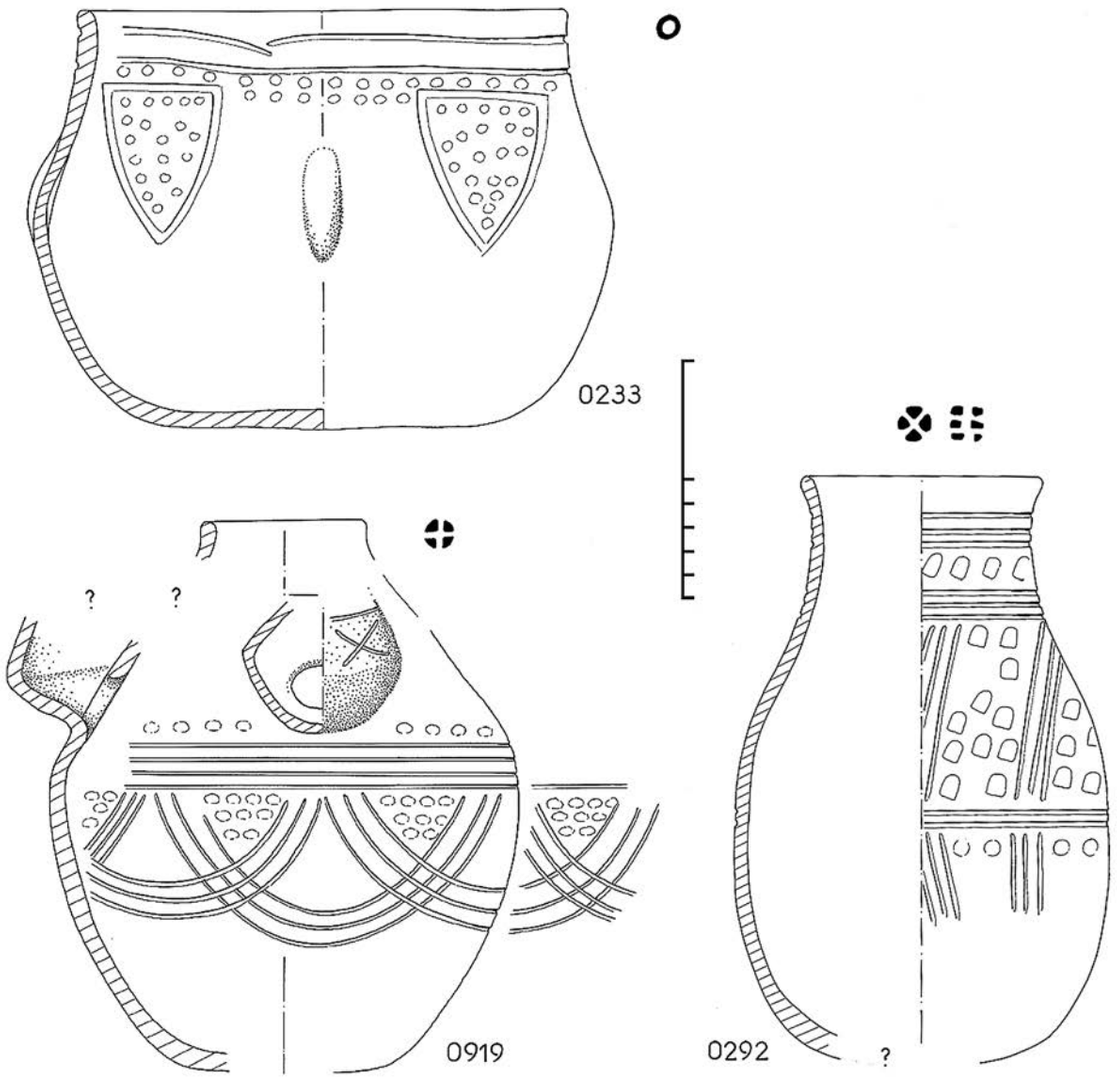


Fig 64 Representative urns from Cleatham Group 22. Unclassified vessels, none phased. Urns at 33%, stamps at 66%

Group 21, Romano-British vessels used as urns (Fig 63)

Cleatham Phase 2

Relationships 29

Four wheel-thrown Romano-British type vessels were found, in addition to which Urn 809 is possibly Roman. One of the Cleatham Roman-style vessels, Urn 649, was found in association with an urn of Phase 2. For further discussion of these 'Romano-British urns' see pages 126–7.

No independently dated examples were found but see the discussion below.

Group 22a, b, n, s, x, unclassified urns with no parallels on the Cleatham site (Fig 64)

While every effort was made to set up a classification system that could accommodate all of the urns found on Cleatham site, there remained 29 urns which seemed to stand alone. The urns in this amorphous 'group' had few relationships with other vessels. Urn 484 of Group 22n could be placed in Phase 3, as could Urn 1181. It is, however, unlikely that this phasing could be applied to the other urns of Group 22.

Urn developmental sequence

The term 'developmental sequence' is probably not one that should be used to describe the changing styles of decoration used at Cleatham as there is no clear trajectory by which urns can be seen as developing stylistically from earlier vessels. It is, however, possible to make some observations and to characterise how the decorative styles changed over the sequence.

Phase 1 is marked by the use of impressed or incised cursive motifs as seen on the urns of Groups 14a, 16b and 22n. This cursive, free-form decoration is clearly an early feature, as is the counter-angled decoration designs seen on the Group 08m urns. Panelled decoration, as seen on the urns of Group 13n, is also early and it is likely that Group 13b, which could only be phased to pre-Phase 5 on stratigraphic grounds, also belongs to Phase 1. The urn group most common in Phase 1 is Group 10a (rings and chevrons) which represents 30.4% (49/161) of the urns. Group 10a is restricted to Phase 1 but Group 10s (chevrons with rings which include stamps) only appears in Phase 3 and remains current into Phase 4. While it might be assumed that there was no hiatus in the use of chevron-decorated urns in Phase 2 the stratigraphy suggests otherwise.

Urns of Group 02s were used in Phases 2, 3 and 4 and thus overlap with Group 10s with which they share the use of stamped rings. It is notable that Group 02s (stamped rings) predates Group 02a (incised rings) which only appears in Phase 3. Group 02b (incised rings and bosses) is current only in Phase 1. Group 04s (Phase 2) and Group 04a (Phase 4) are, with their double bands of incised chevrons, stylistically linked but, here too, the stamped version predates the plain incised design.

Phase 2 is characterised by urns decorated with grouped vertical lines (Groups 05b, 05s, 07b, 07s, 19s). It is recognised that these groups are ill-defined and that it is sometimes difficult to determine into which group a particular urn should be placed. Having said that, it remains clear that incised vertical lines, whether grouped, continuous or interspersed with other elements, is, in the main, characteristic of the middle part of the Cleatham sequence although it can be seen in Phase 1 (Group 04b) and Phase 4 (Group 05n).

The end of the Cleatham sequence is characterised by the use of urns decorated with neat, geometric designs which include the use of stamps (Groups 11s, 15s, 17s, 18s). These share the same repertoire of stamps although they are rarely from the same die. While they were used earlier, incised bows (both pendant and standing) are more common at the end of the sequence.

Phase	1	2	3	4	5
Number of groups	19	17	10	13	8

Table 32 Number of urn groups present in each phase. Groups in use over more than one phase have been included in each phase

A simple count of the number of urn groups in use in each of the phases shows that there was a progressive reduction in the variety of urns in use over the sequence, suggesting that production was becoming more standardised. This could be a result of cultural homogenisation occurring as the Anglo-Saxons settled down in their new homeland or that the making of pots was becoming the work of a small number of specialists, as the neat form of many of the Phase 5 urns would suggest.

Decoration: inter-site comparisons (Fig 65)

The Cleatham cemetery produced 1204 urns and must, as we have seen, have contained around 1343 cremations. Of these 728 (60.5%) were decorated, which is lower than the average of 77.3% presented by the 18 cemeteries analysed by Julian Richards (1987, 94), and it appears that Cleatham contains a higher proportion of plain urns than any of the comparable sites. Cleatham has, however, a higher proportion of urns containing grave goods than the other cemeteries, and does not look 'poor'. The proportion of the plain urns that contain grave goods is close to site average (56.8% cf 56.1%).

It is instructive to compare the use of decorated pottery from Cleatham with that from a nearby settlement site. Intensive field walking carried out by Mrs Pat Albone on a settlement site at Kirton in Lindsey, 4.2km from the cemetery, produced 1400 sherds of Anglo-Saxon pottery of which only 24 (1.7%) were decorated. This may be compared with Mucking where approximately 5% of the pottery from the *Grubenhäuser* was decorated (Hamerow 1993, 51) and West Stow where 2% of the pottery was decorated (West 1985, 128). In an examination of the proportion of decorated pottery from Anglo-Saxon settlement sites

in East Anglia, Russel (1984, 552) found the figure varied between 0% and 14%, with an average of 7.5%. It is clear that the decorated pottery was in the main specially made for funerary use, although it sometimes appears on settlement sites. It was also found (see page 86) that sandy fabrics predominate on the settlement sites and that the varied fillers used for the Cleatham urns are absent. This stands in contrast to Mucking where the fabrics from the settlement and cemetery II were essentially identical (Hamerow 1993, 31).

	Lindsey and the Humber				Lincs and Notts		Norfolk	
	Cleatham	Elsham	Elkington	Sancton	Newark	Loveden	Caistor	Spong
Decorated	60.5	86.3	81.3	78.2	81.0	77.3	73.6	77.9
Bosses, vertical	19.8	19.5	19.8	21.4	37.3	29.1	23.3	23.0
Bosses, round	4.5	3.9	4.4	6.6	5.6	3.6	4.4	7.0
Incised	72.1	82.9	79.1	77.0	78.2	72.9	82.9	76.0
Plastic[3]	26.9	26.8	28.6	25.5	43.0	35.1	31.3	31.3
Stamped	39.8	41.0	34.1	32.5	41.5	41.0	26.0	39.1
Perforations	6.7	7.3	1.1	1.2	1.4	1.2	4.0	10.1

Table 33 Comparative percentages of urns decorated using specified techniques in the Lincolnshire and Humber region, together with Caistor by Norwich and Spong Hill, Norfolk, based on data from Richards 1987. For cemetery locations see Figure 65

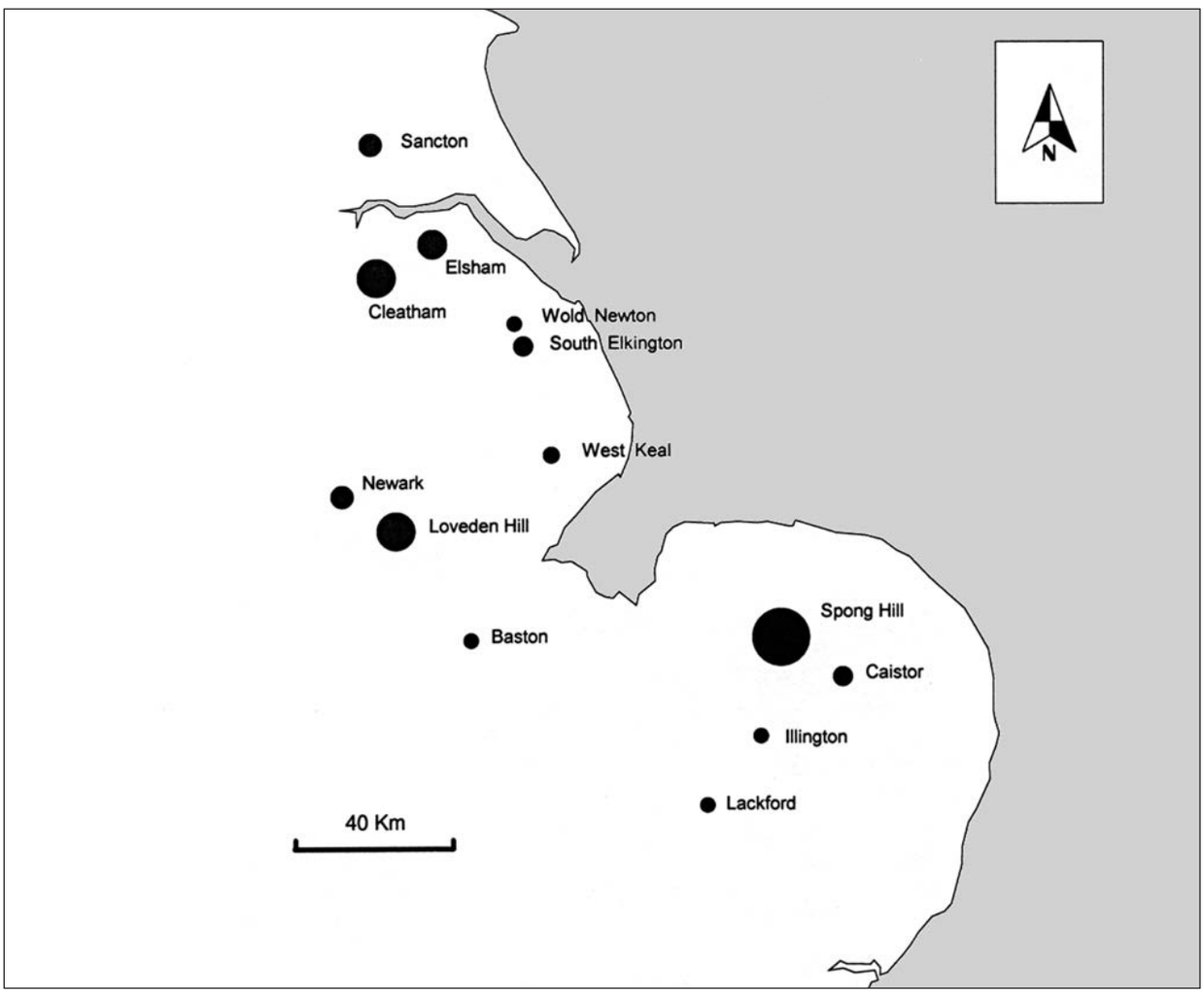


Fig 65 Map showing the locations of the comparable Anglo-Saxon cremation cemeteries in eastern England

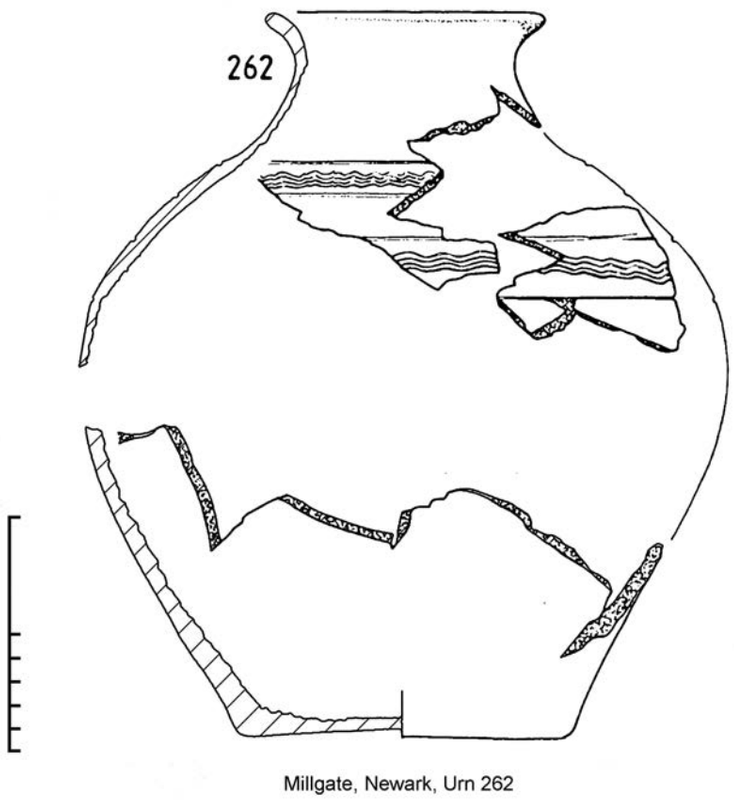


Fig 66 'Roman' urn 262 from the Millgate, Newark, Anglo-Saxon cemetery. Illustration courtesy of Gavin Kinsley, Trent and Peak Archaeological Trust. Urn at 33%

Table 33 gives a breakdown of the decorative techniques as found on excavated cremation cemetery sites in the Lincolnshire and Humber region together with, as external controls, Caistor and Spong Hill, Norfolk.[4] The frequency with which the decorative techniques were used shows a remarkable level of uniformity which, in itself, suggests that some continuing relationship existed between these regions.

An examination was made of how far the Cleatham urn classification was applicable to other sites. At Cleatham itself it was found possible to assign 798 of the classifiable urns to a group; the remaining 29 were placed in the highly varied 'Group 22'. This means that 96.5% (798/827) of the Cleatham urns could be grouped. To examine how far the Cleatham classification could be applied to other sites the urns from eight other cremation cemeteries were classified into the groups defined for the Cleatham urns. Looking at this material an interesting pattern emerged.

Cemetery	Number of urns	Percentage classified	Distance from Cleatham in km
Cleatham[5]	827	96.5%	0
Elsham	345	95.7%	18
Sancton	240	97.1%	35
Elkington	89	92.1%	38
Newark	353	94.5%	48
Loveden Hill	877	90.08%	54
Spong Hill	1773	88.9%	137
Caistor by Norwich	351	83.2%	168
Lackford	163	73.6%	155

Table 34 Number of urns at other cemeteries which can be accommodated in the Cleatham classification. The total number of urns includes only those that were sufficiently complete to allow classification

It can be seen from Table 34 that a higher percentage of the urns found on the cemetery sites in the northern area (Elsham, Newark and Sancton) can be accommodated within the Cleatham classification. Elkington appears to be an exception but this may reflect the relatively low number of urns from that site which were reconstructable. Further south into East Anglia the urns show much more variation, increasing with distance from Cleatham. Spong Hill, where 88.9% of the urns could be classified, looks most like Cleatham and other direct links, exist between the two cemeteries.[6] The correspondence between Cleatham and Lackford is low, perhaps reflecting the high usage of '*Buckelurnen*'[7] at that site and the distinctive work of the Illington/Lackford potter.

Richards discussed two other features of Anglo-Saxon urns: the use of lids and the deliberate perforation of vessels prior to burial (1987, 96–9). None of the Cleatham urns had a lid although 53 of them were associated with stones, which covered, and sometimes wrecked, them. This practice was noted at Loveden Hill (Fennell 1964, 103). It was found that 6.7% (81/1204) of the Cleatham urns had one or more deliberate perforation. This compares with the 7.3% of perforated urns at Elsham and the 10.1% at Spong Hill. However, like Richards, the writer notes a correlation between the perforation of urns, and the date of excavation and subsequent report, and wonders if a re-evaluation of the earlier finds might increase the number of perforated urns. At Loveden Hill it was found that the copper alloy hanging bowls used as 'urns' had been perforated prior to burial (Fennell 1964, 112).

Romano-British type vessels used as urns (Pl 25)

Urn	Phase	Notes	Grave goods	Fabric filler
649	2	Plain pot, lead plug in side wall	No grave goods	Calcareous, 10% Haematite, 5%
702	?	Decorated pot	Iron toilet set, bone comb fragment, spindle whorl, fragment of a bone buckle	Quartz, rounded, 10%
828	?	Decorated pot, 50% complete	No grave goods	Shell, 5%
961	?	Decorated pot	Iron toilet set, tweezers, razor shears	Quartz, rounded, 20%

Table 35 Romano-British type pots used as urns at Cleatham

Four wheel-thrown vessels of Romano-British type (Group 21) were found used as urns at Cleatham, of which only one could be phased, Urn 649 which belonged to Phase 2. This urn was also fitted with a lead plug as found in Anglo-Saxon urns. Two of the urns contained grave goods and could be seen as relatively rich burials. Urn 702 contained seven items and Urn 961 four items; in both cases the finds appeared masculine.

These pots are remarkable in that they so closely resemble each other (see Fig 63). So far as can be determined all four had the same shape; the different rim angle on Urn 961 is likely to be due to the difficulty in reconstructing this vessel. Three of the vessels bear decoration which consists of a reserved band containing a wavy line incised with a multi-point, comb-like tool. The decoration used on Urns 702 and 961 was similar and, as the same fillers were used, they may have come from the same source. All four vessels are in what appear to be local fabrics.

These pots are very difficult to parallel in North Lincolnshire and nothing like them appears in any of the relevant studies (Rigby and Stead 1976; Gregory and Swan 1996). The best parallel is urn 262 from the Millgate, Newark, cemetery (Kinsley 1989, 12, fig 62) which is decorated with the same multiple wave pattern as seen on three of the Cleatham urns (Fig 66, cf Fig 63) and, while it has a slightly narrower neck, has the same shape as the Cleatham pots.[8] The form and decoration of the Newark vessel was compared by John Samuels (quoted in Kinsley) to products of the Torksey kilns. This parallel is not altogether convincing as the Torksey pots have defined necks, absent on the Cleatham and Millgate urns (cf Oswald 1937, pl II, No 11a and 19a). Oswald dated the Torksey kiln to around AD 230–250. Todd (1968, 205–6) drew attention to the lack of internal dating evidence for the kilns and pointed out that some of the forms found on the site only appear in the mid-3rd century, a dating he suggested for the whole assemblage. This date again could be too early: fragments of a jar with a similar profile and decoration were found at Great

Casterton, Rutland (Corder 1951, 32, fig 9, No 23), in a destruction layer coin-dated to post-AD 375. Drawings of the Cleatham 'Roman' urns have been examined by Maggie Darling, a specialist in Romano-British pottery. She commented that while the production method was Roman, the shapes of the vessels were unusual for late Roman jars which tend to be tall and narrow. These body shapes seem to owe more to Anglo-Saxon than to Roman pottery (Maggie Darling, pers comm).

The Cleatham Anglo-Saxon cemetery is not alone in containing Romano-British pots used as urns. Roman pots were found most notably at Caistor by Norwich where four, or possibly six, reused, 2nd-century Roman pots were found (Clough and Myres 1973, 74–6). Only one of these urns contained a grave good (a bone comb fragment) and had a perforated base. Four Romano-British pots were used as urns at the Millgate, Newark, cemetery, one of which is discussed above (Kinsley 1989, 12). Three of these were found to contain grave goods and one was fitted with a lead plug.

It has been suggested that these pots had been found in an abandoned Roman kiln (Clough and Myres 1973, 74–6) but none of the Cleatham examples was defective and, while they resembled each other, no two of them were in the same fabric. A possible source of these urns lies 2.5km to the north, at the Gilliate's Grave Romano-British cremation cemetery. However, none of the urns recovered during the 1951 excavation resembles the Roman pots from Cleatham. Early Anglo-Saxon pottery was found at Gilliate's Grave and two of the Roman urns from that site have cast lead plugs (not repairs) of the sort seen on Anglo-Saxon urns. The grave goods found in the Gilliate's Grave urns were appropriate for the Roman period: a coin of Trajan, hobnails and bird bones. It is notable that the Roman cremations had not been carried out with the skill shown at Cleatham, many of the Gilliate's Grave bones being blue or grey showing incomplete combustion of the organic material. The date of the Roman urns from Gilliate's Grave is thought to be 2nd and 3rd century but in view of the use of lead plugs this date needs to be reviewed.

While the Cleatham 'Roman' pots have been discussed in terms of their dating, it is remarkable that the same unusual style of Romano-British type vessel was found in both the Cleatham and Millgate cemeteries. We cannot ignore the fact that these six late 5th-century urns are our best dated examples of this style of vessel and one must wonder if they are, in fact, sub-Roman. While the pots outwardly resemble each other, the fabrics in which they are made are different (Table 35) which is, perhaps, an indication of a tradition in decline. More work is needed in order to investigate this potentially important find.

Regional 'potters'

A search through the literature in search of parallels for the Cleatham urn groups proved pointless: with few exceptions it was possible to parallel all of the Cleatham groups anywhere in Anglo-Saxon England. This suggests a high level of homogeneity amongst these apparently disparate vessels and that the Cleatham classification and phasing may be generally applicable. However other, more direct links may be made with other cemeteries (see map, Fig 65).

The identification of 'potters' whose work can be identified at more than one cemetery is difficult, but potentially important.[9] The main problem is differentiating between the work of a single hand and a number of potters drawing on the same cultural tradition. With many of the simpler designs it is impossible to determine whether one person or many were involved; the chevron-decorated urns of Group 10a for instance, seem ubiquitous. However, in other cases, links clearly exist.

The Sancton/Elkington potter, Cleatham Group 16b (Fig 57)

One of the best-known potters identified in the Humber and Lincolnshire area is the Sancton/Elkington potter, whose work was identified by Myres as long ago as 1937 (Myres 1937, 394–6). Sancton lies in the East Riding of Yorkshire and South Elkington near Louth in Lincolnshire. Urns in this style have now also been found at Elsham and Cleatham, where four examples were found (Urns 544, 719, 738 and 900), in addition to which Urns 235, 398, 647 and 1069 share motifs with Group 16 and are clearly linked. Shared motifs include both elongated and small round bosses and slashed decoration. Although the decoration on Urn 235 also includes stamps, this vessel has been included in Group 16b as it was considered useful to link it to Group 16n. Cleatham Urns 544 and 738 fit best into

the Sancton/Elkington tradition, both having the typical grooved neck, long slashed and circular bosses, and cursive swastikas (cf Myres 1969, fig 46; 1977, 244–5, figs 196–7). Urn 719 represents a second aspect of the tradition, the bosses being separated by incised chevrons.[10] Urn 900 is unusual, its decoration following the Sancton/Elkington prescription, but to quite different effect. This urn also has modelled rings around it, bears slashed decoration and appears, again, to be a different interpretation of the Sancton/Elkington tradition. The Cleatham pots decorated in the Sancton/Elkington style are of 'average' competence, in contrast to the urns from Sancton, which are crudely made and shapeless, Myres referring to 'the general incompetence of the potting' (Myres and Southern 1973, 19). The fabrics in which the Sancton/Elkington tradition pots from Cleatham were made employ varied fillers which weighs against their being made by one potter. Urns 544 and 647 were made using slag as a filler and are therefore likely to have been locally made. Six of the other urns contain quartz as a filler in their fabrics; Urns 719 and 738 also contain calcareous material in addition to the quartz and 647 has calcareous material together with slag and haematite.

Considering the varied nature of the styles and fillers used to make the Sancton/Elkington urns from Cleatham it is considered that these vessels are best seen as a style rather than the work of an individual potter. The cursive decoration suggests that these urns are early and they have been placed in Cleatham Phase 1.

The Sancton/Baston potter, Cleatham Group 17s (Fig 58)

The other potter whose work is represented at Cleatham is the Sancton/Baston potter (Myres 1977, 343–4, fig 347). Two urns can be placed in this tradition on the basis both of decorative style and stamp links. Urn 613 is badly truncated but clearly recognisable by its conjoined hanging bows, chevrons and the stamps used; Urn 893 is likewise truncated, but also still immediately identifiable. Both are included in Cleatham Group 17s. Urns belonging to this tradition were found at Sancton, Elsham, and Baston, Lincolnshire, 130km to the south (Fig 65). Vessels from Newark, Illington, Loveden Hill, Spong Hill and Melton Mowbray may also be attributed to the Sancton/Baston potter (Arnold 1983, 17–30) but, while the stamps used on these vessels resemble those seen on the main group, the decorative scheme is different. Arnold (1983, 19) divided the Sancton/Baston urns into three groups. Group A comprised: Sancton, Baston, Elsham and now Cleatham; Group B included urns from Newark, Loveden Hill, Spong Hill and Illington with an atypical urn from 'Melton Mowbray' formed Group C. The urns in Group A are all linked by the use of the same dies but there are no shared dies amongst the other groups.

A petrological examination of the Sancton/Baston urns showed that a different pot fabric was used at each of the cemeteries, even when dies had been shared (*ibid,* 22–5). It seems that it was dies that were transported, not finished pots. The two Cleatham Sancton/Baston pots were made in different fabrics, Urn 613 in fabric containing quartz and chaff, and Urn 893 in a fabric containing only quartz. A possible link exists between Cleatham and Newark, where two of the Sancton/Baston urns contained haematite, a feature of the Cleatham urns and a material not locally available around Newark.

Arnold (1983, 27) speculated that the stamps used on the urns represented a sort of heraldry, with the Group A Sancton/Baston urns representing the prime line, and with other stamps being added in the way that the differencing on arms indicates cadency. Attractive as this idea is, it is impossible to prove. The Sancton/Baston urns found at Cleatham are late in the sequence and have been placed in Phases 4–5.

The Cleatham/Spong Hill potter, Group 09n (Fig 67, Pl 26)

Perhaps the most striking parallel for a Cleatham urn is that between Cleatham Urn 889 and Spong Hill Urns 1814 and 2112 (Hills and Penn 1981, fig 92) and 3052 (Hills *et al* 1994, fig 63). These vessels bear an elaborated decorative scheme and are identical down to the level of subliminal features such as a step in the profile above the base. Unfortunately none of them contained any dating evidence but these vessels are late in the Cleatham sequence and have been placed in Phase 5. These urns must be seen as the products of the same hand and it would seem probable that they were made in East Anglia, the Cleatham vessel being transported 137km (see Fig 65). Spong Hill Urn 1814 belonged to Spong Hill Stamp Group 64 along with Urns 2286 and 2319, neither of which was reconstructable. Urn 2112 from Spong Hill bore impressions linking it to Stamp 121 and linking it to Urn 3052.

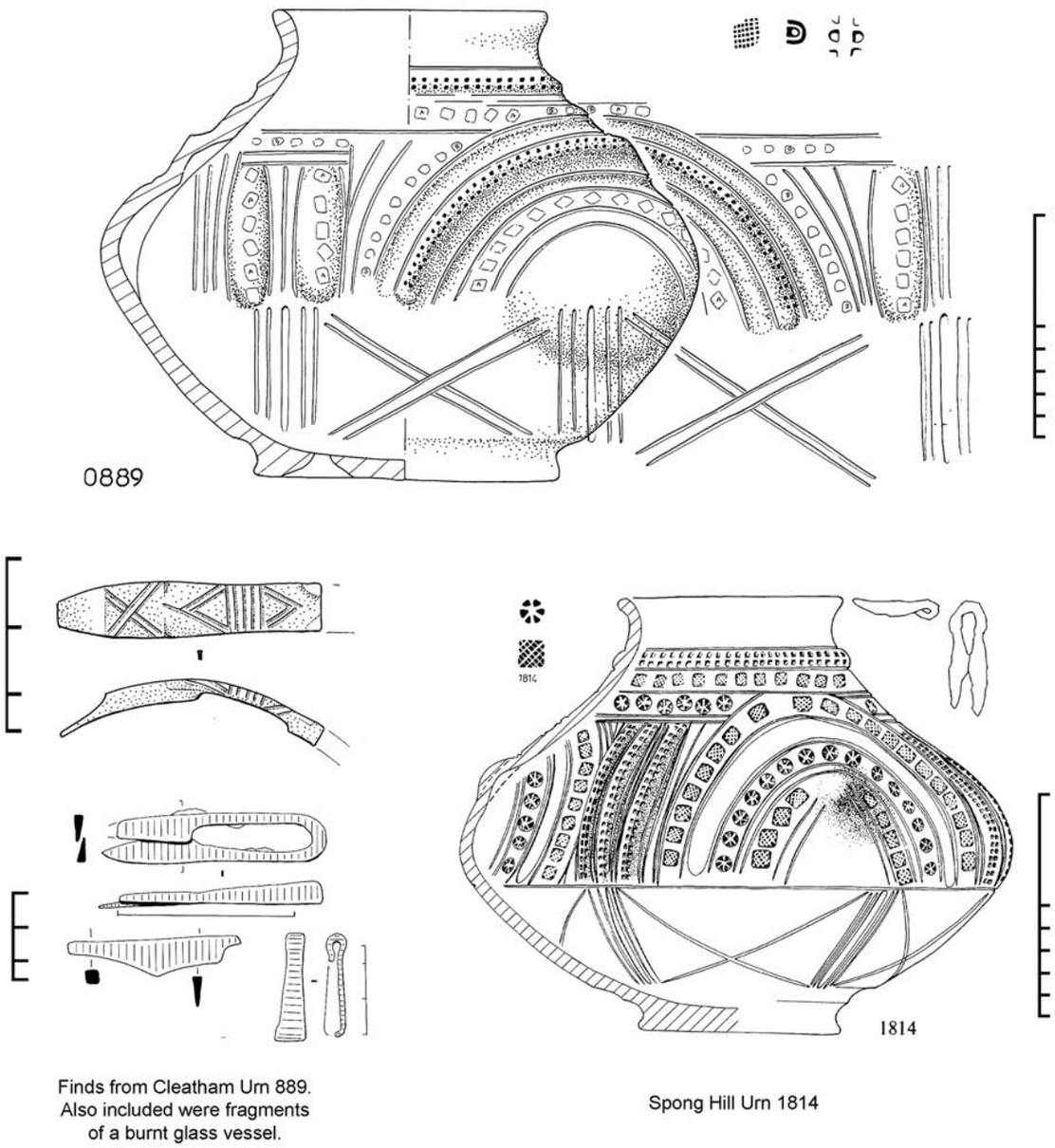


Fig 67 Urns by the Cleatham/Spong Hill potter. Illustration of Urn 1814 from Spong Hill courtesy of Kenneth Penn, Norfolk Museums' Service

Special vessels

Some of the Group 22 urns are of such intrinsic interest that they should be considered in detail.

Urn 1100, faceted carinated bowl not phased, 1856 discovery (Pl 1)

This remarkable vessel appeared on the dust jacket of Myres' 1969 volume and is seen as being amongst the earliest Anglo-Saxon urns in the country. It is finely made and has a neatly formed footring base. The geometric decoration is crisp and carried out with great precision. While some of the features of Urn 1100 can be paralleled on other Cleatham urns, it must be seen as unique and special. A 4th-century date has been suggested for these carinated bowls, mainly on the basis of continental parallels (Myres

1969, 77–8; Hurst 1976, 292–3, fig 7.3). Hamerow reviewed the dating of carinated vessels, showing that we cannot assume that they are all early (1993, 42–4). A faceted carinated bowl was found in grave 4758 at Springfield Lyons (Tyler and Major 2005, figs 29–30) and, while the associated finds are difficult to date, the mid-6th-century date suggested by the excavator seems plausible. The neat panelled decoration on Cleatham Urn 1100 might, however, be placed at the end, rather than the beginning, of the sequence. This vessel can be paralleled by Spong Hill Urn 1490, which contained a fragment of a five spiral applied disc brooch of 5th-century date (Hills 1977, figs 36, 110).

Urn 919, cupped vessel (Fig 64)

Urn 919 is a strange vessel decorated with, one would assume, a series of small, applied subsidiary cups linked, through holes in the urn's neck, to its interior. The only parallel for this vessel at Cleatham was Urn 85 (unclassified Group 22n) which stylistically resembles Urn 919 but lacks the distinctive cups. Only one external parallel exists for this extraordinary arrangement: Urn 201 from Mucking, Essex (Myres 1977, 32–3, 239, fig 188, No 3756).[11] While the two vessels both have subsidiary cups and a similar shape, there the resemblance ends. On the Mucking pot the cups are interspersed with beak-like protrusions, there is a footring base and the decoration consists of broad chevrons, not the overlapping hanging bows seen on the Cleatham urn. Myres speculated on the function of the Mucking pot, suggesting that it was possibly a loving cup or a lamp. The latter at least, is out of the question; the height of the cups above the base meant that the urn would have had to be almost filled before they could be used, generating a hydrostatic pressure which would cause the porous fabric to leak. The form of these vessels invites comparison with Romano-British triple vases, although on these the cups are linked, and not attached to a larger vessel (Kaye 1914). A fragment of a triple vase was found at Great Casterton in the debris from the AD 375 fire (Corder 1951, 38, fig 10, 48). Unfortunately the function of the Roman triple vases is as obscure as that of the Anglo-Saxon cupped urns. The filler in the fabric of the Cleatham pot is a sub-angular quartz, which tells us nothing. The finds from Cleatham Urn 919 are a folded sheet metal strap-end or vessel repair (Find 2322) and a decorated metal fragment (Find 2321), which may have been the rim of a vessel.

Notes

1. The dates provided by the associated objects must be seen as only a guide as they may, in many cases, be far earlier than the date of deposition. The basis for the dating of the objects found within the urns is included in Chapter 5, The Associated Finds.
2. In quoting the urn 'complexes' (the groups of related vessels on which the phasing is based) the numbers in bold (**1–50**) lettering are the significant relationships used to construct the matrix. The other complexes are supplementary and are in standard lettering.
3. In classifying the decorative methods Richards used different criteria from those used by this writer. In Table 33 'Incised' decoration includes urns which, at Cleatham, were described as 'incised' and 'grooved'. 'Plastic' decoration includes urns which, in the Cleatham database, were described as having 'modelled' and 'applied' decoration.
4. The comparative data on other cemeteries which follow are largely drawn from Julian Richards' invaluable work. No attempt, however, has been made to follow the lines of enquiry investigated by Dr Richards and these data are included in order to put Cleatham into context. Additional finds from the Sancton (Timby 1993) and Spong Hill (Hills and Penn 1981; Hills *et al* 1987, 1994) cemeteries have been included. No attempt has been made to look at continental parallels in any detail, as it was considered to be beyond the scope of this regional study.
5. The total of classified urns at Cleatham includes not just the decorated vessels but also the plain urns of Group 01.
6. Cleatham Urn 889 and Spong Hill Urns 1814 and 2112 must have been made by the same person (see page 128).
7. The term *Buckelurne* has not been used in this study, as it is felt that it lacks definition: when does a bossed urn become a *Buckelurne*?
8. This urn was included in Myres' *Corpus of Anglo-Saxon Pottery* (1977, fig 92, No 3740) where it (and No 3453 also from Newark) was described as 'sub-Roman'. Myres may well have been correct.
9. Arnold (1983, 17) drew attention to the difficulty of defining what we mean by the various terms used to

describe these linked pots (potter, influence, school, workshop etc.). The term 'potter' and 'tradition' are used here simply to describe linked vessels.

10. The existence of two styles within the Sancton/Elkington tradition was first recognised by Freda Berisford and I am indebted to her for bringing this to my attention. I am also grateful to both Freda Berisford and Chris Knowles for allowing me access to the Elsham material.
11. I am indebted to Dido Clarke and Sue Hirst for providing copies of the illustrations and text of the forthcoming publication of the Mucking pottery.

5

The associated finds

Of the urns found during the excavation of the Cleatham cemetery 960 retained at least part of their original contents, of which 609 (63.4%) were found to contain grave goods. It was also found that 71.0% (44/62) of the inhumations contained grave goods. A distinction must be made between grave goods deposited on or with the body prior to cremation and offerings placed in the urn by the mourners. These were not burnt and consist, in the main, of comb fragments and toilet implements. Offerings were also found in the fill of graves but material from disturbed cremations was also being incorporated. Four of the graves contained offerings and eight contained redeposited burnt objects.[1] Sherds from urns were found in 31 graves.

Some scepticism has been expressed over the assumption that objects found within urns can be directly related to them and used to date and interpret them; indeed, Myres used this uncertainty to justify his neglect of associated finds (1977, xix–xx). He dismissed them on three grounds:

- That in view of the incomplete and crushed nature of many urns we cannot be sure if an object was actually found in an urn or is intrusive.
- 'The unfortunate habit of museum curators of using urns as convenient containers for small metal objects'.
- The possibility that residual material from earlier cremations was collected and included with a later burial.

Experience in the excavation of cremation burials leads this writer to believe that the integrity of deposits is immediately obvious, particularly in the heavy soil at Cleatham, where plough marks could easily be seen. Myres' first point should therefore not concern us here. It must, however, be recognised that the association of finds with urns may no longer be certain in some of the earlier collections and caution should be exercised. With more justification Myres argued that we cannot be sure that the burnt objects found within an urn were burnt at the same time; they could have been residual material on the site of the pyre. The relationship, however, between urns and finds must always be of this nature. Associated finds can provide only a *terminus post quem*, the finds predate the cremations, but by an unknown period. Richards (1987, 78) did not believe this to be a major problem as residual finds would be included randomly and only on a small scale.

Dress fittings

The brooches

Brooch type	Total finds	Urn finds	Grave finds	Unstratified	Burnt
Annular	26	6	17	3	4
Cruciform	59	17	17 (including 2 residual)	25	36
Disc	1			1	1
Penannular	2	1		1	
Square-headed	6	3		3	4
Small-long	16	4	9	3	6
Unclassified	1				1

Table 36 Breakdown of brooch types and contexts

The Cleatham excavation produced 111 Anglo-Saxon brooches, representing six brooch types as detailed above. In addition to these there four brooch fragments which have been excluded from the totals: iron brooch pins Grave 18 and US 052, and a knob US 002. While these clearly formed parts of cruciform brooches it is possible they came from brooches that are already included in the count. The iron brooch pin from Urn 428 may have come from an annular or penannular brooch. Brooches were significantly more common in the graves, being found in 33.8% (21/62) of those excavated compared with 3.3% (32/960) of the urns. In addition to these, 82 (8.5%) of the urns contained copper alloy melt, some of which is likely to have come from burnt brooches and, of the 36 unstratified brooch fragments, 20 had been burnt and came from ploughed-out urns (Pl 29). Metal detecting produced a further seven pieces of copper alloy melt from the plough soil, which appears low but is in keeping with the figures from other cremation cemeteries.

Cruciform brooches

Urn No	Find No	Åberg Group	Urn Group	Urn Phase	Notes
55	217	?	01	2	Part of bow and foot only. Green enamel inlay. Fig 68
116	396	V	00a	5	Foot only, Style I decoration. Fig 68
140	432	I	?	?	Round knobs, broad head-plate suggests that this is developed Group I. Fig 68
146	445	?	10b	?	Burnt fragments only, possibly part of a cruciform brooch
255	682	II	02s	2–4	Tip of foot only, half-round nostrils.
330	870	V?	15s	4–5	Fragment of bow with panelled decoration below. Fits best in Group V. Fig 68
356	905 and 906	II	05a	1–2	Fragments of bow and foot, half-round nostrils. Stamp decoration
370	941	V	12s	4	Burnt bow from a developed cruciform brooch. Fig 68
459	1146	II	02b	1	Foot only, half-round nostrils, developed eyes. Fig 68
488	1309	I	02b	1	Foot fragment with moulded decoration. Small size suggests an early brooch
636	1777	II–IV	08a	3	Head-plate fragment only, half-round knob. Fig 68
799	2130	?	08m	1	Unclassifiable
859	2197	III	06n	2	Fragment of bow with plain lappets. Fig 69
907	2288	III–IV	01	?	Foot, scrolled nostrils, stamp decoration. Fig 69
922	2326	II–IV	03a	2	Fragments of bow and foot. Fig 69
967	2410	?	01b	?	Mass of burnt Æ and Fe, not classifiable
1058	2497	?	15s	4	Iron pin only

Table 37 Finds of burnt cruciform brooches from urns

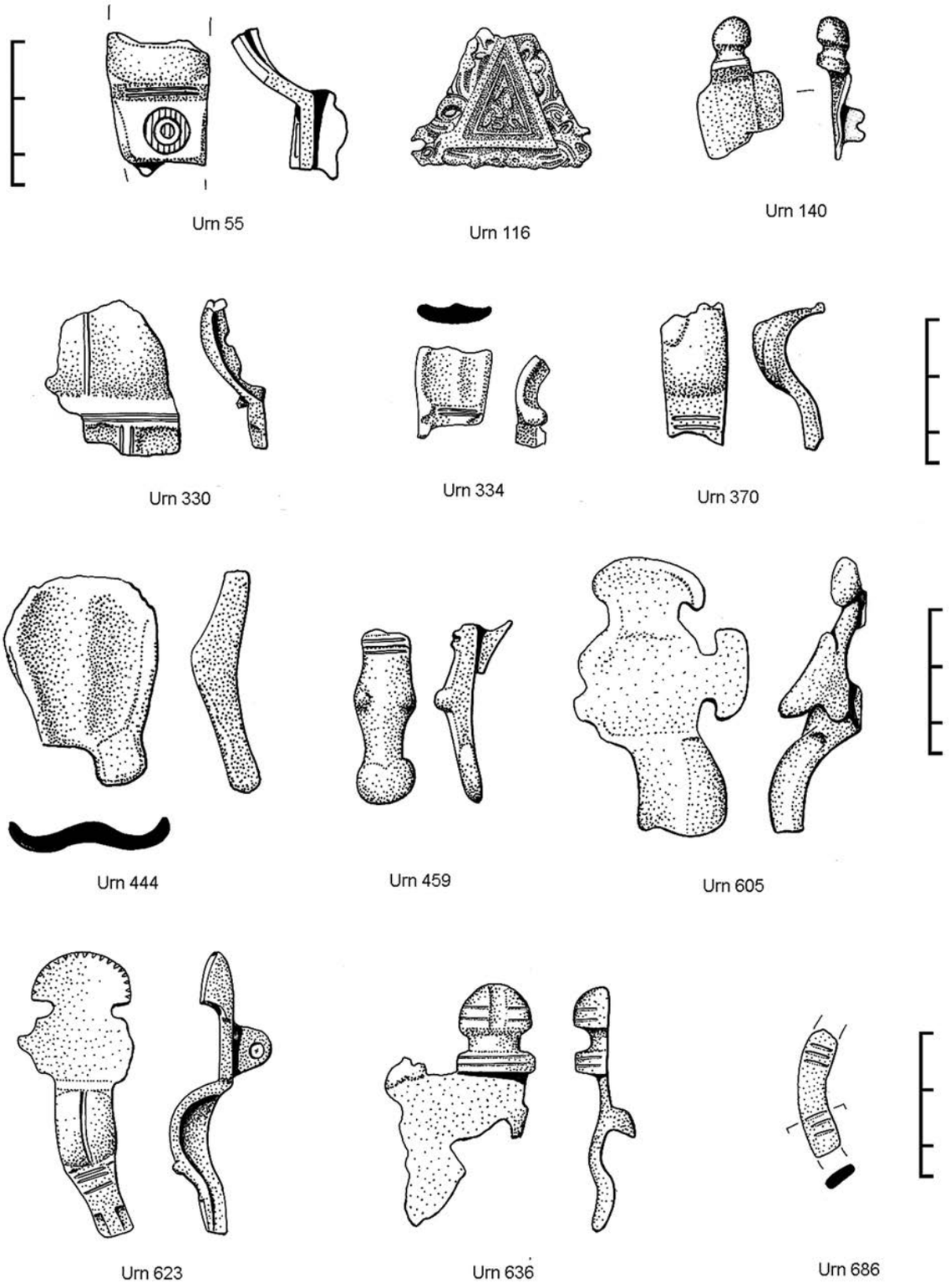


Fig 68 Brooches from the Cleatham urns. Urn 055, Phase 2; Urn 116, Phase 5; Urn 140, Phase? Urn 330, Phase 3–5; Urn 334, Phase?; Urn 370, Phase 4; Urn 444, Phase 1–2; Urn 459, Phase 1; Urn 605, Phase? Urn 623, Phase?; Urn 636, Phase 3; Urn 686, Phase? For detail of the cruciform brooches see Table 37 except for the details of the small-long brooches from Urns 605 and 623 on Table 41, and the annular brooch fragment from Urn 686 which is on Table 43. The fragment from Urn 055 bears traces of enamel inlay. All drawings at 100%

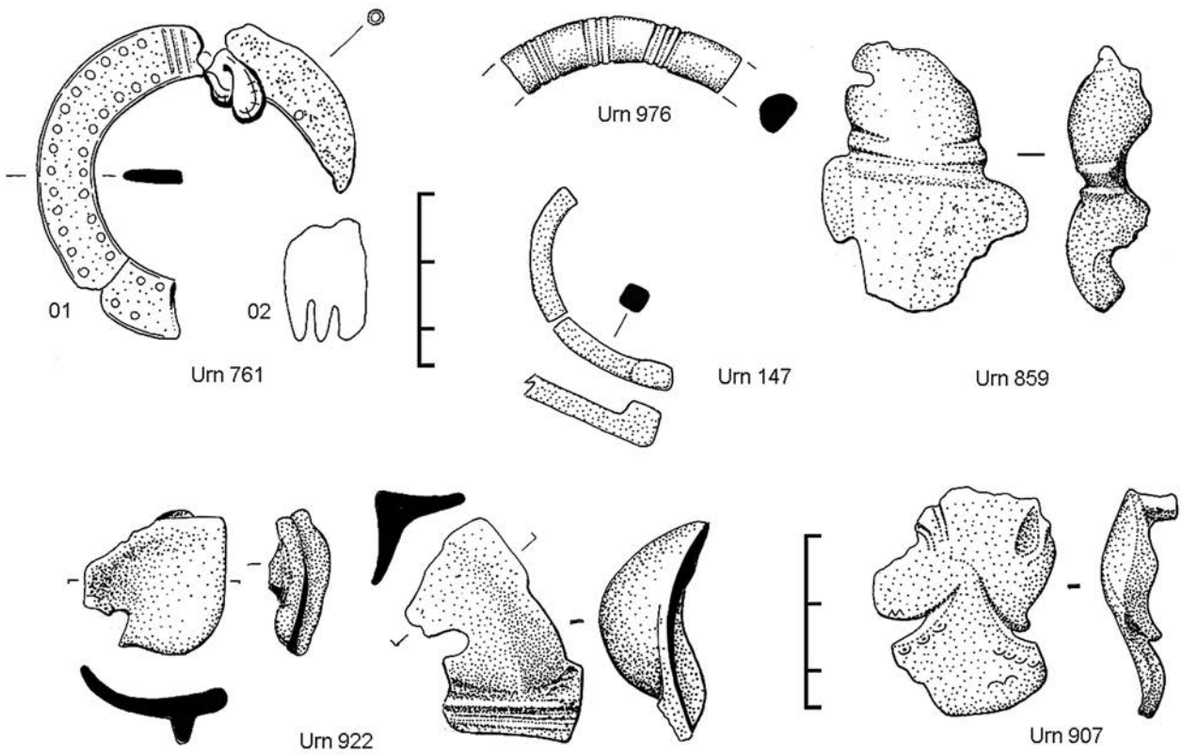


Fig 69 Brooches from the urns. Urn 761, Phase 2; Urn 976, Phase 1–3; Urn 859, Phase 2; Urn 922, Phase 2; Urn 907, Phase?; Urn 147, Phase? The brooches from Urns 761 and 976 are annular (Table 43). Urn 761 also contained a piece of a bone comb. The fragment from Urn 147 may have been part of a penannular brooch (see page 146). The remaining fragments come from cruciform brooches (Table 37). All drawings at 100%

With 59 examples, cruciform brooches are the most common brooch type found on the Cleatham site. Cruciform brooches have been extensively studied and much used as chronological indicators.[2] There are problems: Hines (1993, 3) pointed out that Reichstein's relative chronology of English cruciform brooches was based on a very small number of grave groups. Quoting Catherine Mortimer, he drew attention to the frequency with which relatively early (in our terms) brooch forms, Reichstein's *späte* types, appeared in unexpectedly late contexts. He went on to sum up the situation saying that 'it is easier to cast doubt upon the chronological significance of cruciform brooches than to correct and make more precise our knowledge of their chronology'.

The feeling was that, as we had nothing else, we have to stay with the brooch chronology or face the void.

Grave No	Find No	Åberg Group	Sex	Age	Sherds from fill	Notes
9	2499	I	M?	OA	–	Full-round knobs, faceted foot. Fig 80
14	2553	IVa	M	YA	Group oo	Burnt foot of a brooch, scrolled nostrils, residual. Fig 82
30	2625	IVa	F	MA	–	Pimples on half-round knob, eagle-head lappets. Fig 88
30	2626	IVa	F	MA	–	Pimples on half-round knob, eagle-head lappets. Fig 88
30	2627	IVa	F	MA	–	Pimples on half-round knob, eagle-head lappets. Fig 88
30	2628	I	F	MA	–	Full-round conical knobs, developed form of Group I. Fig 89

Table 38 continued

Grave No	Find No	Åberg Group	Sex	Age	Sherds from fill	Notes
30	2629	I	F	MA	–	Full-round conical knobs, developed form of Group I. Fig 89
34	2759	IVa	?	MA	Urn 1163, Group 08a, Phase 3	Pimples on half-round knob, eagle-head lappets. Fig 92
34	2760	IVa	?	MA	Urn 1163, Group 08a, Phase 3	Pimples on half-round knob, eagle-head lappets. Fig 92
34	2761	III	?	MA	Urn 1163, Group 08a, Phase 3	Half-round knobs, laterals missing, spangle on foot. Fig 92
36	2923	I	F?	MA	–	Full-round, faceted knobs, developed form of Group I. Fig 94
41	2980	I	?	A	00	Full-round conical knobs, developed form of Group I. Fig 96
41	2981	I	?	A	00	Full-round conical knobs, developed form of Group I. Fig 96
41	2982	II	?	A	00	Half-round knobs, half-round nostrils, spangle on foot. Fig 96
46	3003	IVa	F	Adol.	Urn 1227, Group 03a, Phase 2	Large flat brooch, half-round knobs, plain lappets. Fig 98
54	3061	V	F	YA	–	Eagle-head lappet, burnt, residual. Fig 101
62	3080	II	?	A	–	Half-round knobs, laterals missing. Fig 102

Table 38 Finds of cruciform brooches from graves

Find No	Brooch Group	Burnt	Notes
002	II–IV	B	Knob only
003	III–IV	B	Bow fragment
005	III		Foot, scrolled nostrils. Fig 70
008	II–IVa		Foot fragment, tip missing.
009	IVa	B	Foot with lappets
012	Leeds 'C2'	B	Head-plate fragment, Style I decoration. Fig 70
013	V		Lappet in the form of an eagle's head
028		B	Bow fragment, plain
040	II–III		Bow and foot fragment
044	IV–V		Head-plate fragment, Style I decoration
047	IVa		Foot-plate with lappets
069	IVa		Head-plate, half-round knobs with pimple. Fig 70
091	V		Bow fragment with central boss and ladder decoration
098	IVa		Knob only with pimple projection
100	?		Fragment only
106	II–III	B	Foot-plate with poorly developed animal's head.
107	IVa	B	Lappet?
108	?	B	Foot-plate, badly burnt
112	II–III	B	Head-plate with half-round knobs. Fig 71
113	IVa		Foot-plate with lappets and an incised ring. Fig 71
114	II		Foot-plate with half-round nostrils. Fig 71
115	II–III		Head-plate with half-round knobs. Fig 71
125	III–IV		Foot-plate with scrolled nostrils and stamping. Fig 70
131	V		Foot-plate with Style I decoration. Fig 70
132	Vj		Body of 'florid style' brooch, knobs missing. Fig 71
150	II–IV	B	Part of foot and bow

Table 39 Unstratified cruciform brooches

Åberg Group I cruciform brooches

The earliest brooches from Cleatham belong to Åberg's Group I, of which there are eight examples, two from urns, and six from graves. These brooches are characterised by their round-sectioned knobs. Of the Group I brooches only two can be seen as early in the sequence: the brooch in Grave 9 (Find 2499), with its faceted foot, has some features of Reichstein's *Typ Pritzier*, represented in England by the find from Nassington, Northants (Reichstein 1975, 41, Taf 79.5). Reichstein placed his *Typ Pritzier* into *Stufe C3/D1,* the dating of which presented problems, but they were probably being made in the first half of the 5th century. Other features which suggest an early date for this brooch are its diminutive size and the form of its catch-plate, which resembles those seen on late Roman crossbow brooches. This brooch was found with the remains of an elderly adult who could have acquired it as a young woman. The other potentially early brooch is a fragment found in Urn 488 (Find 1309), which, stratigraphically, can be placed in Phase 1. While little survives, the small size of this brooch and the form of the catch-plate again suggest an early date.

The other Group I brooches are more developed, being larger, the round knobs accompanied by a broader head-plate and rounded nostrils on the foot, which Åberg took as a feature of his Group II. The examples in Grave 30 (a pair) and Grave 41 (a pair) may be compared to Reichstein's *Typ Krefeld-Gellep* (1975, 42, Taf 89), which he included in his *Stufe D3*, dating to the last quarter of the 5th century. The Group I brooches found in Grave 30 were heavily worn suggesting that they predated the associated Group IVa brooches by some considerable time. Other examples of these brooches are known from Lincolnshire; the brooch from Castledyke Grave 135 (Mortimer, in Drinkall and Foreman 1998, 252–3, fig 96) has full-round knobs but other features, its size, decorated head-plate and the form of its foot, mark it as a late example. It, too, was worn and likely to have been old when buried. Castledyke Grave 135 also contained an amber bead suggesting that it was deposited in the 6th century.

Åberg Group II cruciform brooches

Brooches of Åberg's Group II are characterised by the use of half-round knobs and developments to the footplate (Åberg 1926, 36–9). Six examples were found at Cleatham, three from urns (Table 37), two from graves (Table 38) and one unstratified (Table 39). In addition to these, there were seven fragments which could not be placed in a group, although it was clear that they belonged to neither Group I nor Group V. All three of the Group II brooches found in Cleatham urns had been burnt and were represented by their foot, with its diagnostic semi-circular nostrils. Urn 356 also included a fragment of the bow which bears stamped decoration. Stamping was also employed on the Group II brooch found in Grave 41. This brooch has integrally cast lateral knobs which appear small and out of proportion. It was fitted with a swivelling spangle attached to its footplate. Grave 41 also contained a pair of developed brooches of Group I. The Group II brooch in Grave 62 is less developed than the example in Grave 41, lacking the stamped decoration and with a simplified foot. Its lateral knobs were attached to the ends of the spring axis but had been lost prior to deposition. Of the unstratified brooches that may have been of Group II, only one can be assigned to the group with certainty (114); four have been placed in 'Group II–III' and three in 'Group II–IV'. Four of these unstratified brooches were burnt, the others having come from ploughed-out graves. These brooches would be best placed amongst Reichstein's *Späte* group which saw appearing around *c* 475, Hines (1984, 28) suggesting a range of *c* 475–525. At Cleatham Group II brooches were found in urns of Phases 1, 1–2, 2–4, and possibly 2, which supports an early dating.

Åberg Group III and IV cruciform brooches

The classification of Group III and IV brooches suggested by Åberg was revised by Leeds (1945, 69–70) who pointed out the illogicality of classifying brooches on one aspect alone: the presence or absence of lappets beneath the bow. Leeds argued that some brooches, clearly belonging to Group III, were placed in Group IV solely because of the presence of lappets, while other brooches which lacked lappets, but belonged to group IV in all other respects, were placed in Group III. He proposed a new subdivision, incorporating the more elaborate examples of Group III and the simpler examples of Group IV, to be called Group IVa. The remaining Group IV brooches, characterised by their more elaborated knobs, were to be placed in Group IVb. All of the Cleatham Group IV brooches can be placed in Group IVa. Catherine Mortimer argued that brooches of Groups III and IV

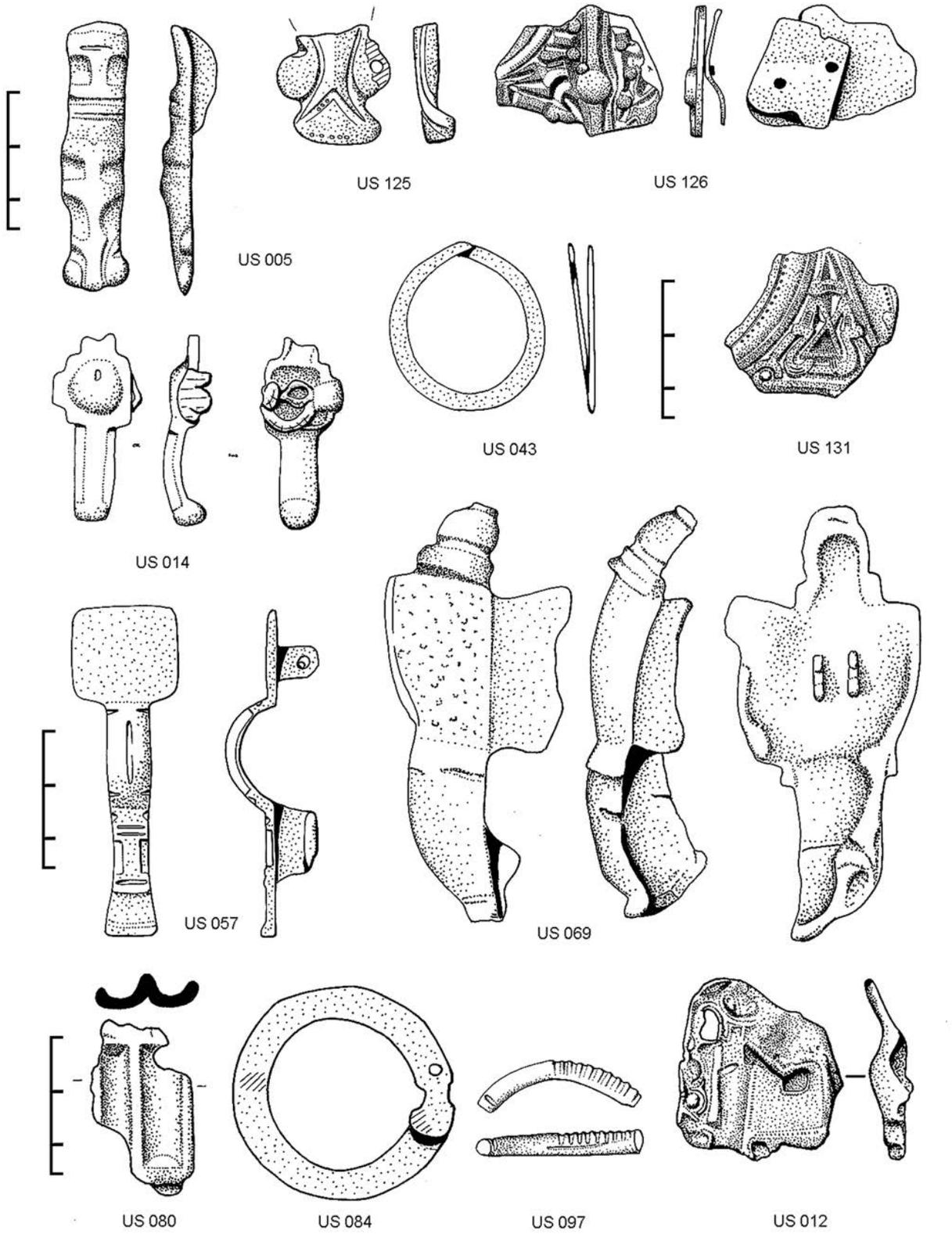


Fig 70 Unstratified brooches I. US 005, US 125, US 014, US 131, US 069 and US 080 are all parts of cruciform brooches (see Table 39). US 057 is a small-long brooch (Table 41), US 012 is a burnt square-headed brooch and US 126 is a fragment of a square-headed brooch (Table 40). US 043 and US 084 are annular brooches (Table 42), and US 097 is part of a penannular brooch
(see page 146)

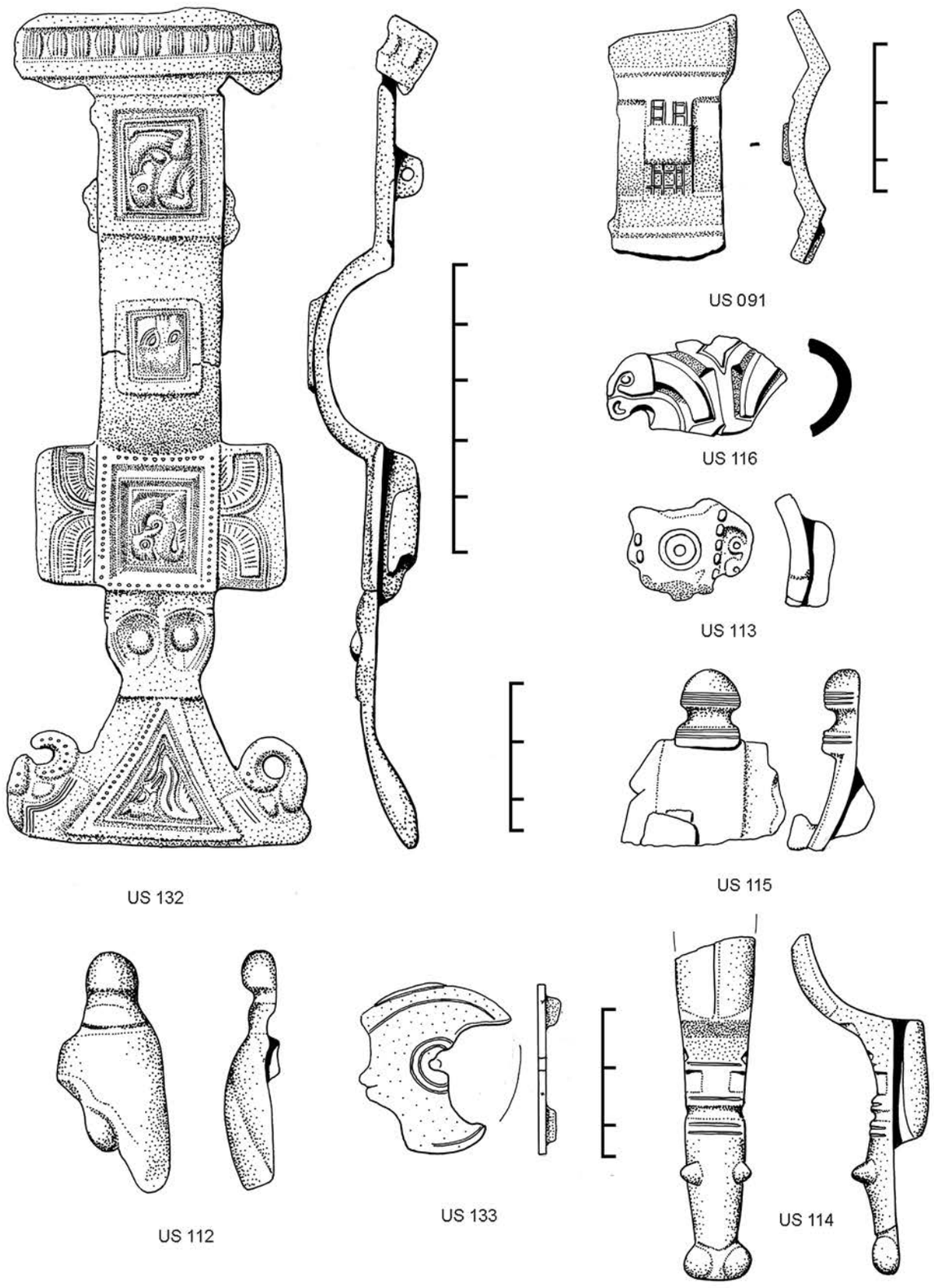


Fig 71 Unstratified brooches II. US 132, US 017, US 113, US 115, US 112 and US 114 are all fragments of cruciform brooches (Table 39). US 116 is part of a square-headed brooch (Table 40) and US 133 a disc brooch (page 147)

(her types C and D) cannot be separated, since there are many typological links between them and they are frequently associated in graves (Mortimer 1998, 253). She suggested that the two groups overlapped in time and that it is unnecessary to keep them apart. This writer has followed Leeds' suggestion regarding Group III and Group IV, believing that aggregation might preclude further study.

Three examples of Group III brooches were found on the Cleatham cemetery, one of which came from Urn 859 (Group 06n, Phase 2) (see Table 37). Three other urns contained brooches that may belong to Group III: a Group II–IV brooch found in Urn 636 (Group 08a, Phase 3), a Group II–IV brooch found in Urn 922 (Urn Group 03a, Phase 2) and a Group III–IV brooch found in Urn 907 (Group 01), which could not be phased. One Group III brooch was found in Grave 34. The foot of this brooch has the scroll-shaped nostrils which are one of marks of the group. Below the foot is a swivelling spangle, a feature shared with the Group II brooch in Grave 41. While only one of the unstratified brooches could be placed definitely in Group III (Find 005), there were ten unstratified cruciform brooch fragments which could not be assigned to a single group, although it was clear that they belonged to neither Group I nor Group V. Of these brooches four could be assigned to Group II–III (two burnt), three to Group II–IV (two burnt), two to Group III–IV (one burnt) and one to Group IV–V (not burnt). The difficulty of classifying these brooches confirms the artificiality of Groups II, III and, to a point, Group IV. Group III brooches may also be placed amongst Reichstein's *Späte* brooches of *c* 475–525.

Fourteen Group IVa brooches were found at Cleatham. Unfortunately none of the fragments found in the urns could be attributed with certainty to Group IVa but a possible example was found in an urn belonging to Phase 2 (Urn 922). Group IVa brooches were found in four graves (Table 38). Grave 30 contained a pair of Group IVa brooches, together with a singleton Group IVa. Grave 34 also contained a pair of Group IVa brooches. Sherds associated with these graves provided a ceramic *terminus post quem* for two of them. Grave 34 contained sherds from a Group 08a urn of Phase 3 (Urn 1163) and Grave 46 contained sherds from a Group 03a urn of Phase 2 (Urn 1227). The large brooch in Grave 46 could be classified as a Group III, but its size and wide flat panels seem better placed in Group IVa. Fragments of seven Group IVa brooches were found in the topsoil, of which two were burnt. Grave 14 contained, as a residual find, the burnt foot of a brooch which is best interpreted as a Group IVa. The dating of the brooches of Åberg's Group IV has been placed at *c* 520–550 on the basis of an association with Frankish radiate-headed brooches at Little Wilbraham, Cambridgeshire (Hines 1984, 26). However, the relative ages of these brooches at the time of burial is unknown.

Åberg Group V 'florid' cruciform brooches

The remains of two developed 'florid' brooches of Åberg's Group V were found in urns. These were in Urn 116 (Group 00a, Phase 5) and Urn 330 (Group 15s, Phase 4–5). Unfortunately, this latter fragment can only be classified as part of a Group V brooch on a balance of possibilities. These finds support the late dating of these highly decorated brooches. Other than a burnt fragment found in Grave 54, no Group V brooches were found in graves but the five unburnt fragments found in the topsoil must have come from ploughed out inhumations (Finds 013, 044, 091, 131 and 132). Find 132 can be linked to florid cruciform brooches of Leeds and Pocock's Type Vj (Leeds and Pocock 1971). These are found in the Midlands, parallels existing at Wychnor, Staffordshire, Brixworth and Duston, Northamptonshire, and Baginton, Warwickshire (Leahy 1977–8, 5–10, pls I and II). These brooches were complex fabrications with the lateral and terminal knobs cast separately and threaded onto rod-like extensions on the body of the brooch. Hines (1984, 30) suggested that the elaborately decorated brooches of Group V came into use around 520 and ended *c* 560–570. This results in a gap in the sequence before the 'Final Phase' or 'Conversion period' graves appear in the 7th century. It is possible that the classic 'pagan Anglo-Saxon' suite of finds may have remained current to the end of the 6th century (Geake 1997, 11) or that the suite of objects and rites that characterise the Final Phase may have started prior to the Conversion (Hines 1999, 65–79).

The brooch fragment found in Urn 55 (Find 217) was decorated with enamel inlay. This brooch cannot be classified and came from an undecorated urn which could be placed in Phase 2 on stratigraphic grounds. This indicates that enamel decoration was in use in the early stages of the sequence. In 1923 Fox drew attention to enamel-decorated cruciform brooches from Cambridgeshire (Fox 1923, 260) and in recent years new examples have been found, the simple

'bulls-eye' motif seen on Find 217 being a typical example. The writer has recorded brooches decorated with red enamel from Howell, Lincolnshire (Åberg Group IV), Welton le Marsh, Lincolnshire (Åberg Group V), and near Beverley, East Yorkshire (Åberg Group V). Enamel was used on a pair of Style 1 decorated sleeve-clasps from Grave 353 at Morning Thorpe (Green *et al* 1987, 136, fig 414). Enamelling does not appear to have been used by the Anglo-Saxons in their continental homelands and the technique is likely to have come from the indigenous population amongst whom it was common (Scull 1985, 120). This early use of what was thought to be a 'Celtic' technique is interesting.

It can be seen from Table 38 that the best suites of brooches were found with the remains of mature adult females, followed by adult females and finally adolescent females. The association of cruciform brooches with adults has been noted elsewhere (Drinkall and Foreman 1998, 258), but, as with Grave 46 at Cleatham, there are exceptions. A cruciform brooch was found with the remains of a child in Sewerby Grave 28 (Hirst 1985, 58). The suite of five cruciform brooches in Cleatham Grave 30 is remarkable. Graves containing three brooches exist elsewhere such as Sewerby Grave 12 (Hirst 1985, 58) and Morning Thorpe Graves 30, 90 and 353 (Green *et al* 1987). Burials containing a single cruciform brooch and a pair of small-long brooches are still more common, reflecting the way in which an Anglian woman dressed, with two small brooches on the shoulders and a larger one in the centre of the chest (Owen-Crocker 1986, 40, fig 30). The use of five cruciform brooches exceeds any practical need and must be seen as a demonstration of status or esteem on the part of the funerary party.

It is notable that all of the unburnt developed brooches, both the florid cruciform of Åberg Group V and the great square-headed, come from the topsoil. While it is tempting to put this down to pure bad luck on the part of the excavator, it is possible that these fine brooches were used in a burial rite which made them susceptible to plough damage, perhaps under low mounds which reduced the depth they were cut into the subsoil. One example of a Leeds' Group C2 brooch was found, the unstratified burnt fragment Find 012 (Fig 70). This resembles a square-headed brooch and, although Leeds included them as his group 'C2' in his 1949 study of the type, he recognised that they had closer affinities with cruciform brooches (Leeds 1949, 79–82, map 3) and they were not included in Hines' 1997 study.

Great square-headed brooches

Find No	Context	Classification	Notes
80	Unstratified	?	Fragment from the bow only
116	Unstratified	Type XXII, Hines phase 3	Burnt fragment only. Style I decoration. Fig 71
126	Unstratified	Sub-type V Hines early phase 2	Fragment only, repaired in antiquity. Style I decoration, gilt. Fig 70
382	Urn 112, Group 00a, Phase 3–5	?	Fragment of a heavily burnt head-plate
873	Urn 334, Group 01	?	Bow fragment only, burnt. Fig 68
1072	Urn 444, Group 07n, Phase 1–2		Bow fragment only, burnt

Table 40 Great square-headed brooches

Six of these brooches were found at Cleatham, of which three came from cremation deposits and three were unstratified topsoil finds. Of the square-headed brooches from the urns only the fragment from Urn 444 was useful, coming from a Group 07n vessel of Phase 1–2. A fragment of a square-headed brooch was found in Urn 334 but the urn was undecorated and could not be phased. Urn 112 was too badly preserved to be classified and its stratigraphic context showed only that it post-dated Phase 2. No square-headed brooches were found in the graves but two unburnt fragments from the topsoil must have come from burials.

Great square-headed brooches have been classified by Leeds (1949) and more recently by Hines (1997). Only two of the Cleatham brooches can be classified but neither was found in a useful context. Hines had some difficulty in classifying Cleatham Find 126 and placed it in an informal niche of its own as 'sub-Group V' (Hines 1997, 195, pl 99b). The other identifiable

fragment also presents problems (it was not seen by Hines). It carries an eagle's head ornament and is probably part of the lower foot-plate border from a Group XXII square-headed brooch. Hines divided the great square-headed brooches into three Phases (1997, 198–204), with Group V being in the earlier part of his Phase 2 and Group XXII being in Phase 3. In absolute terms Hines suggested that Phase 2 started around 510 but with Group 5 being dated to after 525 (Hines 1997, 229). Phase 3 was seen as starting around the same time and ended around 570 (*ibid,* 231) but, again, a later dating is possible.

Small-long brooches

Find No	Leeds Class	Context	Age	Notes
14	?	Unstratified		Unusual brooch, classified as a small-long by default. Burnt. Fig 70
57	Square head	Unstratified		
109	?	Unstratified		Fragment only. Burnt
814	?	Urn 302, Group 10a, Phase 1		Badly burnt
1697	Cross potent	Urn 605, Group 00b, Phase?		Burnt. Fig 68
1728	Trefoil	Urn 623, Group 00, Phase?		Burnt. Fig 68
2185	?	Urn 850, Group 02s, Phases 2–4		Iron spring only. Burnt?
2498	Cross pattee var.	Grave 9	OA	Found with a Group 1 cruciform brooch. Fig 80
2757	Cross pattee var.	Grave 34	MA	Part of a rich grave with three cruciform brooches. Fig 91
2758	Cross pattee var.	Grave 34	MA	Ditto, pair to above. Fig 91
2896	Unclassified	Grave 35	child	Unusual T-shaped brooch, worn as a cruciform. Fig 93
2922	Unclassified	Grave 36	MA	Found with a Group 1 cruciform brooch. Fig 95
3004	Cross potent var.	Grave 46	Adol.	Post Phase 7, found with a cruciform brooch. Fig 98
3005	Cross potent var.	Grave 46	Adol.	Ditto, pair to above. Fig 98
3026	Trefoil	Grave 47		Single small-long. Fig 99
3027	Cross potent	Grave 48		Single small-long. Fig 99

Table 41 Small-long brooches from Cleatham, classification as per Leeds 1945, 4–44[3]

The Cleatham cemetery produced the remains of sixteen small-long brooches. Of these, four were found with cremations, nine in graves and three as topsoil finds. Two of the latter were burnt showing that they came from ploughed-out urns. Small-long brooches were classified by Leeds (1945, 4–44) and while ponderous and ill defined, his 'heraldic' classification has remained in use. Vierck (1972, 78–83) suggested a formal continuum between small-long brooches and cruciform brooches and, while some of the stylistic parallels he makes are perhaps a little too wide ranging, his basic idea is sound. A useful attempt was made to establish a new classification in the report on the Edix Hill, Cambridgeshire, cemetery (Hines 1998, 200–2). This classification 'harmonised' with that of Leeds but looked at small-long brooches in the context of continental material. For all its faults and ambiguities the Leeds scheme was been retained in this study.

Annular brooches

Context	Find No	Burnt	OD	Width	W/OD %	Notes
US	6		46	9	19.5	Flat, slightly dished, radial lines decoration, drilled for pin
Ditch	84		39	6	15.4	Flat, overlapping ring, plain, drilled and notched for pin. Fig 70
Ditch	86		32	4	12.5	Fragment, D-section, close ribbed

Table 42 Annular brooches, unstratified (OD is the outside diameter of the brooch)

Context	Find No	Burnt	OD	Width	W/OD%	Notes	Urn Group	Phase
Urn 193	549	B	20	2.4	12.0	Round-sectioned, plain AE pin, wrap around fixing	07b	1
Urn 470	1249		28	4	14.3	Iron, round-sectioned, wrap around pin	03a	2
Urn 623	1731	B	27	5	18.5	Burnt fragment, D-section	00	?
Urn 686	1857		40	5	12.5	Flat, notched for pin	00s	?
Urn 761	2024	B	46	9	19.6	Flat, ring stamped decoration, drilled for an Fe pin. Fig 69	Cremation only	
Urn 976	2418	B	60	6.5	10.8	D-sectioned, grouped mouldings. Fig 69	20n	1–3

Table 43 Annular brooches from urns (OD is the outside diameter of the brooch)

Context	Find No	Age	Sex	OD	Width	W/OD %	Notes
Grave 1	2487	OA	M	30	4	13.3	Oval section, stamp decoration, Fe pin, wrap around fitting. Fig 79
Grave 13	2541	Adol.	F	37	5	13.5	Fragment, flat, plain, Fe pin. Fig 82
Grave 13	2542			45	6	13.3	Flat, ring stamp decoration, Fe pin, wrap around fixing? Fig 82
Grave 15	2557	A	?	39	5	12.8	D-section, grouped mouldings, notched for Fe pin. Fig 82
Grave 15	2558			26	3	11.5	Round section, grouped mouldings, wrap around Ae pin. Fig 82
Grave 17	2565	YA	M	27	3	11.1	Round section, grouped mouldings, wrap around Ae pin. Fig 83
Grave 19	2572	MA	F	41	5	12.2	D-section, grouped mouldings, Fe pin, fitting? Fig 83
Grave 20	2576	Adol.	F	21	2.5	11.9	Round section, grouped mouldings, Ae pin with wrap around fitting. Fig 84
Grave 24	2583	YA	F	37	5	13.5	Oval section, grouped mouldings, Fe pin, fitting? Fig 85
Grave 24	2584			37	5	13.5	Oval section, grouped mouldings, Fe pin, fitting? Fig 85
Grave 42	2986	YA	?	50	10	20.0	Flat, plain, notched for an Fe pin. Fig 97
Grave 42	2987			50	10	20.0	Flat, plain, notched for an Fe pin. Fig 97
Grave 44	2997	MA	F	46	8	17.4	Iron, round-sectioned, wrap around pin. Fig 97
Grave 54	3059	YA	F	58	6.5	11.2	Flat overlapping ring secured by Fe pin, punch decoration. Fig 101
Grave 54	3060			51	6	11.8	Flat overlapping ring secured by Fe pin, punch decoration. Fig 101
Grave 55	3067	YA	F?	43	9	20.9	Fragment, flat, ring stamp decoration, notched for pin. Fig 101
Grave 62	3082	A	?	35	5	14.3	Iron, round-sectioned, wrap around pin. Fig 102

Table 44 Annular brooches from graves (OD is the outside diameter of the brooch)

The Cleatham excavation produced 26 annular brooches, of which six were found in urns, seventeen in graves and three were unstratified. In spite of being a common item of Anglo-Saxon dress, annular brooches have not yet received the level of systematic study that they deserve. Again, these were initially categorised by Leeds (1945, 46–9). Hines (1984, 260) drew attention to deficiencies in Leeds' classification as it failed to reflect the full range of annular brooches. Furthermore, Leeds' classification failed to differentiate between flat annular brooches with wide rings and those with narrow rings, both of which were included in his Type F. Hirst (1985, 55–7) was equally unhappy with Leeds' classification, describing it as 'a list of different types and not a system of classification'. She proposed a classification of her own, which, while an improvement on Leeds, still fails to cover the full range of types and variations in fixings. Many of the brooch types defined by Leeds and subsequent writers were not found at Cleatham. In particular, quoit brooches and their derivatives of Leeds Types A, B, C, D and E were absent, although they are found elsewhere in Lindsey (Drinkall and Foreman 1998, 254–6).

In view of the limitations of the existing classifications, and the relatively small number and restricted range of the annular brooches found at Cleatham, no attempt was made to classify them. The brooches can be separated into two main groups, those with flat-sectioned rings (eleven examples) and those with rings which have a moulded cross-section, being round, D-shaped or oval (fifteen examples). It was found that the moulded brooches tended to be smaller than the flat-sectioned examples, having an average diameter of 32.8mm as opposed to an average diameter of 45.9mm for the flat brooches. There is only one example of a moulded annular brooch with a diameter equal to that seen amongst the flat brooches: this is the fragment found in Urn 976 (Find 2418) which has an estimated diameter of around 60mm. The unusual size of this brooch may be related to its early date: it was found in a Group 20n urn of Phase 1–3. Early brooches tend to be larger, with the smaller examples at the end of the sequence.

The date range of annular brooches has been discussed by Hines (1984, 262–3) who knew of no example from Anglian England which predated *c* 475. He considered that the ratio of early cruciform brooches to annular brooches at Spong Hill (33:1) suggested that the former were in use during an early phase, when annular brooches had not been adopted (see Hills 1977, 24–5). While this may be true of Spong Hill, the find from Urn 976 (Group 20n, Phase 1–3) at least shows annular brooches were in use at Cleatham close to the site's inception. Annular brooches remained in use through the 6th into the 7th century, 'Final Phase' (Leeds 1936, 98–99, pl 27). These late brooches are characterised by their small size, seldom being more than 30mm in diameter, and the frequent use of copper alloy pins, in contrast to the iron pins found on the larger brooches. Some small, silver annular brooches are decorated with confronted animal or birds' heads in Style II.[4] Small annular brooches occurred in three of the Cleatham graves and one of the urns:

Grave 15. Small annular brooch (Find 2558) was found with a 7th-century cloisonné garnet buckle, and a second, larger (39mm), annular brooch (Find 2557). Fig 82

Grave 17. The brooch was found with a domestic pot, a knife and a bichrome bead. Fig 83

Grave 20. The small annular brooch in this grave was associated with a hanging bowl. Fig 84

Urn 193 (Group 07b, Phase 1). The burnt brooch (Find 549) had a copper alloy pin and was only 20mm in diameter. This brooch was plain and unlike the usual form of late brooch.

Some indications of the dating of the annular brooches are given by the associated finds. The iron annular brooch in Grave 62 was found in association with an undeveloped version of an Åberg Group II cruciform brooch. It would, however, be wrong to place too much emphasis on this, as these brooches were in use over a long period of time and the loss of the lateral knobs on the brooch in Grave 62 may point to it being old when buried. The association of a pair of flat annular brooches in Grave 54 is more useful. This grave contained, as a residual find, a burnt fragment of an Åberg Group V brooch (Find 3061), showing that it must have been deposited in the mid- to later 6th century. A pair of brooches similar to those in Grave 54 were found in Grave 13 where they were associated with a scutiform pendant of probable 6th-century date. In Grave 24, a pair of moulded annular brooches were found with three silver beads of a type which, at Sleaford (Grave 143), were found with an Åberg's Group V of the middle 6th century (Thomas 1887, pls XXIII, fig 8; XXIV, fig 2).

Of the twelve graves which contained annular brooches, eight contained sherds from destroyed urns, of which four could be phased.

Grave	Urn	Group	Phase	Figure
13	1129	05b	2	82
19	1138 1139	05b 05b	2 2	83
20	1095 1097 1148	10s 02s 10s	3–4 2–4 3–4	84
55	1216 1217	07n 02s	1–2 2–4	101

Table 45 Graves containing annular brooches and phased sherds

Unfortunately, the presence of sherds from urns of Phase 1 or even Phase 2 in the fill of a grave is of little value in sequencing the annular brooches, providing only a self-evident *terminus post quem*. The presence of sherds from Phases 2–4 and Phases 1–4 urns in Graves 20 and 55 is more useful as they show that these annular brooches were potentially deposited in the second half of the Cleatham sequence but an earlier date is more likely.

Annular brooches are more commonly found with the remains of younger women than are cruciform brooches. Of the twelve graves which contained annular brooches, seven contained the remains of adolescents or young adults; two the remains of adults, two mature adult and one old adult (Table 44). The picture is, however, complicated by the inclusion of three, or possibly four, 7th-century graves, a period by which the cruciform brooches were no longer in use. Annular brooches were found in the graves of 6th-century 'Mature Adults' (Graves 19 and 44) and an 'Adult' (Grave 62), showing that their use was not restricted to younger women. The skeleton found with an annular brooch in Grave 1 was identified as being that of a man. This is not without precedent but, given the poor preservation of the bones, it is probable that the remains are those of a female.[5] The dating of Grave 1 is also questionable. It is based on a small annular brooch, the knife being undatable. This brooch is not typical of the 7th century and, at 30mm diameter, is a little larger that the other late brooches. Grave 1 lies outside the area which contains the other 7th-century graves.

Of the twelve graves at Cleatham which contained annular brooches, six contained pairs of brooches, although in the case of Grave 62, the second brooch was a small cruciform. Three of the graves containing a single annular brooch were of 7th-century date but two 6th-century graves (Graves 19 and 44) were also found to contain a single brooch. These were found in the middle of the chest and were not being used to secure the shoulders of a cylindrical *peplos*-type gown (Owen-Crocker 1986, 28–39). Two annular brooches were found in only one 7th-century grave (Grave 15). In this grave a large, and probably old, annular brooch was found under the elbow and was not being worn as a brooch. There seems to have been, in the 7th century, a move away from the wearing of double, to single annular brooches.

Dickinson (cited in Hirst 1985, 55–7) saw the ratio of the width of the ring to its diameter as being culturally significant, with wide rings, with ratios of between 25% and 33%, being typical of Saxon areas, and narrower rings appearing in Anglian area of England. With an average width/diameter ratio of 14.4% and a maximum of 20.9% the Cleatham annular brooches are within the Anglian tradition. The 'moulded' brooches with their round or D-shaped sections are also characteristic of the Anglian areas of England although they do, on occasion, occur as far south as Kent (Hirst 1985, 55).

Penannular brooches

Two fragments of penannular brooches were found on the Cleatham site. Find 97 (Fig 70) was unstratified and consisted of part of a copper alloy ring decorated with bands of ribbing which, characteristically, go only half way around the bar. Originally this brooch would have had pseudo-zoomorphic terminals and probably belongs in Fowler's Type F/1 (Fowler 1963, 103–4). The other possible penannular brooch fragment was found in unphased Urn 147 (Fig 69) and consisted of a piece of square-sectioned copper alloy bar with a raised terminal. It resembles a penannular brooch fragment found in Spong Hill Urn 1469 with an Åberg group I cruciform brooch of *c* 480 (Hills 1977, figs 29,107).

These brooches have been extensively studied but their dating remains uncertain, some authorities arguing for them being post-Roman (Youngs 1989, 31; 1995, 127–31), while others wish to place them into the Roman period (Kilbride-Jones 1980, 5–11). It is felt that associations with Anglo-Saxon sites and contexts render the arguments for a 5th- to 6th-century dating more persuasive. Penannular brooches were used in Lincolnshire prior to the Roman conquest and Romano-British examples are known. The use of these brooches may represent a post-Roman reflux of Celtic influence, possibly from outside the region.

We have only one securely dated Type F/1 penannular brooch from Lindsey from a 6th-century grave at Sheffield's Hill. Penannular brooches were also found in five graves at the Castledyke South cemetery: three were made of iron and two of copper alloy (Drinkall and Foreman 1998, 256–8). Unfortunately, the two copper alloy brooches lacked decorated terminals and two of the iron brooches had no distinguishing features. The remaining brooch, however, had terminals everted in the plane of the ring, as in the Iron Age brooches of Fowler's Type B. In the 1960s two Fowler F1 brooches were found at Mount Pleasant Farm which abuts the site of the Cleatham cemetery (North Lincolnshire Museum Records).

Disc brooch

A single example of a copper alloy disc brooch was found at Cleatham. This brooch (Find 133) (Fig 71) was unstratified but had been burnt, showing that it came from an urn.

Disc brooches are not common in Lincolnshire and the discovery of a burnt example at Cleatham invites comment. The distribution of the type lies to the south of a line from the Severn to the Wash, with a major concentration in the upper Thames valley where they may have been manufactured (MacGregor and Bolick 1993, 57). While there are occasional outliers to the north, the Cleatham brooch lies on the edge of this distribution. Five disc brooches were found at the Empingham, Rutland, cemetery from 131 recorded graves (Timby 1996, 37) but only one was found at Sleaford (Thomas 1887, 388) and one at Tallington (Albone and Leahy 2000, 162, fig 7). Additional disc brooches have been found by metal detector users at Cranwell and Farforth. These brooches are seen as being produced in the century centred on AD 500 (MacGregor and Bolick 1993, 57).

Brooch usage, inter-cemetery comparisons

Brooches found with the cremations

Brooches were found in 5.3% (32/609) of the Cleatham urns which contained finds compared with Elsham, where they occurred in 4.7% of the urns, and Newark, where brooches were found in 5.4% of the urns (Table 106).[6] At Sancton, to the north of the Humber, 7.8% of the urns contained brooches, a figure comparable to that found in the other cremation cemeteries included in Table 106. The incidence of brooch deposition was significantly lower with the cremations than with the inhumations. This might be a result of a failure to collect the burnt remains of the brooches, but glass was found in 33.0% of the graves and 27.9% of the urns, showing that this material was being carefully collected. Copper alloy melt may have been retained for reuse (unlikely as few people would have had the ability to utilise the scrap) or, like men's weapons, brooches may not have been placed on the pyre.

Brooches found with the inhumations

	Total graves	Number of graves with brooches
Castledyke	201	36 (17.9%)
Cleatham	62	21 (33.9%)
Empingham II	136	52 (38.2%)
Fonaby	49	20 (40.8%)
Norton	120	44 (36.7%)
Sewerby	58	18 (31.0%)
West Heslerton	186	64 (34.4%)

Table 46 Proportion of graves containing brooches at comparative inhumation cemeteries

It can be seen that Cleatham, where 33.9% of the graves were found to contain brooches, falls into the pattern shown by most of the comparable cemeteries. The exception is Castledyke where the number of graves with brooches is strikingly low (17.9%). This is likely to be a result of the high number of 7th-century burials at Castledyke where they represented 48.4% (62/128) of the dated graves (Drinkall and Foreman 1998, 328–30). Grave goods were less common in the 7th century when many of the main brooch types had gone out of use.

If we look in more detail at the types of brooches found at other Anglo-Saxon cemeteries, some interesting patterns emerge (Table 47). Cruciform brooches form a far higher proportion of the assemblage at Cleatham than at any of the other cemeteries, with a corresponding reduction in the use of annular brooches. This might reflect a higher level of prosperity at Cleatham, or the fact that cruciform brooches survived the pyre better than annular brooches. It was found that 60.0% (36/60) of the cruciform brooches showed signs of burning, compared with 15.4% (4/26) of the annular brooches.

	Cleatham		Castledyke		Fonaby		Welbeck		Sewerby		Norton		Empinghm		West Heslerton	
Annular	26	23.0	27	62.8	24	53.3	17	77.3	27	61.4	35	74.5	49	62.0	103	79.8
Cruciform	59	53.1	8	18.6	13	28.9	4	18.2	9	20.5	11	23.4	12	15.2	12	9.3
Disc	1	0.9	1	2.3									5	6.3	2	1.6
Penannular	2	1.8	5	11.6	2	4.4			3	6.8			1	1.2	2	1.6
Small-long	16	14.2	2	4.7	6	13.3			4	9.1	1	2.1	12	15.2	7	5.4
Square-headed	6	5.3					1	4.6	1	2.3					3	2.3
Total	111	%	43	%	45	%	22	%	44	%	47	%	79	%	129	%

Table 47 Percentage of brooch types at Cleatham and other cemeteries in the region. The total includes unstratified brooches but excludes some types such as the swastika which were strongly represented at Empingham (sixteen examples) but do not appear at Cleatham. The Cleatham total includes one unclassified brooch

Context	Find No	Phase/date	Notes
Unstrat	24	?	Copper alloy pin with lead head, post-medieval
Unstrat	124	?	Fragment of a burnt bone pin with a perforated head
Grave 9	2495	Late 5th	Iron pin found with purse deposit. Fig 80
Grave 19	2573	6th	Small iron pin or needle found under forearm. Fig 83
Grave 43	2990	5th–6th	Iron pin found on left shoulder. Fig 97
Grave 50	3048	7th	Silver disc-headed pin. Fig 100
Urn 22	168	?	Burnt bone pin, some copper alloy staining, head missing
Urn 140	433	?	Iron pin, probably from a cruciform brooch
Urn 275	750	2	Shaft fragment from a burnt bone pin
Urn 294	805	2	Fragment of an unburnt bone pin
Urn 375	952	3	Burnt bone pin, perforated head with fine circumferential lines. Fig 107
Urn 428	1056	2	Iron pin, probably from a brooch
Urn 436	1062	?	Iron pin fragment, probably from a brooch
Urn 468	1190	1–3	Fragments of a burnt bone pin
Urn 581	1645	?	Shaft fragment from a burnt bone pin
Urn 621	1725	?	Iron pin or awl, may have been part of the toilet set
Urn 623	1732	?	Copper alloy brooch pin, may be from the burnt annular brooch also found in the urn, but it does not appear to have been burnt
Urn 788	2099	5	Shaft fragment from a burnt bone pin
Urn 856	2193	3–4	Shaft fragment from a burnt bone pin
Urn 871	2218	2–4	Fragment of a burnt bone pin, appears to have a groove down its length. Fig 107
Urn 884	2243	?	Shaft fragment from a burnt bone pin
Urn 932	2364	1–4	Iron pin fragment

Table 48 Dress and brooch pins from Cleatham

Pins

Twenty-one objects were found at Cleatham which were described as 'pins'. Of these eleven were made of bone or antler, eight of iron, one of copper alloy and one of silver. A lead-headed pin, Find 24, was unstratified and is believed to be post-medieval. Fifteen of the pins came from the urns, four from the graves and two, including the post-medieval pin, were unstratified. The category 'pins' included some objects which had formed part of a brooch mechanism. Five of these were made of iron and one of copper alloy. As the type of brooch of which they formed part is unknown they have been excluded from the brooch lists but included here.

Six of the bone pins came from phased urns which spanned the whole Cleatham sequence. As most of these pins are only represented by a shaft fragment it is not possible to assign external dates to them. Cleatham produced two bone pins with perforated heads, an example from Urn 375 (Find 952) and the unstratified fragment, Find 124. The former pin has fine lines incised around its head. A pin with a perforated head was found in Castledyke (Grave 181) which bore, not incised lines, but three mouldings around its head (Drinkall and Foreman 1998, 270, fig 112). Foreman suggested that this could be a reused Roman pin but, although parallels exist, there is no need to look for a Roman origin for such a simple method of decoration.

The finest pin from Cleatham is the tiny silver pin from Grave 50 (Find 3048). This has a simple, flat disc head which can be paralleled in copper alloy at Castledyke (Grave 17A) and at Buckland, Dover (Grave 158), where they were dated to the later 7th century (Evison 1987, text fig 27, fig 62). A close parallel, although in copper alloy, was found in a rich 7th-century grave at Garton Slack (Mortimer 1905, pl LXXXV, fig 640). The late dating of these pins is supported by their association with iron chatelaines at both Cleatham and Castledyke.

The frequency with which pins were found in the Cleatham urns is 2.5% (15/609), similar to that seen at the other cremation cemeteries (Table 106) but lower than that found at the inhumation cemeteries (Table 49).

It was suspected that a high frequency of pin use was associated with a lower proportion of graves containing brooches. This is the case at Castledyke where only 17.9% of graves contained brooches but was not at Norton, where brooches were found in 36.7% of the graves, or West Heslerton, where brooches were found in 34.4% of graves (Table 46). Elsewhere the proportion of graves containing pins and brooches was generally similar. At West Heslerton it was observed that most pins were found with pairs of annular brooches (Haughton and Powlesland, 1999, **1**, 103), suggesting that they were being used in the place of the large third brooch.

Cemetery	Total graves	Graves with pins/
Cleatham	62	3 (4.8%)
Castledyke (Ross and Foreman 1998, 267–70)	201	25 (12.4%)[7]
Empingham (Timby 1996, 58–9)	136	7 (5.1%)
Fonaby (Cook 1981)	49	0 (0.0%)
Norton (Sherlock and Welch 1992, 41–2)	120	16 (13.3%)
Sewerby (Hirst 1985, 60)	58	2 (3.5%)
West Heslerton (Haughton and Powlesland 1999)	186	16 (8.6%)

Table 49 Proportion of graves containing pins in inhumation cemeteries

Many of the iron pins found in the urns look like brooch fittings; presumably the copper alloy elements had not been placed in the urn. Some may have been funerary offerings, as it is not possible to tell if an iron object had been burnt. What may have been a large iron pin was found as part of the purse deposit in Grave 9 (Find 2495). This consists of a round-sectioned iron rod with a length of *c* 130mm and a diameter of *c* 5mm. No pinhead could be defined, but its location in the grave and its proportions make this interpretation likely. An iron pin was found on the left shoulder of the body in Grave 43 (Find 2990) and a small iron object, which may represent a pin or a needle, was found under the elbow of the skeleton in Grave 19 (Find 2573). The position of these pins on the upper part of body suggests that they were used to secure clothing in place. Although the remains in Grave 43 were identified as male, the position of the iron pin would be in keeping with female dress. The 7th-century silver pin from Grave 50 (Find 3048) was found at the throat of the woman with whom it was buried. Many of the pins found at Buckland were also found at the neck (Evison 1987, 82), where it was thought that these small pins were used to hold a veil in place.

Buckles and belt mounts

Buckles

Grave No	Find	Shape	Width	Classification	Date	Sex	Notes
15	2556	Oval	18.0	Type II 23 bii	570–700	F	Garnet inlaid. Fig 82
32	2744	Oval	10.5	Type II 24 a	570–750	F	Found in grave fill. Fig 90
38	2961	Oval	14.0	Type II 24 a	570–750	F	Fig 94
50	3047	Oval	10.5	Type II 24 a	570–750	F	Fig 100
51	3053	Oval	12.0	Type II 24 a	570–750	M	Found in fill. Fig 100
57	3073	Oval	15.0	Type II 24 a	570–750	F	Fig 101
Unstrat.	76	Oval	6.5	Type II z	?		Fig 73

Table 50 Copper alloy buckles from Cleatham (classification as per Marzinzik 2003)

Grave No	Find	Shape	Width	Classification	Figure	Date	Sex
13	2544	Oval	12.0	Type IIz	82	?	F
18	2569	'D'	20.0	Type IIz	83	?	M
29	2610	Kidney	39.0	Type I 7 b	87	450–550?	M
31	2737	'D'	20.0	Type I 10 bi	90	450–700	M
34	2762	'D'	23.0	Type II z	91	?	F
40	2977	Oval	11.0	Type II 19 a	95	470–660	M
43	2989	Oval	22.0	Type I 10 bi	97	450–700	M
44	2996	Oval	22.0	Type I 10 bi	97	450–700	F
45	3001	Oval	35.0	Type I 10 ai	97	450–700	M
53	3054	Oval	17.0	Type II 24 a	100	570–750	M?
62	3081	Oval	24	Type I 10 bi	102	450–700	F
Unstrat.	89	Kidney?	26	Type I 7 b?		450–550	

Table 51 Iron buckles from Cleatham (classification as per Marzinzik 2003)

Urn No	Find	Shape	Width	Classification	Phase	Date	Notes
265	720	Rectangular	?	Type I 6	Phase 1	?	Burnt fragment. Fig 107
702	1889	Rectangular	?	Type I 6	Phase 2	?	'Roman' pot

Table 52 Bone buckles from Cleatham (classification as per Marzinzik 2003)

Twenty-one buckles were found at Cleatham, of which all but two came from the graves. Seven of the buckles were made from copper alloy, twelve from iron and two, the only examples from urns, were made from bone or antler.

Early Anglo-Saxon buckles have most recently been studied by Sonja Marzinzik who used them as the basis of an Oxford DPhil which she published in 2003. Dr Marzinzik examined the buckles from Cleatham but was unable to incorporate them into her thesis. The Cleatham buckles have been classified using Dr Marzinzik's system and it is satisfying to note that the dates she suggested for her types is in accord with those established for the graves on the basis of other finds. There was some variation in size, which may be significant since a reduction in the width of belts is a characteristic of the 7th century. All of the wider buckles were made from iron. Kidney-shaped buckles of Marzinzik's Type I 7 b as found in Grave 29 have been seen as early since they resemble some late Roman buckles (cf Simpson 1976, 192–209) and Marzinzik also viewed them as early. The Cleatham example was found in association with a Type B1 knife which might also be of early date but other corroboration is lacking. Kidney-shaped iron buckles with a non-ferrous metal inlay are known from south-east England, where they are seen as starting in the first half of the 5th century (Evison 1994b, 19).

However, an undecorated example in Grave 353 at Morning Thorpe (Green *et al* 1987, 136, figs 413–16) was found in association with a Group V cruciform brooch and it would be inadvisable to assume an early dating.

The most important buckle from the Cleatham cemetery is the cloisonné garnet-inlaid buckle from Grave 15 (Pl 34). This buckle is made from copper alloy but bears traces of gilding on its face and sides. The buckle plate is triangular with three circular recesses which, on better-preserved examples, contain dome-shaped studs (*cf* MacGregor and Bolick 1993, 193–7). The Cleatham buckle is made up from a thin sheet-metal back-plate in front of which is a cast copper alloy tray. Into this was placed a second tray, which was divided into cells, each containing a layer of white material which acted as a bed for the impressed gold foil beneath the shaped garnets. Originally the garnets covered the whole face of the buckle but only three survive. This extensive use of garnets is unusual, and absent even on more illustrious buckles such as Taplow, Buckinghamshire (Speake 1980, pl 7f), Crundale, Kent (Webster and Backhouse 1991, 24–5), and Alton, Hampshire (Evison 1988, 18–20, frontispiece). The small cloisonné buckle from Sutton Hoo (Inv. 12, Bruce-Mitford 1978, 449–55, fig 320–1) has three rivets and is covered with cloisonné garnets but there the resemblance ends. We are now seeing increasing amounts of cloisonné garnet work on base metal objects from Lincolnshire, but the Cleatham buckle is outstanding. Triangular buckles were introduced from Merovingian Europe in the 6th century and continued in use into the late 7th century (Geake 1997, 76). The Cleatham buckle was incomplete and old when it was placed in the grave and deposition must have occurred well into the 7th century. The human remains in Grave 15 could not be sexed but, while triangular buckles are usually found with men (Geake 1997, 77), the other finds from the grave (beads, annular brooches) are commonly associated with women.

The two buckles from the urns were made from an organic material, probably bone or antler; both had been burnt, now being represented by fragments. It would seem that both were originally rectangular in shape and should be placed in Marzinzik's Type I 6. One of the bone buckles was found in Urn 265 of Phase 1 and the other was in Urn 702, a Group 30 Romano-British type vessel of Phase 2. Square or trapezoid buckles are unusual in Lincolnshire, but can be paralleled in metal in Kent, where they occur with shield-on-tongue buckles.[8] There is also an example in sheet copper alloy in Grave 98B at the Empingham II, Rutland, cemetery where it had 6th-century associations (Timby 1996, 122–3, fig 149.17).[9] An oval buckle made from a boar's tusk was found in Grave 91 at the Castledyke, Barton on Humber, cemetery, which was dated to the 7th century (O'Connor, 1998, 272–3, fig 81). Bone buckles with square frames were recorded by Roes in her work on the Frisian *Terpen* but these can be only broadly dated to within the migration period (Roes 1963, 77–9, pl LIX, 4, 5, 6).

Three of the Cleatham buckles were not found on the body and must therefore have been graveside offerings.[10] Five of the seven copper alloy buckles were found with the remains of females. The exception was found in the fill of Grave 51 and may have been deposited by a female mourner. Seven of the twelve iron buckles were found with the remains of men, one of the exceptions being in the fill of Grave 62. The larger buckles tended to be made of iron but there was considerable overlap. It was found that the buckles in women's graves were set higher on the body reflecting the higher female waistline.

Belt plates

Five objects were found which could be loosely described as 'belt plates', three of which were unstratified (US 73, US 79, US 129; Fig 73) and one found in the fill of Grave 61 (Fig 102). Unstratified Find 79 was decorated with a 'lattice-like' pattern, which can be paralleled, in a general sense, by a belt plate from Grave 367 at Morning Thorpe (Green *et al* 1987, 142–3, fig 426) which was associated with a kidney-shaped buckle. Cleatham unstratified Find 129 is silvered, decorated in Style 1 and appears to have been truncated in antiquity. It can be paralleled by a belt plate from Grave 24 at the Fonaby cemetery, which was found with two spearheads and a shield boss (Cook 1981, 26–8, fig 8). Both the Fonaby and Morning Thorpe graves are of 6th-century date. Little can be said about the plain square plate found in the fill of Grave 61 (Find 3079), other than that it was an offering.

The small unstratified metal bar Find 71 is likely to have been a belt stiffener (cf MacGregor and Bolick 1993, 212, 36.10) although it is possible that it was part of a Hines Form 13a sleeve-clasp.

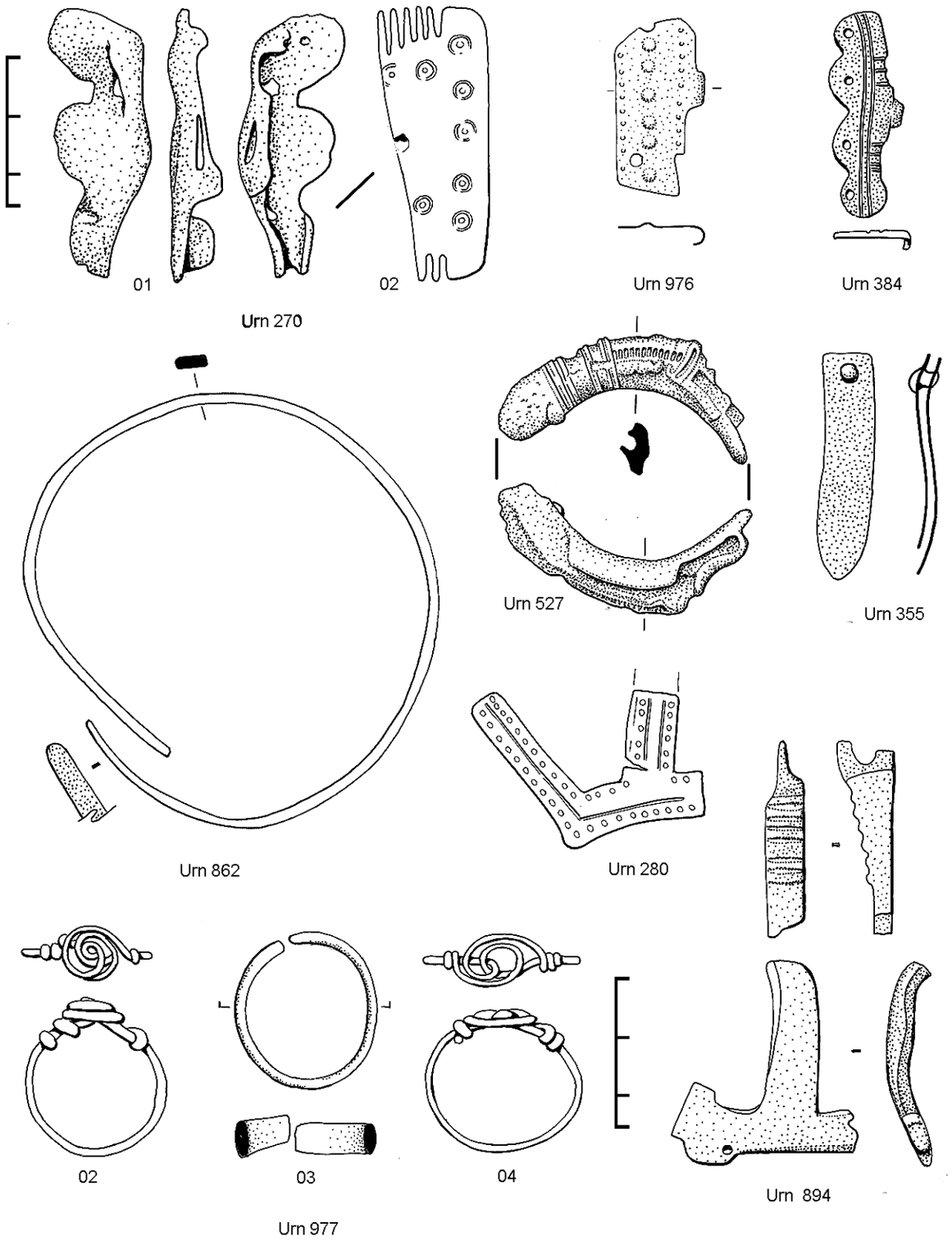


Fig 72 Miscellaneous metal objects. Urn 270, Phase 3–5; Urn 976, Phase 1–3 and Urn 384, Phase 2, are sleeve-clasps (Table 54). The find from Urn 862 (Phase ?) is a bracelet and that from Urn 355 (Phase 5) is a strap-end (Table 53). The finds from Urn 280 (Phase 3–5) and Urn 894 (Phase ?) are girdle hangers (Table 77). The objects from Urn 977 (Phase 5) are finger rings (pages 171–2) but the object from Urn 527 (Phase ?) has not been identified

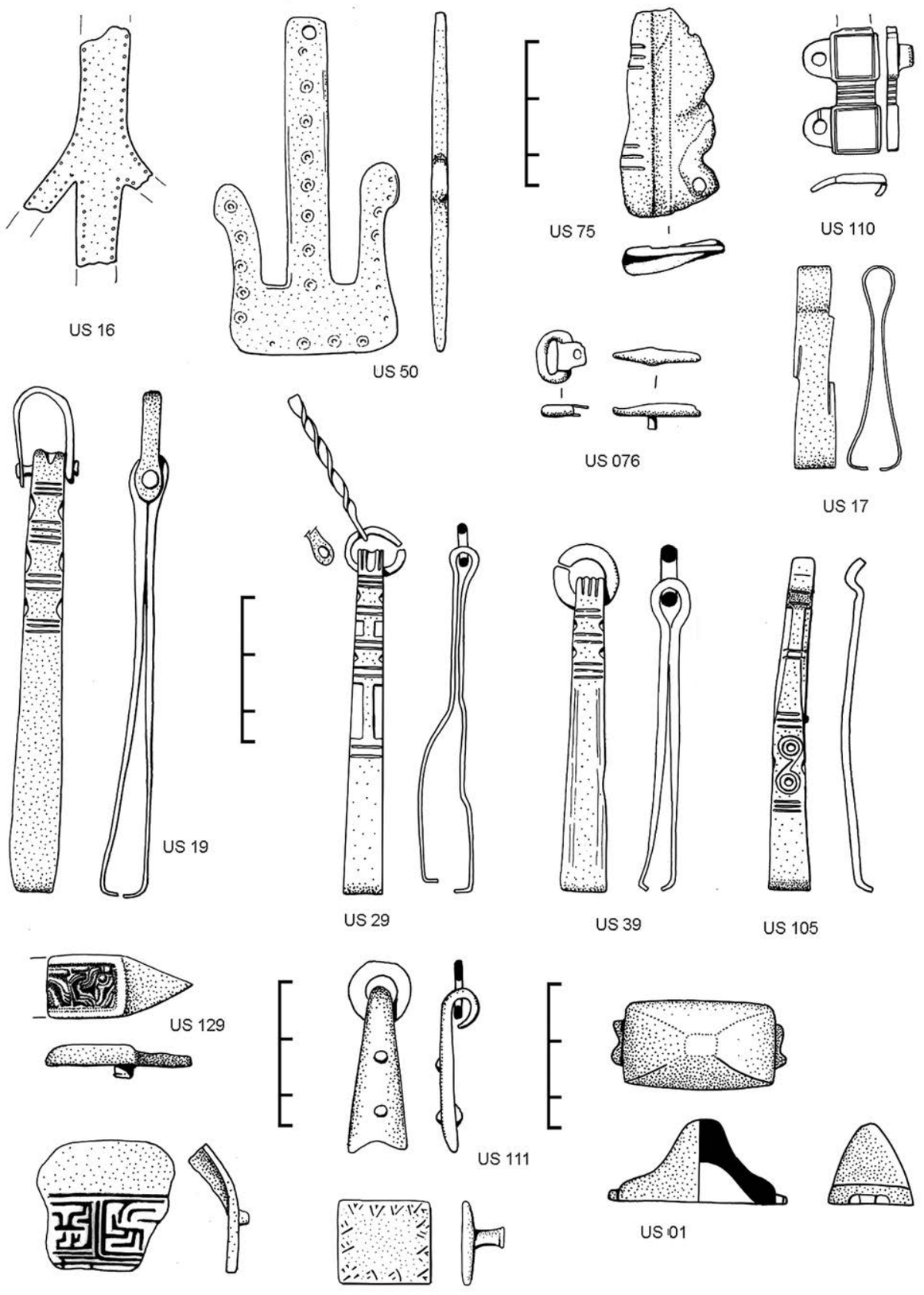


Fig 73 Miscellaneous unstratified metal objects. US 16 and US 50 are girdle hangers (Table 77). US 75 and US 110 are sleeve clasps (Table 54). US 012 is a burnt square-headed brooch. US 17, US 19, US 29, US 39 and US 105 are tweezers (Table 85). US 73, US 79 and US 129 are belt mounts (page 151). US 111 is a mount and US 01 is the pommel-cap from a sword (page 213)

Strap-ends

Nine copper alloy strap-ends, and one possible bone example, were found at Cleatham. Of these one unstratified example (Find 32) was rejected as recent. Of the others, three were found, unburnt, in the urns, four were found in graves and one fragment was unstratified. Urn 889 was found to contain the burnt remains of what may have been a bone strap-end.

Context	Sex	Find	Notes
Unstratified		92	Single leaf fragment, perforated for a rivet
Urn 355 Phase 5		900	Two leaves secured by a single iron rivet. Fig 72
Urn 355 Phase 5		901	Two leaves secured by a single iron rivet. Fig 72
Urn 639 Phase 1		1791	Two leaves secured by a single iron rivet. Fig 72
Urn 889 Phase 5		2256	Possible bone strap-end. Fig 67
Grave 4	M	2488	Two leaves, one decorated. Single rivet, missing. Fig 79
Grave 30	F	2614	Two leaves, one decorated. Single rivet, missing. Fig 87
Grave 38	F	2962	Strap-end loop fitting secured by two copper alloy rivets. Fig 94
Grave 46	F	3007	Two leaves, one decorated, single rivet. Fig 98

Table 53 Strap-ends from the Cleatham cemetery

The plain two-leaf strap-end found in Urn 639 shows that strap-ends were in use near to the beginning of the sequence and the find from Urn 355 may show they were in use into Phase 5. Decorated two-leaf strap-ends were found in graves with developed cruciform brooches, indicating use continuing into the 6th century. A curved bone object decorated with incised lines (Find 2256) was found in Urn 889 (Phase 5) and may have been a strap-end (Fig 67). The copper alloy strap-end/fitting in the 7th-century Grave 38 was associated with a ring (Find 2962) and resembles the looped fitting found with a slip-knot ring, in the 7th-century hanging bowl at St Paul in the Bail, Lincoln (Bruce-Mitford 1993, pl 6c).

The positions of strap-ends in graves provides some indication as to how they were used. The strap-end in Grave 4 lay against an arm in a position appropriate for an item of dress. In Grave 30 a strap-end lay above the right shoulder and in Grave 46 a strap-end lay 80mm beyond the right elbow. In neither case is this a practical position for a dress fitting and these strap-ends were not associated with buckles. The two leaves of these strap-ends were held together by a single rivet and, unless the end opposite the rivet was secured in some way, it is difficult to see how they would have functioned. MacGregor and Bolick (1993, 255, 50.29) identified these objects as 'bucket mounts', an interpretation which would overcome these functional problems. These objects are sometimes found in positions in the graves that would be appropriate for vessels (above the left shoulder). It is, however, likely that the decorated examples are, indeed, strap-ends. At Cleatham strap-ends were found with the remains of both men and women, but were more common with women.

Lace-tags/'thong terminals'

The rolled sheet copper alloy lace-tag from Cleatham (Fig 90) was found in the fill of Grave 32 (Find 2745) and is likely to have been a graveside offering. Four tags were found in graves at Castledyke (Drinkall and Foreman 1998, 271) but differ from the Cleatham example and would be better classed as strap-ends. Better parallels exist at Buckland, Dover, where cone-shaped 'thong fittings' were found in the graves of both men and women and were not present before Phase 4, *c* AD 625 (Evison 1987, 91). A pair of lace-tags was found in Grave 2 at the Morning Thorpe cemetery (Green *et al* 1987, 35, figs 13, 295). This grave was undated but, in view of the lack of 7th-century graves at Morning Thorpe, a 6th-century date can be assumed. They were found at the foot of the grave suggesting that they were used on shoes or leggings.

Sleeve-clasps

Sleeve-clasps were found in four of the Cleatham urns and six of the graves, and there were three unstratified examples. Of the graves only two, Graves 30 and 34,

contained a full set of four clasps. Grave 44 contained three clasps, Grave 48 contained a single pair of clasps and some fragments; single clasps were found in the fills of Grave 47 and 57, where they had been placed as offerings. Five of the clasps, including all of those from the urns, had been burnt.

Anglo-Saxon sleeve-clasps have been studied by John Hines, whose conclusions have been presented in two publications (Hines 1984, 35–109; Hines 1993). Hines divided clasps into three major classes: Class A, made from spirally coiled wire; Class B, made up from one or more of three elements, a plate, buttons or a bar; and Class C, ornate cast-metal clasps. No examples of Hines' Class A were found at Cleatham. This could be a result of the effect of a pyre on a small metal object, but Class A clasps are not common in Lindsey and only four examples are known to the writer.[11] Hines saw Class A clasps as having a long period of use, stretching from the later 5th century into the 560s (1993, 10–11).

Clasps of Hines Form B7

Class B clasps are well represented at Cleatham, with various forms of the class making up the whole assemblage. Form B7 is represented by three examples. These clasps are characterised by their simplicity: decoration is limited and applied directly to the plate, which has straight edges. Form B7 clasps are seen as being, in the main, products of the 6th century although there are some associations that might support an earlier start. Hines noted the presence of B7 clasps in Grave 35 at Sewerby, along with a brooch of Reichstein's *späte* type (1993, 40–1). Other potentially early associations exist but, in view of the longevity of cruciform brooches, must be treated with caution. The best evidence we have for an early start for the use of Form B7 clasps is the example found in Urn 976 at Cleatham. This was a Group 20n urn of Phase 1–3. A pair of B7 clasps were found in Cleatham Grave 48, which also contained a small-long brooch, beads and a knife, none of which was closely datable.

Find No	Context	Hines Class	Urn Phase	Notes
45	US	B17		Sheet-metal fragment, traces of silvering
75	US	B20		Cast-metal clasp, burnt. Fig 73
110	US	B12		Cast-metal clasp. Fig 73
734	Urn 270	B20	Group 19n, Phase 4–5	Cast-metal, burnt, badly distorted. Fig 72
946	Urn 373	?	Group 10a, Phase 1	Burnt, perforated sheet-metal plate
994	Urn 384	B20	Group 07n, Phase 2	Cast-metal clasp, burnt. Fig 72
2417	Urn 976	B7	Group 20n, Phase 1–3	Sheet-metal, repoussé decoration, burnt. Fig 72
2617	Grave 30	B13c		Sheet-metal clasps with repoussé appliqué. Fig 88
2618	Grave 30	B13c		Sheet-metal clasps with repoussé appliqué. Fig 88
2619	Grave 30	B13c		Sheet-metal clasps with repoussé appliqué. Fig 88
2620	Grave 30	B13c		Sheet-metal clasps with repoussé appliqué. Fig 88
2750	Grave 34	B13c	Group 08a, Phase 3	Sheet-metal clasps with repoussé appliqué. Fig 91
2751	Grave 34	B13c		Sheet-metal clasps with repoussé appliqué. Fig 91
2752	Grave 34	B13c		Sheet-metal clasps with repoussé appliqué. Fig 91
2753	Grave 34	B13c		Sheet-metal clasps with repoussé appliqué. Fig 91
2992	Grave 44	B13b	Group 00, Phase ?	Sheet-metal with an applied tube. Fig 97
2993	Grave 44	B13b		Sheet-metal with an applied tube. Fig 97
2994	Grave 44	B13b		Sheet-metal with an applied tube, single hook clasp. Fig 97
3025	Grave 47	B12a		Single cast-metal clasp. Fig 99
3030	Grave 48	B7	Group 01, Phase ?	Repoussé decorated sheet-metal clasp. Fig 99
3031	Grave 48	B7		Repoussé decorated sheet-metal clasp. Fig 99
3072	Grave 57	B12	Groups 01b & 08a, Phase 3	Single cast-metal clasp. Fig 101

Table 54, Sleeve-clasps from Cleatham

Clasps of Hines Form B12

Form B12 clasps were formed by casting and are fitted with loops by which they were attached to the sleeves. Hines (1993, 46–9) observed that many Form B12 clasps were found with early brooches. However, an example was found in Cleatham Grave 57, which contained the remains of Urn 1015 (Group 01b, Phase ?) and Urn 1168 (Group 08a, Phase 3) showing Form B12 clasps were in use in the middle of the sequence. Grave 57 contained an undatable knife and a 15mm wide buckle. The clasp was found in the grave fill, together with a large green glass bead (Find 3071). While these objects could be redeposited, they are unburnt and appear to be graveside offerings, suggesting that Grave 57 is 6th-century. The single B12 clasp in the fill of Cleatham Grave 47 is also likely to have been an offering. This grave contained a trefoil-headed small-long brooch.

Clasps of Hines Form B13b

Form B13b clasps are characterised by having a rolled copper alloy tube soldered onto the face of the plate, instead of a bar. This form is represented by three examples from Cleatham, all of which were found in Grave 44. It appears that the set was incomplete when buried. Hines was able to cite examples of Form B13b found with cruciform brooches from Reichstein's *späte* horizon (c 475–525 AD), together with some later associations (Hines 1993, 50–51). Although Cleatham Grave 44 contained sherds, these could not be phased. The associated grave goods, an iron buckle and a brooch are of little help in dating the grave.

Clasps of Hines Form B13c

Eight examples of Form B13c clasps were found as sets of four in Graves 30 and 34. These clasps are fabricated from a metal plate onto which is fixed a sheet-metal panel bearing repoussé Style I decoration. Hines (1993, 51–2) saw these clasps as products of the 6th century, a dating which is supported by the Cleatham finds.[12] Grave 34 was found to contain sherds from Urn 1163, a Group 08a urn of Phase 3. B13c clasps were found in Grave 95 at West Heslerton, where they were associated with a brooch of Åberg's Group IV (Haughton and Powlesland 1999, **2**, 152–5). This grave also included a pot which at Cleatham would be placed in Group 09b of Phase 1.

Clasps Hines Form B20

Form B20 clasps are cast in one piece with their bar. Three examples were found at Cleatham, one unstratified and two from urns. All had been burnt. Hines saw these clasps as being firmly dated in the 6th century but with suggestions of a 5th-century origin (Hines 1993, 64–5). The Cleatham sequence supports the 6th-century dating with finds of Form B20 clasps in Urn 270 (Group 19n, Phase 4–5), while an example in Urn 384 (Group 07n, Phase 2) might support earlier origins for the form.

Grave	Age	Sex	Notes
Grave 30	MA	F	Rich grave, five cruciform brooches, full set of clasps. Fig 88
Grave 34	MA	F	Rich grave, three cruciform brooches, two small-longs, full set of clasps. Fig 91
Grave 44	MA	F	Fe annular brooch and buckle, three clasps. Fig 97
Grave 47	YA	?	Single small-long brooch, single clasp in fill. Fig 99
Grave 48	YA	F	Single small-long brooch, amber beads, single pair of clasps in fill. Fig 99
Grave 57	YA	F	Small AE buckle, single clasp found in grave fill. Fig 101

Table 55 Associations of sleeve-clasps from the Cleatham graves

Sleeve-clasp contexts

Sleeve-clasps are one of the distinguishing marks of Anglian England, few examples existing to the south.[13] They were not part of the original Anglian cultural package but were introduced as secondary influences, from southern Scandinavia, in the later 5th century (Hines 1984, 108–9). In Scandinavia clasps were worn not only by women but sometimes on the legs of men's trousers (Hines 1993, 76–82). Only one example of this practice is known from England: a pair of clasps was found on the lower legs of a skeleton in Grave 9 at the Tallington, Lincolnshire, cemetery (Albone and Leahy 2000, 154–5 fig 12). Unfortunately Tallington

Grave 9 had been truncated by a pipeline and the lower legs were all that survived. Clasps could be used in other ways: in Fonaby Grave 43 two pairs were linked, horizontally, to form a sort of diadem (Cook 1981, 40–3, fig 16). Sleeve-clasps are surprisingly uncommon with cremation burials. No cemetery has clasps in more than 1.4% of the urns and Cleatham, where 0.7% of the urns contained sleeve-clasps, has the second lowest frequency (Table 106).

A clear link exists between the graves of mature females and sleeve-clasps, but it appears that these objects were also seen as appropriate offering in the graves of young adult women. The complete sets of sleeve-clasps were found in positions in keeping with objects attached to the cuffs of a woman's gown.

The unclassified fragment in Urn 373 (Group 10a, Phase 1) might indicate that clasps were present at the start of the Cleatham sequence; however, the fragment has been burnt and its identification as a clasp is not certain.

Rings

Rings of antler, bone, copper alloy, iron and lead (Pls 30 and 35)

In addition to the large number of ivory bag rings discussed below, 38 rings made of bone/antler, copper alloy, iron and lead were found at the Cleatham cemetery. Seventeen rings were found in urns, of which ten were burnt bone. Ten rings came from phased urns, which showed that rings of all materials were being used throughout the history of the cemetery.

A convincing external dating could be suggested for only one ring, the silver-wound copper alloy ring found as part of the possible purse deposit in Grave 9 (Find 2493). This can be paralleled by the seven silver-wound iron rings in Urn 2376 at Spong Hill, Norfolk (Hills *et al* 1987, 41, figs 91–2) which formed part of a necklace. These were found in association with an equal-armed brooch and two disc brooches of 5th-century date. The urn in which they were found (*op cit,* fig 66) belongs to Group 07s which, at Cleatham, would be placed in Phase 2.

The function of these rings is uncertain, but their relatively small diameters suggest that they had a different use from that of the ivory bag rings. These rings occur in a number of locations in the graves: at the hip, near the hip, at the neck and at the shoulder, none of which suggests that they were used to secure clothing. These positions are more in keeping with the location of a bag, an interpretation supported by the associated finds. The group of finds from the neck area of Grave 9 looks like a bag deposit, as do the tweezers in Grave 41, and the bone and ivory ring fragments Grave 30. These rings are best interpreted as the closures from cloth or leather bags. The diameters of the bone rings found in the urns are similar to those of the metal rings and are also best interpreted as bag rings.

Urn	Grave	Find No	Material	Phase	Diameter	Burnt	Notes
136		427	Bone	1–4	50	B	Rectangular section
140		434	Bone	?	29	B	Round section
249		677	Bone	?	50	B	Round section
288		788	Bone	3	30	B	Round section
350		890	Fe	?	22		Round section
357		909	Bone	?		B	Fragment
373		947	Bone	1	38	B	Trapezoid section
375		953	Fe	3	53		Round section
451		1086	Bone	3		B	Round section
597		1671	Fe	?	14	B	Glass adhering
634		1771	Bone	3–4	53	B	Round section
636		1775	Ae	?	21	B	Round section
692		1861	Fe	5	20		Round section
736		1974	Ae	1		B	'H' section, complex
839		2177	Bone	?	51	B	Decorated, ring-dot
876		2224	Bone	3–4		B	Round section

Table 56 continued

Urn	Grave	Find No	Material	Phase	Diameter	Burnt	Notes
932		2365	Fe	1–4	22		Slip-knot
	9	2494	Ae		84		Spiral of thin Ae wire. Fig 80
	9	2493	Ae/Ag		41		Ae wound with Ag. Fig 80
	9	2496	Ae		23		Twisted Ae wire. Fig 80
	9	2497	Ae		36		Plain Ae ring, open. Fig 80
	9	2502	Pb		51		Irregular lead ring. Fig 80
	12	2539	Fe		56		Fragment. Fig 81
	24	2585	Fe		40		Rectangular section. Fig 85
	30	2615	Bone		90		Perforated fragment. Fig 87
	30	2624	Fe		42		Round section. Fig 88
	34	2755	Fe		58		Round section. Fig 91
	34	2756	Fe		35		Round section. Fig 91
	36	2924	Fe		42		Fragment. Fig 95
	38	2960	Ae		32		Round section. Fig 95
	41	2984	Fe		38		Round section. Fig 96
	42	2988	Fe		45		Round section, frags. Fig 97
	48	3028	Fe		54		Round section. Fig 99
	US	4	Ae		20		Coiled, open, glass adhering
	US	37	Ae		20		Open ring
	US	43	Ae		30		Thin sheet-metal
	US	46	Fe		52		Rectangular section
	US	68	Ae		19		Rectangular section

Table 56 Rings from the Cleatham cemetery

Grave	Find	Location in grave	Figure	Association
9	2493 2494 2496 2497 2502	Bag deposit at neck Bag deposit at neck Bag deposit at neck Bag deposit at neck Under forearm	13	Brooches, pin and objects below Knife
12	2539	Fragment in fill of grave	14	
24	2585	In front of body	18	Knife
30	2624 2615	Waist area Waist area	20	Keys, bone ring, ivory ring Keys, above iron ring
34	2755 2756	Behind hip Behind hip	22	Knives nearby Knives nearby
36	2924	Fragment in fill of grave	23	
38	2960	Below hip	24	Loop fitting Find 2962, knife nearby
41	2984	In front of hips	24	Tweezers, knife nearby
42	2988	Below hips	25	
48	3028	At shoulder	27	Knife

Table 57 The locations in the graves of the Cleatham rings and their associations

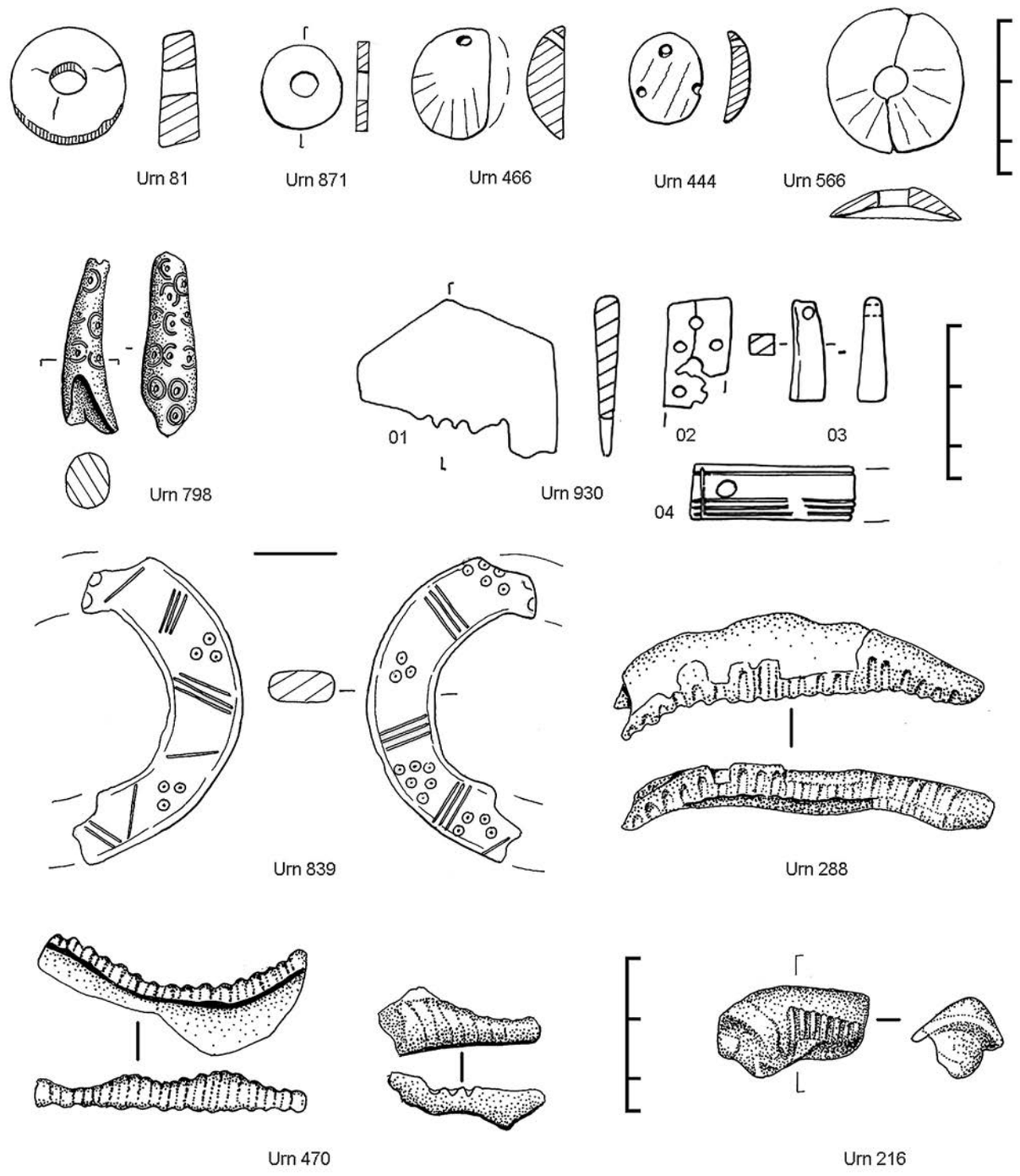


Fig 74 Pendants from Cleatham. Disc: Urn 81, Phase ?; Urn 444, Phase 1–2; Urn 466, Phase ?; Urn 566, Phase 1; Urn 871, Phase 2–4. Club: Urn 798, Phase ?. Bar, plate and miniature comb: Urn 930, Phase 3–5. Annular: Urn 839, Phase ? Cowrie: Urn 288, Phase 3; Urn 470, Phase 2; Urn 216, Phase 2. All illustrations at 100%

Ring amulets

It is sometimes difficult to distinguish between functional objects and amulets if, indeed, the difference was clear to the Anglo–Saxons themselves (Meaney 1981, 139–42). While it appears that most of the smaller rings were functional, there are exceptions. The bone/antler ring fragment found at the waist of the body in Grave 30 (Find 2615) had an oval section through which were multiple perforations. It is difficult to suggest a function for this object even when it was complete. A bone/antler ring, decorated with ring-dot and pseudo-radial lines on both of its faces (Fig 74), was found in unphased

Urn 839 (Find 2177) and is best interpreted as an amulet or a 'girdle ring'. Meaney considered that the antler rings decorated with ring-dot were a feature of the 7th century, citing burials such as Grave E1/S2 at Marina Drive, Dunstable, Bedfordshire (1981, 29, fig Im), Burwell, Cambridgeshire (1981, 140–1, fig IVdd), and Polhill, Kent (*ibid*).

Chatelaine chains (Figs 27, 100)

Only one example of an iron chatelaine chain was found at Cleatham, in Grave 50 (Find 3050). It was found under the left elbow of a young adult female and was directly associated with a narrow, copper alloy buckle and an iron knife. Chatelaines were found in nine graves at the Castledyke, Barton on Humber, cemetery, of which two were dated to the 6th century, the remainder to the 7th century (Drinkall 1998, 285). As at Cleatham, the Castledyke chatelaines were found near the left hip, and were often associated with knives or keys. Grave 50 at Cleatham contained other objects supporting a 7th-century dating.

Beads (Fig 76, Pl 36)

Classification and dating

The Cleatham excavation produced 1595 beads of which 1173 came from the urns, 412 from the graves and ten were unstratified. Beads were found in 278 of the urns of which 170 could be assigned to decorative groups and to phases. The proportion of urns containing beads appears to have declined over the five phases from 30.7% in Phase 1 to 17.8% in Phase 5. This trend is, unfortunately, broken in Phase 4 where 29.5% of the urns contained burnt beads. The proportion of inhumations that contained beads was, at 33.9% (21/62) comparable with the 29% (278/960) of cremation deposits in which they were found.

Phase	1	2	3	4	5
Urns in phase	192.5	137.7	102.5	113.7	58.9
Number of urns with beads	59.1	38.1	28.3	33.5	10.5
Percentage of urns with beads	30.7%	27.7%	27.6	29.5%	17.8

Table 58 Percentage of urns containing beads in each phase

Glass beads were by far the most common, representing 1434 (89.9%) of the total. Of the remainder, 136 were made from organic materials (amber, bone, coral and ivory), 22 were made from lithic materials (quartz and jet) and four were made from silver.[14]

Glass beads

Colours used (Fig 75)

The most detailed survey of Anglo-Saxon beads is that of Guido and Welch (1999). This work included a series of schedules listing by colour, decoration and shape all of the beads recorded by Mrs Guido during her decades of study. The schedules also included associated material and suggested dates. Other scholars have also devoted much time to the study of beads, most notably Vera Evison (1987, 57–82), Susan Hirst (1985, 62–85) and, more recently, Birte Brugmann (2004).

All of these works recognise that the dating of Anglo–Saxon beads is fraught with difficulties. An examination of Guido's schedules shows the long time span over which some beads were in use; small blue glass beads, for example, were produced from the 6th century BC to the 8th century AD (Guido 1978, 66).

Material	Number	Percentage Σ 1596	Urns % Σ282	Graves % Σ20	Notes
Amber	16	1.00%	–	10.0%	From Graves 30 and 48 plus one unstratified
Bone/antler	6	0.38%	1.8%	5.0%	All but one from urns
Coral	110	6.89%	3.9%	–	All from urns
Crystal	21	1.32%	6.7%	–	All from urns
Glass	1434	89.85%	94.7%	91.0%	1035 from urns, 392 from graves, 7 unstratified
Ivory	4	0.25%	1.4%	–	All from urns
Jet	1	0.06%	–	5.0%	Grave 30
Silver	4	0.25%		5%	Three from Grave 24, one unstratified

Table 59 Cleatham beads by material. The percentages are of the number of urns and graves containing beads, not of the whole assemblage

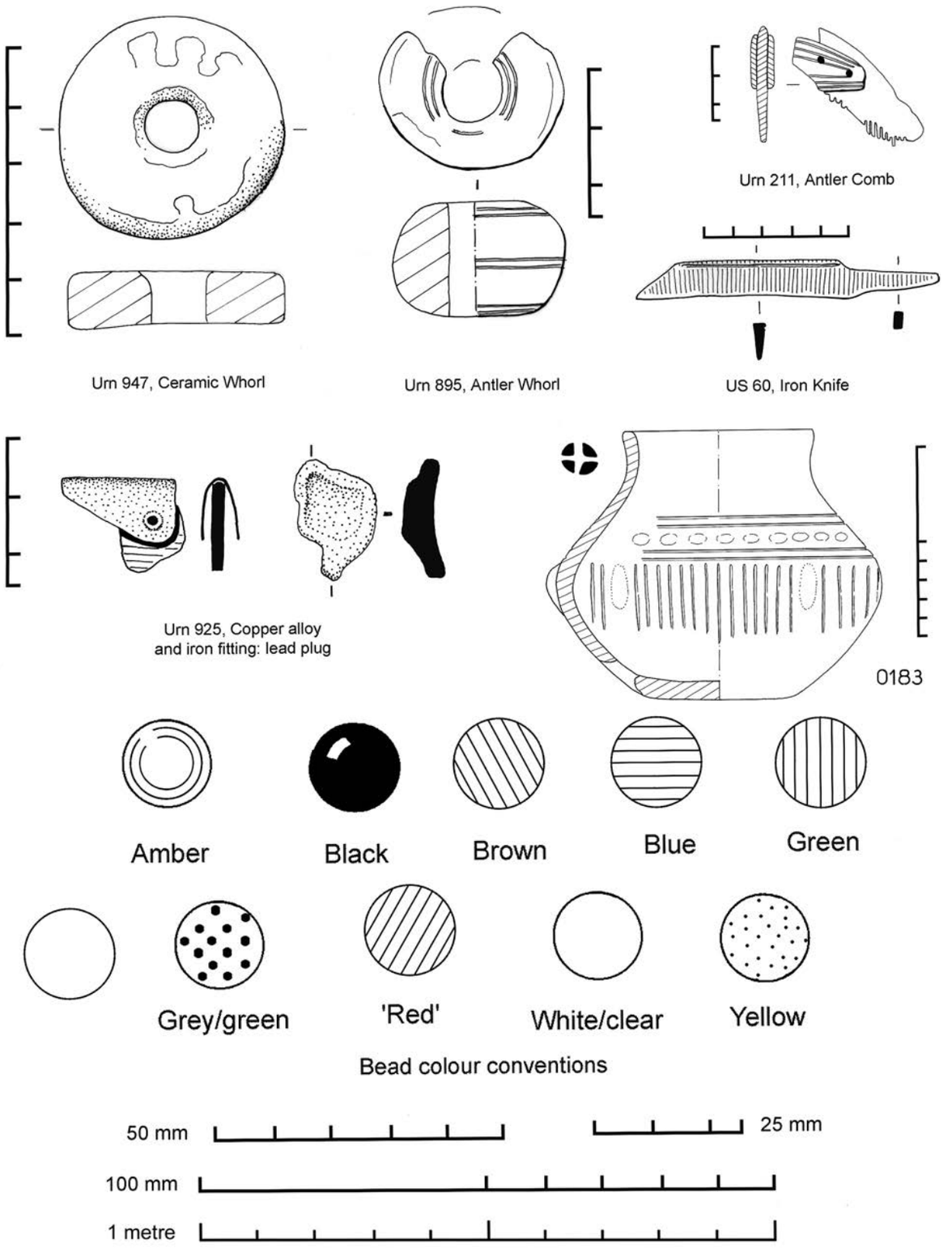


Fig 75 Conventions used in drawing the Cleatham finds. Pottery is shown with dot stippling and cross-hatched sections. Vessels are shown at 33% of full size but the drawings of stamps are at 66%. Stone objects are depicted using the same conventions but are illustrated at 50% of full size. Bone, antler and ivory are not stippled but light, irregular hachures may be used. These materials are shown at 50% of full size. Copper alloy is stippled with black cross-sections and is usually shown at full size. Iron objects are hachured and have black sections. They are shown at 50% of full size. Beads are full size and their colours are as per the key shown above. The divisions on the scale bars are as below regardless of what size object they are being shown with

Evison commented that 'it is not useful to attempt to apply an extremely systematised and rigid method of classification to such intractable material' (1987, 61). She saw the shapes of beads as inconsistent and considered that the colours achieved varied according to changes in composition, furnace temperature and atmosphere. However, she went on to give a useful analysis of bead chronology based on her own phasing of the Buckland, Dover, cemetery (*ibid*) and the work of Koch on the Schretzheim cemetery (Koch 1977). In her study of beads Brugmann defined a systematic classification of bead types and used Correspondence Analysis to examine the associations which these beads had in graves and set up a chronology (Brugmann 2004). She also included comparative material from continental cemeteries. Cleatham was included in Dr Brugmann's analysis (2004, 117, table 10; detailed tabulation on the ADS website: http://ads.ahds.ac.uk/catalogue/resources.html?brugmann_var_2003) and her classification has been used here for the beads from the graves. Dr Brugmann found the burnt glass beads from the Cleatham urns intractable and was unable to assign them to her groups with any confidence. Simple descriptive codes have been used to classify the beads in the Cleatham database and any subtlety of colour was largely ignored. In order to analyse the proportions of coloured glass beads used, the percentage frequencies were plotted (Table 60).

Phase	Bichr.	Black	Blue	Brown	Clear	Green	Polychr	Red	White	Yellow
5 (Σ21.3)	2.8 (13.1%)	4.8 (22.5%)	6.5 (30.5%)	0.3 (1.4%)	–	2.5 (11.7%)	1.0 (4.7%)	1.5 (7.0%)	_	_
4 (Σ106.5)	7.5 (7.0%)	10.6 (10.0%)	24.7 (23.2%)	3.8 (3.6%)	1.0 (0.9%)	15.3 (14.4%)	7.8 (7.3%)	3.5 (3.3%)	1.3 (1.3%)	0.7 (0.7%)
3 (Σ128.0)	9.3 (7.3%)	6.4 (5.0%)	26.0 (20.3%)	5.5 (4.3%)	–	17.5 (13.7%)	10.8 (8.5%)	6.7 (5.2%)	3.6 (2.8%)	3.0 (2.3%)
2 (Σ157.7)	11.0 (7.0%)	15.1 (9.6%)	36.0 (22.8%)	3.2 (2.0%)	1.0 (0.6%)	27.1 (17.2%)	10.3 (6.5%)	16.7 (10.6%)	8.6 (5.5%)	2.0 (1.3%)
1 (Σ331.5)	13.3 (4.0%)	17.3 (5.2%)	105.8 (31.9%)	5.2 (1.6%)	1.0 (0.3%)	32.2 (9.7%)	13.0 (3.9%)	27.7 (8.4%)	16.3 (4.9%)	4.3 (1.3%)

Table 60 Percentage of beads of defined colours in each phase. Due to burning not all beads could be assigned to a colour. The totals are the numbers of beads, not the number of urns containing beads of a certain colour. Where beads come from urns belonging to groups that occur over a number of phases the counts have been evenly spread over the phases

While some trends can be identified, the overall pattern of bead colours used over the Cleatham sequence is difficult to interpret and it is likely that the use of some bead colours did not vary with time. The suggestion that blue glass beads were most common in the 5th and the first half of the 6th century (Hirst 1985, 75; Brugmann 2004, 33–4) seems to be supported by the Cleatham sequence. In Phase 1, 31.9% (105.8/331.5) of the beads were blue; the proportion fell to 22.8% in Phase 2 and fell again to 20.3% in Phase 3. The apparent rise to 30.5% in Phase 5 must be treated with some caution as only three beads could be directly attributed this phase. Brown beads, which Brugmann found to be combined with blue in many early bead sets, did not follow the same pattern as blue, representing only 1.6% of the beads in Phase 1, rising to 4.3% in Phase 3, falling in Phase 4 to 3.6% and to 1.4% in Phase 5. Black beads presented no coherent pattern although they may have become more common in Phase 5. All that can be said about clear glass beads is that that they were in low-level use in Phases 1, 2 and 4. Green glass beads were used in Phase 1 but were more common in Phase 2, falling in Phase 3 to remain relatively constant through the last two phases. The use of red glass beads does not appear to show a coherent pattern. White and yellow do not appear to have been used in Phase 5 and perhaps not in Phase 4.

Only one possible gold, or silver, in glass bead was found at Cleatham (Find 908). This was a burnt, segmented bead found in Urn 357 (Group 01, unphased). Although metal foils in glass beads were used during the Roman period, Brugmann saw the early medieval examples as mainly belonging to her Phase A2, AD 480–580 (Brugmann 2004, 75).

Polychrome glass beads, Fig 76

A total of 65 burnt, polychrome glass beads and 76 bichrome beads were found in the Cleatham urns. These came from 81 (8.5%) of the urns and, while most were single finds, some vessels contained up to

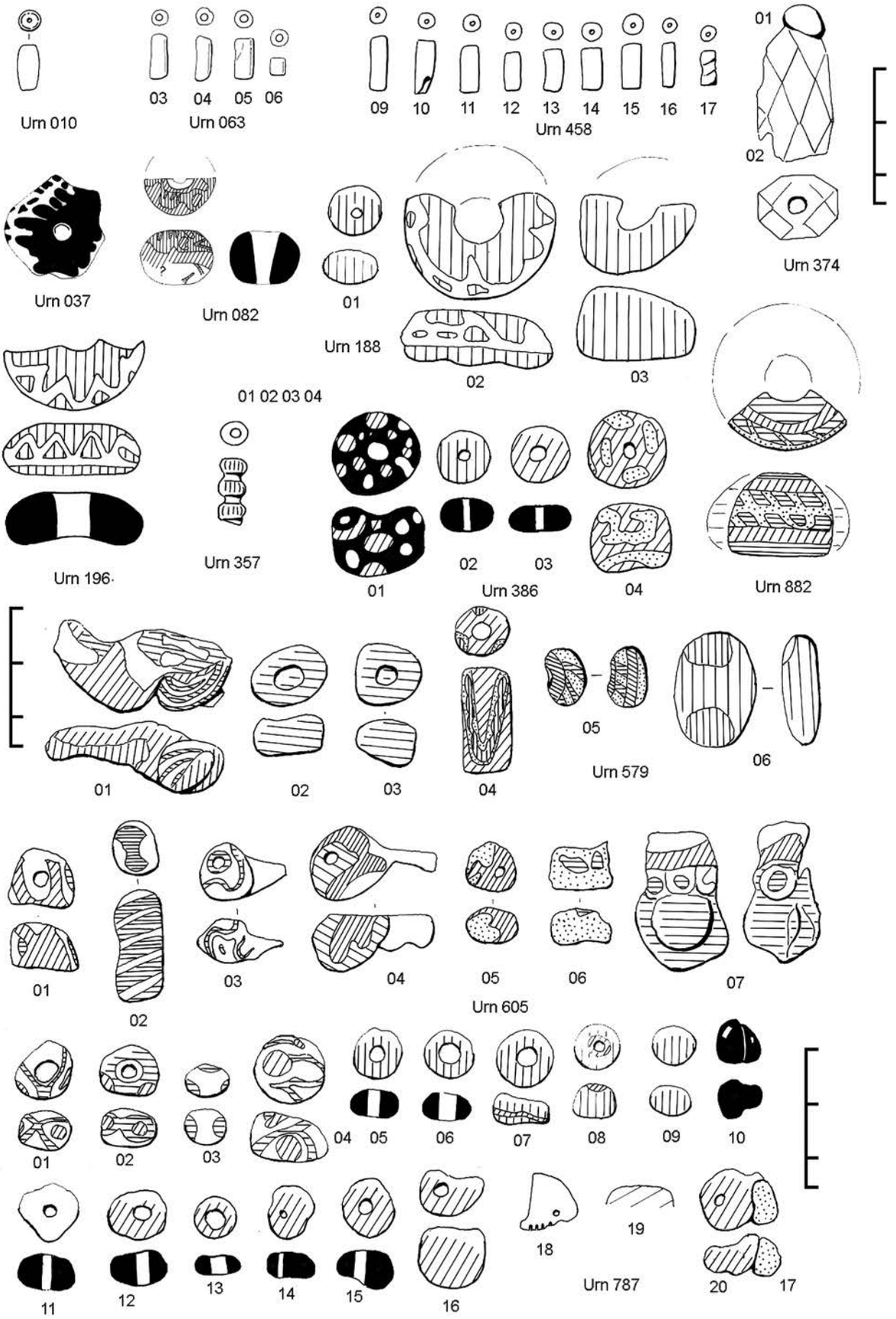


Fig 76 Beads from Cleatham. Colour conventions as per Fig 75. All shown at 100%

thirteen polychrome beads (Urn 579, Group 10s, Phases 3–4). Polychrome beads appear to have been used throughout the sequence but were less common in Phase 1, when they represented 3.9% (13/331.5) of the total. A similar pattern exists for bichrome beads which represented 4.0% (13.3/331.5) of the beads in Phase 1, then generally increasing over the rest of the sequence.

In order to examine the usage of the polychrome beads over the existence of the cemetery the numbers of each form were plotted over the five phases (Table 61).

Bead type	1	2	3	4	5
as (ring-spot)	–	0.3 (1.3%)	0.3 (1.3%)	0.3 (2.0%)	–
b (banded)	4.7 (17.9%)	0.7 (3.2%)	0.7 (3.0%)	–	–
bw (band and wave)	–	–	–	–	–
cw (crossed wave)	2.7 (10.3%)	3.4 (15.7%)	2.9 (12.3%)	3.2 (20.9%)	–
cws (cross wave spot)	5.3 (20.2%)	1.3 (6.0%)	0.3 (1.3%)	–	–
mb (mottled blue)	–	1.0 (4.6%)	–	–	–
parti (parti-coloured)	–	–	–	–	–
s (spotted)	–	1.0 (4.6%)	0.5 (2.1%)	0.5 (3.3%)	–
tl (traffic light?)	2.7 (10.3%	1.7 (7.8%)	1.7 (9.4%)	1.5 (9.8%)	–
Bichrome	13.3 (50.6%)	11.0 (50.7%)	9.3 (39.6%)	7.5 (49.0%)	2.8 (73.7%)
Total bi/polychrome	26.3	21.7	23.5	15.3	3.8

Table 61 Phased urns containing polychrome glass beads. Finds from urns not attributable to a single phase have been spread across the phases. The totals are for polychrome and bichrome beads found in specific phases, not all of which can be classified

In view of the low numbers of beads involved it would be wrong to read too much into the above analysis. Even the basic statement that beads having a particular descriptive code are present in a particular phase has to be treated with caution as some of the finds came from urns that could not be attributed to a single phase. It is, however, possible to make some observations. Beads with banded decoration were most popular in Phase 1 declining thereafter. Crossed wave spot decoration was also most common in Phase 1, then falling in popularity. Conversely, beads bearing simple crossed wave decoration appear to have become more common over the phases. Some beads were, with misgivings, assigned to Brugmann's TL (traffic light) class on the basis of their red-yellow-green colouring alone as they were too badly burnt to allow a certain classification. The Cleatham phasing does, however, confirm that this colour scheme is early, as Brugmann suggests.

Bead shapes (Fig 76)

Phase	1	2	3	4	5
Annular	8.0 (12.4%)	4.3 (16.5%)	3.8 (23.8%)	4.3 (27.9%)	1.5 (35.7%)
Bun	3.8 (5.9%)	3.1 (11.9%)	2.6 (16.3%)	0.8 (5.2%)	0.5 (11.9%)
Globular	–	2.0 (7.7%)	–	–	–
Oblate	49.0 (75.7%)	16.4 (63.1%)	9.1 (56.9%)	10.3 (66.9%)	2.2 (52.4%)
Total classifiable	64.7	26.0	16.0	15.4	4.2

Table 62 Numbers of beads classifiable by shape per phase. Beads from urns that cannot be allocated to a single phase have been spread across the phases. Some unique bead forms, while counted in the totals, do not appear in the breakdowns

It proved impossible to analyse the shapes of the glass beads found in the stratified urns. The forms of only 241 of the 1033 burnt beads could be determined and not all of these came from urns that could be phased. It is also likely that surviving beads are strongly biased in favour of the larger beads, which were less susceptible to melting. In view of this, no detailed study was possible but some trends could be

identified. Annular beads increased in popularity over the sequence. Oblate beads remained the most common form throughout the sequence but their frequency does seem to have declined. It is interesting to compare the frequency with which oblate beads occurred in the urns – 67.9% (163/240) – with that found in the graves where they formed 23.8% (98/412) of the total. While this figure will have been biased by the presence in the graves of bead forms that did not survive the pyre (the base figure of 240 is the number of beads whose shape could be determined) it remains likely that the difference is, at least in part, due to many of the graves being later than the cremations.

In her analysis of Anglo-Saxon beads Brugmann found that all three of her phases were present in the Cleatham graves, confirming the site's longevity (Brugmann 2004, 117, table 10). She was able to phase the following graves on the basis of the beads.

Cleatham Grave No	Brugmann Classification	Phase	Date range
15	RoMel; Candy; Orange (x 2)	B2	AD 550–600
17	BIGrSpiral	A2	AD 480–580
24	CyRound; Dot34; Koch34Wh	B	AD 555–650
30		A1	AD 450–530
34	TLOth	A1	AD 450–530
35		A1	AD 450–530
39		A1	AD 450–530
46		A1	AD 450–530
48		A	AD 450–580
49		A1	AD 450–530
50	WoundSp	C	AD 650–
54	MelonYG; MelonB1; WoundSp	A2B	AD 530–580

Table 63 Beads from Cleatham graves as classified and dated by Dr Birte Brugmann

In addition to glass, beads made of bone/antler, coral, crystal and ivory survived the pyre but amber and jet, being combustible, will have been destroyed. In view of the low numbers of urns involved it would be misleading to calculate percentage frequencies and plain numbers are quoted.

Bone/antler beads[15]

Bone beads were found in four urns, each of which contained only a single example. Only two of these urns could be phased, both to Phase 1 (Urns 815 and 924). In view of the low frequency of bone beads it would be unsafe to make any observation on their chronology.

Beads in materials other than glass

Urn	Phase	Bone	Coral	Crystal	Ivory
63	1		4		
95	3		2		
228	4			1	
287	1			1	
302	1			2	
374	1			1	
416	3–4			1	
458	1		32		1
468	1–3		49		1
509	3–4		2		
562	1–2			1	
599	4–5			1	
729	4			1	
765	3				1
815	1	1			
854	4		2		
857	5			1	
903	2–4			1	
924	1	1			

Table 64 Numbers of beads of specified materials found in phased urns

Coral beads, Urn 63, Urn 458 (Fig 76, Pl 38)

One hundred and ten coral beads were found at Cleatham, in 1.2% (11/960) of the urns, some of which contained relatively large numbers: Urn 468 had 49 coral beads and Urn 458 had 32 beads. These beads are very small and those in Urn 468 had a total

mass of only 4.63g. Other urns were found to contain only a single coral bead, suggesting that these tiny objects had an importance beyond that of simple jewellery. Coral beads occurred throughout the Cleatham sequence and must be seen as undatable (Table 64). Although it has not been possible to identify their source, coral beads were, like cowrie shells, an exotic import. They are rare in Anglo-Saxon England and, so far as it has been possible to determine, they have only been found at Cleatham and Elsham (Table 106).

Crystal beads/whorls (Fig 76, Urn 374)

Crystal beads were found in 2.1% (20/960) urns, representing 1.4% (20/1434) of the total. One unstratified crystal bead was found (Find 64). Most urns contained the remains of only one crystal bead, Urn 302 being the exception, with two (Finds 815–16). Some crystal beads appear to have been quite large, in one case weighing 24.88g (Find 1038, Urn 416, Group 02s, Phase 3–4). This is likely to be the remains of a crystal bead such as that found at Fonaby (Cook 1981, 68, fig 18, 4). Meaney suggests, with some justification, that these large crystal beads were used as spindle-whorls (1981, 78).

Crystal beads appear in 5th-century contexts, with an example from Grave 843 at Mucking, Essex (Meaney 1981, 77), but they are, in the main, a feature of the 6th century, continuing into the 7th (Huggett 1988, 70). At Cleatham, crystal beads occur in Phase 1 (which must be 5th century) and then continue throughout the sequence (Table 64). The faceted crystal bead Find 948 found in Urn 374 (Phase 1) is closely paralleled by beads found with a Group IVb brooch in Grave 39 at Spong Hill, Norfolk, dating from *c* 520–550 (Hills *et al* 1984, 90–1, fig 94).

Crystal beads are widely, but sparsely, scattered through England (Huggett 1988, 70–1) but are most common at the Cleatham, Elsham and Sleaford cemeteries. While rock crystal can be found in the British Isles, these large, clear crystals are likely to have been imported.

Ivory beads (Fig 76, Urn 10)

Ivory beads were found in 0.42% (4/960) of the Cleatham urns. Of these, Urn 458 (Group 10a) could be placed in Phase 1 and Urn 468 (Group 02s) in Phase 1–3. Neither Urn 10 nor Urn 765 could be reconstructed but Urn 765 could be placed in Phase 3 on the strength of a stratigraphic relationship. Each urn contained a single, very small, bead. It is interesting to note that two of the ivory beads (Urns 458 and 468) were found in association with coral beads, also exotic objects.

Amber beads

Amber beads were found in only two graves at Cleatham, these being Graves 30 (six beads, Fig 89, 111–12, 114–17) and Grave 48 (nine beads, Fig 99, 8–14). A single unstratified amber bead was also found (Find 3135). As amber is combustible, its absence from the urns is to be expected.[16] Amber is seen as being both chronologically and socially important. It does not come into common use before the second half of the 6th century and was not often found in 7th-century graves (Meaney 1981, 67). It has been argued that it is generally found in the richer graves (Hirst 1985, 75–7). Cleatham Grave 30 was rich, but the other burial containing amber, Grave 48, was unexceptional. Other finds allow both graves to be dated to the mid-6th century.

Amber beads occur in only 3.2% (2/62) of the Cleatham graves, which is unusually low, as elsewhere they are found in large numbers.

- Castledyke: 431 amber beads were found, occurring in 13.9% (28/201) of the graves (Drinkall and Foreman 1998, 262).
- Fonaby: amber beads appear to have been very common, occurring in 47.8% (22/46) of the graves (Cook 1981, 81). This high figure may reflect the low number of male burials recorded at what was, essentially, a salvage excavation. Some Fonaby graves, however, did contain large numbers of amber beads.
- Sewerby: 312 amber beads were found in 27.6% (16/58) of the graves (Hirst 1985, 75).
- Norton, Cleveland: amber was found in 37.5% (45/120) of the graves (Sherlock and Welch 1992, 44–5).
- Empingham II, Rutland: 45 graves produced 1610 beads, giving a frequency of 33.3% (45/135) (Timby 1996, 45).
- West Heslerton, Yorkshire: 1442 beads from 62 graves, giving a site frequency of 33.3% (62/186) (Haughton and Powlesland 1999, **1**, 112–13).

The frequency of amber was also relatively low at the Castledyke cemetery, where it was found in only

13.9% of the graves but represented 63% of the beads found. The low number of graves with amber may again be due to the high proportion of 7th-century graves at Castledyke. Seventh-century graves are present at Cleatham, but there are rich 6th-century graves and more amber might be expected. The shortage of amber beads in a cemetery which is otherwise well endowed must reflect either deliberate choice or availability. Many beads may have been destroyed by cremation, but amber was present in 47.8% of the graves at Fonaby, where there was also a strong cremation element. The dearth of amber at Cleatham is interesting and inexplicable. Amber can be collected on Lincolnshire's beaches, but is more likely that it was imported, with the Baltic as the most likely origin (Huggett 1988, 64–7).

Silver beads

Grave 24 contained three large silver beads (Fig 85), each made up from an apposed pair of sheet-metal 'bells' set mouth to mouth (Finds 2586–8). In addition to these, topsoil Find 51 probably represents the remains of a further example. The best parallel to these beads is in Grave 143 at the Sleaford, Lincolnshire, cemetery (Thomas 1887, 16, fig XXIII, 8). This was found in association with a Group V cruciform brooch dated to *c* 520–570. Silver beads were also found in Graves 238 and 384 at Morning Thorpe (Green *et al* 1987, 100, figs 373–5; 151, figs 273, 439) which may also be dated to the 6th century, but one was accompanied by a silver-gilt, zoomorphic mount, the decoration of which looks towards Style II. A two-part silver bead from a 6th-century grave at Norton was decorated with a herringbone pattern (Sherlock and Welch 1992, 44, figs 35–6, pl 15). Fragments of a silver bead were found on the site of the Saxon cemetery at Broadway Hill, Broadway, Worcestershire (Cook 1958, 72, fig 10, 5). Like Find 2587 in Cleatham Grave 24, this was decorated with impressed lines but was, unfortunately, unstratified. At the West Heslerton cemetery pairs of hemispherical beads were found in four of the graves (Haughton and Powlesland 1999, 113–14). In each case the beads were associated with annular brooches that were not chronologically sensitive, but the beads themselves provide a useful parallel.

Analysis of bead use

	Bichrome	Black	Blue	Brown	Clear	Green	Polychrome	Red/ terracotta	White	Yellow
Urns	76 (6.5%)	98 (8.4%)	288 (24.6%)	21 (1.8%)	9 (0.7%)	177 (15.1%)	65 (5.5%)	10.5 (9.0%)	64 (5.5%)	21 (1.8%)
Graves	26 (6.3%)	–	196 (47.6%)	14 (3.4%)	3 (0.7%)	43 (10.4%)	21 (5.1%)	37 (9.0%)	15 (3.6%)	29 (7.0%)

Table 65 Comparison of the colour of the beads from the Cleatham urns with finds from the graves. Percentage of total beads, 1173 from urns, 412 from graves. Red beads from the graves include 'terracotta'

As glass beads are the only class of object which are common in both the graves and urns, a comparison was made between the glass colours associated with the two rites (Table 65). The proportion of Cleatham urns which contained glass beads is, at 27.9% (268/960),[17] high but is comparable with the 33.9% (21/62) of graves which included brooches. While some colours (bichrome, polychrome and red/terracotta) were used in similar proportions in both the graves and urns, some striking differences exist. That the common blue glass beads occur in the urns at only half the frequency of that found in the graves (24.6% cf 47.6%) is surprising and is paralleled at a lower level by the use of brown glass beads (1.8% cf 3.4%). 'Black' glass beads were not found with the inhumations but occurred in 64 of the urns. This might be a result of beads of other colours turning black in the pyre, but as 'black' glass was found with unmodified beads of other colours, this explanation is unlikely. It is possible that the disparity in the pattern of bead use associated with the two rites may be a product of the relatively small number of graves (twenty) containing beads. Of the blue beads, 149 came from just two burials (Graves 30 and 34), which had a disproportionate effect on the apparent pattern of bead use.

While all of the necklaces were found with the remains of females, a single polychrome bead was found in the fill of Grave 17 (Find 2567) with the

bones of a man; it was presumably a graveside offering (Fig 83). Single beads occurred with the remains of women in five graves, some of which may again have been offerings. None of the urns contained unburnt beads which could be seen as offerings. Burnt beads were found in the fills of Graves 14 and 45, and are likely to have been redeposited from cremations. The four largest necklaces were found with the remains of mature, or old, adult females (Grave 9, 32 beads; Grave 30, 103 beads; Grave 34, 133 beads; Grave 36, 32 beads). The next largest group comprised the 23 beads in Grave 35. These were found with the remains of a child, who was wearing a small-long brooch as a main brooch, and was adjacent to the rich Grave 34. These were the deepest graves at Cleatham and it is likely that the child in Grave 35 was held in special affection.

It is useful to look at the glass beads from Cleatham in the context of other cremation cemeteries (Table 106). At 45.7%, the proportion of urns containing burnt glass beads at Cleatham is amongst the highest of the other sites included in the comparanda.

Only at Elkington, where 43.3% (13/30) of the urns with grave goods contained beads, and Sancton, with 41.6% (91/219), do we see figures similar to Cleatham. Elsham, which is otherwise very like Cleatham, has only 22.1% (75/339) of urns with glass beads. At the other cemeteries included on Table 106, less than 20% of the urns with grave goods included glass beads. It was not possible to analyse the colour of the beads at other cremation cemeteries as these data are not easily accessible. Coral beads were only found at Cleatham and Elsham.

	Graves with beads	Amber	Mono-chrome glass	Poly-chrome glass
Cleatham	32%	3%	79%	11%
Castledyke	25%	63%	30%	6%
Empingham	36%	81%	7%	2%
Norton	46%	66%	25%	5%
Sewerby	33%	46%	45%	4%
West Heslerton	39%	68%	23%	4%

Table 66 Beads from inhumations at Cleatham and other cemeteries. Proportion of graves containing beads and specified types as percentages of all beads. Some of these percentages are based on those quoted in the excavation reports and it was not possible to recalculate them to the tenth of a percent used elsewhere in this report. Fonaby has been excluded as the data are incomplete

The proportion of graves which contained beads at Cleatham is generally in line with other inhumation cemeteries. Castledyke appears unusual in that only 25% of the graves contained beads but this, again, may reflect the high number of 7th-century graves. The low number of Cleatham graves that contained amber is compensated for by a high frequency of graves with glass beads. Cleatham also contains a high proportion of polychrome beads compared with the other cemeteries.

No attempt has been made to reconstruct the way in which the beads found in the Cleatham graves were worn. In almost every case the beads had cascaded as the body decomposed and, while short sections of the original layout survived, it is impossible to say anything useful.

Adornments

Pendants

Bone/antler and ivory pendants (Pl 35)

Perforated bone pendants were found within 26 of the Cleatham urns; of these fifteen were phased but the numbers found were too low to allow their frequency to be represented as percentages.

It would appear that bone pendants were used over a long period, being most common in the early phases but progressively going out of use over the following phases; they may not have been in use in Phase 5. No bone pendants were found in the graves.

The pendants were classified by shape: the largest groups were plano-convex or 'disc' shaped (18 examples) and the short cylindrical pendants 'annular' (five examples). There were two club-shaped pendants and one rectangular plate. No pattern emerged when the pendants were looked at by phase: both disc and annular forms were in use throughout the urn sequence. A single ivory pendant was found in Urn 776 (Group 10s, Phase 3–4). The other shapes were represented by too few examples to allow a range to be defined.

1	2	3	4	5
6.3	4.0	1.8	1.5	0.3

Table 67 Numbers of bone pendants by phase. Pendants from urns that were in use over a number of phases have been spread over the phases

Urn	Find	Figure	Group	Form	Phase
20	165		10a	Annular	1
81	285	74	01	Annular	
256	688		07b	Disc	1–2
444	1075	74	09n	Disc	1–2
465	1157		02s	Disc	2–4
466	1165	74	01	Disc	
468	1189		03s	Disc	1–3
513	1399		02s	Disc	2–4
518	1418		01	Disc	
531	1440		01	Disc	
557	1566		01	Disc	
566	1584	74	13n	Disc	1
601	1686		00n	Disc	
603	1689		00b	Disc	
632	1766		07a	Annular	1
644	1799		00	Disc	
702	1885		21	Disc	2
711	1904		07a	Disc	1
776	2045		10s	Disc, ivory	3–4
798	2123	74	01	Club	
805	2135		00	Disc	
871	2217	74	02s	Annular	2–4
887	2252		05b	Disc	2
924	2332		10a	Rectan-gular	1
929	2356		00	Annular	
930	2360	74	01p	Club	3–5

Table 68 Bone pendants by type and phase

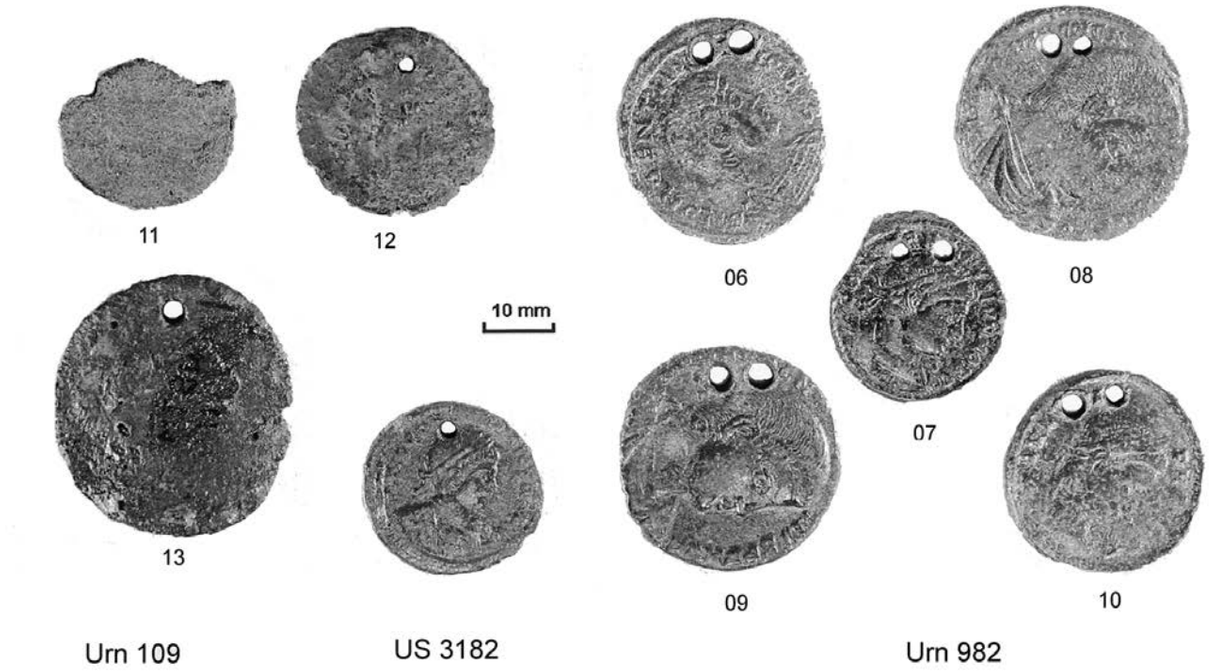
Club-shaped pendants

Two 'Hercules club' pendants were found at Cleatham (Fig 74); these occurred in the unphased Urn 798 (Find 2123) and in Urn 930 of Phase 3–5 (Find 2360). These pendants have different forms, the example in Urn 798 has an oval section decorated with ring-dot while the pendant in Urn 930 has a square section and is plain. The latter pendant was found with three other potential amulets: a miniature bone comb (F2358), a perforated bone plate (F2359) and a decorative bone strip (F2360). Both pendants fall within the range illustrated by Meaney (1981, 162–4, fig Vq). These club pendants are believed to be early: a round-sectioned example was found in an urn at Lackford, Suffolk, with a developed Group I brooch (*ibid,* fig Ir).

Coin pendants (Fig 77)

Perforated Roman coins were found in two of the Cleatham urns, three in Urn 109 (Group 5b, Phase 2) and five in Urn 982 (Group 01, unphased). In addition to these, a perforated coin was found in Grave 62 (Find 3083) and a further example was found in the topsoil (Find 3182). In detail, these coins were:

Fig 77 Roman coins perforated for use as pendants. Burnt coins from Urn 109, Phase 2; coins from Urn 982, Phase ?; unstratified coin US 3182



Urn 109, Group 05b, Phase 2

Find 373 Burnt coin, perforated. No detail survives but its module suggests that it is a 3rd brass of the House of Constantine, AD 317–61. Found amongst the burnt bones.

Find 374 Burnt coin, perforated, Numus of the House of Valentinian. Emperor and captive type, AD 367–375. Found on top of the bones.

Find 375 Burnt brass coin, perforated, Centenionalis of Magnentius, AD 350–375, chi-rho on reverse. Found amongst the bones.

Urn 982, Group 01, Phase ?

Find 2428 Unburnt brass coin, double perforation, Centenionalis of Magnentius.
O. DN MAGNEN-TIVS PF AVG 'A' in field behind head.
R. VICTORIAE DD NN AVG ET CAE Two Victories holding a shield marked VOT V MVLT X
Mint mark TRP = Trier. AD 350–353

Find 2429 Unburnt coin, Numus of Constantine II, double perforation.
CONSTANTINVS IVN NOB C
R. GLOR-IAE [******] ERC-ITVS Two soldiers with two standards
Mint mark TRS = Trier. AD 333–4

Find 2430 Barbarous copy of a Centenionalis of Magnentius, unburnt, double perforation.
O. DN DAOENTIVS AES ??
R. VICTORIAE DD NN AVG ET CAES (Reversed)
Mint mark PLG (although it is doubtful if this piece had ever been anywhere near Lyons).

Find 2431 As 2428 but struck on a small, thick flan using a different die, unburnt, double perforation, AD 350–353.

Find 2432 Unburnt Numus of Crispus, double perforation.
O. IVL [CRIS] PUS NOB C
R. CAESARVM NOSTRORVS, VOT X (in wreath)
Mint mark]T[= Trier? AD 323–324

Grave 62

Find 3083 Corroded remains of a perforated copper alloy coin, head barely perceivable on obverse, reverse blank. The module of this coin would suggest that it was a Centenionalis and it appears to have been badly worn, or deliberately smoothed, when buried in this 6th-century grave.

Unstratified

Find 3182 Unburnt Numus of Constantine II, AD 330–337, perforated.
O. FL IVL CONSTANTIVS NOB C
R. GLORI-EXERC-ITVS Two soldiers with two standards.
Mint mark TRP = Trier.

These coins provide us with our only concrete dating for any of the Cleatham urns, providing a *terminus post quem* in the middle of the 4th century. Although coins were found in an urn of Phase 2, it would be wrong to suggest that they were anything other than stray finds collected for use as pendants. Late Roman coins are common in Lincolnshire, and can be easily found. While most of the coins are 4th-century, earlier issues were used, including some of 1st-century date.[18] Perforated coins seem to be found exclusively in Anglo-Saxon contexts and were not worn in the Roman period. Roman coins are recorded at Caistor and Spong Hill, Norfolk, at a similarly low frequency to that seen at Cleatham. The inclusion amongst the Cleatham coins of three perforated *Centenionali* of Magnentius invites comment. These are not common finds and they may have come from a hoard. Coins of this type were selected for special treatment in other ways and were cut up to form small pellet-like tokens distinguished by the *chi-rho* on their reverse. These may have been votive objects, suggesting the presence of Christianity as a superstition in the Romano-British countryside.

Silver pendants

Scutiform pendants

Two silver 'scutiform', or shield-shaped, pendants were found on the Cleatham cemetery; these came from Grave 13 (Find 2543, Fig 82) and Grave 46 (Find 3008, Fig 98).

Scutiform pendants were of Scandinavian origin and became widespread in Anglian England (Hines 1984, 221–43). They were introduced during the early 6th century and remained in use for a considerable period of time, with examples from 7th-century cemeteries (*ibid,* 228). The pendant found in Grave 13 can be paralleled by the example from Longstone, Derbyshire, which Hines suggested was late, as migration period material is rare in Derbyshire (*ibid,* 228). It is thought that Cleatham Grave 13 dates to the later 6th century, and the plain scutiform pendant from Grave 46 has associations which suggest a date in the first half of the 6th century.

Scutiform pendants are found in the graves of women and are likely to have been protective amulets (Meaney 1981, 159–62). Although both of the Cleatham scutiform pendants were found on the upper chest, neither was fitted with a suspension loop, and they may have been carried in bags.

Horn-shaped silver pendant

Grave 24 contained a small pendant made from sheet silver, rolled into the form of a curved, elongated cone perforated near its open end (Find 2589, Fig 85). It was found in neck/upper chest area and was associated with three large silver bell-beads. No parallels have been found for this object, but Grave 24 dated from the later 6th century.

Cowrie shells (Fig 74, Pl 30)

The burnt remains of cowrie shells were found in 0.4% (4/960) of the Cleatham urns. They are most common in the graves of 7th-century adult females and it appears that they were amulets, perhaps related to fertility or child bearing (Meaney 1981, 124–7). Cowrie shells are significant in that they originated no closer to England than the Red Sea and demonstrate long-distance transport in the late 6th and 7th century. The main distribution of cowries lies in the south and east of England, but with concentrations in Cambridgeshire and Kent (Huggett 1988, 72, fig 6).

Urn	Find	Phase
216	580	2
288	791	3
470	1247	2
546	1499	–

Table 69 Burnt cowrie shells from Cleatham

At Elsham, cowrie shells were found in 1.8% (6/339) of the urns with graves goods and there is a possible example from Urn 50 at the Millgate, Newark, cemetery, although some doubt exists over the identification (Kinsley 1989, 22). The Newark find is potentially important, as Urn 50 dates from the late 5th century, both on the grounds of its decorative style (Group 05b, Phase 2), and the barred comb that it contained. It is possible that the cowrie from Newark belongs to the species *Cypraea europea* which is found in British waters and was in use at an earlier date than the tropical *Cypraea pantherina*.

A shell of the large, tropical cowrie *Cypraea pantherina* was found in Grave 31 at Castledyke, Barton on Humber, which was dated to the 7th century by its association with an amethyst bead (Drinkall and Foreman 1998, 44, 289–90). At Saxton, Yorks, a *Cypraea pantherina* shell was found in a late 6th-century grave. (Meaney 1981, 123), suggesting that while tropical cowries are, in the main, a feature of the 7th century, they were present at an earlier date. This would be in accord with the four *Cypraea pantherina* found in urns of Phase 2–3 at Cleatham. A 6th-century burial at Cheesecake Hill, Driffield contained five cowries, the highest recorded number in any grave, but these belonged to the small, local species (*Cypreae europa*) (Meaney 1981, 123). A similar local cowrie was found with a decorated silver bead in Grave 11 at the Norton cemetery (Sherlock and Welch 1992, 54, 128, pl 15, fig 35).

Bracelets

The Cleatham excavation produced one, or possibly two, copper alloy bracelets. The unburnt example found in Urn 862 (Find 2202) is made from flat-sectioned, sheet copper alloy with rounded ends (Fig 72). Urn 862 belongs to Group 22s, and could not be phased. The other possible bracelet is the wire ring found with the purse deposit in Grave 9 (Find 2494, Fig 13). This simple object may have been a bracelet but could equally have been the ring from the mouth of the bag. Bracelets are not common in Anglo-Saxon graves but two wound wire 'slip-knot' type bracelets were found at Castledyke with 6th- and 7th-century burials (Drinkall and Foreman 1998, 273).

Finger rings (Fig 72)

The Cleatham excavation produced three copper alloy finger rings, all of which were found, unburnt,

in Urn 977 (Group 09s, Phase 5). Of these rings one (Find 2421), had a plain, flat-sectioned hoop; the others (Finds 2420 and 2422) were made from wire, coiled to form a bezel. While these resemble slip-knot rings, the complex knot forming the bezel puts them into a different class. A similar ring was found in Grave 113 at West Heslerton where it was associated with annular brooches, a beaver tooth pendant and a silver hemispherical bead (Haughton and Powlesland 1999, 185–6). MacGregor and Bolick (1993, 169, 72) saw these rings as dating from the 6th or 7th century which is supported by the sequencing of Urn 977. Finger rings are usually found in the graves of women and are generally associated with larger suites of finds (Hills *et al* 1984, 88–90, figs 91–2). Nothing else was found with the Cleatham finger rings, which came from a large, well-made, vessel.

Tools and utilities

Knives (Fig 78)

The Cleatham excavation produced 52 knives, ten of which came from the cremations, 33 from the graves and nine were unstratified. Knives were found in 1.04% (10/960) of the urns, a low-level frequency which is in accord with that observed at the other cremation cemeteries (Table 106).[19] It is not possible to determine whether an iron knife had been present on the body at the time of cremation, or was an offering, although the unfinished blade in Urn 292 (F795) can only have been an offering.

Anglo-Saxon knives have been classified by Evison (1987, 113–17), who based her work on the sequence of blade shapes established by Böhner for the Trier region of Germany (Böhner 1958, 215–25). In spite of its continental basis, Evison found that the Trier typology and dates were applicable to her work on the Buckland, Dover, cemetery (*op cit*). Her classification and dates may be summarised as follows.

Blade type	Description	Dating at Buckland
1 (A)	Curved back, curved cutting edge	Mid-5th to late 7th century
2 (B)	Straight back, curved cutting edge	Mid-5th to late 6th century
3 (C)	Angled back, curved cutting edge	7th century
4 (D)	Curved back, straight cutting edge	7th century
5 (E)	Angled back, straight cutting edge	7th–8th century
6 (F)	Straight back, incurved near tip	7th–8th century

Table 70 Classification of Anglo-Saxon knife shapes based on Evison 1987. To avoid any ambiguity when combining these with Härke's size classes, Evison's type numbers have been replaced with letters

Urn No	Find No	Type	Figure	Urn Group	Phase	Notes
52	212	A1	78	10a	1	
292	795	A1	78	22s	?	Unfinished model
325	860	D1	78	05n	4	Grooved blade, one side
375	951	B1	78	08a	3	
441	1064	A1		1	?	
546	1495	?		00	?	
588	1656	?1		1	?	
702	1887	?1		21	2	
887	2248	?1		05b	2	
1000	2445	A1		04a	4	

Table 71 Knives found with cremations at Cleatham, and their phasing

Härke (1989b, 144–8) showed that knives could be usefully classified on the basis of their size and grouped them as follows.

Blade length[20]	**Blade width**	**Class**
40–99mm	9–22mm	**1**
100–129mm	14–23mm	**2**
130–175mm	20–27mm	**3**

It appears that there is a correlation between the size of knife blades and the age and sex of the person with whom they were buried (*ibid,* 146). Härke found that no juvenile was buried with a blade longer than 106mm and no adult female with a blade longer than 128mm. The large knives of Class 3 were found only with adult males. At Cleatham it was found that 50 of the 52 knives could be graded by blade length, with 41 being placed in Class 1, eleven in Class 2 and no examples of Class 3. The absence of large blades is odd, but of the six medium-sized Class 2 blades found in graves five were found with the remains of men, with one unknown (Table 72). Class 1 knives could not be linked to either sex or age.

Grave	Find No	Type	Figure	Dating	Sex	Basis of dating	Notes
1	2486	B1	79	7th?	M oa	Annular brooch	
4	2489	A1	79	Mid-6th	M ma	Strap-end	
5	2490	B1	79	Late 5th, early 6th	M ya	Spearhead	
7	2492	A1	79	5th–7th	C/adol	Knife	
9	2500	B1	81	Late 5th	M?oa	Cruciform brooch	
10	2535	D2	81	7th	M ma	Knife	Two grooves on one side
12	2540	D2	81	6th–7th	M ya	Spearhead, knife	
13	2550	A1	82	Later 6th	F adol	Annular brooches	
14	2554	?1	82	Later 6th	M ya	Cruciform brooch	
17	2566	E1	83	7th	M a	Annular brooch, knife	
18	2571	E2	83	7th	M ya	Knife, small buckle	Blade grooved on one side
19	2574	A1	83	6th	F a	Annular brooch	
23	2582	D2	84	7th	M ya	Spearhead	
24	2590	A1	85	Later 6th	F a	Silver bell-beads	
27	2607	B1	87	Late 5th–6th	M adol	Spearhead	
29	2612	B1	87	5th–6th	M oa	Knife, buckle	
30	2895	B1	88	Mid-6th	F ma	Cruciform brooches	Very rich grave
31	2734	B1	90	5th early 6th	M a	Spearhead	
32	2746	D1	90	7th	? ma	Small buckle, lace-tag, knife	Blade grooved on one side
34	2754	A1	91	Mid-6th	? ma	Cruciform brooches	
36	2925	D1	94	Early to mid-6th	F?ma	Late small-long brooch	
37	2958	A2	94	7th	M ya	Knife	Blade grooved on one side
38	2963	D1	94	7th	F ya	Small buckle, knife	
40	2979	A1	95	5th	M a	Spearhead	
41	2985	A2	96	5th early 6th	? a	Cruciform brooches	
43	2991	A1	97	5th–6th	M oa	Buckle, iron pin	Blade grooved on one side
45	3002	B1	97	5th–6th	M ya	Buckle	
46	3006	B1	98	Early to mid-6th	F adol	Cruciform brooch	
48	3029	A1	99	Mid-6th	F ya	Sleeve-clasp, amber	
50	3051	A1	100	7th	F ya	Ag pin, chatelaine, knife	
51	3052	A1	100	7th	M ma	Small buckle, knife	
53	3055	A1	100	5th–6th	M?ya	Pottery found in grave	
57	3074	A1	101	6th	F ya	Sleeve-clasp, buckle	

Table 72 Knives found in graves at Cleatham and their dating. M, male; F, female; C, child; a, adult; adol, adolescent; ya, young adult; ma, mature adult; oa, old adult

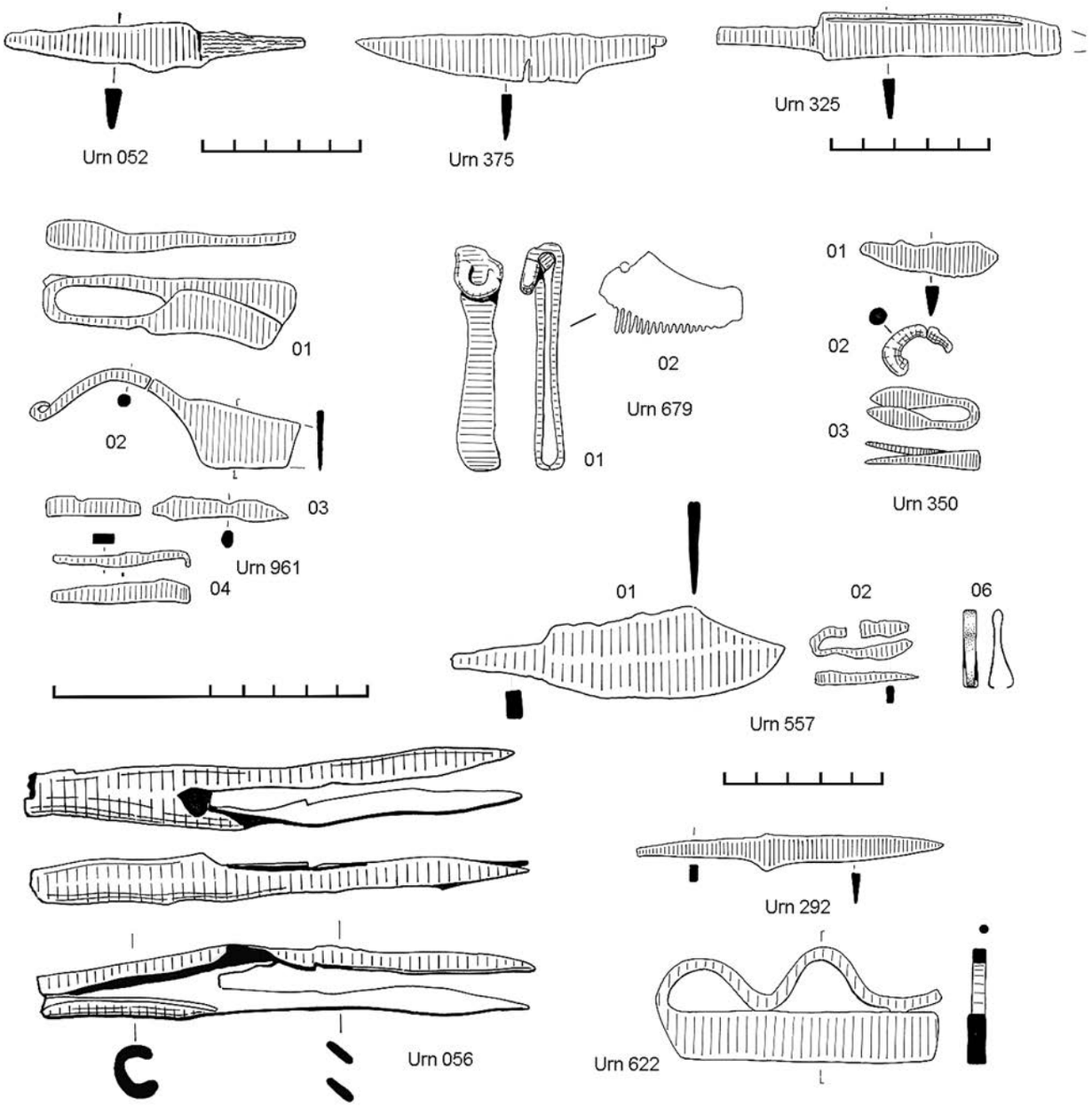


Fig 78 Iron objects. Knives: Urn 052, Phase 1; Urn 292, Phase ?; Urn 325, Phase 4; Urn 375, Phase 3 (Table 71). Firesteel: Urn 622 (page 202). Toilet sets: Urn 350, Phase ?; Urn 557, Phase ?; Urn 679, Phase 2; Urn 961, Phase 2. Urn 056, pronged iron object, function not known. All illustrations at 50%

The phasing of the urns containing knives showed that knives were being placed in urns over most of the history of the cemetery. No knives were found in urns of Phase 5, but it would be wrong to read too much into this. Knives which were considered impossible to date, such as Type A1, occurred over a broad span of phases (Phases 1–4).

The dating of the Cleatham graves containing knives was in keeping with the dates proposed by Evison, with late blade forms found in graves dated to the 7th century by other objects. As the lack of cremations is one of the features of Final Phase cemeteries, it was reassuring to note the absence of 7th-century type knives from the urns. Härke (1989b, 144–8) argued that the 7th century saw an increasing use of large knives. While fourteen of the Cleatham knives belong to types which Evison dated, on morphological grounds, to the 7th century or later, large blades were,

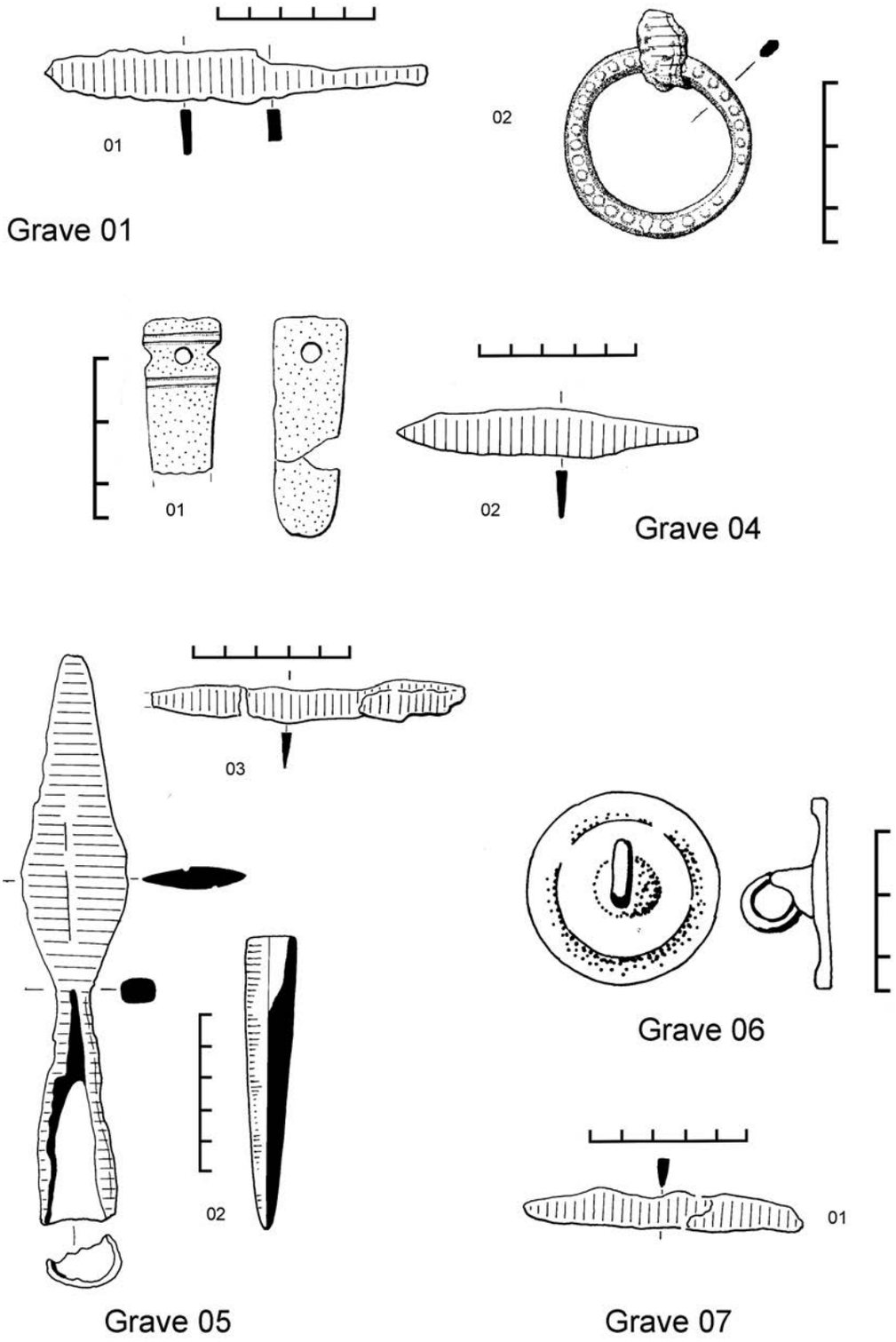


Fig 79 Finds from Graves 1–7. Copper alloy objects at 100%, iron objects at 50%. Finds described by number in the Inhumations Catalogue, pp 231–43

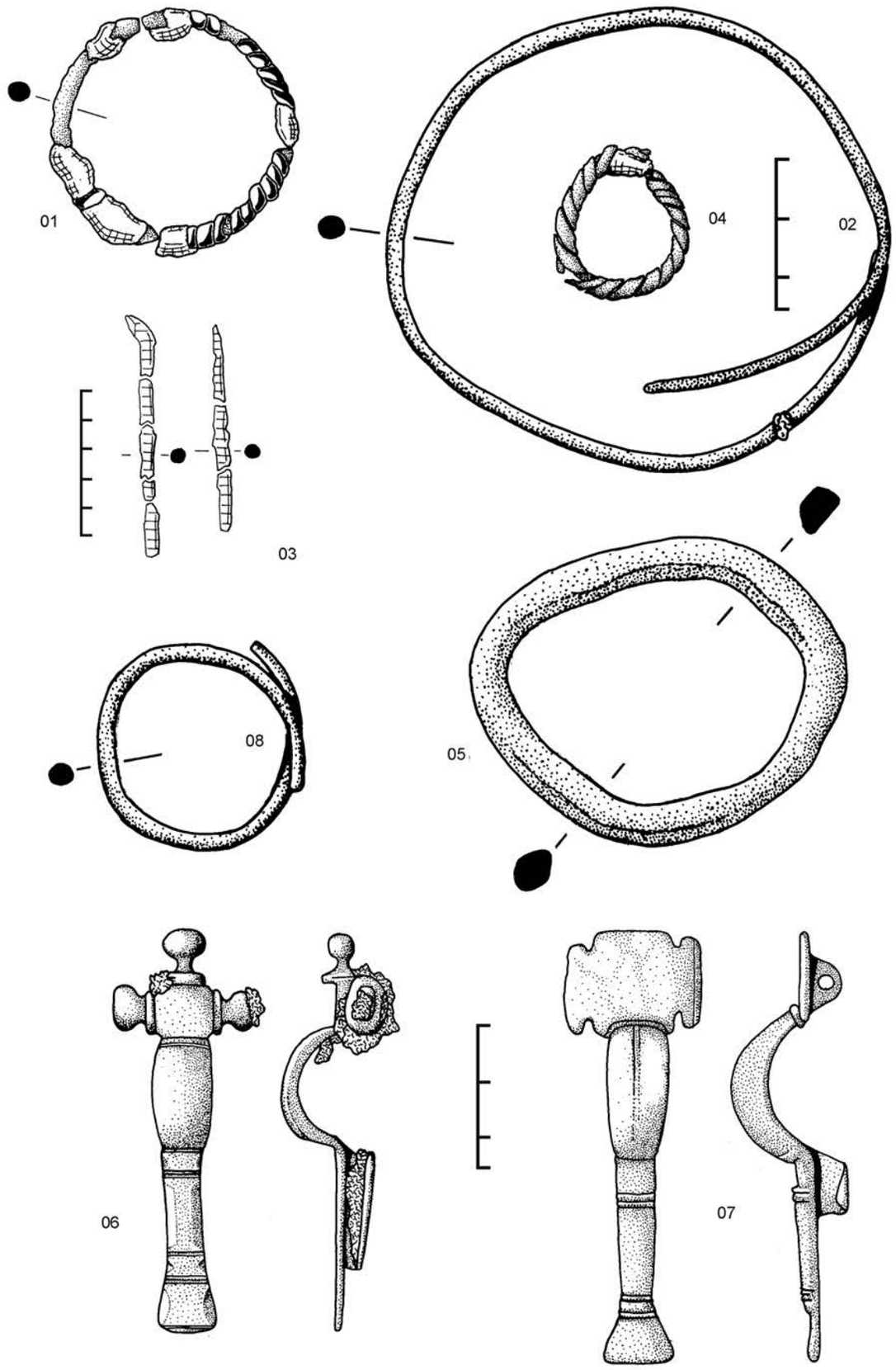


Fig 80 Finds from Grave 9.1. Copper alloy objects at 100%, iron objects at 50%. Finds described by number in the Inhumations Catalogue, pp 231–43

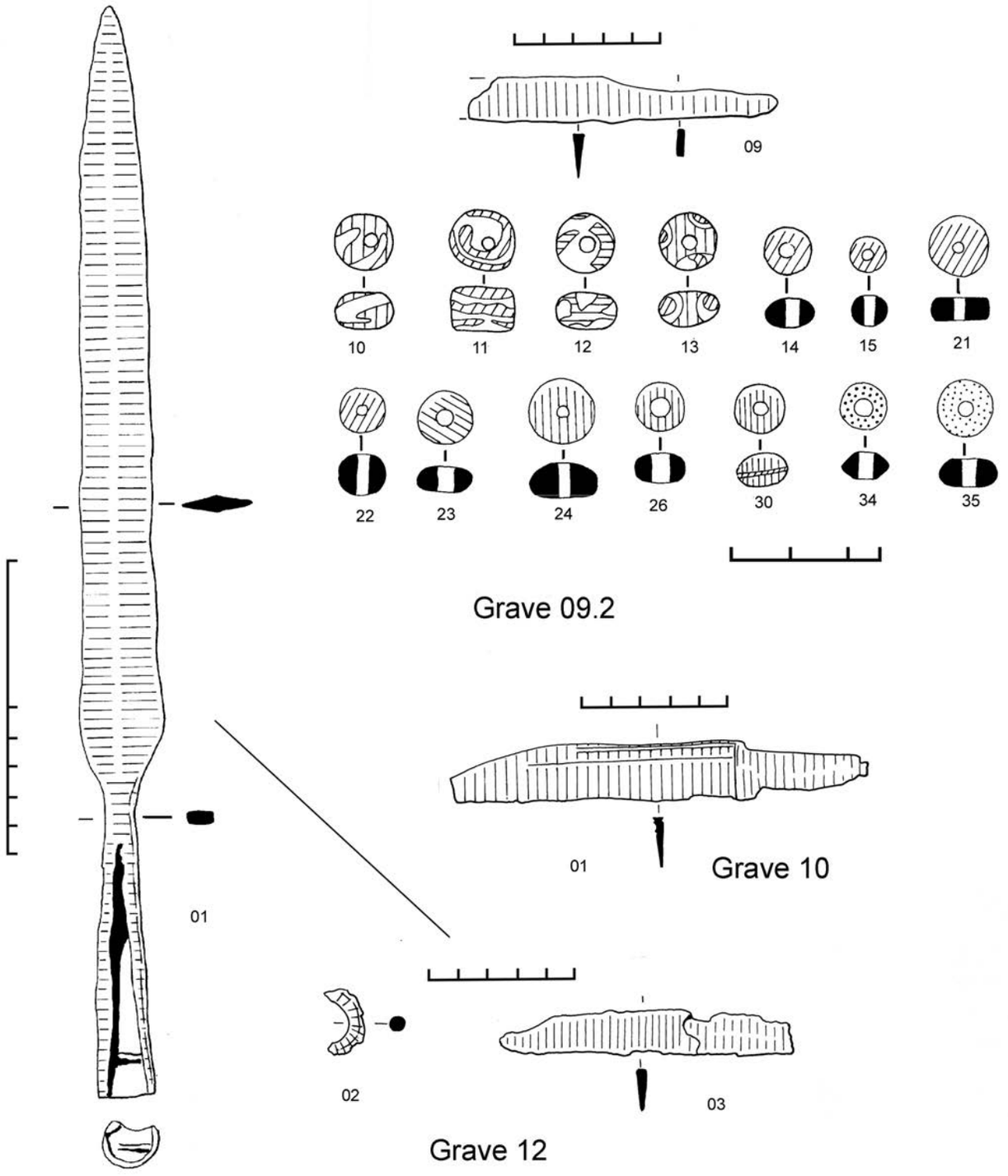


Fig 81 Finds from Graves 9.2–12. Glass beads at 100%, iron objects at 50%. Finds described by number in the Inhumations Catalogue, pp 231–43

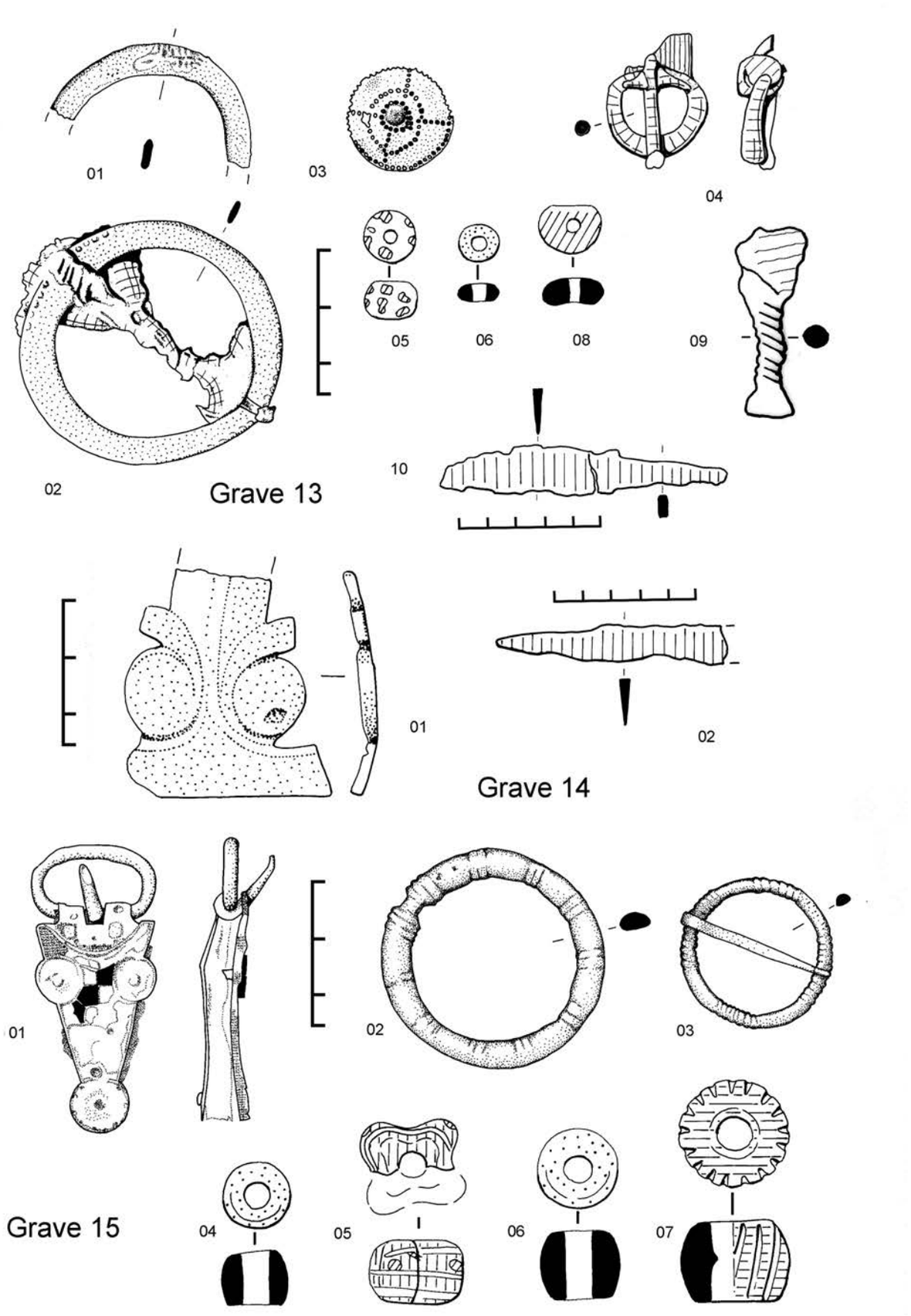


Fig 82 Finds from Graves 13–15. Non-ferrous objects and glass beads at 100%, iron objects at 50% except for Grave 13, 04 and 09, which are 100%. Finds described by number in the Inhumations Catalogue, pp 231–43

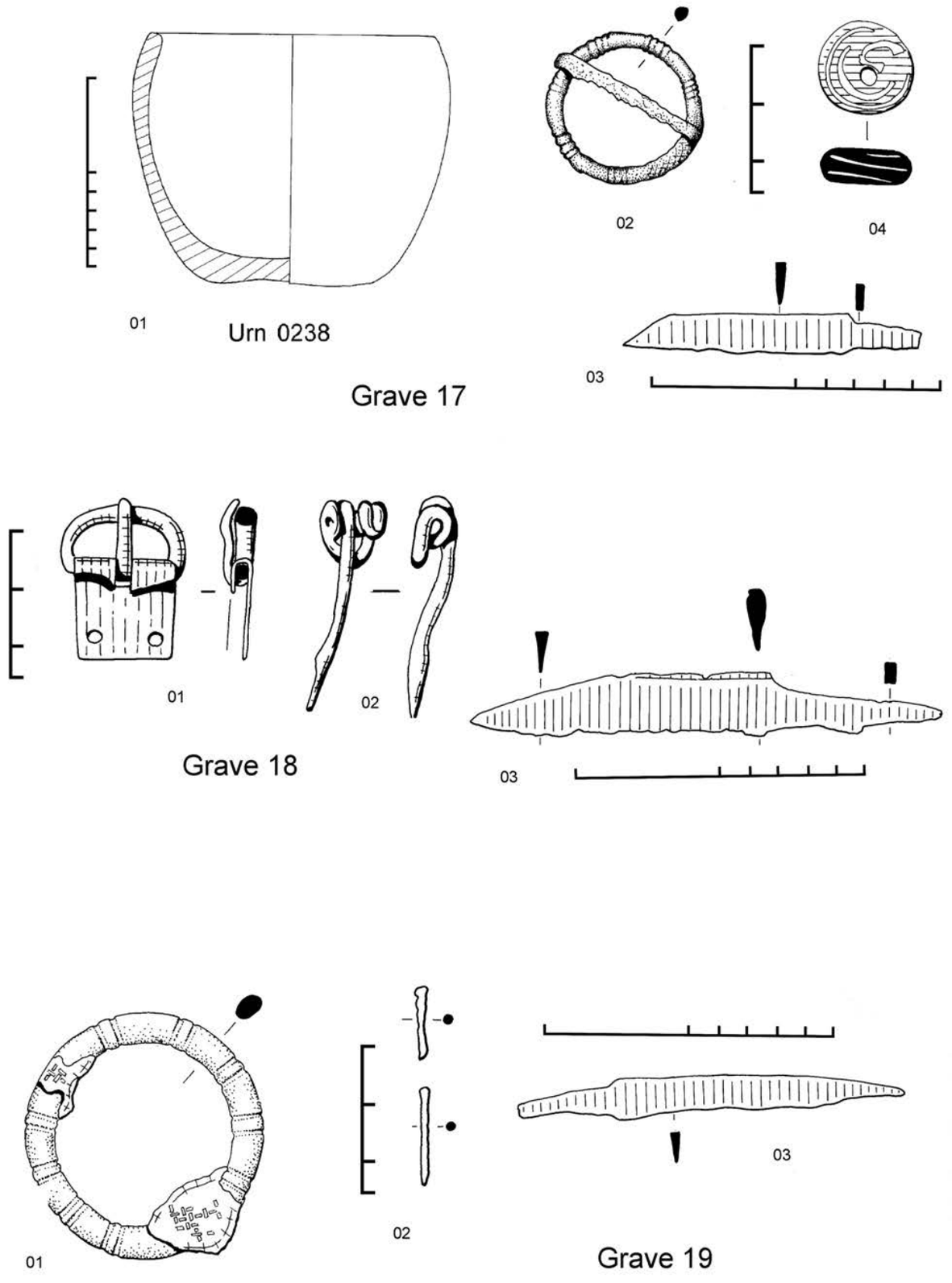


Fig 83 Finds from Graves 17–19. Glass beads at 100%, iron objects at 50% except for Grave 18, 01 and 02, which are 100%. Pot at 33%. Finds described by number in the Inhumations Catalogue, pp 231–43

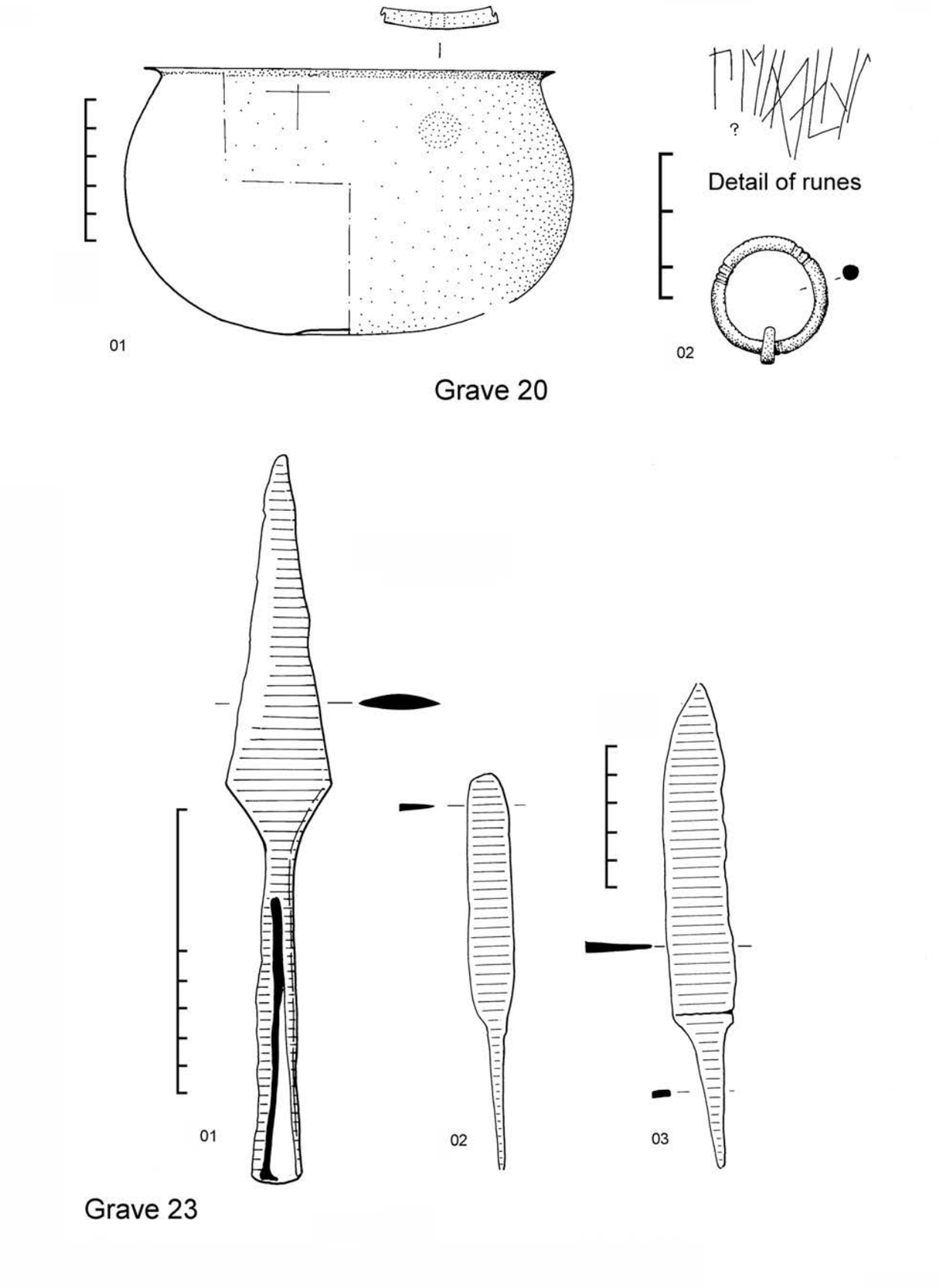


Fig 84 Finds from Graves 20–3. Copper alloy hanging bowl, Grave 20 (01), at 50%, brooch 100%, iron objects at 50%. Finds described by number in the Inhumations Catalogue, pp 231–43

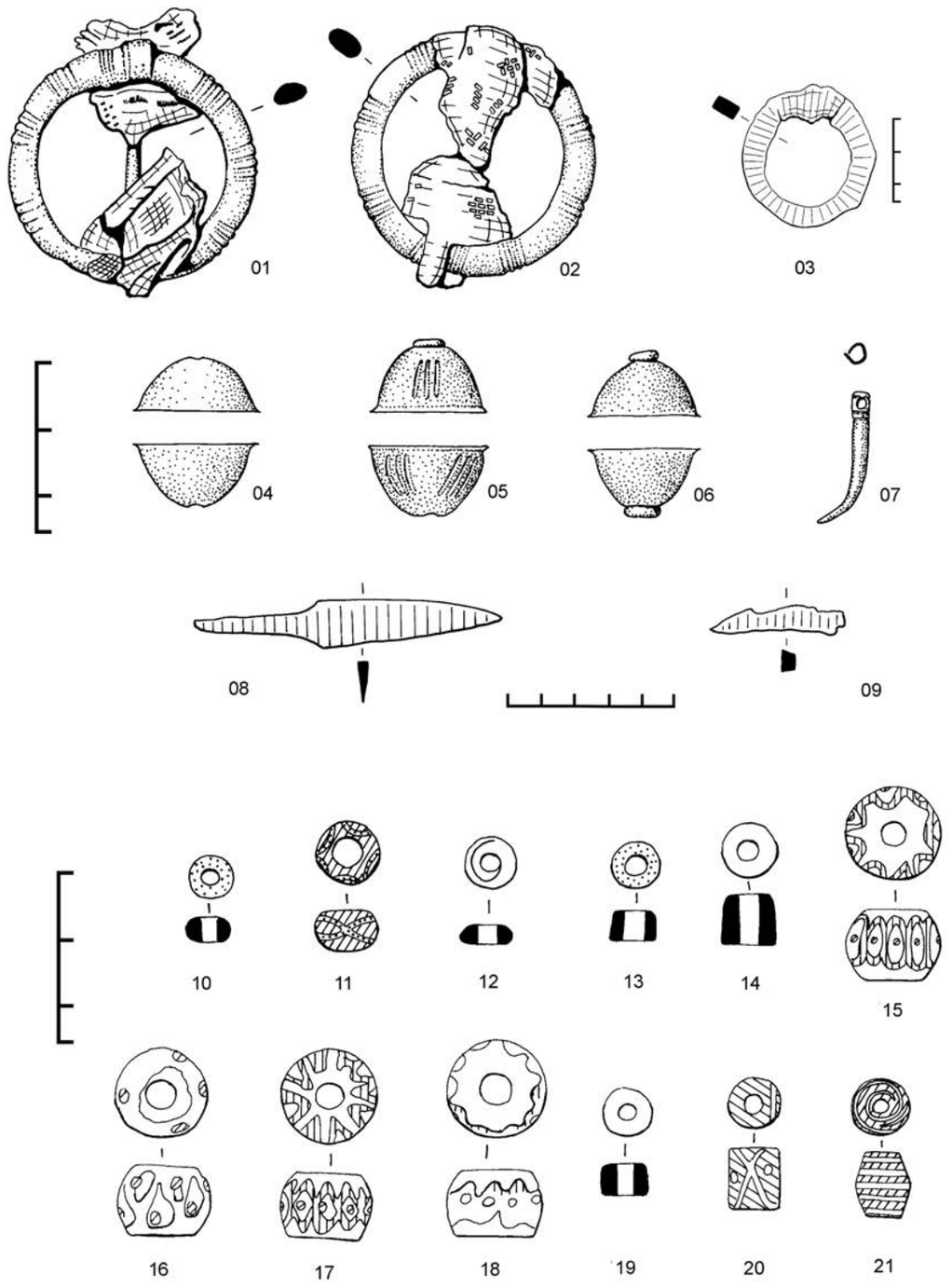


Fig 85 Finds from Grave 24. Non-ferrous objects and glass beads at 100%, iron objects at 50%. Finds described by number in the Inhumations Catalogue, pp 231–43

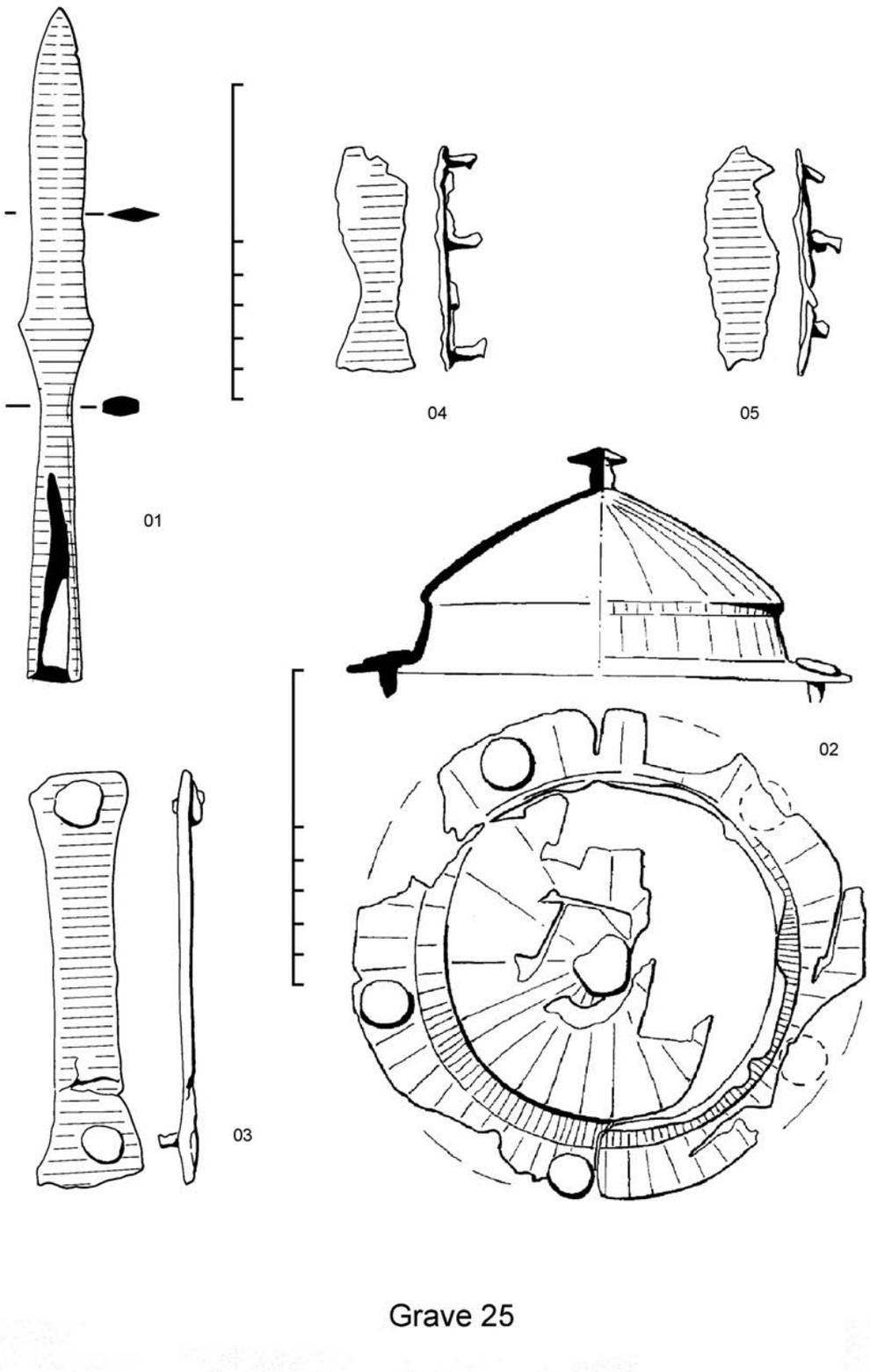


Fig 86 Finds from Grave 25. All at 50%. Finds described by number in the Inhumations Catalogue, pp 231–43

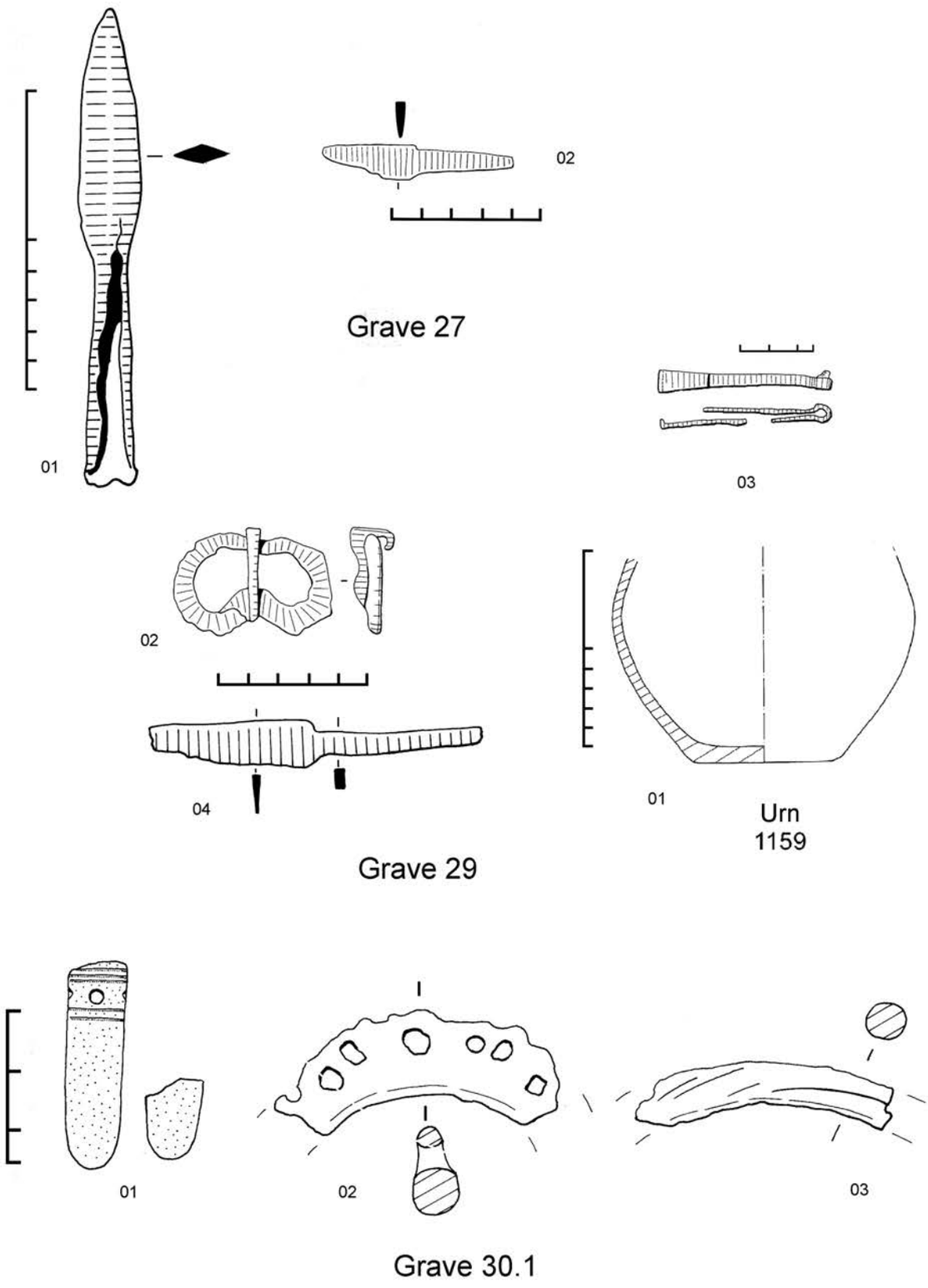


Fig 87 Finds from Graves 27–30.1. All iron objects at 50%, copper alloy and bone at 100%, pot at 33%. Finds described by number in the Inhumations Catalogue, pp 231–43

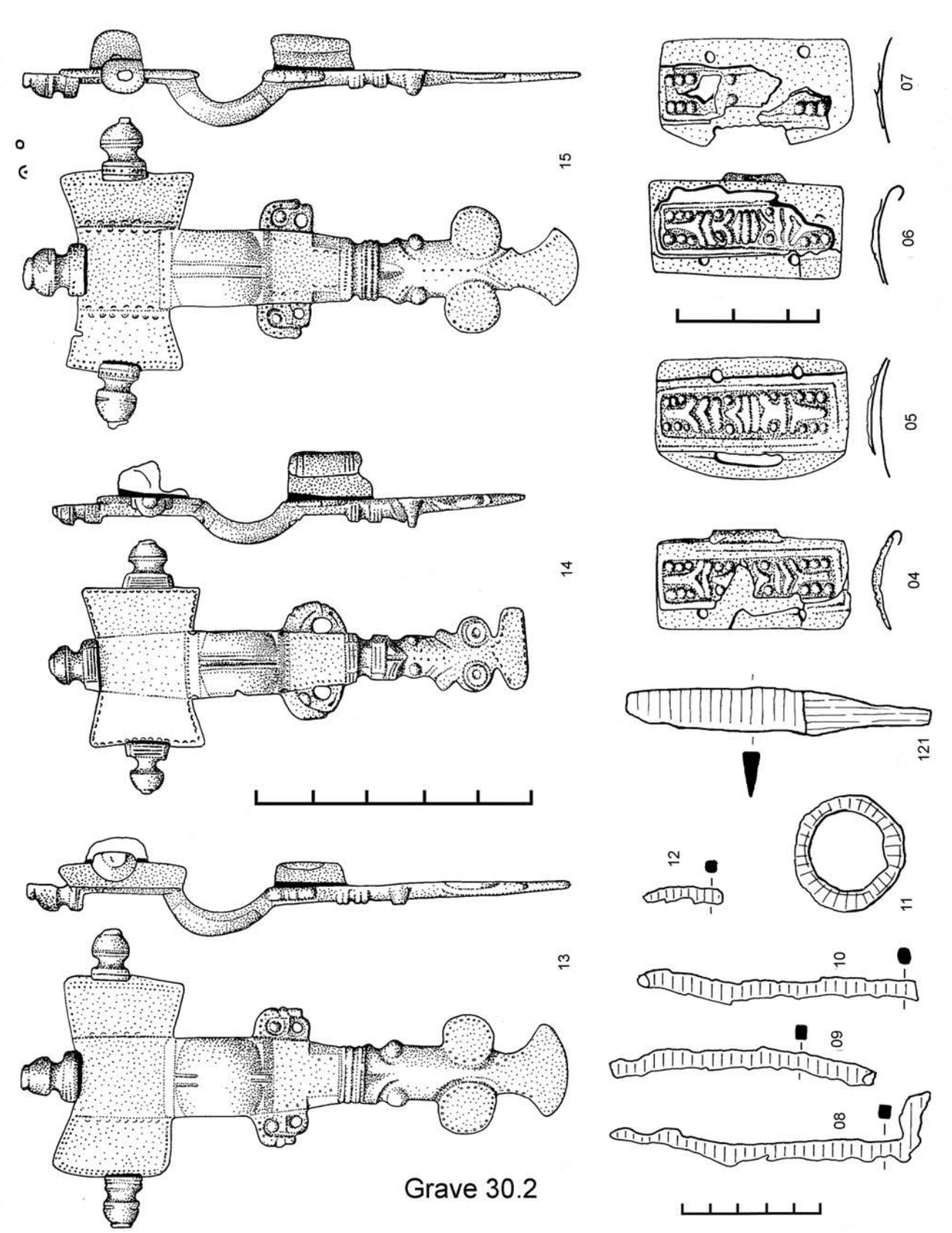


Fig 88 Finds from Grave 30.2. Copper alloy finds at 100%, iron at 50%. Finds described by number in the Inhumations Catalogue, pp 231–43

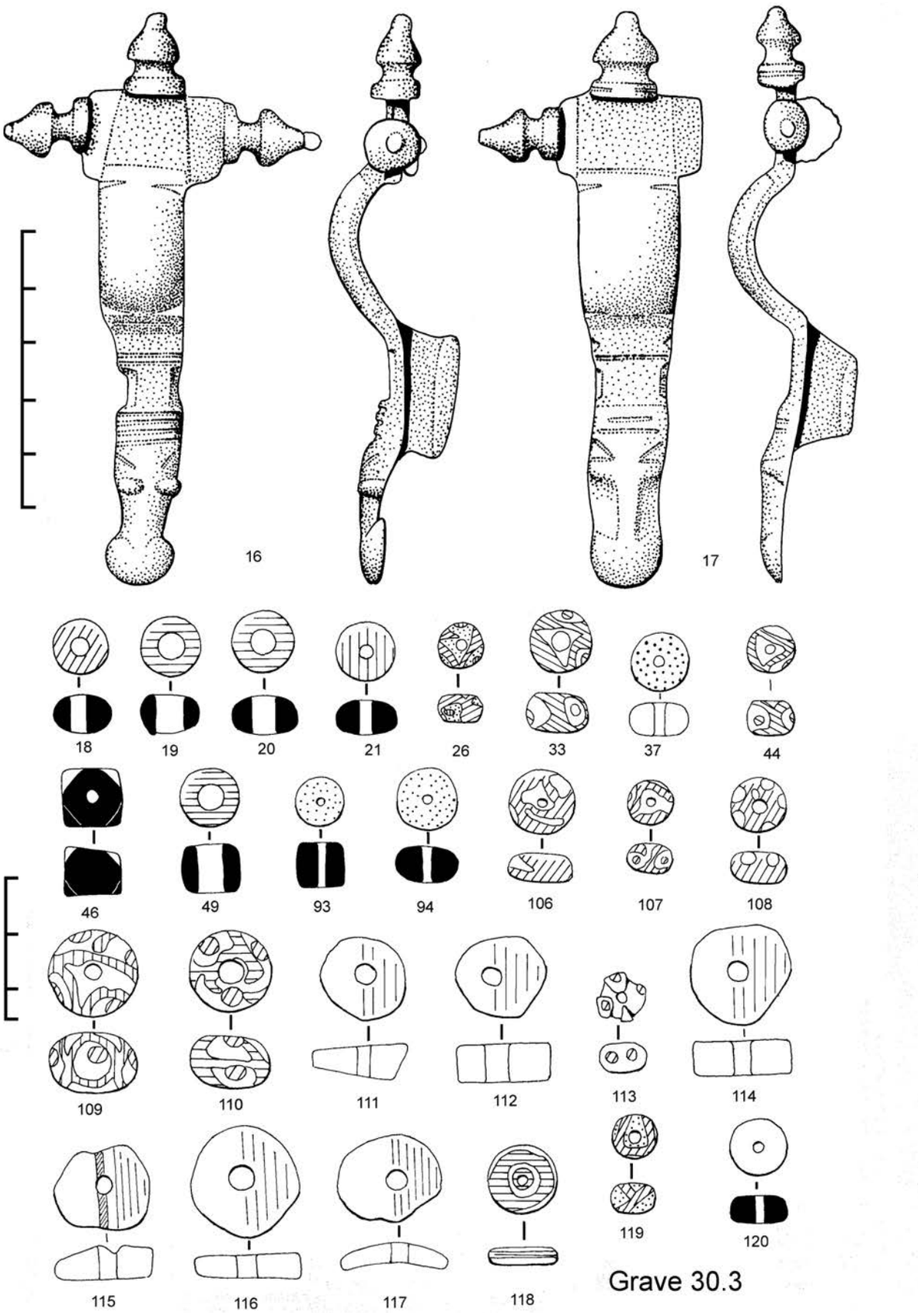


Fig 89 Finds from Grave 30.3. All objects at 100%. Finds described by number in the Inhumations Catalogue, pp 231–43

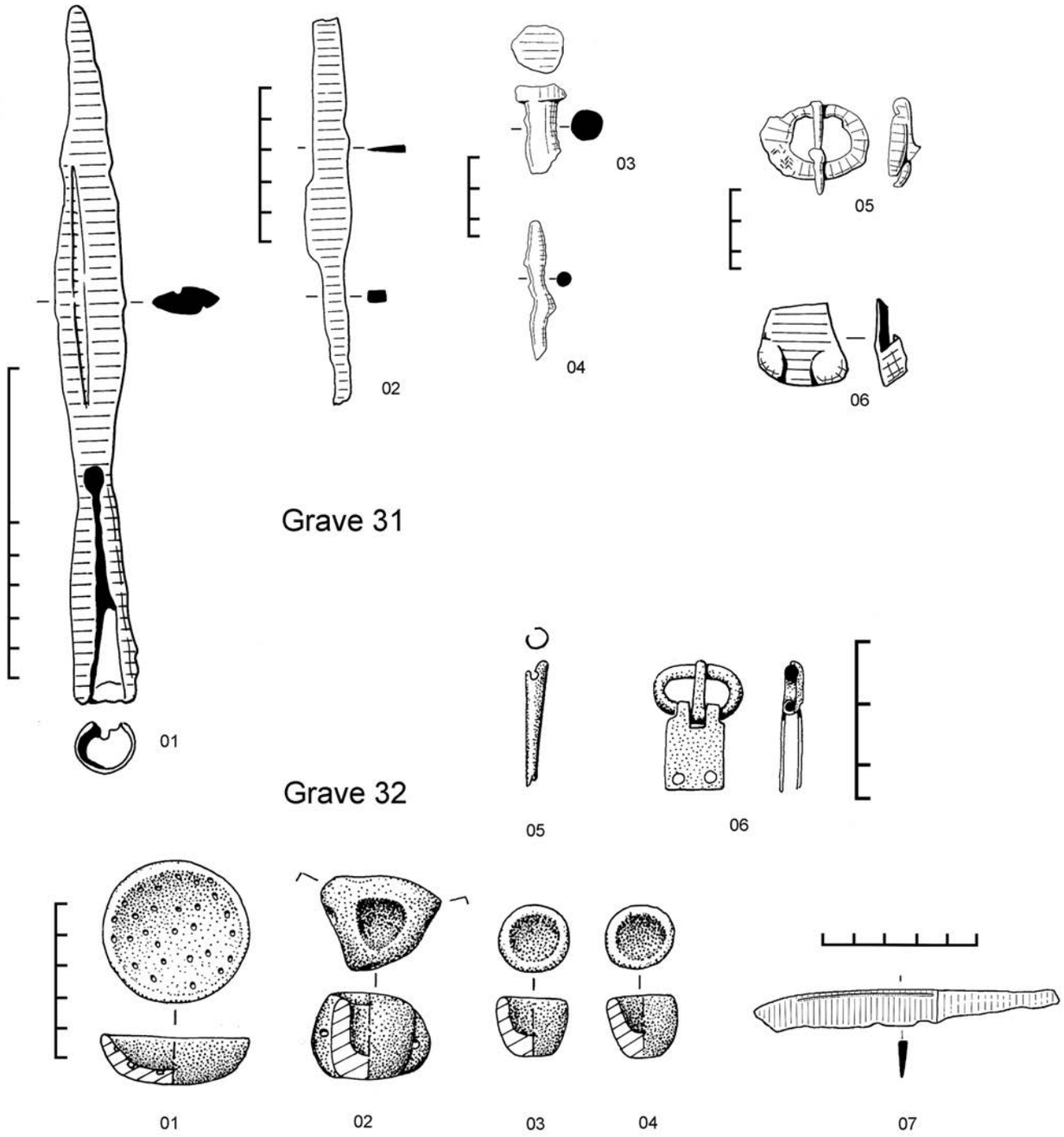


Fig 90 Finds from Graves 31–2. Iron and miniature pots at 50%, copper alloy at 100%. Finds described by number in the Inhumations Catalogue, pp 231–43

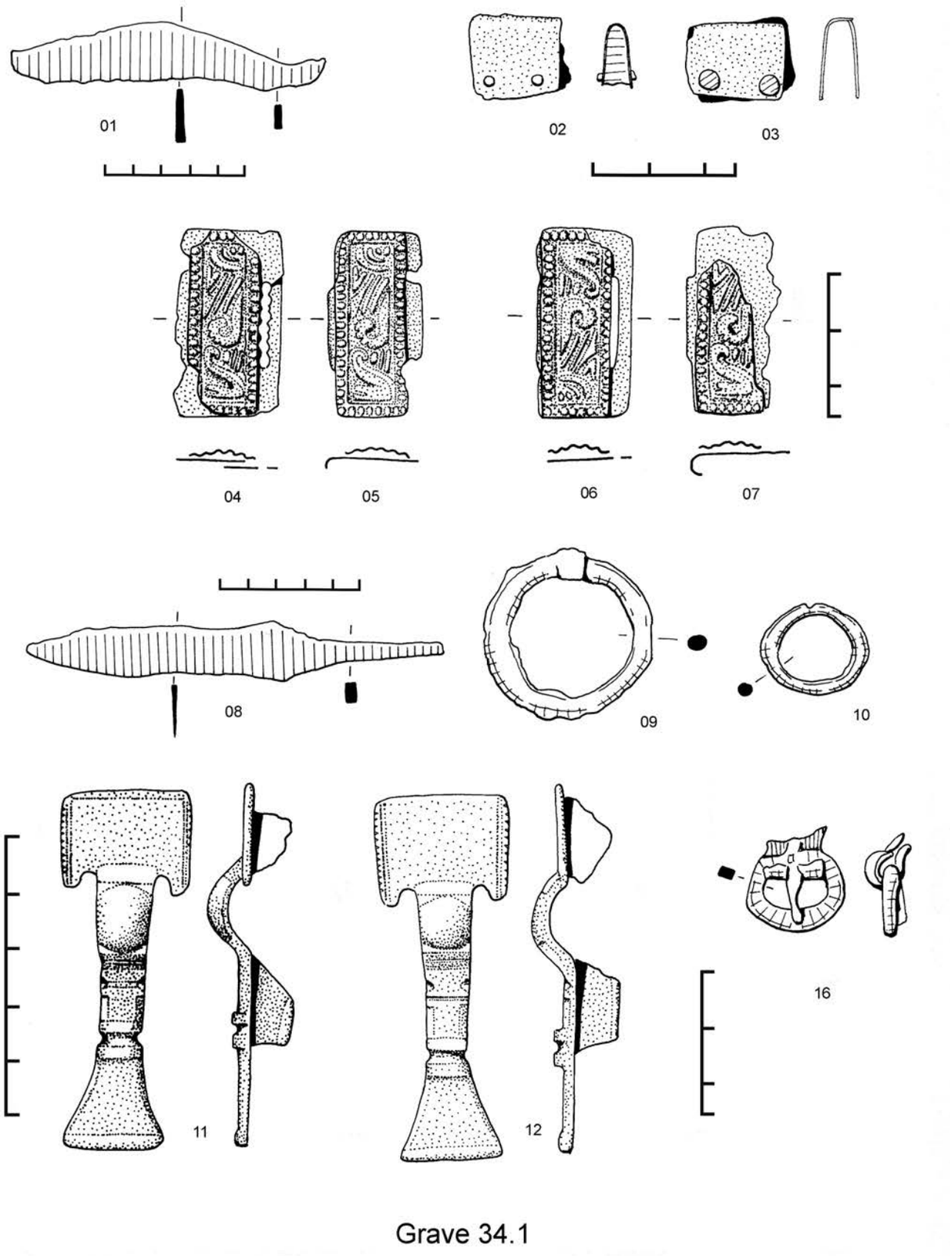
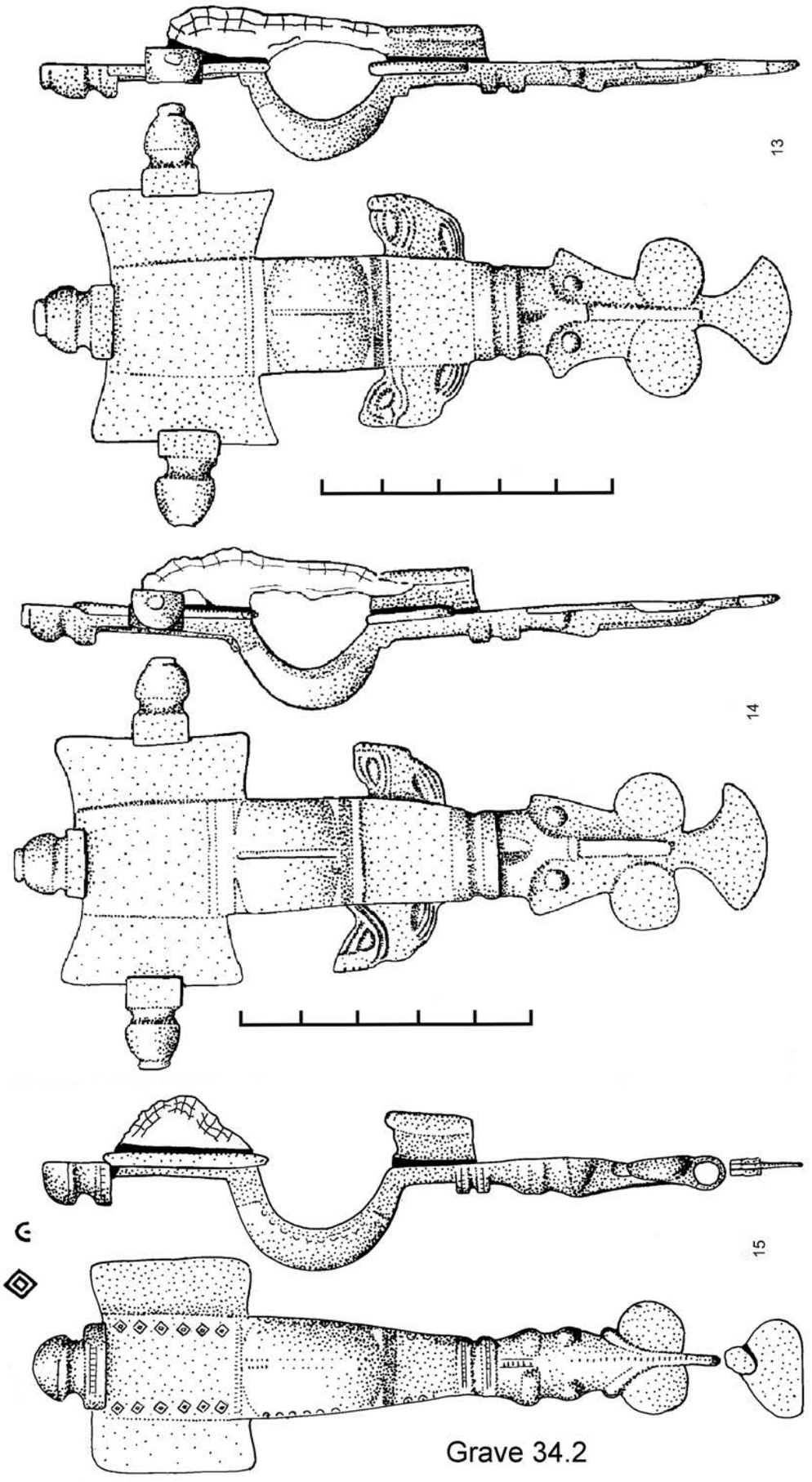


Fig 91 Finds from Grave 34.1. Copper alloy at 100%, iron at 50%. Finds described by number in the Inhumations Catalogue, pp 231–43


13
14
15
Grave 34.2

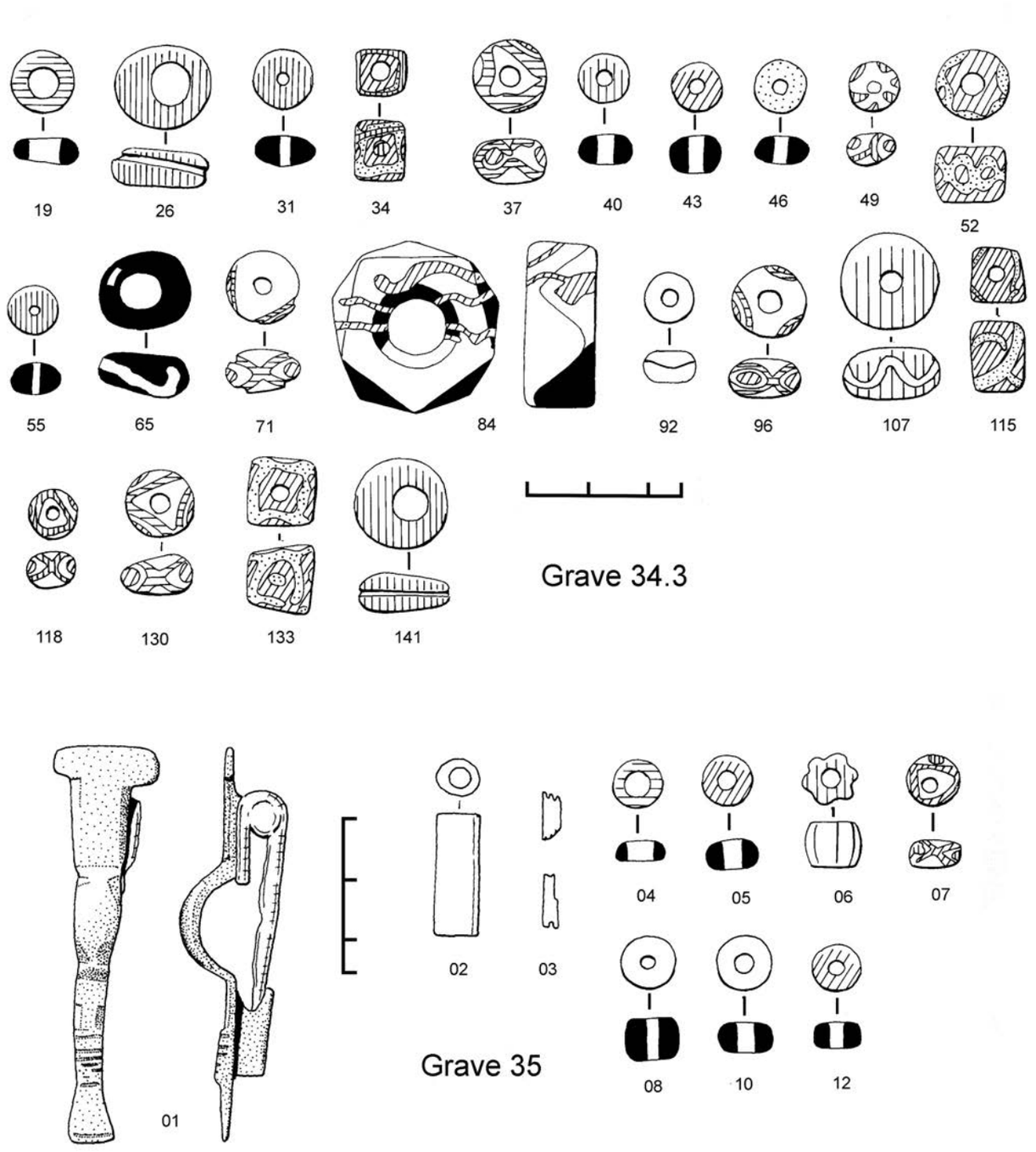


Fig 93 Finds from Graves 34.3–35. All finds at 100%. Finds described by number in the Inhumations Catalogue, pp 231–43

Fig 92 (Opposite) Finds from Grave 34.2. All finds at 100%. Finds described by number in the Inhumations Catalogue, pp 231–43

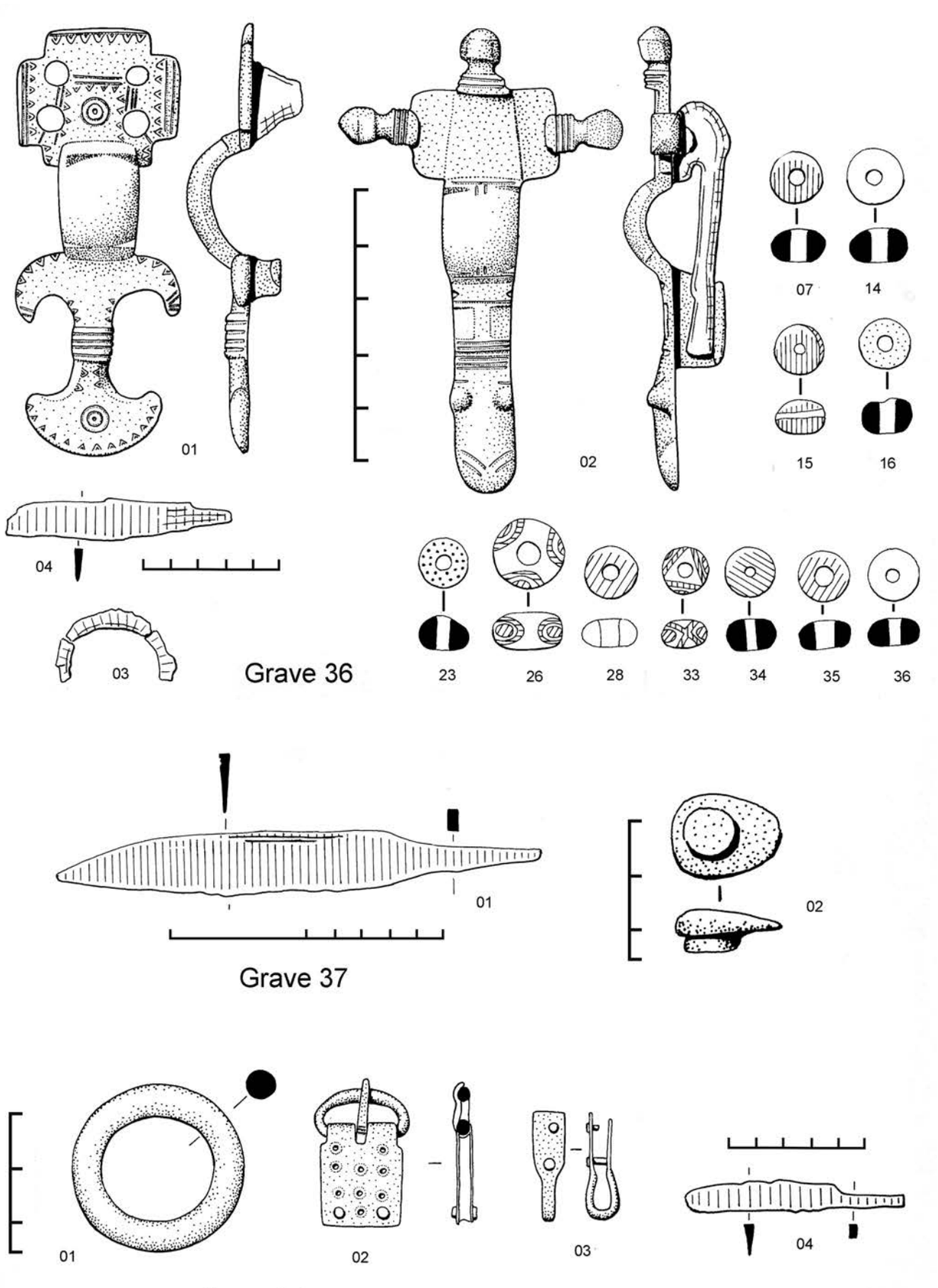
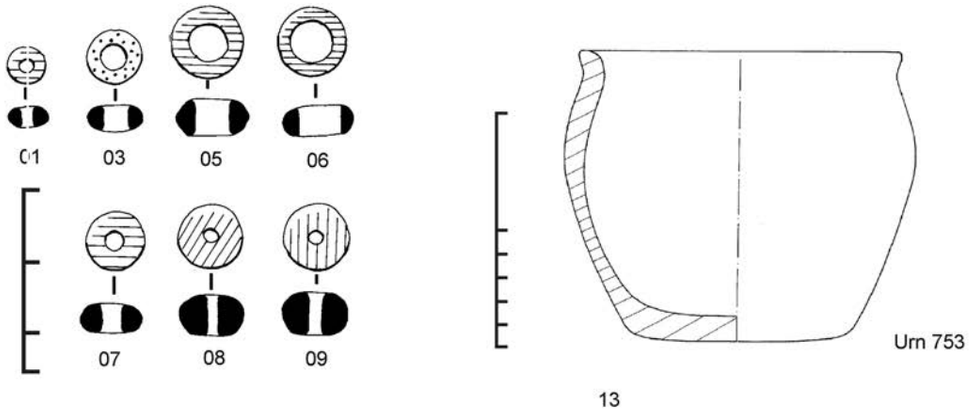


Fig 94 Finds from Graves 36–38. All copper alloy and beads 100%, iron 50%. Finds described by number in the Inhumations Catalogue, pp 231–43



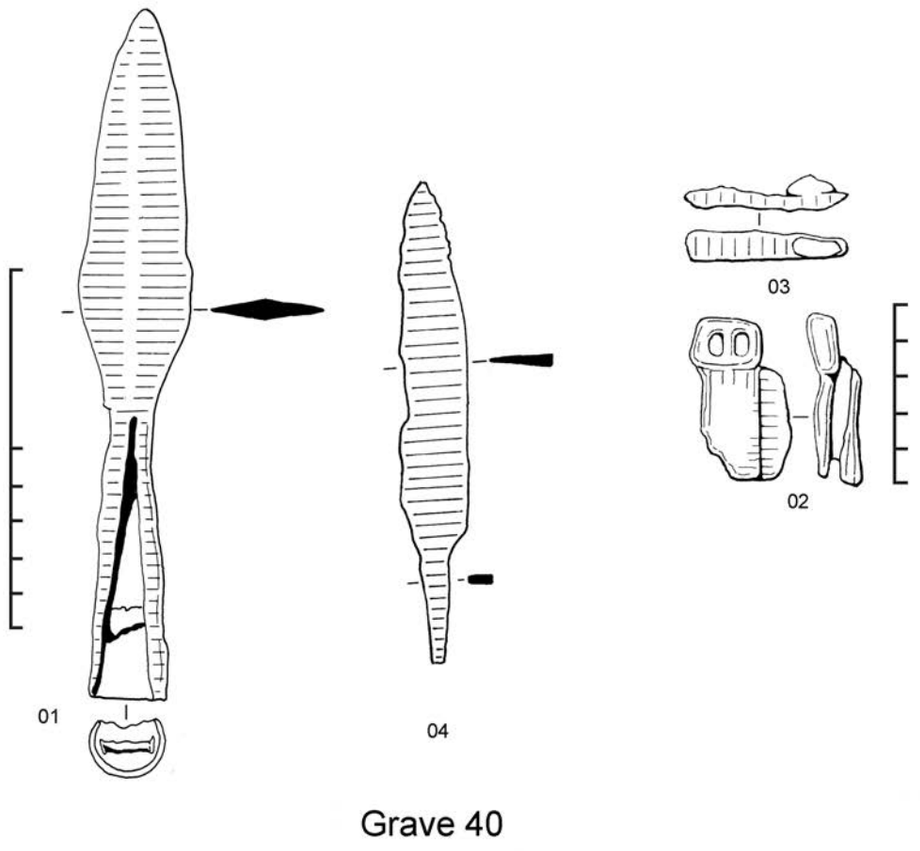


Fig 95 Finds from Graves 39–40. Beads 100%, iron objects 50%, pot 33%. Finds described by number in the Inhumations Catalogue, pp 231–43

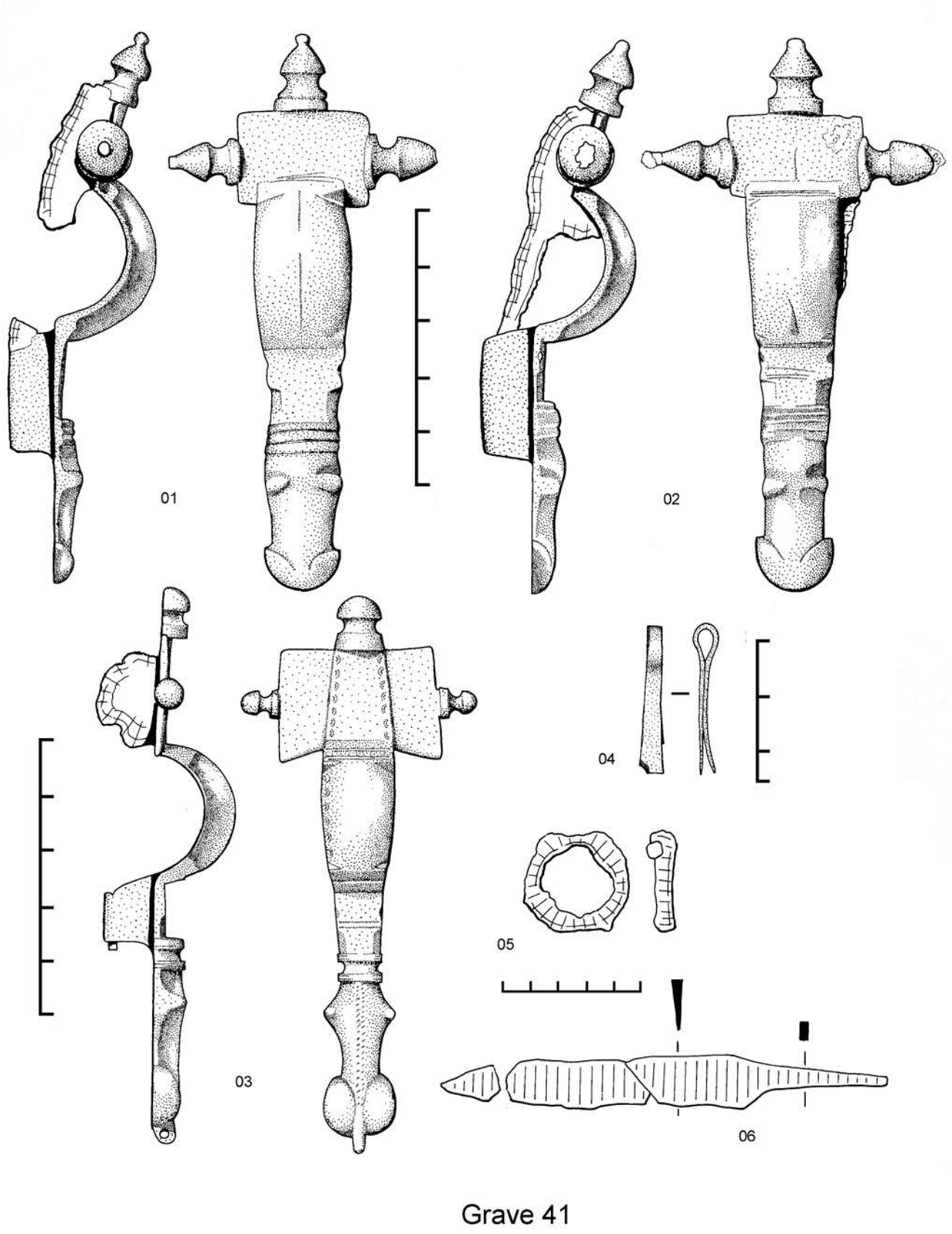


Fig 96 Finds from Grave 41. All copper alloy 100%, iron 50%. Finds described by number in the Inhumations Catalogue, pp 231–43

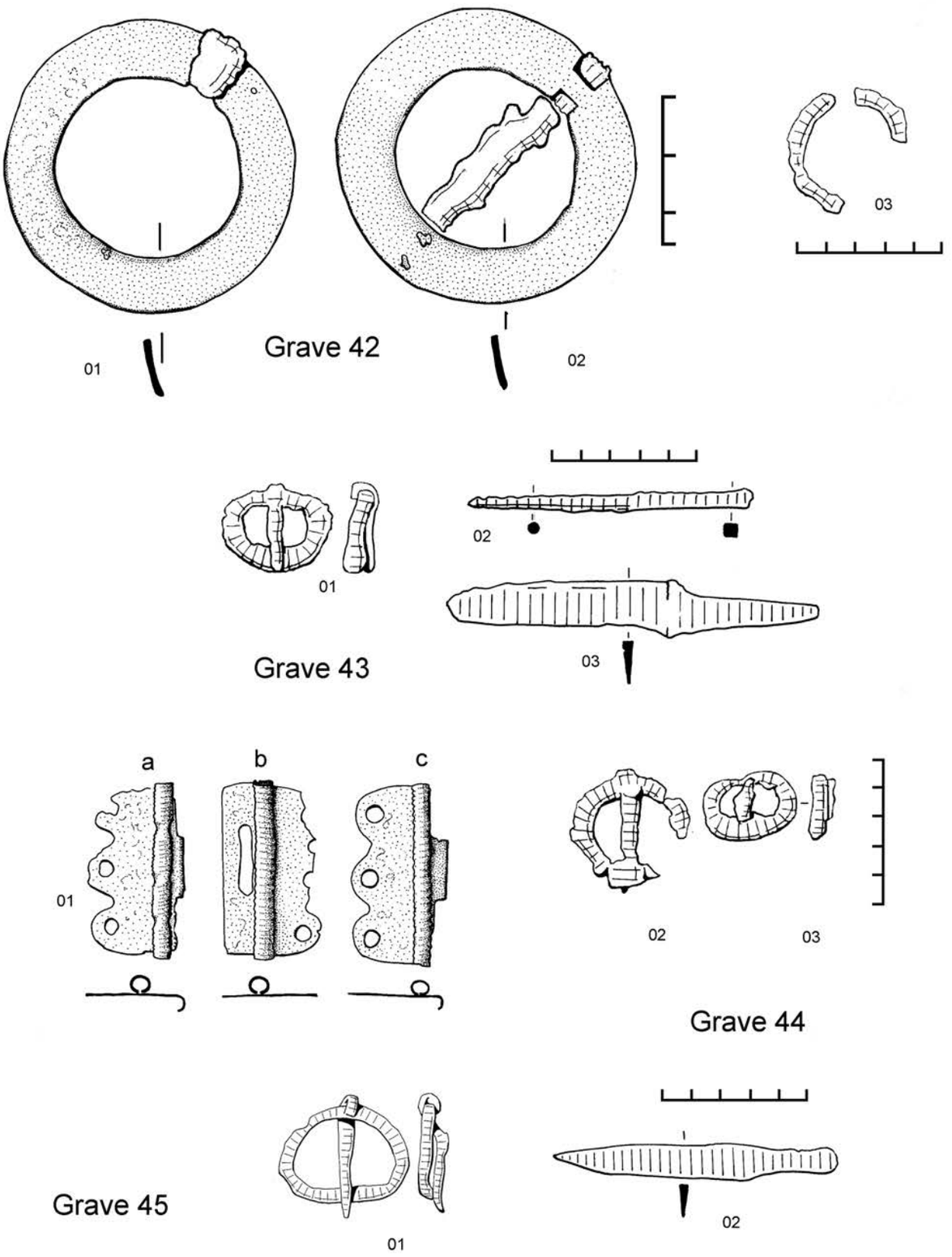


Fig 97 Finds from Graves 42–5. All copper alloy 100%, iron 50%. Finds described by number in the Inhumations Catalogue, pp 231–43

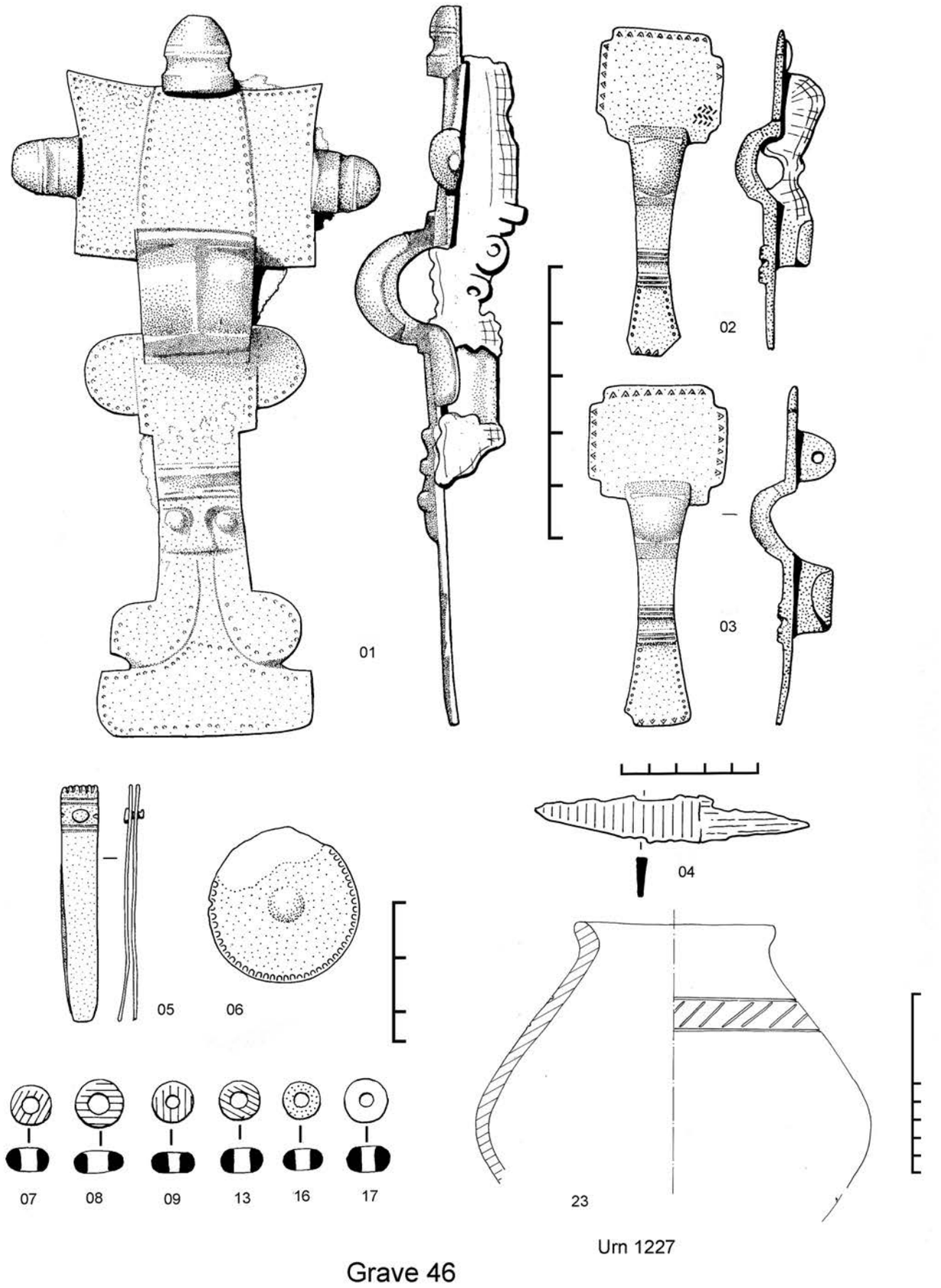


Fig 98 Finds from Grave 46. All non-ferrous objects and beads at 100%, iron at 50%, pot at 33%. Finds described by number in the Inhumations Catalogue, pp 231–43

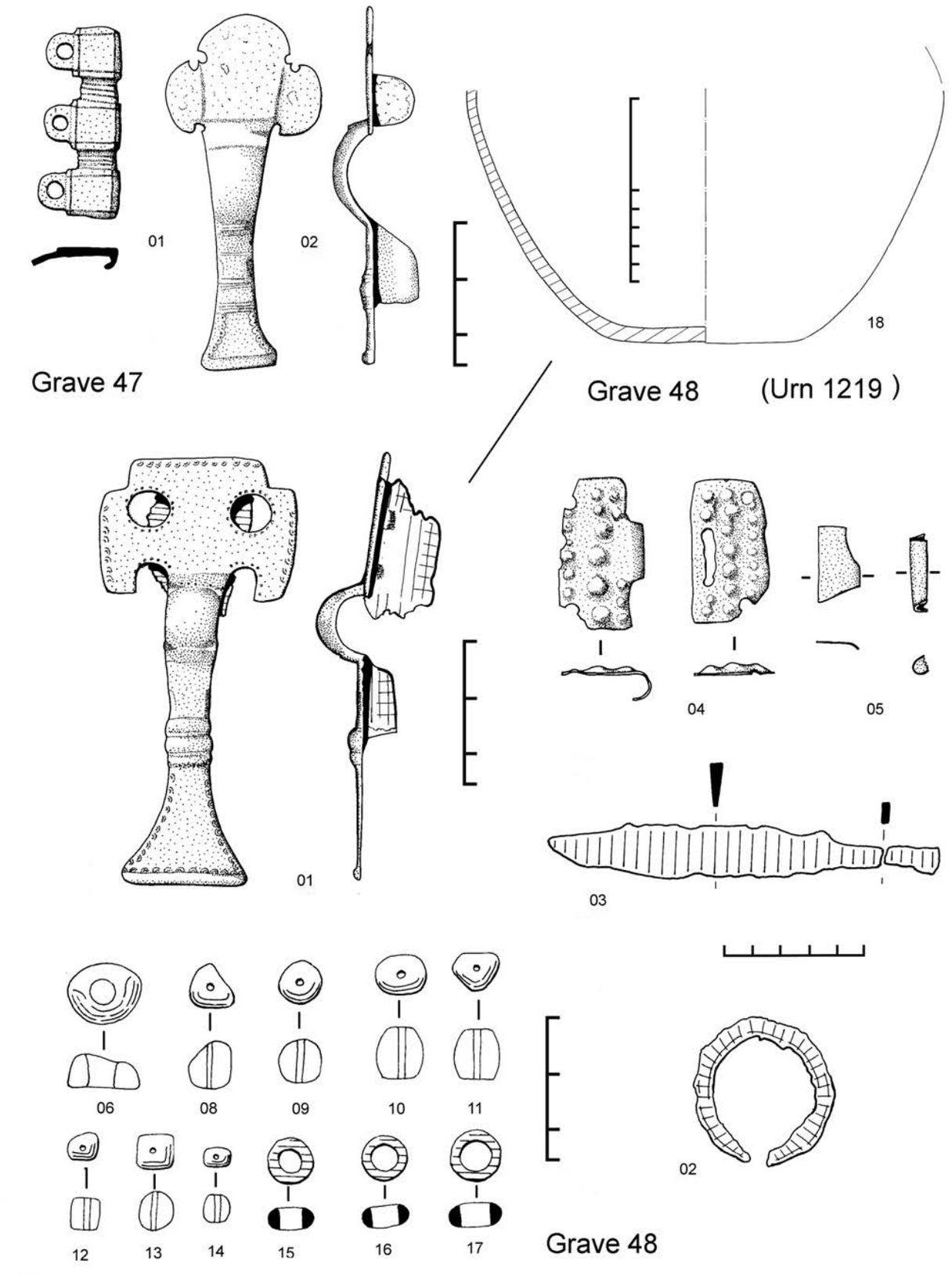
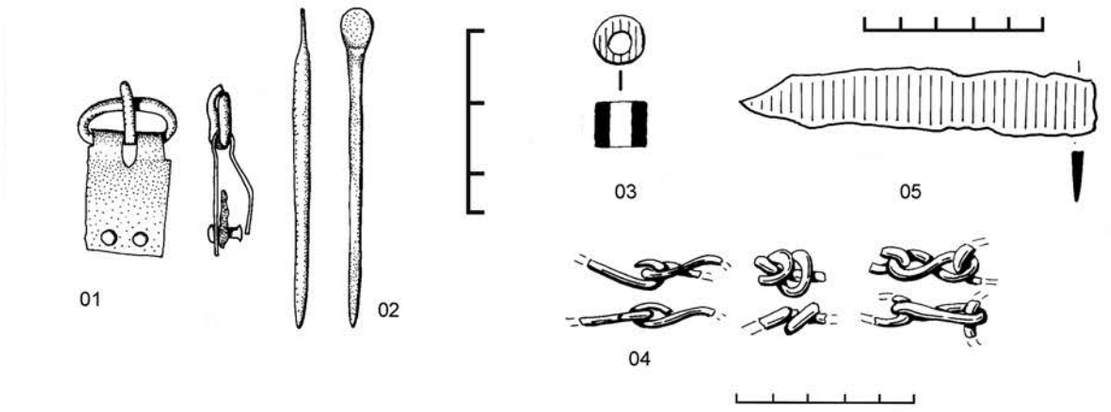
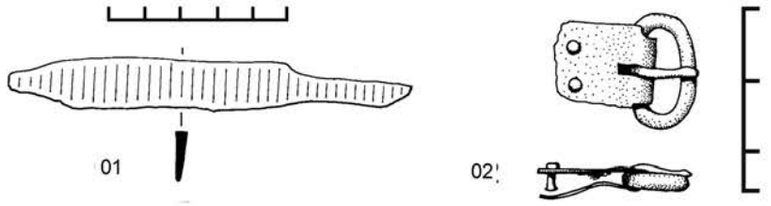


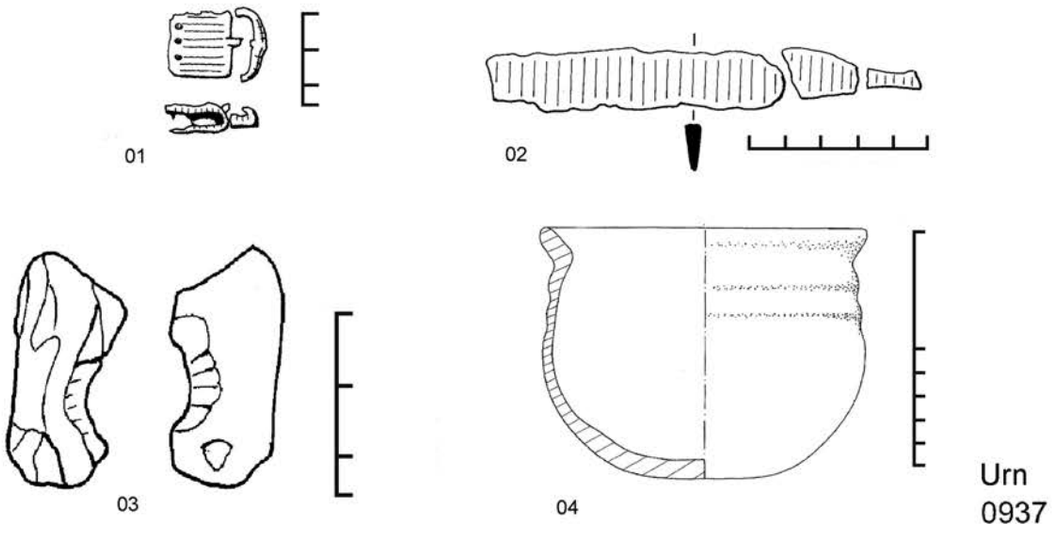
Fig 99 Finds from Graves 47–8. All non-ferrous objects and beads at 100%, iron at 50%, pot at 33%. Finds described by number in the Inhumations Catalogue, pp 231–43



Grave 50



Grave 51



Grave 53

Fig 100 Finds from Graves 50–3. All non-ferrous objects at 100%, iron at 50%. Pot at 33%. Finds described by number in the Inhumations Catalogue, pp 231–43

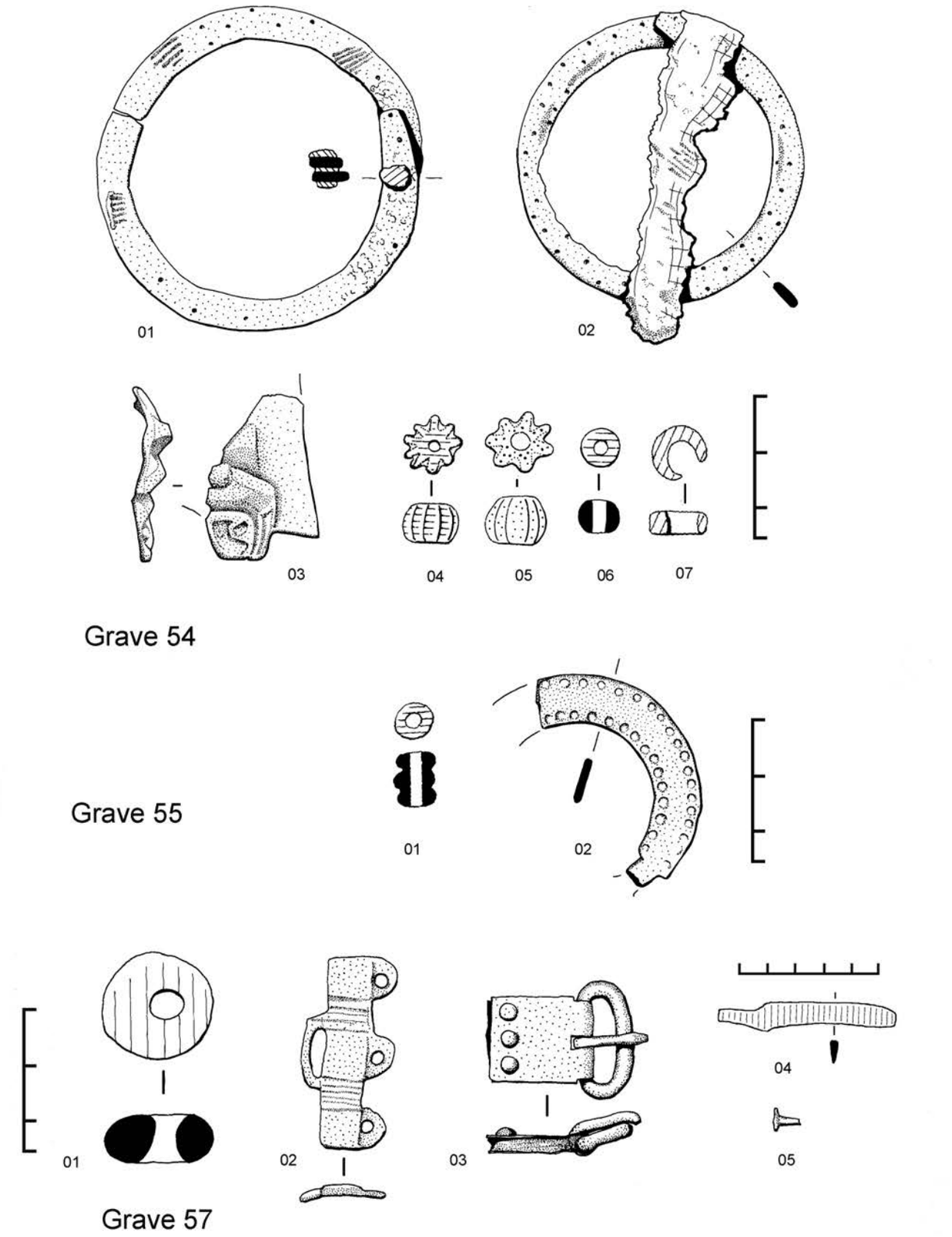


Fig 101 Finds from Graves 54–7. All copper alloy and beads at 100%, iron at 50%. Finds described by number in the Inhumations Catalogue, pp 231–43

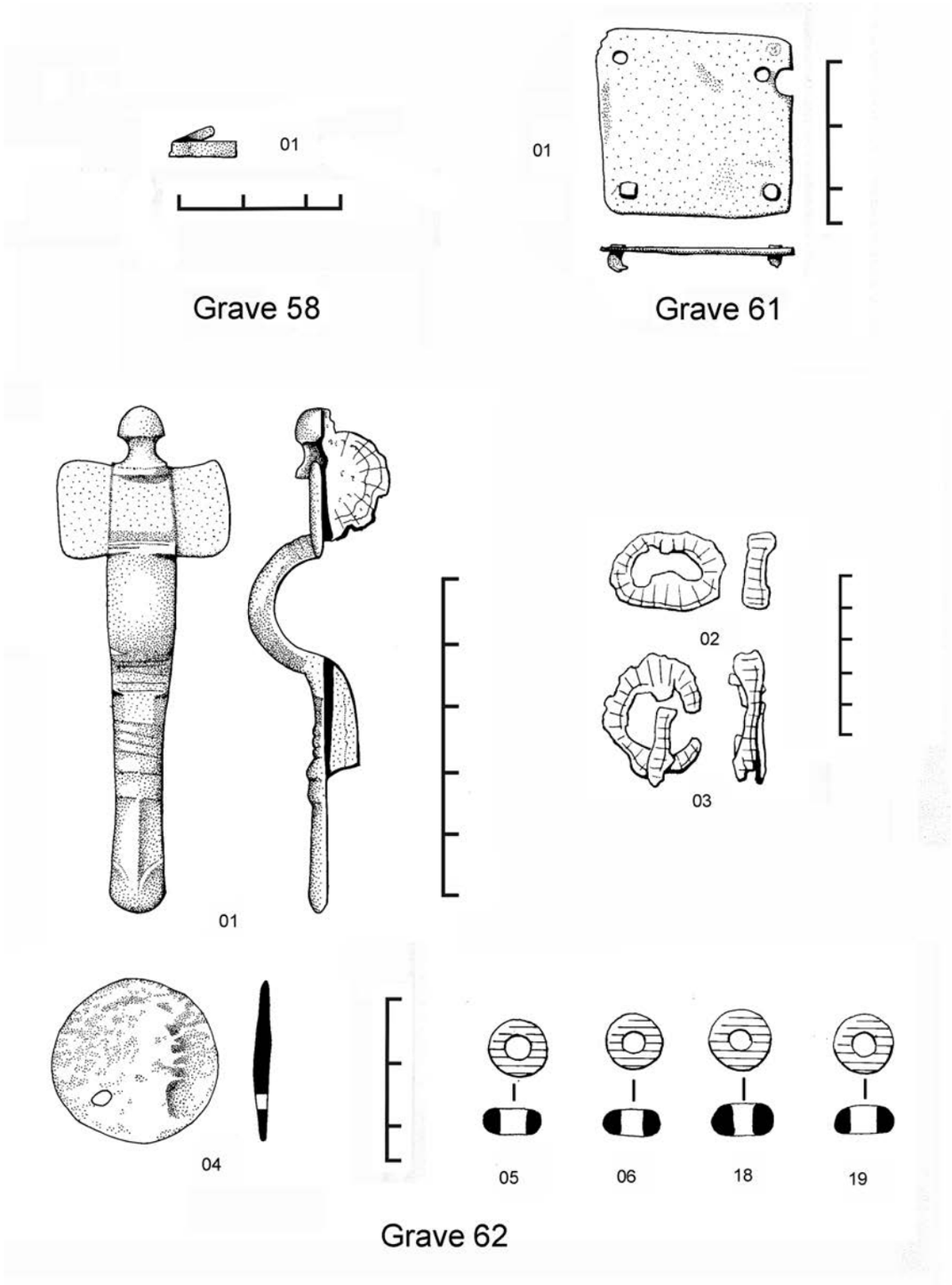


Fig 102 Finds from Graves 58–62. All copper alloy and beads at 100%, iron at 50%. Finds described by number in the Inhumations Catalogue, pp 231–43

as we have seen, absent. The move towards larger blades is, however, a trend, not a rule, and figures quoted by Härke (*ibid,* 145) show that 47.3% of his 7th-century blades were 'small'.

Eight of the knives are marked by having finely cut grooves down one, or in one case, both sides of the blade (Fig 78, Urn 325). It is often difficult to see from published illustrations if a blade bore these narrow grooves, but they occurred in Graves 77, 91, 116 and 174 at Castledyke, Barton on Humber (Drinkall and Forman 1998), Grave 76, Ruskington (Healey, pers comm),[21] Norton, Graves 23 and 56 (Sherlock and Welch 1992), Morning Thorpe, Graves 142 and 265 (Green *et al* 1987), and were often found in 7th-century contexts.

At Cleatham more knives were found with males than females, a pattern which can be paralleled at Castledyke. Elsewhere we find:

	Female	Male	Undetermined
Cleatham	10	19	4
Castledyke	13	31	14
Norton	32	9	7
Sewerby	12	7	6
West Heslerton	24	23	7

Table 73 Number of graves with knives by sex of accompanying remains

In discussing the pattern of knife use at Castledyke, Drinkall and Foreman (1998, 282) suggested that the higher proportion of males found with knives could reflect the cemetery continuing into the 7th century. At Cleatham all but one of the ten 7th-century knives were found with the remains of men.

The position of knives in the graves

Knives occurred in the Cleatham graves in sufficient numbers to allow some consideration as to how they were worn.[22] Only ten of the 33 knives found in the graves were in positions in keeping with them being worn on a belt. Thirteen of the knives were too far away from the body to have been worn and can only be seen as offerings. Seven of the knives were found under the left arm and it is likely that the knife was simply laid at the side of the body where it would have been worn by a right-handed person. With one exception, all of the knives found in this position were associated with the remains of young adults of both sexes.

Spatulate tools

These objects are characterised by their centrally set tangs and parallel-sided, round-ended blades which led Hirst (1985, 88–9) to propose calling them 'spatulate tools'. One example of a spatulate tool was found at Cleatham in Grave 23 (Find 2581, Fig 84). This grave was dated to the 7th century by a Type E2 spearhead, which is in accord with other dated finds of spatulate tools. Grave 23 contained the remains of a young adult male but spatulate tools do occur with women. At Castledyke, spatulate tools were found in Grave 164 (6th–7th century) and Grave 183 (late 7th century) (Drinkall and Foreman 1998, 283–4).

At Sewerby, examples were found in Graves 37/3, 48/1, 52/6 and 56/3, and were considered to be of 7th-century date (Hirst 1985, 88–9). Other examples have been found in 7th-century graves at Uncleby, East Yorkshire (Smith 1912, 157), and Garton Slack (Mortimer 1905, pl 83, fig 625, pl 88, fig 680).

The interpretation of these objects has been the subject of some discussion. Evison (1987, 110) suggested that they could be sharpening steels, but the metallographic examination of examples from Sewerby showed them to be softer than the knives which accompanied them (Hirst, *op cit*). Many examples have a rectangular cross-section and blunt edges. The example from Burial 3 at Wigber Low, Derbyshire, had a neatly formed spiral-shaped finial on its tip (Collis, 1983, 80, fig 41). There are, however, spatulate tools which, like the Cleatham example, had a sharp edge. A second interpretation is that they were firesteels, used for striking sparks from a flint for making fire. This is plausible, but so far as this writer is aware no spatulate tool has been found with a flint. At Cleatham we have the undoubted example of a firesteel from Urn 622 (Find 1727).

Bone handles (Fig 107)

Of the three objects described as 'handles', only one identification was certain: Find 519 from Urn 173. Two finds may be handles, Find 579 (Urn 216) and Find 1970 (Urn 639). The fine octagonal handle from Urn 173 has been burnt and is distorted. Its socket is rectangular and bears traces of iron staining from contact with a blade. Urn 173 can be placed in Phase 1, and the dimensions of this handle suggest the presence of a large Class 3 blade which is otherwise

Grave	Find No	Type	Sex	Age	Position in grave	Figure	Dating
1	2486	B1	M	oa	At hip	11	7th?
4	2489	A1	M	ma	Behind back	11	Mid-6th
5	2490	B1	M	ya	Above shoulder	11	Late 5th, early 6th
7	2492	A1	?	child/adol.	At hip	12	5th–7th
9	2500	B1	M?	oa	In front of waist	13	Late 5th
10	2535	D2	M	ma	At hip	13	7th
12	2540	D2	M	ya	In front of waist	14	6th–7th
13	2550	A1	F	adol.	At side of body	14	Later 6th
14	2554	?1	M	ya	At hip	14	Later 6th
17	2566	E1	M	ya	At hip	15	7th
18	2571	E2	M	ya	Under left arm	15	7th
19	2574	A1	F	ma	Under left arm	15	6th
23	2582	D2	M	ya	Under left arm	17	7th
24	2590	A1	F	ya	In front of waist	18	Later 6th
27	2607	B1	M	adol.	At hip?	19	Late 5th–6th
29	2612	B1	M	oa	To side of waist	20	5th–6th
30	2895	B1	F	ma	At waist	20	Mid-6th
31	2734	B1	M	ya	Above hip	21	5th–early 6th
32	2746	D1		ma	Behind body	21	7th
34	2754	A1		ma	Behind knees	22	Mid-6th
36	2925	D1	F?	ma	In front of waist	23	Early to mid-6th
37	2958	A2	M	ya	In front of body	23	7th
38	2963	D1	F	ya	At hip	24	7th
40	2979	A1	M	ya	Beside hip	24	5th
41	2985	A2		adult	At hip, point upwards	24	5th–early 6th
43	2991	A1	M	oa	Beside hip	25	5th–6th
45	3002	B1	M	ya	At waist	25	5th–6th
46	3006	B1	F	adol.	Under ribs	26	Early to mid-6th
48	3029	A1	F	ya	Under left arm	27	Mid-6th
50	3051	A1	F	ya	Under left arm	27	7th
51	3052	A1	M	ma	Above and behind left hip	28	7th
53	3055	A1	M?	ya	Under left arm	28	5th–6th
57	3074	A1	F	ya	Under left arm	30	6th

Table 74 Context of the knives found in Cleatham graves. M, male; F, female; C, child; a, adult; adol, adolescent; ya, young adult; ma, mature adult; oa, old adult

Find No	Type	Notes
4	A1	
41	?	
48	C1	Blade grooved on both sides
54	D2	
55	E2	
60	E2	Blade grooved on one side
63	?2	
99	A1	
117	D2	

Table 75 Unstratified knives from the Cleatham cemetery

absent. This handle can be paralleled at Spong Hill, where a handle found in Urn 3283 shared its flattened cross-section (Hills *et al* 1994, 115, fig 128). This urn was undecorated (*ibid,* fig 26) but was found in the same pit as Urn 3284, which, at Cleatham, would be in Group 08a, Phase 3.

The second possible Cleatham handle comes from Urn 216 and consists of an unburnt antler tine, the small end of which has been sawn off, the other end being broken. Holes have been drilled into both ends but nothing survives to give any indication of its function. Urn 216 is a Group 05b vessel and

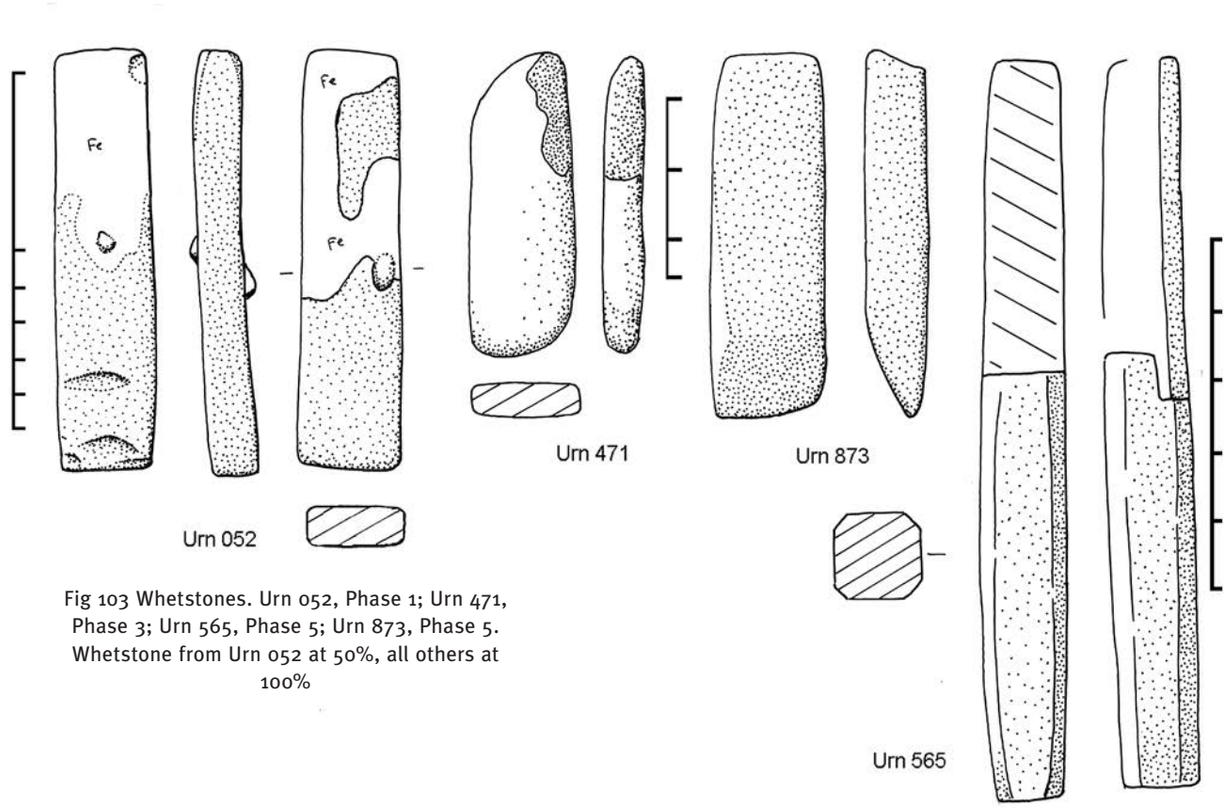


Fig 103 Whetstones. Urn 052, Phase 1; Urn 471, Phase 3; Urn 565, Phase 5; Urn 873, Phase 5. Whetstone from Urn 052 at 50%, all others at 100%

can be placed in Phase 2. The final possible handle was found in Urn 639, a Group 13n vessel of Phase 1. This object consists of a short length of rectangular-sectioned antler with a rounded end. It is truncated but could be interpreted as the end of a handle.

Whetstones (Fig 103)

Four whetstones were found at the Cleatham site, all of which were from phased urns. These were found to belong to Phases 1, 3 and 5, which shows that the inclusion of whetstones was an accepted practice over the whole period of the Cleatham cemetery.

Urn	Find	Phase	Length	Cross-section
52	211	1	119mm	Rectangular
471	1255	3	60mm	'Sponge finger'
565	1581	5	102mm	Octagonal
873	2219	5	51mm +	Rectangular

Table 76 Whetstones from the Cleatham urns, illustrated on Figure 103

Evison (1975), drawing on petrological work carried out by S E Ellis of the British Museum (Natural History), found that medieval whetstones could be divided broadly into three groups, these being:

1. Whetstones made from Norwegian schist
2. Whetstones made from greywackes from Scotland, Wales and Brittany
3. Whetstones made from a range of quartzose, micaceous sandstones, siltstones and sandy limestones which had origins relatively close to their findspot.

In the early Anglo-Saxon period it appears that the general practice was to use any suitable local stone to make whetstones. There are some exceptions: Kentish ragstone and some greywacke whetstones appear to have been distributed. A whetstone from Grave 24 at Fonaby, Lincs. was found to be made of sand-silt greywacke from the Scottish borders, although an origin in the glacial drift cannot be excluded (Cook 1981, 26–8, 85–6, fig 8). This whetstone was found in a grave dated to the second half of the 6th century, which is unusual as most whetstones come from graves of 7th-century date (Evison, *op cit*). Whetstones were placed in urns at the beginning of the sequence at Cleatham and it appears that they became more common later on. However, we cannot be emphatic in view of the low number of finds involved. All four of the Cleatham whetstones are neatly made

and symmetrical; the example found in Urn 565 was of outstanding quality. None had been burnt or showed any sign of use, although two of them (from Urns 873 and 565) had been broken. The carved sceptre/whetstone from Sutton Hoo (Bruce-Mitford 1978, 311–28 and figs) and the example carved with a human head from Hough on the Hill, Lincolnshire (*ibid,* 364–9, fig 267), suggest that, in the early Anglo-Saxon period, whetstones had an importance beyond that of utility. This interpretation is supported by the massive 463mm long whetstone from Uncleby (Evison, *op cit,* 81–3, figs 5–7) which was found set upright in the ground near to a 7th-century grave. Whetstones were found to be present at a low frequency at four of the seven cremation cemeteries included in Table 106.

The Cleatham whetstones were examined by Mr. Steve Thompson, Keeper of Natural History and Geology at the North Lincolnshire Museum. Mr. Thompson reported that all were made from a fine-grained micaceous siltstone which could be found locally.

Firesteels[23]

Three possible firesteels were found at Cleatham, one (Find 1727, Fig 78) in Urn 622 (Group 10s, Phase 3–4). This consisted of a rectangular bar of iron with a curved grip forming two finger holes. A further possible example, with an arched back and up-turned terminals, was found in Grave 34 (Find 2747; Fig 91) and could be dated, by its associations, to the 6th century. The final possible firesteel is the spatulate tool found in Grave 23 (Find 2581; Fig 84), a 7th-century burial which is discussed above. Parallels for the Grave 34 firesteel are not uncommon. Grave 183 at the Castledyke cemetery, contained a similarly shaped object, together with a chatelaine and workbox of 7th-century date with the remains of a woman (Drinkall and Foreman 1998, 90, fig 114). A steel very like the example from Grave 34 was found in a 7th-century grave at Stenigot, Lincolnshire (Thompson 1956, 192–9, pl XII b 2). Debate as to the interpretation of these objects as either 'firesteels' or 'purse mounts' was convincingly settled in favour of them being firesteels by David Brown (1977, 451–77). Brown's study was concerned with firesteels fitted with buckles, but similarities in the shape and the position in graves of finds like the Cleatham example suggest that, they too, were firesteels. In describing three iron objects from Ipswich, West (1998, 57, fig 77, 13–15) cautiously refers to 'three purse mounts, or more likely, as they are so small, strike-a-lights'. The object from Urn 622 is quite unlike the curved firesteel from Grave 34 and, so far as this writer has been able to ascertain, is unique in Anglo-Saxon England. Its form is identical to that of an early modern firesteel and, if it were not found in a closed context it would have been considered recent.

Latch lifters and girdle hangers

Only three iron latch lifters were found in the Cleatham cemetery, all deposited at the hip of the body in Grave 30 (Finds 2621, 2622, 2623; Fig 88). Two other burials contained iron rods which were interpreted on site as keys; the iron fragments in Grave 9 (Find 2501; Fig 80) were found on the upper chest and are better interpreted as the remains of an iron pin. Urn 546 (Group 00, unphased) contained fragments of an iron rod which could represent the remains of a latch lifter, but a rectangular iron plate (Find 1497) also found in this urn suggests that the iron fragments may have been part of more a complex object.

Four copper alloy girdle hangers were found at Cleatham, two from urns and two as topsoil finds.

Context	Find	Figure	Notes
Urn 280, Phase 3–5	F758	72	Burnt fragment of bit, ring-dot stamping
Urn 894, Phase 1	F2263	72	Burnt fragments of bit and bar, ring stamping
Unstratified	F16	73	Fragment of bit, stamp decorated
Unstratified	F50	73	Broken in antiquity, bar truncated with a hole drilled for suspension

Table 77 Girdle hangers from Cleatham

None of the Cleatham girdle hangers was found in a grave. The two unstratified girdle hanger fragments (F16 and F50) were unburnt and are likely to have come from burials. Girdle hangers were found in half of the cremation cemeteries considered during this study, but at a low frequency. Two of the Cleatham girdle hangers came from phased urns, Find F758 from Urn 280 which could only be assigned to Phase 3–5 and F2263 which was found in Urn 894 of Phase 1. A girdle hanger similar to unstratified Find 16 was found in Grave 25 at Fonaby associated with 52 amber beads, suggesting a date in the mid- to late 6th century (Cook 1981, 28, fig 9). At Empingham II, Rutland, a girdle hanger resembling the fragment

from Urn 280 (F758) was found in a 6th-century grave (Timby 1996, 122–3, fig 148, 8–9).[24]

There has been some discussion of the function of girdle hangers, but it now seems accepted that they were symbolic keys (Hirst 1985, 87–8). Girdle hangers and latch lifters occur in the same graves, showing that they had separate functions. While some simple, anchor-like girdle hangers might have functioned as lift-keys, the majority are too elaborate for use and can only have been symbolic, indicating a woman's status as mistress of the household (Fell 1984, 59–60). This view has been contested. At the 7th-century cemetery at Polhill, Kent, it was noted that keys were not found with jewels, and it was suggested that the key-bearer was not the lady of the house, but a housekeeper (Hawkes 1973, 195). This is not the case in the Humber region. Cleatham Grave 30 was one of the richest burials on the site, and at Sewerby Hirst noted that girdle hangers were found in the best-appointed graves (Hirst, *op cit*). At Cleatham, the unstratified girdle hanger fragment Find 50 had been truncated and perforated for suspension. Other girdle hangers have had holes drilled through them to allow them to be used after breakage. A fragment from Grave 396 at Morning Thorpe had been modified in this way (Green *et al* 1987, 154, fig 447). This was found with the loop and bar broken from another girdle hanger. These truncated and fragmentary girdle hangers further suggest that their rôle went beyond utility.

Cemetery	Total graves	Graves containing latch lifters, total		Graves containing girdle hangers		Girdle hangers, total
Cleatham	62	1	1.6%	–	–	2
Castledyke	201	13	6.5%	1	0.5%	3
Empingham	136	19	14.0%	5	3.7%	9
Fonaby	49	8	16.3%	5	10.2%	8
Morning Thorpe	434	20	4.6%	9	2.1%	13
Norton	120	14	11.7%	1	0.8%	2
Sewerby	58	1	1.7%	3	5.2%	5
West Heslerton	186	15	8.1%	3	1.6	3

Table 78 Numbers of girdle hangers and latch lifters found with inhumations at comparable Anglian cemeteries

In view of the potential importance of girdle hangers and keys as badges of feminine status the number of finds found at some comparable Anglian cemeteries was analysed. It can be seen that the low number of graves containing girdle hangers found at Cleatham can be paralleled at Castledyke, Barton on Humber and at Norton. However, any idea that low numbers of these objects is a northern phenomenon is dispelled by the high frequency of girdle hangers at Fonaby and Sewerby. While the figure for Fonaby is distorted by the under-representation of male and poorly equipped female graves, it is clear that the frequency of girdle hangers must have been comparable to that found at Sewerby.

The proportion of Cleatham graves containing latch lifters was generally lower than that seen elsewhere, but is comparable to Sewerby. It was thought possible that cemeteries with a low proportion of graves containing girdle hangers had a correspondingly high number of graves with latch lifters. This was not found to be the case, and no coherent pattern could be discerned.

Ivory rings (Pl 30)

It was found that 159 of the Cleatham urns contained the remains of burnt ivory rings, of which 104 could be phased (Table 79). These rings were represented by small, burnt, fragments found with cremation deposit within the urns. It is impossible to reconstruct any of them, but all seem to have had a flattened 'D' cross-section. When found in graves, these rings are located at the hip, rather than around the arm, suggesting that they are the supports for the mouth of a purse or bag and not bangles (Myres and Green 1973, 102; MacGregor 1985, 110–12, fig 62; Hills 2001, 142–3).

Phase	Urns in Phase	Ivory rings
5	58.9	10.0 (17.0%)
4	113.7	19.8 (17.4%)
3	102.5	17.8 (17.4%)
2	137.7	16.1 (11.7%)
1	192.5	37.8 (19.6%)

Table 79 Number and proportion of urns in each phase containing ivory rings. Rings from urns coming from more than one phase have been spread over the phases

Ivory rings were found in all phases of the Cleatham sequence and it was impossible to identify any trends as usage seems to have occurred at a relatively constant level throughout the history of the site. It was suggested that ivory rings were found in early urns at the Caistor by Norwich cemetery (Green 1973, 102) but rings have also been found in 7th-century graves.[25] Hills (2001, 138) believed that ivory rings were in use throughout the period covered by the furnished graves. These dates are in accord with the long chronology suggested for ivory rings by the Cleatham sequence.

In addition to the ivory rings from the urns, a residual fragment was found in Grave 55 (Find 3070), and a fragment of an unburnt ring was found in Grave 30 (Find 3616). Unlike the fragments found in the urns, this ring had a round cross-section and was of a lighter construction. Its incomplete nature suggests that it was a graveside offering. Grave 55 is dated to the 5th–6th century and Grave 30 to the mid-6th century.

It can be seen from Table 106 that more urns contained ivory at Cleatham than at any of the other cemeteries, with Elsham, again, being the next highest. While the amount of ivory from Cleatham appears large, it should be noted that many of the urns contained only a trace (recorded as 0.01g)[26] and that the cemetery only produced a total of 1,403.85g. In view of the small quantity of ivory present in many of the urns it might be wrong to equate each of them with a ring; a single ring could be distributed amongst any number of burials.

The ivory must have come from outside the British Isles, with Africa, India or Siberia[27] as possible sources. Walrus tusks could not give a large enough diameter and locally found mammoth ivory is denatured and highly unstable. Ivory rings appear to have been most commonly used in Norfolk, Lincolnshire and East Yorkshire, with few examples in the south-east (Huggett 1988, 68–70). This is an unusual distribution pattern as most imported objects seem to radiate out from Kent. The link made by Huggett between this northerly distribution and the use of walrus ivory is untenable and was rejected by Bond following an examination of the Spong Hill material (Bond 1994a, 35–6).

Combs (Fig 104, Pls 32–3)

It was considered that combs had some potential in the sequencing of Anglo-Saxon cemeteries; they are common finds, and probably had a relatively short life. A number of attempts have been made to classify Anglo-Saxon bone, or to be more accurate antler, combs. Detailed work on continental combs was undertaken by Thomas (1960), whose study was extended by Böhme (1974). The work of Roes (1963) on the combs from the Dutch Terpen is relevant for the English material and MacGregor (1985, 73–98) gives a useful account of the forms of antler comb used in the British Isles. West (1985, 126) found that Böhme's work was not relevant to the combs from West Stow. The classification of the Cleatham combs was made still more difficult because they were fragmentary and incomplete. In view of this it was decided to establish a local, descriptive code, which would allow them to be analysed and patterns of use sought.

The Cleatham combs were divided into three types: single-sided, double-sided and miniature or model combs. These were then further classified by elements of their form which it was thought might be diagnostic.

Combs were found in 29.3% (281/960) of the surviving urn deposits at and a total of 294 combs were represented. Thirty-eight of the combs had been burnt, the remainder being broken, but unburnt, fragments. The burnt combs were more complete than the unburnt, which were usually represented only by a fragment of an end plate, a terminal or a single tooth. Eleven of the urns were found to contain the remains of more than one comb: in six cases one of the combs had been burnt, in two cases both combs were burnt and in three cases neither had been burnt. Although no Phase 5 urns contained two combs, pairs were included throughout the life of the cemetery.

Phase	Urns in Phase	Combs
5	58.9	14.0 (23.8%)
4	113.7	35.2 (31.0%)
3	102.5	22.2 (21.7%)
2	137.7	45.2 (32.8%)
1	192.5	65.2 (33.9%)

Table 80 Number and proportion of urns in each phase containing bone/antler combs. Combs from urns coming from more than one phase have been spread over the phases

Of the 294 combs from Cleatham, two fragments were found in the fills of Graves 35 and 55 and the remaining 292 came from urns, of which 191 were found in urns that could be phased. Combs were found to be most common in the urns of Phases 1 and 2 but fell sharply in Phase 3, recovering in Phase 4 to

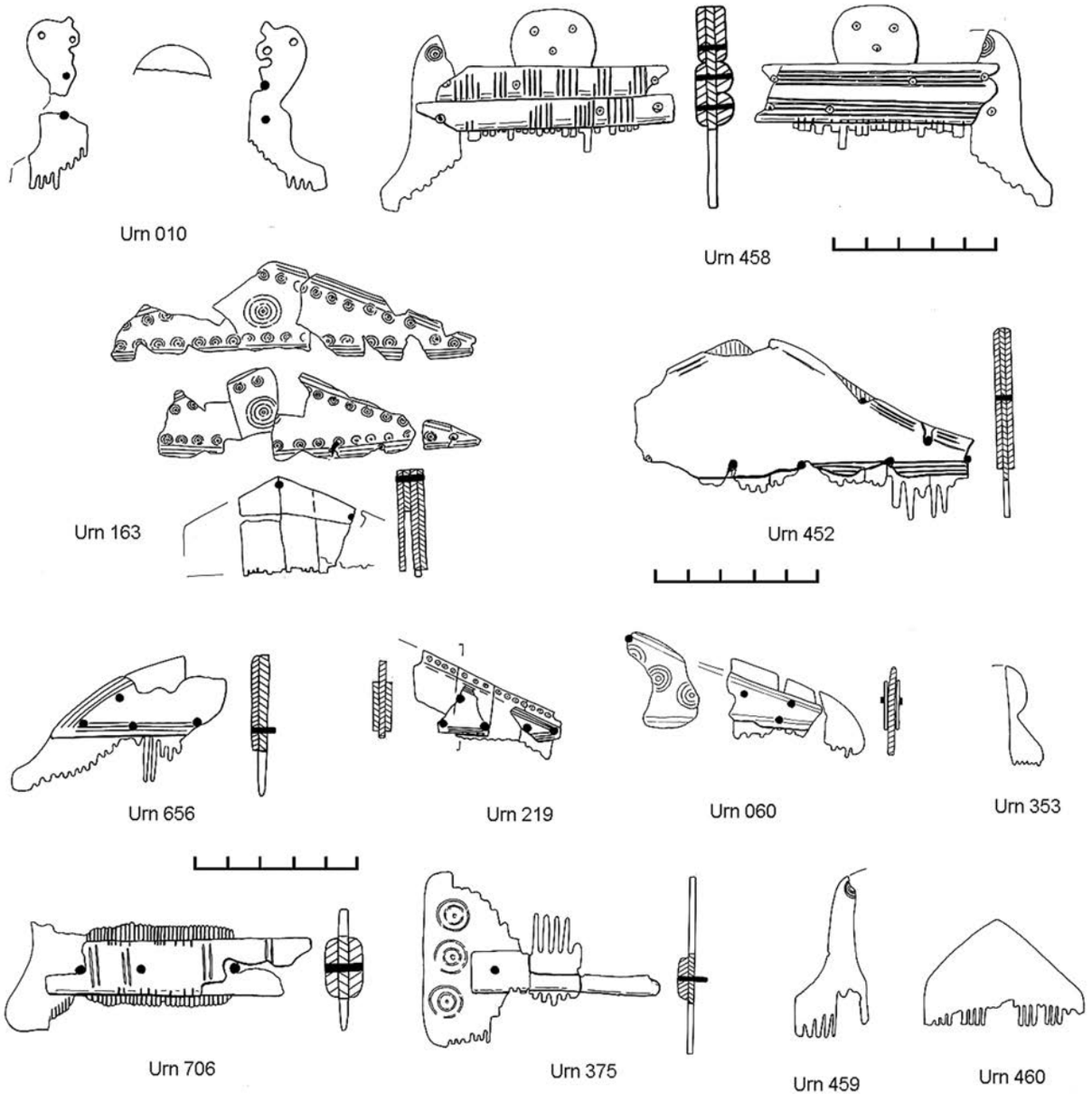


Fig 104 Bone/antler combs from Cleatham. Urn 010 (barred 'Frisian' comb), Phase ?; Urn 060 (straight backed, rounded terminal), Phase 1; Urn 163 (straight backed, pointed terminal), Phase ?; Urn 219 (straight backed, uncertain terminal), Phase ?; Urn 353 (miniature comb), Phase 3–4; Urn 375 (double edged, straight terminal), Phase 3; Urn 452 (bowed back, uncertain terminal), Phase 4; Urn 458 (barred 'Frisian' comb), Phase 1; Urn 459 (miniature comb), Phase 1; Urn 460 (miniature comb), Phase ?; Urn 656 (bowed back, rounded terminal), Phase ?; Urn 706 (double edged, incurved terminal), Phase ? (Tables 80–4). All combs illustrated at 50%

decline sharply in Phase 5 (Table 80). It is difficult to suggest a reason for this and it is best to assume that the inclusion of combs was at a relatively high level throughout the history of the cemetery.

The combs can be divided between those with single and those with double rows of teeth, but it was impossible to determine if 91 of the combs were single- or double-sided. Of the remainder it was found that 70.4% (143/203) of the combs were single-sided and 27.6% (56/203) were double-sided. Four miniature combs (2.0%) were also found. Double-sided combs predominated at Castledyke where they represented 81.8% (9/11) of the combs, perhaps reflecting the late date of many of the graves. None of the

Cleatham graves contained a comb apart from the redeposited fragments mentioned above.

Phase	Urns in Phase	Single-sided combs	Double-sided combs
5	58.9	7.3 (12.4%)	4.3 (7.3%)
4	113.7	22.6 (19.9%)	7.6 (6.7%)
3	102.5	16.6 (16.2%)	4.9 (4.8%)
2	137.7	24.3 (17.7%)	9.3 (6.8%)
1	192.5	41.0 (21.3%)	10.3 (5.4%)

Table 81 Number and proportion of urns in each phase containing bone/antler combs. Combs from urns coming from more than one phase have been spread over the phases

The proportion of urns containing single-sided combs was highest in Phase 1, declining over the following four phases. An apparent increase in frequency in Phase 4 cannot be explained. Double-sided combs were present at a low frequency throughout the history of the site (Table 81), and while it was difficult to see a coherent pattern, it would appear that they were becoming increasingly common over the sequence. The increasing use of double-sided combs is supported by the finds from West Stow, where they occurred in greater numbers in the late 6th and 7th centuries (West 1985, 127–8, table 50). Miniature combs were found at Cleatham in Phase 2 (one example), Phase 3–4 (two examples) and Phase 3–5 (one example), indicating that they were in use over most of the sequence.

Phase	1	2	3	4	5
Angled	2.8 (11.0%)	3.8 (18.7%)	0.6 (5.2%)	0.3 (2.8%)	0.3 (3.9%)
Compound	4.3 (16.9%)	5.5 (27.1%)	2.5 (21.6%)	2.3 (21.3%)	3.5 (44.9%)
Ogival	3.0 (11.8%)	–	–	–	–
Bowed	1.0 (3.9%)	–	–	–	–
Stepped	1.0 (3.9%)	–	0.5 (4.3%)	0.5 (4.6%)	1.0 (12.8%)
Straight	11.3 (44.5%)	7.0 (34.5%)	6.5 (56.0%)	3.2 (29.6%)	–
Square	2.0 (7.9%)	4.0 (19.7%)	1.5 (12.9%)	4.5 (41.7%)	3.0 (38.5%)
Total combs	25.4	20.3	11.6	10.8	7.8

Table 82 Numbers of combs of each form by phase. Combs from urns which could not be attributed to a single phase have been spread over the phases. The totals include only classified combs. The classification is as defined on Fig 105

In view of the low numbers of combs included in each of the forms it is possible only to suggest trends across the sequence. Usually it was teeth or the terminals of combs that survived, but even the latter are not the most distinguishing feature of combs. Potentially, the most interesting combs are those represented by Form O, the ogival form, which are likely to be the remains of barred 'Frisian' combs (MacGregor 1975, 195–8; 1985, 85). These are characterised by their method of construction, in which the tooth plates are secured by a flat bone plate one side and two plano-convex bars on the other. Many of them have a central handle and zoomorphic terminals. As the name 'Frisian' suggests, these combs are particularly common in the Netherlands provinces of Friesland and Groningen (MacGregor 1975, 197), both of which are likely places of origin for Anglo-Saxon settlers. Barred combs are considered to be early, and it was a relief to find that the three phased examples from Cleatham (from a total of five) were found in urns of Phase 1. As barred combs are readily recognisable, parallels were sought at other cremation cemeteries. Examples were found at the Millgate, Newark, cemetery (Kinsley 1989, Urn 50, fig 27; 39, 114) in an urn which would belong in Cleatham Group 05b, Phase 2. Barred combs found in Urn 1765 at Spong Hill (Hills and Penn 1981, fig 58, 168) and Urn 2160 (*ibid,* figs 44, 169) would also be placed in Group 05b (Phase 2). Urn 2017 from Spong Hill (*ibid,* figs 45, 168) would be placed in Group 10b which was not phased at Cleatham.

Angle-backed combs occurred in all phases but were at their most popular in Phase 2. Compound combs were also used throughout the sequence but appear to have increased in popularity in the later phases. The sudden increase in frequency in Phase 5 must, however, be treated with caution in view of the low number of finds involved. Ogival-backed combs were, as we have seen, restricted to Phase 1 but bow-backed combs also seem early, although at a very low frequency. Stepped-back combs were in use at a low frequency throughout the sequence and must be seen as undatable. Straight-backed combs seem to have declined in popularity from a high level in Phase 1, failing to appear at all in Phase 5. The sudden increase in the frequency of straight-backed combs in Phase 3 might represent a reality but, as with most of the data in this table, the low numbers involved means that they should be treated with caution. Square-backed combs occur in all phases but show a steady increase in popularity.

Only nine combs with triangular backs, all of which had been burnt, were identified amongst the finds from the Cleatham cemetery. It is, however, likely that many combs of this type are included amongst the fragments and if the 10 angled, 25 compound and 41 straight forms were taken into consideration the Cleatham assemblage could potentially contain 29.3% (85/290) triangular-backed combs. Unfortunately these occur in all phases and must be seen as undatable. Triangular combs were the most common form at West Stow, where they were found to represent 22.6% (24/106) of the combs (West 1985, 126). An attempt to sequence the West Stow triangular combs on the basis of the angle of their apex proved unsuccessful (*ibid,* table 48) and, in any event, could not be applied to the fragmentary material from Cleatham.

In view of the preponderance of terminals amongst the comb remains, these were analysed to determine if any sequence could be defined (Table 83). The small numbers involved made it difficult to do any more than suggest the broadest trends. It appears that four forms of terminal were in use throughout the sequence. Square terminals may have been at their most common in the middle of the sequence. Pointed and vertical terminals became increasingly popular over the five phases, while the use of rounded terminals seems to have declined.

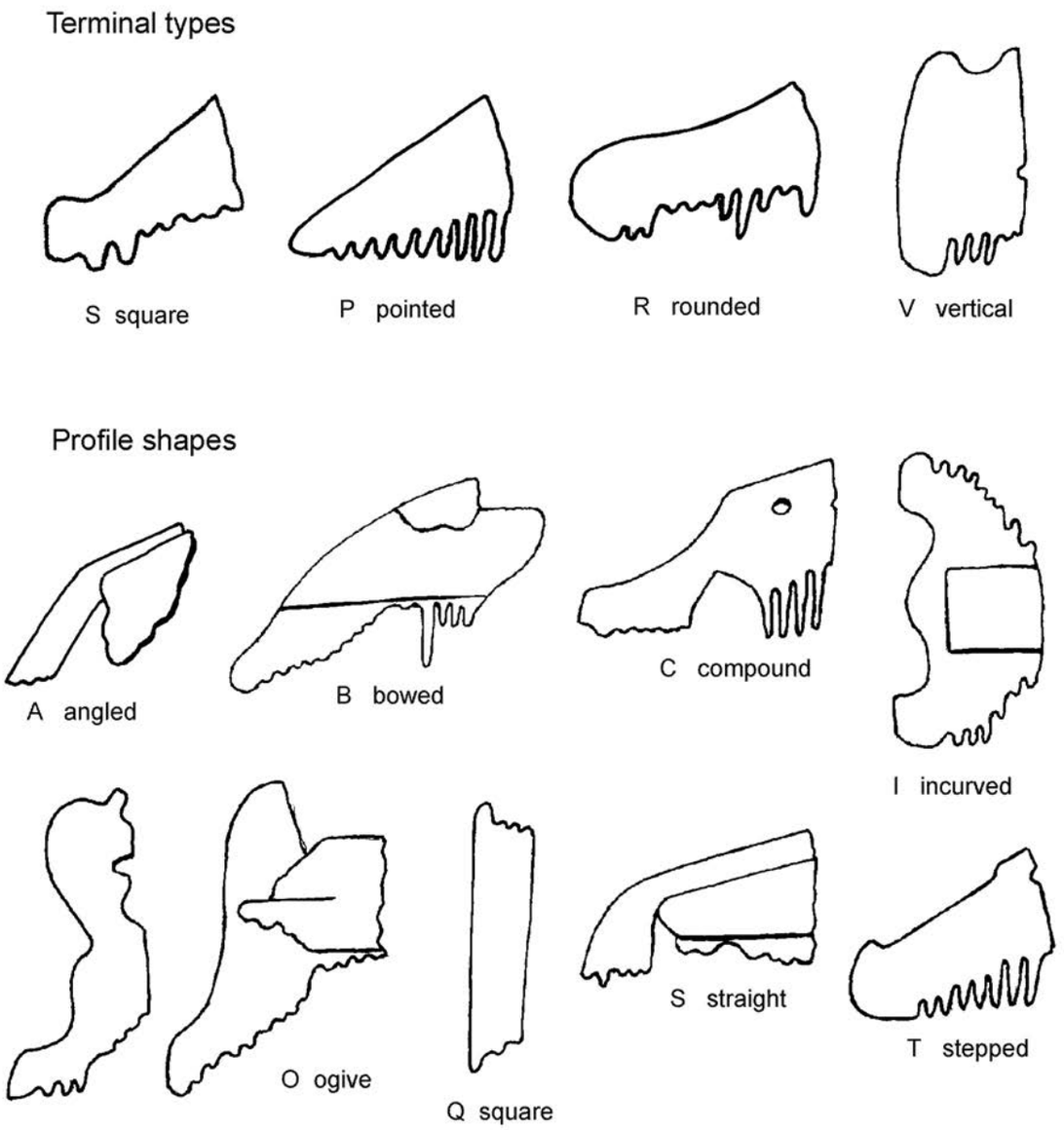


Fig 105 Comb classification

Phase	1	2	3	4	5
Square	3.0 (13.0%)	3.8 (19.6%)	3.6 (45.0%)	1.1 (8.5%)	0.3 (4.2%)
Pointed	2.0 (8.7%)	2.3 (11.9%)	1.8 (22.5%)	2.3 (17.7%)	2.5 (35.2%)
Rounded	13.0 (56.5%)	9.3 (47.9%)	0.8 (10.0%)	3.8 (29.3%)	2.0 (28.2%)
Vertical	5.0 (21.7%)	4.0 (20.6%)	1.8 (22.5%)	5.8 (44.6%)	2.3 (32.4%)
Total	23.0	19.4	8.0	13.0	7.1

Table 83 Comb terminal forms over the phases. Finds from urns not attributable to a single phase have been spread over the phases. The classification is as defined on Fig 105

The presence of these terminal fragments is, in itself interesting, showing the mourners breaking off the most easily removable part of a comb for deposition in the urn.

It was possible to record a tooth pitch for 175 of the 294 combs from the Cleatham cemetery. This was recorded in terms of the number of teeth per centimetre, and varied between a coarse 3/cm, and a fine 11/cm. To determine if tooth pitch was chronologically sensitive, the average pitch was calculated for each of the five phases, together with the standard deviation (Table 84).

Phase	Number of comb tooth blades	Average tooth pitch	Standard deviation
5	7	5.00	0.59
4	14	4.34	1.08
3	6	3.78	0.80
2	20	4.49	1.54
1	36	4.45	0.87

Table 84 Average tooth pitch and the standard deviation shown by combs by phase. Only combs from urns directly attributed to each phase and for which a tooth pitch could be recorded have been included

No pattern was found to exist and the small variation that appeared between the phases is likely to be attributable to the low number of combs in these phases. It is also possible that tooth pitch was a functional consideration and that the different gauges were used for specific purposes in all phases and their deposition rates were accidental.

The proportion of Cleatham urns with finds that included combs is, at 46.1% (281/609), very high in comparison to other cemeteries, with only Elsham (33.3%) and Sancton (28.3%) approaching it (Table 106). Comb fragments may have been missed in the 1950s analysis of the South Elkington finds and the low numbers for this site are questionable. None of the Cleatham inhumations contained combs as grave goods; the fragments of unburnt combs found in the fills of Graves 35 and 55 may have been offerings, or, more likely, redeposited from disturbed urns. At Castledyke 5.6% of graves contained combs and it was found that they occurred with the richer burials (Drinkall and Foreman 1998, 287). This also appears to have been the case at Cleatham, where 65.8% of the urns with burnt combs contained three or more object types. The lack of bone combs in the graves at Cleatham is surprising, as the sample should have been large enough to have included examples, had they been present.

Toilet implements (Figs 73 and 78)

Fifty-seven pairs of tweezers, 27 pairs of shears, 18 razors and 2 'scrapers' were found on the Cleatham site. Of the tweezers, 22 were made out of copper alloy, 35 from iron and, so far as can be determined, none had been burnt. Twelve pairs of tweezers were unstratified topsoil finds, of which only one was made from iron, perhaps reflecting only the greater survival potential of copper alloy (Fig 73). All shears and razors were made from iron. Two pairs of shears were found in the fill of graves. While all 27 pairs of shears were stratified, only seventeen were in phased urns (Table 84). Likewise all eighteen razors were stratified but only eight could be phased. The dating of these objects is difficult: the tweezers continue a form which was used throughout the Roman period and which continued until the late 7th–8th century, when it was replaced by tweezers with wider nips.

Phase	Urns in Phase	Tweezers	Shears	Razors
5	58.9	2.0 (3.4%)	2.0 (3.4%)	1.0 (1.7%)
4	113.7	2.6 (2.3%)	2.0 (1.8%)	0.9 (0.9%)
3	102.5	4.3 (4.2%)	2.0 (2.0%)	2.0 (2.0%)
2	137.7	7.3 (5.3%)	5.5 (4.0%)	1.5 (1.1%)
1	192.5	8.0 (4.2%)	5.5 (2.9%)	2.5 (1.3%)

Table 85 Number and proportion of urns containing toilet equipment in the five phases. Finds coming from urns that occur over more than one phase have been spread over the phases

Table 85 shows that toilet equipment was found in all phases of the Cleatham sequence in a more or less similar proportion of urns. In view of the low numbers involved it would be wrong to attempt to make anything of what little variation seems to exist. Most tweezers were made from iron but four examples of copper alloy tweezers were found within urns. These were found in Urn 129 of Phase 1, Urn 503 of Phase 2, Urn 598 of Phases 2–4 and Urn 709 of Phase 5. As with iron it seems that copper alloy tweezers occurred throughout the sequence.

In addition to a pair of tweezers, Urn 651 (Group 03s, Phase 1–3) contained an example of what is likely to be an iron 'scraper' (Find 1810). A second iron scraper (Find 686) was found with a pair of tweezers in Urn 256 (Group 07b, Phase 1–2). These objects resemble one side of a pair of tweezers and are usually made of copper alloy (MacGregor and Bolick 1993, 225–6). They are found with toilet implements, suggesting that they too were used for personal care, although their actual use is unknown. Urn 598 (Group 02s, Phase 2–4) contained a pair of tweezers and a fragment of a spiral-twisted iron object (Find 1678), which is best paralleled on 'ear scoops' (*ibid,* 216–20). A further pair of tweezers and an ear scoop were found in Group 21 Urn 809 of Phase 2 (Find 2140).

Tweezers, both full-sized and miniature, occurred in 7.1% (43/609) of the Cleatham urns which contained finds, a figure comparable with the numbers observed at Elsham (7.9%), but lower that that seen at Sancton (11.0%), Spong Hill (15.0%) and Caistor (25.2%) (Table 106). It seems that tweezers are more common in the cemeteries to the south of the Humber region. While toilet implements are relatively common in the urns, they were found in only two of the Cleatham graves: Grave 29 contained a pair of iron tweezers, Find 2611 (Fig 87), and Grave 41 a pair of copper alloy tweezers, Find 2983 (Fig 96). They are found in graves at other cemeteries, the Castledyke, Barton on Humber, cemetery contained five pairs of copper alloy tweezers (Drinkall and Foreman 1998, 288–9) and two sets of toilet implements were found in graves at Norton (Sherlock and Welch 1992, 53) and five at Empingham (Timby 1996, 64–5). They occur with the remains of both men and women.

Spindle whorls (Fig 106, Pl 35)

Spindle whorls were found in 10.2% (62/609) of the Cleatham urns, in addition to which three unstratified whorls were found. Four materials were used to make spindle whorls: bone/antler 70.8% (46/65); ceramic 18.5% (12/65); ivory 1.5% (1/65); stone (limestone or chalk) 9.2% (6/65).

These were found in the Cleatham urns in the following proportions.

Phase	Urns in phase	Urn with whorls	Bone/antler	Ceramic	Ivory	Stone
5	58.9	2.8 (4.8%)	2.2 (78.6%)	–	0.5 (17.9%)	–
4	113.7	11.0 (9.7%)	9.4 (85.5%)	1.0 (9.1%)	0.5 (4.6%)	–
3	102.5	6.5 (6.3%)	4.7 (72.3%)	0.3 (4.6%)	–	1.3 (20.0%)
2	137.7	6.5 (4.7%)	5.7 (87.7%)	0.3 (4.6%)	–	0.3 (4.6%)
1	192.5	8.5 (4.4%)	7.8 (91.8%)	0.3 (3.5%)	–	0.3 (3.5%)

Table 86 Number and proportion of urns containing spindle whorls in the five phases and the proportion of whorls made in specified materials in each phase. Finds coming from urns that occur over more than one phase have been spread over the phases

Spindle whorls were being placed in urns of all phases of the cemetery's existence but the table suggests that they were most common in Phase 4 when they occurred in 9.7% of the urns (Table 86). Bone (antler) whorls were most common in all phases, and the apparent decline in their use in Phase 5 must, in view of the low numbers involved, be treated with caution. None of the graves contained a spindle whorl.

The proportion of the Cleatham urns with finds that included spindle whorls was 10.2% (62/609) which is similar to Elsham where 10.6% (8/170) urns with finds contained whorls. Elsewhere whorls were found in less than 5.5% of the urns with finds. It is interesting that textile working equipment, like spindle whorls and thread-pickers, are the only tools commonly found in Anglo-Saxon graves. This is in accord with the importance the Anglo-Saxons attached to women's responsibility for making textiles; indeed the word '*wif*' could be etymologically connected to the word 'weave' (Fell 1984, 39). The corresponding male appellation is 'weaponed' giving us '*wæpman*' and, for women '*wifman*'. While a man's position in society

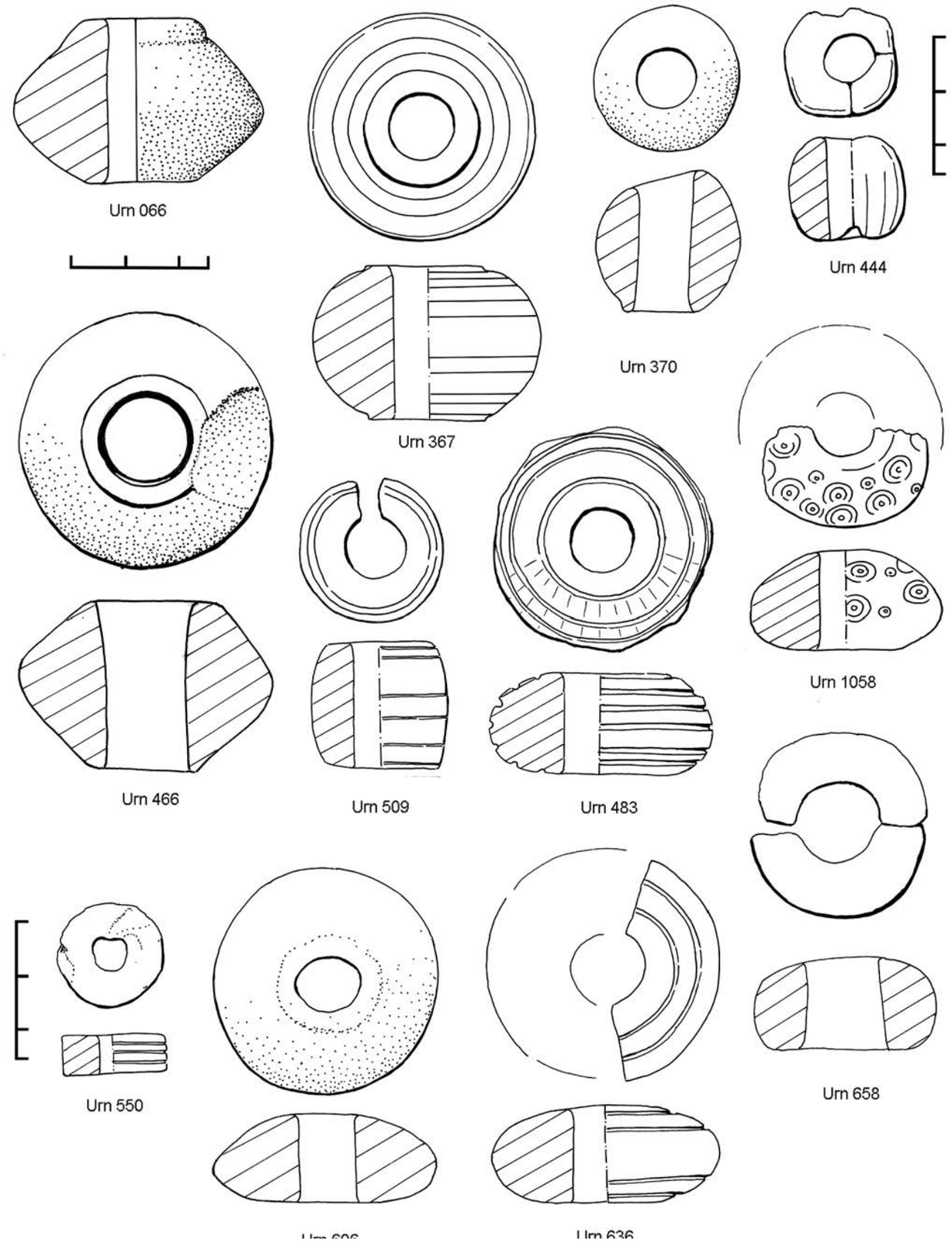


Fig 106 Spindle whorls. Urn 066 (ceramic), Phase ?; Urn 367 (chalk), Phase ?; Urn 370 (ceramic), Phase 4; Urn 444 (antler/bone), Phase 1–2; Urn 466 (ceramic), Phase ?; Urn 483 (chalk), Phase ?; Urn 1058 (bone/antler), Phase 4; Urn 509 (antler/bone), Phase 3–4; Urn 550 (antler/bone), Phase ?; Urn 606 (ceramic), Phase ?; Urn 636 (chalk), Phase 3; Urn 658 (chalk), Phase 1–3 (Table 86). Illustrations at 100%

was shown by his weapons, a woman's may have been demonstrated by the tools with which she clothed her family and took to her grave.

Thread-picker

The burnt, double-ended pin (Find 1190, Fig 107) found in Urn 468 (Group 03s, Phase 1–3) has been identified as a bone thread-picker, used to beat-up the weft threads on a warp weighted loom (MacGregor 1985, 188–9, fig 101, 14–17). It appears rather small and, while still usable, may have been a model. A burnt fragment of a possible second thread-picker (Find 2318) was found in unphased Urn 918, and an unburnt bone point (Find 278) found in Urn 77 (Group 10x, Phase 5) may also be a thread-picker, although it is round ended. A bone thread-picker was found in Grave 46 at Castledyke, where it was associated with a pair of linked pins, dating it to the late 7th century (Drinkall and Foreman 1998, 292).

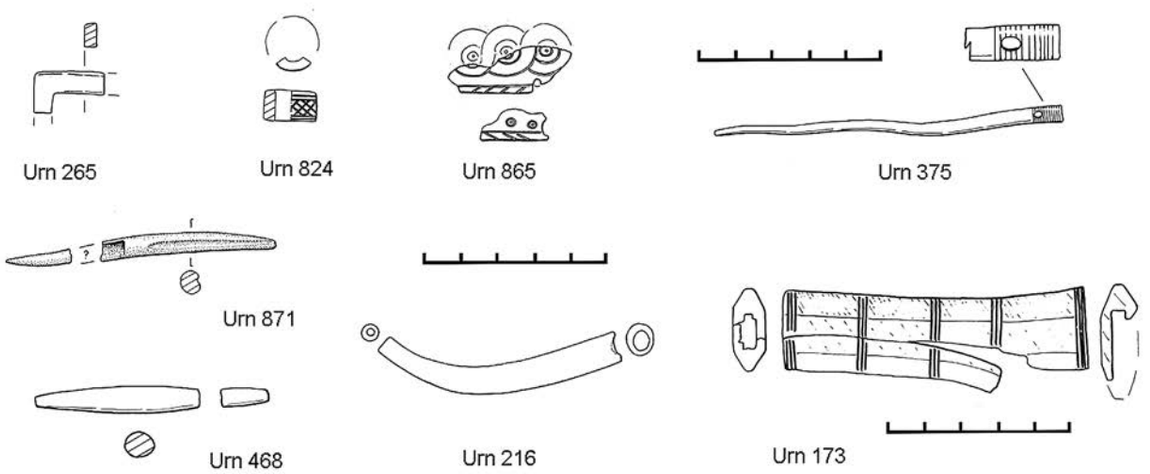


Fig 107 Bone objects. Bone/ivory buckle fragment: Urn 265, Phase 1 (Table 52). Antler ring: Urn 824, Phase ?. Antler box mount?: Urn 865, Phase 1–2. Bone pins: Urn 375, Phase 3; Urn 871, Phase 2–4 (Table 48). Antler pin-beater: Urn 468, Phase 1–3. Antler handles: Urn 216 (Phase 2); Urn 173, Phase 1. Pages 199–200. Illustrations at 50%

Gaming pieces (Fig 108, Pl 35)

A total of 68 gaming pieces or counters were found in six of the Cleatham urns. These are plano-convex in shape, and most were made from bone/antler, the exception being two pebbles, one of quartzite and the other of an igneous rock, found with 20 bone counters in Urn 383.

Urn No	Number of pieces	Phase
265	5	1
383	22	4
719	32	1
724	5	4
876	2	3–4
918	2	?

Table 87 Number of gaming pieces found in urns

It is difficult to discern a pattern from these few finds, although it appears that gaming pieces were being placed in urns from Phase 1 until at least Phase 4. Finds from the Derbyshire Peak District suggest that these counters continued in use into the 7th century (Ozanne 1962–63, 37).

Gaming pieces were found at all of the cemeteries included in the comparative data (Table 106). At Cleatham they occurred in only 1.0% (6/609) of the urns with finds; this is the lowest frequency but is comparable to Newark where 1.2% (2/170) of the urns with finds contained gaming pieces.

The 32 counters in Urn 719 may represent a playing set,[28] but in the other urns we must have only token deposits. It is not known how these pieces were used in play, and they may, as Meaney speculates, have been used in divination (1981, 262). As they are burnt, it is not possible to see if they were coloured to make opposing sets. Some are marked with one, two or three recesses on their flat faces (undersides?) which could represent a scoring system (Green 1973, 99). The burnt gaming pieces from New Inns, Derbyshire, were

marked with ring-dot on their upper surfaces (Bateman 1861, 179–81 and fig). These were found with a cremation, deposited in what appears to have been an iron-bound bucket. Of the 22 bone counters found in Urn 383, ten had recesses on their undersides, seven with two recesses, two with three, and one counter had four recesses. Only two of the 32 counters found in Urn 719 had recesses on their undersides, both of which were of an unusual, cable-like, pattern.

While respectable, the objects associated with the gaming pieces are not outstanding, although these pieces do seem to come from fine urns. Urn 719 with 32 gaming pieces was made in the style of the 'Sancton-Elkington potter'.

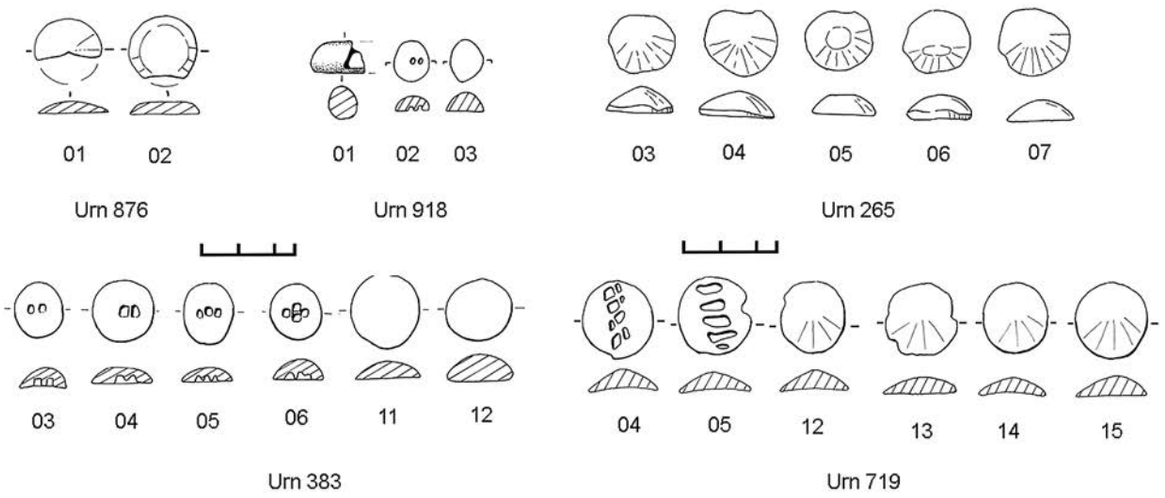


Fig 108 Gaming pieces. Urn 265, Phase 1; Urn 383, Phase 4; Urn 719, Phase 1; Urn 876, Phase 3–4; Urn 918, Phase ? Illustrations at 50%

Miniature objects

Context	Urn Group	Phase	Miniature		Material	Find No	Figure
Grave 32			Four miniature pots	Miniature	Ceramic	2740–3	90
Grave 41			Tweezers	Miniature	Æ	2983	96
Urn 170	01	1	Comb	Dummy	Bone	507	
Urn 294	07s	2	Shears	Miniature	Fe	803	
Urn 304	05a	1–2	Comb	Dummy	Bone	818	
Urn 353	10s	3–4	Comb	Miniature	Bone	895	104
Urn 447	?	?	Shears and tweezers	Miniature	Fe	1079–80	
Urn 460	03a	2	Comb	Miniature	Bone	1149	104
Urn 471	02a	3	Razor and shears	Dummy	Iron	1256–7	
Urn 503	07s	2	Tweezers	Dummy	Iron	1365	
Urn 561	?	?	Shears, tweezers and razor	Miniature	Fe	1570–3	
Urn 580	01	?	Tweezers	Dummy	Æ	1642	
Urn 709	09n	5	Tweezers	Dummy	Æ	1900	
Urn 887	05b	2	Shears and tweezers	Miniature	Fe	2250–1	
Urn 930	01p	3–5	Comb	Miniature	Bone	2358	74
Urn 1003	10a	1	Tweezers	Miniature	Fe	2453	
Urn 1101	12a	?	Razor	Miniature	Fe	2484	
US			Tweezers	Dummy		17	
US			Tweezers	Dummy		18	

Table 88 Miniature and dummy objects

Some difficulties were experienced in deciding whether certain objects were models, or simply small but usable examples of the real thing. It was, therefore, decided only to include those objects which were clearly unusable. In addition to the eighteen miniature objects, from nine urns and two graves, there were nine 'dummy' objects from six urns which, although full size, were too poorly finished for use (Fig 73, US17). These objects were all unburnt and included five pairs of tweezers, full sized but roughly cut from thin sheet-metal and unusable, two combs, one pair of shears and an unfinished knife. The use of specially made funerary objects adds another dimension to the offerings placed with burials, as they were not simply drawn, or broken, from the possessions of the living.

Phases	1	2	3	4	5
Combs	–	1.0	0.3	0.3	0.3
Razors			1		
Shears		2	1		
Tweezers	1	2			1

Table 89 The phasing of miniature objects by type. Some classes of object were not found in phased urns and could not be included in the table. Objects found in urns which occur in more than one phase have been spread over the phases

Miniature objects other than scutiform pendants were found in nine of the Cleatham urns and in two of the graves, which together gave a total of eighteen objects. The grave finds consisted of a pair of dummy tweezers from Grave 41, and a set of four miniature pots (a three-lugged pot, two cups and a dish) from Grave 32. Grave 41 dated to the late 5th or early 6th century and Grave 32 dated to the 7th century. The miniature vessels in Grave 32 resemble the three model pots found with the remains of an elderly female in Grave 65 at Shudy Camps, Cambridgeshire, which was also 7th-century (Lethbridge 1936, 20–1, fig 4C). Lethbridge interpreted these as '*ointment jars*', but the nature of the Cleatham pots suggests a ritual function. A small (58mm diameter) pottery cup was found in Grave 32 at Cemetery II, Chamberlain's Barn, Bedfordshire, accompanying the bones of a child (Hyslop 1963, 179, fig 12). This was a rich grave, which also included a silver quoit brooch and a necklace consisting of beads, rings and a silver *bulla*, demonstrating its 7th-century date. Six miniature pots (three lugged, one handled cup and two cups) were found at West Stow, Suffolk (West 1985, 64, fig 255, 1–6). These were slightly larger than the Cleatham miniatures and were found in Layer 2, the original Anglo-Saxon topsoil. Although West Stow is best known as a 5th-/6th-century settlement and cemetery, 7th-century remains were found (*ibid,* 149). A further miniature lugged vessel with a pedestal foot was found, intact, on the floor of *Grubenhaus* 156 at Mucking, Essex (Hamerow 1993, fig 159). This vessel was 69mm high, its three lugs were not perforated and it was made in a poor, friable fabric. The dish-like vessel from Grave 32 can also be paralleled at Mucking, where bowls form part of the assemblage, for example the bowl from *Grubenhaus* 37 (*op cit*, fig 102.3).

The numbers of miniature objects found at Cleatham are too low to allow any pattern to be defined but it appears that they were used throughout the Early Anglo-Saxon period.

Weapons

Sword pommel mount

No swords were found on the Cleatham site and this weapon was only represented by Find 1, an unstratified copper alloy pommel cap of 'cocked hat' form (Fig 73). This pommel cap may be paralleled by the example from Grave 51 at the Westgarth Gardens cemetery, Bury St Edmunds, Suffolk (West 1988, 33, fig 75), which was found with a glass cone beaker and an accessory vessel which belonged in Cleatham Group 10s, Phase 4. This form of pommel cap is known from elsewhere in Lindsey, with metal detector finds from Bigby and Welton le Marsh, and a 7th-century example in filigree gold from Market Rasen.

Spearheads

The Cleatham excavation produced thirteen spearheads, seven from graves, five from the topsoil and a possible spearhead fragment from an urn. These were classified according to the system devised by Michael Swanton (1973) and the types represented are shown in Table 90.

Swanton Type C1

Two spearheads, with leaf-shaped blades of Swanton's Type C1, were found at Cleatham. One (Find 102) was found set vertically in a small pit filled with reddish clay. Next to it was a pair of shears (US103)

set at 45% and a sherd (Urn 1226, unclassified). This must be seen as a ritual deposit. The other type C1 spearhead was found in Grave 27 (Find 2606). Swanton (1973, 48–51) saw Type C1 spearheads as earlier, rather than later, in the pagan Saxon period and noted their rarity in Lincolnshire and East Anglia. He observed that they tended to be found in poorer graves but, in view of the scarcity of weapon graves in Lincolnshire, it would be wrong to consider any of them as poor.

Context	Find No	Swanton class	Notes	Date range
Unstratified	101	E1	End of blade and socket base lost	5th century?
Pit	102	C1	Found set vertically in a pit with a pair of shears and a sherd	5th–6th century
Unstratified	118	?	Socket fragment only	?
Unstratified	149	E1	Blade fragment	5th century?
Unstratified	1865	E1	Part of a double-edged blade, possibly from a disturbed grave. Found with the remains of Urn 694	5th century
Grave 5	3170	I1	Iron spearhead. Found 1.9m from spear butt [0038]. On top of rubble filled grave. Fig 79	475–525
Grave 12	2538	E3	Spearhead found at foot of grave pointing down. Fig 81	550–650
Grave 23	2580	E2	Iron spearhead. Fig 84	570–650
Grave 25	2604	H1	Iron spearhead, found with a shield boss and mounts. Fig 86	475–550
Grave 27	2606	C1	Iron spearhead. Fig 87	425–570
Grave 31	2733	I2	Iron spearhead. Fig 90	450–500
Grave 40	2976	E1	Iron spearhead. Fig 95	475–525?
Urn 56	3173	1–4	Socketed iron object with two projecting forks. Found on top of bones. Fig 78	?

Table 90 Cleatham spearheads, dating based on Swanton 1973[29]

Swanton Type E1

Spearheads with small angular blades of Swanton's Type E1 were, with four examples, the most common type at Cleatham. Swanton saw these spearheads as dating, in the main, to the 5th century, stating that 'There is no good evidence to suggest that many examples belonged even to the sixth century' (1973, 79). The distribution of Type E1 spearheads, as recorded in 1973, was concentrated around the upper Thames but extend up into Lincolnshire. Swanton noted that Type E1 tended to be found only in poorly equipped graves. Tania Dickinson, however, has cast doubt on both Swanton's chronology for Type E1 spearheads and on these social implications (Dickinson and Härke 1992, 13), suggesting that they cannot be used to supply a precise date. Grave 40 at Cleatham contained, in addition to the E1 spearhead, two iron belt fittings and a knife. The other Type E1 spearhead (Find 1865) consists of a fragment of a double-edged blade, attached to a rectangular-sectioned bar. This can be paralleled by the tanged, not socketed, spearhead from Laceby, Lincolnshire (Swanton, *op cit*). The Cleatham fragment was found amongst a jumble of sherds from five urns and, although it has been allocated to Urn 694 to locate it on the site, it is probably from a disturbed grave and must be considered to be unstratified.

The only other possible find of a weapon in an urn is the strange two pronged object found on top of bones in Urn 56 (Group 13b, Phase 1–4). This object may represent the socket of a spearhead, with two extensions running part way down the shaft (langets), which appear on some weapons of Swanton's Series L (*ibid,* 134–8). A weapon of this type was found in association with a 6th-century shield at the Sheffield's Hill, cemetery, 15km to the north of Cleatham (Leahy and Williams 2001, 310–13). However, in contrast to the beautifully made Sheffield's Hill spearhead, the Cleatham find has rough-cut edges and appears unfinished.

Swanton Type E2

The Cleatham cemetery produced a spearhead of Type E2 (Find 2580). Like Type E1, these are characterised by their angular shape, but are considerably larger in size. Swanton saw Type E2 as being late in date (1973, 80–3). While many of them are likely to date to the

6th century, the best-dated examples were found in 7th-century graves. These weapons are found throughout Anglo-Saxon England.

Swanton Type E3

The long-bladed Type E3 spearhead from Cleatham (Find 2538) was found at the foot of Grave 12, with its point towards the foot. It was thought that it might be a socketed weaving sword, as was the Type G2 spearhead found in Grave 17B at Castledyke (Rogers 1998, 292–4). However, the Cleatham spearhead is pointed, has sharp edges and was found with a mature male. Type E3 spearheads are seen as appearing in the 6th century and continuing through the 7th. They, too, are widely distributed through Anglo-Saxon England.

Swanton Type H1

One Type H1 spearhead was found. This was in Grave 25 (Find 2604) and was accompanied by a shield boss with iron mounts (Find 2605). The spearhead lay, not at the shoulder, but near the right hip and its shaft must have been broken to place it in the grave. Type H1 spearheads are characterised by their concave-sided blades. Swanton (1973, 103–7) saw them as early, dating from the 5th and first half of the 6th century. Their main area of distribution was seen as being south of the River Witham, but with no examples in East Anglia.

Swanton Types I1 and I2

Type I1 and I2 spearheads are characterised by their fullered blades. A single offset fuller is present on each side of the blade which gives the weapon a 'Z'-like cross-section. Two examples of these spearheads were found at Cleatham, a Type I1 spearhead (Find 3170) was found in, or rather above, Grave 5. This grave had been filled with blocks of masonry and the spearhead was found on the top of this fill. An iron spear-butt ferrule (Find 38) was found aligned with the spearhead, 1.9m away along the line of the grave. The Type I2 spearhead was found in Grave 31 (Find 2733) which contained the prone remains of a young adult male. Swanton (1973, 122–5) saw the spearheads of Types I1 and I2 as early, dating from the 5th and earlier 6th century. Their distribution, as recorded in the early 1970s, was interesting. Type I1 spearheads were only found on and to the south of the Thames. Type I2 had a complementary distribution occurring on and to the north of the Thames. The single Lincolnshire example recorded by Swanton was from Barlings.

It was thought that Find 42 was an Anglo-Saxon arrowhead. Underwood (2001, 26–30) shows a range of Anglo-Saxon and early Germanic arrowheads, none of which resembles the Cleatham find. It can, however, be paralleled amongst the medieval arrowheads depicted in the London Museum *Medieval Catalogue* (1940, 69, fig 17) and must be rejected as Anglo-Saxon.

Shield fittings

The remains of only two shields were found at Cleatham: one was an unstratified topsoil find (Find 3151) and the other was found in Grave 25 (Find 2605, Fig 86), with the remains of a young adult male.

The low overall height and moderately high concave side wall, with an overhanging carination, allow the unstratified boss, Find 3151, to be placed into Dickinson and Härke's Group 1, and its concave cone shows it to be Group 1.2 (Dickinson and Härke 1992, 10–13). Although the possibility of later use exists, Dickinson and Härke dated their Group 1 bosses to the late 5th–mid-6th century. The shield boss from Grave 25 (Find 2605) is similar, but its straight side walls are best placed in Dickinson and Härke's Group 2 (*ibid,* 13–14), which they placed in the 6th century. This would be in keeping with the Type H1 spearhead found in Grave 25. Other fittings from this shield were present: the simple straight handle belongs in Härke's Group I but unfortunately no trace of its binding survived. More can be said about the two iron decorative mounts which had adorned the face of the shield. Neither is complete, but in recent study Tania Dickinson has convincingly interpreted them as a bird and a fish (Dickinson 2005, 109–163, figs 9b and 12a). Similar fishes were depicted on local examples from Worlaby (Knowles 1965, fig 6.2; Dickinson 2005, fig 10b), and Sheffield's Hill, Roxby (Leahy and Williams 2001, 310–13; Dickinson 2005, fig 10a). The boss associated with the Sheffield's Hill mounts had a decorative plate on its apex that can be paralleled by an example from Aylesby, Lincolnshire, which led Dickinson to suggest localised manufacture, but good external parallels make this unlikely. Other iron shield mounts are known from the region: Grave 24 at Fonaby (Cook 1981, 26–8, fig 8) contained two iron discs in association with a Group 1.1 shield boss and two spearheads of Swanton's Type H1 and H3. Also

found in the grave was a mount decorated in Style 1, placing it into the 6th century. Dickinson saw these shield mounts as being mainly a product of the middle years of the 6th century. All of the figurative mounts known to Dickinson and Härke (1993, 29) were made from, or included in their design, precious materials, which was seen as reflecting their importance. Evison (1987, 34) saw these figurative mounts as 'insignia attached to the shields of warriors of high rank'. The iron examples from Cleatham are an exception, but an exception that should not come as a surprise.

Weapon graves discussion

The frequency of weapon burials at Cleatham was, as we have seen, low, there being spearheads in only seven of the graves and an additional five from the topsoil. There were two shield bosses, and no swords, this weapon type being represented only by an unstratified pommel cap. None of the knives was large enough to be considered as a possible 'seax'. At Cleatham, therefore, 11.3% (7/62) of the excavated graves contained weapons and none of the urns contained anything that was definitively a weapon. To place this into context it is worth looking at some comparable cemeteries.

	Weapon graves	Total graves	Percentage
Castledyke	13	201	6.5%
Cleatham	7	62	11.3%
Empingham II	34	136	25.0%
Fonaby	Poor survival of iron	49	?
Morning Thorpe	67	434	15.4%
Norton	10	120	8.3%
Sewerby	5	59	8.4%
Welbeck Hill	5	84	5.9%
West Heslerton	20	186	10.8%

Table 91 Number of graves containing weapons at comparable inhumation cemeteries. The information on the weapon graves at Welbeck Hill was provided by Mr Gordon Taylor

The number of weapon graves at Cleatham is comparable to the numbers found at other cemeteries in the region. Weapon burials are more common in southern England where an average of 18% of graves contain war-gear (Härke 1989a, 49). Amongst the northern cemeteries an average of only 8% of graves contain weapons (*ibid*). In the Anglian area of England a correlation has been observed between high numbers of weapon graves and cemeteries containing cremations (Härke 1989a, 51). This is not the case in Lindsey, where cremations are common, but the frequency of weapon graves is low. Härke (1990, 28–33) has drawn attention to the apparently inverse relationship between weapon graves and historically attested Anglo-Saxon warfare: weapon graves seem more common in times of peace. There are, as Härke recognises, problems in correlating historical and archaeological dates, but his observations appear sound: weapon graves are most common in the first half and middle of the 6th century, a time for which the *Anglo-Saxon Chronicle* records few battles and which, Gildas tells us, was a time of peace. While control of Lindsey was contested between Mercia and Northumbria during the 7th century, it seems that the major battles between these powers were not fought in Lindsey but along the north–south routeway to the west.[30]

Grave No	Stature m	σ mm	Age	Blade length, mm	Figure
10	1.792	40.5	ma	–	81
12	1.872	40.5	ya	380	81
14	1.774	33.7	ya	–	82
18	1.871	29.9	ya	–	83
23	1.769	33.7	ya	255	84
25	1.799	29.9	ya	216	86
27	1.744	29.9	adol	156	87
31	1.847	29.9	ya	244	90
56	1.784	43.2	ya	_	

Table 92 Male stature at Cleatham and the lengths of any associated spearheads

Härke has also drawn attention to the relationship between weapon graves and the stature of the men found in them, arguing that weapons tended to be found with taller men (1990, 37–42). This could be a result of two factors: nutrition, in that men buried with weapons had a privileged access to food during childhood and later, or genetics, in that they came from different stock from those men who lacked weapons. At Cleatham, the longest spearhead was found with a tall man in Grave 12 but a still taller individual in Grave 56 was unarmed. The smallest spearhead was found with an adolescent in Grave 27 but this boy was, at 1.744m, very tall. These examples are inconclusive and unsound, as Jacob points out in her report on the Cleatham inhumations, it was possible to determine the stature of only ten of the 62 Cleatham skeletons, making it impossible to use this evidence in a systematic way.

Accessory vessels

Ceramic vessels

Context	Accessory vessel	Notes
Grave 17	Urn 238, Group 01. Fig 83	Found by left shoulder. Fig 15
Grave 29	Urn 1159, Group 01. Fig 87	Found by left shoulder, incomplete when buried. Traces of sooting present. Fig 20
Grave 39	Urn 753, Group 01. Fig 95	Found by right shoulder, large piece of masonry covered rim. Fig 24
Grave 46	Urn 1227, Group 03a, Phase 2 Fig 98	Found by left shoulder, crushed but complete. Now missing. Fig 26
Grave 48	Urn 1219, Group 01. Fig 99	By, and covering, left shoulder. Fig 27
Grave 53	Urn 937, Group 02a. Fig 100	Found by left shoulder. Fig 28
Urn 114, Group 10x, Phase 5	Urn 247, Group 01p	Found on top of bones in Urn 114
Urn 76 (Phase 5), Urns 87 and 415 (Phase 4)	Urn 144, Group 01p. Fig 41	See below

Table 93 Cleatham accessory vessels

Pottery vessels were used as grave goods with six of the inhumations (9.7%) and two of the cremations (0.2%). Urn 114 (Group 10x, Phase 5) was found to contain Urn 247, a small vessel of Group 01p fitted with perforated lugs which was found lying, partly buried in the top of the burnt bones. The second possible accessory vessel associated with the cremation burials (Urn 144, Group 01p) presents a complex, but interesting picture. To summarise:

- Fragments of Urn 144 were found with Urn 415 (Group 02s, Phase 4)
- Urn 144 (Phase 4) belongs to Group 01p, the group which was used as an accessory within Urn 114
- No cremation was associated with Urn 144
- Joining sherds from Urn 144 were found in association with Urns 76 (Group 00, Phase 5) and 87 (Group 01, Phase 4). This was 16m away from where Urn 415 was found
- A large sherd of Urn 87 was found with Urn 144 showing that some form of interchange had occurred.

This points to the deliberate sharing out of the accessory vessel, Urn 144, with other deposits, but the reciprocal transfer of a sherd of Urn 87 suggests the deliberate linking of the burials. It is notable that, with one exception, all of the accessory vessels are plain domestic vessels, or copy them in a miniature form. The exception, Urn 1227 from Grave 46, could be classified as an urn of Group 03a and placed in Phase 2. While this vessel may have been recovered from an earlier cremation, its phase is in keeping with the other material found in the grave and it should be seen as a decorated accessory vessel. The vessel in Grave 29 bore traces of sooting and had seen domestic use.

Vessels of Group 01p, with perforated lugs, seem to have been selected for 'ritual' use. In addition to the examples described above, we have Cleatham Urn 314, which was found empty, and one of the miniature pots in Grave 32 (Find 2741)[1]. Group 01p Urn 1066 bore traces of sooting on its base but this need not show that it had a secular use.

Wooden vessels

Fragments of the metal mounts of nine wooden vessels were found at Cleatham. The best example is a burnt copper alloy fragment (Find 944) found in Urn 371 (Group 09n, Phase 5). This represents part of the rim of a stave-built, wooden bucket of the type found in Grave 9 at Great Chesterford, Essex, associated with a small radiate brooch dating to the middle of the 5th century (Evison 1994b, 92, fig 19). A second possible example from Cleatham was found in Urn 566 (Group 13n, Phase 1) and consisted of a length of copper alloy edging and a piece of burnt copper alloy sheet (Finds 1582–3). These are best interpreted as the rim, and part of the mounts, from a bucket.

In addition to these objects, four of the urns contained iron staples, which are probably fittings or repairs from wooden vessels. In Grave 36 at Great Chesterford, the staples were associated with a rim mount and the traces of wood (Evison 1994b, fig 27).

The wooden vessel remains found at Spong Hill have been discussed by Morris (1994, 30–3). Organic traces found in many of the graves at Sheffield's Hill suggest that Morris was correct in saying that vessels were common in graves, but the argument she puts forward is flawed.[31] It is also possible that the 'strap-ends' found in Grave 30 (Find 2614) and Grave 46 (Find 3007) were mounts from vessels.

Context	Find	Description
Urn 371, Phase 5	944	Copper alloy rim fragment. Fig 109
Urn 443, Phase 1	1070	Iron staple
Urn 452, Phase 4	1091	Iron staple
Urn 566, Phase 1	1582–3	Copper alloy rim and sheet-metal mount
Urn 769, Phase ?	2038	Iron staple
Urn 919, Phase ?	2322	Folded long copper alloy rim mount with single iron rivet. Fig 109
Urn 1050, Phase 4	2477	Iron staple
Grave 34	2748	Folded short copper alloy rim mount, two iron rivets. Fig 91
Grave 34	2749	Folded short copper alloy rim mount, two iron rivets. Fig 91

Table 94 Fittings from wooden vessels

Possible saddle fitting

It is possible that the riveted iron mount (Find 1789, Fig 110) found in Urn 639 (Group 13n, Phase 1) may have been a fitting from a wooden saddle. The object is difficult to parallel and Chris Fern's recent paper on early Anglo-Saxon equestrianism (Fern 2006, 43–71) includes nothing like it. However, Urn 639 was found to contain a considerable amount of burnt bone from a large animal (almost certainly a horse) and the decorative scheme includes stamps in the form of a horse's hoof-print. While, in view of the lack of parallels, we cannot be certain, the possibility that Find 1789 represents a fitting from a wooden saddle must be considered. Similar mounts found elsewhere have retained fragments of wood within them: see for instance the mounts from Grave 358 at Morning Thorpe (Green *et al* 1987, 138, figs 247 and 420). These were associated with a fine buckle and lay away from the body, suggesting that they were a graveside offering.

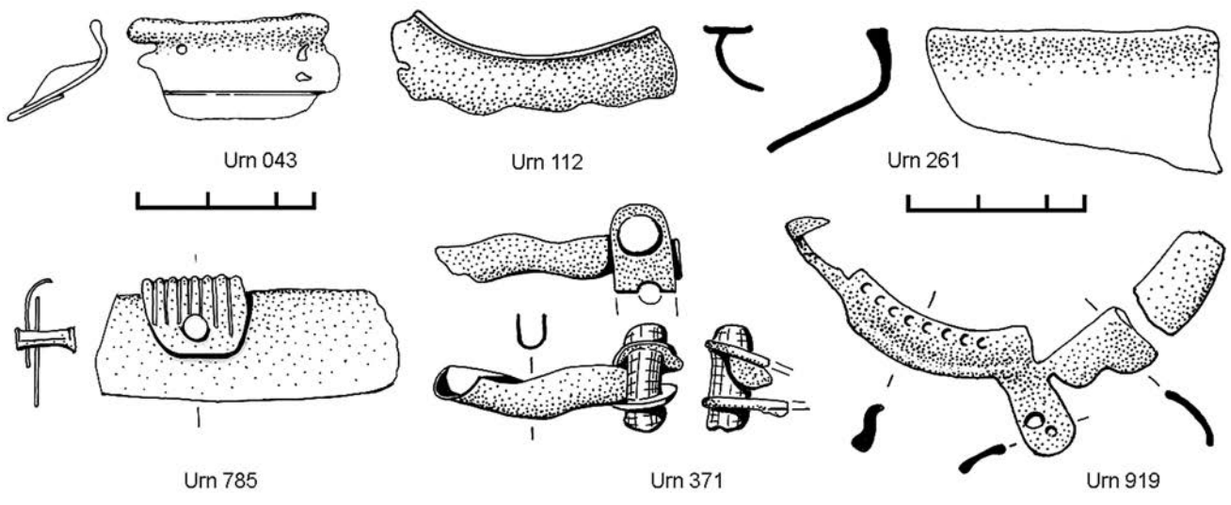
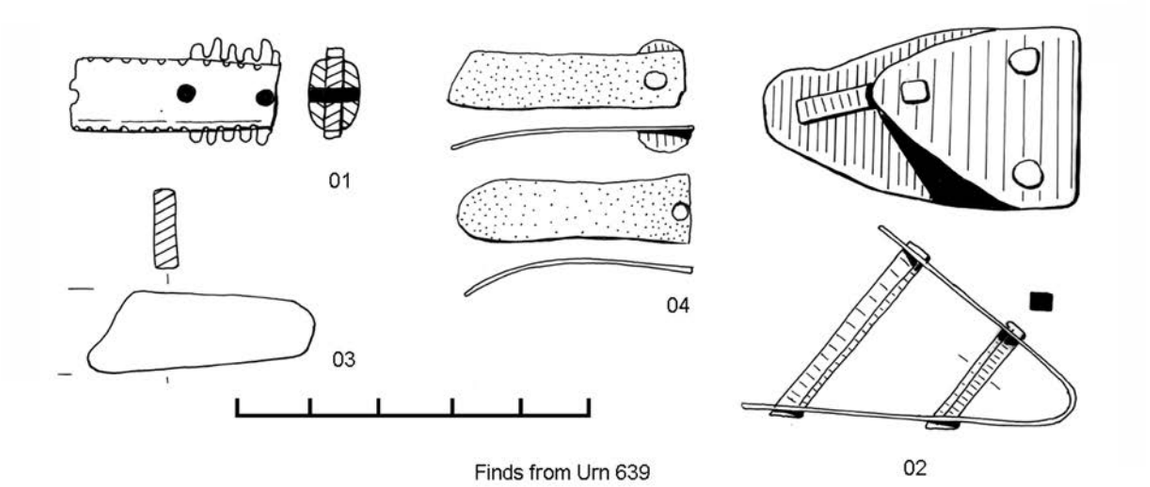


Fig 109 Rims from copper alloy bowls. Urn 043, Phase ?; Urn 112, Phase 3–4; Urn 261, Phase 4; Urn 371, Phase 5; Urn 785, Phase 1–3; Urn 919, Phase ? (Table 97). All objects shown at 100%



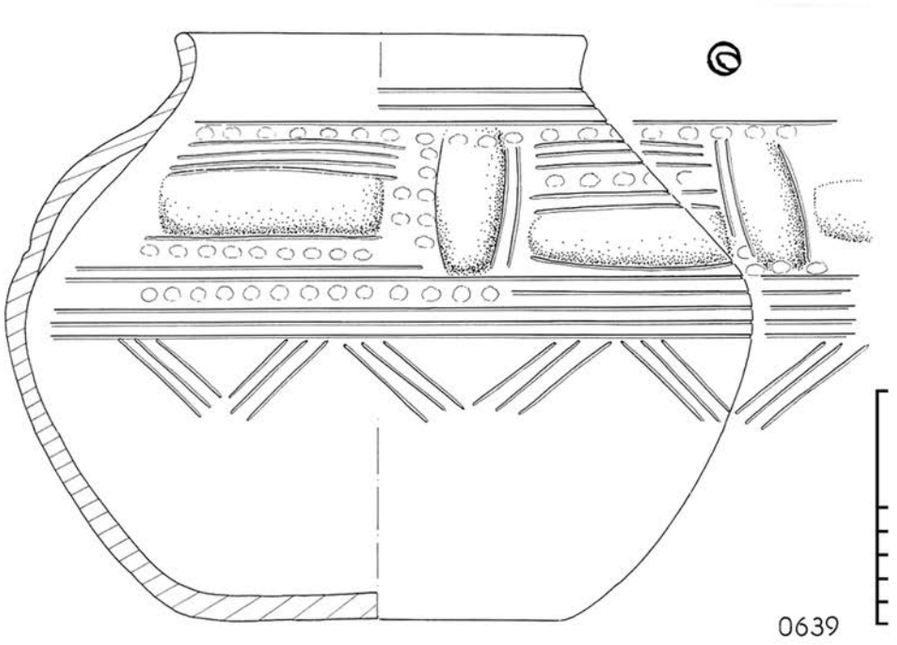


Fig 110 Possible saddle fitting from Urn 639 and associated finds. Urn 639, Group 13n, Phase 1, contained the remains of a bone comb, an antler handle, two strap-ends and an iron fitting that that could plausibly be interpreted as a fitting from a wooden saddle. This interpretation is supported by the large number of massive bones found within the urn, which are likely to be equine, and the stamp used to decorate Urn 639 which is in the shape of a horse's footprint. Urn illustrated at 33%, other finds at 100%

Bone casket mounts

Urn 865 (Group 07n, Phase 1–2) contained two fragments of thin bone plate, decorated with the remains of a rolling pattern of conjoined circles and with notched edges (Find 2211, Fig 107). These fragments have a thickness of only 0.8mm and are best interpreted as the remains of mounts from a box or casket, although it is possible that they are part of a comb case of the type found at Lackford, Suffolk (MacGregor 1985, fig 76). They can also be paralleled by finds from Urn 1645 at Spong Hill (Hills 1977, fig 138) and at Caistor by Norwich (Green 1973, 85–6, fig 27, pls XX, XXI). In the Cleatham classification, the Spong Hill vessel would be placed in Group 10b of Phase 1; the Caistor urn cannot be classified.

Glass vessels

The Cleatham excavation produced the remains of eight possible glass vessels, of which seven were represented only by a mass of pale green glass melt (Pl 37). Ribbed fragments found in Urn 815 (Find 2155, Fig 111) came from a Kempston-type glass cone beaker. This urn belongs to Group 10a and can be placed into Phase 1. The remains of a glass vessel were found in Urn 889 which could be placed in Phase 5, showing that they were available at the end of the sequence. In her work on the glass vessels from Spong Hill Evison (1994a, 30) saw the main period of use of Kempston beakers as *c* AD 450–550.

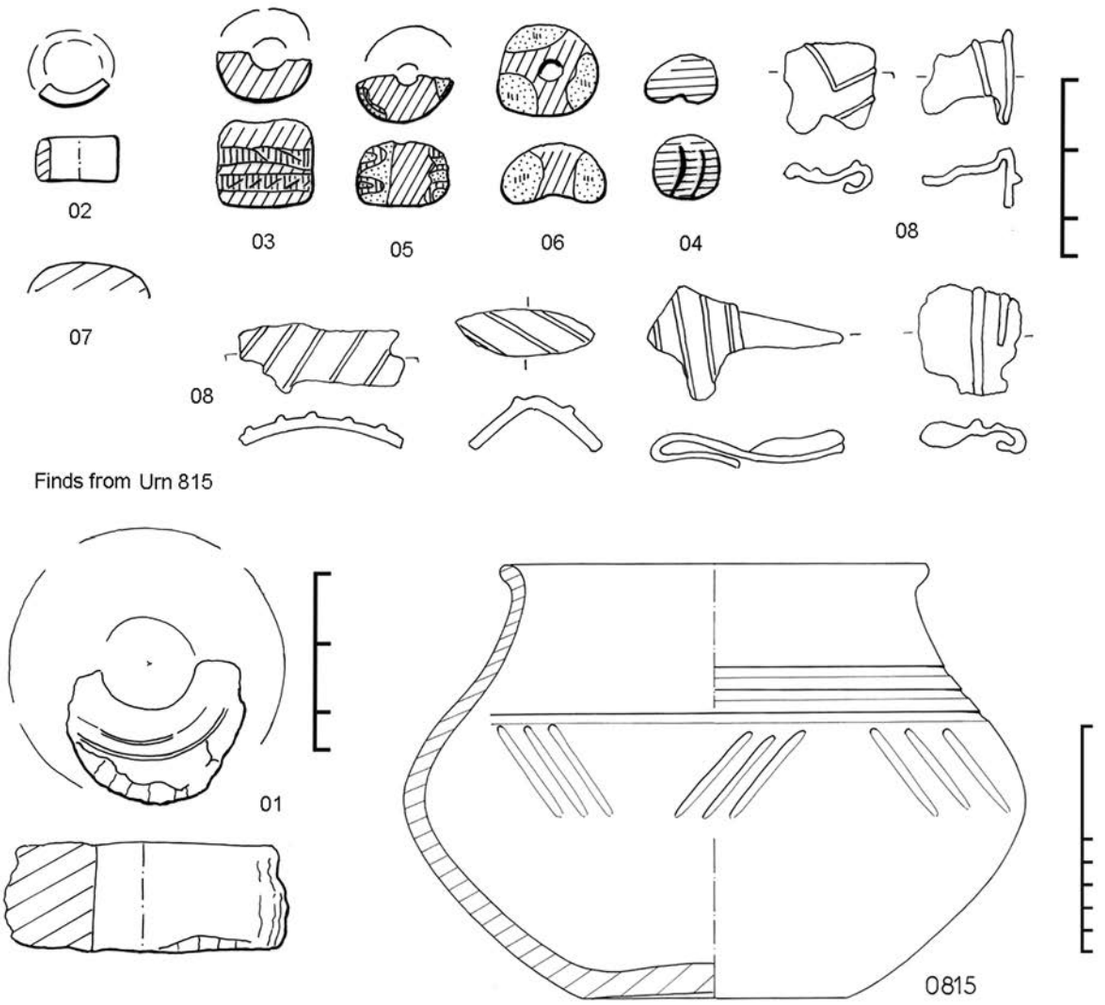


Fig 111 Glass vessel from Urn 815 and associated finds. Urn 815, a Group 10a urn of Phase 1, contained the burnt remains of a 'Kempston'-type glass beaker (Table 95), an antler whorl, ivory ring, a bone bead, a bichrome bead, three polychrome beads and some copper alloy melt. Urn illustrated at 33%, other finds at 100%

Urn	Group	Phase	Find	Notes
140	00	?	436	Vessel
488	02b	1–3	1336	Vessel
598	02s	2–4	1674	Vessel
623	00	?	1747	Perhaps from a vessel
790	01	?	2102	Bead or vessel glass
815	10a	1	2155	Kempston-type beaker
865	07n	1–2	2213	Vessel
889	09n	5	2257	Vessel

Table 95 Stratified glass vessels from Cleatham

It can be seen from Table 106 that the number of Cleatham urns with grave goods that included the remains of burnt glass vessels was, at 1.3% (8/609), low; only Elsham, where only 0.3% (1/339) of the urns contained glass, is lower. The number of glass vessels at both Elsham and Newark may be concealed by the high proportion of deposits of unidentified glass included in the catalogues for these cemeteries.

Glass fragments

Audrey Meaney drew attention to the presence of fragments of broken glass in Anglo-Saxon graves, where they are found in 'amulet bags' (Meaney 1981, 227–8). In some cases the glass is flat, suggesting that it was originally Roman window glass. Fragments of flat glass were found in six of the Cleatham urns.

Urn	Group	Find	Phase	Colour	Figure
101	10x	F336	5	Blue	113
119	10a	400	1	Green	
448	00	1085	?	Black	
510	05s	1383	1–2	Green	
513	02s	1398	2–4	Yellow	
1000	04a	2446	4	Clear	

Table 96 Glass fragments from urns

All of the glass was transparent, but black would be a surprising choice for glazing windows. However, as with yellow, only a small fragment of black glass was found (< 0.1g) and another origin is possible. Meaney suggests that glass was sufficiently rare in Anglo-Saxon society for fragments to be valued. At Sheffield's Hill, one of the graves was found to contain a small collection of sherds from fine glass vessels. None of the plate glass from the Cleatham urns had been burnt; and it must therefore have been placed in the urns as offerings.

Copper alloy vessels

Urn No	Group	Find No	Phase	Burnt	Notes
Unstrat.		20			Thickened rim
Unstrat.		121			Thickened rim
20	10a	167	1	B	
43	00	177	?	B	Thickened rim. Fig 109
55	01	221	2	B	
112	00a	381	3–5	B	T-shaped rim. Fig 109
253	00	681	?		
261	05n	705	4		Thickened rim. Fig 109
269	11s	732	5	B	
328	22s	868	?	B	
383	10s	992	4	B	
478	01	1261	?	B	
492	18s	1356	4	B	
533	01b	1453	4	B	Thickened rim
566	13n	1582	1	B	Rolled rim?
594	10s	1667	3–4	B	
680	01	1850	?	B	
731	07s	1971	2	B	
744	10a	1991	1	B	
782	10a	2054	1		
785	20n	2061	1–3		Rim and riveted clip, Fig 109
786	07b	2064	1–2		
839	01	2180	?	B	
851	03s	2188	1–3		Thickened rim
876	01	2225	3–4	B	Everted rim
886	11s	2245	5		
894	00	2267	?		
902	19n	2279	4–5	B	
919	22n	2321	?		Cup rim mount. Fig 109
934	13n	2371	1	B	Thickened rim
940	01	2388	?	B	
999	00	2442	?	B	
Grave 20		2575			Everted rim. Fig 84

Table 97 Sheet-metal vessel fragments from Cleatham

The Cleatham cemetery produced evidence for 33 copper alloy bowls, thirteen of which had recognisable rim fragments, the others being represented only by fragments of sheet metal. A complete hanging bowl was found in Grave 20. Of the 33 bowls, 21 showed signs of having been burnt. The lack of escutcheons in the urns is surprising, as one would have expected these, as the most robust part of the bowls, to have a higher survival rate. Their absence might be explained by the bowl in Grave 20, from which the escutcheons had been removed prior to burial. It is possible that the unstratified fitting, Find 111, was an escutcheon from a hanging bowl, although it would be unusual in that the ring is secured by the escutcheon and not simply held against the rim.

It was found that the remains of metal vessels occurred in urns throughout the sequence and can be summarised as follows.

Phase	Urns in Phase	Urn with bowl frags
5	58.9	3.3 (5.6%)
4	113.7	6.3 (5.5%)
3	102.5	3.0 (2.9%)
2	137.7	4.2 (3.1%)
1	192.5	5.2 (2.7%)

Table 98 Numbers of urns containing copper alloy vessels and frequency calculated as a percentage of total urns in phase. Finds from urns that occur over more than one phase have been spread over the phases

This long chronology is in accord with the generally accepted belief that these bowls were being made between the late 4th and the 8th century. Helen Geake (1999, 1–19) has argued for the graves containing bowls being 7th century, but it is clear that the remains of metal vessels were being placed with cremations at an earlier date.

Four rim forms appear at Cleatham: the simple thickened rim which was found on seven vessels; everted, found on two vessels; and 'T'-shaped and rolled rims each on single vessels. All of the rim forms found at Cleatham can be paralleled in Bruce-Mitford's catalogue of hanging bowls from Lincolnshire (Bruce-Mitford 1993, 45–70). The most interesting hanging bowl is the example found, inverted, in Grave 20 (*ibid*) (Fig 84). This is complete, but its escutcheons had been removed prior to burial, and are now represented by three patches of solder and some setting out marks. In the base of the bowl is a saucer-shaped indentation (*omphalos*). The Cleatham bowl has an atypical shape and Bruce-Mitford (2005, 141) saw this as an example of an abnormal vessel that had been adapted for use as a hanging bowl, a practice not uncommon in Lincolnshire. Faintly scratched just above the shoulder of this bowl is a Runic inscription. This is difficult to read and obscure: John Hines' suggested reading is [...]**edih** the meaning of which is unknown (Hines 1990, 444, fig 9; Hines 1991, 83). While Bruce-Mitford preferred an earlier date, the writer sees Grave 20 as 7th century on the basis of the small annular brooch.

The remains of bronze bowls, or sheet-metal fragments which may represent the remains of bowls, were found in almost all of the cremation cemeteries included in the comparative data (Table 106). Cleatham, where sheet-metal fragments were found in 4.9% (30/609) of the urns, had the lowest figure recorded (Table 106) which is surprising in view of the remarkable number of bowls found in Lincolnshire (Bruce-Mitford 1993, 45–70). In addition to the bowls, the rim of a smaller vessel or cup was found in Urn 919, the odd cupped vessel (Find 2321, Fig 109).

Textiles (Pl 39)

Textile remains were found in 22 of the Cleatham graves and an impression of textile was found on Urn 89 (Group 10a Phase 1), giving a total of over 100 fragments. This material has been studied in detail and published in the journal *Textile History* (Coatsworth *et al* 1996). This paper is summarised here in so far as it is relevant to the archaeology.

The weaves used at Cleatham are typical of those found on early Anglo-Saxon sites, with a predominance of tabbies and 2/2 twills, with small numbers of 2/2 chevron/broken diamond twills, three shed twills and tablet weaves. It was possible to describe only 26 of the Cleatham textiles in full detail, with weave type, spin direction and thread count. These showed that the most common type of weave was Z/Z tabby, which made up 44% of the textiles. It was found that 2/2 twill spun Z/Z made up a further 15%. Seven examples of fibre were examined using a scanning electron microscope, but poor preservation made identification difficult. The fibres which could be identified were found to be linen, which is likely to be a result of the differential preservation of vegetable fibre in the soil at Cleatham.

A fragment of tabby weave was found on the iron

chain in Grave 50, which dated to the 7th century. This was very fine, with a weave count of 18/18 threads/cm. Amongst the three shed twills are two examples which were made using mixed threads (S/Z spun). These were found in Graves 31 and 40, both of which contained the remains of men with spearheads. It has been suggested that mixed thread weaves were used on more decorative fabrics such as diamond twills. Grave 38 contained traces of a fine 2/2 chevron twill, with a weave of 20/20, preserved on a copper alloy ring. This dated to the 7th century. A fragment of broken diamond twill, at 16/16 threads/cm, was found with the five brooches in Grave 30. The Cleatham cemetery contained examples of three shed twill, a weave which, it has been argued, could not be made on an Anglo-Saxon warp weighted loom. It is believed that this weave is a product of a Roman-type two-beam loom, which was adopted by the Anglo-Saxon settlers (Hoffmann 1964, 203). One clear example of a tablet woven edging was found. This was in Grave 24 and is dated to the later 6th–early 7th century. The tablet weave was woven on a four-hole pattern using S and Z spun thread to produce a chevron pattern. It was attached to a fragment of 1/1 tabby made from a well-spun Z/Z linen fibre with a 14/10 weave. Other braid fragments were found in Cleatham Grave 1 (6th century?), Grave 9 (5th century) and Grave 30 (6th century). Three fragments of cords were found in Cleatham Graves 30, 41 and 48, and are likely to have been bead strings. In Graves 19 and 30 threads were found wound around brooch pins, a practice also observed at Norton.

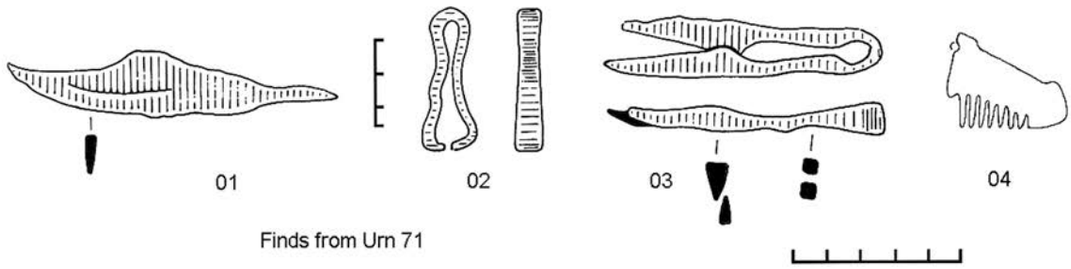
Faunal remains

Context	Find	Phase	Description
Urn 242	F3184	1	Horse bones? Burnt, found in Urn 242, beneath Urn 71
Urn 315	F3178	1–3	Sheep's tooth, unburnt, found amongst bones
Urn 346	F3180	1–2	Sheep's tooth, unburnt, found amongst bones
Urn 351	F3179	?	Sheep's tooth, unburnt, found amongst bones
Urn 639	F3185	1	Horse bones? Burnt, found in a mass beneath Urn 639
Grave 11	F3171		Bird bones, lying next to left hip. Body prone and decapitated
Grave 27	F2608		Animal scapula, found on left elbow
Grave 31	F2737		Sheep's jawbone in fill
Grave 44	F3110		Sheep's tooth found in fill

Table 99 Cleatham animal bones

The examination of the burnt bones found within the urns at other cremation cemeteries has shown that at some cemeteries animal bones occur in up to 30% of the urns (Richards 1987, 125). Many of the urns at Elsham and Newark contained animal bones, and it is reasonable to expect a similarly high percentage at Cleatham. In the absence of a bone report it was only possible to distinguish those bones which were immediately obvious to the untrained eye. Animal bones were identified in five of the urns and in four of the graves.

With the urns we are looking at two practices: the inclusion of unburnt sheep's teeth with the burnt human bones; and cremation, and subsequent burial, of animal remains. While the number of Cleatham urns which contained burnt animal bones is unknown, the number of unburnt sheep's teeth recorded is likely to be accurate. These teeth, all come from the lower jaw, and may have been amulets, although Meaney (1981, 131–9) records no instance of sheep's teeth being used in this way, and the Cleatham finds were not perforated. Sheep's bones were the most common animal remains found in the urns at Elsham (Richards 1987, 115, table 21). The rites observed in Cleatham Urns 242 and 639 were striking. Urn 639 had been deposited on top of a mass of bones from a large animal, almost certainly a horse. Found within the urn was an iron fitting (Find 1789, Fig 110) which could plausibly be interpreted as a fitting from a wooden saddle. The stamp decoration



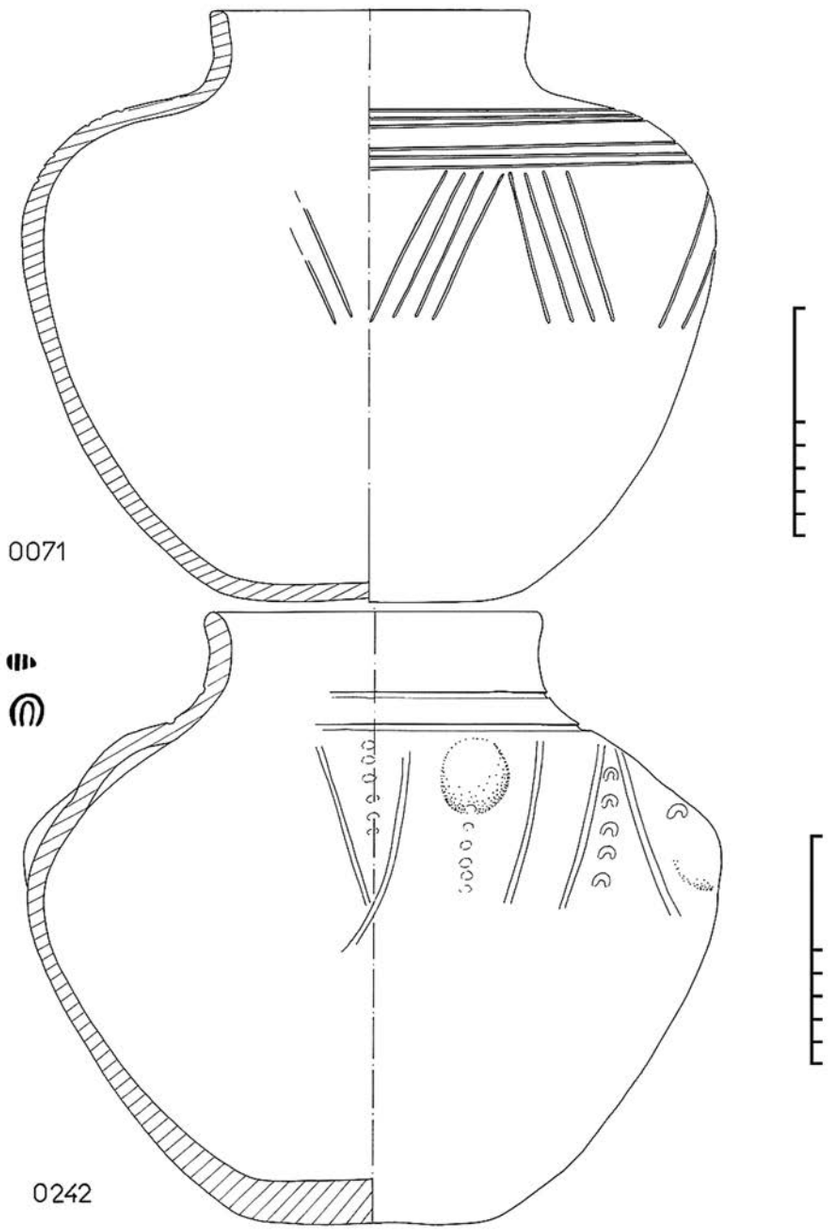


Fig 112 Superimposed Urns 71 and 242 with associated finds. Urn 071 had been placed directly on top of Urn 242. In it was an iron toilet set suggesting that it contained the remains of a man. Urn 242 contained 4.5kg of burnt bones from a large animal, probably a horse. This identification is supported by the stamp used to decorate the pot which is in the form of a horseshoe. Urns shown at 33%, stamps at 66%, iron objects at 50%

on the urn clearly depicts horses' footprints, the frog in the middle of the hoof being clearly shown. Urn 242 formed part of a double burial, the upper urn (Urn 71) standing directly on top of Urn 242 (Fig 112). Urn 71 was found to contain human bones and an iron toilet set (razor, shears and tweezers). Below it Urn 242 held a large amount (4,500g) of bone from a very large animal. The stamped impressions decorating this vessel resembled a horseshoe. These burials were associated with urns from Phases 1–4, suggesting that the inclusion of animal bone remains occurred over much of the sequence.

Animal bones were found in four of the graves. In Grave 11 bird bones were discovered at the left hip of the body. This was an unusual grave in other ways: the body was prone, and the head had been severed and was found 2.2m away, standing next to Urn 115. A sheep's jawbone was found in the fill of Grave 31. This body was also prone and accompanied by a spearhead. The scapula of an animal was found lying on the left elbow of the body in Grave 27; this burial also contained a spearhead (Find 2606). The other grave to contain animal bone was Grave 44, the fill of which contained a sheep's tooth, and was dated to the mid-6th century. In view of the scarcity of weapon graves at Cleatham the inclusion of sheep's bones in two of them may be more than a coincidence, but it is difficult to say more than that.

Collected objects (Fig 113)

Pot sherds

Six of the Cleatham graves and 34 of the urns contained sherds of Romano-British pottery, and three contained fragments of tile. While Roman material occurs as stray finds on the Cleatham site, it is not found in sufficiently large quantities to explain the number of urns which contain sherds, and we must be looking at a deliberate act on the part of the funeral party. No temporal pattern was found: Roman sherds occurred in all phases and in similar proportions of urns.

Phase	Urns in Phase	Worked flint	Roman sherds
5	58.9	1.0 (1.7%)	2.3 (3.9%)
4	113.7	1.3 (1.1%)	3.8 (3.3%)
3	102.5	0.3 (0.3%)	2.0 (2.0%)
2	137.7	0.3 (0.2%)	4.0 (2.9%)
1	192.5	4.0 (2.1%)	6.8 (3.5%)

Table 100 Number and percentage of urns containing worked flint and Romano-British sherds. Finds from urns occurring in more than one phase have been spread over the phases

The inclusion of this material must prompt some speculation. The discovery of Romano-British metalwork in Anglo-Saxon graves has been discussed by Meaney (1981, 222–8) and White (1990, 125–52) who showed that the practice was widespread. The inclusion of Romano-British sherds in graves seems odd, particularly as most of it consists of plain greyware sherds that are not intrinsically attractive. Their inclusion was a deliberate act on the part of the funeral party, the significance of which is lost to us. The four Roman-type jars used as urns at Cleatham could have been heirlooms, although it is argued here that they may represent a sub-Roman pottery industry.

Worked flints (Fig 113)

Three of the Cleatham graves and twelve of the urns with finds (2.0%) contained worked flints, a similar, low-level frequency to that seen on two of the other cemeteries cited in Table 106. Worked flints were most common in the urns of Phase 1 (four examples) but also occurred in Phase 2–4 (one example), Phase 4 (three examples) and Phase 5 (one example).

Flint artefacts are very common in northern Lincolnshire, and were frequent topsoil finds at Cleatham, but it is unlikely that the flints got into the urns by accident and they must, like the Roman sherds, have been deliberately placed. The flints were all debitage and no finished artefacts were present. Meaney (1981, 210–13) discusses the inclusion of worked flints in Anglo-Saxon graves and suggests a number of possible interpretations, all of which are impossible to verify. None of the flints found in the Cleatham urns was suitable for use with a firesteel and there were no signs of iron staining.

Fossils

Urn 364 (Phase 1) was found to contain the burnt remains of a silicaceous fossil sea urchin (Find 918, Fig 113). Meaney (1981, 117–22) discusses the use of fossils in Anglo-Saxon graves which she sees as coming

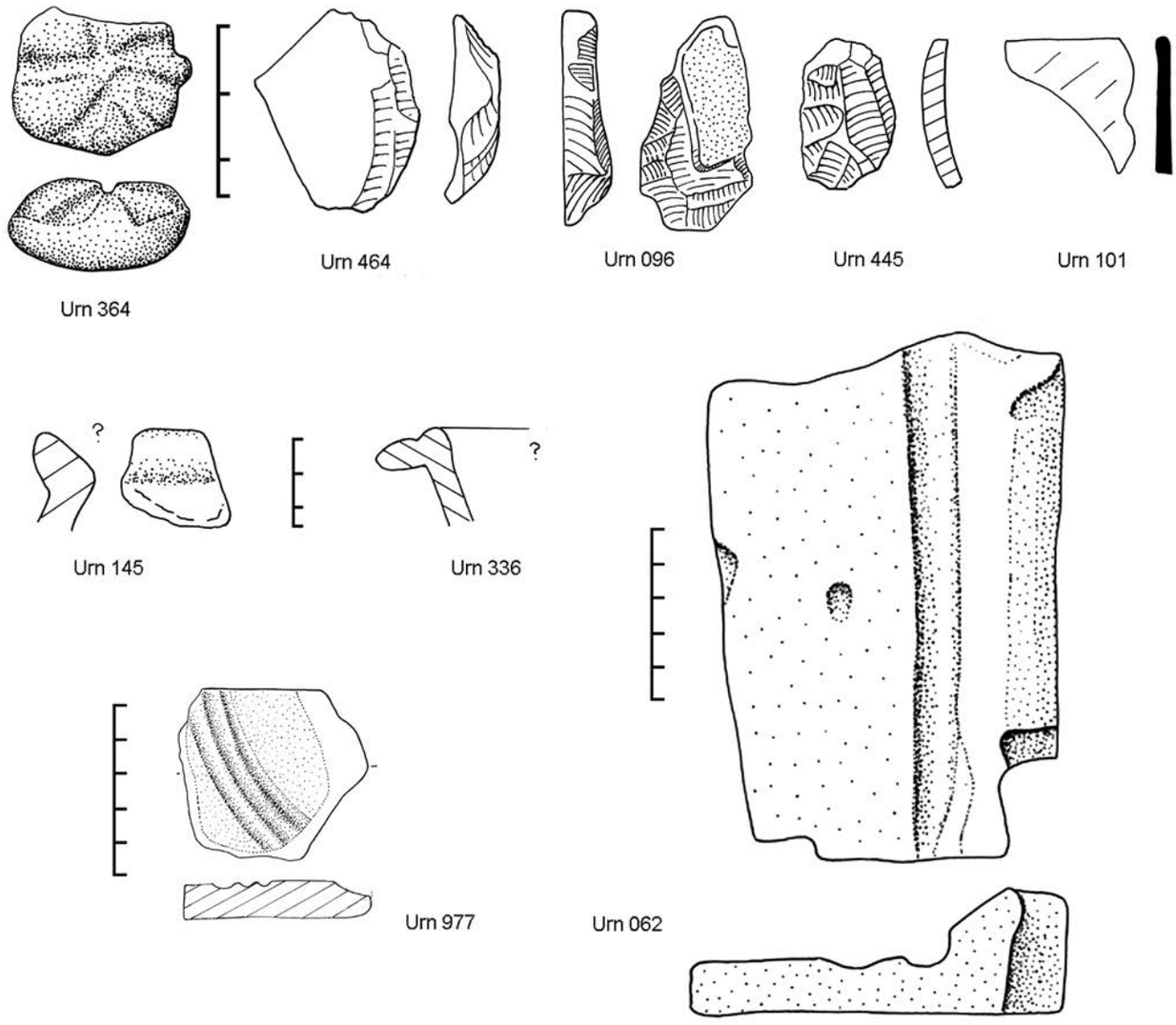


Fig 113 'Collected' objects. Fossil echinoid: Urn 364, Phase 1. Worked flints: Urn 464, Phase 2–4; Urn 096, Phase ?; Urn 445, Phase 4. Glass sherd: Urn 101, Phase 5 (all 100%). Roman sherds: Urn 145, Phase 3–4; Urn 336, Phase 1. Roman roof tile: Urn 062, Phase ?; Urn 977, Phase 5 (all at 50%). Table 100

into favour after the mid-6th century and continuing at least as late as the early 7th century. The Cleatham find represents an early example.

Silica frit (Pl 31)

There has been some discussion of this material which was, at one time, known as 'hair slag' and believed to be the residue of burnt human hair. Analysis, however, showed it to be almost pure silica and it is better seen as a result of alkalis, produced by the pyre, acting as a flux and reducing the melting point of available silica, allowing it to form a frit (Henderson *et al* 1987, 353–6). It is interesting that the funeral party saw this material as worthy of collection and inclusion in the urn. This material was found in 3.3% (32/960) of the Cleatham urns, with a median content of 0.62g. The largest mass found was 24.67g in Urn 596, unphased. No coherent pattern was found for the inclusion of silica frit over the history of the site.

Phase	Urns in Phase	Silica frit
5	58.9	2.0 (3.4%)
4	113.7	6.5 (5.7%)
3	102.5	4.8 (4.7%)
2	137.7	4.8 (3.5%)
1	192.5	5.8 (3.0%)

Table 101 Number and percentage of urns containing silica frit. Finds from urns occurring in more than one phase have been spread over the phases

Iron slag

Slag was found as an additive to the clay bodies of many of the pots, but fragments were also found in two of the urns and two of the graves.

A feature of the parishes of Manton and Kirton in Lindsey are the 'Cinder Hills' which are early iron-working sites and are frequently associated with Anglo-Saxon domestic pottery (see Fig 3).

Context	Find	Phase	Mass
Urn 12	F160	1	7.66g
Urn 82	F294	3–4	21.29g
Grave 13	F2551		54.28g
Grave 48	F3045		76.00g

Table 102 Finds of iron slag in funerary contexts at Cleatham

Summary

There can be little doubt that the Cleatham cemetery was in use from the very beginning of the early Anglo-Saxon period to its end with 'Final Phase' graves from the end of the 7th century. We have a sequence of urn decoration established from the intercutting vessels but it remains impossible to put absolute dates to the phases. The associated finds do, however, give some indications of the period during which both cremations (Table 103) and inhumations (Table 104) were taking place on the site. There was large measure of overlap between the two rites, with cremation dominating at first but being replaced by inhumation towards the end of the 6th century. It was also found that there was considerable overlap in the types of finds from the Cleatham urns and inhumations, suggesting that the two rites were, so far as one can tell, being practised by people of the same cultural background. This is best examined by reference to the pattern of bead use. The beads, by their high frequency, allow meaningful comparisons to be made (Table 66). While some differences exist it is likely that the people using the two rites at Cleatham were drawing on the same sources and using many of their beads in similar combinations.

Having established the contemporaneity of the two rites, the pattern of grave goods was examined to see if the rites could be differentiated on other, possibly social, grounds. Finds were more common in the graves than in the urns, with 63.4% of the urns containing finds and 85.5% of the graves being accompanied by artefacts. The graves were also found to contain a wider range of finds, 58.1% (36/62) of the graves had three or more object types as compared with 34.5% (331/960) of the urns. It would be wrong to see the cremation burials as 'poorer' than the inhumations; the objects found in the urns are unlikely to represent all that was placed on the pyre and cremation is, in itself, a more elaborate rite than inhumation.

Urn No.	Phase	Dating	Evidence
52	1	450–700	Group A1 knife
109	2	375–700	Roman coin, 367–375
116	5	520–570	Group V cruciform brooch
216	2	570–700	Cowrie shell
255	2–4	475–525	Group II cruciform brooch
288	3	570–700	Cowrie shell
325	4	570–700	Group D1 knife
330	4–5	520–570	Group V cruciform brooch
356	1–2	475–525	Group II cruciform brooch
370	4	520–570	Group V cruciform brooch
375	3	450–600	Group B1 knife
458	1	425–475	Barred comb
459	1	475–525	Group II cruciform brooch
459	1	475–475	Barred comb
470	2	570–700	Cowrie shell
488	1	425–475	Group I cruciform brooch
636	3	475–550	Group II–IV cruciform brooch
859	2	475–525	Group III cruciform brooch
922	2	475–550	Group II–IV cruciform brooch
977	5	550–700	Wire finger rings
1000	4	450–700	Group A1 knife
1097	2–4	570–700	Urn sherds found in fill of Grave 20, taq only
1129	2	520–570	Urn sherds found in fill of Grave 13, taq only
1138	2	500–570	Urn sherds found in fill of Grave 19, taq only
1139	2	500–570	Urn sherds found in fill of Grave 19, taq only
1148	3–4	570–700	Urn sherds found in fill of Grave 20, taq only
1216	1–2	520–570	Urn sherds found in fill of Grave 55, taq only
1217	2–4	520–570	Urn sherds found in fill of Grave 55, taq only

Table 103 Urns dated by associated finds from Cleatham (taq = *terminus ante quem*)

Grave	Dating, century	Evidence
1	580–650?	Small annular brooch
2	?	Badly disturbed, not datable
3	?	Badly disturbed, not datable
4	500–550	Strap-end, cf Grave 30
5	475–525	Spearhead, Class I1
6	?	No finds, undated
7	450–650	Knife, Type A1
8	?	Undated
9	450–525	Cruciform brooch, Group 1
10	580–650	Knife, Type D2, grooved blade
11	?	No datable grave goods. Decapitated burial
12	550–650	Spearhead, Class E3; knife, Type D2
13	530–580	Annular brooches cf brooches in Grave 54
14	530–580	Fragment of burnt Group IVa brooch in fill
15	600–650	Garnet buckle; B2 bead (580–650)
16	?	Badly disturbed, not datable
17	580–650	Small annular brooch, Type E1 knife
18	600–650	Knife Type E2, small buckle
19	500–570	Annular brooch
20	580–650	Small annular brooch
21	?	No finds
22	?	No finds
23	580–650h	Spearhead, Class E2
24	550–650	Silver 'bell' beads; B bead (550–650)
25	475–525	Spearhead, Type H1; shield boss Group 1.2
26	7th ?	Extended, supine, therefore late?
27	475–570	Spearhead, Class C1
28	?	No finds
29	475–550	Knife, Type B1, kidney-shaped buckle
30	500–550	Cruciform brooches, amber beads; A1 bead (450–530)
31	425–525	Spearhead, Class I2
32	580–650	Knife, Type D1, grooved blade, lace-tag, small buckle
33	?	Badly disturbed, not datable
34	500–530	Cruciform brooches; A1 bead (450–530)
35	500–530	Small-long brooch; A1 bead (450–530)
36	500–550	Small-long brooch with lappets
37	580–650	Knife, Type A2, grooved blade
38	580–650	Knife, Type D1, small buckle
39	450–530	Pot and beads found in grave; A1 bead (450–530)
40	450–500	Spearhead, Class E1
41	500–550	Cruciform brooches
42	500–570	Annular brooches
43	475–570	Buckle, iron pin
44	475–525	Sleeve-clasps
45	475–570	Large buckle
46	450–530	Cruciform brooch; A1 bead (450–530)
47	475–550	Sleeve-clasp
48	450–530	Sleeve-clasp, amber beads; A1 bead (450–530)
49	?	No grave goods
50	650–700	Knife, chatelaine, Ag pin; C bead (650–700)
51	580–650	Knife, small buckle
52	?	No grave goods
53	5th–6th	Pot found in grave
54	530–580	Fragment of a late cruciform brooch in fill; A2b bead (530–580)
55	475–550	Fragment of an annular brooch in fill
56	?	No grave goods
57	475–550	Sleeve-clasp, buckle
58	?	No grave goods
59	?	No grave goods
60	?	Ploughed out, no grave goods
61	?	No grave goods
62	500–550	Cruciform brooch

Table 104 Cleatham graves dated by associated finds. Bead dates as per Brugmann 2004

An attempt was also made to determine if the frequency with which grave goods were placed in the urns varied over the history of the cemetery (Table 105).

It proved impossible to get a coherent picture from this table. The proportion of urns containing specified numbers of find types appears to fluctuate randomly or, at least, no pattern can be discerned.

The work of Julian Richards suggested that there was a relationship between the height of urns and the grave goods found within them (Richards 1987, 136). An attempt was made to determine if there was any relationship between the height of the urns at Cleatham and the material which they contained.

It can be seen from Fig 114 that Richards' hypothesis is generally supported by the number of finds found in the Cleatham urns. It is clear that with increasing urn size the number of burials which contain no finds is progressively reduced, from 80% in Band 2 (80–99mm) down to 8.7% in Band 11

No of Finds	Phase 1 Σ160	Phase 2 Σ95	Phase 3 Σ44	Phase 4 Σ59	Phase 5 Σ45
0	58 (36.3%)	38 (40.0%)	20 (45.5%)	21 (35.6%)	21 (46.7%)
1	32 (20.0%)	21 (22.1%)	9 (20.5%)	13 (22.0%)	7 (15.6%)
2–4	57 (35.6%)	30 (31.6%)	10 (22.7%)	23 (39.0%)	13 (28.9%)
5–10	13 (8.1%)	6 (6.3%)	5 (11.4%)	2 (3.4%)	4 (8.9%)

Table 105 Number of urns containing specified numbers of find types.
The count includes only those urns that can be attributed to a single phase

(260–79mm). The numbers of urns in Bands 12 and 13 are too low to be interpreted. The number of urns containing single finds is broadly constant across all bands. This is likely to be a result of the high number of urns which contain a single comb fragment as an offering. It is difficult to say much about the urns which contained more than ten finds. These high numbers of finds will consist of glass beads or bone counters which occur in urns over a wide range of sizes. An attempt was made to look at the urns containing different numbers of find-types, rather than total finds, but this was more confusing than illuminating. The taller urns do seem to contain more grave goods but this is only a trend, as significant numbers of finds occur in smaller urns.

At Cleatham 63.4% of the urns contain finds, a figure comparable to that seen at Elsham and Spong Hill (Table 106). It is notable that these are the most recently excavated cemeteries and the high frequency of finds may be a product of improved methods in the processing of cremation deposits. This is unlikely to be a problem with the more immediately recognisable materials such as metal and glass, but the low frequencies of bone combs and ivory rings (often represented by very small fragments) amongst the finds from the early excavations is suspicious. The reworking of the finds from Sancton by Jane Timby increased the frequency of ivory in the urns from 1.6% to 10.3% (Timby 1993, 279). At South Elkington, where only 14.7% of the urns contained finds, easily collected materials such as burnt glass and copper alloy are also poorly represented and, of the 22 categories of find included in Table 106, only five were present. The apparent frequency with which finds occur in the urns will be affected by the amount of care exercised in collecting material from the pyre site and the inclusion of graveside offerings. It is notable that of the 292 bone combs found at Cleatham only 38 had been burnt; the remainder were unburnt offerings placed with the bone deposit. Practices of this sort, which are themselves part of the funerary ritual, could do much to increase the frequency of finds.

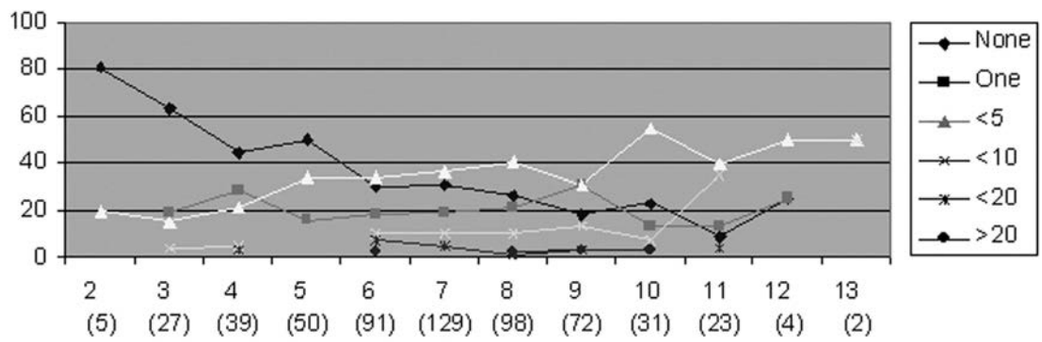


Fig 114 Urn heights compared with the number of grave goods they contained. The urn heights are in thirteen 20mm bands between Band 1 (60–79mm) and Band 13 (⇢300mm). The total number of urns in each band is given in brackets and the graph shows the changing percentage of urns in each band that contain specified numbers of finds

	Caistor	Cleatham	Elkington	Newark	Elsham	Sancton	Spong
No urns	376	960	204	404	623	390	2502
No with grave goods	155 (41.2%)	609 (63.4%)	30 (14.7%)	170 (42.1%)	339 (54.4%)	219 (56.2%)	1315 (52.6%)
Brooch	13 (8.4%)	32 (5.3%)	2 (6.7%)	9 (5.3%)	16 (4.7%)	17 (7.8%)	114 (8.7%)
Sleeve-clasp	–	4 (0.7%)	–	2 (1.2%)	3 (0.9%)	3 (1.4%)	10 (0.8%)
Pin	–	15 (2.5%)	–	5 (2.9%)	9 (2.7%)	–	12 (0.9%)
Knife	22 (14.2%)	10 (1.6%)	–	3 (1.8%)	17 (5.0%)	7 (3.2%)	98 (7.5%)
Razor		18 (3.0%)	6 (20.0%)	4 (2.4%)		–	52 (4.0%)
Shears	31 (20.0%)	27 (4.4%)		7 (4.1%)	21 (6.2%)	8 (3.7%)	139 (10.6%)
Tweezers	29 (25.2%)	43 (7.1%)	2 (6.7%)	13 (7.7%)	26 (7.7%)	24 (11.0%)	197 (15.0%)
Sheet Æ	18 (11.6%)	30 (4.9%)	–	14 (8.3%)	30 (8.9%)	58 (26.5%)	120 (9.1%)
Æ melt	?	94 (15.4%)	–	No data	66 (19.5%)	32 (14.6%)	226 (17.2%)
Glass beads	26 (16.8%)	278 (45.7%)	13 (43.3%)	23 (13.5%)	75 (22.1%)	91 (41.6%)	106 (8.1%)
Glass vessel	5 (3.2%)	8 (1.3%)	–	5 (2.9%)	1 (0.3%)	12 (5.5%)	106 (8.1%)
Glass melt	–	13 (2.1%)	–	83 (48.8%)	120 (35.4%)	32 (14.6%)	–
Comb	27 (17.4%)	281 (46.1%)		44 (25.9%)	113 (33.3%)	62 (28.3%)	294 (22.4%)
Counters	3 (1.9%)	6 (1.0%)	2 (6.7%)	2 (1.2%)	10 (3.0%)	4 (1.8%)	51 (3.9%)
Ivory	5 (3.2%)	159 (26.1%)		39 (22.9%)	83 (24.5%)	40 (10.3%)	160 (12.2%)
Antler work	1 (0.7%)	43 (7.1%)	–	13 (7.6%)	32 (9.4%)	–	146 (11.1%)
Whorl	2 (1.3%)	62 (10.2%)	–	8 (4.7%)	36 (10.6%)	12 (5.5%)	56 (4.3%)
Whetstone	–	4 (0.7%)	–	–	2 (0.6%)	1 (0.4%)	9 (0.7%)
Coral	–	11 (1.8%)	–	–	9 (2.7%)	–	–
Cowrie	–	4 (0.7%)	–	1 (0.6%)	6 (1.8%)	–	–
Crystal	–	20 (3.3%)	–	5 (2.9%)	14 (4.1%)	2 (0.9%)	41 (3.1%)
Flint	–	12 (2.0%)	–	6 (3.5%)	–	–	61 (4.6%)

Table 106 Comparison of the proportion of urns containing selected grave goods. The base figure for each cemetery is the number of urns which contained grave goods, not the urn total. This differs from the figure used in the analysis of the Cleatham cemetery, which was the number of urns with burnt bone, and potentially grave goods (960 urns with bone and 609 with grave goods). In each case I have returned to the published report on the cemetery in question, these being: Caistor by Norwich, Myres and Green 1973; South Elkington, Webster 1952; Newark, Millgate, Kinsley 1989; Elsham, unpublished (I am grateful to Freda Berisford and Chris Knowles for allowing me access to the site archive). Spong Hill, Hills 1977, Hills and Penn 1981, Hills *et al* 1987 and 1994; Sancton, Timby 1993. Some difficulty was encountered in the extraction of the data on which this table is based as people have recorded information in different ways (see the discussion on page 245). At the most basic level it was often difficult to determine how many urns a cemetery contained, for example Surgeon-Commander Mann, who excavated the Caistor cemetery, registered 376 urns in addition to which there were large quantities of debris lying around the site from which 94 other urns were defined.

Inhumations Catalogue

Grave No 1 Co-ordinates: 33.4 E, 31.0 N
Position: Flexed, lying on left side Alignment: 101° Depth: 250mm
Human remains Age: Old adult Sex: Male Stature: ?
Grave goods
1. Knife, Find 2486
2. Annular brooch, Find 2487
Notes
Edges of grave could not be determined. Some plough damage. Brooch found under jaw.

Grave No 2 Co-ordinates: 27.0E, 33.0N
Position: ? Alignment: ? Depth: ?
Human remains Age: ? Sex: ? Stature: ?
Grave goods Nil
Notes
Mixed burnt and unburnt bones representing the remains of a ploughed-out grave. Sherds from Urn 1116 found in grave fill.

Grave No 3 Co-ordinates: 25.0E, 33.1N
Position: ? Alignment: 111° Depth: ?
Human remains Age: Adult Sex: ? Stature: ?
Grave goods Nil
Notes
Ploughed out grave, only the *in situ* remains of an arm survived, although the scattered fragments of other bones were present.

Grave No 4 Co-ordinates: 30.2E, 32.4N
Position: Flexed Alignment: 98° Depth: 360mm
Human remains Age: Mature adult Sex: Male Stature: ?
Grave goods
1. Strap end, Find 2488
2. Knife, Find 2489
Notes
Iron knife found on chest, point towards feet. Sherds from Urns 1117[32] (Group 10a, Phase 1), 1118 and 1119 found in grave fill.

Grave No 5 Co-ordinates: 32.5E, 33.0N
Position: Extended Alignment: 151° Depth: 450mm Stones in fill
Human remains Age: Young adult Sex: Male Stature: ?
Grave goods
1. Spearhead, Find 3170
2. Spear butt ferrule, Find 0038
3. Knife, Find 2490
Notes
Iron spearhead and butt found aligned, 1.9m apart, just beneath the top of the subsoil, prior to the excavation of the grave. They were aligned with the grave and must have been associated. Dressed stones in fill of grave. Grave cut could not be defined.

Grave No 6 Co-ordinates: 26.6E, 36.5N
Position: Flexed, lying on left side Alignment: 121° Depth: 320mm
Human remains Age: Adult Sex: ? Stature: ?
Grave goods Copper alloy button, may be intrusive.
Notes
Severe plough damage. Intrusive modern find in fill of grave.

Grave No 7 Co-ordinates: 32.9E, 35.2
Position: Extended Alignment: 126° Depth: 340mm Stones in fill
Human remains Age: Child/adolescent Sex: ? Stature: ?
Grave goods
1. Knife, Find 2492
Notes
Large quantity of dressed stone in fill of grave. Sherds from Urns 1120 and 1121 found in grave fill.

Grave No 8 Co-ordinates: 36.3E, 34.7N
Position: Flexed Alignment: 113° Depth: 20mm
Human remains Age: Adult Sex: ? Stature: ?
Grave goods Nil
Notes
Poorly preserved remains, plough damaged. No grave goods. Large sherds from Urns 1122 and 1123 in grave fill.

Grave No 9 Co-ordinates: 28.2E, 105.0N
Position: Flexed, lying on left side. Alignment: 271° Depth: ?
Human remains Age: Old adult Sex: Male? Stature: ?
Grave goods
1. Ring, Ag wrapped, Ae, Find 2493
2. Ring, Ae wire, Find 2494
3. Pin, Fe, Find 2495/2501
4. Ring, wound Ae, Find 2496
5. Ring, Pb, Find 2502
6. Cruciform brooch, Find 2499
7. Small long brooch, Find 2498
8. Ring, Ae wire, Find 2497
9. Knife, Find 2500
10–41 Beads, glass, (32) Finds 2503–2534

Blue	1
Brown	5
Green	8
Grey/green	1
Polychrome	5
Terracotta	5
White	4
Yellow	3

Notes
Bones identified as 'Male?' but the associated finds suggest that this individual was female. Some undecorated sherds found in fill of grave.

Grave No 10 Co-ordinates: 26.7E, 99.5N
Position: Flexed, body lying on left side. Alignment: 133° Depth: ?
Human remains Age: Mature Adult Sex: Male Stature: 1.790m
Grave goods
1. Knife, Find 2535
2. Roman greyware sherd, Find 2536
Notes
Sherds from Urns 1124 (Group 07n, Phase 1–5) and 1125 (Group 10a, Phase 1) found in grave fill.

Grave No 11 Co-ordinates: 28.7E, 89.6
Position: Prone Alignment: 131° Depth: ?
Human remains Age: Young adult Sex: Female Stature: ?
Grave goods
1. Fragmentary bird bones, Find 3171, found at right hip.

Notes
Skeleton found on its face. Skull missing, but is probably the skull found standing upright, on mandible, next to Urn 115 (Group 05b, Phase 2), 2.2m to the south-west. Left arm folded under body.

Grave No 12 Co-ordinates 26.0E, 90.2N
Position: Flexed, lying on right side Alignment: 291° Depth: ?
Human remains Age: Young Adult Sex: Male Stature: 1.87m
Grave goods
1. Spearhead, Find 2538
2. Ring, Fe, Find 2539
3. Knife, Find 2540

Notes
Knife under left forearm. Iron spearhead found, pointing downwards from right knee. Urn 125 (Group 21n, Phase 1) damaged by the insertion of this grave.

Grave No 13 Co-ordinates: 30.2E, 107.0N
Position: Extended Alignment: 231° Depth: 400mm
Human remains Age: Adolescent Sex: Female Stature: 1.63m
Grave goods
1. Annular brooch fragment, Find 2541
2. Annular brooch, Find 2542
3. Scutiform pendant, Ag, Find 2543
4. Buckle, Fe, Find 2544
5–8. Beads, glass (4), Finds 2545–8, 52
   - Polychrome 1
   - Red 1
   - Green 1
   - Yellow 1

9. Fe fragment, Find 2549
10. Knife, Find 2550
11. Iron slag, Find 2551
12. Bead, glass, blue, Find 2552

Notes
Cut into fill of northern boundary ditch. Sherds from Urns 1128 and 1129 (Group 07b, Phase 1–5) found in grave fill.

Grave No 14 Co-ordinates: 31.8E, 103.2N
Position: Extended Alignment: 141° Depth: 300/450mm
Human remains Age: Young adult Sex: Male Stature: 1.77m
Grave goods
1. Burnt cruciform brooch fragment, residual, Find 2553
2. Knife, Find 2554

Notes
Grave 450mm deep at head but only 300mm deep at foot. Right forearm beneath pelvis. Sherds from Urns 1130 and 1131 found in grave fill.

Grave No 15 Co-ordinates: 30.6E, 100.7N
Position: Crouched Alignment: 117° Depth: ?
Human remains Age: Adult Sex: ? Stature: ?
Grave goods
1. Buckle, Ae, gilt with garnet inlay, Find 2556
2. Annular brooch, Ae, Find 2557
3. Annular brooch with pin, Ae, Find 2558
4–7. Beads, glass, Find 2559–62
   - Blue 1
   - Polychrome 1

Yellow 2

Notes
Sherds from Urn 1132 found in grave fill.

Grave No 16 Co-ordinates: 31.1E, 93.1N
Position: ? Alignment: ? Depth: 20mm
Human remains Age: Child Sex: ? Stature: ?
Grave goods Nil
Notes
Skull and arm fragment from an infant, plough damaged. Bones now missing.

Grave No 17 Co-ordinates: 31.0E, 86.3N
Position: Flexed, lying on left side Alignment: 135° Depth: ?
Human remains Age: Adult Sex: Male Stature: ?
Grave goods
1. Pot, plain domestic, 'Urn 238'
2. Annular brooch, Ae, Find 2565
3. Knife, Find 2566
4. Bead, glass, polychrome, Find 2567

Notes
Urn 238 found as an accessory vessel. Large quantity of sherds from Urns 1133, 1134 and 1135 in fill of grave.

Grave No 18 Co-ordinates: 33.0E, 97.0N
Position: Extended Alignment: 111° Depth: ?
Human remains Age: Young adult Sex: Male Stature: 1.87m
Grave goods
1. Buckle, Fe, Find 2569
2. Brooch pin, Fe, residual, Find 2570
3. Knife, Find 2571

Notes
Iron knife found under left forearm. Sherds from Urns 1136 (Group 03s, Phase 3) and 1137 found in grave fill.

Grave No 19 Co-ordinates: 32.0E, 92.0N
Position: Flexed, lying on left side Alignment: 134° Depth: ?
Human remains Age: Adult Sex: Female Stature: ?
Grave goods
1. Annular brooch, Ae, Find 2572
2. Pin, Fe, Find 2573
3. Knife, Find 2574

Notes
Sherds from Urns 1138 (Group 05b, Phase 2), 1139 (Group 05b, Phase 2), 1140, 1141, 1142 and 1143 found in grave fill.

Grave No 20 Co-ordinates: 36.3E, 100.7N
Position: Extended Alignment: 86° Depth: ? Stones in fill
Human remains Age: Adolescent Sex: Female Stature: ?
Grave goods
1. Hanging bowl, Ae, Find 2575
2. Annular brooch, Ae, Find 2576

Notes
Bronze bowl found, inverted, 700mm to north of skeleton. Sherds from Urns 1095 (Group 11s, Phase 4), 1097 (Group 02s, Phase 3–4), 1145, 1146, 1147, 1148 (Group 10s, Phase 4) and 1149 found in grave fill.

Grave No 21 Co-ordinates: 24.0E, 113.0N
Position: Flexed, lying on left side Alignment: 155° Depth: 380mm
Human remains Age: Adult Sex: ? Stature: ?

Grave goods
1. Sherd of Roman pottery, Find 2578

Grave No 22 Co-ordinates: 35.8E, 90.8N
Position: Flexed, lying on left side Alignment: 268° Depth: 830mm
Human remains Age: Mature adult Sex: Female? Stature: ?
Grave goods Nil
Notes
Sherds from Urns 1150 and 1151 found in grave fill.

Grave No 23 Co-ordinates 37.2E, 93.0N
Position: Flexed, lying on left side Alignment: 133° Depth: 750mm Stones in fill
Human remains Age: Young adult Sex: Male Stature: 1.77m
Grave goods
1. Spearhead, Find 2580
2. Spatulate implement, Find 2581
3. Knife, Find 2582
Notes
Left arm extended, right arm sharply bent at elbow. Sherds from Urns 1152, 1153, 1154 (Group 02b Phase 1–3), 1155 (Group 04s, Phase 4) and 1156 (Group 10a, Phase 1) found in grave fill.

Grave No 24 Co-ordinates: 41.7E, 101.0N
Position: Flexed, lying on right side Alignment: 151° Depth: ? Stones in fill
Human remains Age: Adult Sex: Female Stature: ?
Grave goods
1. Annular brooch, Ae, Find 2583
2. Annular brooch, Ae, Find 2584
3. Ring, Fe, Find 2585
4. Bead, Ag, in two halves, Find 2586
5. Bead, Ag, in two halves, Find 2587
6. Bead, Ag, in two halves, Find 2588
7. Pendent, Ag, tooth-like, Find 2589
8. Knife, Find 2590
9. Fe fragment, Find 2591
10–21 Glass beads.

Polychrome	7	Finds 2593, 2597–600, 2602–3
White	2	Finds 2594, 2596
Yellow	3	Finds 2592, 2595, 2601

Grave No 25 Co-ordinates: 8.3E, 105.0N
Position: Extended Alignment 119° Depth: 630mm Stones in fill
Human remains Age: Young adult Sex: Male Stature: 1.80m
Grave goods
1. Spearhead, Find 2604
2. Shield boss, Find 2605a
3. Shield grip, Find 2605b
4. Shield mount, Find 2605c
5. Shield mount, Find 2605d
Notes
Spearhead at side, not at shoulder of body.

Grave No 26 Co-ordinates: 21.7E, 85.8N
Position: Extended Alignment: 111° Depth: 600mm
Human remains Age: Young adult Sex: Female Stature: ?
Grave goods Nil

Notes
Grave 500mm deep at head, 600mm at foot. Sherds from Urns 1157 and 1158 found in grave fill.

Grave No 27 Co-ordinates: 0.0E, 88.1N
Position: Extended Alignment: 111° Depth: 620mm Stones in fill
Human remains Age: Adolescent Sex: Male Stature: 1.74m
Grave goods
1. Spearhead, Find 2606
2. Knife, Find 2607
3. Animal bone, Find 2608.

Notes
Animal scapula against left elbow.

Grave No 28 Co-ordinates: 40.0E, 34.3N
Position: Extended Alignment: 117° Depth: 440mm
Human remains Age: Adolescent Sex: Male Stature: ?
Grave goods Nil

Grave No 29 Co-ordinates: 21.3E, 84.4N
Position: Extended Alignment: 127° Depth: 630mm Stones in fill
Human remains Age: Old adult Sex: Male Stature: ?
Grave goods
1. Pottery vessel, plain 'Urn 1159'
2. Buckle, Fe, kidney-shaped, Find 2610
3. Tweezers, Ae, Find 2611
4. Knife, Find 2612
5. Romano-British sherds, Find 2613

Notes
Broken pot (Urn 1159) used as an accessory vessel.

Grave No 30 Co-ordinates: 43.7E, 35.2N
Position: Extended Alignment: 139° Depth: 570mm Stones in fill
Human remains Age: Mature adult Sex: Female Stature: ?
Grave goods
1. Strap end, Ae, Find 2614
2. Ring fragment, bone/antler, Find 2615
3. Ring fragment, ivory, Find 2616
4–7. Sleeve-clasps, Ae, Finds 2617–20
8–10. Keys, Fe, Finds 2621–3
11. Ring , Fe, Find 2624
13. Cruciform brooch, Find 2625
14. Cruciform brooch, Find 2626
15. Cruciform brooch, Find 2627
16. Cruciform brooch, Find 2628
17. Cruciform brooch, Find 2629
18–45, 47–110, 113, 119–20. Beads, glass, (96) Finds 2630–2732

Blue	53
Brown	1
Green	9
Grey/Green	1
Polychrome	11
Terracotta	10
White	3
Yellow	8

46. Bead, jet, (1), Find 2658

111–12, 114–17, Beads, amber (6), Finds 2723–4, 2726–9
121. Knife, Find 2895

Grave No 31 Co-ordinates: 13.8E, 84.7N
Position: Prone Alignment: 291° Depth: 610mm Stones in fill
Human remains Age: Adult Sex: Male Stature: 1.85m
Grave goods
1. Spearhead, Find 2733
2. Knife, Find 2734
3. Iron fragment, Find 2735
4. Iron fragment, Find 2736
5. Buckle, Fe, Find 2737
6. Burnt Fe fragment, Find 2738
7. Sheep's jaw bone, Find 2739

Notes
Skeleton found on its face. Sheep's jawbone found in fill of grave. Sherds from Urn 1160 (Group 05b, Phase 2) found in grave fill.

Grave No 32 Co-ordinates: 39.3E, 83.7N
Position: Crouched Alignment: 146° Depth: 660mm
Human remains Age: Mature adult Sex: ? Stature: ?
Grave goods
1. Miniature pottery platter, Find 2740
2. Miniature 3 lugged pot, Find 2741
3. Miniature cup, Find 2742
4. Miniature cup, Find 2743
5. Lace-tag, Ae, Find 2745
6. Buckle, Ae, Find 2744
7. Knife, Find 2746

Notes
Group of four miniature pottery vessels found in front of body, knife lying at side. Small copper alloy buckle and lace-tag found in grave fill. Sherds from Urns 1161 and 1162 found in grave fill.

Grave No 33 Co-ordinates: 19.0E, 85.7N
Position: Flexed Alignment: 111° Depth: 350mm
Human remains Age: Adult Sex: ? Stature: ?
Grave goods Nil
Notes
Plough damaged, only the legs survived.

Grave No 34 Co-ordinates: 8.0E, 95.7N
Position: Flexed Alignment: 111° Depth: 950mm Stones in fill
Human remains Age: Mature adult Sex: ? Stature: ?
Grave goods
1. Fire steel, Find 2747
2. Sheet Ae repair from a wooden vessel, Find 2748
3. Sheet Ae repair from a wooden vessel, Find 2749
4–7. Sleeve clasps, Ae, Finds 2750–2753
8. Knife, Find 2754
9. Ring, Fe, Find 2755
10. Ring, Fe, Find 2756
11. Small-long brooch, Find 2757
12. Small-long brooch, Find 2758
13. Cruciform brooch, Find 2759
14. Cruciform brooch, Find 2760

15. Cruciform brooch, Find 2761
16. Buckle, Fe, Find 2762
17–148. Beads, glass (132), Finds 2763–2894

Blue	96
Brown	1
Green	9
Polychrome	16
Red	2
Terracotta	4
White	1
Yellow	3

Notes
Grave cut partly into the limestone and partly into a fissure. The upper part of the body, cut into the fissure, failed to survive, while the legs were relatively well preserved. Sherds from Urn 1163 (Group 08a, Phase 4) found in grave fill.

Grave No 35 Co-ordinates: 6.4E, 95.5N
Position: Crouched Alignment: 101° Depth: 840mm
Human remains Age: Child Sex: ? Stature: ?
Grave goods
1. Small-long brooch, Find 2896
2. Bead, bone, Find 2897
3. Comb fragments, Find 2898
4–26. Beads glass (23), Finds 2898–2921

Blue	11
Green	2
Polychrome	2
Terracotta	5
White	3

Grave No 36 Co-ordinates: 33.0E, 40.2N
Position: Flexed, lying on left side Alignment: 284° Depth: 520mm Stones in fill
Human remains Age: Mature adult Sex: Female? Stature: ?
Grave goods
1. Small-long brooch, Find 2922
2. Cruciform brooch, Find 2923
3. Ring fragments, Fe, Find 2924
4. Knife, Find 2925
5–36. Beads, glass (32), Finds 2926–57

Brown	6
Clear	3
Green	5
Grey/Green	3
Polychrome	3
Terracotta	5
White	1
Yellow	6

Grave No 37 Co-ordinates: 31.0E, 81.7N
Position: Flexed, lying on left side Alignment: 121° Depth: 680mm Stones in fill
Human remains Age: Young adult Sex: Male Stature: ?
Grave goods
1. Knife, Find 2958
2. Lead plug, Find 2959

Notes
Knife found under body but on top of left arm. Grave edge could not be determined. Large quantity of plain Anglo-Saxon sherds in fill of grave. Lead plug from an urn found near to shoulder.

Grave No 38 Co-ordinates 37.6E, 60.9N
Position: Extended Alignment 131° Depth 390mm
Human remains Age Young adult Sex: Female Stature ?
Grave goods
1. Ring, Ae, Find 2960
2. Buckle, Ae, Find 2961
3. Loop fitting, Ae, Find 2962
4. Knife, Find 2963

Grave No 39 Co-ordinates: 39.6E, 63.0N
Position: ? Alignment: 111° Depth: 530mm
Human remains Age: Child? Sex: ? Stature: ?
Grave goods
1–12. Beads, glass, Finds 2964–75

Blue	4
Green	4
Grey/green	3
Terracotta	1

13. Pottery vessel, 'Urn 753'
Notes
Accessory vessel (Urn 753) found to the right of a stain which is likely to represent the skull.

Grave No 40 Co-ordinates: 44.7E, 90.0N
Position: Extended Alignment: 97° Depth: 600mm Stones in fill
Human remains Age: Adult Sex: Male Stature: ?
Grave goods
1. Spearhead, Find 2976
2. Buckle, Fe, Find 2977
3. Orthopaedic fitting, Find 2978
4. Knife, Find 2979
Notes
Covering of field stones over body. Knife and buckle appear to have been deposited beneath the body. Small metal fitting (3) may have come from a strap or sling being worn on a disabled right arm.

Grave No 41 Co-ordinates: 39.2E, 37.0N
Position: Extended Alignment: 116° Depth: 630mm Stones in fill
Human remains Age: Adult Sex: ? Stature: ?
Grave goods
1. Cruciform brooch, Find 2980
2. Cruciform brooch, Find 2981
3. Cruciform brooch, Find 2982
4. Model tweezers, Ae, Find 2983
5. Ring, Fe, Find 2984
6. Knife, Find 2985
Notes
Line of stones down northern side of grave appear to have formed a wall. These could be seen at the top of the grave fill. Sherds from Urn 1222 found in grave fill.

Grave No 42 Co-ordinates: 33.0E, 29.0N
Position: Flexed Alignment: 101° Depth: 380mm
Human remains Age: Young adult Sex: ? Stature: ?
Grave goods
1. Annular brooch, Ae, Find 2986
2. Annular brooch, Ae, Find 2987
3. Ring, Fe, Find 2988

Notes
Remains very poorly preserved. Sherds from Urn 1144 found in grave fill.

Grave No 43 Co-ordinates: 32.6E, 3.8N
Position: Extended Alignment: 106° Depth: 40mm
Human remains Age: Old adult Sex: Male Stature: ?
Grave goods
1. Buckle, Fe, Find 2989
2. Pin, Fe, Find 2990
3. Knife, Find 2991
Notes
Few remains survive, some plough damage.

Grave No 44 Co-ordinates: 40.4E, 39.0N
Position: Extended Alignment: 134° Depth: 600mm
Human remains Age: Mature adult Sex: Female Stature: ?
Grave goods
1a,b,c. Sleeve-clasps, Ae, Finds 2994, 2993, 2992
2. Annular brooch, Fe, Find 2997
3. Buckle, Fe, Find 2996
4. Sheep's tooth, Find 3110
5. Roman greyware sherd, Find 2998
Notes
Sheep's tooth found in fill of grave. Sherds from Urns 1126 and 1127 found in grave fill.

Grave No 45 Co-ordinates: 31.0E, 16.5N
Position: Extended Alignment: 115° Depth: 600mm Stones in fill
Human remains Age: Young adult Sex: Male Stature: ?
Grave goods
1. Buckle, Fe, Find 3001
2. Knife, Find 3002
Notes
Iron knife found beneath ribs. Sherds from Urns 1220 and 1221 found in grave fill.

Grave No 46 Co-ordinates: 43.2E, 31.1N
Position: Extended Alignment: 147° Depth: 600mm Stones in fill
Human remains Age: Adolescent Sex: Female Stature: ?
Grave goods
1. Cruciform brooch, Find 3003
2. Small-long brooch, Find 3004
3. Small-long brooch, Find 3005
4. Knife, Find 3006
5. Strap-end, Ae, Find 3007
6. Scutiform pendant, Ag, Find 3008
7–22. Beads, glass (16), Finds 3009–24

Blue	6
Brown	1
Green	3
Terracotta	3
White	1
Yellow	2

23. Pottery vessel, 'Urn 1227'
Notes
Strap-end may have been an offering. Large pottery vessel, Urn 1227 (Group 03a, Phase 7) (Find 3046) found by left shoulder, now missing.

Grave No 47 Co-ordinates: 35.0E, 28.6N
Position: Extended Alignment: 104° Depth: 370mm Stones in fill
Human remains Age: Young adult Sex: ? Stature: ?
Grave goods
1. Sleeve-clasp, Find 3025
2. Small-long brooch, Find 3026
Notes
Single sleeve-clasp appears to have been an offering. Line of stones down one side of grave extended to top of grave fill and appears to have been a wall.

Grave No 48 Co-ordinates: 8.0E, 16.0N
Position: Extended Alignment: 111° Depth: 520mm Stones in fill
Human remains Age: Young adult Sex: Female Stature: ?
Grave goods
1. Small-long brooch, Find 3027
2. Ring, Fe, Find 3028
3. Knife, Find 3029
4. Sleeve clasps, Ae, Find 3030–1
5. Sleeve clasp fragments, Ae, Find 3032
6–14. Beads, amber (9), Find 3033–41
15–17. Beads, glass, blue (3), Finds 3042–4
18. Remains of a pottery vessel, 'Urn 1219'
Notes
Only three stones found in fill. Fragments of a large broken vessel (Urn 1219) found lying over left shoulder.

Grave No 49 Co-ordinates: 7.0E, 13.2N
Position: Extended Alignment: 129° Depth: 460mm
Human remains Age: Young adult Sex: male Stature: ?
Grave goods Nil
Notes
Edges of grave uncertain.

Grave No 50 Co-ordinates: 36.7E, 80.6N
Position: Flexed Alignment: 121° Depth: 600mm
Human remains Age: Young adult Sex: Female Stature: ?
Grave goods
1. Pin, Ag, Find 3048
2. Buckle, Ae, Find 3047
3. Bead, glass, green, Find 3045
4. Chatelaine chain, Fe, Find 3050
5. Knife, Find 3051
Notes
Sherds from Urns 1035 and 1164, 1165, 1166 and 1167 found in grave fill.

Grave No 51 Co-ordinates: 42.9E, 79.4N
Position: Flexed Alignment: 199° Depth: 150mm Stones in fill
Human remains Age: Mature adult Sex: male Stature: ?
Grave goods
1. Knife, Find 3052
2. Buckle, Ae, Find 3053
Notes
One large stone on chest. Grave cut Urns 897 (Group 22b, Phase 5) and 911(Group 23a, Phase 1). Buckle found on top of large stone, and not on body, and is therefore likely to have been an offering.

Grave No 52 Co-ordinates: 35.3E, 76.8N
Position: Crouched Alignment: 203° Depth: 240mm Stones in fill
Human remains Age: Child Sex: ? Stature: ?
Grave goods Nil
Notes
Urn 915 (Group 10s, Phase 4) found in fill of grave.

Grave No 53 Co-ordinates: 38.9E, 77.5N
Position: Extended Alignment: 115° Depth: 29mm
Human remains Age: Young adult Sex: male? Stature: ?
Grave goods
1. Buckle, Fe, Find 3054
2. Knife, Find 3055
3. Flint with retouch, Find 3056
4. Pottery vessel, 'Urn 937'
Notes
Pottery vessel (Urn 937) placed by left shoulder. Sherd from Urn 1223 found in grave fill.

Grave No 54 Co-ordinates: 43.8E, 76.3N
Position: Extended Alignment: 113° Depth: 240mm Stones in fill
Human remains Age: Young adult Sex: Female Stature: ?
Grave goods
1. Annular brooch, Ae, Find 3059
2. Annular brooch, Ae, Find 3060
3. Cruciform brooch fragment, burnt, Find 3061
4–7. Beads, glass (4),Finds 3062–5
Notes
Some stones in top of fill.

Grave No 55 Co-ordinates: 36.5E, 75.3N
Position: Prone Alignment: 148° Depth: 170mm
Human remains Age: Young adult Sex: Female? Stature: ?
Grave goods
1. Bead, glass, blue, Find 3066
2. Annular brooch fragment, Find 3067
3. Roman greyware sherd, Find 3158
Notes
Skeleton found on its face. No stones, but much pottery in fill of grave (sherds from Urns 959 (Group 03s, Phase 3), 1081 (Group 10a, Phase 1), 1212, 1213, 1214, 1215, 1216 (Group 07n, Phase 1–4) and 1217 (Group 02s, Phase 3–8)). Bead, annular brooch fragment, burnt bone and comb fragment in fill of grave, probably residual. Arms probably beneath body but evidence uncertain.

Grave No 56 Co-ordinates: 35.0E, 69.0N
Position: Extended Alignment: 111° Depth: 500mm Stones in fill
Human remains Age: Young adult Sex: Male Stature: 1.780m
Grave goods Nil
Notes
Grave had vertical sides. Right arm appeared to be beneath body.

Grave No 57 Co-ordinates: 35.2E, 73.5N
Position: Extended Alignment: 91° Depth: 460mm
Human remains Age: Young adult Sex: Female Stature: ?
Grave goods
1. Bead glass, green, Find 3071
2. Sleeve clasp, Ae, Find 3072

3. Buckle, Ae, Find 3073
4. Knife, Find 3074
5. Ae rivet, Find 3075

Notes

Single bead and sleeve clasp in fill of grave, possibly offerings. Sherds from Urns 1015 (Group 01b, Phase 5), 1168 (Group 08a, Phase 4), 1169 (Group 29a, Phase ?), 1170 and 1171 found in grave fill.

Grave No 58 Co-ordinates: 11.0E, 89.6N

Position: Flexed, lying on right side Alignment: 136° Depth: 720mm

Human remains Age: Child/adolescent Sex: ? Stature: ?

Grave goods

1. Fragment of bent sheet Ae (Find 3077) found in fill of grave, may be redeposited.

Grave No 59 Co-ordinates: 37.5E, 68.5N

Position: Extended Alignment: 104° Depth: 410mm Stones in fill

Human remains Age: Young adult Sex: Male Stature: ?

Grave goods Nil

Notes

Stones in fill of grave, two stones covered skull. Grave had vertical sides. The stones form walls along the sides of the grave, which may have supported a roof forming a chamber.

Grave No 60 Co-ordinates: 40.5E, 26.4N

Position: ? Alignment: 111° Depth: 120mm

Human remains Age: Adult Sex: ? Stature: ?

Grave goods Nil

Notes

Bones in very poor condition.

Grave No 61 Co-ordinates: 2.0E, 76.0N

Position: Extended Alignment: 126° Depth: 610mm Stones in fill

Human remains Age: Adolescent Sex: Female Stature: ?

Grave goods

1. Plate, square, Ae, Find 3037, may have been an offering.

Notes

Metal plate probably an offering. Layer of masonry over top of grave fill, rest of grave filled with field stone. Edges of grave well defined.

Grave No 62 Co-ordinates: 39.9E, 29.5N

Position: ? Alignment: 143° Depth: 250mm

Human remains Age: Adult Sex: ? Stature: ?

Grave goods

1. Cruciform brooch, Find 3080
2. Buckle, Fe, Find 3081
3. Annular brooch, Fe, Find 3082
4. Coin pendant, Ae, Find 3083

5–19. Beads, glass, blue (15), Find 3084–98

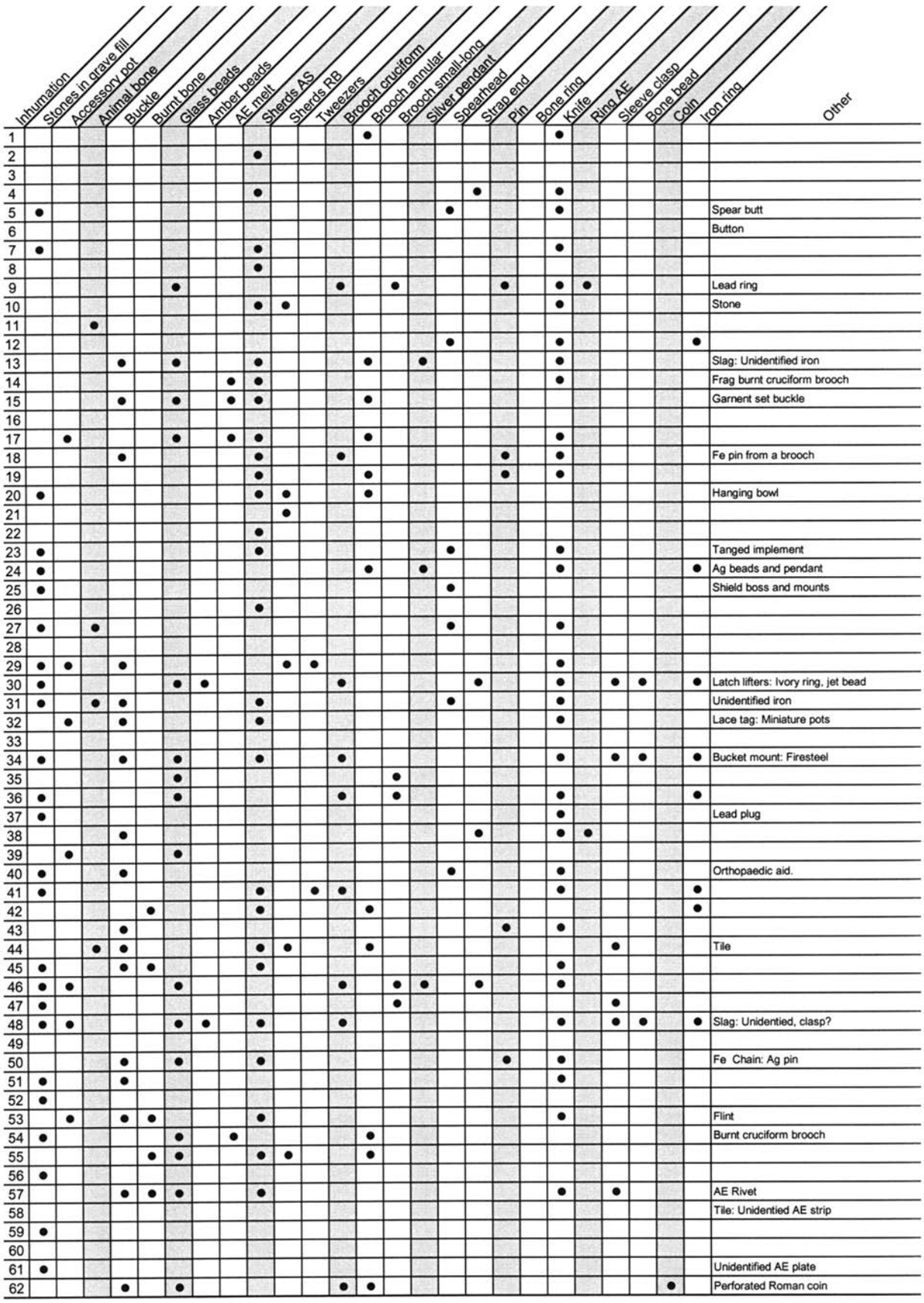


Fig 117 Tabulated finds from the graves

Notes

1. Graveside offerings were found in Grave 35, bone comb fragments; Grave 47, sleeve-clasp; Grave 57, sleeve-clasp and bead. Grave 55 contained an annular brooch fragment, a comb fragment and bead. This grave also contained large numbers of sherds but as the brooch and bead are unburnt they, at least, should be seen as offerings.
2. As they appear to show a development in both form and decoration, cruciform brooches are amongst the most studied aspects of early Anglo-Saxon archaeology. Although some scepticism has been expressed over the validity of stylistic evolution as a dating method (Dickinson 1978, 336), the established sequence appears to hold true in general, if not in specific cases. The classification of cruciform brooches is based on the study published by Nils Åberg in 1926 which was revised by E T Leeds (Åberg 1926, 28–56; Leeds 1945, 69–72; Leeds and Pocock 1971, 13–36). More recently there have been studies by Reichstein (1975) and Mortimer (1990). Reichstein's work was concerned, in the main, with continental, particularly Scandinavian, material and neglects Insular developments of the 6th century. Having spent many fruitless hours attempting to place the Cleatham brooches into Reichstein's *Typen* the writer can fully concur with Hines' comment that it is *not usually easy to attribute these [new finds] to any of Reichstein's datable types, since he lays down no clear and followable classification. To associate these brooches with the chronological results of Reichstein's work, one frequently finds oneself intuitively drawn back to comparing general similarities of proportion, size of headplate, form of knobs, bow, lappets, horse's head and nostrils.* Hines goes on to say that Reichstein's classification is actually similar to that of Åberg. Dickinson (*op cit*), while applauding Reichstein's use of sequence dating and horizontal stratigraphy, expressed concern at the difficulty of evaluating his classification and the limited nature of his illustrations. The writer feels some concern over the small number of brooches on which Reichstein's dating is based. The unknown period of time between the manufacture of a brooch and its deposition also causes difficulties. Mortimer's work on cruciform brooches formed the basis for a University of Oxford DPhil which looked at both the form of brooches and their metallurgical analysis. Unfortunately this work remains unpublished. In view of the problems involved in the later classifications the writer has used Åberg/Leeds classification for the Cleatham cruciform brooches. This is, at least, readily available and generally understood. Where appropriate the work of Reichstein has been used. While it is recognised that the dating of this material is a matter of some debate, the dates suggested by Hines (1984) have been used here, although it is felt that Hines may have placed the end of the late brooches too early (AD 570), leaving a gap in the sequence.
3. In the first analysis of this material the writer used a classification developed by Helene McNeill using Correspondence Analysis (McNeill 2001). While this was useful, it has not been generally accepted and it was decided to revert to Leeds' classification which, for all its faults, is generally understood.
4. Silver annular brooches decorated with confronted animal or birds' heads have been found in Final Phase contexts at Uncleby, East Yorkshire (Smith 1912, 146–58, pl and figs; Leeds 1936, 98–100, pl XXVII), Garton Slack, also East Yorkshire (Mortimer 1905, 247–57) and Riby, Lincolnshire (White 1982, 80–2, figs 4–5). A silver gilt brooch set with garnets and bearing Style 2 birds' heads was found in Grave 106 at Castledyke, Barton on Humber, cemetery (Drinkall and Foreman 1998, 65, 256, fig 84).
5. While it makes for interesting speculation in gender studies, it cannot be assumed that a man with brooches was dressed as a woman. The brooch may have been an offering or may have been worn as part of male dress.
6. In many cases it was found to be very difficult to determine how many urns were found on an Anglo-Saxon cemetery site. Cleatham is a case in point. During the excavation of the site 1014 'urns' were registered. This number included accessory vessels found with inhumations and un-urned cremation deposits that were given urn numbers for reasons of control. During the process of analysis urn numbers were issued to stratified sherds, again for reasons of control, raising the total to 1204. When analysing the use of grave goods only those urns which contained burnt bone (and could therefore have also had grave goods) were included, giving a working figure of 960 urns. Things grow still more complicated when dealing with other cemeteries. At Caistor by Norwich Mann registered 376 urns but recorded on his plan 'about a hundred' other urns that were represented only by their bases (Myres and Green 1973, 6). In view of this, and other similar problems, it was decided to calculate the comparative percentages of urns containing specified finds on the basis of, not the total of urns from a site, but the total that contained grave goods. Internal calculations relating only to Cleatham have been based on the total number of urns that had preserved at least some of their bone content (960), and not on the number that contained finds (609), used when making comparisons with other cemeteries.

7. In their discussion of the Castledyke pins Foreman and Ross (1998, 267–70) excluded five pins which lacked diagnostic features. In view of the positions in which objects of this type were found in the Cleatham graves they have been included in this count.
8. See for instance the buckles from Grave 65 at Mill Hill, Deal (Parfitt and Bruggmann 1997, fig 37), and Chessel Down Grave 37iii (Arnold 1982, fig 8).
9. Grave 98B at Empingham II contained a form B7 sleeve-clasp which probably dates from the first half of the 6th century.
10. The buckles from Graves 32, 51 and 62.
11. Examples of Class A sleeve-clasps are known from Fonaby (Cook 1981, 62, figs 27, 54), Worlaby (North Lincolnshire Museum Records) and Welbeck Hill (Gordon Taylor, pers comm).
12. The four Form B13c clasps from Cleatham Grave 34 are illustrated by Hines (1993, 51, fig 98a).
13. Two pairs of highly decorated sleeve-clasps were found at the Bifrons, Kent, cemetery. These had been converted for use as brooches (Hawkes 2000, 60, figs 42, 61–4).
14. The decision as to whether amber, coral and jet should be classed as organic or mineral was never satisfactorily resolved in the mind of the writer and the classification imposed probably has more to do with feeling than logic.
15. It was found impossible to differentiate between bone and antler which are very similar materials (MacGregor 1985) and the term 'bone' used here may refer to antler.
16. The single amber bead found in urn A1091 at Sancton (Timby 1993, 286) is likely to be an offering rather that a grave good.
17. The percentages are based only on urns which were found with burnt bone and could, therefore, have potentially contained finds. While sherds were given urn numbers they could not be associated with any of the finds and have been excluded from the percentages.
18. A perforated *As* of Claudius was found near Caistor on the Wolds.
19. It was impossible to analyse the finds of knives from the cremation cemeteries with any confidence as the authors of the reports found it difficult to differentiate between knives, razors and broken shears. It does, however, appear that knives were included with cremation deposits at all cemeteries except the atypical South Elkington.
20. These blade lengths exclude the tang.
21. I am grateful to Hilary Healey for making her work on Ruskington available to me.
22. Statistical analysis has been carried out on the position of grave goods in Anglo-Saxon burials but the writer considers the level of variation to be too high and the sample size too low to allow anything concrete to be said.
23. The terms 'firesteel' and 'strike-a-light' are often confused in the archaeological literature but, as Brown points out (1977, 451fn), a strike-a-light is the flint or pyrite from which a spark is struck using the iron firesteel.
24. Grave 98B at Empingham II also contained a form B7 sleeve-clasp which probably dates from the first half of the 6th century.
25. An ivory ring found in Grave 19 at Shudy Camps had 7th-century 'Final Phase' associations, silver bullae, chatelaine, 'safety pin' brooch (Lethbridge 1936, 6, fig 2, A–B).
26. The median mass of ivory found in the Cleatham urns was 4.72g with a maximum content of 47.13g.
27. Mammoth ivory from the Siberian permafrost can be easily worked and is stable. It is not an exotic material: between 1825 and 1831 35,000kg of mammoth ivory was exported through the Siberian port of Yakutsk (Osborne 1975, 488), and was mainly used in the manufacture of piano keys and billiard balls. This attractive proposition unfortunately falls down in the face of cruel radiocarbon dates (Hills 2001, 134). Tests carried out ivory rings gave the following dates:
    1705 ± 100 BP (OxA-479) Chatham Lines, Kent
    1575 ±60 BP (OxA-648) Fairford, Gloucestershire
    2330 ± 70 BP (OxA-649) Sancton, East Yorkshire.
    The first two dates are in keeping with the Anglo-Saxon use of recent ivory and while the other date is early it is not early enough for it to be mammoth ivory. The most likely source of elephant ivory would appear to be through Aksum in Ethiopia (Hills, *op cit*).
28. It is, however, notable that three of the urns from Loveden Hill contained 45, 43 and 31 counters (Green 1973, 99), but none of these numbers would make a full playing set.
29. The initial work on spearheads which formed the basis of Swanton's classification and datings of Anglo-Saxon spearheads was submitted as a thesis at the University of Durham in 1966. This was revised and augmented before publication in 1973 and, while this work is now somewhat out of date, it remains useful and the datings it provides seem to stand up well.
30. The Battles of the River Idle, 616; Hatfield Chase 632; *Winwæd* (probably near the Aire), 655; the Trent, 679 (Stafford 1985, 96).
31. Because only 18 of the 323 surviving medieval wooden bowls were repaired it cannot be assumed that these survivors are representative; there would have always been a tendency to keep unbroken vessels and dispose of those which were damaged.
32. Those urns for which no Decorative Group or Phase is quoted are unclassified.

Plate 1 Urns from the 1856 discovery. From left to right: Urns 1106, 1102, 1101 and 1100

Plate 2 Aerial photograph of the Cleatham site, taken from the north-west in 1985. The cemetery was in the straw-coloured field on the centre-left of the frame and lay in the area of the diagonal brown mark in the right-hand corner of the field. In the foreground the slope of the Lincoln Edge escarpment can be seen. The trackway marking the boundary between the parishes of Manton and Kirton lies on upper right-hand side of the field

Plate 3 View from the site looking towards the west

Plate 4 The excavation in progress. The topsoil was removed by hand and the site excavated in 2m × 2m square boxes with two volunteers in each 'box'

Plate 5 Excavated urns at Cleatham

Plate 6 Pair of associated urns. These two vessels were probably deposited together and were therefore contemporary

Plate 7 Intercut urns. Urn 378 cuts 379 and, therefore, must be later

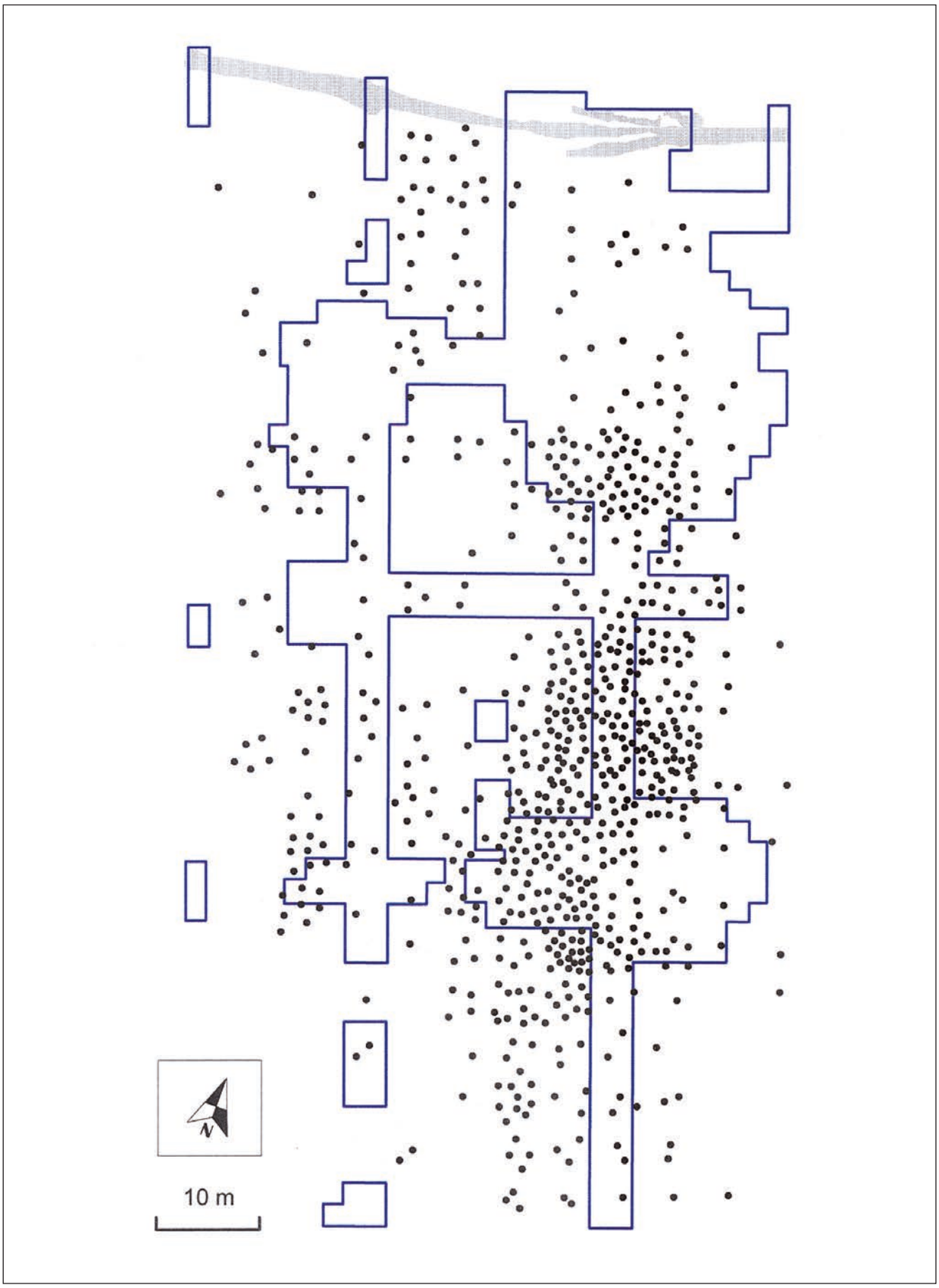


Plate 8 Plan of the Cleatham cemetery overlain by the results of intensive field walking. Each point has a value of 5g of sherds. This work showed the extent of the cemetery and was used as guide during the final seasons of the excavation. The low number of sherds in some areas is due to their having already been excavated prior to field walking.

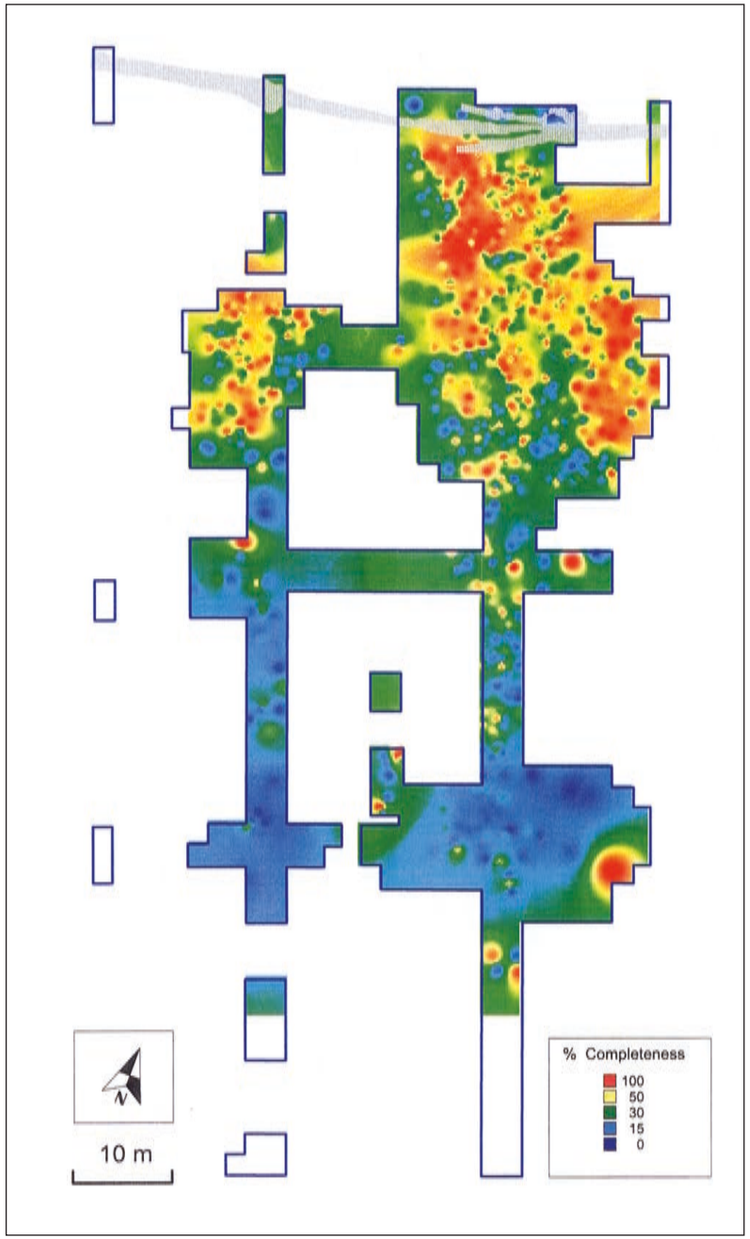
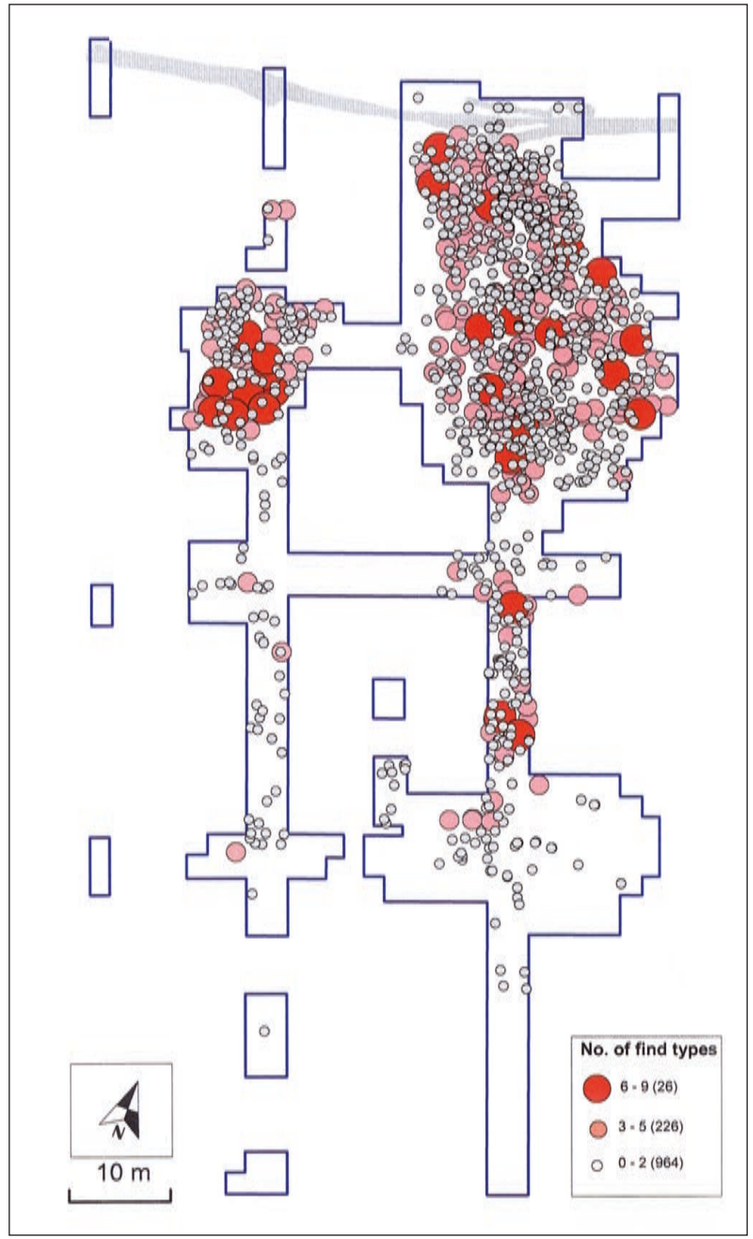


Plate 9 (left) Colour-temperature plan showing the preservation of urns

Plate 10 (right) Number of find-types found in the urns. This suggests that there was no higher-status area of the cemetery



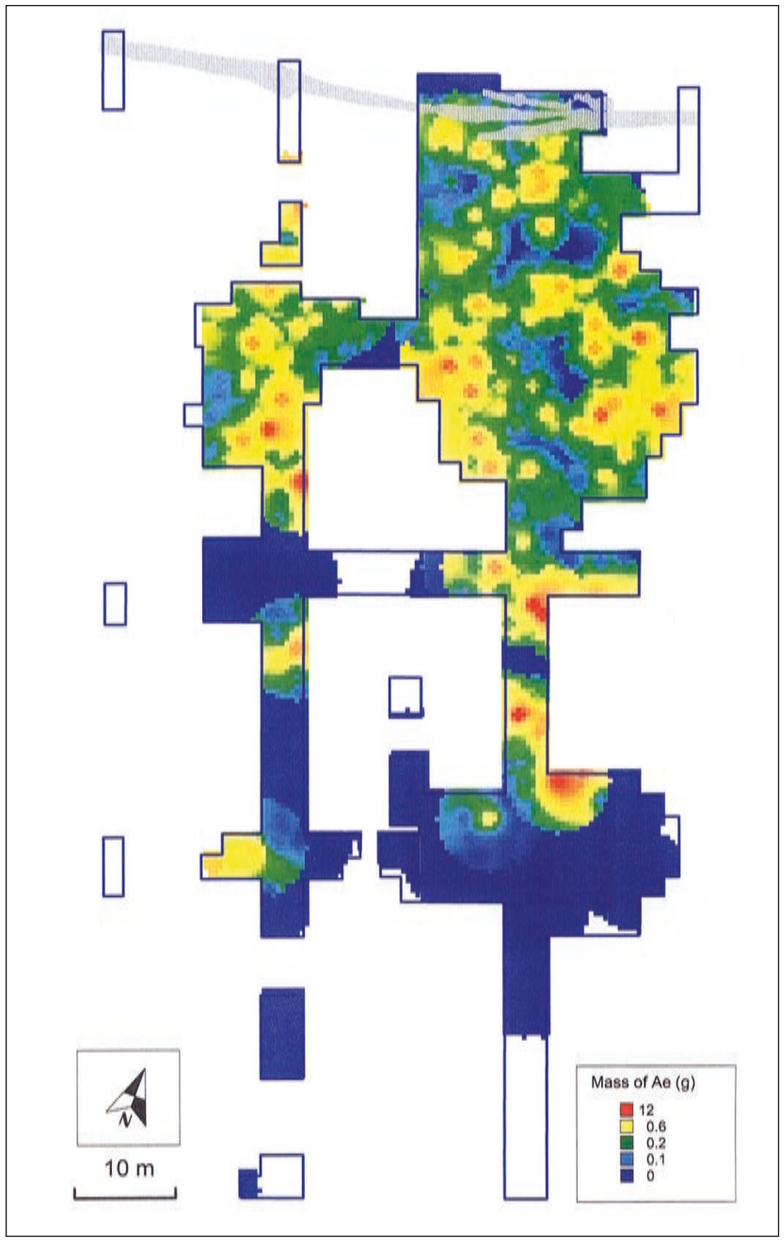
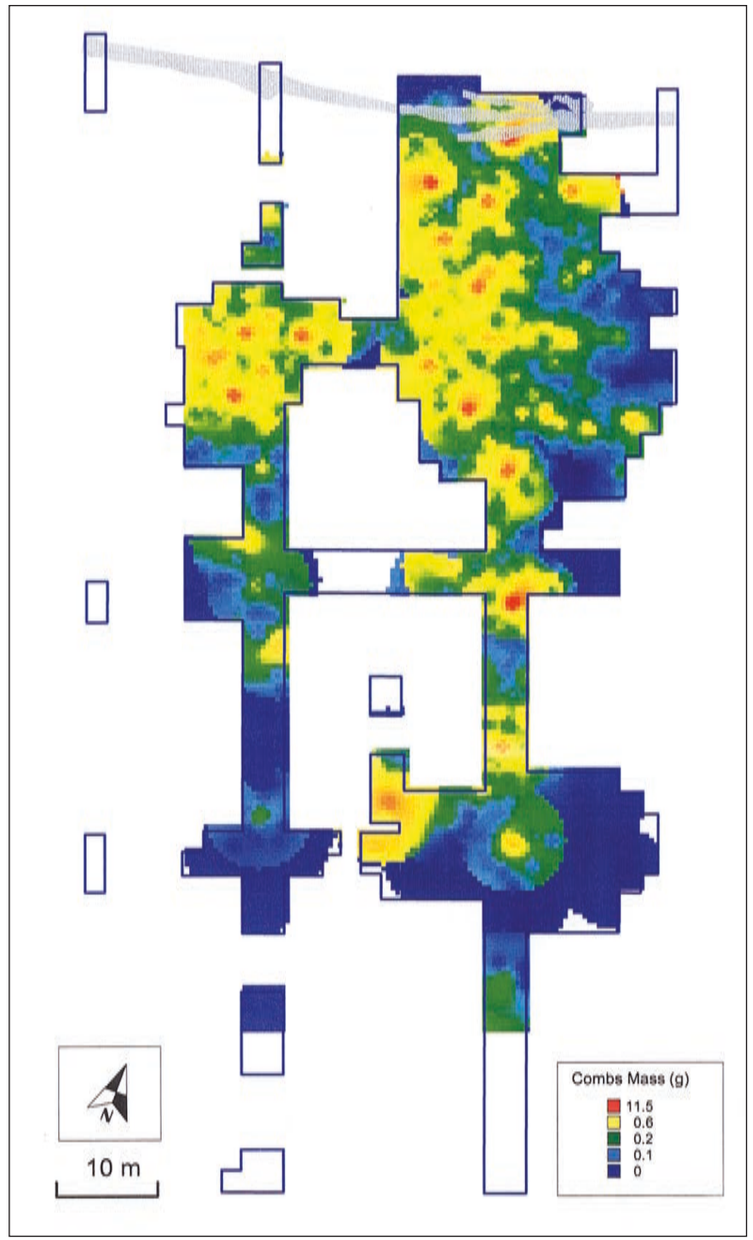


Plate 11 (left) Colour-temperature plan showing the distribution of copper alloy from the urns, by mass

Plate 12 (right) Colour-temperature plan showing the mass of burnt bone in the urns



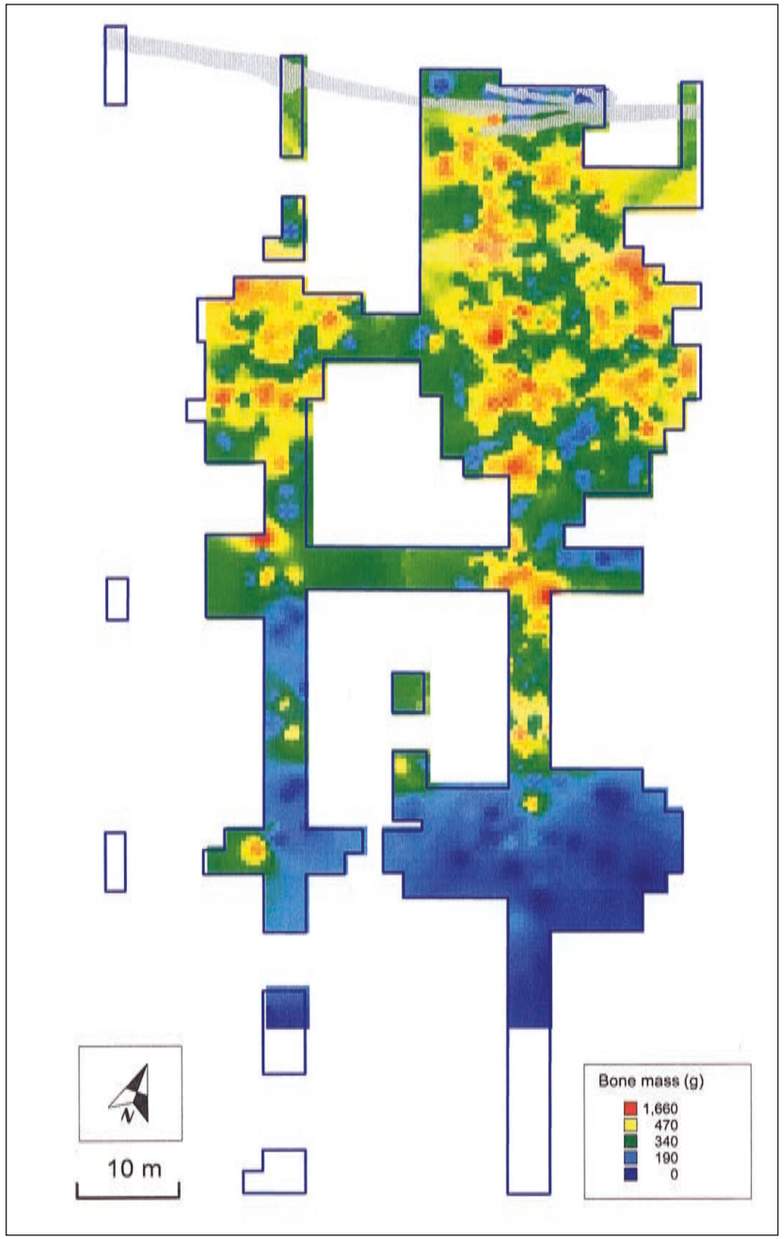
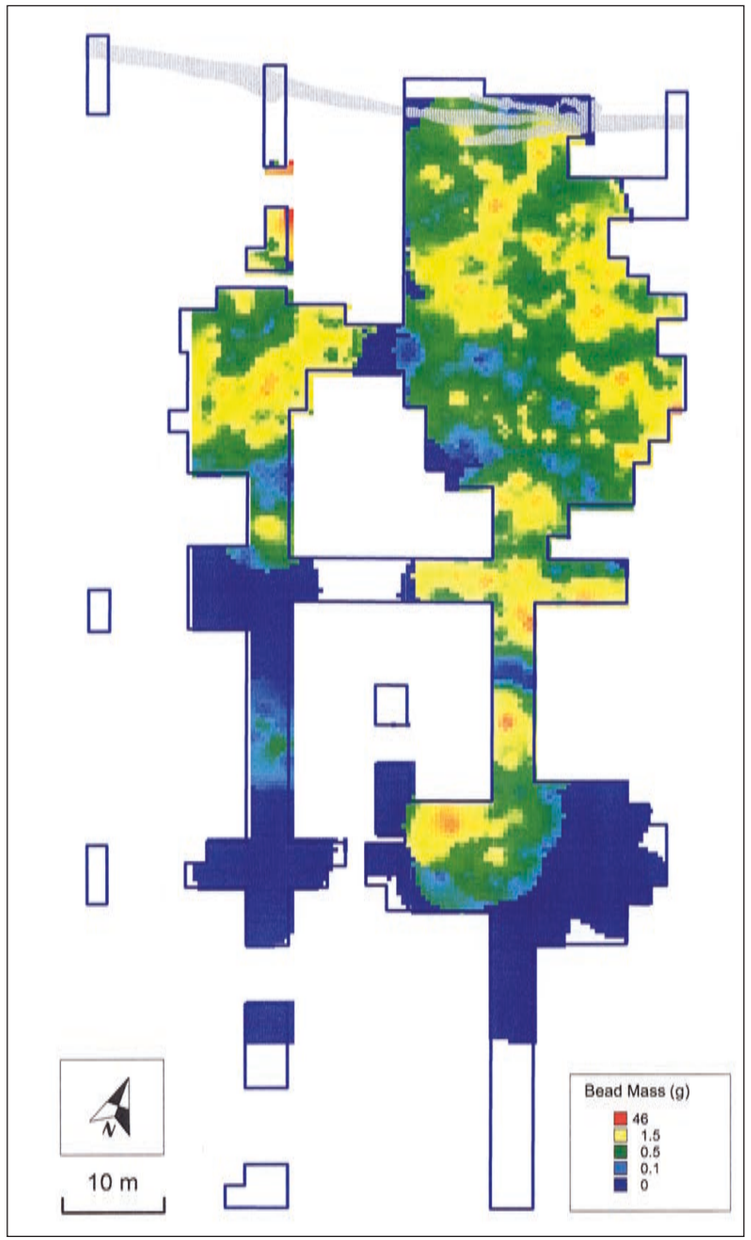


Plate 13 (left) Colour-temperature plan showing the mass of antler comb fragments in the urns

Plate 14 (right) Colour-temperature plan showing the mass of glass beads in the urns



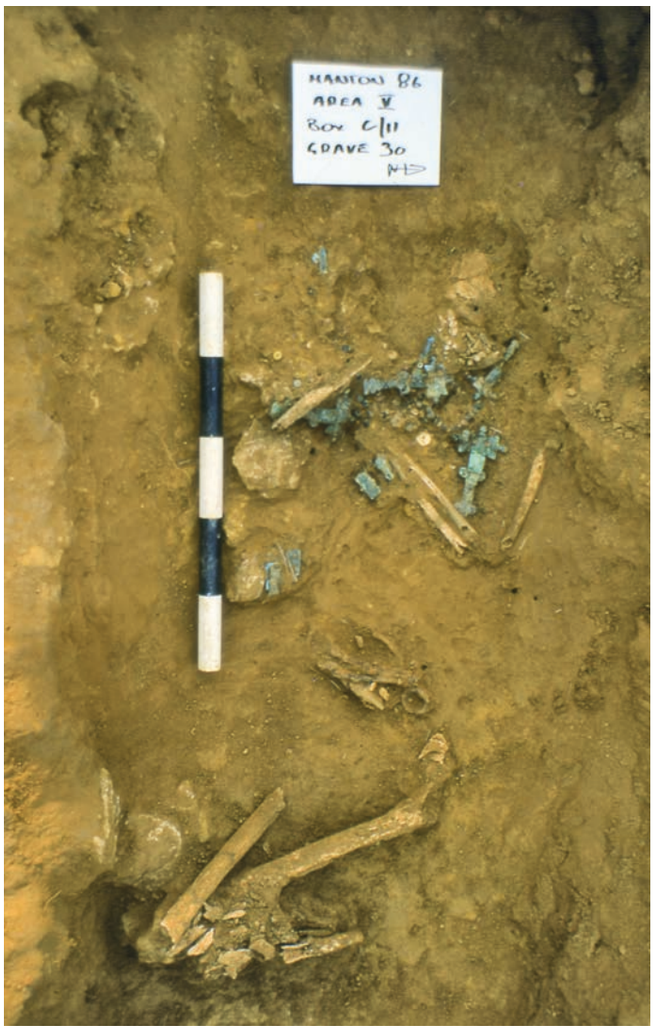


Plate 15 The state of preservation of human remains in Grave 30 is typical of burials cut into the subsoil

Plate 16 Grave 31, prone male burial, accompanied by a spearhead and buckle. The better preservation of the bones is characteristic of deeper graves cut into the lime-stone basement

Plate 17 Roman masonry in the fill of Grave 36

Plate 18 Line of stones marking the northern edge of Grave 41. As these appeared at the top of the subsoil, just beneath the ploughing horizon, it is possible that they originally extended above the ground and marked the sites of graves

Plate 19 Stones forming the sides of a possible chamber in Grave 59

Plate 20 A group of urns with covering stones. Groups like these seven, intercut, vessels provided valuable evidence for the succession of urns at Cleatham

Plate 21 Seven-urn complex during the course of excavation. Most urns were lifted *en bloc* with their contents in place. This complex, however, had to be resolved *in situ*, a task carried out by Alison Williams

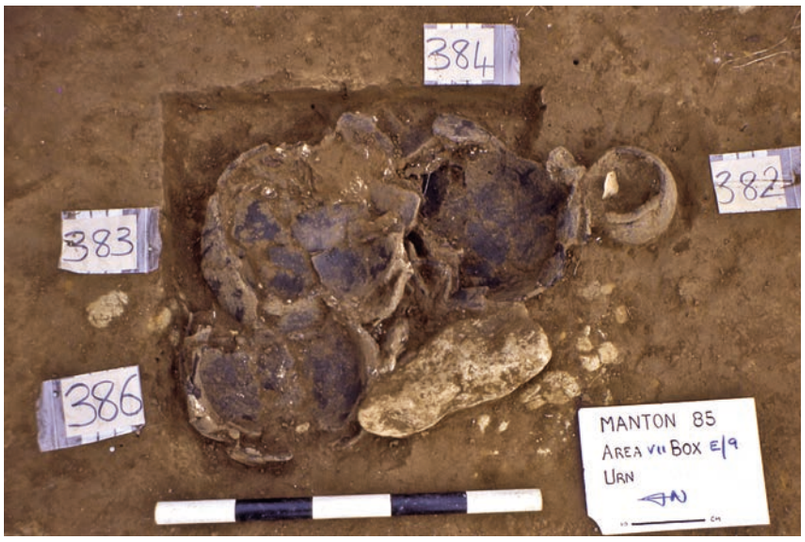


Plate 22 The seven-urn complex fully exacavated

Plate 23 Urn 238 with sooting

Plate 24 Two decorated urns showing typical Cleatham fabrics. Left, Urn 566; right, Urn 137

Plate 25 Wheel-thrown ‘Roman’ Urn 702

Plate 26 Urn 889 Cleatham/Spong vessel

Plate 27 (far left) Urn 566 with lead plug
Plate 28 (left) Urn with the perforations typical of many of the Cleatham urns

Plate 29 Burnt copper alloy. Top, fragment of a square headed brooch US 012; left, fragment of a cruciform brooch US150; other fragments represent unstratified blobs of copper alloy melt

Plate 30 Burnt cowrie shell and burnt ivory bag ring fragments

Plate 31 Sample of silica frit from Urn 375

Plate 32 Burnt bone comb from Urn 163

Plate 33 Remains of an unburnt bone comb found on top of the bones in Urn 458

Plate 34 Gilt copper alloy and garnet buckle

Plate 35 Bone objects from urns: gaming counters, amulets, pendants, spindle whorl

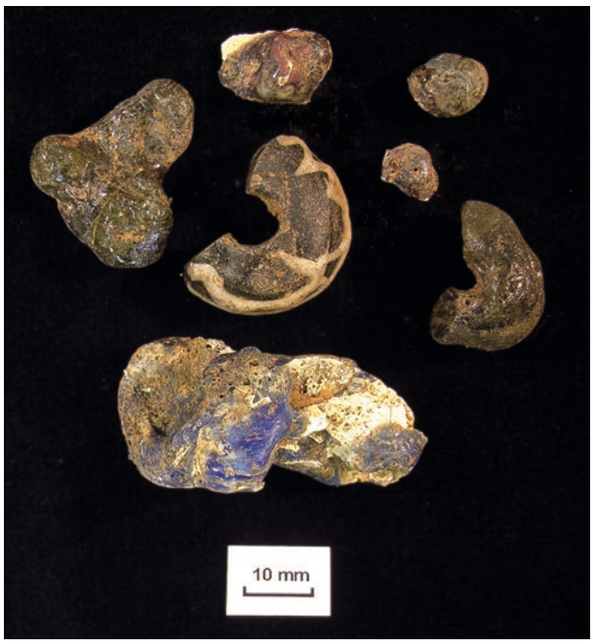


Plate 36 Burnt glass beads from urns

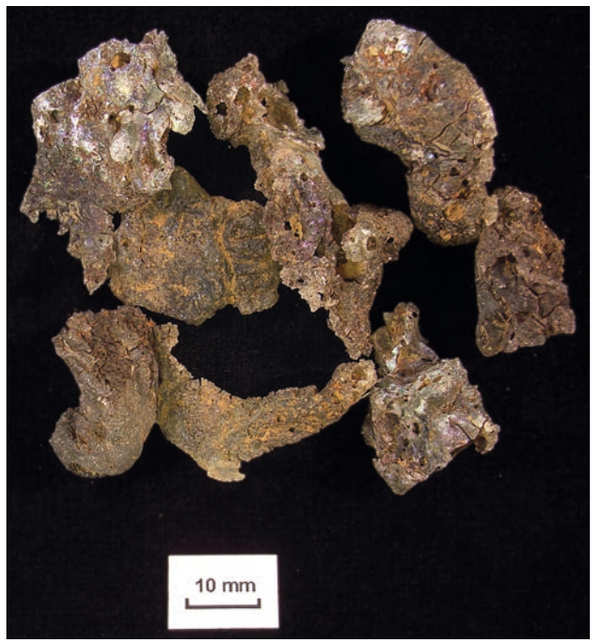


Plate 37 Burnt vessel glass from Urn 181

Plate 38 Burnt coral beads

Plate 39 Textile and beads on the back of a cruciform brooch

6

Conclusions

The excavation of the Cleatham Anglo-Saxon cemetery produced the remains of 1204 urns and 62 inhumation burials. It is estimated that the cemetery originally contained around 1528 burials, making it the third largest Anglo-Saxon cemetery in England. The most important feature of the Cleatham cemetery was the degree to which the urns were intercut. From these relationships, together with urns which had been buried together, a matrix was constructed and the cremations phased. The phasing was based on the decorative styles of the urns; attempts to order them on the basis of their shapes and proportions failed. It was found that an analysis of the pot fabrics was of some, albeit limited, value. The stamps used to decorate the urns also proved to be disappointing; the range of die forms was limited, making it difficult to define useful groups. It was also found that most of the dies were used on a single urn or only on a small number. No indications were found of horizontal stratigraphy in the placing of the Cleatham urns; it appears that burial was taking place over the full area of the cemetery throughout its history. This should cause no surprise; the high number of intercut urns was a product of the failure of the cemetery to expand from a nucleus. Some zoning existed amongst the inhumation burials, with the 7th-century graves being clustered in the north-east corner of the cemetery.

The phasing of urns allowed the sequencing of the grave goods to be examined. This proved satisfactory in that that the accepted dates for the finds fitted the urn sequence remarkably well. One point that must be emphasised is that while certain object types dominated in particular phases they then often remained in low-level use throughout the rest of the sequence as in the case of, for example, blue glass beads. The generally held belief that these were early was confirmed but, while their popularity fell, they never disappeared from the record.

The Cleatham cemetery spanned that whole of the early Anglo-Saxon period, starting with very early urns and going through to Final Phase graves. While some dates were provided by the associated finds these dates are, in themselves, conjectural and should not be accepted uncritically. It is the writer's belief that burial started at Cleatham around the middle of the 5th century. Both cremation and inhumation were used through the 5th and 6th centuries but inhumation alone in the 7th century. Burial continued to take place on the site into the second half of the 7th century.

It was found that the urn sequence established at Cleatham was applicable to other cremation cemeteries in eastern England. While the absence of intercut vessels prevented these cemeteries from being phased, urns from other sites were found to contain grave goods appropriate to their place in the Cleatham sequence. This is of great interest as it suggests a uniform pattern of ceramic development. While we are accustomed to seeing similar metalwork found throughout Anglian England, this shared tradition in potting is surprising. The metalwork was either traded or made by travelling craftsmen but the pottery was thought to have been locally made. Some urns can be shown to have been transported over long distances: vessels made by the Sancton/Baston potter are widespread and there are direct links between Cleatham and Spong Hill, 137km away. A further possible link is provided by pots which contain, as a filler, acid igneous rock from the Charnwood Forest area of Leicestershire. It was considered that these vessels were being made in Leicestershire and distributed throughout the East Midlands. The evidence for the use of this filler at Cleatham was inconclusive but the centralised production of some early Anglo-Saxon pottery now seems more acceptable. Some local variations existed in the urns used at other cemeteries and it was found that the further a cemetery was away from Cleatham, the higher the proportion of urns which could not be accommodated in the Cleatham classification.

Other evidence for links between Cleatham and the wider early medieval world was provided by the exotica (cowrie shells, ivory and coral beads) all of which had travelled a considerable distance from their place of origin. In all, the evidence suggests that early medieval England was a lot more integrated than we imagined – the idea that horizons extended only as far as the next hedge but one is untenable.

Evidence was found of a sub-Roman survival at the Cleatham cemetery. Some of the graves employed rites which were used in the late Roman period and earlier. Four of the cremations were in vessels which appeared to be Romano-British but are, it is argued, later and could be described as 'sub-Roman'. It is possible that the Anglo-Saxon cemeteries represent only part of the population, made manifest by a highly distinctive burial rite, and that the rest of the population were in unmarked graves elsewhere.

Fieldwork in the area around the Cleatham cemetery has shown the cemetery to have been surrounded by Anglo-Saxon settlement sites and other burial places. Like the other large cremation cemeteries in Lindsey, Cleatham was close to what went on to become an important manorial centre and it is likely that this importance extended back in time. It is likely that Cleatham was the original folk moot for the Corringham wapentake.

Further work

The most obvious deficiency in this study is the absence of a report on the burnt bone without which it has not been possible to discuss the site's demography or link the finds with social structure. As Cleatham is the only phased, large Anglo-Saxon cemetery in England, if not in Europe, the failure of funding bodies to support this, the final aspect of the project, can only be described as scandalous.

The sheer quantity of evidence from Cleatham (together with the writer's inexperience) made it impossible to carry out any statistical studies of the assemblage. Rigorous statistical analysis would allow the Cleatham sequence to be placed on a more systematic foundation. In particular it is believed that application of Correspondence Analysis to the urn decoration and to the associated finds could be informative. During the process of compiling this report it was noted that some urn groups and find types seemed to have urn numbers that lay close together in the series, suggesting that they were occurring in the same area of the site. Time prevented the pursuit of this but it would be worthy of examination. It is believed that if the Cleatham sequence was applied to other cemeteries, such as Spong Hill where there was horizontal stratigraphy and stamp die links, it may be possible to define the sequence still further. It might also be instructive to look at the urns from the Continent to determine if the changing pattern of urn decoration was represented there, indicating continuing contacts across the North Sea at least during the early stages of the settlement of England.

In recent years much work has been done on the social aspects of burial archaeology and it is with some regret that I admit to having neglected this fascinating area of study. This is due to two factors. One was the absence of a report on the bones found within the urns, which placed severe limits on what could be said. It was not possible to look at the changing demography or the burial practices used in terms of age, sex and apparent social structure. The other factor was the already excessive length of the thesis on which this publication is based.

While the Cleatham sequence will, it is hoped, be helpful, it is not, at present, chronologically secured and AMS dates need to be obtained as a matter of priority. These will anchor the sequence and should tell us, for the first time, when the Anglo-Saxon settlement of England actually took place.

It is clear that much remains to be said about Cleatham. The site exists as a computer database which is available at http://ads.ahds.ac.uk/catalogue/resources.html?cleatham_cba_2007. This contains data that were not used in the preparation of this study and it is my hope that others will pick up where I left off, taking the analysis of the Cleatham cemetery further, refining and correcting my interpretations.

Kevin Leahy, Broughton, Lincolnshire,
September 2006

Bibliography

Åberg, N, 1926 *The Anglo-Saxons in England in the Early Centuries after the Invasion*. Cambridge: Heffer & Sons

Albone, J, & Leahy, K A, 2000 The Anglo-Saxon cemetery at Tallington, Lincolnshire, *Anglo-Saxon Studies in Hist and Archaeol,* **11**. Oxford, 143–73

Arnold, C J, 1982 *Anglo-Saxon Cemeteries of the Isle of Wight.* London: British Museum

Arnold, C J, 1983 The Sancton-Baston potter, *Scottish Archaeol Rev,* **2**, 17–30

Bassett, S (ed), 1989a *The Origins of the Anglo-Saxon Kingdoms*. Leicester: University Press

Bassett, S, 1989b Lincoln and the Anglo-Saxon See of Lindsey, *Anglo-Saxon England,* **18**, 1–32

Bateman, T, 1861 *Ten Years' Diggings in the Celtic and Saxon Grave Hills, in the Counties of Derby, Stafford and York, from 1848–58*. London: Allen

Bede, *Historia Ecclesiastica Gentis Anglorum,* ed B Colgrave & R Mynors, 1969. Oxford: Oxford University Press (see also Plummer 1896)

Boddington, A, 1990 Models of burial, settlement and worship: the Final Phase reviewed, in Southworth (ed) 1990, 177–99

Böhme, H W, 1974 *Germanische Grabfunde des 4 bis 5 jahrhunderts zwischen unterer Elbe und Loire*, Studien zür Chronologie Bevölkerungsgeschichte, Münchner Beiträge zur Vor und Frühgeschichte, **19**, Beck, 2 vols. Munich

Böhner, K 1958. *Die fränkischen Altertümer des Trierer Landes*, Germanische Denkmäler der Völkerwanderungszeit, ser B1, 1–2. Berlin

Bond, J M, 1993 The cremated animal bone, in Timby 1993, 300–9

Bond, J M, 1994a An explanatory note on the identification of the ivory fragments, in Hills *et al* 1994, 35–6

Bond, J M, 1994b The cremated animal bone, Appendix I in McKinley 1994, 121–35

Boylston, A, Wiggins, R & Roberts, C, 1998 Human skeletal remains, in Drinkall & Foreman 1998, 221–36

Briscoe, T, 1981 Anglo-Saxon pot stamps, in D Brown, J Campbell & S Chadwick Hawkes (eds), *Anglo-Saxon Studies in Archaeology and History*, BAR Brit Ser **92**. Oxford*:* British Archaeological Reports, 1–36

Briscoe, T, 1985 The use of brooches and other jewellery as dies on pagan Saxon pottery, *Medieval Archaeol*, **29**, 136–42

Brooks, N, 1989 The formation of the Mercian kingdom, in Bassett 1989a, 159–70

Brown, G Baldwin, 1915 *The Arts in Early England Vol 4: Saxon Art and Industry in the Pagan Period*. London: John Murray

Brown, P D C, 1977 Firesteels and pursemounts again, *Bonner Jahrbücher,* **177**, 451–77

Bruce-Mitford, R, 1978 *The Sutton Hoo Ship-burial, Vol 2: Arms, Armour and Regalia*. London: British Museum

Bruce-Mitford, R, 1993 Late Celtic hanging bowls in Lincolnshire and South Humberside, in Vince (ed) 1993, 45–70

Bruce-Mitford, R, 2005 *A Corpus of Late Celtic Hanging Bowls, with an account of the Bowls found in Scandinavia* (Sheila Raven). Oxford: Oxford University Press

Brugmann, B, 2004 *Glass Beads from Early Anglo-Saxon Graves*. Oxford: Oxbow

Carver, M, 1992 The Anglo-Saxon cemetery at Sutton Hoo: an interim report, in M Carver (ed), *The Age of Sutton Hoo, the Seventh Century in North-western Europe*. Woodstock: Boydell

Clough, T H McK & Myres, J N L, 1973 Roman pottery used for Anglo-Saxon cremations, in Myres & Green 1973, 74–6

Coatsworth, E Fitzgerald, Owen-Crocker, G & Leahy, K A, 1996 Anglo-Saxon textiles from Cleatham, Humberside, *Textile History*, **27**(1), 5–41

Collingwood, R G & Myres, J N L, 1936 *Roman Britain and the English Settlements*, vol 1 of *The Oxford History of England*. Oxford: Oxford University Press

Collis, J, 1983 *Wigber Low, a Bronze Age and Anglian Burial Site in the White Peak*. Sheffield: Dept of Prehistory and Archaeology, University of Sheffield

Cook, A M, 1981 *The Anglo-Saxon Cemetery at Fonaby, Lincolnshire*, Occasional paper in *Lincs Hist and Archaeol*, **6**. Sleaford

Cook, A M & Dacre, M W, 1985 *Excavations at Portway, Andover 1973–5*, Oxford Univ Comm Archaeology Monograph, **4**. Oxford

Cook, J M, 1958 An Anglo-Saxon cemetery at Broadway Hill, Broadway, Worcestershire, *Antiq J,* **38**, 58–81

Corder, P (ed), 1951 *The Roman Town and Villa at Great Casterton, Rutland*. University of Nottingham

Crawford, S, 1999 *Childhood in Anglo-Saxon England*. Stroud: Sutton

Davies, W & Vierck, H, 1974 The contexts of the Tribal Hidage: social aggregates and settlement patterns,

Frühmittelalterliche Studien, **8**, 222–93

Davison, A, Green, B & Milligan, W, 1993 *Illington: The Study of a Breckland Parish and its Anglo-Saxon Cemetery*, East Anglian Archaeol, **63**. Gressenhall

Dickinson, T M, 1978 British Antiquity: post-Roman and pagan Anglo-Saxon, *Archaeol,* **135**, 332–44

Dickinson, TM, 2005 Symbols of protection: the significance of animal-ornamented shields in Early Anglo-Saxon England, *Medieval Archaeol,* **49**, 109–63

Dickinson, T M & Härke, H, 1992 Early Anglo-Saxon Shields, *Archaeologia,* **110**. London: Society of Antiquaries

Didsbury, P, 1998 The pottery, in Drinkall & Foreman 1998, 297–314

Drinkall, G, 1998 The knives, in Drinkall & Foreman 1998, 279–83

Drinkall, G & Foreman, M, 1998 *The Anglo-Saxon Cemetery at Castledyke South, Barton on Humber*, Sheffield Excavation Reports, **6**

Dudley, H E, 1949 *Early Days in North-West Lincolnshire.* Scunthorpe: Caldicott

Eagles, B N, 1979 *The Anglo-Saxon Settlement of Humberside*, BAR Brit Ser, **68** i and ii. Oxford: British Archaeological Reports

Eagles, B N, 1989 Lindsey, in Bassett (ed) 1989a, 202–12

Ellis, S & Crowther, D R, 1990 *Humber Perspectives: a Region through the Ages*. Hull University Press

Everson, P, 1993 Pre-Viking settlement in Lindsey, in Vince (ed) 1993, 91–100

Everson, P & Stocker, D, 1999 *Corpus of Anglo-Saxon Stone Sculpture: Vol V, Lincolnshire*. Oxford: Oxford University Press

Evison, V I, 1975 Pagan Saxon whetstones, *Antiq J,* **55**, 70–85

Evison, V I, 1987 *Dover: The Buckland Anglo-Saxon Cemetery.* London: Historic Buildings Monuments Commmission for England, Archaeol Rep, **3**

Evison, V I, 1988 *An Anglo-Saxon Cemetery at Alton, Hampshire*, Hampshire Field Club and Archaeol Soc Monograph, **4**. Gloucester: Alan Sutton

Evison, V I, 1994a Anglo-Saxon glass from cremations, in Hills *et al* 1994, 23–30, figs 3–7

Evison, V I, 1994b *An Anglo-Saxon Cemetery at Great Chesterford, Essex,* Council for British Archaeology Research Report, **91**. York

Faull, M L, 1981 West Yorkshire: the post-Roman period', in M L Faull & S Moorhouse (eds) 1981, *West Yorkshire: an Archaeological Survey to 1500: Vol 1, Sources, Environment and the County to 1066*. Wakefield, 171–224

Fell, C, 1984 *Women in Anglo-Saxon England and the Impact of 1066*. London: British Museum

Fennell, K R, 1964 The Anglo-Saxon Cemetery at Loveden Hill, Lincs., and its significance in relation to the Dark Age settlement of the East Midlands. Unpublished doctoral thesis, University of Nottingham

Fennell, K R, 1974 Pagan Saxon Lincolnshire, *Archaeol J,* **131**, 283–93

Fern, C, 2006 The archaeological evidence for equestrianism in early Anglo-Saxon England, in A Pluskowski (ed), *Just Skin and Bones? New Perspectives on Human-Animal Relations in the Historic Past,* BAR Internat Ser **1410**. Oxford: British Archaeological Reports

Field, F N & Leahy, K A, 1993 Prehistoric and Anglo-Saxon remains at Nettleton Top, Nettleton, *Lincs Hist Archaeol,* **28**, 9–38

Foot, S, 1993 The Kingdom of Lindsey, in Vince (ed), 1993, 128–40

Foster, CW & Longley, T, 1924 *The Lincolnshire Domesday and the Lindsey Survey,* Lincoln Record Society, **19**

Fowler, E, 1963 Celtic metalwork of the Fifth and Sixth centuries AD: a reappraisal, *Archaeol J*, **120**, 98–160

Fox, C F, 1923 *The Archaeology of the Cambridge Region*. Cambridge

Geake, H, 1997 *The Use of Grave-Goods in Conversion Period England, c 600–850*, BAR Brit Ser **261**. Oxford: British Archaeological Reports

Geake, H, 1999 When were hanging bowls deposited in Anglo-Saxon graves?, *Medieval Archaeol,* **43**, 1–18

Gelling, M, 1984 *Place-names in the Landscape*, London: Dent

Gibbons, E J, 1975 *The Flora of Lincolnshire*, Lincs Naturalists Union. Lincoln

Goodier, A, 1984 The formation of boundaries in Anglo-Saxon England: a statistical study, *Medieval Archaeol,* **28**, 1–21

Green, B, 1973 Grave goods from the cremations, in Myres & Green 1973, 77–113

Green, B, Rogerson, A & White, S G, 1987 *The Anglo-Saxon Cemetery at Morning Thorpe, Norfolk*, E Anglian Archaeol Rep, **36**, 2 vols. Gressenhall: Norfolk Archaeological Unit

Green, C, 1932 An Anglian cinerary urn from Hibaldstow, Kirton in Lindsey, *Trans E Riding Antiq Soc,* **27** (2), 174–7

Gregory, A K & Swan, V G, 1996 Romano-British pottery in May 1996, 513–82

Guido, M, 1978 *The Glass Beads of the Prehistoric and Roman periods in Britain and Ireland*, Society of Antiquaries of London, Research Committee Report, **35**, London: Thames & Hudson

Guido, M & Welch, M (ed), 1999. *The Glass Beads of Anglo-Saxon England, c. AD 400–700,* Society of Antiquaries of London, Research Committee Report, **56**. Woodbridge: Boydell

Hamerow, H F, 1993 *Excavations at Mucking, Volume*

2: The Anglo-Saxon Settlement. London: English Heritage

Härke, H, 1989a Early Anglo-Saxon weapon burials: frequencies, distributions and weapon combinations, in S C Hawkes (ed) 1989, *Weapons and Warfare in Anglo-Saxon England*, Oxford University Comm for Archaeol Monograph, **21**. Oxford, 49–61

Härke, H, 1989b Knives in early Anglo-Saxon burials: blade length and age at death, *Medieval Archaeol*, **33**, 144–8

Härke, H, 1990 Warrior graves? The background of the Anglo-Saxon burial rite, *Past and Present*, **126**, 22–43

Harman, M, Molleson, T & Price, J, 1981 Burials, bodies and beheadings in Romano-British and Anglo-Saxon cemeteries', *Bull Brit Mus Nat Hist (Geol),* **35** (3), 145–88

Hart, C R, 1992 *The Danelaw*. London: Hambledon Press

Haughton, C & Powlesland, D, 1999 *West Heslerton Anglo-Saxon Cemetery*, The Landscape Research Centre, Yedingham, North Yorkshire, 2 vols

Hawkes, S C, 1973 The dating and social significance of the burials in the Polhill cemetery', in B Philp 1973, *Excavations in West Kent 1960–70,* Kent Archaeological Rescue Unit. Dover, 186–201

Hawkes, S C, 2000 The Anglo-Saxon cemetery of Bifrons, in the parish of Patrixbourne, East Kent, *Anglo-Saxon Studies in History and Archaeology,* **11**. Oxford, 1–93

Hawkes, S C & Wells, C, 1975 Crime and punishment in an Anglo-Saxon cemetery, *Antiquity,* **49**, 118–22

Henderson, J, Janaway, R & Richards, J, 1987 A curious clinker, *J Archaeol Sci,* **14**, 353–65

Hills, C, 1976 The results of the excavations at the Anglo-Saxon cemetery at Spong Hill, North Elmham, Norfolk, with reference to cultural and chronological contexts. Unpublished doctoral thesis, Birkbeck College, University of London

Hills, C, 1977 *The Anglo-Saxon Cemetery at Spong Hill, North Elmham, Part 1: Catalogue of Cremations 20–64 and 1000–1690*, E Anglian Archaeol, **6**. Gressenhall: Norfolk Archaeological Unit

Hills, C, 1979 The archaeology of Anglo-Saxon England in the pagan period: a review, *Anglo-Saxon England*, **8**, 287–329

Hills, C, 1980 Anglo-Saxon cemeteries, with particular reference to Spong Hill, Norfolk, in Rahtz *et al* 1980, 197–202

Hills, C, 1981 Barred zoomorphic combs of the migration period, in V I Evison (ed) 1981, *Angles, Saxons and Jutes: Essays Presented to J N L Myres*. Oxford: Clarendon Press, 95–125

Hills, C, 2001 From Isodore to isotopes, ivory rings in Early Medieval Graves, in H Hamerow & A MacGregor (eds), *Image and Power in the Archaeology of Early Medieval Britain: Essays in Honour of Rosemary Cramp*. Oxford: Oxbow, 131–46

Hills, C & Penn, K, 1981 *The Anglo-Saxon Cemetery at Spong Hill, North Elmham, Part II*: *Catalogue of Cremations 22, 41 and 1691–2285,* E Anglian Archaeol, **11**. Gressenhall: Norfolk Archaeological Unit

Hills, C, Penn, K & Rickett, R, 1984 *The Anglo-Saxon Cemetery at Spong Hill, North Elmham, Part III: Catalogue of Inhumations*, E Anglian Archaeol, **21**. Gressenhall: Norfolk Archaeological Unit

Hills, C, Penn, K & Rickett, R, 1987 *The Anglo-Saxon Cemetery at Spong Hill, North Elmham, Part IV: Catalogue of Cremations 30–2, 42, 44a, 46, 65–6, 2224, 2286–799 and 3325*, E Anglian Archaeol, **34**. Gressenhall: Norfolk Archaeological Unit

Hills, C, Penn, K & Rickett, R, 1994 *The Anglo-Saxon Cemetery at Spong Hill, North Elmham, Part V: Catalogue of Cremations 2800–3334*, E Anglian Archaeol, **67**. Gressenhall: Norfolk Archaeological Unit

Hines, J, 1984 *The Scandinavian Character of England in the pre-Viking Period.* BAR Brit Ser **124**. Oxford: British Archaeological Reports

Hines, J, 1990 The runic inscriptions of early Anglo-Saxon England, in A Bammesberger & A Wollmann (eds) 1990, *Britain 400–600: Language and History*. Heidelberg: Carl Winter, 437–55

Hines, J, 1991 Some observations on the runic inscriptions of early Anglo-Saxon England, in A Bammesberger (ed) 1991, *Old English Runes and their Continental Background*. Heidelberg: Carl Winter, 61–83

Hines, J, 1993 *Clasps Hektespenner Agraffen, Anglo-Scandinavian Clasps of Classes A–C of the 3rd to 6th Centuries AD. Typology, Diffusion and Function*. Stockholm: Almqvist & Wiksell

Hines, J, 1997 *A New Corpus of Anglo-Saxon Great Square-Headed Brooches*, Soc Antiq London. Woodbridge: Boydell

Hines, J, 1998 The finds, in T Malim & J Hines, *The Anglo-Saxon Cemetery at Edix Hill, (Barrington A), Cambridgeshire,* Council for British Archaeology Research Report, **112**. York, 200–28

Hines, J, 1999 The sixth century transition in Anglian England: an analysis of female graves from Cambridgeshire, in J Hines, K Høilund Nielsen & F Siegmund (eds), *The Pace of Change, Studies in Early-Medieval Chronology*. Oxford: Oxbow, 65–79

Hirst, S M, 1985 *An Anglo-Saxon Inhumation Cemetery at Sewerby, East Yorkshire*, York University Publication, **4**. York

Hoffmann, M, 1964 *The Warp Weighted Loom*, *Studies in the History and Technology of an Ancient Implement*, Studia Novegica, **14**. Oslo: Universitetsforlaget

Huggett, J W, 1988 Imported early Anglo-Saxon grave

goods, *Medieval Archaeol,* **32**, 63–96
Hurst, J G, 1976 The pottery, in D M Wilson (ed) 1976, *The archaeology of Anglo-Saxon England*. London: Methuen, 283–348
Hyslop, M, 1963 Two Anglo-Saxon cemeteries at Chamberlain's Barn, Leighton Buzzard, Bedfordshire, *Archaeol J,* **120**, 160–200
Jackson, C, 1870 *The Diary of Abraham de la Pryme, 1690–1704*, The Surtees Society, **54**. Durham: Andrews & Co
Jackson, K, 1953 *Language and History in Early Britain*. Edinburgh
Jacob, B, 1999 The inhumations from the mixed rite Anglo-Saxon cemetery 'Kirton in Lindsey', Cleatham, North Lincolnshire. Unpublished MSc dissertation, University of Sheffield
Jarvis, E, 1850 Account of the discovery of ornaments and remains, supposedly of Danish origin, in the parish of Caenby, Lincolnshire, *Archaeol J*, **7,** 36–44
Jessup, R, 1975 *Man of Many Talents, an Informal Biography of James Douglas 1753–1819*. Chichester: Phillimore
Jewitt, Ll, 1867 A note on the urns from Cleatham, *The Reliquary*, **8**, 224–6
Jewitt, Ll, 1870 *Grave Mounds and their Contents*, *a Manual of Archaeology as Exemplified in the Burials of the Celtic, the Romano-British and the Anglo-Saxon periods*. London: Groombridge & Son
Kaye, W J, 1914 *Roman (and other) Triple Vases*. London: Elliot Stock
Kemble, J M, 1855 Burial and cremation, *Archaeol J*, **12**, 309–37
Kidd, D, 1976 Review of Myres & Southern 1973, Sancton report, *Medieval Archaeol*, **20**, 202–4
Kilbride-Jones, H, 1980 *Zoomorphic Penannular Brooches*, Society of Antiquaries of London, Research Committee Report, **29**
Kinsley, A G, 1989 *The Anglo-Saxon Cemetery at Millgate, Newark on Trent, Nottinghamshire*, Nottingham Archaeological Monographs, **2**. Nottingham: Dept of Classical and Archaeological Studies, University of Nottingham
Knowles, G C, 1965 Worlaby, *E Midlands Archaeol Bulletin*, **8**, 26 and 28
Koch, U, 1977 *Das Reihengräberfeld bei Schretzheim*, Germanische Denkmäler der Völkerwanderungszeit ser. A, **13**, 1 and 2. Berlin
Kristensson, G, 1967 *A Survey of Middle English Dialects 1290–1350, the Six Northern Counties and Lincolnshire*. Lund: C W K Gleerup
Lane, T W, 1993 *Lincolnshire Survey, the Northern Fen Edge*, E Anglian Archaeol, **66**
Leach, T R, 1992 Edward Trollope and the Lincoln Diocesan Architectural Society, in C Sturman (ed), *Some Historians of Lincolnshire*, Soc Lincs Hist Archaeol Occasional Paper, **9**. Lincoln
Leahy, K A, 1977/78 Anglian cruciform brooches from Wychnor and Brizlincote near Burton upon Trent, *Trans South Staffs Archaeol and Hist Soc*, **19**, 5–10
Leahy, K A, 1980 Interim report on excavations on the Anglo-Saxon cemetery at Kirton in Lindsey, *Lincs Hist Archaeol,* **15**, 72–3
Leahy, K A, 1993 The Anglo-Saxon settlement of Lindsey, in Vince (ed) 1993, 29–44
Leahy, K A, 1998 Demography, in Drinkall & Foreman 1998, 338–41
Leahy, K A, 1999 The formation of the Anglo-Saxon Kingdom of Lindsey, in, T Dickinson & D Griffiths (eds), *The Making of Kingdoms, Anglo-Saxon Studies in Archaeology and History* ***10****,* Papers from the Forty-seventh Sachsensymposium, York, 1996. Oxford, 127–33
Leahy, K A, 2003 Middle Saxon Lincolnshire: an emerging picture, in T Pestell & K Ulmschneider (eds), *Markets in Early Medieval Europe, Trading and Productive Sites*. Macclesfield, Windgather Press, 650–850
Leahy, K A, 2005 The early barrow boys, *Lincolnshire Unearthed,* **3**, 29–30
Leahy, K A & Boylston, A, 1998 The demography, in Drinkall & Foreman 1998, 338–41
Leahy, K A & Williams, D J, 2001 Sheffield's Hill, two Anglo-Saxon cemeteries, *Current Archaeol,* No 175, **15** (7), 310–13
Leeds, E T, 1936 *Early Anglo-Saxon Art and Archaeology*; *being the Rhind Lectures Delivered in Edinburgh, 1935*. Oxford: Clarendon Press
Leeds, E T, 1945 The distribution of the Angles and Saxons archaeologically considered, *Archaeologia,* **91**, 1–106
Leeds, E T, 1949 *A Corpus of Early Anglo-Saxon Great Square-Headed Brooches.* Oxford: Clarendon Press
Leeds, E T & Pocock, M, 1971 A survey of Anglo-Saxon brooches of the florid type, *Medieval Archaeol*, **15**, 13–36
Lethbridge, T C, 1931 *Recent Excavations in Anglo-Saxon Cemeteries in Cambridgeshire and Suffolk,* Cambridge Antiquarian Society, Quarto Publications, New Series, **3**
Lethbridge, T C, 1936 *A Cemetery at Shudy Camps, Cambridgeshire: Report on the Excavation of a Cemetery of the Christian Anglo-Saxon Period in 1933*, Cambridge Antiquarian Society, Quarto Publications, New Series, **5**
Lethbridge, T C, 1951 *A Cemetery at Lackford, Suffolk, Report on the Excavation of a Cemetery of the Pagan Anglo-Saxon Period in 1947*, Cambridge Antiquarian Society, Quarto Publications, New Series, **6**
London Museum, 1940 *Medieval Catalogue*, London Museum Catalogues, **7**

MacGregor, A, 1975 Barred combs of the Frisian type in England, *Medieval Archaeol,* **19**, 195–8

MacGregor, A, 1985 *Bone, Antler, Ivory and Horn, the Technology of Skeletal Materials Since the Roman Period*. London: Croom Helm

MacGregor, A & Bolick, E, 1993 *Ashmolean Museum, Oxford, A Summary Catalogue of the Anglo-Saxon Collections (Non-Ferrous Metals),* BAR Brit Ser **230**. Oxford*:* British Archaeological Reports

McKinley, J I, 1994 *Spong Hill, Part VIII, the Cremations*, E Anglian Archaeol Rep, **69**. Gressenhall

McNeill, H, 2001 A new approach to Anglo-Saxon small-long brooches and their context: a perspective from Lincolnshire, MA thesis, University of York

Malim, T & Hines, J, 1998 *The Anglo-Saxon Cemetery at Edix Hill (Barrington A), Cambridgeshire,* Council for British Archaeology Research Report, **112**. York

Marlow, M, 1992 The population, in Sherlock & Welch 1992, 107–18

Marzinzik, S, 2003 Early Anglo-Saxon Belt Buckles (late 5th to early 8th centuries AD): Their Classification and Context, BAR Brit Ser **357**. Oxford*:* British Archaeological Reports

May, J, 1996 *Dragonby Report on Excavations at an Iron Age and Romano-British Settlement in North Lincolnshire*, 2 vols, Oxbow Monograph, **61**. Oxford: Oxbow

Meaney, A, 1964 *A Gazetteer of Early Anglo-Saxon Burial Sites*. London: Allen & Unwin

Meaney, A, 1981 *Anglo-Saxon Amulets and Curing Stones,* BAR Brit Ser **96**. Oxford*:* British Archaeological Reports

Meaney, A & Hawkes, S C, 1970 *Two Anglo-Saxon Cemeteries at Winnall,* Soc. Medieval Archaeol Monograph, **4**

Milne, A A, 1928 *The House at Pooh Corner*. London: Methuen & Co

Morris, C, 1994 Finds connected with wooden artefacts, woodworking and other tools, in Hills *et al* 1994, 30–5

Morris, J, 1974 Review of Myres & Green, *The Anglo-Saxon cemeteries at Caistor by Norwich and Markshall, Norfolk* in *Medieval Archaeol*, **18**, 225–32

Mortimer, C, 1990 *Some aspects of Early Medieval Copper alloy technology as illustrated in a study of the Anglian cruciform brooch*, unpublished PhD thesis, University of Oxford

Mortimer, C, 1998 Cruciform brooches in Drinkall and Foreman 1998, 252–4

Mortimer, J R, 1905 *Forty Years' Researches in the British and Saxon Burial Mounds of East Yorkshire.* London: Brown & Sons

Murphy, P, 1994 Impressions of plant material, in Hills *et al* 1994, 36

Myres, J N L, 1937 Some Anglo-Saxon potters, *Antiquity,* **11**, 389–99

Myres, J N L, 1951 The Anglo-Saxon pottery of Lincolnshire, *Archaeol J*, **108**, 65–99

Myres, J N L, 1969 *Anglo-Saxon Pottery and the Settlement of England.* Oxford: Oxford University Press

Myres, J N L, 1977 *A Corpus of Anglo-Saxon Pottery of the Pagan Period*, 2 vols. Cambridge: Cambridge University Press

Myres, J N L & Green, B, 1973 *The Anglo-Saxon Cemeteries at Caistor by Norwich and Markshall, Norfolk,* Society of Antiquaries of London, Research Committee Report, **30**

Myres, J N L & Southern, W H, 1973 *The Anglo-Saxon Cremation Cemetery at Sancton, East Yorkshire*, Hull Museum Publication, **218**

Neumann, H, 1998 The palaeo-environmental survey of the Ancholme valley, in Van de Noort & Ellis (eds) 1998

Nicholson, R, 1998 Animal bone from graves, in Drinkall & Foreman 1998, 236–40

O'Connor, S, 1998 The boar's tusk buckle, in Drinkall & Foreman 1998, 272–3

Osborne, H (ed), 1975 *The Oxford Companion to the Decorative Arts*. Oxford: Clarendon Press

Oswald, A, 1937 *The Roman Pottery Kilns at Little London, Torksey*, *Lincs*. Privately printed

Owen-Crocker, G R, 1986 *Dress in Anglo-Saxon England.* Manchester: Manchester University Press

Ozanne, A, 1962–63 The Peak dwellers, *Medieval Archaeol,* 6–7, 15–52

Page, W (ed), 1906 *The Victoria County History of Lincolnshire*, **2**. London

Pantos, A, 2001 The meeting place of Langoe wapentake, *Lincs Hist Archaeol,* **36**, 66–9

Parfitt, K & Brugmann, B, 1997 *The Anglo-Saxon Cemetery at Mill Hill, Deal, Kent.* London, Soc Medieval Archaeol Monograph Series, **14**

Peacock, D P S, 1977. Ceramics in Roman and medieval archaeology, in D P S Peacock (ed) 1977, *Pottery in Early Commerce.* London: Academic Press, 21–34

Peacock, E, 1868 An account of the opening of a Celtic gravemound at Cleatham, Lincolnshire, *The Reliquary,* **8**, 224–6

Penthick, J S, 1990 The Humber Estuary, in Ellis & Crowther (eds) 1990, 54–67

Phillips, C W, 1934 The present state of archaeology in Lincolnshire part II, *Archaeol J,* **91**, 97–187

Plettke, A, 1921 *Ursprung und Ausbreitung der Angeln und Sachsen*, *Urnenfriedhöfe in Niedersachsen, Bd. 3*. Hildsheim

Plummer, C, 1896 *Venerabilis Baedae*: *Historia Ecclesiasticam Gentis Anglorum.* Oxford: Oxford University Press

Radford, C A Ralegh, 1947 A lost inscription of pre-Danish age from Caistor, *Archaeol J,* **103**, 95–9

Rahtz, P, 1978 Grave orientation, *Archaeol J*, **135**, 1–14

Rahtz, P, Dickinson, T & Watts, L (eds), 1980 *Anglo-Saxon Cemeteries 1979, The Fourth Anglo-Saxon Symposium at Oxford*, BAR Brit Ser **82**. Oxford: British Archaeological Reports

Reichstein, J, 1975 *Die kreuzförmige Fibel zur Chronologie der späten römischen Kaiseerzeit und der Völkerwanderungzeit in Skandinavian, auf dem Kontinent und in England.* Neumünster: Karl Wachholze

Richards, J D, 1987 *The Significance of Form and Decoration of Anglo-Saxon Cremation Urns*, BAR Brit Ser **166**. Oxford: British Archaeological Reports

Rigby, V & Stead, I M, 1976 Coarse pottery, in Stead 1976

Roes, A, 1963 *Bone and Antler Objects from the Frisian Terp Mounds*. Haarlem

Ross, S & Foreman, M, 1998 The pins in Drinkall & Foreman 1998, 267–70

Russel, A D, 1984 *Early Anglo-Saxon ceramics from East Anglia: a microprovenence study*, unpublished PhD thesis, University of Southampton

Russell, E, 1991 The enclosure of Cleatham 1624–1710, in D Tyszka, K Miller & G Bryant, *Land, People and Landscapes, Essays in Honour of Rex C Russell*. Lincoln: Lincolnshire County Council, 115–20

Russell, E & Russell, R C, 1982 *Landscape Changes in South Humberside, The Enclosures of Thirty-Seven Parishes*. Hull: Humberside Leisure Services

Scull, C, 1985 Further evidence from East Anglia for enamelling on early Anglo-Saxon metalwork, in S C Hawkes, J Campbell and D Brown (eds), *Anglo-Saxon Studies in Archaeology and History*. Oxford: Oxford Univ Comm Archaeol, 117–24

Shephard, J, 1979 The social identity of the individual in isolated barrows and barrow cemeteries in Anglo-Saxon England,, B C Burnham & J Kingsbury (eds), *Space, Hierarchy and Society*, BAR Brit Ser **59**. Oxford: British Archaeological Reports, 47–79

Sheppard, T, 1939 Saxon relics from Barton, Lincs, *Hull Museum Publication,* **207**, 257–62

Sheppard, T, 1940 Saxon relics from Barton, Lincs, Part 2, *Hull Museum Publication,* **208**, 37–49

Sherlock, S J & Welch, M G, 1992 *An Anglo-Saxon Cemetery at Norton, Cleveland*, Council for British Archaeology, Research Report, **82**. London

Simpson, C J, 1976 Belt buckles and strap-ends of the later Roman Empire: a preliminary survey of several new groups, *Britannia* **7**

Smith, R A, 1912 The excavation by Canon Greenwell, FSA, in 1908, of an Anglo-Saxon cemetery at Uncleby, East Riding of Yorkshire, *Proc Soc Antiq, 2nd Ser,* **24**, 146–58

Smyth, A, 1984 Warlords and holy men: Scotland AD 80–1000. London: Arnold

Southworth, E (ed), 1990 *Anglo-Saxon Cemeteries: a Reappraisal, Proceedings of a Conference held at Liverpool Museum 1986*. Stroud: Alan Sutton

Speake, G, 1980 *Anglo-Saxon Animal Art and its Germanic Background*. Oxford: Oxford University Press

Stafford, P, 1985 *The East Midlands in the Early Middle Ages.* Leicester: Leicester University Press

Stead, I, 1976 *Excavations at Winterton Roman Villa and other Roman Sites in North Lincolnshire, 1958–1967,* Dept of the Environment Archaeol Rep, **9**. London: HMSO

Stenton, F M, 1970 Lindsey and its Kings, in D M Stenton (ed), *Preparatory to Anglo-Saxon England,* 127–35, previously published in H W C Davis (ed), 1927, *Essays presented to Reginald Poole Lane*, 136–50

Stenton, F M, 1971 *Anglo-Saxon England*, 3rd edn. Oxford: Oxford University Press

Swanton, M J, 1973 *The Spearheads of the Anglo-Saxon Settlements*. London: Royal Archaeological Institute

Taylor, C M, 1992 Elmet: boundaries and Celtic survival in the post-Roman period, *Medieval Hist*, **2**, 111–29

Thomas, G W, 1887 On excavations in an Anglo-Saxon cemetery at Sleaford, in Lincolnshire, *Archaeologia,* **50**, 383–406

Thomas, S, 1960 Studien zu den germanischen Kammen der Römischen Kaiserzeit, *Arbeits und Forschungberichte zur Sächsischen Bodendenkmalpflege*

Thompson, F H, 1956 Anglo-Saxon sites in Lincolnshire: unpublished material and recent discoveries, *Antiq J*, **36**, 181–99

Timby, J, 1993 Sancton I Anglo-Saxon cemetery; excavations carried out between 1976 and 1980, *Archaeol J,* **150**, 243–65

Timby, J, 1996 *The Anglo-Saxon Cemetery at Empingham II, Rutland.* Oxford: Oxbow Monograph **70**

Todd, M, 1968 The commoner late Roman coarse wares of the East Midlands, *Antiq J*, **48**, 192–209

Trollope, E, 1857 Note in *Archaeol J*, **14**, 275–6

Tyers I, Hillam, J & Groves, C, 1994 Trees and woodland in the Saxon period: the dendrochronological evidence, in J Rackham (ed), *Environment and Economy in Anglo-Saxon England*, Council for British Archaeology Research Report, **89**. York

Tyler, S & Major, H, 2005 *The Early Anglo-Saxon Cemetery and Later Saxon Settlement at Springfield Lyons, Essex,* E Anglian Archaeology Rep, **111**. Chelmsford: Essex County Council

Ubelaker, D H, 1974 *Reconstruction of Demographic Profiles from Ossuary Skeletal Samples (Case study from Tidewater Potomac).* Washington: Smithsonian contributions to anthropology, **18**

Underwood, R, 2001 *Anglo-Saxon Weapons and Warefare*. Stroud: Tempus

Van de Noort, R & Ellis, S (eds), 1998 *Wetland Heritage of the Ancholme and Lower Trent Valleys.* Hull: Centre

for Wetland Archaeology, University of Hull

Vierck, H, 1972 Date and origin of a small-long brooch, in A Brodribb, A Hands & D Walker, *Excavations at Shakenoak Farm, near Wilncote Oxfordshire.* Privately printed

Vince, A (ed), 1993 *Pre-Viking Lindsey*. Lincoln: City of Lincoln Archaeological Unit

Vince, A, 1995. The petrology of clay and briquetage samples from Tetney, Lincolnshire, in G Tann *et al, Archaeological Monitoring of Project Clearwater*, *Report Prepared by Lindsey Archaeological Services for Anglia Water*, 83–4

Vince, A, 1998 Pottery thin sections, in Drinkall & Foreman 1998, 244

Vince, A & Young, J, 1992 *The East Midlands Anglo-Saxon Pottery Project: Second Annual Report*

Walton Rogers, P, 1998 The swordbeater, in Drinkall & Foreman 1998, 292–4

Watkin, G R, 1980 A Frankish bronze bowl from Barton upon Humber, *Lincs Hist Archaeol*, **15**, 88–9

Webster, G & Myres, J N L, 1952 An Anglo-Saxon urnfield at Elkington, Louth, Lincolnshire, *Archaeol J,* **108**, 25–64

Webster, L & Backhouse, J, 1991 *The Making of England, Anglo-Saxon Art and Culture, AD 600–900.* London: The British Museum

Wenham, P, 1968 *The Romano-British Cemetery at Trentholme Drive*. York: HMSO

West, S, 1985 *West Stow, the Anglo-Saxon Village*, 2 vols, E Anglian Archaeol, **24**. Ipswich: Suffolk County Council

West, S, 1988 *Westgarth Gardens Anglo-Saxon Cemetery Suffolk: Catalogue,* E Anglian Archaeol, **38**. Bury St. Edmunds: Suffolk County Council Planning Department

West, S, 1998 *A Corpus of Anglo-Saxon Material from Suffolk*, E Anglian Archaeol, **84**. Ipswich: Suffolk County Council Archaeology Service

White, A, 1976 Archaeology in Lincolnshire and South Humberside, 1975, *Lincs Hist Archaeol,* **11**, 55–64

White, A, 1982 Riby, Anglo-Saxon burials, *Lincs Hist Archaeol,* **17**, 80–2, figs 4–5

White, R, 1990 Scrap or substitute: Roman material in Anglo-Saxon Graves, in Southworth (ed) 1990, 125–52

Whitwell, J B, 1967 Archaeological Notes 1966, *Lincs Hist Archaeol,* **2**, 31–54

Williams, D, 1992 Petrology of fabrics, in D Knight, Excavations of an Iron Age settlement at Gamston, Nottinghamshire, *Trans Thoroton Soc,* **96**, 40–1

Williams, D & Vince, A, 1997 The characterisation and interpretation of early to middle Saxon granitic tempered pottery in England, *Medieval Archaeol*, **41**, 214–20

Williams, H, 1997 Ancient landscapes and the dead: the reuse of Prehistoric and Roman monuments as early Anglo-Saxon burial sites, *Medieval Archaeol*, **41**, 1–32

Williams, H, 1998 Monuments and the past in early Anglo-Saxon England, *World Archaeol,* **30** (1), 90–108

Williams, H, 2002 Cemeteries as central places – place and identity in Migration Period eastern England, in B Hårdh & L Larsson, *Central Places in the Migration and Merovigian Periods, Papers from the 52nd Sachsensymposium*, Acta Archaeologica Lundensia, Series in 8°, **39**. Stockholme: Almqvist and Wiksell International

Wilson, D, 1992 *Anglo-Saxon Paganism.* London: Routledge

Yorke, B, 1993 Lindsey: The Lost Kingdom found?, in Vince (ed) 1993, 141–50

Youngs, S, 1989 *The Work of Angels, Masterpieces of Celtic Metalwork, 6th–9th Century AD*. London: British Museum

Youngs, S, 1995 A penannular brooch from near Calne, Wiltshire, *Wiltshire Archaeol and Nat Hist Mag*, **88**, 127–31

Index

Page numbers in italics refer to illustrations or tables.

Aethelred, King of Mercia 8
Albone, Mrs Pat 123
Aldfrith 8
Alton, Hampshire 151
amber 166–67
'amulet bags' 221
amulets 159–60, 171, Pl 34
Ancaster 2
Ancholme River 3, 4
Anglo-Saxon Chronicle 216
Anglo-Saxon settlers 64–65
animal remains 223–25, *223 see also* bones, animal
antler 31, 149, 151, 157, 160, 165, 204, *205*, *206*, 209, 229, Pl 13, Pls 32–33
Arnold, C J 128
Axholme, Isle of 6, 86
Aylesby, Lincolnshire 215

Bagmore, Burton Strather 12
Bardney, Monastery of 8
Barlings, Lincolnshire 215
Barnetby le Wold 6
Barton on Humber 12
Baston, Lincolnshire 128
beads:
  amber 166–67
  bone/antler 165
  classifying 160, *165*
  colours 160–64, *162*, 167–68, *167*
  context 167–68
  coral 165–66, Pl 38
  crystal 166
  dating 160–62, *165*
  glass 31, 160–65, 167–68, *177*, *178*, *179*, 263, Pl 14, Pl 36
  illustrations of *163*, *177*, *178*, *179*, *185*, *191*, *194*, *195*, *197*, *198*, Pls 38–39
  ivory 166
  material *160*, *165*
  polychrome glass 162–64, *164*, *220*
  shape 162, 164–65, *165*
  silver 156, 167
  use patterns 227
Bede, St 7, 8
belt fittings 151, 214
belt stiffener 151
Berisford, Freda 3, 12
Beverley, East Yorkshire 142
Bigby 213
bird bones 225
Blaecca 8
Boddington, A 59
Böhme, H W 204
Böhner, K 172
Bolinbroke 6
Bond, J M 204
bone, animal 149, 151, 157, 165, 168, *169*, *183*, 199–201, 211, *211*, 212, 220, 223–25, *223*, Pl 35
Bottesford 12
Bracebridge Heath 13
bracelets 171
brass mines 1
Briscoe, Lady Teresa 77, 81
British Museum 2
brooch pins 134
brooches:
  annular 134, 144–46, *144*, *146*
  cruciform 10, 94, 95, 98, 114, 134, 136, *136–37*, 138–42, 146, 147, 167, Pl 39
  disc 147
  illustrations *135*, *136*, *139–40*, *176*, *184*, *185*, *188*, *190*, *192*, *193*, *194*, *195*, *197*, *198*
  inter-cemetery comparisons 147, *148*
  penannular 146–47
  quoit 145
  small-long 143, *143*
  square-headed 142–43, *142*
  stamps 138
  types *133*, 134, *148*
Brown, David 202
Brown, G Baldwin 9
Browne, Sir Thomas 63
Bruce-Mitford, R 222
Brugman, Birte 160, 165, *165*
Brumby, Mrs K P 2
bucket, wooden 217
Buckland cemetery, Dover 149, 154, 162, 172
buckles 150–51, *150*, 160, *196*, *197*:
  garnet-set 59, Pl 34
burials:
  decapitated 58
  social aspects 264
  see also cemeteries; cremation; graves; inhumation; urns *and under names of cemeteries*
Burton Stather 12
Burwell cemetery, Cambridgeshire 59, 160
Bury St Edmunds cemetery, Suffolk 99, 213

Cadwalon, King of Gwynedd 8
Caenby mound burial 9, 13
Caistor: Roman fortifications 12, 170
Caistor by Norwich cemetery, Norfolk 101:
  casket mounts 220
  coins 170
  grave goods *230*
  ivory rings 204
  pottery 63
  urns 65, *125*, 127
Candlesby 9
casket mounts 220
Cassington Roman cemetery 58
Castledyke cemetery, Barton on Humber:
  amber 166, 167
  beads 166, 168
  bracelets 171
  brooches 138, 147
  buckle 151
  burials:
    animal bones in 58
    number of 32
    seated 13
    skeletal remains 60
  cereals 86
  chatelaine 149
  cowrie shell 171
  excavation 12–13
  Final Phase 59
  ?firesteel 202
  girdle hangers 203
  grave disturbance 33
  knives 199
  lace-tags 154
  pin 149, *149*
  population 32
  pottery 84, 86
  rites mixture 10
  size 11, 32
  spatulate tools 199
  spearhead 215
  stones 33
  urns intercut 29
  weaving sword 215
cemeteries:
  cremation 10, 11–12, *11*, *124*
  distribution 11
  Final Phase 10, 13, 58–59, 174
  inhumation 11, 12–13
  proportion of population 264
  size of 10, 11
Chadwick, Sonia 12
Chamberlain's Barn, Bedfordshire 59, 213
Charnwood Forest 84, 263
chatelaines 149:
  chain 160
Cheesecake Hill, Driffield 171
Christianity 58, 59
Christie Collection 2
Cleatham Anglo-Saxon cemetery, Lincolnshire:
  aerial photograph Pl 2
  bone report lacking 32, 60
  boundaries 23–25
  burial practices 33, 56–59
  burials
    demography 31–32
    number of 31
    rich 33
    size ranking 31
  coffins absent 33
  cremations/inhumations relationship 10, 29, 58, 227
  discovery of, 1856 1–3, 129–30, Pl 1
  drawing conventions 14
  excavation 2–3:
    methodology 23
  future work needed 263
  geology 3–4
  horizontal stratigraphy 25–31
  importance of 6
  iron extraction 7
  links to outer world 263
  manorial centre and 264
  Newark and 128
  northern boundary ditch 23–25, *24*, *25*, 69
  period of use 32, 227, 263
  phasing 25–30, 263, 264
  photographs of Pls 1–7
  population size 32
  regional setting 7
  ritual deposits 60–61
  settlement evidence around 6–7, 123, 264
  single graves in area 13
  site archive 3, 30
  site location 3–7, *3*, *4*, *5*
  size 32, 263
  soil conditions 60
  Spong Hill and 263, 264
  statistical analyis 264
  stones 1, 5, 29, 33, 61–62, Pls 19–20
  studies of 9
  trade links 263
  tumulus on possible 5
  see also cremations; graves; inhumations; urns
Cleatham barrow 6
Cleatham Hall Farm 2
Cleatham House Farm 2
Cleatham/Spong Hill potter 128, *129*
Cleatham Tithe Award Map 1845 5
coins 169–70, *169*, *170*
collected items 225–27, *226*
combs 133, 204–8, *204*, *205*, *206*, *207*, *208*, 213
combs, bone/antler 31, 204, *204*, *205*, *206*, 229, Pl 13, Pls 32–33
Continent:
  contacts with 59,
  parallels 63, 65, 264
  urns 64, 65
copper alloy 149, 150, 151, 154, 157, 160, *175*, *176*, *178*, *181*, *182*, *184*, *186*, *192*, *193*, *197*, 202, 208, 209, 217, Pl 29

copper-alloy finds: distribution 30–31
coral 165–66
Corringham wapentake 6
cowrie shells 171, Pl 30
Cranwell 147
cremation:
  brooches and 147
  cemeteries, uniformity of 89
  expense of 29
  stratigraphically earlier than inhumation 29
  trend away from 10
  see also following entry and urns
cremations, Cleatham:
  clay envelope 29–30
  inhumation and 10, 29
  trend away from 10
  urnless 29–30
crude mortality rate 32
Crundale, Kent 151
crystal 166

Darling, Maggie 127
Darwin family 4
Deira 7, 10
Dickinson and Härke 215, 216
Dickinson, Tania 65, 146, 214, 215, 216
Domesday Survey 4, 6, 11, 32
Doncaster Conservation Agency 3
drawings, conventions of 14, *161*
dress fittings 133–68
Driffield 171
Drinkall and Foreman 149, 199
dummy objects *212*, 213
Dunstable, Bedfordshire 160

Eagles, Bruce 2, 10, 89
Ealfrid/Ecgfrid Rex 8
'ear scoops' 209
Eau River 3
Edix Hill cemetery, Cambridgeshire 143
Edwin, Earl of Mercia 6
Edwin, King of Northumbria 8
Ellis, S E 201
Elmet 7
Elsham cemetery, Lincolnshire:
  animal bones 223
  beads 166
  boundary 25
  brooches 10, 147
  combs 208
  cowrie shells 171
  cremations/inhumations relationship 10
  excavation 12
  glass vessels 221
  grave goods 229, *230*
  ivory rings 204
  pottery 82, 86
  urns 82, *125*, 126, 128
  window urns 82
  Yarborough Camp and 6
Empingham, Rutland 147, *149*, 151, 166
enamelling 142
enclosure 4
Everson, P 13
Evison, Vera 160, 162, 172, *172*, 199, 201, 220

Farforth 147
Fennell, Kenneth 10, 29, 66
Fens 6
Fern, Chris 218
field walking 6, 25
finger rings 171–72
firesteels 199, 202
flints, worked 225
Flixborough 8, 9
Fonaby cemetery, Lincolnshire 10, *149*, 151, 166:
  excavation 12
  girdle hangers 202, 203
  whetstone 201
Foot, Sarah 7
fossils 225–26
Fox, C F 141
'Frisian' combs *205*, 206

gaming pieces 211–12, *211*, *212*, Pl 34
garnets 151
Garton Slack 149, 199
Gathercole, Peter 12
Geake, Helen 10, 222
gilding 151
Gilliate's Grave cemetery 7, 127
girdle hangers 202–3, *202*, *203*
glass fragments 221, *221*, Pl 37
glass vessels 220–21, *220*, *221*
Goodier, A 6
graves:
  adolescents 33, 56, 60
  age at death 60
  alignments 33, *56*
  animal bones in 57, 58
  body positions 33, 56–58
  bone analysis 60–61
  bone preservation 60
  brooches found in 147
  catalogue of finds 231–43
  children 33, 56, 60, 61, 168
  dating *228*
  decapitated burials 58
  depth 33
  distribution 263
  Final Phase 59
  finds tabulated 244
  grave goods 133, 147, 227
  pathology 60–61
  photographs of Pls 15–19
  plans *34–55*
  prone burials 56–58
  sex 33, 56, 60, 61
  single 13
  skeletal remains 60–61
  skull *57*

stature 216
stones 33
structures 33
Great Casterton, Rutland 126–27, 130
Great Chesterford 91, 99, 217
Great Limber 12
Grubenhäuser 7, 67
Guido and Welch 160

'hair slag' 226
Hall Hill 11
Hamerow, Helena 67, 74, 110, 130
handles, bone 199
hanging bowl *180*, 222
Härke, H 173, 199, 216
Hatfield Chase 7:
battle of 8
Hawkes, Mrs Chadwick 12
'Hercules club' pendants 169
Hibaldstow 6
Hibaldstow parish 13
Higson, Hugh 2
Hills, C 29, 66, 204
Hines, J 91, 94, 136, 142, 145, 155–56, 171, 222
Hirst, S M 145, 160
horses 223, *224*, 225
Hough on the Hill, Lincolnshire 202
Howell, Lincolnshire 142
Huggett, J W 204
Hull Museums 13
Humber Estuary 3, 7
Humber River 3
links across 7
Humberside Archaeological Unit 3
Hyslop, M 59

Illington, Norfolk 106, 128
Illington/Lackford potter 126
inhumation:
cremation and 10
trend towards 10
see also following entry and graves
inhumations:
discovery of 2
number of 263
see also preceding entry and graves
Ipswich 202
Irby on Humber 6, 12, 99
iron 149, 150, 151, 157, 160, *175*, *176*, *177*, *178*, *179*, *181*, *182*, *196*, 208, 209, 217
iron smelting 84
ivory 166, 204
ivory, burnt 31, 203
ivory rings 203–4, 229

Kemble, J M 63
Kempston beakers 220
Kidd, Dafydd 64, 65
Kirton Soke 6
Kirton-in-Lindsey parish 1, 5, 86, 123
Kirton-in-Lindsey soke centre 6
knives 160, 172–74, *172*, *173*, *174*, 199, *199*, *200*, 213, 216
Knowles, Chris 12
Koch, U 162

lace-tags 154
Laceby, Lincolnshire 91, 214
Lackford, Suffolk 29, 91, 94, 101, 106, 109:
comb case 220
urns *125*, 126
latch lifters 202, 203, *203*
Leeds, E T 58–59, 141, 142, 143, 145
Leeds and Pocock 141
Lethbridge, T C 29, 59, 213
Lincoln 8, 11
Lincoln Edge/Cliff 3
Lincoln Museum 2
Lincolnshire:
disc brooches in 147
hanging bowls in 222
largest inhumation cemetery 9
Lincolnshire Wolds 11, 12
Lindsey:
Anglo-Saxon finds, apparent lack of 9–10
Anglo-Saxon kingdom 7–8
archaeological study of 9–11
aristocracy in 7th century 59
burial in 9–13:
rites 10
single 13
types of 10
cemeteries 6, 9–13:
excavated 11–13
population size and 32
historical evidence 7–8
Mercia and Northumbria and 8, 216
population 32
pottery 86
Ridings 7
settlements *9*
wapentakes 6
weapon graves 216
Little Wilbraham, Cambridgeshire 58
Longstone, Derbyshire 171
loom, two-beam 223
Louth 6
Loveden Hill cemetery, Lincolnshire:
burial mound and 6
cremations and clay 30
cremations and inhumations 58
decapitated burials 58
hanging bowl cremations 10
limestone blocks 33
Lincoln and 11
Myres and 63
size 31
urnless cremations 29
urns 95, 98, *125*:
intercut 29
perforated 62
window urn 82

MacGregor, A 204
MacGregor and Bolick 154
McKinley, Jacqueline 32
mammoth ivory 204
Manton hanging bowl 6
Manton parish 2, 3, 4, 5, 13, 86
Manton Warren 6, 7
Marina Drive, Dunstable, Bedfordshire 160
Market Rasen 213
Markshall, Norwich 65
Marzinzik, Sonja 68, 150
Maw, Matthew 2
Meaney, Audrey 10, 160, 166, 169, 211, 221, 223, 225
Meaney and Hawkes 59
Melton Mowbray 128
Melton Ross cemetery 6
Mercia 7
metal detectors 2, 6, 8, *9*, 12, 213
metal objects *152–53*
Metcalf, Charles 2
miniature objects *212*, 213, *213*
monuments: reuse of 5
Morning Thorpe cemetery 94, 95, 106, 142, 151, 154, 167, 199, 203, 218
Morris, C 218
Morris, John 65
Mortimer, Catherine 138–41
Mount Pleasant Roman villa 5, 33, 147
Mucking, Essex 66, 67, 71, 74, 83, 106, 123, 124, 130, 166, 213
Myres, J N L 2, 10, 63–65, 66, 67, 71, 72, 74, 81, 82, 127, 133

Nassington, Northants 138
necklaces 168
Nettleton Top 7
New Inns, Derbyshire 211–12
Newark 6, 98, *125*, 126, 127, 147, 171, 206, 211, 220, 223, *230*
Norden's *Survey of the soke of Kirton in Lindsey* 1
North Lincolnshire 3
North Lincolnshire Community Archaeology Project 6
North Sea 7, 264
Northumbria 7:
  King 8
Norton, Cleveland 149, *149*, 166, 167, 199, 203

Offa, King of Mercia 8
Osthryth, Queen 8
Oswald, King 8
Oswald, A 126
Oswestry 8
Oswiu, King 8
Ouse River 3

Pakenham, Suffolk 106
parish boundaries 5–6
Paulinus, St 8
Peacock, Edward 1, 2
Peacock, Mrs Edward 2
Penda, King of Mercia 8
pendants *159*, 168–71, *168*, *169–70*, Pl 34
Phillips, C W 9–10
pins *148*, 149
plough damage 2, 3, 25, 60
Polhill, Kent 160, 203
Portway cemetery, Andover, Hampshire 29, 58, 86
potters, regional 127–28
pottery:
  centralised production of some 263
  classification and 63, 67–68, *69*
  comparisons 89–122
  decoration 64, 68
  development 263
  study of early Anglo-Saxon 63–67
  technical skill 63, 67
  see also urns

razors 208, *208*
Red Sea 171
Reichstein, J 136, 137, 155
Riby cemetery, Lincolnshire 99
Richards, J D 63, 66–67, 68, 73, 74, 75, 123, 126, 133, 228–29
Richardson, Mr 5
ring amulets 159
rings 157–58, *157–58*, 160, 171–72, 203–4, *203*, 229
Risby 4
roadway, Worcestershire 167
Roes, A 151, 204
Romano-British period:
  buckles 150
  burial practices 33, 264:
    animal bones 58
    urns *121*, 122, *124*
    urns perforated 58
  cemeteries 58
  coins 169–70, *169–70*
  glass 221
  loom 223
  masonry Pl 17
  metalwork 225
  pottery sherds 225
  survivals of 7
  see also sub-Roman period
Roxby cum Risby 13, 215
Royal Museum, Salford 2
runes *180*
Ruskington 199
Russell, Mrs 4

?saddle fitting 218, *219*
St Paul in the Bail, Lincoln 154
Sambye, Thomas 1
Samuels, John 126
Sancton cemetery, East Yorkshire:
  animal bones in 58
  beads 168
  brooches 147

combs 208
grave goods *230*
ivory 229
parallels and 65
reworking of finds 229
urns 63, 64, 94, 101, 106, 116, *125*, 126
Sancton/Baston potter 77, 128, 263
Sancton/Elkington potter 127–28, 212
Sandy, Bedfordshire 86
Saxton, Yorks 171
Scandinavia 156
'scrapers' 208, 209
Scunthorpe Borough Council 3
Scunthorpe Museum 2, 3
sea urchin fossil 225
Searby 9
Sewerby 142, *149*, 166, 199, 203
sharpening steels 199
shears 62, 208, *208*, 213
sheep 223, 225
Sheffield Literary and Philosophical Society 2
Sheffield's Hill cemetery, Roxby, Lincolnshire:
boundaries 13
brooches 147
excavation 13
Final Phase cemetery 59
glass 221
intertwined branches 33
rites mixture 10
settlement and 6–7
shield mounts 215
spearhead 214
Sheppard, Tom 13
shield fittings 215–16
Shudy Camps cemetery, Cambridgeshire 59, 213
silica frit 226, *226*, Pl 31
silver 149, 156, 157, 167, 170–71
slag 84–85, *84*, 227, *227*
Sleaford (Kesteven) cemetery 9, 11, 147, 166, 167
sleeve-clasps 1, 154–57, *155*, *156*
Society of Antiquaries 1
South Elkington cemetery, Lincolnshire 5, 6, 10, 11, 29, 32, 63:
beads 168
combs 208
grave goods 229, *230*
pottery 81
stone 33
urns 32, 116, *125*, 126
South Ferriby 3
spatulate tools 199
spear-butt ferrule 215
spearheads 61, 62, *180*, *182*, *183*, *186*, *191*, 213–15, *214*
spindle whorls 209–11, *209*, *210*, Pl 34
Spong Hill cemetery, Norfolk:
animal bones in 58
beads 166
bone handle 200
boundaries 25
brooches 145, 146
casket mounts 220
cereals 86
Cleatham cemetery and 263, 264
coins 170
combs 206
excavation 66
grave goods 229, *230*
grave structure 33
horizontal stratigraphy 25
perforated urns 82
population 32
pottery stamps 77
rings 157
size 31
urnless cremations 29
urns 94, 95, 98, 101, 106, 109, *125*, 126, *129*, 130
urns superimposed 29
window urn 82
wooden vessel 218
Springfield Lyons cemetery, Essex 98, 101, 106, 130
Stanton Harcourt Roman cemetery 58
steels, sharpening 199
Stenigot, Lincolnshire 202
Stenton, F M 7–8, 10
strap-ends 154, *154*
sub-Roman period:
brooches 146
burial and 32, 58
farmland decline 32
pottery 225
reafforestation 32
survival from 264
Sutton Hoo burials 13, 58, 151
whetstone 102
Swanton, M J 94, 213, 215
sword pommel mount 213

Tallington, Lincolnshire 147, 156–57
Taplow, Buckinghamshire 151
Taylor, Gordon 12
Tetney, Lincolnshire 84
textiles 209, 222–23, Pl 39
Thames Valley, upper 147
Theodore, Archbishop 86
Thomas, S 204
Thompson, Steve 202
'thong terminals' 154
thread-pickers 209, 211
Tickler, Edmund 2
Todd, M 126
toilet implements 133, 208–9, *208*, 224
tools 172–202:
spatulate 199
Torksey kilns 126
Trent, battle of 8
Trent River 3, 6, 7
Tribal Hidage 7
Trollope, Edward 1, 2
tweezers 1, 157, 208–9, *208*, 213

Uncleby, East Yorkshire 199, 202
Underwood, R 215
urns:
  accessory vessels 217–22
  acid igneous rock 83–84, 263
  analysis of 69–71
  animal bones 223
  base forms 76–77, *76*
  beads in 160, *164*, 165–66, 167, 168
  bone analysis lacking 60–61, 264
  bone mass Pl 12
  bosses 68, 71, *71*, 89, 94, 95, 98, 101, 105, 106, 109, 114, 120, 127, 128
  bows 72, 109, 116, 123, 128
  brooches 147
  calcareous materials 85, *85*, 128
  cereals 85–86
  chaff 85, *85*
  chronological sensitivity 89
  classification 64, 66, 67–68, *69*, 71
  combs Pl 13
  'complex' decoration 72
  concentration 25, *26–28*
  contents retained 133
  copper alloy distribution Pl 11
  Correspondence Analysis 264
  dating 89–122, *227*
  decoration 68, 71–75, 123–26, *124*
  destroyed 1
  development sequence 123
  dimensions *73*
  discovery of 1, 2, *129*, Pl 1
  distribution *26–28*, *30*, *31*
  domestic vessels reused as 86
  empty 62
  fabrics 82–86, 124, 263:
    fillers 82, 128
  feldspar *83*, 84
  find types, number of Pl 10
  grass 85, *85*, 86
  grave goods in 29, 30–31, 57, 123, 126, 133, 227, 228–29, *228*, *229*, *230*
  gypsum 86
  haematite 84, *84*, 128
  Harris matrix 69–71, 263, Fig. 115
  intercutting 29, 69, 263
  knives in 172
  lead plugs 58, 82, 126
  limestone basement and 23
  linear decoration 72
  medallions *71*, 72
  mica *83*, 84
  motifs *71*, 72
  multiple burials in 31–32
  number of 31, 67, *125*
  organic materials 85, *85*
  perforated 58, 62, 82, 89, 126
  phasing 67, 68, 70, 71, *71*, 72, 73, 82, 89, 123
  photographs of Pl 1, Pls 6–7, Pls 24–25
  preservation of Pl 9
  quality 81–82
  quartz 83, *83*, 128, 130
  representative *90–93*, *96–100*, *102–4*, *107–8*, *110–22*
  rim forms 75–76, *75*
  Roman-style 122, 126, 127
  sacrifice 57–58
  sequence 263, 264, Fig. 116
  seven-urn complex 70, Pls 21–22
  shapes 73–74:
    development 74–75
  size 74, 75
  slag 84–85, *84*, 227, *227*
  sooting 86
  stamps 68, 71, *71*, 77–81, *78*, *79*, *80*, 95, 98, 99, 101, 105, 109, 114, 120, 127, 128, 263
  stratigraphic relationship between 69
  transport of 263
  window 82
Ustrina 1, 5

vessels:
  accessory 217–22
  copper alloy *218*, 221–22
  wooden 217–18
  see also urns
Victoria History of the County of Lincolnshire 9
Vierck, H 143
Vince, Alan 83

Walker, John 83
walrus tusks 204
wealth and 31
weapons 213–16, *214*, *216*
weaving sword 215
Webster, Graham 11
Welbeck hill cemetery 6, 12, 58, 99
Well (Stow) 6
Wellbeck Hill 10
Welton le Marsh, Lincolnshire 142, 213
West, S 81, 202
West Garth Gardens cemetery, Bury St Edmunds, Suffolk 99, 213
West Heslerton, Yorkshire 105, 149, *149*, 156, 166, 167, 172
West Keal cemetery 5, 6, 11, 32
West Stow, Suffolk 67, 123, 204, 206, 207, 213
whetstones 201–2, *201*
White, R 225
White, Rev. J 1
Wigber Low, Derbyshire 199
Williams, Alison 3
Williams, David 13
Williams, Howard 5
Winnall, Hampshire 58, 59
Witham River 7, 215
Wold Newton 12
Worlaby cemetery 10, 215

Yorke, Barbara 7
Yorkshire and Humberside Area Museum Council 3