



INDEX DATA	RPS INFORMATION
Scheme Title A417/A419 Swindon to Gloucester A417/A419	Details DBFO Roadscheme Vol 2: Appendices
Road Number A417/A419	Date March 2007 1997
Plan description Contractor Robb & Co Ltd Oxford Archaeological Unit	
County Gloucestershire	
OS Reference ?	
Single sided ✓ Double sided ✓ A3 0 Colour 0	

RMG Construction JV – Gloucester
(Chris Blanford Associates)

Swindon to Gloucester A417/A419 DBFO Roadscheme

Post-excavation Assessment and Publication Proposal
Volume 2: Appendices



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Oxford Archaeological Unit

February 1997

KP [ENV] 11

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APPENDIX 1: Prehistoric Pottery Assessment

By A Barclay

Introduction

The excavations at BAGTF 96, DRDG 96, PRSAL 96 and PRSTAS 96 produced a total of 283 sherds (453g) of prehistoric pottery. The overall assemblage has a Neolithic to Iron Age date range and is characterised by mostly small and often abraded body sherds (average sherd weight <2g). Out of the 26 contexts that produced probable prehistoric pottery, only one contained sherds weighing more than 40g in total. BAGTF 96 produced an important assemblage of early Bronze Age Beaker pottery.

Methodology

All of the material was recorded and quantified by sherd count and weight (see table 1). Broad dates were assigned through fabric analysis. A brief record was made of diagnostic forms and decoration.

Fabrics

The assemblage contains few diagnostic sherds and broad dates have been assigned through analysis of the fabrics. Possible Neolithic sherds from the excavations at PRSAL 96 and PRSTAS 96 occur in either flint or flint and sand tempered fabrics. The Beaker and early Bronze Age sherds were either grog or grog and calcareous tempered. There is a range of fabrics containing common calcareous (mostly shell) inclusions which are thought to be of later prehistoric and most likely late Bronze Age or early Iron Age date. A small number of sand tempered sherds are likely to be Iron Age in date.

Earlier Prehistoric

At PRSAL 96 and PRSTAS 96 two contexts 83 and 3196, respectively, produced small crumbs of probably earlier Neolithic pottery. The fragment from 3165 could conceivably be from the rim of a Plain Ware bowl and the simple rim from 83 could be from a small cup-like vessel. Alternatively the rims could be of late Bronze Age date, although this is thought to be less likely. In addition, an externally expanded rim in a very leached shell tempered fabric from DRDG 96, context 113 could potentially be earlier Neolithic.

At BAGTF 96 four contexts (7, 9, 11, 27) produced a total of 123 sherds of Beaker pottery. All of the sherds are fine and some have been decorated with either horizontal bands of impressed comb or aplastic finger-nail decoration. Although no attempt was made to reconstruct vessel profiles at this stage, it is suspected from the rim and shoulder forms, and from the decoration, that the assemblage can be placed within Clarke's Wessex/Middle Rhine style (1970). In addition, a few small scraps of early Bronze Age material were recovered from contexts 6 (PRSAL), 3017 and 3102 (PRSTAS). One of these sherds (3017) came from the fill of the ring ditch, although no pottery was found in direct association with the funerary deposits.

Later Prehistoric

Later prehistoric material was recovered from all four sites (see Table 1). The majority of this material consisted of shell tempered body sherds which are probably more likely to be early Iron Age in date. Whilst it is possible that some of this material could be late or middle Bronze Age, or even Neolithic, in the absence of diagnostic sherds no precise date can be assigned with any certainty. Some of the shell tempered sherds (context 26 PRSAL 96) could even be non-prehistoric.

Discussion and potential for further work

The most important group of material is the Beaker pottery from BAGTF 96. Beaker domestic assemblages from pit deposits are quite rare in Gloucestershire and the fact that these deposits contain Wessex/Middle Rhine material increases this importance. Such assemblages are relatively unusual in Southern England in contrast to the more numerous assemblages of coarser domestic ware, and a comparable assemblage comes from the Marlborough Downs (Cleal 1992) and a much smaller assemblage comes from Yarnton near Oxford (Barclay in prep). In general relatively little Beaker material has been found in Gloucestershire (Ellison 1984, 115) and this assemblage deserves to be published in full. Potentially this material could represent one of the earliest Beaker sites in this area and it is suggested that radiocarbon dates should be obtained.

The excavations produced no other significant groups of prehistoric pottery. Relatively little contemporary pottery was found during the excavation of the ring ditch at St Augustine's Farm South and, likewise, the segmented ditches produced only a small and mixed group of sherds which ranged in date from possibly Neolithic through to Roman. The general abraded character and small size of much of the prehistoric pottery indicates that settlement activity may have been sparse in the general vicinity of the barrow and segmented ditches. It is not unusual for excavated barrows to produce no pottery and unaccompanied cremation deposits are quite common. Likewise, the excavation of similar segmented ditches at Butler's Field and Roughground Farm, Lechlade produced only small quantities of pottery. At Butler's Field the pottery was again mixed and included sherds of both middle and late Bronze Age date (Barclay forthcoming), while at Roughground Farm the ditch segments produced scraps of shell tempered prehistoric pottery of probable early Iron Age date (Allen et al 1993).

It is suggested that a summary report is prepared on the remainder of the assemblage.

Time estimates for further work

- 2 days to record and write a report on the Beaker material
- 1 day to write summary reports on the rest of the collection
- 3 days illustration (Quote from P Hughes)

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Table 1: A quantification of all prehistoric sherds (number, weight).

Context	Quantification	Comment and date
BAGTF 96		
7	19, 37g	Beaker including a number of comb and finger-nail decorated sherds
9	103,188g	Beaker sherds including a number with comb and finger-nail decoration. Some sherds (11, 15g) are possibly Iron Age and may represent intrusive material
11	8, 29g	Beaker sherds some with finger-nail decoration
27	4, 11g	Beaker sherds
46	14, 11g	Mostly calcareous tempered. Probably EIA
57	13, 8g	Mostly calcareous tempered. Probably EIA
74	1, 1g	Sand tempered. Probably IA
Subtotal	162,285g	
DRDG 96		
63	5, 8g	Sherds in a leached shell fabric. Indeterminate prehistoric. A rim could be ?earlier Neolithic
113	2, 7g	Sherds with no added temper. Possibly MIA
Subtotal	7, 15g	
PRSAI 96		
6	1, 1g	A very worn grog tempered Beaker sherd
6	1, 4g	Shell tempered. Probably EIA
7	1, 2g	Indeterminate shell tempered Prehistoric. Possibly fired clay rather than pot
10 or 12	19, 29g	Shell tempered possibly not prehistoric
26	11, 22g	Shell tempered possibly not prehistoric. A sand tempered sherd is thought to be Roman
47	3, 3g	Leached shell tempered sherds. Probably later prehistoric
59	40, 39g	Shell tempered sherds. Probably later prehistoric
83	6, 3g	Flint tempered sherds. A simple rim could be either LBA or Neolithic in date
147	12, 11g	Mostly shell tempered. Probably non-prehistoric
Subtotal	94,114g	

PRSTAS 96		
3008	11, 24g	Mostly shell tempered. Possibly later prehistoric.
3017	1, 5g	Grog tempered. EBA
3018	1, 3g	Calcareous tempered. Fired clay or pot?
3102	1, <1g	Grog tempered crumb. Probably earlier prehistoric
3102	2, 1g	Shell tempered crumbs. Probably prehistoric
3121	1, 1g	Shell tempered crumb. Probably prehistoric
3165	2, 2g	Shell tempered crumbs. Probably later prehistoric
3165	1, 2g	Flint and sand tempered. Possible rim fragment. It could be earlier Neolithic.
Subtotal	20, 39g	
Total	283,453g	

APPENDIX 2: Iron Age/Roman Pottery Assessment.

By J Timby

SITES:

Cowley, Birdlip Quarry (COWBQ 96)
Cowley, Highgate House (COHH 96)
Duntisbourne Abbots, Fields Farm (DAFF 96)
Duntisbourne Abbots, Duntisbourne Leer (DADL 96)
Duntisbourne Rouse, Sly's Wall South (DRSWS 96)
Duntisbourne Abbots, Middle Duntisbourne (DAMD 96)
Duntisbourne Rouse, Duntisbourne Grove (DRDG 96)
Daglingworth Quarry (DAGQ 96)
Bagendon, Trinity Farm (BAGTF 96)
Baunton, Lynches Trackway (BAULT 96)
Baunton, Exhibition Barn (BAUEXB 96)
Cirencester, Burford Road (CIBFRD 96)
Cherry Tree Lane Compound (CIRCL 96)
Preston, Norcote Farm (PRNOF 96)
Preston, Witpit Lane (PRWPL 96)
Preston Enclosure (PRENC 96)
Preston, St Augustine's Lane (PRSAL 96)
Preston, St Augustine's Farm South (PRSTAS 96)
Preston, Ermin Farm (PREM 96)
Latton, Driffield Cirencester Road (LADCRI 96)
Driffield, Lower Street Furlong (DRLF 96)
Latton, Westfield Farm (LAWF 96)
Latton, Roman Pond (LARP 96)
Latton, Street Farm (LATST 96)
Latton, Court Farm (LACFM 96)
Latton, Weavers Bridge (LAWBR 96)
Stratton to Nettleton Improvement (NOSNIWB'96)
Cirencester WB (CIREN WB 96)
Latton WB (LATWB 96)

METHODOLOGY

The pottery from each of the above sites was scanned to assess its likely date range. The material was sorted into approximate fabric groups and quantified by count and weight onto pottery recording forms. Fabric codes were adopted from the Gloucester type fabric series for the Roman and some of the Medieval material. The less distinctive wares for which no instant code was available were grouped into general categories using the Oxford Unit system, i.e. R10/O10 reduced/oxidized fine wares; R20/O20 reduced/oxidized sandy wares; W - whitewares; Q - white-slipped wares. Prehistoric material was classified according to the principal inclusion type present and coded accordingly, for eg H - shell, L - limestone, S - sand, G -grog etc. The Post-medieval/modern material was simply noted by PM codes. A summary of the fabric

codes can be found in Appendix 00. The information was summarized in a dbase for each site and a short site summary prepared. A table presenting a breakdown of the main period groups for each site can be found below. The division between the Early Prehistoric and Later Prehistoric groups is slightly arbitrary for some sites where there is some uncertainty about the precise date of some of the fragmentary material.

The databases indicate the number of sherds per context and thus some indication of the level of confidence that can be attributed to the date ascribed to that context. Contexts with less than 10 sherds are clearly less reliably dated and the possibility of redeposition must be considered especially for the multi-period sites.

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TABLE : SUMMARY OF POTTERY FOR DFBO SITES

SITE	EP		LP		R		S		M		PM		TOTALS	
	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt
COHH	1	29	230	797	7	19	0	0	0	0	0	0	238	845
COWBQ	34	33	1	2	15781	130940	0	0	2	12	29	47		131,034
BAUEXH	0	0	0	0	33	88	0	0	7	20	1	2	41	110
DAFF	0	0	0	0	300	879	0	0	0	0	0	0	300	879
DADL	0	0	0	0	3	8	2	6	1	1	4	100	10	115
DRSWS	0	0	0	0	6	12	0	0	0	0	0	0	6	12
DAMD	0	0	1	3	675	6651	0	0	0	0	3	22	679	6,676
DRDG	5	8	0	0	788	3755	0	0	1	34	1	2	794	3,799
DAGQ	0	0	0	0	4	20	0	0	1	13	40	1806	45	1,839
BAGTF	149	279	?	?	7	9	0	0	0	0	0	0	156	288
BAULT	0	0	27	120	166	651	0	0	0	0	4	16	197	787
CIBFRD	0	0	0	0	62	237	0	0	0	0	37	459	99	696
CIRCL	4	18	54	121	1	14	0	0	16	130	12	171	87	454
PRNOF	0	0	0	0	4	15	0	0	8	56	17	70	29	141
PRWPL	0	0	0	0	4	14	0	0	47	300	5	53	56	367
PRENC	8	14	489	2137	7	11	0	0	9	32	17	213	530	2,407
PRSAL	?	?	95	114	1	38	0	0	1	2	5	23	102	177
PRSTAS	4	7	17	47	1	2	0	0	2	15	7	44	31	115
PREM	0	0	228	1347	0	0	0	0	0	0	0	0	228	1,347
DRLF	0	0	5	5	0	0	0	0	0	0	10	167	15	172
LADCRI	0	0	2	2	2	10	0	0	0	0	0	0	4	12
LAWF	0	0	2	2	26	143	0	0	2	26	3	294	33	465
LARP	0	0	5	17	0	0	0	0	65	768	8	160	78	945
LACFM	22	135	85	411	363	1718	0	0	10	42	15	250	495	2,556
LAWBR	0	0	0	0	809	7415	0	0	9	37	0	0	818	7,452
NOSNI	5	10	14	25	49	444	0	0	1	7	5	69	74	555
CIRENWB	0	0	42	58	7	36	0	0	0	0	7	102	56	196
LATWB	0	0	0	0	14	149	3	13	13	63	11	276	41	501
LATST	2	17	5	7	7	35	0	0	0	0	0	0	14	59
TOTAL	234	550	1,302	5,215	19,127	153,313	5	19	195	1,558	241	4,346	5,256	165,001

POTTERY ASSESSMENTS

APPENDIX: SUMMARY OF FABRIC CODES USED

PREHISTORIC POTTERY

For Prehistoric Material the letter code denotes the main tempering agent, the number different variants within the main group. Sherds with mixed tempering materials may have more than one letter.

F	= flint tempered
H	= fossil shell tempered
L	= limestone tempered
S	= sand tempered/sandy wares
G	= grog tempered
FE	= iron pellets
O	= organic material

FC = fired clay

ROMAN

Gloucester Excavation Unit Codes

1A	Oxford Parchment ware
2	grog-tempered wares
4	Dorset black burnished ware (BB1)
5	grey micaceous ware
6	Savernake ware
8	samian
9A	Oxfordshire whiteware mortaria
9D	Mancetter-Hartshill mortaria
9X	Oxfordshire colour-coated mortaria
9	mortaria
10A	Dressel 20 amphora
10B	Gallic amphora
10E	misc Spanish amphora
11	Severn Valley ware type
11B	Severn Valley ware (SVW)
11D	early SVW
12A	Oxfordshire colour-coat
12B	Nene Valley colour-coat
12C	New Forest colour-coat
12D	local brown colour-coat
12J	Rhenish colour-coat
12	misc colour-coat
13	Oxfordshire whiteware
15/A	South-west white slipped ware
17	SVW variant
18	Malvernian roack tempered
22	late Roman shelly ware
23	SVW variant
33	handmade limestone tempered ware (Malvernian)
34	calcite tempered ware
201	wheelmade black burnished ware
212	Alice Holt greyware
216	handmade limestone tempered ware (Malvernian)
231	Wiltshire grey sandy wares

232 Wiltshire orange andy wares
 241 Midlands grog-tempered ware

Other

ARR Italian Arretine
 TN Gallo-Belgic Terra Nigra
 TR3 Gallo-Belgic Terra Rubra (fabric 3)

General Roman codes

R00 misc grey wares
 R10 misc fine grey ware
 R15 misc medium-fine sandy grey ware
 R20 misc medium sandy grey wares
 O10 misc fine orange wares
 O20 misc sandy orange wares
 OXCC Oxfordshire colour-coat
 W00/WW misc whitewares
 Q10 misc white-slipped ware
 CC colour-coat

SAXON

O1 organic-tempered ware

MEDIEVAL/POST-MEDIEVAL

41 limestone tempered ware (Gloucester)
 42 sand and limestone tempered cooking pot
 44 Minety ware
 COT oolitic limestone tempered Cotswold type
 GG Medieval green glazed ware
 PMAK Ashton Keynes type
 PMEWS glazed red earthenwares
 PMGL Post medieval glazed ware
 PMCH Post medieval/modern 'china'
 PMKW Post medieval kitchen ware
 PMFE Post medieval iron glazed ware
 PMFP flower-pot
 PMST Post medieval stoneware

T = tile
 B = brick

Cowley, Birdlip Quarry - COWBQ 96

Introduction

1.1 The excavation work at Birdlip Quarry (up to December 1996) has yielded a substantial pottery assemblage amounting to some 15,850 sherds, 131 kg in weight contained in c 17 bulk finds boxes. Material was recorded from 516 individual contexts.

1.2 As the excavation work has yet to be completed a small quantity of further material is anticipated.

1.3 The material is predominantly of later Roman date (3rd-4th century) with a small quantity of potentially earlier 2nd century sherds and a single prehistoric deposit.

1.4 The pottery was in variable condition in terms of sherd size with a mixture of smaller abraded pieces and larger sherds, in some cases belonging to the same vessels. The preponderance of smaller pieces is reflected in a generally low average sherd size of just 8 gm.

1.5 In terms of surface preservation the condition of the pottery was poor. Most of the colour-coated wares had lost their surfaces thus making the distinction between orange Severn Valley wares, Oxfordshire colour-coats and orange other wares extremely difficult for unfeatured sherds. This has ramifications both for the level of confidence attributed to the dating of some contexts and the tightness of the date ranges given.

2 Methodology

2.1 The pottery was briefly scanned in order to provide spot dates to assist in the provisional phasing of the site; to assess the potential of the assemblage and to provide a preliminary estimate on any recommended further work.

2.2 Dating was done on the basis of the presence of particular forms and fabrics. Unfortunately this locality is served by some very long-lived ceramic industries which stylistically remain very conservative. Moreover, the presence of a single dateable rimsherd, as was often the case, cannot be regarded as conclusive but simply an indication that the deposit was formed after that date.

2.3 Spot dates were filled into provided pro-forma but no assessment was made by the pottery analyst of the contextual information. For this reason no clear idea of the level of redeposition on the site was formed beyond that there did appear to be a significant level of residuality. Several of the modern features yielded exclusively Roman pottery. This combined with the generally small sherd size might suggest very disturbed deposits or material that has been exposed and degraded over time and that only a few, if any, of the contexts might prove primary.

2.4 A simple database was prepared recording count and weight for each context and the main fabrics present. Recognisable fabrics were recorded using the Gloucester City

Excavation unit fabric codes. Other less distinctive wares were placed into general categories following the codes used by the Oxford Unit.

2.5 It should be noted that of the 516 contexts assessed, 290 contexts yielded ten sherds or less (195 contexts five sherds and less) which also affects the reliability of much of the dating.

3 Chronology

Prehistoric

3.1 A small group of unfeathered Prehistoric sherds was recovered from (89) with a single residual sherd in (253) and an Iron Age residual sherd in (435).

Roman

3.2 The overall chronology of the assemblage was quite limited with the bulk of the group dating to the 3rd-4th centuries. Although there are some wares that could be current on the first half of the 2nd century, on balance there is not much evidence to indicate much activity at this time and most of the wares could date from the mid-later 2nd century onwards.

3.3 Specific chronological indicators used in the spot dates include Dorset black burnished wares (BB1), Oxfordshire colour-coated, finewares such as Rhenish colour-coat and samian, and for the later 4th century the presence of late Roman shell-tempered ware. Dates from AD 120 simply reflect the presence of unfeathered BB1 which is unlikely to have been on the site before this date. Such sherds could equally well be 3rd or 4th century.

3.4 The presence of late Roman shelly ware is significant as it dates to the last quarter of the 4th century. Contexts with this ware present include (7), (12), (14), (18), (31), (34), (53), (86), (95), (278), (294), (519), (704), and (706).

Post-Roman

3.5 No evidence of any sub-Roman material was present to indicate continuing activity into the 5th century or beyond. Medieval sherds were rare, with single sherds in (231) and (72). Later activity was indicated by a few Post-Medieval/modern pieces in contexts (1216), (1217), (1313), and (1318).

4 Composition

4.1 The bulk of the assemblage comprised coarsewares which were dominated by the products of three regional industries: Severn Valley ware; Dorset black burnished ware and the Oxfordshire industry (colour-coats, white-wares and parchment ware).

4.2 Foreign imported wares include Dressel 20 olive oil amphora, Gallic wine amphora, samian (Central and East Gaulish), Rhenish and Cologne colour-coated wares.

4.3 Traded regional wares include Nene Valley colour-coated wares including a barbotine decorated hunt-cup, New Forest colour-coated indented beakers, Midlands pink grog-tempered ware, Midlands shelly ware, Mancetter-Hartshill mortaria (rare) and Alice Holt greyware.

4.4 Named local wares include white-slipped south-west flagon, Savernake ware (rare), north Wiltshire grey and oxidized wares, and late Roman grey micaceous ware.

Small finds

4.5 Amongst the ceramic finds of special interest are a counter (1317), a decorated 'tile' object (*cf* similar items Kingscote, Uley, Great Witcombe); incised X graffiti/batch marks (34), (1250) and (1328) and a fragment of a box-flue tile from (1264).

5 Potential

5.1 The potential of this assemblage is twofold; firstly in the extent to which it can be used to understand the chronology and function of the site, and secondly in terms of its contribution to pottery studies within the region.

5.2 Further detailed analysis of the groups in conjunction with the site stratigraphy will hopefully help refine the sometimes broad chronology initially arrived out through the assessment.

5.3 Spatial analysis of the distribution of wares across the site through time may assist the understanding of the development and perhaps function of the site.

5.4 Large published assemblages of Roman pottery in Gloucestershire are relatively rare and most of that which has been published is from urban sites such as Cirencester and Gloucester. Unfortunately whilst much of the Birdlip material can be matched with wares from both these sites, the Cirencester pottery has never been quantified in detail and quantified data for several of the Gloucester sites remains unpublished, thus diminishing their use for comparative studies.

5.5 The Birdlip material has some further interest in terms of its relationship with both these sites in that the Cotswolds appears to have acted as a ceramic watershed. Many of the wares to be found in Cirencester, notably products of the Wiltshire industries do not make much impact in Gloucester. In this respect Birdlip would provisionally show a greater similarity to the range of wares to be found in Gloucester although further analysis would be needed to qualify this statement.

5.6 Other large rurally based assemblages now available for the region include Uley temple (Leach 1993), Kingscote (Timby forthcoming a) and Procester (Timby forthcoming b) all to the west of Cirencester (south of Gloucester) which would provide

useful comparative data in terms of relative quantities of wares from different industries etc. The Birdlip assemblage would provide a useful complement for the area north-west of Cirencester. A recently excavated mid-late Roman site near Tewkesbury (CAT work in progress) may further add to the picture.

6 Suggested Further Work

6.1 In the light of the potential of the assemblage both in relation to site specific and regional studies it is recommended that a fully quantified record (sherd no, weight and eves) of the material in terms of fabrics, vessel forms and other relevant characteristics should be undertaken.

6.2 It is recognised that there are some limitations in the assemblage, in terms of the physical condition and nature of the material and the small size of many of the groups and that some site based questions may remain unresolved.

6.3 It is recognised that many of the sherds will need to be recorded as general categories as it would be too time consuming without return to try and sort some of the smaller, and/or abraded fragments.

6.4 The quantified data should be computerised and if possible linked in with the site data to facilitate analysis.

6.5 A detailed record would fulfil the requirements of a site archive and form the basis for a publication report.

6.6 Illustrations are not likely to be extensive as most of the individual wares and forms are well-known. Any figures therefore should focus on any significant key groups from stratigraphically closed contexts.

6.7 In addition to the pottery analyst it is recommended that a samian specialist looks either the complete samian group or, as a minimum, the stamped and decorated pieces. There are approximately four stamped pieces and five decorated sherds. The overall samian assemblage comprises some 375 sherds but a high proportion of these are extremely fragmentary (less than 1 gm) and many have no surviving surfaces. The samian has not been extracted from bags at present.

6.8 No other specialist work in terms of specific wares or petrological analysis is envisaged.

6.9 Estimate of time (including material from COWBQ EX4).

Prepare fully quantified paper record: 23 days

Prepare integrated dbase: 4 days

Interrogate database/liaise with strat. person: 7 days

Regional comparison: 2 days

Prepare publication report: 14 days

Illustration: 2-3 days

COWBQ 96

CONTEXT	FABRICS	NO	WT	FORMS	SPOT DATE	COMMENT
0	8	1	10	37		
1	4,11	2	9	IIC	100+	
1	232	1	1		100+	
2	12,4,11B,R10	12	131		200+	
3	4,11B,R10	5	9	I2	200+	SMALL
4	8,9A,12C,12,4,232,11	46	277		300+	R10,R20,O10,O20
7	4,22,10AB,5,6,8,9A,	720	6996	IV3,4,I4	350+	9X,11B,12J,12C,2 C..
8	8,12A,G	6	60	31	250-350	
10	12A,4,R20,5	6	52	IV3	250-350	
12	4,22,11B,R20,O10,00	15	119		350+	
14	22,4,13,12A,11B,8,15	113	842	IIV3	350+	
15	10A,R20	2	13		100-300	
16	8	1	40	36	100-200	
18	11B,4,GW,22,5,10A,13	681	4615	IV3,4,IIC,	350+	RING VASE,M17
18	4	31	340	I,IIC	350+	JOINS 258;SF 176
19	11B,4,12A,5,8,R20,,	51	252		250+	
20	O10	2	3		250+	
21	11B,R10,23,R20	32	151		100+	
25	11B,11,6,RLG	8	69		100-200	
26	11B,2,4,6,R10,R20	17	77		100-200	X
28	11B	14	139		100+	
29	4,R20,11B,9X,12A,R20	25	152		250+	
30	9A,4,10A,11B,R20	11	125	M17	240-300	
31	11B,GW,4,12A,9X,1A,	766	4268		350+	22,8,13,10A,5,12 C
32	8,12C,4,11B	10	102	36,VI,IIC	300+	
33	8,12A,4,11B,R20,R10	87	776		300+	
34	4,11B,9A,9X,241,12A,	778	8019	36,M20,M22	350+	12B,9W,22,6,212, 15A,
35	4,11B,8,5,R10,R20	74	411		100+	
36	11B,R10,R20	7	124		100+	
38	11B,4,8,12J,R10,O20	38	186		150-250	
40	8,11B,10A,5,4,R10..	21	141		200+	
41	8,5,10A,11B,4,R10	24	75		200+	BELSA.ARVE
43	4,11B,5,R10,R20	23	100		200+	
46	4,5,11B	4	14		200+	
47	11B,4,5,10A	13	127		200+	
51	11B,4,5,9X,12A,15,R,	47	354	IV4,I,IIC	250+	
53	12A,22,11B,4,5,8,R,,	28	135		350+	
54	R20,11B,4	7	19		220+	
56	11B	3	14		100+	
58	8,11B,4,5,R10	40	175		220+	
60	8,12A,11B	11	98		250+	
61	11B,4,R10	21	150	I12	100+	
63	4,241,9X,12A,11B	13	64		250+	
64	8,4,R10,R20,11B,12A	20	67		250+	WORN
66	4	3	1		120+	

68	6,4,10A,9X,12A,11B	45	647		250+	
71	11B,8,4,12A,R20	14	40		250+	
72	11B,R10,4,6,8,22,15A	233	2109		350+	MEDGG
73	4	13	443	IIC	200+	
76	4	1	4		120+	
78	9A,4,12A,15,R20	25	194	M17	240+	
79	241,R10,6,4,12A,11B,	43	310	IV4	250+	
81	4,5,R10,R20,8,11B	85	530		220+	OBL
81	11B	2	500		220+	SF 328
83	10A,4,R10,12A,11B	35	632	IV4,IIC	300+	
83	10A	3	360		300+	
84	8,4,12A/O	10	92		240+	
86	9A,11B,22,8,12A,9X,4	71	714	M22	350+	
89	PREH	34	33			PREHISTORIC <5>
90	10A,8,4,11B,12A,R..	145	1033	IV4,I	250+	
91	5,4,11B,12A	10	70	VI	250+	
93	8,11B,4	12	71	I	250+	
95	8,R20,4,R10,12A,11B,	73	393		350+	22,9X
99	4,11B	3	7		120+	
104	12A/O	1	7		240+	
106	4,12A/O	3	31		240+	
108	4,12A	7	34		240+	OBL
110	4	1	25		100+	
113	9A,4,R20,R10,11	14	76	M22	240+	
114	RL,4,12A,11B,R20	34	310	IV4,VI	240+	
118	15A,12A	2	3		240+	
120	4,8,9A,R10,12A/O,232	19	110	M20,DR31	240+	
122	8,R20,22,5,12A,4,11B	38	475		240+	
127	5,8,4,11B,R10	18	276		200+	
128	11B,12A,10A,1A,9A,4	529	4886	33	300+	
131	4,11B,12A/O	14	64		240+	
135	R20	4	20	I	220+	
136	6,10A,9A,4,12A,11B..	51	711	M13	200-300	
139	R10,4,9A,8,11B	18	73	37/30	100-200	
139	10A	1	145		100-200	
140	10A,4,12A,11B,8,232,	148	814	IV3/4	240+	
142	10A,9A,5,8,12A,4,11B	46	556	IV3,31	200-300	RIVET HOLE
146	8,11B,4,12,11B,R..	30	252	31	100-200	
147	15A	1	6		100-300	
150	4,R10,15,11B	23	141		300+	
153	4,O10	55	175	I	120-200	ACUTE
154	5,11B,R10	7	12		200+	
157	8,15A,R10,5,4	15	38	IIC,I	200+	
160	11B	1	13		100+	
163	11B	2	38		100+	
171	4,5,11B	9	24		200+	
172	R20	1	2		200+	
173	10A,B,8,11B,4	21	308	33	120+	
179	8,4,R6,12,11B	13	130	IV3	43+	

181	4,R10,9E,5,8,12,232,	88	1014	I,IIIB,IV3	180-250	
182	12A,4,R10,11B	49	287		240+	
188	9A,4,11B,12A,8,15,6,	154	1923	M17	240-300	
189	8,4,11B	6	113		120+	
190	4,11B,5,15,12A/O	104	1066	IV4	300+	PROFILE
192	15	1	1		150-250	
193	4	27	164		200+	
198	4	13	57		120+	
199	4	1	5		120+	
200	4	2	17		200+	
204	4,11B	12	87		120+	
205	2,R6,15,11B	7	49		150+	
206	10E,B,8,R10,9A,232,4	119	1109	M22,IIC	240+	10A,12A
208	8,4	3	30	31	120-200	
209	4,R10	9	51	I	120-200	
210	9A,R10,12A	6	67	C51	250+	
211	12A,R20,4,8,R10	31	161	C36,VII	240-300	
220	11B,4,R20	10	54	IIC	150+	
221	8	1	7		120-200	
222	4,11	4	17		220+	OBL
223	10A,241,4,12A,232,11	54	347	IV4	300+	
224	8,4	12	114		100+	
227	9A,10A,B,8,15,12A,4	113	999	31,33,M22	240+	13,R10
228	4,11B	2	24		120+	
230	4,5,15A,12A/O,11B,R	22	205		240+	
231	4,8,R10,11B,MED	15	104	IIC	240+	
232	R10	1	2		100+	
234	11B,6,10A,4,15,R,,	120	479	IIC,I	220+	OBL
236	4	4	26		43+	
240	12A/O	1	9		240+	
243	4	11	52		220+	OBL
245	11B,4,R10	12	51		120+	
246	10A,8,4,15A,10B,11B,	66	436		120+	
248	O20,4,R10,11B,R20	10	80		120+	
250	4,O10	8	44		120+	
251	10A,4,5,9A,1A,9X,12A	129	1258		240+	
252	8,232,4,R20,R10,O10	20	52	31	120-200	
253	8,11B,4,R10,232,L	30	158	33,38,IIC	120-200	PREH RESID
254	6V,R10,11B	3	14		100+	
256	O10	1	2		43+	
258	10B,11B,4	25	144		180+	
258	4,10B,O10	55	566	I,IV3	180+	SF 740
260	241,9A,8,4,23,11B,12	44	400	IV3	200+	
261	9A,10B,4,15,11B	92	825	IV3,G30,I	220+	
262	6,R10,4,11B	7	77		120+	
263	4	1	10		120+	
268	4,R10	31	157	I,IV4	220+	CALC RES
270	4,8,13,11	13	105	IV4,CAND	300+	
272	241,9A,5,12A,R10,4,	56	570	IV3,IIC	240+	
276	12A,4,11B	6	35		240+	

278	22,9X,5,12A,232,15A,	115	611		350+	4,11B
280	5,10A,4,11B,12,15,R	26	130		200+	
282	8,11B	2	5		100+	
284	11B	1	29		100+	
289	11	1	1		100+	
292	11B,4	6	52		200+	
294	R10,8,22,13,12A,4,11	62	412		350+	
296	10A,8,4,R10,11B	20	174		100-300	
299	11B,5,4	10	40		200+	
302	8,R10,4,11B,15	12	88	31	100-300	
304	4,8	6	45		100-300	
305	4,11B	5	15		100-300	
306	10B,11,O10	3	7		100-300	
307	4,8,6,15A,232,11B,R	40	235		100-300	
307	10A	1	10		100-300	
308	4,11B,8,R10	6	25		220+	
309	15,4,11B	11	45		150+	
321	11B	1	22		100+	
323	15A,4	10	40		200+	
325	4	14	45		120+	
327	4,11B	4	5		120+	
329	8,6,4,R10,11B	13	112		120-200	
333	4,11B,R10,O10	13	111		120-200	
335	8,4,R10,12A,11B	15	101		120+	
336	11B,4	2	6		120+	
338	O10,4	14	57		120-200	
341	8,11B,4,R20	12	60		100-200	
345	4	1	6		120+	
346	4,11B,R10	16	154		120-200	
347	11B,5,4	7	51		200+	
351	6,8,R10,4,11B	17	189		120-200	
368	10A,11B,4,5	160	5082		100-300	
369	12A,9X,4,11B,R10	17	129	VI	240-300	
370	10A	4	9		100-300	
372	11B	1	4		100+	
374	4,11B,12,232	9	83		120+	
376	10A,11B	4	120		100-300	
378	4,8	2	24		120-200	
386	8,11B,10B,4	32	233	IV3,I	180-250	
392	11B,12C,R20,4	11	85	VI	300+	
395	4,11B,5,R10	7	58		200+	
396	R10	1	1		100+	
397	23	1	11		100+	
400	4,6,11B	9	72		120-200	
401	12A?	1	68		240+	
403	00	1	3		43+	
404	12A	1	4		240+	
407	4	2	10		120+	
410	4,11B,8,12	10	89		200-300	
411	10A,4,12A	4	54		240+	

412	4,232	2	4		120-200	
413	4	1	6		120+	
415	4,R10, O10	31	85		120-200	
417	11B	1	2		100+	
421	R6,11B,R20,4	13	56		200+	
423	4,5,R10,11B	5	101		200+	
424	4,8	18	79		120-200	
431	11B,R10	5	186		100+	
435	R10,11B,12A	8	114		240+	
435	H	17	117		240+	SF874; IA
437	4	7	30		120-200	ACUTE
439	R20	1	4		100+	
442	4	7	26		120-200	
447	11B,5	2	24		200+	
454	4,R10,8,R20,11B	7	60		150+	
455	R10,11B	3	6		100-200	
457	11B,4	2	16		120-200	
467	11B	3	79		100+	
469	4,12A,11B,R10	17	131		240+	
483	4,11B	5	12		120+	
490	4,11B	2	10		100+	
492	11B	1	6		100+	
499	R10	1	14		100-200	
500	4	2	11		120-200	
504	11	1	1		100+	
505	6,4,11B,232	19	87		120-200	
507	11B	3	87		100+	
513	R6	1	10		100-200	
519	22,11B,12A	6	50		350+	
521	11B	1	8		100+	
536	11B	2	139		100+	
537	4,R10,11B	15	143		100-200	
542	4,10B,11B,R10	6	13		120-200	
566	4,5	2	26		200+	
568	4,11B,12	10	26		200+	
572	4,R10,11B	5	24		120+	
576	4,11B	9	35		120+	
578	11B,R10,4,O10	16	124	I	120+	
579	11B,4,R10	93	308	I,IV4	300+	
589	232	1	4		100-200	
597	23,8,R10,R20	6	56		100-200	
606	10A,8,11	5	158		100-200	
607	4,11B	6	10		120+	
612	4	1	1		120+	
616	9X,4	4	27		240+	
653	11,4	2	7		100+	
655	6,8,4,11B,12A	9	48		240+	
667	R20	1	4		43+	
671	12J	1	2		150-250	
703	4,R10,R20,11B	41	230		150-300	

704	6,15A,9A,12A,22,12J,	200	889		350+	8,R10,11B,4
704	11B,R10	24	335		350+	SF 1211
705	4,11B,8,5,R20	15	100		100-300	
706	9X,22,4,R20,R10,11B	24	116		350+	
707	4,R20,11B	8	30		120+	
709	4,R10	9	60		120+	
710	4,11B,R20,R10,8	26	140		120+	
711	5,4,12A,11B,R10	27	165	IV3,OBL	240+	
712	4,R10	3	19		220+	
716	4,6,R10,R20	9	39		120-200	
717	11B,22,R10,15A,4	13	157	IV4	300+	
721	4,R10	5	34		220+	
723	4	2	20		120+	
725	8,4,R20	4	17	DR 30,31	43+	
726	4	1	3		43+	
727	11B,R6	3	17		100-200	
728	13	1	22		100-300	
729	6,8,12,R10,11B,4,5,,	100	924	IV4,33,36	300+	
730	4,11B	3	16		100+	
731	4,232,5,6,8,15A,12	135	830		220+	OBL
732	11B,4,8,R20,R10	20	214	IV4	300+	
734	4,11B	5	44		120+	
735	4,R10	7	22		120+	
736	4,11B,22,R10,R20,8,5	101	335	I,IV4,36	350+	
738	4,R20,R10,8,5,6,232,	58	813	IV3,4,I	300+	
740	11B	1	10		100+	
742	4,11B	5	53		120+	
743	8,4,5,10B,11B,R10	34	234		120-300	
744	11B,4	4	14		120+	
745	4,11B,O20	11	110	I,HC	120+	
746	4,11B	3	28		120+	
752	4	1	2		120+	
756	R10,R20,O20,4	10	40		120-300	
758	5,12A,R10	6	33		240+	
759	11B,12A	6	27		240+	
760	5,4,6,15A,12A,R6,O20	32	205	VII,C45	240+	
766	4,12B,10A,R10,11B	19	192		240+	
767	4,9A,5,R10	19	148		300+	
768	5,12A,4,R10,11B	47	509		240+	
770	6,4	4	16		180-250	
771	4	1	1		100+	
772	4	2	5		100+	
773	4	1	3		100+	
774	5,12B,232,8,12A,4,11	40	289	45,VI	240+	
775	8,9X,4,11B,R10	17	100		240+	
778	4,5,8,12A,15,232,11B	99	482		240+	
779	241,4,11B,R10	9	215		250+	
780	11B,6,8,5,10A,4,12J.	181	1543	IV3,4,I	180-250	
781	4,5,R10,11B,8,R20,15	89	337	IV4	300+	
782	4,12A/O	3	12		240+	

786	R20	1	5		43+	
788	11B,6,4,201	8	34		120-200	
789	8,4,O10,R20	7	22		120-200	
790	4,11B	3	78	IIIC	150+	
791	4,12,6,11B	16	246	IIIC	150+	
792	4,13,11D,R10	8	42		120-200	
793	4,11B	7	10		120+	
794	R10,R20,12A,4	7	36		240+	
796	11D,8,4,12A	7	19	VI	240+	
797	8,10A,11B,15A,4,R10	29	362	32,36	150-300	
798	8,4,5,11B,R10,R20	42	166	IV4	300+	
801	4,5,8	10	37		120-300	
802	R10,8,4,9A,11B,R20	66	694	IIIB,IIIC	120-200	RIVET
803	R10,4,6,11B	38	608	IIIC,IV3	180-250	
804	O20,R20,4	4	16		120-200	
806	8,9A,4,O10	10	107	M17	240-300	
807	15,8,4,11B,R20	42	197		150-250	
809	12A/O,4,15	3	20		240+	
810	12A/O	2	4		200+	
812	4,11B,15A,R20	5	24		150-250	
813	11B,4,R10,R20	12	83	IIIC	150-200	
814	8	1	1		100-200	
815	241,4,5,9X,12C,11B,	150	1379		300+	
815	10a	1	74		300+	
817	11B	4	164		100+	
819	8,15,11B,4,R10	17	90	IV3	180-250	
821	R20,9A	2	85	M15	180-240	
825	9X,12A,4,11B,R20,R10	46	184		240+	
826	4,R10,5,12A,11	23	62		240+	
827	R20,11B,4	8	53		100+	
829	O10,4	3	2		120+	
830	4,R6	32	237		220+	
831	11B,4	11	43		120+	
832	4,R20,R10	3	12		120+	
835	4,8	5	5		120-200	
837	9A,6,4,12A,11B,23,R1	45	475		240+	
840	9A,12B,15A,8,5,10A,4	115	5366	IV3,M17	240-300	
841	4,R10,5,11B	21	148	IIIC,I	150-300	
843	R20,4	4	11		120+	
846	4,12A,R10,11B	25	301	C45	300+	
848	6,12J,5,4,12A,8,11B,	81	426		240+	
849	4,22,9A,6,11B,5,8,12	239	1441	IV3,IIIC,17	240-300	
851	10A,R10	2	149		100-300	
852	6,11B	3	18		100-200	
853	R10	1	2		43+	
857	4,R20,R10,11B	30	98		120+	
858	9A,R20,11B	4	281	M17	240-300	
860	10A,9A,6,13,4,11B,R1	32	287	IV4,IIIC	300+	
861	R10,4,11B,R20	26	251		120+	
863	8,11B,231	5	16		100-200	

865	4	1	13		120+	
867	R10,4,8,11B	11	103		100-200	ST ?CINNAMUS
869	11B	2	28		100+	
872	4,12A,11B,R10	10	63	C51	240+	OR 837
873	10A,9A,11B,5,4,8,R10	36	885	M17,IV3	240-300	
875	8,11B,12A,5,4,R10,R1	70	470		240+	
877	15A	1	1		150-250	
879	4,12J	4	31		150-250	
880	5,12A,4,11B,15A,R,,	88	1044	III B,C,33	240+	
883	11B	1	2		100+	
885	6,5,4,R10,R20	22	153		120+	
887	8,11B/O	2	8		100-200	
892	4,R20	4	8		120+	
893	11B,4	3	26		120+	
895	6,11B,R20	4	193		100-200	
896	5,R10,15,201,4,232,,	65	860	III B,IV3,II	180-250	
897	R6,4	39	275		220+	
901	11B,R10	2	5		100+	
902	11B,4,9A	7	105		120+	
903	5,12A,12C,R20,R10,4	48	177		300+	
905	9D,4,R20,12A	15	297		240+	
909	8,11B,4,R10	18	143	C36	120-200	
910	11B,R20	3	101		100+	
914	5,R10,11B,4,12	71	156		200+	
915	10A,4,5,11B	19	132	IV3,IIC	180-250	
916	4,11B	3	14		120+	
918	11B,15,R10,R20,4	40	155		120-300	
919	4	1	1		120+	
922	8,4,11B,R10,R20	24	82		120+	
924	15A,4,11B,12,R10,5,,	30	212		200+	
925	9A,11B,4	8	38		200-300	
926	11B	1	13		100+	
927	R6	1	3		100-200	
929	5,R10,11B,12A	6	48		240+	
929	10A	1	38		240+	
930	4,R10,11B	8	69		120+	
931	4	6	48		120+	
935	6,4,11B,R20	9	44		100-200	
937	4,15,R20	3	4		150-250	
943	4	90	363	I	220+	SF1403, SOOTED
945	12A,9X,SL	3	25		240+	
950	11B,L	2	9		100+	
953	4,R10,8,11B	7	34		120-200	
954	11B,4,R10,12A/O	14	136		220+	
956	6,11B	3	18		100-200	
957	4	1	1		120+	
961	6,5,O10	4	9		100-300	
964	11B,O10,6,12J,8,4,R.	19	97		150-250	
965	4,12J	4	23		150-250	
968	4	13	19		120+	

970	4,O10,11B	5	51		120-300
976	15A,R10,4	4	12		150-250
978	R6,4	88	1014		120-200
984	10A,8,12J,5,232,4,11	110	2120	IV3	180-250
986	4,11B,R10,O10	48	393		180-250
988	R10,R20	8	7		43+
990	4,8,11B,R10	13	56		220+
993	10A	1	127		100-300
994	4,8,R20,R10,11B	38	151		100-200
995	5,15A,8,6,232,4,11B,	20	117		100-300
995	4,10A,11B,R10	21	87	IIC	100-300
998	4,11B	14	201	IV3	180-250
999	11B	1	3		100+
1001	12C,4,5,6,R10,11B	30	313	VI	300+
1002	R10	19	48		43+
1006	11B	3	40		100+
1009	4,8	5	54	IV4	300+
1011	4,5,11B	3	12		120-300
1013	10A,6,8,4,11B,15,R10	22	252		100-200
1014	4,232,11B	13	48		100-200
1020	11B,4,R20	10	65		120-200
1021	R10,4,11B,12A,232,R	11	90	IIC	240+
1022	T	1	0	OBJECT	43+
1023	4,11B	3	58		120-200
1027	6,4,R20,11B	10	23		100-200
1031	00	2	10		43+
1040	11B,R20	6	25		100+
1045	12A,4	4	18		240+
1047	4	5	33		220+
1049	8,11B,4,R20	10	67		220+
1050	12A	4	2		240+
1052	11B,232,R10	8	59		100-200
1058	11B,5,4	22	92		100-300
1060	11B,5,4,231,R00	14	86		100-300
1061	232,11B,4	8	29		120-200
1076	8	1	5		100-160
1078	9A,4,R10	6	39		220+
1085	11B	1	45		10+
1088	6,8,15A,4,R10	10	91	31	220+
1092	4	1	4		120+
1096	4	1	16		120+
1097	15A	1	2		150-250
1099	4,5	21	167	I OBL	220+
1101	4,12A	4	27		240+
1102	4	7	26		220+
1106	10A,R10	2	18		100-300
1108	8,11B,4	4	11		120-300
1114	4,8,11B,R20	13	61		120-300
1116	11B,4,R10	9	53		120-300
1117	4	1	3		120+

1121	9A	4	62		200+	
1126	11B,6,4,R20	10	47		100-200	
1128	11B,4,R6,00	10	55		100-200	
1131	232	1	3		100-200	
1139	4,13,11B	10	60		120-300	
1140	232,4,9,6,231,11B	55	454		100-150	
1143	11B	1	28		100+	
1144	T	0	0		43+	
1146	10A,8,4,11B	8	48		180-250	
1149	R10	4	20		43+	
1161	11	1	5		43+	
1162	6,5,4,15A,O10,R10	6	37		150-250	
1163	4,11B	2	9		120+	
1165	8,4,R20,R10,11B,12A	17	43		240+	
1167	4,15,R10,11B,12A	13	53		240+	
1167	4	1	1		240+	
1168	4,5,15A,11B	4	14		150-250	
1171	4	1	9	IIC	43+	
1176	4,11B	3	13		120+	
1178	4	1	6		150+	
1179	6,4,11B,1A?	8	106		240+	
1181	O10	1	3		43+	
1183	11B	2	5		43+	
1187	4,5,12A,11B,R10	16	77		240+	
1191	4,11B	3	6		120+	
1198	11B,4,15A,R10,R20,5,	108	703		240+	8,12A,10A
1208	11B	1	2		43+	
1210	11B,10A,4,5,12B,8,15	941	2360	IIB,IV3,VI	180-300	8,12A,R20,R10
1211	4,12A,R20,11B	39	216		240+	
1213	4,O10	7	15		120+	
1216	PM,4,11B	28	51		1700-1900	
1217	R10,PM	2	15		1700-1900	
1218	8,4,R10,10A,11B,O10	15	199		120-200	
1224	5,10A,4,R20,12A,12J,	105	1023	IV4	280+	8,241,232,11B
1225	5,4,R20,10A,8,12C,9A	232	2962	IV3,IIC,31	300+	
1226	232,12A?4,11B,R20,,	23	110		120-200	
1227	15A,R10,11B,4,12A,H	90	579	I,IIC	240+	
1228	10A,5,R10,6,1A,11B,4	102	989	VI,IIC	300+	
1230	R20,4,11B,8	41	294		120-200	
1234	4,R10,201V	58	493	IIC,I	150-200	
1235	15A,4,12A,8,11B	34	144	VII,IIC	150-250	
1236	8,4,5,2A,R10,10,12J	142	992	IV3,IIC	180-250	
1240	12J,4,5,R10,11B,8,12	45	200		180-300	
1244	8,9A,6,12C,10A,4,5,,	219	2759	IV4,IIC,I	300+	
1247	4	3	36		220+	CHECK NOS
1250	4,8,11B,10B,232	36	227	IV3,I,31	180-250	X ON RIM
1253	4,5,11B,R10	76	758	IV3,IIC	180-250	
1257	4,R10,11B,12A	27	55		200+	
1259	11B	3	8		43+	
1262	12J,R20,4,15A,11B,R	19	209		180-250	

1264	8,4,11B,R10	46	409	OBL	220+	
1265	9A,15A,4,11B,R10	37	501	IV4	250+	
1266	11B,R20,O10	22	246		220+	
1267	R10,4	4	49		220+	
1268	5,4,11B,232,8,12	29	234		150-250	
1272	4	6	70		220+	
1273	4	3	11		200+	
1274	4,5	55	659		220+	
1277	11B,4,12	3	14		150-250	
1280	11B	1	50		43+	
1281	4,R10	6	53		200+	
1287	8,11B,R10,4	20	58		120+	
1288	11B,4,R20,12A	8	38		43+	
1289	9A,4,11B,232	8	92		100-300	
1290	4,R10,11B	7	30		220+	
1291	4,11B	17	231		220+	
1292	R10,4,232	6	10		120-300	
1294	4,11B	10	79		120-300	
1299	11B,4,R00,201V	8	109		120-300	
1304	O10	3	38		43+	
1305	R10,5,4,11B,12,8	55	265		240+	
1306	4,11B,R20	9	68		200+	
1307	11B	5	34		43+	
1308	R10,12,11B	9	24		240+	
1309	4,11B	8	40		200+	
1311	12A,8,R10,4,11B	19	170	C51	240+	
1335	8	30	1		220+	ST JULIANVS SF1609
1400	11B,4	5	43			

Cowley, Highgate House - COHH 96

Summary

The Cowley, Highgate House site produced a small assemblage of 238 sherds (845 g) from 25 individual contexts. The pottery is largely of Iron Age date, with in addition seven Roman sherds and two-three sherds of possible Later Bronze Age or earlier date. The material was generally in poor condition with particularly small fragmentary sherds, the average weight being just 2.3 g. Featured sherds were limited and thus close dating not easy. The majority of the fabrics were fossil shell and/or limestone tempered. Two main limestone tempered wares could be distinguished, those with a Jurassic and therefore likely Cotswold origin, and those with fragments of limestone more typical of the Palaeozoic outcrops and thus likely to come from the Malvernian area. The latter are more likely to date to the later Iron Age (1st century BC-AD), whereas use of the former fabrics tends to span the later Prehistoric period and unfeatured sherds therefore less easy to date.

A single rim sherd from (229) in a grog tempered fabric may be of late Bronze Age date, having some similarity with the material published from Shorncliffe Quarry, Somerford Keynes, (Morris 1994, 37, and fig 11.1). A further grog and flint tempered sherd from (211) could also be later Bronze Age but is in this case redeposited alongside late Iron Age material. Context (125) may also be Bronze Age with a small sherd of a sandy ware with sparse limestone and an orange external fabric with a blackened interior. This was accompanied by a few crumbs of fine fossil shell-tempered ware. The only other context with this latter fabric was (204) which also had a Roman sherd.

Contexts producing the Malvernian fabric and thus by inference later Iron Age include (109, 110, 111, 126, 128, 138, 141, 143, 210, 211, 228, 277, 307 and 308). Two sherds from (211) were decorated with horizontal grooves. The other shell or limestone wares came from contexts (106, 117-18, 139 and 309), and in most cases comprised undiagnostic crumbs. Such fabrics would not be out of place in the Middle-Late Iron Age.

The seven Roman sherds were also poorly preserved including miscellaneous fine sandy reduced and oxidized scrappy bodysherds, probably from the North Wiltshire industries and Severn Valley ware. A date in the second half of the 1st or 2nd centuries is hinted at.

Potential

The assemblage is generally too poor, both in quality of preservation and in terms of the lack of any sizeable groups to warrant any further detailed work. Some individual sherds might justify brief comment and illustration, notably the Later Bronze Age rim and later Iron Age sherds from (210), (211) and (109) as a general contribution to regional pottery studies. This could be done as brief catalogue entries alongside the stratigraphic narrative or be integrated into a more composite report summarizing the pottery from a group of sites.

Time Estimates

0.5 day illustration

0.25 day summary

COHH 96

CONTEXT	FABRICS	WT	NO	DATE	COMMENTS
101	11BD	11	2	ROMAN	
106	H1	1	2	IA	
109	33	14	2	LIA	
110	33	9	8	LIA	
111	33,FC	1	2	LIA	
117	L2	12	2	IA	
118	L2	6	1	IA	
125	H2,SL	7	8	PREH	
126	33,L2,H1,LFE	222	44	M-LIA	
128	LFE,33V,33,FC	34	11	LIA	
138	33,LFE	20	6	IA	
139	L2	12	1	IA	INT RESID
141	33,L2	20	3	IA	
143	33	3	5	LIA	
204	O10, H2	7	2	ROMAN	
210	33,L2/H	38	10	LIA	
211	33,L2/5	224	66	LIA	
211	33,GF,33	125	31	IA/PREH	
228	33,FC	3	4	LIA	
229	G	29	1	PREH	RIM
233	O10	1	1	??ROMAN	
277	33?	1	3	LIA	
306	11?,R10	2	3	ROMAN	
307	33	1	1	LIA	
308	33,LS,FC	34	13	LIA	
309	L2	8	6	IA	

Duntisbourne Abbots, Fields Farm - DAFF 96*Summary*

The assemblage assessed comprises 300 sherds (879 g) from 14 contexts. All the pottery dates to the Roman period. The material is generally in poor condition being extremely fragmented, the average sherds size being just 3 g. Despite this in several contexts the sherds clearly derive from single vessels, for example 104 sherds from a BB1 jar from (104) and 61 sherds from a handled greyware flagon SF 5 (context?). The pottery appears to span most of the Roman period with early wares (late 1st-2nd century in (111) and (112). Other sherds from (21), (98), (104) and (117) would support a 2nd-3rd century date whereas three sherds of Oxfordshire colour-coated ware (TF 12A) from (25) suggest a date from the late 3rd-4th century. Several contexts produced Severn Valley wares or grey wares which cannot be chronologically refined beyond 2nd-4th century.

Further Work

The extremely fragmentary nature of the assemblage and the limited number of featured sherds, 55% coming from just two vessels in two contexts, limits the value of this group for any further analysis.

CONTEXT	FABRICS	WT	NO	DATE	COMMENTS
0	R15	167	61	2ND-3RD	SF 5, FLAGON
21	4	8	5	2ND+	
22	R20	12	3	ROMAN	
24	R20	3	1	ROMAN	
25	12A	8	3	240-400	
26	11B	15	14	ROMAN	
28	11	10	3	ROMAN	
62	R15	6	1	ROMAN	
68	11B	80	1	ROMAN	
89	11V	250	38	2ND-3RD	
98	11D/2,4,010	84	60	2ND+	
104	R10	220	104	2ND-3RD?	JAR, ACUTE LATTICE
111	201,T	3	1	L1ST-2ND	
112	11D,201	9	3	L1ST-2ND	
117	4,R20	4	2	2ND+	

Duntisbourne Abbotts-Duntisbourne Leer - DADL 96*Summary*

A very small group of just 10 sherds (115 g) and two fragments of abraded tile were recovered from eight contexts. The group included sherds of Post-medieval, Medieval, Saxon and Roman date. In particular, Roman wares were associated with (205), (214) and (217) and although really too small to be specific, an earlier (ie 1st-2nd) Roman rather than later presence is suggested. Context (229) yielded two sherds of early Saxon date, one sandy, one organic tempered. A single very small sherd of Minety ware was recovered from (11) indicating a late 12-14th century date if *in-situ* whereas contexts (5) and (47) produced exclusively Post-medieval sherds.

Further Work

The presence of Saxon sherds is a particular useful addition to the 'list' for Gloucestershire which is not extensive (cf. Timby 1995). Otherwise no further pottery work is necessary on such a small group.

CONTEXT	FABRIC	WT	NO	DATE	COMMENTS
5	PMEW	92	2	PMED	
11	44	1	1	L12TH-14TH	
17	FC/ABRAD TILE	2	3	ND	
47	PMEW	9	1	PMED	
205	11D/2	4	1	1ST AD	
214	4	3	1	2ND+	
217	R15	1	1	ROMAN	
229	O1,S00	6	2	SAXON	

Duntisbourne Rouse, Sly's Wall South - DRSWS 96*Summary*

Site DRSWS only produced six Roman sherds (12 g) from contexts (32) and (36). Five sherds (2 g) from the former comprised small pieces of black sandy ware with a red core, not closely dateable other than Roman. A single Oxfordshire colour-coated mortarium sherd (10 g) from (36), is suggestive of a late 3rd-4th century date. The sherd was in poor condition and had lost its surface.

Further Work

None

Duntisbourne Abbots, Middle Duntisbourne - DAMD 96

Summary

The site yielded a total 680 sherds weighing 6676 g. Pottery was recovered from 52 contexts. With the exception of three sherds of Post-medieval/modern currency from (1), (12) and (130), the assemblage appears to date to a single relatively short phase of occupation in the immediate post-conquest period. Although the average sherd size is not that good at 9.8 g, there are several sherds present from individual vessels, with the substantial parts of complete vessels from (69) and (84).

Comments

The group is of particular interest as it contains several imports, in particular two sherds of Arretine of pre-conquest date, Gallo-belgic *terra nigra*, *terra rubra* and a classic whiteware butt beaker, Camulodunum type 113 (Hawkes and Hull 1947, 238). Although several of the fabrics could potentially date to the earlier part of the 1st century AD, the almost ubiquitous presence of Savernake ware, traditionally regarded as a post-conquest industry, would suggest that the main focus of activity dates to the post-conquest period. There is nothing, however, that indicates a date beyond the Flavian period. Many of the wares are typical of late Iron Age traditions in this area. In particular, the Malvernian limestone tempered handmade black jars (fabric TF33), and the large hammer-rim bowls (TF 216) were circulating from the 1st century BC but continue to feature well into the 1st century AD. The handmade and wheelmade Severn Valley type bowls and jars (TF 11D, 11D/2, 17) are also relatively common.

The presence of imports of this calibre is rare in Gloucestershire as a whole but well-known from both Bagendon (Clifford 1938) and The Ditches, North Cerney (Trow 1988). At least two Arretine vessels are present, one an Augustan Arretine platter (Conspectus form 2), unfortunately came from the topsoil (1); the other a cup Conspectus form 33 of Augusto-Tiberian date came from (4) and was associated with a *terra rubra* beaker sherd.

Potential

The assemblage adds an important addition to the county for the mid 1st century AD and would be worth publishing in further detail. The amphora sherds would benefit from specific identification by Dr D F Williams. It is recommended that the imported wares recovered from the Stage 2 evaluation are identified to type and added into the report.

Further Work

Drawing c 12-15 sherds

Time estimate to produce text: 3 days

Dr D Williams to identify 3-5 amphora sherds

DAMD 96

CONTEXT	FABRICS	WT	NO	DATE	COMMENT
1	ARR, 17, PMAK	25	4	PM/12BC-AD25/30	ARR CONSPECT 22
4	ARR, TR3, 6, 11D, R20, 11D/2	99	19	1ST C AD	CONSP 33 AD10-35
11	6	19	1	40=99	
12	6, O20, 11D/2, R20, 2C, R10, 11D	54	27	50=99	
12	PM, 2A, 6,17, 201, 11D/2, FC	110	24	PM/1ST AD	
24	33, 11D	130	2	40=99	
39	6,2,33,11B,R10,17	418	50	40=70	
41	6, 17, 11D, WW, 33	391	43	40=99	
41	6, 11DV, 33	163	11	40=99	
43	6, 11D/2	118	18	40=99	
44	11B, R20, 2	11	11	40=70	
45	11B, 11D, WW, R10, 6	338	22	40=99	
47	11D	25	3	40=99	
48	Q1, 11B	18	3	50=100	
52	6, 11D/2	35	9	40=99	
54	11D, 6, 17, 33, L5, O20	104	19	40=70	
55	TR3, 11D/2	14	5	40=60	
56	TN, 6, 216, 33	197	12	40=60	
57	6, TN, 11B, 6, 11D, RG	497	20	40=60	
69	6, Q10, WW	319	21	40=60	CAM 113
69	6, 11DV	271	8	40=99	
70	6, 33	403	10	40=99	
84	11D, 11DV	450	43	40=99	PROFILE
91	FC	0	1	1ST	
117	17	4	1	1ST	
130	PMAK	10	1	PMED	
142	11BD, R10, 11D, 11D/2	18	13	40=70	
152	6, 11D, 11D/2	40	21	40=99	
153	6	283	1	40=99	
154	WW, CC, L2, R10, 6, 17, 11D	250	31	40=60	
156	2, R20, 33	30	5	50=99	
157	216	12	13	1ST BC/AD	
157	Q10	20	1	50=99	
163	6	10	2	40=99	
165	6	34	1	40=99	
184	FC/POT	3	1	?1ST	
186	17	10	3	40=99	
202	10, 201, R10	28	7	50=70	
208	2A	14	2	40=99	
210	TN	7	2	40=60	
216	6, 2, 33, 11BD	75	6	40=99	
217	6, H2, 11D, 33, FC	151	23	40=99	
218	11B, S, LA, 33, O20, FC	99	13	40=99	
218	33	10	5	1ST BC/AD	
218	6	590	8	40=99	1V CF 217
225	6	20	1	40=99	
228	6	11	2	40=99	

251	11D	4	1	40=99	
255	6, 11B, 11D, R10	129	16	40=99	
256	11B, 10,, 17, 6, 11D/2	283	37	40=99	
280	33, 11D	11	6	40=99	
282	11D	13	3	40=99	
287	6, 11B	58	5	40=99	
288	10, 6, 11BD, 33, FC	65	9	40=70	
289	TN, 33, 201, 11BD, 11D/2	91	16	50=60	
314	F1	3	1	PREH ?LIA	
323	11D, 11D/2	24	4	40=99	
330	11D, 33	57	33	40=99	

Duntisbourne Rouse, Duntisbourne Grove - DRDG 96

Summary

The Duntisbourne Grove site produced a moderately good sized assemblage of some 794 sherds (3799 g) although the actual average size of the individual sherds was generally low at 4.8 g. In total 37 contexts yielded pottery and of these 17 contained more than 10 sherds. With the exception of four contexts all the material appeared to belong to one relatively short period of occupation dating to the 1st century AD. The four exceptions are (135) which has a tripod foot (Medieval), (118) which has a single Post-Medieval sherd in amongst the late Iron Age/Roman material (?contamination) and (63) and (113) which are probably early Prehistoric.

Early Prehistoric (see also Barclay assessment).

Two sherds from a small ?hemispherical cup in a fine orange slightly vesicular (leached shell) fabric with sparse fine grog/clay pellets from (113) SF 117 could potentially be Early Bronze Age in date. Context (63) contained five very vesicular limestone/shell tempered sherds including a slightly expanded rim may potentially be Neolithic (info AB).

Late Iron Age-early Roman

The bulk of the assemblage comprises sherds of 1st century currency. As with site DAMD, several sherds of Savernake ware (TF 6) and post-conquest wheelmade black burnished ware (TF 201) were present indicating that some of the contexts belong to the second half of the 1st century AD. In contrast to DAMD, however, DRDG shows a much higher proportion of later Iron Age fabrics, in particular Malvernian wares (TF 33, TF 216), less imported wares and a higher proportion of proto- and early Severn Valley wares which would either argue for a slightly earlier date of activity compared to DAMD, or a distinctly different but broadly contemporary form of occupation. This could be due to social, economic or functional reasons. The presence of a small number of fossil shell tempered or Jurassic limestone tempered wares might also suggest earlier Iron Age activity in the locality. Such wares did not feature at DAMD, or North Cerney

(Trow 1988, 64) which would reinforce the suggestion that they represent earlier activity and maybe a change in focus of the settlement patterns in this area.

A small number of imports are present, notably a small sherd from a platter in the earlier fabric of *Terra Rubra* (TR1A) from context (118). This is probably an Augusto-Tiberian import. Context (162) of slightly later date included samian (Drag 29) (?Claudio-Neronian) and an imported whiteware sherd. No amphora were present and very little to suggest much, if any activity in the post-Flavian period the only exception being some sandy grey wares in (27).

Potential

This assemblage is of considerably interest especially when assessed alongside DAMD and other recently studied assemblages from the locality such as The Ditches, North Cerney. As with DAMD it is suggested that the Stage 2 evaluation material should be reconsidered alongside the more recent material, especially any imported wares (report not available at present to know content). A samian specialist will probably be able to offer more precise details on the decorated samian (one sherd) which is of early Roman date.

Further Work

Drawing: c 10-12 items including x1 decorated samian

Summary text and discussion: 3 days

CONTEXT	FABRICS	WT	NO	DATE	COMMENTS
0	201,11D/2,6,216	42	11	50=100	
2	11D/2	2	3	1ST AD	
6	R10,201	3	2	50-100+	
7	11D/2,O10,34	35	11	1ST AD	
9	33,11D/2,6,34,R10	723	189	50=100	
14	33	10	6	1ST BC-AD	
26	6,L5,2,201,216,R00	77	24	50=100	
27	6,33,216,R6,11D,L,2,	187	27	50=100	?R6 = 75-100+
27	201,11D/2	45	24	50=100	
38	6,216,33,11D	264	37	50=100	
63	L	8	5	E PREH	V VESIC
82	33,201,11D	167	49	50=100	
83	6,11D/17,2,33,11D	117	28	50=100	
87	L1,11D/2,R00	18	3	1ST AD	
88	11D	5	1	1ST AD	
89	11DV	4	1	1ST AD	
96	11D,4?	9	6	1ST-2ND	
99	6,11D,17/2	304	19	50=100	
108	216,33,11BD,1,6,2	317	70	L1ST-2ND	
113	GO	8	2	?EPREH	HEMI CUP?
115	201	3	1	50=100	
118	33,11D/2,R00,TR1A,PM	92	27	PMED/1ST	CONTAMIN?
122	2,6,33	22	11	50=100	

133	11D	26	8	1ST AD	
134	6	15	2	50=100	
135	6V,11D/2, ?44	77	23	RO/MED?	TRIPOD FOOT
156	6	13	1	50=100	
157	2,6,33	24	3	50=100	
160	2,6,11D,33,R10,11D	135	25	50=100	
162	L5,201,R10,6,33,11D2	200	32	50=100	
162	8,216,11D,201,33..	50	13	50=100	SAM DR 29 ?AD 45-65
162	6,L5,WW,33,11D,17,2	168	25	50=100	
170	201,6V	35	3	50=100	
175	6,11D,11D/2	66	9	50=100	
176	11D/2,216	25	8	1ST AD	
181	216	180	29	1ST BC-AD	
181	216,L5,2,33,11D/2	99	19	1ST AD	
203	6V,L5	19	2	50=100	
215	33	116	23	1ST BC-AD	
222	6	12	1	50=100	
231	H2,11D	41	5	1ST AD	
232	6,11D/2,11BD	34	6	50=100	

Daglingworth Quarry - DAGQ 96

Summary

A small group of pottery amounting to some 45 sherds (1839 g) was recovered from four contexts (107), (116), (120) and (1002). Most of the sherds came from (107), (116) and (120) and date to the Post-Medieval/modern period. A single sherd of residual oolitic limestone of Medieval date (or Saxo-Norman? see P Blinkhorn report) was present in (107). The four sherds (20 g) from (1002) were all Roman Savernake ware (TF 6) and thus likely to date to the 1st-2nd century.

Further Work

None

Bagendon, Trinity Farm - BAGTF 96

Summary

A total of 156 sherds of pottery (288 g) was recovered from eight contexts. The material mainly comprised sherds of early Bronze Age (Beaker) date (see report by A. Barclay) with a small quantity of extremely small sherds which may tentatively be ascribed an early Roman date. The latter were associated with contexts (46) and (57). A small fine grey ware rim sherd from (15) is more definitely Roman.

Further Work

Prehistoric material (see Barclay).

CONTEXT	FABRICS	WT	NO	DATE	COMMENTS
7	G	37	19	BEAKER	3 RIM,+ DECOR
9	G, L	188	103	BEAKER	
11	G	29	8	BEAKER	
15	R10	2	1	E ROMAN	
27	G	11	4	BEAKER	
46	G,L,L5,?11D/2	12	8	E ROMAN	RESID E PREH
57	L, ?11D/2	8	12	E ROMAN	RESID PREH
74	S00	1	1	?PREH	

Baunton, Lynches Trackway - BAULT 96*Summary*

An assemblage of 197 sherds (787 g) dating to the Iron Age, Roman and Post-medieval periods was recovered from eight contexts. The Iron Age material mainly featured as redeposited sherds in Roman contexts, with the exception of (12). A rimsherd from (3) with a notched edge suggests the sherds belong to the early Iron Age. The Roman sherds indicate activity dating to the late 1st and 2nd centuries. Several sherds belonging to the same vessels were associated with (21), (22) and (23) indicating some contemporaneity between these three contexts. Context (5) only contained Post-medieval sherds.

Further work

A summary report with 3-4 illustrated sherds could be prepared if required; but the group is really too small to warrant much further work.

CONTEXT	FABRICS	WT	NO	DATE	COMMENTS
3	O10,L2,L1,H1	63	16	EIA/RO	DECOR RIM
5	PMEW	16	4	PMED	
8	6,LH2	11	2	ROMAN/IA	
12	L	3	4	PREH	
15	4,R20,11D,L2	115	7	2ND +	RESID IA
21	4, L2	135	29	2ND +	RESID IA
22	6,11D,R6,O10,R10,L	211	28	L1ST-2ND	
23	O10,R10,4, L2	233	81	2ND +	SAME AS 21/22?

Baunton, Exhibition Barn - BAUEXB 96*Summary*

A small assemblage of some 41 sherds (110 g) of Roman, Medieval and Post-medieval date. There is some uncertainty about the date of some of the limestone tempered wares (e.g. 13, 15, 23) which are not familiar Roman fabrics and thus assumed here to be Medieval (but see P Blinkhorn's report). Roman material is present from (8), (12), (13) and (24). The Roman sherds are not distinctive enough to be very closely dateable.

Further work

None

CONTEXT	FABRICS	WT	NO	DATE	COMMENTS
2	PMEW	2	1	PMED	
8	M00, R20	80	29	MED/ROMAN	
12	O20	6	3	ROMAN	
13	O10, ?COT	12	4	?MED/ROMAN	
15	COT	4	2	?MED	
23	COT	3	1	?MED	
24	11	3	1	ROMAN	

Cirencester, Burford Road - CIBFRD 96*Summary*

A small assemblage of 99 sherds (696 g) of Roman and Post-Medieval date was recovered from seventeen contexts. The Roman sherds came from (106), (111), (205), (208), (214), (318) (323) and (602), with residual pieces in (105), (206) and (310). The sherds include types dating from the 2nd-4th centuries. The later wares include Oxfordshire colour-coated sherds (AD 240-400) from (602), (205) and (105), the latter a Young 1977, form C45 with a rivet hole. Sherds of BB1, Severn Valley ware, Savernake ware, and various reduced and oxidized wares are also amongst the group.

Further Work

No further work is recommended on either the Roman or Post-medieval wares.

CONTEXT	FABRICS	WT	NO	DATE	COMMENTS
105	PMEW,12A	25	2	PMED/RO	RIVET HOLE, C45
106	11V	4	1	ROMAN	
111	4	6	1	L2ND-3RD	
205	12A,4,R10	35	8	L3RD-4TH	
206	PMEW,PMCH,12A,4,00	86	14	PMED/ROMAN	
208	O10	2	1	ROMAN?	
209	PMEW,PMCH,B/T	2	2	PMED	

214	R10,O10	3	2	ROMAN	
310	PMST,T,O10	3	4	PMED	
318	6,R10,4	35	7	2ND+	
323	6,R10,R20,O20,010,4	97	37	3RD+	
406	PMEW,B/T	255	2	PMED	
419	PM	51	5	PMED	
523	PMEW	18	2	PMED	
540	PMEW,PMKW	44	5	PMED	
602	I2A	5	1	L3RD-4TH	
661	PMEW	25	5	PMED	

Cherry Tree Lane Compound - CIRCL 96

Summary

A small assemblage of 90 sherds (464 g) of Prehistoric, ?Roman, Medieval and Post-medieval date was recovered from 11 contexts. The Prehistoric sherds are very small and appear to include both Iron Age (limestone tempered) and possible Bronze Age (grog-tempered) pieces. Shell tempered wares were associated with the grog-tempered pieces in (36) which may also be Bronze Age. Further shell tempered sherds from (28) and (31) could be Bronze Age or Iron Age. Residual sherds occurred in (18) and (27).

A single very abraded sherd from (20) may just conceivably be a piece of Roman Oxfordshire whiteware mortarium which has lost its grits. Medieval sherds were associated with (5) and with later Post-medieval sherds in (6), (20), and (22). Further Post-Medieval sherds came from (1), (18) and (27).

Further Work

No further work is recommended.

CONTEXT	FABRICS	WT	NO	DATE	COMMENTS
1	PMEW	41	2	PMED	
2	COT	22	5	MED	
6	PMEW,COT,44,FP	121	11	PMED,MED	
17	L2	40	16	IRON AGE	RIM
18	PMEW, H2	14	2	PMED,IA	
20	PMEW,PMCH,PMST,44,9A	95	7	PMED/MED/R	
22	PMEW,44	20	2	PMED/MED	
27	PMEW,T, GL	30	5	PMED/PREH	
28	H2	66	35	IRON AGE	
31	H2	10	1	IRON AGE	
36	H2,G,G	5	4	PREH	

Preston, Norcote Farm - PRNOF 96

Summary

A small assemblage of some 29 sherds (141 g) was recovered from twenty-four contexts. Most of the material, with the exception of four Roman sherds and eight Medieval sherds, is of Post-medieval/modern date. The Roman sherds came from (146), (184), TP15 (27) and TP20 (38) and are not closely dateable. Most of the Medieval sherds are oolitic tempered wares with the exception of a very small glazed jug sherd with rouletted decoration from TP40 (75).

Further Work

The group does not warrant publication.

TESTPIT	CONTEXT	FABRICS	WT	NO	DATE	COMMENTS
	146	?2			?1ST AD	
	182	PMEW			PMED	
	184	R10			ROMAN	
	101	COT			MED	
	102	44			L12TH-14TH	CPOT
	183	44			L12TH-14TH	COMBED
1	2	PMGL	1	1	PMED	
2	5	PMEW	35	1	PMED	
3	6	PMGL	1	1	PMED	
5	10	PMEW	1	1	PMED	
9	16	PMEW	3	1	PMED	
13	23	PMCH	1	1	PMED-MOD	
15	27	PMEW,R10	3	2	PMED/ROMAN	
17	31	PMEW	1	1	PMED	
17	32	41	1	1	MED	
18	33	44	3	1	L12-14TH	
19	35	PMCH	1	1	PMED-MOD	
19	35	PMAK	5	1	PMED	
20	38	R10	3	1	ROMAN	
21	39	PMCH, PMAK	4	4	PMED/MOD	
27	48	44, B/T	1	1	MED	
34	63	PMGL	3	1	PMED	
35	65	FC	0	1	ND	
37	69	COT	32	1	L12-14TH	SLASH HANDLE
40	75	GG	1	1	MED	ROUL

Preston, Witpl Lane - PRWPL 96*Summary*

A small group of 58 sherds (367 g) of Roman, Medieval and Post-medieval date were recovered from eight contexts. The Roman material included sherds of later Roman currency (AD 240-400) from (24), but as residual finds alongside Medieval Minety ware of late 12th-14th century date. A possible single small abraded oxidized piece from (5) may also be Roman. Further Medieval material was recovered from (7) and (23). Post-medieval material, mainly glazed red earthenwares (Ashton Keynes type) were associated with (5), (13), (15) and (19) indicates 17th-19th century activity (see also report P Blinkhorn).

Further work

None

CONTEXT	FABRICS	WT	NO	DATE	COMMENT
5	PMAK,44,MED	189	28	PMED	MED/RO RESID
13	PM	6	1	PMED	
7	44,00	46	5	MED	
15	PMEW	8	1	PMED	
17	TILE	0	1	PM/MED	
19	PMAK,PMKW	31	2	PMED	
23	44	68	1	L12-14TH	JUG HANDLE
24	44,MED,OXCC,R10	190	19	L12-14TH	RO RESID

Preston Enclosure - PRENC 96*Summary*

An assemblage of some 530 sherds weighing 2,407 g was recovered from 26 contexts. The group comprised mainly Iron Age sherds with smaller amounts of early Bronze Age, Roman, Medieval and Post-Medieval material.

Early Prehistoric

A sherd from grog-tempered beaker with comb-impressed decoration was recovered from (19) associated with a sandy ware rim, probably also from a beaker and small fine shell tempered fragments. An early Bronze Age (Beaker) date would be appropriate for this feature. A second very small sherd with comb-impressed decoration in the form of chevrons came from Iron Age context (8). Residual sherds probably also of comparable date were present in (64/65), and (160). A sandy grog-tempered sherd, the only piece from (74) may also belong to this group or could be later.

Later Prehistoric

Most of the sherds were in shell or limestone tempered fabrics dateable to the Iron Age. There are a few sherds with elements of form and/or decoration suggestive of an early Iron Age date, in particular context (176) with both a carinated bowl and a piece with incised line decoration. The fabrics are fossil shell tempered. It is thus possible that some contexts with only unfeatured shell-tempered sherds are also early Iron Age, or even Bronze Age, but could equally be middle Iron Age, for example, (5), (60), (61), and (63). A large expanded rim jar from (64/65) in a limestone and shelly fabric is also difficult to place but could provisionally be early Iron Age, however, the rounded form of the rim could also place it towards the later middle Iron Age. Most of the remaining material would perhaps fit more easily in the later middle Iron Age where some rims are plain undifferentiated but other shows slight beading, for example contexts (8-12), (28), (33), (84), (93), (124), (131-3), (279) and (285). It should be noted however, that most of these contexts did not contain featured sherds. There are no specific fabrics or forms suggestive of late Iron Age activity.

Roman

A few sherds of Roman date were recovered from the surface cleaning, plough furrows and context (160) which also contains later material. The sherds are small and abraded, commensurate with material that has been in the ploughsoil for some time, and is not sufficiently common to indicate Roman occupation in the very immediate vicinity.

Medieval and Post Medieval

A small quantity of Medieval and Post-Medieval material was recovered from the ploughsoil and context (160). The former included sherds of 'Cotswold oolitic ware', and Minety ware broadly dating to the late 12th-14th centuries. The Post-Medieval sherds included German stoneware, glazed red earthenwares and ?Cistercian ware indicating general rubbish from the 16th-18th centuries.

Potential

The Prehistoric material is of some interest and adds to the general picture emerging for this area. Further work is needed to build up the patterns of fabric change through the Iron Age in the locality which may assist in refining some of the provisional date. This is now becoming a feasible proposition for the later Bronze Age to late Iron Age with the availability of increasing amounts of material from different sites both along the road scheme (e.g. PRSTAS, PREM) and recently published from sites like Crickley Hill (Elsdon 1994), Shorncliffe (Barclay 1995; Morris 1994), and the Lechlade sites (Hingley 1986; 1993). Details of the features and/or finds may also assist in refining the pottery chronology.

Further work

Prehistoric: summary text - 2 days

Illustrations: c 10 items

CONTEXT	FABRICS	WT	NO	DATE	COMMENTS
6	L2,L4,8,11V	10	8	IA/RO	
0	PM,44,41,11B,T	112	14	PM/M/RO	FURROWS
5	H2	10	1	M-LIA	
28	L2	10	2	M-LIA	
11	L2	4	7	MIA-LIA	
176	H1,H/L	23	10	E-MIA	DEC/CARIN
124	L5	6	1	IA	
132	FC	7	3	IA?	SEG A
64	G, L2	787	59	PREH	
8	L2,H1,L5,L1,G,S1	552	184	EBA/MIA	
4	L	1	5	PREH	
9	L1,L2,L5	60	17	MIA	
12	L2	11	11	MIA	
279	H1,L5,L2	113	65	MIA	
84	H1, L2, FC	3	4	MIA	
74	GS	3	1	IA	
160	PMAK,PM,44,41,G,R00	148	24	PM/M/RO/PH	MIXED
19	H2,G,S00	8	4	EBA	COMB DEC
133	L5, L2	36	15	MIA	
63	H1/2	27	10	IA	
61	H1/2, FC	28	3	IA	
60	H2	6	2	IA	
285	H2, L2, S2, 00	37	19	IA	
162	STONE	0	0		
132	L5, L2, FC	10	7	IA	X5 FC
10	L2	8	3	IA	
33	L2	25	6	IA	
0	PMAK,PM,44,H1,L2,R00	255	22	PM/M/RO/PH	SURFACE CLEANING
131	L2	45	6	IA	
93	L2, H2	62	17	IA	

Preston St. Augustine's Lane - PRSAL 96

Summary

A small assemblage of c 102 sherds weighing just 177 g was recovered from 14 contexts. The material included sherds of Post-medieval, Medieval, Roman and Prehistoric date.

Prehistoric (see also A Barclay's report)

Ten contexts produced exclusively earlier prehistoric material, which appears to include sherds of Neolithic and Bronze Age date. Small flint tempered sherds from (83) are considered to be of earlier Neolithic date (AB). Small grog tempered sherds from (6) and (77) are probably of early Bronze Age (Beaker) date. The latter includes three joining fragments decorated with lines of fine comb impressions and is most likely from

a beaker. The similarity between the limestone/ and or shell tempered sherds from (7), (12), (26), (47), (59), (77), (109) and (147) would strongly suggest that these sherds are contemporary and may also date to the early Bronze Age.

Roman

A single Savernake storage jar rim of 1st-2nd century date came from (1) alongside Post-medieval sherds.

Medieval

A single small oolitic limestone-tempered (TF44) came from (91).

Post-medieval

Post-medieval sherds were associated with contexts (1), (68) and (128).

Further work

The very fragmentary nature of the assemblage and the general lack of diagnostic pieces to confirm or refute the tentative dating, limits its potential for further work without independent dating evidence.

PRSA 96

CONTEXT	FABRICS	WT	NO	DATE	COMMENT
1	PMEW,6,T	46	4	PMED/RO	
6	H1,G	5	2	?BA, ?IA	
26	L, HL,00	23	12	?BA	
47	L	4	3	PREH	
68	PMEW	2	1	PMED	
77	L, G	6	2	BEAKER	COMB DECOR
117	PM	2	1	PMED	V SMALL
147	HL, L	8	8	PREH	V SMALL
124	PMEW	9	1	PMED	
7	L	1	1	?BA	
83	F	3	6	?NEO	INFO AB
12	L, S	31	19	PREH	
59	H	35	40	PREH	V SMALL

Preston, St. Augustine's Farm South - PRSTAS 96*Summary*

A small assemblage of 31 sherds (115 g) of pottery of prehistoric, Roman, Medieval and Post-medieval date was recovered from 15 contexts. The average sherd size was just 3.6 g.

Prehistoric (See report by A Barclay)

Most of the Prehistoric pottery comprises very small crumbs which are not easily definable.

Roman

A single Savernake sherd of Roman date (1st-2nd century) was recovered from (3120).

Medieval

A single oolitic limestone tempered sherd of Medieval date was recovered from (2013) and Minety ware from (1002).

Post-medieval

Post-medieval glazed earthenwares were associated with (1002), (1013), (2077), (3006) and (3176).

Further Work

None

CONTEXT	FABRIC	WT	NO	DATE	COMMENT
1002	L5,44,PMEW,FC	30	4	PMED/MED	RESID IA
1004	GF	12	1	PREH ??IA	DECOR. DON'T RECOG?
1013	PMEW	7	1	PMED	
2013	41	5	1	MED	
2077	PMEW	6	1	PMED	
3006	PMEW, B/T	10	1	PMED	
3008	L2	24	11	IA	
3017	G	4	1	PREH EBA	SL ABRADED
3018	FC	0	1	?PREH	
3102	LH	1	3	PREH	CRUMBS
3120	6	2	1	ROMAN	
3121	H1	2	2	PREH	CRUMB
3165	FS, H1	3	3	PREH	?BA
3174	FC	0	2	ND	
3176	PMEW	10	2	PMED	

Preston, Ermin Farm - PREM 96*Summary*

An assemblage of 228 sherds of pottery (1347 g) was recovered from nine contexts. The assemblage was exclusively middle-late Iron Age in date. The fabrics were restricted to fossil shell (H1, H2), limestone (L2, L5) and sandy wares (S1). The limestone is exclusively of Jurassic origin suggesting that activity had ceased before the 1st century BC. Of particular note is a straight-sided vessel similar to the Wessex saucepan pot with curvilinear decoration (57). Such vessels are rare in Gloucestershire with no immediate parallels known to the author. A further sherd from the same or a similar vessel was recovered from (64).

Further work

A small but interesting group which would be worth describing as a summary to highlight its existence and the fabric/form composition.

Drawing: 3 sherds

Summary text: 1 day

CONTEXT	FABRICS	WT	NO	DATE	COMMENT
4	L2,L5,H1,LFE,FC	345	59	MIA	
5	H1,L2,L5,S,FC	493	24	MIA	
12	S1,00	6	6	IA	
14	L5,00	12	11	IA	V SMALL
57	H1,S1	388	109	M-LIA	DEC SPAN? VG
60	L2	24	4	M-LIA	
64	S1	7	1	M-LIA	
65	H2	9	1	M-LIA	
83	H1,S1	61	13	M-LIA	

Driffield, Lower Street Furlong - DRLF 96*Summary*

A small assemblage of just 15 sherds (172 g) was recovered from eight contexts. Most of the sherds were of Post-medieval-modern date (contexts 2, 5, 23, 31 and 42). Contexts (16), (25) and (27) all contained very small crumbs of limestone tempered pottery and fragments of fired clay suggestive of a prehistoric date. The material is too fragmentary to tie down to any specific period with certainty but is compatible with Iron Age fabrics found nearby.

Further Work

No further work is recommended.

CONTEXT	FABRICS	WT	NO	DATE
2	PMEW	102	4	PMED
5	PMEW,FC/TILE	4	1	PMED
16	L,FC	1	1	PREH
23	PMCH	17	2	PMED/MODERN
25	L,FC	1	2	PREH
27	L,FC	3	2	PREH
31	PMKW	14	1	PMED
42	PMEW	30	2	PMED

Latton, Roman Pond - LARP 96

Summary

The 'Roman pond' produced a small assemblage of 78 sherds (945 g) from 16 contexts. The condition of the material was generally poor, the sherds being discoloured and abraded. There are very few featured sherds preventing close dating although the bulk of the material dates to the Roman period with some Post-medieval material.

Prehistoric

Five shell-tempered sherds of indeterminate ?Prehistoric date (SF 72) Context ?,

Roman

Most of the sherds were of Roman date and included examples of samian, Oxfordshire whiteware mortaria, Savernake, BB1, Severn Valley wares, south-west white slipped sandy ware, Oxfordshire colour-coated ware and various grey wares indicating a date range from the 2nd to 4th century

Post-medieval

A small number of Post-medieval glazed red earthenwares were present in (44), (112), (208), (336) and (412). The piece from (112) is the only sherd amongst 35 Roman pieces.

Further Work

The poor quality of the material and the general lack of featured sherds suggests that the group does not warrant further detailed work.

CONTEXT	RECORD	FABRICS	WT	NO	DATE	COMMENTS
0	94	PMAK	67	1	PMED	
0	72	H2	17	5	?1A/LATER	BLACK, SHELLY
0	119	15?	2	1	2ND-3RD	
44	128	PMEW	45	1	PMED	

101	4	G	8	1	?RO/LATER	
112	26	R10	12	3	ROMAN	
112	40	R00	8	4	ROMAN	
112	21	8,R00	22	3	2ND-3RD	
112	60	R10	7	1	ROMAN	
112	19	R10	11	1	ROMAN	
112	17	R10	23	1	ROMAN	
112	0	8,9A,6,4,R00	191	15	2ND	DRAG 37
112	15	4	14	1	2ND-3RD	
112	34	O10	2	1	ROMAN	
112	24	R00	4	1	ROMAN	
112	39	R00	10	1	ROMAN	
112	16	R00	60	1	ROMAN	
112	22	PMST	2	1	PMED	
112	7	4	28	1	LATE 3-4TH	
112	25	11B	5	1	2ND-4TH	
113	36	SHALE	0	0		
113	28	R10	2	1	ROMAN	
113	107	STONE	0	0		
113	38	8	8	1	2ND-3RD	
118	293	O20(WHF)	26	1	2ND-3RD	
120	58	00	12	1	?PMED/RO	DATE UNCERTAIN
171	48	G	7	1	MED/RO	DATE UNCERTAIN
171	67	RG	16	1	ROMAN	
208	31	PMGL	6	1	PMED	
208	30	PMFP	4	1	PMED	
260	78	R20	27	1	ROMAN	
262	76	R10	4	1	ROMAN	
262	86	O20(WHF)	6	1	2ND-4TH	
262	84	R10	14	1	ROMAN	
262	85	12A	33	1	240-400	
262	75	9A	16	2	2ND-4TH	
262	88	R10	6	1	ROMAN	
262	87	R10	10	1	ROMAN	
269	113	R10	53	1	ROMAN	
270	104	R6	8	1	2ND-4TH	
270	101	R6	30	1	2ND-4TH	
270	103	O20	2	1	ROMAN	
270	105	R6	23	1	2ND-4TH	
270	98	R10	22	1	ROMAN	
270	95	R10	10	4	ROMAN	
277	93	23	22	1	ROMAN	
336	134	PMFE	1	1	PMED	
394	122	R6	4	1	2ND-4TH	
394	123	4	10	1	2ND-4TH	
412	126	PMAK,15A	25	2	PMED/2-3RD	

Latton, Court Farm - LACFM 96

An assemblage of 495 sherds (2556 g) was recovered from 72 contexts excavated on the site at Court Farm. The material includes sherds of Post-Medieval, Medieval, Roman, and Iron Age date. Also present were a small number of less diagnostic sherds of Prehistoric date. A chronological summary can be found at the end of this assessment.

Prehistoric

Several potentially earlier and later prehistoric sherds are present, many redeposited in later contexts. Amongst the earlier fabrics are two pieces from (120), a Roman context, which include a very small grog tempered sherd and a sandy flint tempered sherd both probably of earlier prehistoric date, perhaps early Bronze Age. A very abraded vesicular sherd from (138) with an orange exterior and black interior could also be of early Bronze Age date. A thick-walled grog and flint tempered sherd from (234) is suggestive of a middle or later Bronze Age date. Odd redeposited sherds in later contexts, for example, flint tempered sherds in (10), (288), and (317), and grog tempered sherds in (375), (245) are also likely to be of Bronze Age origin.

Of particular note are two decorated sherds from (223) and (242) both with incised line decoration in the form of five-line chevrons and possibly from the same vessel. The style suggests these are likely to date to the later Bronze Age /early Iron Age period. A small sherd in a fine, micaceous fabric with sparse grog decorated with short incised parallel lines from (218) could also belong to this phase or may be earlier. Shell-tempered sherds from (142) and the groups from (333) and (53) could also belong to this group.

A collection of oolitic limestone tempered sherds from a large jar in (428) suggest a middle-late Iron Age date. Other contexts containing sherds of comparable date, both limestone and sand tempered examples, include (22), (83), (149), (235) and (436).

Late Iron Age/early Roman

The bulk of the assemblage can be dated to the 1st century AD and includes both handmade native wares of Late Iron Age character alongside more Romanised wares. Certain fabrics, for example black wheelmade sandy wares (Gloucester TF 201), various grey wares (R10) and Savernake wheelmade and handmade wares (Gloucester TF 6) suggest that much of the activity is likely to date to the second half of the 1st century AD. A number of sherds more typical of the later Iron Age, mainly limestone and grog-tempered wares occur alongside these sherds and are either residual, or are still in use, as is quite common on the more rural Gloucestershire sites. The grog-tempered sherds probably first appear in the first half of the 1st century AD but the limestone-tempered pieces, along with a single sherd of Malvernian ware, could potentially date back to the 1st century BC. The few samian sherds present include forms typical of the second half of the 1st century, eg Drag 18, 24/5, 37. Other Roman imports include Dressel 20 amphora. The presence of at least one BB1 sherd, along with some orange sandy wares typical of the North Wiltshire industries could suggest continuing use of the site into the

2nd century but there is nothing of later Roman date present. The potentially later contexts would include (34), (36), (314) and perhaps (479).

Medieval

Medieval pottery sherds comprised just ten sherds from (43), (486), (33) and (402). The fabrics include both Minety oolitic tempered ware, and sand and limestone tempered ware (Gloucester fabric TF43) broadly dating to the later 12th-14th centuries. In addition two contexts (7), (344) produced fragments of glazed roof tile with no accompanying pottery which may be Medieval or later.

Post-Medieval

Post-medieval material was restricted to a fifteen sherds from contexts 16, 290, 345, and 486. Sherds include salt-glazed stoneware, glazed red earthenwares (including Ashton Keynes ware) and brown glazed wares.

Potential

The Prehistoric material may require more detailed examination to try and tie it down more precisely as it appears initially quite diverse in type. Some discussion with Alistair Barclay would be beneficial to try and refine the initial impressions.

The late Iron Age/early Roman group is another useful addition to the regional picture although featured sherds are relatively scarce. It is suggested that a short summary would be sufficient for publication purposes. A small number of sherds (76) might be worth illustration to accompany any text.

Further Work

No further work is necessary on the Medieval and Post-medieval sherds.

Other material: Drawing: 0.5 day, Text summary: 0.5 day

CHRONOLOGICAL SUMMARY (LACFM '96)

POST-MEDIEVAL: Contexts: 16, 290, 345, 486

MEDIEVAL: Contexts: 7, 733, 43, 402, 344

LATE IRON AGE - EARLY ROMAN (1st century AD)

8, 10, 34, 36, 38, 50, 81, 107, 110, 112, 120, 132, 135, 169, 176, 218, 242, 245, 259, 263, 266, 286, 287, 288, 298, 304, 307, 314, 317, 319, 320, 325, 327, 331, 340, 363, 373, 374, 375, 432, 434, 435, 438, 469, 479, 481, 484

PREHISTORIC

?Earlier: 138, 234

?Later: 22, 53, 83, 142, 149, 223, 235, 333, 428, 436

NOT DATED: 165, 303, 343

CONTEXT	FABRICS	WT	NO	DATE	COMMENT
7	TILE	0	6	MED	
8	11D/2	10	2	1ST	
10	201,L,F,020,6	59	17	50=100	
16	PMAK	36	1	PMED	
22	L2	13	3	IA	
33	MED?	27	6	MED	6=1 SHERD
34	4, R20, R10, SG	21	12	1-2ND	
36	R3, Q,L2,R00,11DV	14	9	1-2ND	
38	11V	13	1	RO	
43	44	1	1	MED	
50	201	1	1	50=100	
53	L2, GS, FC	25	7	IA	
81	6, L1, 2, R10	34	4	1ST	RESID IA
83	S1	4	2	IA	
107	6, 8, R10, R20	23	6	50=100	
110	2	8	1	ERO	WM JAR
112	6V	30	2	1ST	
120	8,201,SF,G	5	4	1ST	RESID PREH ?BA
132	2A,8,R10,6,R20,L2,FC	106	25	50=100	RESID IA
135	11DV	8	4	ERO	
138	L	1	1	PREH	V ABRADED/VESIC
142	H2	5	1	IA	
149	S1, L1/33	9	3	LIA	
165	O10	1	2	ND	
169	R20	2	1	?RO	
176	8, 6, 4, R20, 11D/2	55	11	50=100	DR 18
218	R20, G, SL	85	72	1ST	RESID PREH ?LBA/EIA
223	L, H2, FC	22	3	IA	DECOR CF 242
234	GF	12	1	?BA	
235	L	8	1	IA	
242	L, 6, 201, GFE	38	9	50=100	RESID PREH. CF 223
245	L, 2, SLG	16	3	1ST	
259	8	1	1	PRE-FL	?DR 24/5
263	SL	8	5	1ST	
266	33, 11D, R10	29	5	1ST	
286	GS,6,201	51	4	50=100	
287	11D/2,L/33,R10,201..	83	27	1ST	
288	6,F,2,201,L2,GS,R20.	131	27	1ST	RESID IA
290	PMAK	50	1	PMED	
298	201	5	1	50=100	

303	FC/POT?	1	1	ND	
304	6	36	1	1-2ND	
307	L2, R10, 11D/2	12	3	ERO	
314	10A,6,11B,11D/2, 15	197	7	1-2ND	
314	R20,11B,10A,L5,L1,L2	46	22	1ST	
317	L5, L1/5, R00, F	32	4	IA/RO	RESID - 1ST C
319	L1, L5, R20	27	5	1ST	
320	18?, 2A, 11D, 6V	39	6	1ST	
325	33	10	1	1ST	
327	201, 2, 6V	208	41	1ST C	
331	2A	10	1	1ST	
333	F, H2, L5, G	72	7	IA	
340	11V	26	5	RO	
343	FC	4	1	ND	
344	TILE	0	4	MED	
345	PMAK	46	3	PMED	
363	2A	7	1	1ST	
373	G/2	1	1	1ST	
374	R10, 11B	8	6	1ST+	
375	GS	7	1	1ST	
402	11B, 8, 43	49	5	MED/RO	
428	L5	120	22	IA	
432	RG	6	1	ERO	WM
434	6, 201	26	3	50=100	
435	GS	6	1	1ST	
436	L2	6	1	IA	
438	11D/6, SL	46	5	1ST	
469	GS,2C,R10	31	3	1ST	
479	O10,L5,2,R3,R6	220	18	70=100	RESID IA
481	34,6,010,R10	39	7	1ST	
484	6,2	15	2	50=100	
486	PM x4, 44, GS	153	13	PMED	RESID MED/RO

Latton, Weavers Bridge - LAWBR 96

Summary

The assemblage from Weaver's Bridge amounts to 818 sherds, 7452 g from just 11 contexts. Particularly large groups of material were associated with two contexts (51, 57) accounting for 95 percent of the total assemblage by weight. With the exception of one Medieval context, (45), all the pottery dates to the later Roman period.

Roman

Later Roman pottery was associated with 10 excavated contexts with particularly large groups from (51) and (57) ? a midden deposit. The range of fabrics present included those wares to be expected in this locality in the later 2nd to 4th centuries, namely samian (TF 8), Dressel 20 amphora (TF 10A); BB1 (TF 4), products of the Oxfordshire

industries, in particular colour-coated forms (Young 1977, forms C 83, C45) and whiteware mortaria (*ibid.* forms M20, M22), grey micaceous ware (TF 5 type), Nene Valley colour-coated ware (TF 12B) and late grog-tempered storage jar (TF 241). Various local grey wares were also present including examples imitating BB1 forms. The presence of the stamped bowl (Young 1977, form C83) indicates a *terminus post quem* well into the 4th century but the absence of any late Roman shell-tempered wares might suggest a mid 4th century *terminus ante quem*. The presence of the samian, amphora and Savernake ware suggests occupation dating back to at least the later 2nd century although this does not preclude the material being thrown away at a later date as it is in association with later vessels. The samian in particular is very worn and abraded. Seven fragments of tile (*tegulae*) also came from (57).

The average sherd size is generally quite low for Roman material at around 9 g, and this is perhaps a little surprising for a midden deposit where one might expect to find larger, better preserved sherds. This might suggest that the material has either been deliberately broken up or has been redeposited from another context(s).

Medieval

Context (45) produced nine body/basesherds from a Medieval cooking pot in oolitic limestone tempered ware indicating a date sometime in the late 12th-14th centuries.

Further Work

The midden deposit presents a nice group of associated pottery although all the forms/fabrics are well known. If publication were to proceed on this site the midden group could be presented in summary form with a figure illustrating the group.

Summary : 1 day

Illustrations: c 12-15 items

CONTEXT	FABRICS	WT	NO	DATE	COMMENTS
4	8	7	1	L2ND+	
45	44	37	9	L12-14TH	
51	241,4,5,12A,8,R20..	2156	214	L3RD-4TH	C83
57	241,6,4,12A,9X,R20..	4892	561	L3RD-4TH	M22, M20, C45
57	TILE (TEG)	0	7	ROMAN	
60	R20	4	1	LATE ROMAN	
62	10A	127	3	1ST-3RD+	
66	R6,4	26	2	4TH	
71	4,R20,R10,010/12A	101	15	L3RD-4TH	
80	R00	15	1	LATE ROMAN	
98	STONE	0	0		
111	12A	6	2	L3RD-4TH	
112	12A,R20	81	4	L3RD-4TH	

North of Stratton to Nettleton Improvement - NOSNIWB 96

Summary

The watching brief produced a small assemblage of 74 sherds (555 g) of prehistoric, Roman, Medieval, Post-medieval and modern date from eleven stations/contexts.

Prehistoric

CH 5200 (2) produced five small grog-tempered sherds including a rim fragment suggestive of an early Prehistoric date. Further fragmentary prehistoric limestone-tempered sherds were recovered from CH2800 (5). The latter could be Iron Age but their character is perhaps more suggestive of an earlier date.

Roman

Most of the sherds (49) date to the Roman period. Eight sherds from a very worn 2nd century samian dish (Drag 36) came from CH2320, (1). The remaining sherds from CH 2200 (3), (5), (8) are all typical of the later Roman period dating to the 3rd-4th centuries. The sherds are in poor condition with a low average sherd size and abraded. Colour-coated wares have lost their surfaces. Wares include examples of Severn Valley ware, BB1, Oxfordshire colour-coat, ?East Gaulish samian and various local greywares.

Medieval

A single Medieval cooking pot rim in oolitic limestone tempered ware came from CH10800 (2).

Post-medieval-modern

Glazed red earthenwares, miscellaneous 'china' came from CH 7500 (2), CH 2600-2620 (1), CH 5700 (1).

Further work

A Barclay to comment on Prehistoric material, otherwise no further work recommended.

Additional Pottery

A further eight sherds of pottery from CH 9652 (4) included Savernake ware, South Gaulish samian (Drag 24/5) and Malvernian handmade limestone-tempered ware which together indicate a date in the second half of the 1st century AD. The samian is pre-Flavian.

Cirencester Watching Brief - CIRENWB 96

Summary

The Cirencester watching brief produced just 56 sherds (196 g) from seven contexts. The sherds are of Post-medieval, Roman and probable Iron Age date. The prehistoric sherds all came from CH 8500, in particular contexts (5), (7), (10), and (15). The fabrics of either fine shell or limestone and shell suggest an Iron Age date. Roman sherds came from CH4100 (2) and from (1), in the latter case associated with Post-medieval material.

Further Work

No further work is recommended.

Latton Watching Brief - LATWB 96

Summary

The watching brief produced a small group of 41 sherds (501 g) and two pieces of tile from 13 contexts/stations. The material included sherds of Roman, Saxon, Medieval and Post-medieval date. The eight Roman sherds from 3500 (2), (4) and 3700 (2) include mortaria (unclassified), BB1 and Oxfordshire parchment ware generally indicating a later Roman date. Three Saxon sherds were recovered from 5900 (22) and (24), all with an organic temper and including both a jar/cooking pot and a possible ?lamp fragment.

Medieval sherds including Gloucester type fabric TF41, 43 and 44 were collected from 3400 (2), 3800 (3) and 3900 (6) indicating later 12th-14th century activity. Post-medieval sherds were recovered from 3700 (2), 3800 (1), (3), 3900 (1), (2).

Further work

The Saxon sherds include two featured pieces which might warrant publication as material of this type is generally rare in the Cotswolds (cf. Timby 1995). The Roman, Medieval and Post-medieval sherds do not warrant further work.

NOSNIWB 96

CHAIN	CONTEXT	FABRICS	WT	NO	DATE	COMMENTS
2200	8	4,R20,010,R10,12A	38	13	240=400	
2200	5	4,8,R20,R10	156	8	LATE 3RD+	
2200	3	11B,0XCC?	49	5	LATE 3-4TH	
10800	2	44	7	1	12-14TH C	
7500	2	CHINA	1	1	MODERN	
2600	1	PMEW	5	2	PMED	CH2600-2610
5200	2	GROG	10	5	?BA	
2800	5	L1	25	14	BA/TA	
2320	1	8	50	8	2ND	1 V DRAG 36, WORN
5700	1	PMAK, CH	63	2	PMED/MOD	
2200	8	R20,11B,010,20,0XCC	151	15	LATE 3-4TH	

CIRENBW 96

CHAIN	CONTEXT	FABRIC	WT	NO	DATE
0	1		124	13	PMED/ROMAN
4100	2	O20	14	3	ROMAN
8500	5	LH, FC	1	2	IA
8500	7	H2	18	14	IA
8500	10	H2, FC	38	20	IA
8500	15	H2	1	6	IA
8500	19	FC	4	2	ND

LATWB 96

CHAIN	CONTEXT	FABRICS	WT	NO	DATE	COMMENTS
3500	2	9	83	5	RO.?2-4TH	
3500	4	4	11	2	?4TH C	
3400	2	41,44	23	7	MED	
3700	2	PMAK,PM,1A	132	6	PMED/RO	Young P24?
3900	1	?TILE	0	1	PMED	
3800	3	PMAK,43,44	25	6	PMED/MED	
3800	1	PMEW	18	1	PMED	
3900	2	PMAK	105	4	PMED	
3900	6	41,43,MED	31	3	12-14TH	
3900	1	PMAK	60	4	PMED	
4000	2	TILE/PIPE	0	1	PMED/MOD	
5900	22	O1	10	2	SAXON	JAR
5900	24	O1	3	1	SAXON	?LAMP/ UNUSUAL FORM

APPENDIX 3: Medieval/Post-Medieval Pottery Assessment

By P Blinkhorn

Medieval and post-medieval ceramics were recovered from seven sites on the roadscheme; Burford road (CIBFRD 96), Witpit Lane (PRWPL 96), Westfield Farm (LAWF 96), Daglingworth Quarry (DAGQ 96), Exhibition Barn (BAUEXB 96), Court Farm (LACFM 96) and Street Farm (LATST 96). The results of the assessment are presented below in tabular form.

1) Burford Road

Context	Romano-British Wares	Rhenish Stonewares	Red Earthenwares	Metropolitan Slipware	Staffordshire Slip-trailed Ware	Misc 19/20thC wares
105	1 (17)		1 (5)			
106	1 (4)					
111	1 (7)					
205	8 (35)					
206	3 (34)		2 (37)		1 (3)	8 (13)
208	1 (1)					
209			1 (1)			1 (1)
214	4 (1)					
310		1 (4)				
318	7 (35)					
323	39 (99)					
401			1 (1)			
406			2 (257)			
419			4 (51)			
523				2 (19)		
540			4 (39)			
602	1 (3)					
661			4 (23)			

2) Witpit Lane

Context	Romano-British Wares	Cotswolds-type Oolitic Ware	Glazed Shelly Ware	Brill/Boarstall Ware	Medieval Glazed Sandy Ware	Red Earthenwares
5	2 (4)	23 (122)	1 (60)	1 (3)		1 (8)
7		2 (42)				
13						1 (7)
15						1 (8)
19						2 (31)
24	3 (14)	15 (171)				

The majority of sherds from context 24 were leached and abraded.

3) Westfield Farm

Context	Romano-British Wares	Medieval Shelly-Limestone Coarseware	Red Earthenwares	Misc. 19/20thC Wares
9			1 (280)	
10				1 (3)
21		1 (26)		
29			1 (5)	
30	21 (127)			
36	1 (8)			
47	2 (7)			

4) Daglingworth Quarry

Context	Romano-British Wares	Saxo-Norman Shelly Ware	Red Earthenwares	Misc 19/20thC Wares
107		1 (12)	4 (395)	
116			1 (5)	1 (16)
120				10 (80)
1002	4 (19)			

5) Court Farm

Context	Romano-British Wares	Red Earthenwares	English Stoneware
16		1 (35)	
290		1 (49)	
345		1 (45)	
486	3 (33)	6 (101)	1 (16)

The rest of the ceramic from this site was Romano-British or earlier.

6) Exhibition Barn

Context	Romano-British Wares	Medieval Shelly Coarseware	Red Earthenwares
2			1 (2)
8	28 (50)	1 (1)	
12	1 (2)		
13	3 (4)	1 (5)	
15	1 (3)		
23	1 (2)		
24	1 (2)		

7) Latton Street Farm

Context	Medieval Coarse ware	Brill/Boarstall Ware	Glazed Oolitic Ware	Tudor Green	Cistercian Ware	Tin-Glazed Earthen-ware	Staffs Slip-Trailled/Manganese Wares	Red Earthen-wares	Misc 19/20thC wares
1								2 (50)	
3	3 (38)							2 (69)	
5								1 (25)	
12								3 (42)	
17	2 (22)								
119	1 (8)		1 (3)					1 (19)	
173			1 (5)		1 (12)			5 (118)	
178	1 (23)								

Context	Medieval Coarse ware	Brill/ Boarstall Ware	Glazed Oolitic Ware	Tudor Green	Cistercian Ware	Tin- Glazed Earthen- ware	Staffs Slip- Trailed/ Manganese Wares	Red Earthen -wares	Misc 19/20thC wares
187			2 (125)		8 (8)				
190								9 (77)	7 (33)
191							1 (14)	5 (80)	6 (16)
194									
195							1 (8)		
196								22 (796)	1 (2)
197								1 (17)	
198							1 (24)	7 (77)	2 (5)
199								8 (201)	21 (77)
214	2 (12)								
216	2 (18)								
218	2 (24)								
225	7 (152)							28 (630)	4 (26)
227								13 (207)	114 (904)
229								17 (215)	5 (17)
232								6 (32)	6 (29)
235								9 (165)	12 (101)
237					1 (22)			9 (517)	3 (34)
240							1 (13)	13 (270)	24 (237)
251		1 (9)	8 (43)						
255								3 (22)	7 (81)
258	1 (10)				1 (3)		1 (18)	7 (110)	1 (13)
262	4 (81)		3 (21)		1 (8)			3 (34)	
263			1 (111)						
265		1 (3)							
267								21 (765)	15 (187)
268							4 (67)	10 (344)	15 (131)
269								6 (172)	3 (68)
272								7 (407)	5 (107)
273							1 (9)		

Context	Medieval Coarse ware	Brill/Boarstall Ware	Glazed Oolitic Ware	Tudor Green	Cistercian Ware	Tin-Glazed Earthen-ware	Staffs Slip-Trailled/Manganese Wares	Red Earthen-wares	Misc 19/20thC wares
276						1 (14)	3 (13)	1 (421)	
277								1 (14)	
281									31 (224)
285								4 (45)	
287								7 (153)	15 (238)
290								13 (156)	13 (206)
291							1 (10)	29 (987)	48 (425)
297	1 (20)								
304								13 (464)	40 (389)
305								14 (1935)	6 (230)
313								8 (139)	20 (120)
314								7 (159)	15 (238)
331					2 (4)			3 (49)	3 (7)
340									
356					1 (3)			6 (66)	1 (18)
357								4 (111)	
358								13 (489)	
365									
379								1 (86)	
389	3 (76)						1 (15)	12 (149)	
390								7 (120)	17 (258)
391								2 (40)	
395									3 (8)
403									
409			1 (266)						
411								2 (121)	
420			1 (5)					7 (48)	8 (24)
431	1 (69)		1 (345)						
438	2 (79)				1 (8)			5 (330)	3 (25)
441	3 (18)		1 (5)					1 (61)	3 (70)

Context	Medieval Coarse ware	Brill/Boarstall Ware	Glazed Oolitic Ware	Tudor Green	Cistercian Ware	Tin-Glazed Earthenware	Staffs Slip-Trailed/Manganese Wares	Red Earthen-wares	Misc 19/20thC wares
444									4 (12)
445	5 (162)								
446	6 (332)								10 (40)
458	2 (24)		2 (37)		1 (16)			4 (84)	4 (4)
462			2 (112)						
464					1 (2)			4 (18)	
469							1 (3)		
470							2 (79)	5 (70)	11 (48)
471									1 (8)
488			1 (110)						
492			1 (61)						
495	1 (10)		1 (73)	1 (20)				2 (7)	
500	1 (23)			1 (48)	2 (5)				
503	1 (5)		2 (136)						
513	5 (112)		1 (7)						
516	1 (15)								
517	1 (3)								
518	2 (77)		1 (16)						1 (2)
526	1 (39)				1 (81)				
534								5 (111)	
540								1 (12)	
541								6 (121)	
542	1 (9)							3 (56)	
545									1 (6)
547			1 (31)						
551								24 (742)	
559			3 (336)						
560	1 (18)		1 (6)						
587									1 (4)

Context	Medieval Coarse ware	Brill/Boarstall Ware	Glazed Oolitic Ware	Tudor Green	Cistercian Ware	Tin-Glazed Earthenware	Staffs Slip-Trailed/Manganese Wares	Red Earthen-wares	Misc 19/20thC wares
589								9 (329)	8 (23)
591	2 (37)							18 (337)	9 (89)
597			2 (28)						
605								3 (164)	15 (107)
607			1 (50)						
611	3 (67)				2 (19)			45 (1856)	51 (801)
614								5 (1044)	1 (591)

Chronology:

Medieval Wares: c. 12th-14th C.

Red Earthenwares: c. 15th-17th C.

Tudor Green: c. 15th C

Cistercian Ware: c. 15th-16thC

Tin-Glazed Earthenware: c. 17th C

Staffordshire Wares: c. 17th C

Assessment

The post-Roman pottery assemblage from Latton Street Farm is the only one of those listed above which is considered worthy of further analysis, particularly the medieval and early post-medieval wares. The former comprise primarily Oolitic-tempered wares of the Cotswolds tradition, particularly the glazed sherds, which appear mainly to be fragments of tripod pitchers, and can be stylistically paralleled with vessels from Gloucester and Selsey Common (McCarthy and Brooks 1988: Fig. 219 nos 1491 and 1497). They are most likely to have a date range of the 12th-13th centuries (*ibid*). A single unglazed coarseware jar has form parallels with vessels from Great Somerford and Old Sarum in Wiltshire (*ibid*: Fig 102 nos. 404 and 406). The sherds of Brill/Boarstall ware are also worthy of note, as the fine tablewares of this tradition are rarely found to the west of Oxfordshire or Buckinghamshire (Mellor 1994: 117).

The late medieval transitional and post-medieval wares are largely unremarkable, apart from a reconstructed tripod skillet in a red earthenware fabric. However, the presence of large quantities of such wares, along with fragments of Cistercian and Tudor Green vessels, suggests that the site was occupied continuously from the 12/13th century until the post-medieval period. The date ranges of the later wares, which include Tin-glazed Earthenwares, Staffordshire slipwares and Victorian 'Willow Pattern', suggest that the occupation lasted until the 19th century.

Assessment of Additional Pottery from LATST 96 Pipeline Trench

By N Jefferies

The pottery assemblage from the LATST 96 pipeline trench comprised 259 sherds with a total weight of 5253 grammes. The fabric occurrence was as in table 1.

Table 1: Fabric occurrence by number of sherds and weight in grammes

Cxt	Saxo-Medieval Coarseware	Medieval Glazed Ware	LMT Earthen-ware	Cistercian Ware	Frechen Stoneware	Staffordshire Wares	17th-18th C Wares	19th-20thC Wares	Total
U/S	3 (65)	2 (299)							5 (364)
702	3 (17)		13 (179)				1 (1)		17 (195)
703			2 (126)						2 (126)
704			5 (35)						5 (35)
706			2 (23)					2 (14)	4 (37)
708						1 (31)		2 (4)	3 (35)
709								1 (15)	1 (15)
710			2 (35)					7 (10)	9 (45)
713			3 (49)				2 (25)		5 (74)
719	4 (81)		1 (1)						5 (52)
728		1 (22)							1 (22)
730			5 (60)					2 (58)	7 (118)
733		1 (12)	2 (7)						3 (19)
737	3 (34)		11 (98)						14 (132)
740			1 (10)						1 (10)
749	2 (12)	1 (16)	6 (88)			1 (3)			10 (119)
750			1 (55)						1 (55)
753	4 (125)		2 (94)						6 (219)
758			2 (28)			1 (6)			3 (34)
759			1 (30)					1 (1)	2 (31)
761			11 (364)					2 (13)	3 (383)
768			4 (147)	2 (6)	1 (3)	2 (51)			9 (207)
773			1 (8)			2 (10)			3 (18)
777		2 (14)	1 (15)		1 (6)				4 (35)
778	1 (7)		1 (5)						2 (12)
780			1 (31)						1 (31)
783	2 (28)								2 (28)
784					1 (2)			2 (9)	3 (11)
787	6 (97)								6 (97)

812	2 (25)							2 (25)
821	2 (20)							2 (20)
822	8 (45)							8 (45)
843	3 (22)	1 (11)						4 (33)
844	2 (66)							2 (66)
846	7 (132)							7 (132)
852	2 (13)							2 (13)
862			1 (8)					1 (8)
867			3 (36)				9 (65)	12 (101)
869			3 (72)				2 (21)	5 (93)
872			3 (187)					3 (187)
873			14 (288)					14 (288)
875			2 (31)				2 (7)	4 (38)
887	1 (67)	1 (12)	1 (9)					3 (86)
889	3 (46)	2 (27)	3 (11)	1 (2)				9 (86)
895			2 (25)					2 (25)
897			1 (13)					1 (13)
901			1 (59)					1 (59)
936							14 (647)	14 (647)
944			10 (75)					10 (75)
947			1 (20)				2 (581)	3 (601)
955			2 (18)					2 (18)

Description of pottery

Saxo-Norman wares:

This broad term encompasses two different fabrics from the late Saxon into the medieval period, as follows:

Oolitic limestone ware (F200): a calcareous gravel-tempered fabric with several different regional styles. The second (F202) is a flint-, ironstone-, and quartz-rich fabric from the south-west Oxfordshire region. These fabrics are described in detail in the Oxford type-series as OXAC and OXBF respectively (Mellor 1994, 44-52). The production spanned c. AD875 - 1200 for fabric 200 and c. AD1050 - 1300 for fabric 202.

Medieval glazed ware (F355):

This fabric is the medieval green-glazed pottery produced in the Cotswolds region. It has a Oolitic limestone tempered fabric and a broad date range of c. AD1200 - 1500. As

with the above, this pottery fabric is in Oxford type series as a Minety-type product, fabric codes OXAQ and OXBB (Mellor 1994, 97-101).

Late-Medieval Transitional Earthenwares (Fabrics 427, 432, 439, 440 and 441):

Such wares were produced at numerous sources. The vessel types are typically large bodied, red earthenware storage jars and pancheons. Glaze is usually green or brown and nearly always on the internal surface or around the rim. It has a date range of c. AD1400 - 1750, although production continues in some regions into the 19th century.

Cistercian Wares (Fabric 404):

Pottery of this tradition was first found in the destruction levels of monasteries in Yorkshire. It was produced all over the north of England and the Midlands and has a smooth red fabric with a dark brown or black glaze. Forms are almost exclusively cups and have a date range of c. AD1475 - 1550x1600 (McCarthy and Brooks 1988, 403).

Frechen Stonewares (Fabric 405):

Part of the German stoneware tradition, this particular ware was first imported into this country from c. AD1550 onwards and is by far the most common imported find on sites of this period. Forms are generally mugs and cups. It is generally identified by its distinctive grey fabric and 'orange peel' or 'tiger striped' salt glaze. It has a general date range of AD1550 to 1680, when it was superseded by English stoneware copies produced in London (Crossley 1990, 262).

Staffordshire Wares (Fabrics 414, 418):

This includes Staffordshire Manganese Wares and Creamwares. The first are distinguished by their rilled incised decoration, usually underneath the rim or by the base, and 'tiger striped' manganese brown glaze. The forms are mainly cups and mugs. These were first discovered during the excavations in Henley in Staffordshire and have a date range of c. AD1680 - 1760 (Royle 1984, 12). The second fabric (F418), dates from c. AD1760 into the 19th century.

17th to 18th century wares (Fabrics 412, 417):

These are a two fabrics which both came into production c. AD1680. They encompass Delftware and Midland Black wares. The likely source for the Delftware is the Limekiln Lane potteries in Bristol (Jackson and Beckey 1991, 101) and the Midland Black probably originated from the potteries of Northamptonshire, the nearest regional production centre (Gooder 1984, 150).

19th century wares (Fabrics 437, 438):

This includes the Victorian tinglazed flat and finewares as well as the occasional piece of stoneware of the same period.

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APPENDIX 4: Assessment of the Brooches

By D.F. Mackreth

A total of 18 brooches was recovered from 4 sites on the roadscheme; 6 from DRDG 96, 6 from DAMD 96, 5 from COWBQ 96 and 1 from LACFM 96. All 18 examples were assessed and attributed, where possible, to one of the following typological categories: Colchesters, Colchester Derivatives, Late La Tène, Aucissa and Related, Trumpet and Pennaular. All are made from copper alloy, unless otherwise stated.

Colchesters

- 1 DAMD 96, sf.29. (288) The spring is covered with corrosion including a lot of iron possibly pointing to an ancient repair. The wings cannot be seen. The relatively short hook has a pointed end. The bow profile was forged and there are facets down each rear corner, the evidence for others down the front edges is equivocal. The bow is plain apart from three stamped circles arranged 2 and 1. The catch-plate was pierced, but it is impossible to tell whether it was fretted.
- 2 DAMD 96, sf.28. (256) The wings are plain and the hook short. The plain bow had an octagonal section, its profile being forged. The catch-plate has largely gone but enough remains to show that it had been pierced with square-cornered openings.
- 3 DRDG 96, sf.136. (135) In appalling condition, the type is assured, and the hook was short.

The only good guide to what is likely to have been common in most of Southern England in the Late pre-Roman Iron Age is the King Harry Lane cemetery (Stead and Rigby 1989) where brooches such as these Colchesters are common. Because the condition of the present examples is poor, detailed analysis of parallels in the four phases is not really possible. However, all three here had their profiles forged, none is particularly small or has any feature pointing specifically to a late date in the development of the type. In this they match the bulk of those in the cemetery, excluding obviously early and late ones. The former are defined by their almost straight bows and the marked kick at the top of the profile, the latter are small and are cast with minimal finishing. The dating, therefore, of the cemetery is important.

The King Harry Lane report (*Ibid.*, 84) assigns to each phase the following dates: Phase 1 - 1-40, Phase 2 - 30-55, Phase 3 - 40-60, Phase 4 - 60+. The cemetery could have begun as early as *c.* 15 B.C. (*ibid.*, 83), but a conservative view was taken and this suggested that the cemetery lasted significantly beyond the Roman conquest. On statistical grounds, therefore, all Phase 1, half of Phase 2 and practically nothing of Phase 3 would be pre-conquest, Phase 4 can be ignored. However, there is a striking absence of well-known post-conquest types which had flooded the market in the 1st ten to fifteen years after the arrival of the Roman army: only one Colchester Derivative, Grave 316.4, and no standard Hod Hill. This is inconceivable when these types were being used in quantity a few hundred metres away. There is a commensurate lack of samian at a time when it was being imported in vast quantities (*ibid.*, 113) and was, apparently, abundant in the developing town. If, however, using

the possible start-date of 15 B.C., the phasing can be adjusted so that virtually all the imbalance disappears. The following dating is proposed: Phase 1 - 15B.C.-A.D.30; Phase 2 - 20-40; Phase 3 - 35-50; Phase 4 - 45+. What should be revealed, whatever the dating, is what was the common *floruit* of the main types in use at the time.

This argument covers brooches from a specialised environment such as a well-furnished cemetery in which ordinary residuality which is a common condition of standard occupation sites and these show that the Colchester is frequently found on sites with Claudian deposits. Those Colchesters which occur in contexts dating to the 1st ten to fifteen years after 43 are clearly devolving rapidly and it is very much a moot point as to whether they are actually only survivors in use. However, Brooches like Nos. 1-3 were made from about 10/20 and their manufacture had ceased by the conquest. The difficulty is establishing the point at which they become purely residual. The writer's opinion is that all like these three must have been residual by 60 and possibly not by 50 and in default of better evidence, they should have passed out of use 50/55.

Only Brooch 1, with its stamped circles, has a distinctive feature. Brooches with such stamps are almost invariably larger than average, often have moulded wings and occasionally have grooves across the foot. The most extreme example comes from Cheriton, Kent, which has stamps down each side of the bow sweeping out along the top of the catch-plate (Tester and Bing 1949, 33, fig.6,3). The frequency of stamps in the King Harry Lane cemetery is unequivocal: Phase 2, G53, G152, G399, G433; Phase 3, G23; unphased D170, G177. Those which are underlined have the almost straight bows which mark the earliest strand of British Colchesters. In other words, and treating the cemetery as an ordinary site, such brooches were going out of use in Phase 3, which suits the general tenor of the main series as a whole, and the most should have ceased to be used by the conquest.

Colchester Derivative

- 4 DRDG 96. sf.6, (27) The spring is held by the Polden Hill method: an axis bar through the coils is lodged in pierced plates at the ends of the wings, the chord being secured by a rearward-facing hook. Each wing has a buried moulding at its end. The hook is part of a skeuomorph of the Colchester's hook, otherwise the bow is plain. The return of the solid catch-plate has a buried moulding across its top.

Most Polden Hills can be assigned to a major group without difficulty, and, had the present piece had a moulding rising from the wings on each side of the head, the same would true here. However, despite this, the overall proportions, the minimal decoration on the wings, coupled with the skeuomorph of the hook, show that the brooch belongs to the 2nd half of the 1st century. A determining feature in placing the brooch more exactly would have been the style of any piercing in the catch-plate, but the catch-plate here is too small to have been treated like that. Bearing in mind that the chief variety of Polden Hill had developed by the end of the 1st century (Mackreth 1996, 301), and Brooch 4 betrays no sign of that development, the brooch may date to before 75.

Late La Tène

- 5 DAMD 96, sf.(7), (45) Iron. The integral spring has four coils and an internal chord. The bow is a circular-sectioned rod, the lower bow with the catch-plate is missing.
- 6 DAMD 96, SF.21, (41) Half the spring and internal chord from a brooch of Nauheim or *Drahtfibel* Derivative type.
- 7 COWBO 96, SF.363, (34) A repeat of the last.

Without the bows, very little can be said about Brooches 6 and 7. Both are almost certainly 1st century A.D., and may have lasted to near the end of the century. However, Brooch 6 is recognizably related to the *Drahtfibel*. Without the framed catch-plate, one cannot be sure that this example was not one, its proportions would not be out of place (cf. Mackreth 1992, 123, fig.113,21). The type developed in as much it sometimes has a fretted catch-plate and examples occur in Phases 1 and 2 burials at King Harry Lane showing that this feature belongs to pre-conquest times (Stead and Rigby 1989, 342, fig.141,270.5; 310, fig.113,143.5). The dating available for examples with or without catch-plates, some of the latter possibly having been genuine *Drahtfibeln*, is as follows: Ower, Dorset, before A.D. 25 (Woodward 1987, 97, fig.52, 217,219); Kelvedon, Essex, 1st century B.C.-43 A.D., and Tiberian-40 (Rodwell 1988, 67, fig.53,3,5); Werrington, Peterborough, 2nd/1st century B.C. - 50/60 (Mackreth 1988, 90, fig.20,1); Station Road, Puckeridge, Herts, two examples, c.25?-Claudius (Partridge 1979, 35, fig.6,1-2); Gussage All Saints, mid 1st century, two examples (Wainwright 1979, 108, fig.82,3,1056); Thetford, c.45-61 (Mackreth 1992, 123, fig.113, 24); Bagendon, 50-60 (Clifford 1961, 167, fig.29,4). Apart from excluding all brooches dating after 100, all those in iron with dates recorded by the writer are gathered here. The emphasis is on the 1st half of the 1st century or earlier. By 60 all were either residual or very long-lived survivors in use.

- 8 DRDG 96, sf.8, (43) The separate spring is housed in a case formed by folding two flaps round it at the top of the bow. This is a single plate shaped as a disc and fantail and was once covered by an applied repoussé plate. The remains of which preserve part of a beaded border on the disc.

This Rosette stands almost at the very end of a development which began in the middle of the 1st century B.C., the last stage was to substitute a hinged pin for the sprung one. Beginning again with the King Harry Lane cemetery, 2 brooches of this variety occurred in Phase 2 (Stead and Rigby 1989, 290, fig.99,67.2,3) showing that, on the revised dating offered after Brooch 3, it had arrived before the Roman conquest. Other dated examples are: Bagendon, 20/25-43/5 (Clifford 1961, 175, fig.32,2); Bancroft, pre-conquest-late 1st century (Mackreth 1994a, 291, fig.132,17); Colchester, 43/44-48, and 49-60 (Hawkes and Hull 1947, 83, pl.94,81,83); Bagendon, 43/45-47/52 and 50/60 (Clifford 1961, 175, fig.32,3,4); Colchester, 44-60 and 54-60 (Niblett 1985, 116, fig.74,22,24); Baldock, 50-70 (Stead and Rigby 1986, 113, fig.46,100); Colchester, 60-80? (Crummy 1983, 8, fig.3,17). Again, any context later than 100 has been omitted. What is striking about these examples is that there is only one dating after 60, and that should be residual, and the terminal date for pieces still in use should be hardly later than 50/55.

- 9 DRDG 96, [5] The spring is housed like that in Brooch 8. The condition is very poor and all that can be said is that the brooch was a reeded Langton Down, without any beading.

The King Harry Lane cemetery is again the chief source of information on the chronology of the Langton Down. The dating of the cemetery was discussed after Brooch 3. The condition of this brooch is so poor that all that need be noted is that it appears to have been reeded and to have had no beading. The latter means that the brooch probably belongs to the 1st half of the overall *floruit*. The type lasted a little longer than the Colchester and could still be seen in use in 55, but probably not by 60.

Aucissa and Related

These have rolled-over heads to house the axis bar of the hinged pin, and have separately-made foot-knobs sweated on.

- 10 DRDG 96, sf.3, (6) Apparently a standard uninscribed Aucissa, the beading to be expected down the bow cannot be seen, but the surface is in poor condition.
- 11 COWBO 96, sf.792, (308) The same as the last, but in very poor condition.
- 12 DRDG 96, sf.15, (64) The moulded head-plate head been reduced to a minimum, the bow is now an almost flat straight-sided strip with a flute down each side and a sunken moulding down the middle. The foot tapers in quickly from a slight triple cross-moulding.

The first two show no signs of having any early features such as rolled-under heads, extra ridges or punched dot decoration down the bow, stamps or eyes on the head-plates. Both should be standard uninscribed Aucissas. The Aucissa lies at the very end of a development which started with the Alesia sometime in the middle of the 1st century B.C. (Duval 1974). The end of the Aucissa itself comes when it develops through brooches like Brooch 11 to the Hod Hill. As the Hod Hill in all its manifestations had fully developed by the time of the conquest, the parent had patently passed out of manufacture and so those found in Roman contexts in this country should be survivors in use. The Hod Hill, apart from one element, can be shown to be passing out of use in the period 60-70, therefore, the terminal date of the Aucissa should be considered to be at least 10 to 15 years earlier. The actual transition to the Hod Hill, represented by Brooch 12, was very short and examples should perhaps have the same dating as the Aucissa proper.

Trumpet

- 13 COWBO 96, sf.1200, (837) The spring had been mounted in a pierced lug behind the head of the bow which is very narrow. On top is an unpierced tab. The trumpet head is minimal and most of it is straight-sided down to the knop. This has a triple cross-moulding in the middle separated from a single one top and bottom by a flute. The lower lug has a rounded front and a projecting foot.

A definite variety of the Trumpet found mainly in the South-West, hardly east of Wiltshire/Dorset and hardly north of the Avon in Warwickshire, there are obviously sub-groups, but these have yet to be fully distinguished. The chief features which define the general variety are the narrow head springing from a head-plate, generally slim lines, almost exclusive use of cross-mouldings for the knop and use of the single lug for holding the spring. Few are dated: Nettleton, 69-117 (Wedlake 1982, 127,

fig.53,54); Caerleon, 80-100 (Brewer 1986, 170, fig.54,3); Leicester, late 1st century (Clay and Pollard 1994, 145, fig.74,24); Alcester, Warks, Hadrianic-Antonine (Mackreth 1994b, 167, fig.79,57). These few indicate that they date to the general *floruit* if the Trumpet type at large.

Unclassified

- 14 COWBO 96, sf.98, (2) Only the lower bow survives. It is broad at the fracture, flat in front, and tapers down to a foot which is suspended below the catch-plate and is made up of two discs separated by a flute.

The writer has isolated three other catch-plates with the same style of foot-knob, but none has the upper bow, therefore the type is largely unidentified. All belong to the South-West and all may be related to a widespread and poorly dated group which all have the same basic lower bow and prominent base moulding, but none close to the present example (cf. Farwell and Molleson 1993, 87, fig.67,2; Hawkes 1947, 54, fig.9,12), unless one from Bristol is acceptable (Hattatt 1985, 96, fig.40,408). Precise dating is rare, considering the numbers known: Dorchester, late 1st into the 2nd century (Green 1981, fig.66); Camerton, 90-200 (Wedlake 1958, 225, fig.52,23); Chew, 2nd century (Rahtz and Greenfield 1977, fig.114,12).

Penannulars

All have circular-sectioned rings and straight pins, and all were forged.

- 15 DAMD 96, sf.12, (39) Each terminal is turned back along the ring and has a groove across each end and a wide with a deep flute between.
- 16 DAMD 96, sf.36, (288) Here the same style of terminal has five grooves across it.

In discussing the dating of these two brooches, only examples with the same characteristics have been chosen. These are, for Brooch 15, the deep flute between a groove across each end, and for Brooch 16, three or more equal value grooves. Brooch 15, before 60/65: Bagendon, 20/25 - 43/45 (Clifford 1961, 184, fig.36,10); Hod Hill, before 50 (Brailsford 1962, 13, fig.11,E17; Richmond 1968, 117-9); Longthorpe, Peterborough, c. 45-60/65 (Frere and St. Joseph 1974, 46, fig.24,13); Waddon Hill, Stoke Abbot, c.50-60 (Webster 1981, 62, fig.25,11); Prestatyn, 70s-160 (Mackreth 1989, 98, fig.40-27). Brooch 16, probably always before 60/65: Longthorpe, Peterborough, c. 45-60/65 (Frere and St. Joseph 1974, 46, fig.24,14), and Claudian-Neronian (Dannell and Wild 1987, 87, fig.21,12); Tewkesbury, 140-160 (Hannan 1993, 68-70, fig.19, 12).

- 17 LACEM 96, sf.2, (132) Each terminal consists of two close-set discs which, although very worn, still preserve evidence of having been knurled. The wrap-round of the pin has two grooves round it, stopped at the top of the pin by two more.

The dating recorded by the writer is: Cirencester, 49-70/5 (Wacher and McWhirr 1982, 92, fig.25,17); Leicester, 90-100 (Kenyon 1948, 252, fig.82,10); Bancroft, late 1st-late 2nd century (Mackreth 1994a, 302, fig.137,54); Baldock, 120-150 (Stead and Rigby 1986, 122, fig.49,157); Ravenglass, 200-350/70 (Potter 1979, 69, fig.26,11). The range runs from the latter part of the 1st century to the 3rd century, it is possible that any after 200/225 should be regarded as having been residual in its context.

Fragment

- 18 COWBO 96, sf.1581. (1268) The pin and half of a bilateral spring, very probably from a Colchester Derivative. If so, it would date to before 150/175 by which date the bulk of British bow brooches had ceased to made and used.

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APPENDIX 5: Metalwork

Part 1: Assessment of ironwork

By I. Scott

1 Background and Assessment Methodology

1.1 The project and sites

The Swindon-Gloucester road scheme required a variety of archaeological responses, ranging from watching brief to full excavation. A number of sites were revealed and recorded. Although some 23 sites produced ironwork, 17 sites produced 10 or less objects. Only 2 sites (Cowley, Birdlip Quarry and Latton, Street Farm) produced substantial quantities of material. The remaining sites produced small quantities. In addition to the material from specific sites ironwork was recovered during 3 watching briefs (CIRENWB; LATWB and NOSNIWB), and from sections of Ermin Street (ERMIN 96). The quantification is given in more detail in section 2.1 below and in the Appendices.

The sites uncovered were all on or near to the line of the Ermin Street, which was the main Roman road between Cirencester (*Corinium*) to the north and Mildenhall (*Cunetio*) and Silchester (*Calleva*) to the south and east. Many of the sites were contemporary with the Roman road and others with its later use.

1.2 Aims of the Assessment

The aims were twofold. Firstly, the finds assemblages from individual sites were assessed, and secondly the total assemblage from the road scheme was considered.

Site specific aims:

- (i) To establish the quantity and quality of the individual site assemblages and considered their group value.
- (ii) To identify the range of types present and, where possible, to date objects typologically.
- (iii) The stratigraphic context of the finds was not considered in detail at this stage.

General aims:

- (i) To identify any common traits identifiable between site assemblages.
- (ii) To identify individual groups or objects from the smaller sites which would be worthy of further analysis and publication and which would add to the value of the evidence viewed as a group.

1.3 Assessment Methodology

All finds were quantified, provisionally identified and listed on assessment sheets by context. No measurements were made, but objects were graded intuitively on a scale from 0 to 3, where 0 = poorly preserved/not worth drawing; 1 = possibly worth drawing; 2 = probably worth drawing depending on context/group value; 3 = definitely worth drawing. Where objects could be dated typologically this was also noted. The information was entered into a spread sheet, which can be expanded as required during further analysis. In the case of Cowley, Birdlip Quarry (COWBQ 96), because of the quantity of material, the nails and other iron objects were quantified separately. For all other sites the iron objects and nails was quantified together. Separate spread sheets were created for Cowley, Birdlip Quarry (COWBQ 96) nails and objects (see Appendices 1 and 2), for Latton, Street Farm (LATST 96) (see Appendix 3) and for the smaller sites (see Appendix 4).

Following the assessment of individual sites, a brief overall assessment of the collection from the road scheme was undertaken. Individual objects which in the context of the overall road scheme assemblage were worthy of further analysis and publication were identified.

2 Quantification

The quantification presented in the following tables lists all objects, regardless of their identification. It includes all unidentifiable scraps and possible pieces of slag. For a very small number of contexts and/or small finds numbers there is no quantification because the fragments were not counted. These can be identified in the Appendices. The tables serve to indicate the overall composition and scale of the site assemblages. The major groups are from COWBQ 96 and LATST 96. Smaller groups include DAMD 96, CIBFRD 96 and PRENC 96. The remaining assemblages are very small.

Site Code	Objects	Nails	Total no
COWBQ	285	1341	1626
COHH 96	2	5	7
DADL 96	3	0	3
DAFF 96	4	1	5
DRSWS 96	2	3	5
DAMD 96	15	44	59
DRDG 96	6	9	15
DAGQ 96	1	4	5

DAGWGH 96	0	1	1
BAGTF 96	0	2	2
BAULT 96	1	1	2
CIBFRD 96	26	89	115
CIRCL 96	3	1	4
PRNOF 96	0	4	4
PRWPL 96	2	4	6
PRENC 96	14	18	32
PRSAL 96	0	2	2
PRSTAS 96	2	0	2
PREM 96	5	0	5
LARP 96	5	5	10
LATST 96	96	172	268
LACFM 96	3	2	5
LAWBR 96	11	11	22
	486	1,719	2,205
ERMIN	6	6	12
CIREN WB	2	5	7
LAT WB	1	3	4
	9	14	23
TOTALS	495	1,733	2,228

3 Preservation

In general the preservation of the assemblage is reasonable. Most objects appear stable, with little evidence for lamination and spalling of flakes. Very little of the material is heavily encrusted in corrosion products. Identification of individual objects is not a problem.

4 Assessment by site

COWBQ A substantial group of Romano-British ironwork which can add materially to understanding of the site and therefore further analysis and publication of selected groups and items is

indicated. The spatial and context distribution of the substantial number of nails (in excess of 1300) should be undertaken.

COHH	Insufficient potential for further work. The quantification already undertaken is sufficient.
DADL	Insufficient potential for further work. The quantification already undertaken is sufficient.
DAFF	Insufficient potential for further work. The quantification already undertaken is sufficient.
DRSWS	Insufficient potential for further work. The quantification already undertaken is sufficient.
DAMD	A small group comprising mainly nails. Limited potential for further work: one or two objects worthy of publication, otherwise the quantification already undertaken is sufficient.
DRDG	Insufficient potential for further work. The quantification already undertaken is sufficient.
DAGQ	Insufficient potential for further work. The quantification already undertaken is sufficient.
DAGWH	Insufficient potential for further work. The quantification already undertaken is sufficient.
BAGTF	Insufficient potential for further work. The quantification already undertaken is sufficient.
BAULT	Insufficient potential for further work. The quantification already undertaken is sufficient.
CIBFRD	A small group comprising mainly nails. Limited potential for further work: one or two objects worthy of publication, otherwise the quantification already undertaken is sufficient.
PRNOF	Insufficient potential for further work. The quantification already undertaken is sufficient.
PRWPL	Insufficient potential for further work. The quantification already undertaken is sufficient.
PRENC	A small group comprising mainly nails. Limited potential for further work, and the quantification already undertaken is sufficient.

PRSAI	Insufficient potential for further work. The quantification already undertaken is sufficient.
PRSTAS	Insufficient potential for further work. The quantification already undertaken is sufficient.
PREM	Insufficient potential for further work. The quantification already undertaken is sufficient.
LARP	Insufficient potential for further work. The quantification already undertaken is sufficient.
LATST	A substantial group of post-medieval ironwork which can add materially to understanding of the site and therefore further analysis and publication of selected groups and items is indicated. The spatial and context distribution of the nails is not worthwhile.
LACFM	Insufficient potential for further work. The quantification already undertaken is sufficient.
LAWBR	Insufficient potential for further work. The quantification already undertaken is sufficient.
WBrifcs	Insufficient potential for further work. The quantification already undertaken is sufficient.

5 Assessment of the overall DBFO ironwork assemblage

One obvious common thread linking the various sites together is the widespread occurrence of horseshoes and horseshoe nails and the discovery of a number of hipposandals and fragments of hipposandals. This is scarcely to be wondered at given the location of the sites, but what is unusual is the comparative absence of evidence for bits and associated pieces, and the lack of cart fittings (with the exception of one linch pin). More might have been expected.

The smaller sites have produced a small number of objects which are worthy of publication and which together add to the value of the assemblage from the road scheme. They include objects from DADL, DAFF, DRDG, LACFM and LAWBR as well as the watching briefs and sections through Ermin Street. The latter produced a complete hipposandal.

6 Proposed work

- 1 Catalogue assemblages from COWBQ and LATST, including measurements, and enter data into enhanced database
- 2 Write discussion of COWBQ and LATST assemblages
- 3 Undertake spatial analysis of nails from COWBQ, by type (nail, horseshoe nail and hobnail)
- 4 Prepare catalogue entres for the individual objects from smaller assemblages.
- 5 Prepare drawing briefs
- 6 Write discussion of DBFO assemblage

7 Estimate of time required

Ironwork

Task	1	10 days, including data entry
	2	2 days, including library work
	3	2 days
	4	1 day
	5	1 day
	6	1 day
	Total	17 days

8 Appendices

- 1 Cowley, Birdlip Quarry ironwork (excl nails)
- 2 Cowley, Birdlip Quarry nails
- 3 Latton, Street Farm ironwork (incl nails)
- 4 Ironwork from small sites Incl nails)

Appendix 1: Ironwork (excl nails) from the Cowley, Birdlip Quarry site on the Swindon - Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	1	127	socket, open with extant nail		1		2	Fe 2
COWBQ 96	2	28	knife blade, tanged		1	triangular section blade	3	Fe 1
COWBQ 96	2	282	plate, fragt		1		0	Fe 2
COWBQ 96	2	282	strip		1		0	Fe 2
COWBQ 96	7	13	hinge straps		2		3	Fe 1
COWBQ 96	7	35	strip, curved bent		1		1	Fe 1
COWBQ 96	7	37	binding, narrow strip		1		1	Fe 1
COWBQ 96	7	39	teardrop shaped plate		1	uncertain ID	2	Fe 1
COWBQ 96	7	46	fitting or bracket		1		3	Fe 1
COWBQ 96	7	51	?hinge bracket		1		2	Fe 1
COWBQ 96	7	51	tapering spike		1		2	Fe 1
COWBQ 96	7	56	U-shaped staple		1		2	Fe 1
COWBQ 96	7	63	eye or lug		1		2	Fe 1
COWBQ 96	7	65	tanged ?knife blade		1		3	Fe 1
COWBQ 96	7	77	Dutch hoe, small, socketed		1		3	Fe 1
COWBQ 96	7	82	junction, or part of bit comprising looped bar		1		2	Fe 1
COWBQ 96	7	84	strip		1		0	Fe 1
COWBQ 96	7	87	nail or pin, circular section stem		1		2	Fe 1
COWBQ 96	7	106	binding, half round strip		1		2	Fe 2
COWBQ 96	7	112	strip, with eye at one end		1		2	Fe 2
COWBQ 96	7	117	strip, tapering		1		0	Fe 2
COWBQ 96	7	135	curved fragt		1	uncertain ID	0	Fe 2
COWBQ 96	7	137	trapezoidal fragt		1		0	Fe 2
COWBQ 96	7	137A	curved plate, fragt		1	uncertain ID	0	Fe 2
COWBQ 96	14	123	hipposandal wing	RB	1		3	Fe 2
COWBQ 96	14	126	ring attached by loop to sheet fragt		1	part of a vessel?	2	Fe 2
COWBQ 96	14	479	bar, tapering		1		0	Fe 3
COWBQ 96	14	494	bar, curved, tapering with rounded point				2	Fe 3
COWBQ 96	14	513	hinge strap, fragt with rolled-over loop		1		3	Fe 3
COWBQ 96	14	615	hooked rod, square-sectioned		1	?terminal for handle	2	Fe 4
COWBQ 96	14	677	clamp or large cleat		1	f.at rectangular back	3	Fe 4

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28/02/97

Appendix 1: Ironwork (excl nails) from the Cowley, Birdlip Quarry site on the Swindon - Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	14	678	clamp or large cleat		1	flat rectangular back	3	Fe 4
COWBQ 96	15	47	?binding, curved strip		1		1	Fe 1
COWBQ 96	18	142	sheet/strip frags		3		0	Fe 2
COWBQ 96	19	171	loop formed from thick wire or rod		1		3	Fe 2
COWBQ 96	29	909	no ID		1	fragt	0	Fe 5
COWBQ 96	29	913	plate/strip fragt with nail/rivet		1		1	Fe 5
COWBQ 96	29	930	strip/sheet fragt, v small		1		0	Fe 5
COWBQ 96	29	936	sheet fragt, v small		1		0	Fe 5
COWBQ 96	29	939	no ID		1	v small fragt	0	Fe 5
COWBQ 96	29	940	boot cleat		1		2	Fe 5
COWBQ 96	29	941	plate frags		4		0	Fe 5
COWBQ 96	29	950	no ID		1	fragt, v small	0	Fe 5
COWBQ 96	29	951	no ID		1	fragt, v small	0	Fe 5
COWBQ 96	29	952	bar fragt, v small		1		0	Fe 5
COWBQ 96	29	957	bar fragt, small		1		0	Fe 5
COWBQ 96	31	157	strip, tapering		1		0	Fe 2
COWBQ 96	31	180	bar fragt, strongly curved		1		1	Fe 2
COWBQ 96	31	187	small fragt		1		0	Fe 2
COWBQ 96	31	194	wire, ?pin or needle		1		1	Fe 2
COWBQ 96	31	199	sheet fragt, small		1		0	Fe 2
COWBQ 96	31	258	socketed ?blade		1	little of blade extant	2	Fe 2
COWBQ 96	31	264	plate/strip, pierced		1		2	Fe 2
COWBQ 96	31	283	rod/bar, square-sectioned		1		0	Fe 2
COWBQ 96	31	291	frags				0	Fe 2
COWBQ 96	32	155	?blade, with square pierced lug or tang		1		3	Fe 2
COWBQ 96	33	209	bar, tapering		1		0	Fe 2
COWBQ 96	33	214	hipposandal wing	RB	1		3	Fe 2
COWBQ 96	33	215	square washer		1		2	Fe 2
COWBQ 96	33	484	strip, narrow, tapering		1		0	Fe 3
COWBQ 96	33	485	wire or rod, tapering		1		0	Fe 3
COWBQ 96	34	341	blade fragt, tanged		1	incomplete	2	Fe 3

Appendix 1: Ironwork (excl nails) from the Cowley, Birdlip Quarry site on the Swindon - Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	34	342	amorphous lump		1		0 Fe 3	
COWBQ 96	34	352	hook, formed from square-section rod/bar		1		3 Fe 3	
COWBQ 96	34	357	plate fragt		1		0 Fe 3	
COWBQ 96	34	364	bar, square-section, small curved fragt		1		0 Fe 3	
COWBQ 96	34	366	gouge, hollow, half round-section		1	handle or tang missing	3 Fe 3	
COWBQ 96	34	382	bar, tapering, bent		1		0 Fe 3	
COWBQ 96	34	383	amorphous lump		1	?slag	0 Fe 3	
COWBQ 96	34	385	amorphous lump		1	?slag	0 Fe 3	
COWBQ 96	34	387	bar/strip, bent into a tight loop		1		2 Fe 3	
COWBQ 96	34	392	amorphous lump		1	?slag	0 Fe 3	
COWBQ 96	34	400	rod/bar, circular-sectioned, strongly curved		1		0 Fe 3	
COWBQ 96	34	408	no ID		1	fragt	0 Fe 3	
COWBQ 96	34	408	ring, fragt		1		0 Fe 3	
COWBQ 96	34	408	strips		2		0 Fe 3	
COWBQ 96	34	417	looped spike		1		2 Fe 3	
COWBQ 96	34	421	lump, small, dense		1		0 Fe 3	
COWBQ 96	34	449	lump, small		1		0 Fe 3	
COWBQ 96	34	480	ox-goad, small		1		3 Fe 3	
COWBQ 96	34	1505	strip, strongly curved and of curved cross-section, one end rolled over into a loop		1		3 Fe 22	
COWBQ 96	40	161	stylus, fragt	RB	1	probably decorated	3 Fe 2	
COWBQ 96	41	163	tapering bar with pierced expansion		1		3 Fe 2	
COWBQ 96	41	204	ring, or collar of sub-rectangular section		1		1 Fe 2	
COWBQ 96	51	186	narrow strip, small fragt		1		0 Fe 2	
COWBQ 96	53	220	strip, bent into a loop		1		2 Fe 2	
COWBQ 96	72	569	?nail head, sub-round, possible scar of stem		1		0 Fe 3	
COWBQ 96	72	606	strip formed into a loop		1		2 Fe 4	
COWBQ 96	72	674	chain-link, oval		1		2 Fe 4	
COWBQ 96	72	674	fragts		5		0 Fe 4	
COWBQ 96	84	230	strip, curved and pierced for a nail		1		2 Fe 2	
COWBQ 96	84	231	V-shaped object, large		1	possibly a hook	3 Fe 2	

Appendix 1: Ironwork (excl nails) from the Cowley, Birdlip Quarry site on the Swindon - Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	86	247	strip, no nail holes		1		0	Fe 2
COWBQ 96	86	252	strip, no nail holes		1		0	Fe 2
COWBQ 96	86	271	plate fragt, pierced by 1 nail hole		1	washer?	1	Fe 2
COWBQ 96	90	248	boot cleat		1	well-preserved	2	Fe 2
COWBQ 96	90	262	linch pin, spatulate head & rolled-over loop		1		3	Fe 2
COWBQ 96	90	313	amorphous lump		1	?slag	0	Fe 3
COWBQ 96	90	439	?hook springing from plate fragt		1		2	Fe 3
COWBQ 96	102	344	disc, thick, sub-round with ?lead on one side		1	?nail head	0	Fe 3
COWBQ 96	108	299	L-shaped staple or nail		1		1	Fe 2
COWBQ 96	113	81	rod		1		0	Fe 1
COWBQ 96	118	305	blade or tool, tanged		1	the blade is strongly angled in relation to the tang	2	Fe 3
COWBQ 96	128	466	?ox-gcad		1		2	Fe 3
COWBQ 96	128	466	no ID		?	fragts, small	0	Fe 3
COWBQ 96	128	555	swivel ring attached to holdfast		1		3	Fe 3
COWBQ 96	128	558	curd sheet, possible vessel fragts		?		2	Fe 3
COWBQ 96	128	623	strip, curved		1		0	Fe 4
COWBQ 96	128	663	cleat		1		2	Fe 4
COWBQ 96	128	672	amorphous lump		1		0	Fe 4
COWBQ 96	128	675	rod/bar		1		0	Fe 4
COWBQ 96	128	695	strip, curved		1	part of collar?	0	Fe 4
COWBQ 96	128	702	strip, thin		1		0	Fe 4
COWBQ 96	128	706	?cleat		1		2	Fe 4
COWBQ 96	128	730	strip		3		0	Fe 4
COWBQ 96	136	359	ring, circular-sectioned, large		1		1	Fe 3
COWBQ 96	136	379	boot cleat		1		2	Fe 3
COWBQ 96	140	538	strip		1		0	Fe 3
COWBQ 96	142	1289	no ID		1	fragt, small	0	Fe 6
COWBQ 96	181	415	rod bent to form a hook or loop		1		2	Fe 3
COWBQ 96	181	535	V- or Y-shaped fragt with lead ?wire wrapped around		1	uncertain ID	2	Fe 3
COWBQ 96	182	970	bar, square section, bent into loop		1		1	Fe 5

Appendix 1: Ironwork (excl nails) from the Cowley, Birdlip Quarry site on the Swindon - Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	188	571	washer, square		1			2 Fe 3
COWBQ 96	188	988	strip fragt		1			0 Fe 5
COWBQ 96	206	640	?cleat		1	uncertain ID		1 Fe 4
COWBQ 96	220	673	strip, curved		1	small collar?		0 Fe 4
COWBQ 96	227	778	wire		1			0 Fe 4
COWBQ 96	231	818	no ID		1	fragt, small		0 Fe 5
COWBQ 96	234	693	U-shaped hook of flat cross-section		1	uncertain ID		2 Fe 4
COWBQ 96	234	738	amorphous lumps, v small		2			0 Fe 4
COWBQ 96	246	707	bucket handle fragt.	RB	1	rectangular section with U-section grip		3 Fe 4
COWBQ 96	246	731	no ID		1	fragt, v small		0 Fe 4
COWBQ 96	253	739	strip, curved section		1			0 Fe 4
COWBQ 96	253	754	plate fragt		1	no original edges		0 Fe 4
COWBQ 96	260	745	no ID		1	fragt		0 Fe 4
COWBQ 96	260	751	plate or sheet fragt		1			0 Fe 4
COWBQ 96	262	771	bar/wire fragt		1			0 Fe 4
COWBQ 96	270	758	strip/plate fragts					0 Fe 4
COWBQ 96	270	805	ox-goad		1			3 Fe 5
COWBQ 96	270		?hinge, rolled over loop		1			2 Fe 1
COWBQ 96	272	757	hipposandal front loop	RB	1			3 Fe 4
COWBQ 96	272	793	bar, tapering, bent at one end		1			0 Fe 4
COWBQ 96	272	926	triangular block, dense		1	uncertain ID		2 Fe 5
COWBQ 96	276	467	length of wire formed into a loop at one end and an eye at the other		1			3 Fe 3
COWBQ 96	206	910	U-shaped staple		1			2 Fe 15
COWBQ 96	276	481	leaf- or diamond-shaped terminal, small		1			2 Fe 4
COWBQ 96	276	962	looped fragt, ? lynch pin head?		1			3 Fe 5
COWBQ 96	278	765	strip/plate fragt		1			0 Fe 4
COWBQ 96	291	916	boot cleats		13			2 Fe 5
COWBQ 96	296	775	strip with large nail hole		1			1 Fe 4
COWBQ 96	296	790	sheet fragt		1			0 Fe 4
COWBQ 96	329	801	strip fragt		1			0 Fe 5

Appendix 1: Ironwork (excl nails) from the Cowley, Birdlip Quarry site on the Swindon - Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	329	845	bar fragt		1		0	Fe 5
COWBQ 96	333	819	bar, twisted or bent		1		1	Fe 5
COWBQ 96	335	823	wire fragt		1		0	Fe 5
COWBQ 96	347	824	no ID		1	fragt, small	0	Fe 5
COWBQ 96	347	828	no ID			frags	0	Fe 5
COWBQ 96	349	820	pieces of strip, curved, no nail holes; barrel or bucket hoops, or felloes?				2	Fe 7
COWBQ 96	349	830	small pieces of strip, curved, no nail holes; barrel or bucket hoops, or felloes?				2	Fe 7
COWBQ 96	372	833	cleat or collar		1		2	Fe 5
COWBQ 96	377	842	boot cleat		1		2	Fe 5
COWBQ 96	378	834	no ID			frags v small	0	Fe 5
COWBQ 96	383	670	binding, of thin rectangular section, at least 2 nail holes		1		2	Fe 4
COWBQ 96	386	894	plate fragt		1		0	Fe 5
COWBQ 96	392	843	ring, circular section		1		1	Fe 5
COWBQ 96	392	847	plate, triangular, narrow point bent over		1	?hipposandal wing	2	Fe 5
COWBQ 96	395	870	plate/strip fragt, nail hole or notch		1		2	Fe 5
COWBQ 96	421	859	boot cleats		2		2	Fe 5
COWBQ 96	421	866	boot cleat		1		2	Fe 5
COWBQ 96	421	873	boot cleats		2		2	Fe 5
COWBQ 96	431	868	handle mount, plate with well-formed eye		1	remains of nail hole visible	3	Fe 5
COWBQ 96	431	869	plate/strip frags		3		0	Fe 5
COWBQ 96	431	881	diamond-shaped plate with ?tang at one corner; slight lip at one end of plate		1		2	Fe 5
COWBQ 96	507	918	strip fragt, no nail holes		1		0	Fe 5
COWBQ 96	507	919	plate fragt, small		1		0	Fe 5
COWBQ 96	704	1131	no ID		3	frags, v small	0	Fe 6
COWBQ 96	704	1186	no ID			frags, v v small	0	Fe 6
COWBQ 96	704	1206	rod, circular section, slightly tapered		1	strongly curved	0	Fe 6
COWBQ 96	704	1228	no ID		1	fragt, v small	0	Fe 6
COWBQ 96	716	1002	strip/collar frags, small		2		0	Fe 5

Appendix 1: Ironwork (excl nails) from the Cowley, Birdlip Quarry site on the Swindon - Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	717	1066	no ID		1	fragt, small	0	Fe 5
COWBQ 96	726	1036	wire fragt, small		1		0	Fe 5
COWBQ 96	729	1270	bar/rod rolled over to form loop at one end		1		2	Fe 6
COWBQ 96	729	1359	plate fragt		1		0	Fe 21
COWBQ 96	732	1350	plate fragt with possible nail hole		1		1	Fe 21
COWBQ 96	732	1351	plate fragt, no original edges, with possible nail hole		1		1	Fe 21
COWBQ 96	736	1007	wire fragts, small		2		0	Fe 5
COWBQ 96	736	1016	rod/bar fragt, v small		1		0	Fe 5
COWBQ 96	736	1017	no ID		1	minute fragt	0	Fe 5
COWBQ 96	736	1060	rod/bar fragt		1		0	Fe 5
COWBQ 96	736	1101	sheet/plate fragt, v small		1		0	Fe 6
COWBQ 96	736	1118	wire, curved		1		0	Fe 6
COWBQ 96	745	1040	spud or chisel		1		3	Fe 5
COWBQ 96	745	1144	?ox-goad or spiral collar		1		3	Fe 6
COWBQ 96	746	1026	boot cleat		1		2	Fe 5
COWBQ 96	759	1202	D-shaped buckle with extant pin		1		3	Fe 6
COWBQ 96	760	1217	loop-fastening formed from strip		1		2	Fe 6
COWBQ 96	768	1070	spiral socket or collar, formed from narrow strip		1		2	Fe 5
COWBQ 96	768	1106	bar/block, dense		1		2	Fe 6
COWBQ 96	774	1483	thin strip or wire, oval section		1		0	Fe 21
COWBQ 96	778	1063	boot cleat		1		2	Fe 5
COWBQ 96	780	1030	no ID			crumbs!	0	Fe 5
COWBQ 96	780	1055	bar, square section		1		1	Fe 5
COWBQ 96	780	1057	boot cleat		1		2	Fe 5
COWBQ 96	781	1132	plate fragt pierced by circular hole, with rolled edge		1		2	Fe 6
COWBQ 96	789	1272	strip, curved		1		1	Fe 6
COWBQ 96	798	1081	plate fragt		1		0	Fe 5
COWBQ 96	806	1236	?spike, formed from tapering bar		1		2	Fe 6
COWBQ 96	806	1236	bar, small curved		1		0	Fe 6
COWBQ 96	819	1141	strip, narrow, slightly curved		1		0	Fe 6
COWBQ 96	825	1209	lunate-shaped plate, v small, possibly a seg		1		2	Fe 6

Appendix 1: Ironwork (excl nails) from the Cowley, Birdlip Quarry site on the Swindon - Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	829	1179	wire/rod		1		0	Fe 6
COWBQ 96	835	1479	?wire		1		0	Fe 21
COWBQ 96	835	1479	no ID		1	fragt	0	Fe 21
COWBQ 96	837	1196	strip fragt		1		0	Fe 6
COWBQ 96	840	1316	collar or ring formed from thin strip		1		2	Fe 21
COWBQ 96	840	1390	ring, circular section		1		1	Fe 21
COWBQ 96	840	1396	ring of circular cross-section		1		2	Fe 21
COWBQ 96	841	1235	wire/nail fragt		1		0	Fe 6
COWBQ 96	848	1245	ring, fragmentary, circular section		1		1	Fe 6
COWBQ 96	848	1252	no ID		2	frags, v small	0	Fe 6
COWBQ 96	848	1259	amorphous lump		1		0	Fe 6
COWBQ 96	848	1302	plate/sheet fragt, v small		1		0	Fe 21
COWBQ 96	849	1300	plate fragt, triangular, ?not original edges		1		0	Fe 21
COWBQ 96	849	1318	strip frags, 1 with nail hole, ?hinge strap frags		3		1	Fe 21
COWBQ 96	849	1319	strip, tapering, with possible cross-piece		1		2	Fe 21
COWBQ 96	849	1321	amorphous lump		1	?slag	0	Fe 21
COWBQ 96	849	1349	no ID		2	frags, v small	0	Fe 21
COWBQ 96	849	1393	no ID		3	frags, v small	0	Fe 21
COWBQ 96	849	1404	no ID		1	fragt, v small	0	Fe 21
COWBQ 96	849	1404	wire, v small fragt		1		0	Fe 21
COWBQ 96	860	1360	bar, rectangular section, very dense		1		2	Fe 21
COWBQ 96	861	1266	rod/bar, curved		1		0	Fe 6
COWBQ 96	872	1287	no ID			frags	0	Fe 6
COWBQ 96	875	1255	wire		1		0	Fe 6
COWBQ 96	880	1299	block, dense; signs of cutting?		1		2	Fe 6
COWBQ 96	880	1377	strip frags, folded over				2	Fe 21
COWBQ 96	880	1400	brooch pin	RB	1		3	Fe 21
COWBQ 96	892	1332	wire/nail fragt, v small		1		0	Fe 21
COWBQ 96	892	1434	?wire fragt, v small		1		0	Fe 21
COWBQ 96	901	1339	plate/sheet fragt, rectangular		1		0	Fe 21
COWBQ 96	903	1456	strip fragt		1		0	Fe 21

Appendix 1: Ironwork (excl nails) from the Cowley, Birdlip Quarry site on the Swindon - Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	903	1480	no ID		2	frags	0	Fe 21
COWBQ 96	915	1471	wire/nail fragt		1		0	Fe 21
COWBQ 96	922	1406	wire/nail fragt, v small		1		0	Fe 21
COWBQ 96	925	1484	bar/strip fragt, curved		1		0	Fe 21
COWBQ 96	939	1481	?tanged blade, may be a chisel		1		3	Fe 21
COWBQ 96	993	1448	reaping hook, socketed		1		3	Fe 21
COWBQ 96	993	1459	T-shaped bracket formed from strip		1		3	Fe 21
COWBQ 96	1011	1427	no ID		1	small fragt	0	Fe 21
COWBQ 96	1020	1432	strip fragts, curved; ?collar				1	Fe 21
COWBQ 96	1060	1474	no ID		1	v small fragt	0	Fe 21
COWBQ 96	1060	1483	no ID		1	small fragt	0	Fe 21
COWBQ 96	1121	1515	amorphous lump		1		0	Fe 6
COWBQ 96	1139	1499	plate fragt		1		0	Fe 21
COWBQ 96	1146	1506	rod fragt		1		0	Fe 22
COWBQ 96	u/s	822	?binding, strip with pierced ?expansion		1		2	Fe 6
COWBQ 96	u/s	1363	?tool/?weapon, socketed; blade of ?double convex cross-section		1		2	Fe 21
				Total	285			

Appendix 3: Ironwork (incl nails) from the Latton Street Farm site on the Swindon-Gloucester DBFO Road Scheme

Site Code	Trench	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
LATST 96		17		nail stem		1		0	
LATST 96		118	5	key, lever lock		1		2	Fe 3
LATST 96		119		strip, thin slightly tapered and curved		1		0	Fe 3
LATST 96		173		knife blade fragt, pointed, of triangular section		1		2	Fe 3
LATST 96		173		nails		3		0	
LATST 96		190		nail or small chisel/scrapper, rectangular section and flattened oval head		1		3	Fe 3
LATST 96		190		nails		4		0	
LATST 96		191		bar fragt, tapering		1		0	Fe 3
LATST 96		195		bar/?nail, tapering, rectangular section		1		1	Fe 3
LATST 96		195		nails		3		0	
LATST 96		197		strip, no extant nail holes		1		0	Fe 3
LATST 96		198		strip, no nail holes		1		0	Fe 3
LATST 96		198		nail		1		0	
LATST 96		199		sheet/plate fragt, small		1		0	Fe 3
LATST 96		199		nail stem		1		0	
LATST 96		209		?nail		1		0	
LATST 96		214	21	kettle handle and upper portion of body	Mod	1		3	Fe 6
LATST 96		225		reinforcing plate for a corner, approx L-shaped with 3 complete and 1 part nail hole		1		3	Fe 3
LATST 96		225		nail, large		1		0	
LATST 96		225		nail, v large/pin		1		1	
LATST 96		225		no ID		1	object	0	
LATST 96		227		nails,		17		0	
LATST 96		227		fragts, incl wire		3		0	
LATST 96		229		nails		5		0	
LATST 96		232	2	?saw blade, taper sheet/plate, with some evidence for teeth		1		3	Fe 6
LATST 96		232		nails		2		0	
LATST 96		258		amorphous lump		1	?slag	0	Fe 3
LATST 96		258		nails		4		0	
LATST 96		262		knife handle with bone plates, from a folding knife, or penknife	PM	1		3	Fe 3
LATST 96		262		barb-spring padlock bolt, with 3 extant leaf springs		1		3	Fe 3

Appendix 2: Nails from the Birdlip Quarry site, Swindon-Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	2	369	nail		1		0	Fe 10
COWBQ 96	2	367; 368	hobnails		2		0	Fe 10
COWBQ 96	31	304; 311; 312; 314; 316; 320; 322; 327	nails (incl 2 hobnails)		8		0	Fe 10
COWBQ 96	34	323; 331; 334; 335; 338; 347; 348; 349; 350; 354; 355; 358; 360; 361; 365; 371; 372; 373; 374; 376; 377; 380; 381; 384; 386; 388; 389; 390; 393; 394; 399	nails (incl 2 hobnails)		32		0	Fe 10
COWBQ 96	71	309	nail		1		0	Fe 10
COWBQ 96	86	310	hobnail		1		1	Fe 10
COWBQ 96	90	306; 318	nail; ?hobnail		2		0	Fe 10
COWBQ 96	91	308	nail		1		0	Fe 10
COWBQ 96	104	301; 302	hobnails		2		0	Fe 10
COWBQ 96	106	329	nail		1		0	Fe 10
COWBQ 96	108	300	nail fragt		1		0	Fe 10
COWBQ 96	114	303	nail		1		0	Fe 10
COWBQ 96	128	324; 326	nails		2		0	Fe 10
COWBQ 96	131	356	nail		1	stem only	0	Fe 10
COWBQ 96	136	362; 378	hobnails		2		0	Fe 10
COWBQ 96	142	340	nail		1		0	Fe 10
COWBQ 96	163	387	nail		1		0	Fe 10
COWBQ 96	181	391; 396; 398	nails		3		0	Fe 10
COWBQ 96	14	491	nail		1		0	Fe 11
COWBQ 96	33	482; 483; 486; 487; 488; 489; 490	nails		7		0	Fe 11
COWBQ 96	34	405; 406; 409; 410; 416; 418; 419; 420; 422; 440; 441; 443; 451; 456; 457; 459; 465; 470; 493	nails		19		0	Fe 11
COWBQ 96	34	411; 412; 423; 428; 434; 435; 437; 442; 471; 475; 476	hobnails		12		0	Fe 11

Appendix 2: Nails from the Birdlip Quarry site, Swindon-Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	52	474	nail		1		0	Fe 11
COWBQ 96	128	433; 444; 445; 446; 447; 472; 473; 495	nails (incl 1 hobnail)		8		0	Fe 11
COWBQ 96	139	454	nail		1		0	Fe 11
COWBQ 96	179	419; 438	nails		2		0	Fe 11
COWBQ 96	181	401; 402; 403; 404	nails/nail frags		4		0	Fe 11
COWBQ 96	182	425	nail		1		0	Fe 11
COWBQ 96	182	429	hobnails		7		0	Fe 11
COWBQ 96	189	450	hobnails		12		0	Fe 11
COWBQ 96	190	460; 461; 462; 463; 498; 499	nails		6		0	Fe 11
COWBQ 96	276	477; 478	nails		2		0	Fe 11
COWBQ 96	2	282	nails		4		0	Fe 2
COWBQ 96	31	189	hobnail		1		1	Fe 2
COWBQ 96	31	191	hobnail		1		1	Fe 2
COWBQ 96	31	190	?hobnail, corroded		1		0	Fe 2
COWBQ 96	840	1316	nail and nail fragt		2		0	Fe 21
COWBQ 96	849	1325	nail		1		0	Fe 21
COWBQ 96	915	1405	nail		1		0	Fe 21
COWBQ 96	922	1406	hobnail		1		1	Fe 21
COWBQ 96	994	1420	nail		1		0	Fe 21
COWBQ 96	1121	1497	tack with large flat head		1		2	Fe 21
COWBQ 96	34	413	hobnail		1		1	Fe 3
COWBQ 96	128	570	nail		1		0	Fe 3
COWBQ 96	260	799	hobnail		1		1	Fe 4
COWBQ 96	29	907; 908; 911	nail; nail head; nail fragt		1		0	Fe 5
COWBQ 96	29	938	?hobnail		1		1	Fe 5
COWBQ 96	278	901; 906	?nail stem; nail fragt		2		0	Fe 5
COWBQ 96	307	896	nail fragt		2		0	Fe 5
COWBQ 96	307	897	nail fragt		1		0	Fe 5

Appendix 2: Nails from the Birdlip Quarry site, Swindon-Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	343	811	nail fragt		1		0	Fe 5
COWBQ 96	347	828	?nails		3		0	Fe 5
COWBQ 96	372	832	nail, small		1		1	Fe 5
COWBQ 96	735	1091	?hobnail head		1	ID uncertain	0	Fe 5
COWBQ 96	778	1073	nail		1		1	Fe 5
COWBQ 96	798	1072	?nail		1		0	Fe 5
COWBQ 96	140	1159	?nail head		1		0	Fe 6
COWBQ 96	875	1250	?nail frags		?		0	Fe 6
COWBQ 96	6	131	nail		1		0	Fe 8
COWBQ 96	7	45; 64; 68; 69; 71; 74; 85; 107; 108; 109; 136; 151	nails		12		0	Fe 8
COWBQ 96	14	120; 121; 122	nail		3		0	Fe 8
COWBQ 96	18	192	nail		1		0	Fe 8
COWBQ 96	19	173	nail		1		0	Fe 8
COWBQ 96	31	158; 177; 178; 179; 181; 182; 183; 184; 185; 193	nails		10		0	Fe 8
COWBQ 96	32	174; 175; 195; 197	nail		4		0	Fe 8
COWBQ 96	68	172	nail		1		0	Fe 8
COWBQ 96	18	202; 203; 216; 217; 218; 219; 223; 226	nails		8		0	Fe 9
COWBQ 96	31	228; 229; 233; 234; 235; 236; 239; 241; 242; 243; 244; 246; 249; 250; 251; 259; 265; 268; 286; 289; 293; 294; 295	nails		31			Fe 9
COWBQ 96	32	222	nail		1		0	Fe 9
COWBQ 96	41	207	nail		1		0	Fe 9
COWBQ 96	47	206	nail		1		0	Fe 9
COWBQ 96	53	213	nail		1		0	Fe 9
COWBQ 96	73	208	?nails		2		0	Fe 9
COWBQ 96	78	211	nail		1		0	Fe 9
COWBQ 96	86	288; 297; 298	nails & hobnails		3		0	Fe 9

Appendix 2: Nails from the Birdlip Quarry site, Swindon-Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	90	253; 277	nails		2		0	Fe 9
COWBQ 96	91	255; 356	nails		2		0	Fe 9
COWBQ 96	14	507; 510	nails		2		0	Fe 12
COWBQ 96	34	595; 596	nails		2		0	Fe 12
COWBQ 96	36	599	nail		1		0	Fe 12
COWBQ 96	81	502; 503; 504; 514; 515; 516; 517; 518; 519; 520; 521; 522; 523	nails (incl 1 hobnail)		13		0	Fe 12
COWBQ 96	114	592; 593	nails		2		0	Fe 12
COWBQ 96	128	509; 524; 524; 527; 528; 529; 530; 565; 567; 568; 594; 597	nails (incl 2 hobnails)		11		0	Fe 12
COWBQ 96	140	532; 533; 537; 557; 563; 573	nails (incl 1 hobnail)		6		0	Fe 12
COWBQ 96	181	534	nail		1		0	Fe 12
COWBQ 96	188	556; 561; 566; 591	nails		4		0	Fe 12
COWBQ 96	188	508; 540-554; 572 [check]	hobnails		17		0	Fe 12
COWBQ 96	190	500; 501; 575-590	nails		18		0	Fe 12
COWBQ 96	190	562	hobnails		1		0	Fe 12
COWBQ 96	197	511; 525	nails		2		0	Fe 12
COWBQ 96	198	559; 560	nails		2	559, large	0	Fe 12
COWBQ 96	276	505	nail		1		0	Fe 12
COWBQ 96	14	631; 659; 692	nails		3		0	Fe 13
COWBQ 96	34	601; 602	nail; hobnail		2		0	Fe 13
COWBQ 96	36	600	nail		1		0	Fe 13
COWBQ 96	72	603; 604; 605; 618; 619; 636; 641; 642; 683; 686	nails		10		0	Fe 13
COWBQ 96	128	607-612; 614; 617; 622; 627; 637; 643-5; 656; 658; 665-6; 671; 681-2; 685; 687; 689-90; 696	nails		26		0	Fe 13
COWBQ 96	128	628; 639; 657; 684; 697-8	hobnails		6		0	Fe 13
COWBQ 96	136	621	nail		1		0	Fe 13

Appendix 2: Nails from the Birdlip Quarry site, Swindon-Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	206	632; 633	nails		2		0	Fe 13
COWBQ 96	210	638	nail or small T-staple		1		0	Fe 13
COWBQ 96	220	661; 669	nail frags		2		0	Fe 13
COWBQ 96	227	679	nail		1		0	Fe 13
COWBQ 96	234	694	nail fragt		1		0	Fe 13
COWBQ 96	246	699	nail		1		0	Fe 13
COWBQ 96	14	727; 733	nail frags		2		0	Fe 14
COWBQ 96	128	700; 703; 705; 711; 713; 722-4; 726; 734; 748	nails and frags		11	726 may not be a nail	0	Fe 14
COWBQ 96	128	701; 704; 717-19; 721	hobnails		6		0	Fe 14
COWBQ 96	173	776	hobnails (incl 1 nail)		6		0	Fe 14
COWBQ 96	227	720; 777; 779; 782-83; 787-88; 798	nails		8		0	Fe 14
COWBQ 96	230	729	nail fragt		1		0	Fe 14
COWBQ 96	234	728; 732; 737; 750	nails (incl 1 hobnail)		4		0	Fe 14
COWBQ 96	248	708-10	nails (incl 1 hobnail)		3		0	Fe 14
COWBQ 96	250	716	hobnail		1		0	Fe 14
COWBQ 96	252	725; 736; 742; 747	nails (incl 1 thumb tack and 1 hobnail)		4		0	Fe 14
COWBQ 96	253	752	nail		1		0	Fe 14
COWBQ 96	260	764; 784-85	nails and frags		3		0	Fe 14
COWBQ 96	261	744; 753	nails		2		0	Fe 14
COWBQ 96	278	773; 780-81; 791; 796-97	nails (incl 1 horseshoe nail and 2 hobnails)		6		0	Fe 14
COWBQ 96	280	789	nail		1		0	Fe 14
COWBQ 96	296	763	nails		2		0	Fe 14
COWBQ 96	306	786	nail fragt		1		0	Fe 14
COWBQ 96	u/s	755	nail fragt		1		0	Fe 14
COWBQ 96	u/s	756	nail		1		0	Fe 14
COWBQ 96	2	933	nail fragt		1		0	Fe 15
COWBQ 96	7	998	hobnails		2		0	Fe 15

Appendix 2: Nails from the Birdlip Quarry site, Swindon-Gloucestter DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	14	884; 917	nails		2		0	Fe 15
COWBQ 96	29	905; 912; 914; 928; 931; 937; 947 49	nails (incl horseshoe nails and 1 thumbtack)		9		0	Fe 15
COWBQ 96	29	925; 929	hobnails		2		0	Fe 15
COWBQ 96	30	838-39	nails		2		0	Fe 15
COWBQ 96	35	971	nail fragt		1		0	Fe 15
COWBQ 96	35	981; 991	hobnails		4		0	Fe 15
COWBQ 96	58	802	nail		1		0	Fe 15
COWBQ 96	120	961	thumb tack		1		0	Fe 15
COWBQ 96	122	986	nail		1		0	Fe 15
COWBQ 96	128	923	nail		1		0	Fe 15
COWBQ 96	140	974	hobnail		1		0	Fe 15
COWBQ 96	188	982; 984	hobnails (incl 1 nail)		23		0	Fe 15
COWBQ 96	206	827	nail		1		0	Fe 15
COWBQ 96	227	804; 809; 892	nails		4		0	Fe 15
COWBQ 96	231	817	hobnail		1		0	Fe 15
COWBQ 96	251	854-56; 861; 875; 877-78; 886	nails		8		0	Fe 15
COWBQ 96	270	813; 825; 968	nails		3		0	Fe 15
COWBQ 96	272	898	nail		1		0	Fe 15
COWBQ 96	276	841; 963	nails		2		0	Fe 15
COWBQ 96	278	800; 806; 826; 902-03	nails and frags		5		0	Fe 15
COWBQ 96	294	848	nail		1	well-preserved/ complete	0	Fe 15
COWBQ 96	302	871	nail head		1		0	Fe 15
COWBQ 96	329	895	?thumb tack		1		0	Fe 15
COWBQ 96	333	862; 867	nails		2		0	Fe 15
COWBQ 96	335	803	nail		1		0	Fe 15
COWBQ 96	345	812	hobnail		1		0	Fe 15
COWBQ 96	346	966	nail		1		0	Fe 15
COWBQ 96	351	807; 808	nails		2		0	Fe 15
COWBQ 96	370	851; 922	nails		2		0	Fe 15

Appendix 2: Nails from the Birdlip Quarry site, Swindon-Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	400	846	hobnails		4		0	Fe 15
COWBQ 96	405	849	nail		1		0	Fe 15
COWBQ 96	413	852	nail		1		0	Fe 15
COWBQ 96	415	900	nail, large		1	complete	0	Fe 15
COWBQ 96	415	887	nail		1		0	Fe 15
COWBQ 96	392	844	nail		1		0	Fe 15
COWBQ 96	421	865- ; 882; 885 [check]	hobnails (incl 3 nails)		21		0	Fe 15
COWBQ 96	457	890	?nail		1		0	Fe 15
COWBQ 96	457	891	hobnail		1		0	Fe 15
COWBQ 96	469	944; 956	nails		2		0	Fe 15
COWBQ 96	505	920; 924	hobnails		64		0	Fe 15
COWBQ 96	525	945	hobnail		1		0	Fe 15
COWBQ 96	566	942; 946	nails		2		0	Fe 15
COWBQ 96	572	958	hobnails		10		0	Fe 15
COWBQ 96	606	959	nail		1		0	Fe 15
COWBQ 96	704	972; 975; 977-80; 985	nails (incl 4 hobnails)		7		0	Fe 15
COWBQ 96	706	997	hobnail		1		0	Fe 15
COWBQ 96	712	989-90; 999	nails and frags		3		0	Fe 15
COWBQ 96	716	992-995	hobnails (incl 2 nails)		9		0	Fe 15
COWBQ 96	719	983	nail		1		0	Fe 15
COWBQ 96	54	1031; 1033; 1034	hobnails (incl 1 nail)		3		0	Fe 16
COWBQ 96	122	1013; 1027; 1085	hobnails		6		0	Fe 16
COWBQ 96	154	1051	nail		1		0	Fe 16
COWBQ 96	704	1003; 1089; 1092-95	hobnails		6		0	Fe 16
COWBQ 96	706	1004; 1005	hobnail and nail fragt		2		0	Fe 16
COWBQ 96	710	1012; 1025	hobnails		13		0	Fe 16
COWBQ 96	712	1000-01	nail frags		2		0	Fe 16
COWBQ 96	717	1068	hobnail		1		0	Fe 16
COWBQ 96	731	1006	nail frags		2		0	Fe 16
COWBQ 96	735	1080; 1088; 1096-97	hobnails (incl 1 nail)		4		0	Fe 16
COWBQ 96	736	1015; 1018; 1037; 1041; 1047	nails (incl 2 hobnails)		5		0	Fe 16

Appendix 2: Nails from the Birdlip Quarry site, Swindon-Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	738	1008-10	nails		3		0	Fe 16
COWBQ 96	740	1011; 1020-23; 1028	nails (incl 2 hobnails)		6		0	Fe 16
COWBQ 96	768	1069; 1076; 1079	nails		3		0	Fe 16
COWBQ 96	768	1064-65; 1077	hobnails		43		0	Fe 16
COWBQ 96	778	1045; 1058-59; 1074	nails (incl 1 hobnail)		4		0	Fe 16
COWBQ 96	780	1038-39; 1042-44; 1046; 1049-50; 1053-54; 1056; 1062	nails (incl 1 hobnail)		12		0	Fe 16
COWBQ 96	781	1032; 1035; 1084	hobnails (incl 1 nail)		5		0	Fe 16
COWBQ 96	792	1061	nail		1		0	Fe 16
COWBQ 96	798	1075; 1078; 1083; 1090	hobnails (incl 1 nail)		4		0	Fe 16
COWBQ 96	798	1067	hobnail		1		0	Fe 16
COWBQ 96	831	1014	hobnails		4		0	Fe 16
COWBQ 96	140	1148; 1158; 1181-84	hobnails (incl 2 nails)		6		0	Fe 17
COWBQ 96	704	1107; 1110; 1112; 1117; 1120; 1125-27; 1129-30; 1133-37; 1145; 1147; 1153; 1156-57; 1161-63; 1171; 1195; 1197	hobnails (incl 1 nail)		26		0	Fe 17
COWBQ 96	723	1144; 1155	nails		2		0	Fe 17
COWBQ 96	735	1108	nail		1		0	Fe 17
COWBQ 96	736	1109; 1116	nail and hobnail		2		0	Fe 17
COWBQ 96	746	1188-89	hobnails		25		0	Fe 17
COWBQ 96	768	1102-05; 1142	nails (incl 1 nail)		5		0	Fe 17
COWBQ 96	778	1114-15; 1119	nails (incl 1 hobnail)		3		0	Fe 17
COWBQ 96	780	1143	nail		1		0	Fe 17
COWBQ 96	803	1122-24	nails		3		0	Fe 17
COWBQ 96	807	1128	hobnail		1		0	Fe 17
COWBQ 96	812	1111	hobnails		38		0	Fe 17
COWBQ 96	815	1149-50; 1152; 1165-66; 1168; 1170; 1191-93	nails		10		0	Fe 17
COWBQ 96	815	1121; 1151; 1164; 1167; 1169; 1194	hobnails (incl 1 nail)		56		0	Fe 17
COWBQ 96	817	1138-39	hobnails (incl 1 nail)		3		0	Fe 17

Appendix 2: Nails from the Birdlip Quarry site, Swindon-Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	819	1140	nail		1		0	Fe 17
COWBQ 96	825	1160	hobnail		1		0	Fe 17
COWBQ 96	826	1198-99	hobnails		2		0	Fe 17
COWBQ 96	829	1172-78	hobnails		7		0	Fe 17
COWBQ 96	837	1187	nail		1		0	Fe 17
COWBQ 96	34	1280-81	nails		2		0	Fe 18
COWBQ 96	704	1201	hobnail		1		0	Fe 18
COWBQ 96	722	1210; 1219	hobnails (incl 1 nail)		11		0	Fe 18
COWBQ 96	729	1268-69; 1271; 1273-75; 1278-79; 1295-96	nails		10		0	Fe 18
COWBQ 96	729	1276-77	hobnails		46		0	Fe 18
COWBQ 96	757	1222; 1265	nails (incl 1 hobnail)		3		0	Fe 18
COWBQ 96	758	1290	nail head		1		0	Fe 18
COWBQ 96	759	1203-04	nails		2		0	Fe 18
COWBQ 96	760	1212-13; 1218; 1249	nails		4	1 bent into a loop	0	Fe 18
COWBQ 96	763	1221	nail		1		0	Fe 18
COWBQ 96	804	1207; 1214	nails		2		0	Fe 18
COWBQ 96	815	1254	hobnails		8		0	Fe 18
COWBQ 96	825	1256	nail		1		0	Fe 18
COWBQ 96	826	1215-16; 1220; 1229-31; 1241-43	hobnails (incl 1 nail)		13		0	Fe 18
COWBQ 96	841	1224-26; 1238-40	nails		6		0	Fe 18
COWBQ 96	846	1223; 1233-34; 1260	nails		4		0	Fe 18
COWBQ 96	848	1258; 1267; 1284-85	hobnails		4		0	Fe 18
COWBQ 96	849	1248; 1263-64; 1247	nails x 2 and hobnails x2		4		0	Fe 18
COWBQ 96	857	186	hobnails		7		0	Fe 18
COWBQ 96	860	1261	nail		1		0	Fe 18
COWBQ 96	861	1282	nail		1		0	Fe 18
COWBQ 96	872	1288	hobnail		1		0	Fe 18
COWBQ 96	75	1251; 1257	nails		2		0	Fe 18

Appendix 2: Nails from the Birdlip Quarry site, Swindon-Gloucestter DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	880	1297-98	nails		2		0	Fe 18
COWBQ 96	885	1293-94	nails		2		0	Fe 18
COWBQ 96	744	1336	nail		1		0	Fe 19
COWBQ 96	774	1323	nail		1		0	Fe 19
COWBQ 96	837	1344; 1348	nails		3		0	Fe 19
COWBQ 96	840	1315; 1317; 1324; 1389; 1395	nails (incl 1 hobnail)		5		0	Fe 19
COWBQ 96	848	1303-04; 1306	hobnails		4		0	Fe 19
COWBQ 96	849	1309; 1314; 1320; 1334; 1338 1340-43; 1345; 1386;	nails (incl 3 hobnails)		12		0	Fe 19
COWBQ 96	860	1371-74	nails		4		0	Fe 19
COWBQ 96	861	1375; 1379; 1391	nails		3		0	Fe 19
COWBQ 96	875	1308; 1310	hobnails (incl 1 nail)		25		0	Fe 19
COWBQ 96	880	1311-12; 1361; 1376	nails		4		0	Fe 19
COWBQ 96	883	1301	nail		1		0	Fe 19
COWBQ 96	892	1307; 1327-1330	hobnails (incl 4 nails)		19		0	Fe 19
COWBQ 96	909	1370	nail		1		0	Fe 19
COWBQ 96	914	1369; 1397	hobnails		2		0	Fe 19
COWBQ 96	915	1364	hobnail		1		0	Fe 19
COWBQ 96	916	1381	hobnail		1		0	Fe 19
COWBQ 96	918	1399	nail		1		0	Fe 19
COWBQ 96	922	1392	hobnails		3		0	Fe 19
COWBQ 96	924	1365-68; 1378; 1382-83;	hobnails (incl 1 nail)		10		0	Fe 19
COWBQ 96	931	1384-85	nails		2		0	Fe 19
COWBQ 96	u/s	1346	hobnails		3		0	Fe 19
COWBQ 96	u/s	1362	nail		1		0	Fe 19
COWBQ 96	480	1410	nail		1		0	Fe 20
COWBQ 96	723	1401	nail fragt		1		0	Fe 20
COWBQ 96	723	1402	nail		1		0	Fe 20
COWBQ 96	752	1476	nail frags		2		0	Fe 20
COWBQ 96	791	1446	nail		1		0	Fe 20

Appendix 2: Nails from the Birdlip Quarry site, Swindon-Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	849	1407; 1411-12; 1426	hobnails		4		0	Fe 20
COWBQ 96	892	1437	nails and frags		6		0	Fe 20
COWBQ 96	896	1461-63	nails		3		0	Fe 20
COWBQ 96	903	1442-43; 1455; 1457; 1482	hobnails (incl 1)		6		0	Fe 20
COWBQ 96	915	1414; 1416; 1424	nails		3		0	Fe 20
COWBQ 96	918	1413	nail		1		0	Fe 20
COWBQ 96	920	1436	hobnails		3		0	Fe 20
COWBQ 96	925	1485-86	nails		2		0	Fe 20
COWBQ 96	976	1449	?			small crumbs	0	Fe 20
COWBQ 96	980	1415	nail		1		0	Fe 20
COWBQ 96	984	1417-18; 1453	nails		3		0	Fe 20
COWBQ 96	994	1460	?hobnail		1		0	Fe 20
COWBQ 96	993	1425; 1435; 1440; 1440; 1444-45; 1452; 1458; 1465-66; 1470	nails (incl ? dog)		11		0	Fe 20
COWBQ 96	994	1421-23	nails		3		0	Fe 20
COWBQ 96	875	1408	hobnail		1		0	Fe 20
COWBQ 96	1009	1431; 1433; 1478	hobnails (incl 1 nail)		4		0	Fe 20
COWBQ 96	1011	1428-30	hobnails (incl 1 nail)		3		0	Fe 20
COWBQ 96	1021	1441	hobnail		1		0	Fe 20
COWBQ 96	1027	1450	nail		1		0	Fe 20
COWBQ 96	1037	1472	fragt		1		0	Fe 20
COWBQ 96	1049	1467-68	hobnails (incl. 1 nail)		21		0	Fe 20
COWBQ 96	1060	1477; 1488-89	nails		3		0	Fe 20
COWBQ 96	1099	1487	nail		1		0	Fe 20
COWBQ 96	1101	1491	hobnails		7		0	Fe 20
COWBQ 96	1106	1494	nail		1		0	Fe 20
COWBQ 96	1107	1493	nails		2		0	Fe 20
COWBQ 96	1114	1503	nail		1		0	Fe 20
COWBQ 96	1139	1500	nail		1		0	Fe 20
COWBQ 96	1143	1504	nail		1		0	Fe 20

Appendix 2: Nails from the Birdlip Quarry site, Swindon-Gloucester DBFO Road Scheme

Site Code	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96	1165	1511; 1516	nail and hobnail fragt		2		0	Fe 20
COWBQ 96	1171	1513	hobnail		1		0	Fe 20
COWBQ 96	u/s	1454	hobnail		1		0	Fe 20
					1367			

Appendix 3: Ironwork (incl nails) from the Latton Street Farm site on the Swindon-Gloucester DBFO Road Scheme

Site Code	Trench	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
LATST 96		267		strip with 1 nail hole and adjacent small circular dense feature with a concentric ring around it		1		3	Fe 3
LATST 96		267		nail		1		0	
LATST 96		268		hinge, H-shaped, with decorative terminals	PM			3	Fe 3
LATST 96		269		nails		3		0	
LATST 96		275		hinge strap, with rolled-over loop		1		2	Fe 7
LATST 96		281		catch and catch plate, comprising thick wire catch with a securing eye and a wire loop attached to a plate	PM	1		2	Fe 3
LATST 96		281		plate fragt folded up at one end		1		0	Fe 3
LATST 96		281		nails		5		0	
LATST 96		281		wire fragts		4		0	
LATST 96		285		knife fragt, comprising tang and part of blade		1		3	Fe 3
LATST 96		287		chain link, broken		1		2	Fe 3
LATST 96		304		strip fragt, 1 nail hole, possible binding or hinge strap		1		2	Fe 4
LATST 96		304		hooked spike		1		3	Fe 4
LATST 96		304		rod/bar fragt		1		0	Fe 4
LATST 96		304		sheet, thin folded		1		0	Fe 4
LATST 96		304		nails		11		0	
LATST 96		305		spatula blade		1		3	Fe 4
LATST 96		305		?bolt, comprising strip with protrusions, widening to one end which forms a solid rectangular block		1		3	Fe 4
LATST 96		305		bar/rod cut at one end		1		2	Fe 4
LATST 96		305		chisel, smith's, with stout rectangular section stem		1		3	Fe 4
LATST 96		319	6	sickle, tanged		1		3	Fe 6
LATST 96		328		spike of rectangular section, tapering		1		2	Fe 4
LATST 96		328		sheet, pierced by 1 nail hole and slightly curved		1		2	Fe 4
LATST 96		331		nails		6		0	
LATST 96		336		strip, irregular fragt, bent		1		0	Fe 4
LATST 96		356		nail		1		0	
LATST 96		357		strip/sheet fragt, 1 pierced by hole				0	Fe 4
LATST 96		357		block, trapezoid section, dense		1		2	Fe 4
LATST 96		357		nails		5		0	
LATST 96		357		holdfast		1		2	
LATST 96		383		nail		1		0	

Appendix 3: Ironwork (incl nails) from the Latton Street Farm site on the Swindon-Gloucester DBFO Road Scheme

Site Code	Trench	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
LATST 96		389		strip, thin section, straight-sided, no nail holes		1	x-ray shows that one side has a change in angle midway along!	2	Fe 4
LATST 96		389		nails		7		0	
LATST 96		390		strip fragt, thin section, no nail holes		1		0	Fe 4
LATST 96		390		tin can or small bucket/vessel, crushed	PM	1		0	Fe 4
LATST 96		390		nails (incl 1 large)		3		0	
LATST 96		391		nails		2		0	
LATST 96		411		strip tapering to a rolled-over loop		1		1	Fe 5
LATST 96		413	8	hinge strap, tapering	Mod	1		0	Fe 5
LATST 96		420		nails		3		0	
LATST 96		436		H-hinge, part of	PM	1		3	Fe 5
LATST 96		438		strip frags, no nail holes, ?bucket hoops				1	Fe 5
LATST 96		438		bar/rod		1		0	Fe 5
LATST 96		458		strip/sheet fragt, thin		1		0	Fe 5
LATST 96		458		screwdriver blade, tanged	Mod	1		0	Fe 5
LATST 96		458		T-staple		1		2	
LATST 96		458		nails		5		0	
LATST 96		469	11	nail		1		0	
LATST 96		469	11	U-shaped staple		1		2	
LATST 96		469	11	object consisting of a rectangular section bar with a circular section rod extending at right angle at one end; the rod is bent back over the bar		1	object	2	
LATST 96		470		L-shaped drop hinge bracket		1		3	Fe 5
LATST 96		470		nails		7		0	
LATST 96		472		U-shaped staple, with points crossed over		1		2	Fe 5
LATST 96		500		nail		1		0	
LATST 96		517		no ID			frags	0	Fe 5
LATST 96		534		?chisel, with battered head and stem of round to sub-square section; the stem has been cut		1		3	Fe 5
LATST 96		545		nail		1		0	
LATST 96		551	14	nails		2		0	
LATST 96		551	15	nail		1		0	
LATST 96		589		strip frags, no nail holes, but 1 piece has a cluster of 8 small holes; ? bucket hoops				2	Fe 5
LATST 96		589		strip, tapering		1		0	Fe 5

Appendix 3: Ironwork (incl nails) from the Latton Street Farm site on the Swindon-Gloucester DBFO Road Scheme

Site Code	Trench	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
LATST 96			589	strip, no nail holes		1		0	Fe 5
LATST 96			589	sheet, thin with lip		1		0	Fe 5
LATST 96			589	sheet, curved		1		0	Fe 5
LATST 96			589	nails		6		0	
LATST 96			591	tin can/tin plate frags				1	Fe 5
LATST 96			591	rod		1		0	Fe 5
LATST 96			591	fastening, traces of nail		1		1	Fe 5
LATST 96			591	nails		3		0	
LATST 96			605	heel iron		1		2	Fe 5
LATST 96			605	chain link		1		2	Fe 5
LATST 96			605	bar fragt		1		0	Fe 5
LATST 96			605	nails		11		0	
LATST 96			605	spike		1		2	
LATST 96			611	sickle, tanged		1		3	Fe 6
LATST 96			611	strip frags, ?bucket hoops		3		2	Fe 6
LATST 96			611	rod/bar fragt		1		0	Fe 6
LATST 96			611	sheet, fragt, square		1		0	Fe 6
LATST 96			611	L-shaped drop hinge bracket		1		3	Fe 6
LATST 96			611	oval object with projecting flanges at either end		1		3	Fe 6
LATST 96			702	nails	PM	12		0	Fe 8
LATST 96			702	strip		3		0	Fe 8
LATST 96			702	chain link		1		0	Fe 8
LATST 96			702	nail		1		0	Fe 8
LATST 96			702	no ID		1	fragt	0	Fe 8
LATST 96			706	binding, strip with nail	Mod	1		0	Fe 8
LATST 96			706	nail	Mod	1		0	Fe 8
LATST 96			709	nail		1		0	Fe 8
LATST 96			710	nails		3		0	Fe 8
LATST 96			717	plate fragt fused to stone		1		0	Fe 8
LATST 96			721	rod/nail fragt		1		0	Fe 8
LATST 96			730	nails		2		0	Fe 8
LATST 96			730	strip		1		0	Fe 8
LATST 96			733	nails		2		0	Fe 8
LATST 96			737	nails and nail frags		10		0	Fe 8
LATST 96			737	strip		1		0	Fe 8

Appendix 3: Ironwork (incl nails) from the Latton Street Farm site on the Swindon-Gloucester DBFO Road Scheme

Site Code	Trench	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
LATST 96		737		U-shaped staple		2		1	Fe 8
LATST 96		740		?horseshoe fragt		1	uncertain ID	1	Fe 8
LATST 96		762		plate, pierced by 1 rectangular hole flanked by 2 smaller holes		1		3	Fe 8
LATST 96		812		nail		1		0	Fe 8
LATST 96		870		bar/rod		1		0	Fe 8
LATST 96		873		nails		2		0	Fe 8
LATST 96		878		sword chape	PM	1		3	Fe 8
LATST 96		889		plate fragt, curved		1		0	Fe 8
LATST 96		947		nails	PM	3	2 v large	0	Fe 8
LATST 96		952		nail		1		0	Fe 8
LATST 96		u/s		sickle, tanged		1		3	Fe 6
LATST 96		u/s		nails		3		0	
LATST 96		u/s		T-staple		1		2	
LATST 96		u/s		spoon fragt		1		2	
					Total	268			

Appendix 4: Ironwork (incl nails) from smaller sites on the Swindon-Gloucester DBFO Road Scheme

Site Code	Trench	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COHH 96		201		rod/wire, slight taper, possibly a pin		1		1	Fe 1
COHH 96		201		plate/strip fragt, possible hole at one end		1		1	Fe 1
COHH 96		201		nail		1		0	Fe 1
COHH 96		233		nails		2		0	Fe 1
COHH 96		233		hobnail		1		0	Fe 1
COHH 96		255		?nail		1		0	Fe 1
					Total	7			
DADL 96		5	1	?hook, formed from tapering strip		1		2	
DADL 96		214	4	?hipposandal frags; curved plates		2		2	
					Total	3			
DAFF 96		2	2	no ID		1	curved fragt	1	
DAFF 96		2	12	?heel iron, 1 nail extant		1	too small to be pony or horse shoe	3	
DAFF 96		50	9	horse or pony shoe, 1 extant calkin, 5 nail holes and 3 in situ nails		1			
DAFF 96		65	3	horseshoe nail		1		3	
DAFF 96		u/s	6	clamp, with wide flat back		1		3	
					Total	5			
DRSWS 96		2		nail		1		0	
DRSWS 96		2		horseshoe nail		1		0	
DRSWS 96		20		nail		1		0	
DRSWS 96		73		bar/rod, square cross-section		1		0	
DRSWS 96		80		plate fragt		1		0	
					Total	5			
DAMD 96		1	1	horseshoe nail		1		0	Fe 1
DAMD 96		1	8	?nail		1		0	Fe 1
DAMD 96		1	5	plate fragt, curved		1		0	Fe 1
DAMD 96		1	13	nail		1		0	Fe 1
DAMD 96		12		split spike loop, possibly hinge bracket		1		3	Fe 1
DAMD 96		13	10	?hobnail		1		0	Fe 1
DAMD 96		39		nails		2		0	Fe 2
DAMD 96		45	<6>	hobnails		2		0	Fe 2
DAMD 96		45	<7>	brooch, formed from wire and with sprung pin; catch plate missing		1		3	Fe 2
DAMD 96		56		plate/strip fragt, flat		1		0	Fe 2

Appendix 4: Ironwork (incl nails) from smaller sites on the Swindon-Gloucesterc DBFO Road Scheme

Site Code	Trench	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
DAMD 96			56	nail fragt		1		0	Fe 2
DAMD 96			69	nails		3		0	Fe 2
DAMD 96			80	plate fragt		1		0	Fe 2
DAMD 96			80	horseshoe nails		3		0	Fe 2
DAMD 96			84	24 nail		1		0	Fe 1
DAMD 96			99	14 horseshoe nail		1		0	Fe 1
DAMD 96			99	15 nail		1		0	Fe 1
DAMD 96			99	16 nail		1		0	Fe 1
DAMD 96			102	no ID		1	v small fragt	0	Fe 2
DAMD 96			102	horseshoe nail		1		0	Fe 2
DAMD 96			104	17 nails		2		0	Fe 1
DAMD 96			104	17 horseshoe nails		5		0	Fe 1
DAMD 96			104	23 hobnail		1		0	Fe 1
DAMD 96			104	strip, v small fragts		3		0	Fe 2
DAMD 96			131	horseshoe nails		4		0	Fe 2
DAMD 96			131	nail head		1		0	Fe 2
DAMD 96			137	horseshoe nails		2		0	Fe 2
DAMD 96			137	no ID		2	v small fragts	0	Fe 2
DAMD 96			154	nails		2		0	Fe 2
DAMD 96			154	hobnail		1		0	Fe 2
DAMD 96			174	25 ?horseshoe nail		1		0	Fe 1
DAMD 96			196	33 plate fragt, could be a tang		1		1	Fe 1
DAMD 96			196	nail		1		0	Fe 2
DAMD 96			196	horseshoe nails		2		0	Fe 2
DAMD 96			216	26 rod/bar fragt, slight taper, possibly a nail		1		1	Fe 1
DAMD 96			288	30 ring, broken, circular section		1		1	Fe 1
DAMD 96			298	horseshoe nails		1		0	Fe 2
DAMD 96			299	horseshoe nails		1		0	Fe 2
DAMD 96			330	bar, tapering and bent		1		0	Fe 2
					Total	59			
DRDG 96			3	horseshoe nail		1		0	Fe 2
DRDG 96			6	7 strip/sheet, folded, possible nail hole on x-ray, ?binding		1		1	Fe 1
DRDG 96			7	233 hipposandal, complete	RB	1		3	Fe 1

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28/02/97

A 17/419 Post-exc. Assessment

Appendix 4: Ironwork (incl nails) from smaller sites on the Swindon-Gloucester DBFO Road Scheme

Site Code	Trench	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
DRDG 96			14	4 bar or nail fragt		1		0	Fe 1
DRDG 96			18	?nail point		1		0	Fe 2
DRDG 96			18	slag		1		0	Fe 2
DRDG 96			23	nail		1		0	Fe 2
DRDG 96			52	9 plate with tang or point, not a tanged blade		1		2	Fe 1
DRDG 96			52	nail		1		0	Fe 2
DRDG 96			64	nail fragt		1		0	Fe 2
DRDG 96			83	nail/?wire		1		0	Fe 2
DRDG 96			108	plate/sheet fragt		1		0	Fe 2
DRDG 96			162	232 strip, no visible nail holes		1	poorly preserved	0	Fe 1
DRDG 96			162	nail		1		0	Fe 2
DRDG 96			188	nail		1		0	Fe 2
					Total	15			
DACQ 96			116	horseshoe nails		2		0	
DACQ 96			120	2 key, lever lock	PM	1		3	
DACQ 96			120	3 nail		1		0	
DACQ 96			120	4 nail		1		0	
					Total	5			
DAGWH	Tr 1		113	102 horseshoe nail				0	
					Total	0			
BAGTF 96			13	nails		2		0	
					Total	2			
BAULT 96			6	nail		1		0	
BAULT 96			8	plate fragt, tapering, possible nail hole		1		1	
					Total	2			
CIBFRD 96			111	rod/wire, possibly slightly tapering		1		0	Fe 1
CIBFRD 96			205	sheet fragt, v small		1		0	Fe 1
CIBFRD 96			206	nail		1		0	Fe 2
CIBFRD 96			206	sheet fragt, small		2		0	Fe 1
CIBFRD 96			206	binding, expanded terminal/?cleat		1	dense spot in centre of expansion	2	Fe 1
CIBFRD 96			208	nail		1		0	Fe 2
CIBFRD 96			302	tack		1		0	Fe 2
CIBFRD 96			306	nails		6		0	Fe 2
CIBFRD 96			306	horseshoe nil		1		0	Fe 2

Appendix 4: Ironwork (incl nails) from smaller sites on the Swindon-Gloucester DBFO Road Scheme

Site Code	Trench	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
CIBFRD 96			309	nail, v large		1		0	Fe 2
CIBFRD 96			309	horseshoe nail		1		0	Fe 2
CIBFRD 96			309	horseshoe, half, no calkin, 4 nail holes with groove and 1 extant nail		1		2	Fe 1
CIBFRD 96			310	4 nail, rectangular section shank		1		2	Fe 1
CIBFRD 96			310	4 chisel/scrapper, with flared blade and small flat head		1		3	Fe 1
CIBFRD 96			310	nails and nail frags (incl at least 1 horseshoe nail)		17		0	Fe 2
CIBFRD 96			316	nails and nail frags		4		0	Fe 2
CIBFRD 96			317	horseshoe nail		1		0	Fe 2
CIBFRD 96			317	nails		6		0	Fe 2
CIBFRD 96			317	horseshoe nails		2		0	Fe 2
CIBFRD 96			318	nails		2		0	Fe 2
CIBFRD 96			320	nails and frags		9		0	Fe 2
CIBFRD 96			320	?horseshoe fragt		1		2	Fe 1.
CIBFRD 96			320	horseshoe nail		1		0	Fe 1
CIBFRD 96			320	no ID		6	frags	0	Fe 1
CIBFRD 96			323	nail frags		5		0	Fe 2
CIBFRD 96			323	nails and nail frags		7		0	Fe 2
CIBFRD 96			323	thumb tack		1		1	Fe 1
CIBFRD 96			323	sheet, folded		1		1	Fe 1
CIBFRD 96			323	tube/tubular collar		1		1	Fe 1
CIBFRD 96			323	horseshoe nail		1		0	Fe 1
CIBFRD 96			323	bar/wire fragt, small		1		0	Fe 1
CIBFRD 96			324	nail		1		0	Fe 2
CIBFRD 96			325	nails		5		0	Fe 2
CIBFRD 96			406	nail fragt		1		0	Fe 2
CIBFRD 96			407	nails		3		0	Fe 2
CIBFRD 96			407	U-shaped staple		1		2	Fe 1
CIBFRD 96			409	horseshoe fragt, 4 nail holes and groove, no calkin		1		3	Fe 1
CIBFRD 96			409	no ID		3		0	Fe 1
CIBFRD 96			409	horseshoe nails		2		0	Fe 1
CIBFRD 96			410	no ID		2	frags	0	Fe 2
CIBFRD 96			419	no ID		1	fragt, not a nil	0	Fe 2
CIBFRD 96			523	large nail or pin, with T-shaped head		1		2	
CIBFRD 96			525	nail		1		0	Fe 2

Appendix 4: Ironwork (incl nails) from smaller sites on the Swindon-Gloucester DBFO Road Scheme

Site Code	Trench	Centext	Sf no	Identification	Date	Nos	Comment	Grade	Box No
CIBFRD 96		573		nails		4	plus frags	0	Fe 2
CIBFRD 96		573		horseshoe, half, wide side bar with 4 extant nail holes		1		3	Fe 1
CIBFRD 96		633		nail		1		0	Fe 2
CIBFRD 96		661	9	horseshoe, almost complete, 5 nail holes to each side		1		3	Fe 1
					Total	115			
CIRCL 96		1		nail		1		0	
CIRCL 96		6		bar frags		2		0	
CIRCL 96		6		block, small, ?offcut		1	v dense	2	
					Total	4			
PRNOF 96	TP 6	11		?nail, small		1		0	Fe 1
PRNOF 96	TP26	47		nail		1		0	Fe 1
PRNOF 96		177	1	hobnail		1		0	Fe 1
PRNOF 96		177	2	hobnail		1		0	Fe 1
					Total	4			
PRWPL 96		5		nails		2		0	Fe 1
PRWPL 96		15		ring, circular section		1		0	Fe 1
PRWPL 96		19		nail		1		0	Fe 1
PRWPL 96		24		hobnail/?nail head		1		0	Fe 1
PRWPL 96		24		horseshoe fragt, no calkin, no groove 3 extant nail holes		1		3	Fe 1
					Total	6			
PRENC 96		74		strip		1		0	
PRENC 96		160		horseshoe fragt, small		1		2	
PRENC 96		160		strips		2		0	
PRENC 96		160		?horseshoe nail		1		0	
PRENC 96		160		nail, elongated flat head		1		0	
PRENC 96		furrows		nails		2		0	
PRENC 96		furrows		horseshoe nail		1		0	
PRENC 96		furrows		rectangular washers or bindings		2		2	
PRENC 96		furrows		tapering fragt		1		0	
PRENC 96		furrows		chain, 4 elongated oval links		1		3	
PRENC 96		furrows		looped spike, ?hinge bracket		1		3	

Appendix 4: Ironwork (incl nails) from smaller sites on the Swindon-Gloucester DBFO Road Scheme

Site Code	Trench	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
PRENC 96		surface cleaning		horseshoe fragt, no calkin, 3 extant nail holes		1		3	
PRENC 96		surface cleaning		nails		13		0	
PRENC 96		surface cleaning		tube fragt		1		2	
PRENC 96		surface cleaning		strip fragt		1		0	
PRENC 96		surface cleaning		?offcut		1		2	
PRENC 96		surface cleaning		buckle, small oval, strongly curved	PM	1		3	
					Total	32			
PRSA 96			115	nails		2		0	
					Total	2			
PRSTA 96			1002	sheet fragts		2		0	
					Total	2			
PREM 96			4	4 strip/sheet fragt, v small		1		0	
PREM 96			5	6 ?strip, irregular fragts		3		0	
PREM 96			7	7 strip fragt, irregular		1		0	
					Total	5			
LARP 96			112	51 nail head		1		0	
LARP 96			113	51 nail		1		0	
LARP 96			174	59 nail		1		0	
LARP 96			174	71 cast plate, from recent farm machinery?		1		2	
LARP 96			202	54 nail point		1		0	
LARP 96			202	55 no ID		1	small dense fragt	0	
LARP 96			205	53 ?bar fragt		1		0	
LARP 96			205	57 no ID		1	small fragt	0	
LARP 96			208	56 nail		1		0	
LARP 96			228	49 strip, no nail holes		1		0	
					Total	10			
LACFM 96			36	nail		1		0	
LACFM 96			176	?nail		1		0	

Appendix 4: Ironwork (incl nails) from smaller sites on the Swindon-Gloucester DBFO Road Scheme

Site Code	Trench	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
LACFM 96		203		reaping hook, socketed		1		3	
LACFM 96		218		no ID		2	frags	0	
					Total	5			
LAWBR 96		2		horseshoe, 8 nail holes, groove, no calkins		1		2	
LAWBR 96		4		horseshoe, small, 6 extant nail holes, no calkins		1	?pony shoe	2	
LAWBR 96		4		horseshoe, small, fragt, 2 extant nail holes		1		1	
LAWBR 96		13		horseshoes, 6 nail holes each, some nails in situ		2	?pony shoes	2	
LAWBR 96		57	14	washer, square		1		2	
LAWBR 96		57	20	?hobnails in a block of hardened mud				0	
LAWBR 96		57	21	ring, circular section		1		0	
LAWBR 96		57	23	no ID		1	small fragt	0	
LAWBR 96		57	56	nail or tack head		1		0	
LAWBR 96		57	65	round domed object, ?nail head		1		0	
LAWBR 96		57		nails		3		0	
LAWBR 96		57		horseshoe nail		1		0	
LAWBR 96		57		nails		2		0	
LAWBR 96		57		nails		3		0	
LAWBR 96		57		strip, small, expanded at one end, no nail holes		1		1	
LAWBR 96		57		terminal, flat square, with nail hole		1		2	
LAWBR 96		80	16	washer, circular		1		1	
					Total	22			
ERMIN		u/s	301	hipposandal, complete	RB	1	well-preserved	3	Fe 1
ERMIN		105		horseshoe nail		1		0	Fe 2
ERMIN		114		tack		1		0	Fe 2
ERMIN		116		?horseshoe nail		1		0	Fe 2
ERMIN		116		nail		1		0	Fe 2
ERMIN		116		cast iron fragt		1		0	Fe 2
ERMIN		117		plate fragt, small		1		0	Fe 2
ERMIN		117		no ID		1	v small fragt	0	Fe 2
ERMIN		310		horseshoe, fragt, no calkins		1		2	Fe 2
ERMIN		312		nail head, square, large		1		1	Fe 2
ERMIN		320		nail		1		0	Fe 2
ERMIN		329		horseshoe, grooved, no calkins		1		3	Fe 2
					Total	12			

Appendix 4: Ironwork (incl nails) from smaller sites on the Swindon-Gloucester DBFO Road Scheme

Site Code	Trench	Context	Sf no	Identification	Date	Nos	Comment	Grade	Box No
CIREN WB		1		strip, tapers, with part nail hole, ?hinge strap		1		1	Fe 1
CIREN WB		1		bar/rod fragt		1		0	Fe 1
CIREN WB		2		nails (incl 1 fragt)		4		0	Fe 1
CIREN WB	CH4100	2	9	nail		1		0	Fe 1
					Total	7			
LAT WB	CH3700	2		?nail or L-shaped staple		1		0	
LAT WB	CH4000	1		nail		1		0	
LAT WB	CH4000	1		bar, square section		1		0	
LAT WB	CH4300	3		nail		1		0	
					Total	4			

APPENDIX 5: Metalwork (contd.)**Part 2: Assessment of the copper alloy finds (excluding brooches and coins)**

By I Scott

1 Introduction

The aims and methods set out above for the assessment of the ironwork are the same for the copper alloy objects.

2 Quantification

The quantification presented in the following tables lists all objects, regardless of their identification. It includes all unidentifiable scraps and possible pieces of slag. Details can be ascertained from the Appendices. The tables serve to indicate the overall composition and scale of the site assemblages. The major groups are from COWBQ 96, DAMD 96 and LATST 96. Smaller groups include DRDG 96 and CIBFRD 96. The remaining assemblages are very small.

Site Code	Total no of objects
COWBQ	81
DADL 96	1
DAFF 96	1
DAMD 96	15
DRDG 96	4
BAUEXB 96	1
CIBFRD 96	7
CIRCL 96	1
PRENC 96	1
PRSTAS 96	1
PREM 96	3
LARP 96	1
LATST 96	12
LAWBR 96	3
TOTAL	132

3 Preservation

In general the preservation of the copper alloy assemblage is good. Identification of individual objects is not a problem.

4 Assessment by site

COWBQ A medium size group of Romano-British copper alloy which can add materially to understanding of the site and therefore further analysis and publication of selected groups and items is indicated. Of particular note are the small number of pieces of military origin.

DADL Single object: insufficient potential for further work. The quantification already undertaken is sufficient.

DAFF Single object: insufficient potential for further work. The quantification already undertaken is sufficient.

DAMD A small group with limited potential for further work: a small number of objects are worthy of publication, otherwise the quantification already undertaken is sufficient.

DRDG Insufficient potential for further work. The quantification already undertaken is sufficient, but a small number of objects are worthy of publication..

BAUEXB The solitary object is worthy of publication as part of the overall road scheme assemblage.

CIBFRD A small group with a small number of objects worthy of publication as part of the overall road scheme assemblage, otherwise the quantification already undertaken is sufficient.

CIRCL The solitary object is perhaps worthy of publication as part of the overall road scheme assemblage.

PRENC The solitary object is perhaps worthy of publication as part of the overall road scheme assemblage.

PRSTAS The solitary object is probably not worthy of publication.

PREM Insufficient potential for further work. The quantification already undertaken is sufficient.

LARP Insufficient potential for further work. The quantification already undertaken is sufficient.

LATST A small group of post-medieval copper alloy which can add materially to understanding of the site and therefore further analysis and publication of selected groups and items is indicated.

LABWR A small group with limited potential for further work: a small number of objects are worthy of publication, otherwise the quantification already undertaken is sufficient.

5 Assessment of the overall DBFO copper alloy assemblage

There is no obvious common thread linking the copper alloy assemblages from the various sites together. The small size of the majority of the groups militates against any patterns emerging. The best that can be hoped for is that selected groups will contribute to an understanding of the individual sites. The lack of pieces clearly associated with harnesses is noteworthy.

The smaller sites have produced a small number of objects which are worthy of publication and which together add to the value of the assemblage from the road scheme. They include objects from DADL, DAFF, DRDG and LAWBR as well as the watching briefs and sections through Ermin Street. The latter produced a complete hipposandal.

6 Proposed work

- 1 Catalogue assemblages from COWBQ and LATST, including measurements, and enter data into enhanced database
- 2 Write discussion of COWBQ and LATST assemblages
- 3 Prepare catalogue entries for the individual objects from smaller assemblages.
- 4 Prepare drawing briefs
- 5 Write discussion of DBFO assemblage

7 Estimate of time required

Copper alloy

Task	1	3 days, including data entry
	2	2 days, including library work
	3	1 day
	4	1 day
	5	1 day
	Total	8 days

8 Appendix

1 Copper alloy from all sites

Appendix 1: Copper alloy finds from the Swindon-Gloucester DBFO road scheme

Site Code	Trench	Cxt	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96		2	19	stud, circular, slightly domed, tapering square section stem		1			3 CA 1
COWBQ 96		2	23	pin, tapering stem with round head flattened on top		1			3 CA 1
COWBQ 96		2	99	button, hollow with attached loop	Mod	1			0 CA 1
COWBQ 96		2	100	Statue or model, fragt of leg below knee, with modelled strapping for shoe; hollow cast		1			2 CA 1
COWBQ 96		2	102	sheet, cast, trapezoidal, cut		1			1 CA 1
COWBQ 96		7	5	washer, circular, with oval hole		1			1 CA 1
COWBQ 96		7	34	melted waste or scrap		1			0 CA 1
COWBQ 96		7	52	pin or needle, tapering stem, with ?slight trace of broken eye		1			1 CA 1
COWBQ 96		7	72	strip, tapering		1			0 CA 1
COWBQ 96		7	73	pin, large, slightly domed head, with fine incised lines around edge radiating from centre		1			3 CA 1
COWBQ 96		14	426	sheet fragt, slightly curved		1			1 CA 2
COWBQ 96		14	526	tack with large flat damaged head and tapering stem		1			2 CA 2
COWBQ 96		18	149	finger ring, v small fragt comprising empty bezel and small section of ring		1			2 CA 1
COWBQ 96		18	198	bracelet of strip cast strip with punched decoration giving fish scale effect	RB	1			3 CA 2
COWBQ 96		29	953	pointed object		1			1 CA 2
COWBQ 96		31	168	wire, twisted length		1			2 CA 1
COWBQ 96		31	257	sheet, thin		1			0 CA 1
COWBQ 96		31	292	sheet, small fragt, could be piece of small collar		1			0 CA 1
COWBQ 96		34	232	waste or scrap ?from casting		1			0 CA 1
COWBQ 96		34	276	sheet, cast, fragt, poor surfaces		1			0 CA 1
COWBQ 96		34	741	decorative terminal from a ?sword belt holder	RB	1	2nd- to 3rd-century military		3 CA 2

Appendix 1: Copper alloy finds from the Swindon-Gloucester DBFO road scheme

Site Code	Trench	Cxt	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96		80		melted waste or scrap		1			0 CA 1
COWBQ 96		86	269	waste, ?casting		1			0 CA 1
COWBQ 96		95	307	chain, very fine, constructed of pairs of round links		1			2 CA 2
COWBQ 96		128	455	?chain, formed from looped wire		1			2 CA 2
COWBQ 96		128	455	wire loop		1			1 CA 2
COWBQ 96		128	512	roundel or plate, formed of embossed sheet, edge fragt		1			2 CA 2
COWBQ 96		128	531	?chain link, small fragt		1			0 CA 2
COWBQ 96		128	536	sheet, fragts			poorly preserved		0 CA 2
COWBQ 96		128	715	wire, twisted, within heavy encrustation, ?could be organic material		1			0 CA 2
COWBQ 96		140	574	button, composite, with ?organic fill, and smooth domed cu alloy face	Mod	1			0 CA 2
COWBQ 96		142	339	plate/sheet fragt, 1 straight edge		1			1 CA 2
COWBQ 96		181	436	?stud, slightly domed, formed from thin sheet, loop or stem missing		1			2 CA 2
COWBQ 96		190	497	pointed object, roughly triangular		1	ID uncertain, needs cleaning		1 CA 2
COWBQ 96		206	814	?stud or button, loop or stem missing		1			2 CA 2
COWBQ 96		227	712	pointed object		1	ID uncertain		1 CA 2
COWBQ 96		253	735	washer, circular with circular hole		1			2 CA 2
COWBQ 96		253	746	stud, heavy, composite, incls fe with cu alloy outer coating		1			2 CA 2
COWBQ 96		270	816	finger ring, heavy, with small empty bezel		1			3 CA 2
COWBQ 96		270	969	tack, flat head, tapering stem		1	poorly preserved head		2 CA 2
COWBQ 96		278	821	sheet fragt, bent		1			0 CA 2

Appendix 1: Copper alloy finds from the Swindon-Gloucester DBFO road scheme

Site Code	Trench	Cxt	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96		415	888	sheet frags			poorly preserved	0	CA 2
COWBQ 96		447	78	cast object, comprising tapering bar slightly curved bar set at a right angle, part of a ?decorative openwork casting			ID uncertain	3	CA 1
COWBQ 96		519	921	sheet frags, could be scrap		8		2	CA 2
COWBQ 96		519	960	sheet frags		9	v poorly preserved	0	CA 2
COWBQ 96		774	1029	pin or needle, no extant head or eye		1		2	CA 3
COWBQ 96		780	1052	?button or stud, slightly domed disc with scar on the back and traces of ?tinning and ?organic fill		1		2	CA 3
COWBQ 96		837	1246	pin or needle with V-shaped cut at end; ?brooch pin		1	ID uncertain	1	CA 3
COWBQ 96		880	1313	finger ring, very thin, with punched decoration on outer edge		1		3	CA 3
COWBQ 96		880	1394	openwork plate fragt, tinned	RB	1	possibly 2nd- to 3rd-century military	3	CA 3
COWBQ 96		880	1398	fragt of cu alloy with gold leaf, not identifiable		1		1	CA 3
COWBQ 96		893	1333	waste or scrap		1		0	CA 3
COWBQ 96		986	1419	Strip, narrow, curved and decorated with incised cable pattern, ?bracelet (or ring) fragt		1		3	CA 3
COWBQ 96		1210	1522	rod/bar fragt, square section		1		0	CA 3
COWBQ 96		1210	1535	terminal, 'bell-shaped', on a fe tang	RB	1		3	CA 3
COWBQ 96		1210	1536	fastener, for plate armour ('lorica segmentata')	RB	1		3	CA 3
COWBQ 96		1210	1539	sheet, tinned surface, v thin		1		0	CA 3
COWBQ 96		1224	1530	?pin		1	v corroded	1	CA 3
COWBQ 96		1235	1543	plate frags, irregular, possibly with cut edges		2		2	CA 3
COWBQ 96		1244	1548	sheer, folded, ?scrap		1		1	CA 3

Appendix 1: Copper alloy finds from the Swindon-Gloucester DBFO road scheme

Site Code	Trench	Cxt	Sf no	Identification	Date	Nos	Comment	Grade	Box No
COWBQ 96		1266	1566	sword chape fragt, squashed	RB	1	2nd- to 3rd-century military	3	CA 3
COWBQ 96		1266	1567	ring or bracelet fragt, lentoidal section		1		2	CA 3
COWBQ 96		1283	1586	wire		1		0	CA 3
COWBQ 96		1297	1583	bracelet, formed from narrow strip of plano-convex section decorated with incised cable pattern	RB	1		3	CA 3
COWBQ 96		1313	1564	ring fragt		1		1	CA 3
COWBQ 96		u/s	152	wire, twisted		1	little survives	0	CA 1
COWBQ 96		u/s	1237	?wire/v thin strip, curved		1		0	CA 3
COWBQ 96		u/s	1327	wire or pin, tapered and bent		1		0	CA 3
					Total	81			
DADL 96		6	2	tack or panel pin		1		1	
					Total	1			
DAFF 96		33	4	button, solid round with broken attachment loop		1		1	
					Total	1			
DAMD 96		1	4	fragt, small, curved		1		2	
DAMD 96		1	6	?pin, formed from thin tapering wire, flattened at wider end		1		2	
DAMD 96		1	7	sheet fragt, bent/folded double		1		1	
DAMD 96		1	11	pin/needle, formed from wire, distinct point at one end		1		1	
DAMD 96		1	20	cast fragt, curved, ?rumbler bell fragt		1		2	
DAMD 96		13	9	wire, v fine		1		1	
DAMD 96		44		strip, pierced at one end		1		2	
DAMD 96		109	18	pin/needle fragt		1		1	
DAMD 96		142	19	?belt plate, thin rectangular, ?unfinished, 2 rivets		1		3	
DAMD 96		165	22	bracelet fragt, no visible decoration		1		3	
DAMD 96		196	32	?sheet fragt		1		0	
DAMD 96		196	35	cast decorated fragt, ?rumbler bell fragt,		1		2	
DAMD 96		218	27	sheet fragt, thin		1		0	

Appendix 1: Copper alloy finds from the Swindon-Gloucester DBFO road scheme

Site Code	Trench	Cxt	Sf no	Identification	Date	Nos	Comment	Grade	Box No
DAMD 96		267	31	pin with flat circular head		1			3
DAMD 96		314	34	pin, thin stem and large round head		1			3
					Total	15			
DRDG 96		108	107	strip, thin, looped		1			2
DRDG 96		96	116	ring, oval section		1			0
DRDG 96		135	141	tongue from a buckle		1			3
DRDG 96		32	228	button or roundel, formed of thin sheet with border and with central pin/stem		1			2
					Total	4			
BAUEXB 96		8	1	junction plate, comprising rectangular plate (2 layers of thin sheet) and hook/loop		1			2
					Total	1			
CIBFRD 96		206		plate/sheet, ?lunate plan		1			2
CIBFRD 96		206	2	?bangle formed from strip		1	?child's bangle		3
CIBFRD 96		209		washer, circular, square hole		1			2
CIBFRD 96		306	3	stud, shield-shaped with enamel ?dragon on face, securing stud with washer on back	Med/ PM	1			3
CIBFRD 96		309		cast fragt, slightly curved, no ID to type		1			0
CIBFRD 96		320		sheet fragt with sub-rectangular nail hole and ?original edges		1			3
CIBFRD 96		535	7	plate fragt, triangular, no ID to type		1			0
					Total	7			
CIRCL 96		6		stud or nail with domed head, and tapering square section stem		1			3
					Total	1			
PRENC 96		160		rumbler bell fragt, tinned		1	well-preserved		3
					Total	1			
PRSTAS 96		1002		button or stud, circular, plain	PM	1			2
					Total	1			
PREM 96		4	3	no ID		1	v small fragt		0
PREM 96		3	2	sheet/plate fragt, with rivet/nail hole		1			0
PREM 96		4	5	rod/wire of square section		1			0

Appendix 1: Copper alloy finds from the Swindon-Gloucester DBFO road scheme

Site Code	Trench	Cxt	Sf no	Identification	Date	Nos	Comment	Grade	Box No
					Total	3			
LARP 96		112	29	bracelet, adjustable formed from wire, with overlapping ends rolled and twisted to clasp onto the main hoop		1			3
					Total	1			
LATST 96		268		button, flat circular, tinned, with single attachment loop	Mod	1			1
LATST 96		305		strip with 2 holes		1			1
LATST 96		446		sheet with folded edges		1			1
LATST 96		458	9	pin with round head formed from wire, plated		1			2
LATST 96		611		button, large flat		1			1
LATST 96	metal detect.		13	button, flat circular with loop		1			1
LATST 96		768	26	plate, decorative, possibly from furniture		1			2
LATST 96		768	25	disc, ?coin		1			0
LATST 96		889	32	plate, quatrefoil, decorative, v small		1			2
LATST 96		730		button, flat circular, small		1			1
LATST 96		784	24	stud, embossed sheet, incomplete		1	probably cu alloy		1
LATST 96		173		key handle, detached from shank	PM	1			2
					Total	12			
LAWBR 96		51	61	wire, slightly tapering, loop or knot at thinner end		1			2
LAWBR 96		57	63	?bracelet, formed from twisted wire		1			3
LAWBR 96		112	58	rod/wire		1	?cu alloy or other material		0
					Total	3			

Appendix 1: Copper alloy finds from the Swindon-Gloucester DBFO road scheme

Site Code	Trench	Crt	Sf no	Identification	Date	Nos	Comment	Grade	Box No
LARP 96		228	50	scrap		1	pb	0	
					Total	5			
LAWBR 96		57	61	?spoon		1	pb or pewter	3	
LAWBR 96		57	18	offcut		1	pb	0	
LAWBR 96		57		sheet/offcut		1	pb	0	
LAWBR 96		57	26	melted blob		1	pb	0	
					Total	4			

APPENDIX 5: Metalwork (contd.)**Part 3: Assessment of the lead objects**

By L Allen

There were 34 lead objects recovered from 4 of the excavations along the route of the Swindon-Gloucester DBFO Road Scheme. The majority of the assemblage was comprised of miscellaneous fragments of strips and sheet. The identifiable objects included 4 fragments of lead waste including a casting sprue and 3 weights. Two of the weights were of a globular type with a looped attachment, the third a circular discoidal weight with a lipped edge similar to an example recovered from Fishbourne (Cunliffe 1971, 144-145). There was also a plain discoidal button and a spoon bowl of Medieval/Post Medieval date.

Site Code	Object	SF No	Ctx	Description	Length
COWBQ	Misc	38	7	Irregular shaped fragment with a perforation	56mm
	Sheet	41	7	Folded sheet fragment	67mm
	Misc	50	7	Irregular shaped fragment	33mm
	Misc	62	7	Irregular shaped object	74mm
	Misc	66	7	Poss. damaged pot rivet	28mm
	Waste	67	7	Irregular shaped fragment poss. spillage	33mm
	Misc	53	31	Irregular shaped fragment	40mm
	Waste	54	31	Irregular shaped fragment, poss. spillage	42mm
	Weight	55	31	Large globular weight with the remains of a circular loop attachment	68mm
	Misc	57	10	Irregular shaped fragment	20mm
	Sheet	58	61	Rolled sheet	24mm
	Misc	101	2	Irregular shaped fragment	31mm
	Misc	285	2	Irregular shaped fragment	33mm
	Misc	932	2	Irregular shaped object	24mm
	Misc	114	14	Irregular shed fragment	27mm
	Sheet	119	14	Fragment of cut lead sheet with a square perforation through it.	43mm
	Sheet	125	14	Fragment with curved outside edge	52mm
	Weight	138	131	Globular weight with attachment loop	30mm
	Waste	140	72	Irregular shaped fragment poss. spillage	27mm

	Button	315	32	Plain discoidal button with integral attachment loop	27mm
	Casting sprue	688	227	Waste protrusion from the casting mould.	46mm
	Object	876	278	Large trapezoidal object	42mm
LARP	Misc	50	228	Irregular shaped fragment	13mm
LATST	Misc	30	-	Irregular fragment of cut sheet	27mm
	Sheet	23	-	Folded sheet fragment	28mm
	Sheet	29	-	Folded sheet fragment	23mm
	Sheet	27	-	Fragment of lead sheet with a perforation through it.	46mm
	Strip	-	749	Two strip fragments possibly window came	40mm
	Weight	28	-	Circular discoidal weight, lipped around the circumference with a small indentation in the centre.	?
	Strip	-	356	Strip, poss. window came	100mm
LAWBR	Misc	26	26	Irregular shaped fragment	10mm
	Misc	18	-	Irregular shaped fragment	39mm
	Sheet	-	57	Irregular shaped fragment of sheet bent into an angle	31mm
	Spoon bowl	32	-	Spoon bowl, the handle is missing.	

Potential

Very little further work will be necessary on the lead.

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APPENDIX 6: Assessment of the coins

By J Davies

Introduction

This is an assessment of the coins from the Swindon-Gloucester DBFO roadscheme, undertaken by the Oxford Archaeological Unit. It has been prepared following a first hand examination of the coins from the following seven sites:

	site code	number of coins seen
Fields Farm	DAFF'9	62
Daglingworth Quarry	DAGQ'96	1
Burford Road	CIBFRD'96	4
Street Farm	LATST'96	1
Preston, St. Augustine's Lane	PRSAL	1
Birdlip Quarry	COWBQ'96	167
Weaver's Bridge	LAWBR'96	51
TOTAL ITEMS		<u>227</u>

This report will summarise the contents of each site group, assess the work required to maximise the potential information from them and outline the potential for a full study. An estimate for the time and cost of a full report is attached.

Condition of the coins

The site groups differ in the condition of their coins and in their requirements for cleaning.

The coins from Fields Farm, Daglingworth Quarry and Preston, St. Augustine's Lane need no cleaning.

The small group of four coins from Burford Road includes two post-Roman issues. These are both farthings of Charles II (AD 1660-85) and would both reveal more detail if cleaned. However, this work would add nothing of importance or significance to the report or archive and they are common coins. I recommend that they are not cleaned.

The single coin from Street Farm is again a post-Roman issue (SF 10). It is totally illegible, although I have been able to identify its type. I would like to examine this more closely and suggest that this should be cleaned.

Birdlip Quarry is the largest group, comprising 167 items. Most of these will not require conservation or cleaning. A number of these are very crumbly and additional

unnecessary handling should be avoided. I recommend that just a small number be cleaned, totalling four. These are small find numbers:- 15, 134, 430, 613.

Weaver's Bridge is the second largest group and presents the greatest problems for identification. The poor preservation of these fifty-one coins has already been recognised and a sample of ten have been cleaned. Of the remaining forty-one coins, I recommend that forty (all but one of those) be cleaned. Two are very fragmentary (SF 31, 33) and nothing may be salvaged in these cases. The only coin to be adequately legible for study is SF 13. Of the sample ten cleaned coins, all have come up very well. They are legible and stable, providing very good detail for study.

In conclusion, I recommend that a total of 45 coins, coming from three of the sites, be cleaned, prior to preparation of the full report.

Contents of the assemblage

A total of 227 items have been examined, coming from seven sites. The contents of each site group will now be summarised, in turn. A more detailed listing of individual coins, with spot dates, is presented in a later section. X-rays have been provided and have been used for the identifications.

Fields Farm

Two coins from Fields Farm have been seen. They are both Roman, dating from the later fourth century.

Daglingworth Quarry

One Roman coin, of late fourth century date.

Burford Road

Four coins. Two are Roman, both of which are very worn and can only be broadly dated; one to the second century and the other to the mid-fourth century.

There are two post-Roman coins. Both are farthings of Charles II (1660-85) and both come from context 620.

Street Farm

Just one coin has been seen. This requires cleaning. It is post-Roman and appears to be French, of 19th century date.

Preston, St. Augustine's Lane

One Roman coin. Early fourth century date (AD 307).

Birdlip Quarry

This is the largest of the individual site groups, with 167 items. A chronological summary of the coins is shown below. The twenty-one Issue Periods referred to are those established by Dr Richard Reece, for comparison of assemblages between different sites. The percentages for each period are also shown, for comparison.

Period	Date	Number	%
1	(To AD 41)	-	
2a	(41-54)	-	
2b	(54-69)	-	
3	(69-96)	1	0.7
4	(96-117)	-	
5	(117-38)	-	
6	(138-61)	2	1.4
7a	(161-80)	3	2.0
7b	(180-93)	-	
8	(193-222)	1	0.7
9a	(222-38)	1	0.7
9b	(238-59)	2	1.4
10	(259-75)	38	25.9
11	(275-94)	32	21.8
12	(294-317)	8	5.4
13a	(317-30)	26	17.7
13b	(330-48)	22	15.0
14	(348-64)	3	2.0
15a	(364-78)	7	4.8
15b	(378-88)	-	
16	(388-402)	1	0.7

			147
	1C-2C	2	
	3C-4C	17	

Total Roman		166	
Non-coin		1	

GRAND TOTAL		167	

There is one metallic fragment present which is not a coin (SF 492). All of the 166 coins are Roman, dating from the mid-first century to the end of the fourth century AD.

Weaver's Bridge

This is the second largest group, with fifty-one coins. All appear to be Roman, although some are badly illegible and corroded and in need of conservation and cleaning. The ten cleaned examples all exhibit a tight chronological range, of between AD 316-340. The one other legible coin can be dated slightly later, between AD 354-64. All of the others appear to be of third or fourth century date.

The importance of the assemblage and the potential of a full study

A provisional listing of the coins and their dates, based on an initial viewing, will be provided in the next section. All of the individual groups, except that from Street Farm, essentially comprise Roman coins. Just Burford Road has two post-medieval coins present. All except Birdlip Quarry and Weaver's Bridge are very small site collections. However, all provide important dating evidence for the sites in question and information on the nature of the sites and their use.

Birdlip Quarry

These coins exhibit a chronological range from the mid-first century to the end of the fourth century. However, the bulk of the group is late Roman. A broad summary of the chronological grouping can be analysed by dividing them into four phases:

		Total	%
Phase A	(to AD 259)	10	6.8
Phase B	(259-96)	70	47.6
Phase C	(296-330)	34	23.1
Phase D	(330-402)	33	22.4

There are some features present in the group which can be highlighted at this stage but which will need to be explained in the subsequent report. The early coinage (Phase A) is light. Late-third century coinage (Phase B) is remarkably high and dominates the assemblage. The coins from the early fourth century (Phase C) are also well-represented. This period is usually much lighter on all categories of Romano-British site. Later fourth century coinage (Phase D) usually dominates site assemblages. Although well-represented here, it is significantly lighter than Phases B and C. A flourish of late-third - early fourth century is apparent.

The coins present do not include remarkable types individually. The quantity of *antoniniani* is interesting and these include some types not regularly seen on Romano-British sites, although they are not rare. These include examples of Valerian,

Postumus and Valerian II. Some are silvered. Many of these coins are semi-legible, with unstable surfaces, and full references to *Roman Imperial Coinage* will be precluded in many cases due to their deterioration.

In conclusion, this is a substantial group of Roman coins, presenting high potential for study and interpretation. This number of coins allows some statistical analysis and reliable comparison with other Romano-British sites, both in the immediate region and across Britain. Groups of coins come from individual contexts (for example contexts 2, 7, 14 31, 34, 128), which will allow closer detailed dating and understanding of individual parts of the site. As a whole, work on this collection will provide a framework for the interpretation and understanding of the site as a whole.

Weaver's Bridge

The high level of legibility from the cleaned examples makes this a potentially interesting group. Those cleaned exhibit a tight chronological grouping, of between AD 316 and 340. Much other detail is present, with mint marks legible on seven of the ten examples. The size of the group is quite large and offers potential for statistical analysis and comparison with other sites. The whole group should reveal a highly useful site profile, after cleaning, based on this evidence, which will provide an essential framework for the understanding of the site and its dating.

Listing of the coins, with spot dates

The coins will now be listed, site-by-site, in small find number order. Provisional spot dates have been added, to enable preliminary assessment and analysis of the overall assemblage. Coin issue periods are also provided.

Fields Farm

SF no.	Context	Date	Issue Period
1	13	330-5	13b
10	2	388-402	16

Daglingworth Quarry

1	116	367-75	15a
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Burford Road

1	208	340-64	
5	310	2nd century	
8	620	1660-85	

10	620	1660-85
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Street Farm

10	281	19th century
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Preston, St. Augustine's Lane

1	2	307	12
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Birdlip Quarry

1	7	330-5	13b
2	7	341-6	13b
3	7	161-80	7a
4	7	324-8	13a
6	7	335-40	13b
7	7	270-84	11
8	7	364-78	15a
9	7	330-5	13b
10	2	313-17	12
11	7	4th century	
12	7	340-64	14
14	2	310-13	12
15	2	268-74	10
17	-	270-84	11
18	2	317-30	13a
21	2	310-13	12
22	7	347-8	13b
24	-	222-35	9a
25	7	335-40	13b
26	7	260-8	10
27	7	270-84	11
28	7	335-40	13b
29	7	270-4	10
30	7	287-93	11
31	7	316-20	13a
32	7	364-78	15a
33	7	330-5	13b
36	7	260-8	10
40	7	270	10
42	7	320-3	13a
43	7	293-6	11
44	7	259-68	10
48	7	320-3	13a

59	7	270-4	10
60	7	293-6	11
61	7	310-12	12
70	7	335-40	13b
75	-	270-84	11
79	-	330-5	13b
83	-	260-8	10
86	7	287-93	11
88	7	260-378	
89	7	335-40	13b
91	7	364-78	15a
92	2	320-1	13a
93	2	321-4	13a
94	2	270-5	10
95	2	270-4	10
96	2	324-5	13a
97	2	268-70	10
103	7	316	12
105	7	270-84	11
110	7	354-64	14
111	7	268	10
113	14	270-4	10
115	14	270-4	10
116	14	270	10
118	14	270-4	10
124	14	270-84	11
128	7	3rd-4th century	
129	7	3rd-4th century	
130	7	364-78	15a
132	18	3rd-4th century	
133	18	3rd-4th century	
134	18	321-4	13a
139	-	268-74	10
141	-	330-5	13b
143	18	3rd-4th century	
144	18	270-4	10
145	18	268-70	10
147	18	275-84	11
148	18	161-80	7a
150	18	268-70	10
153	7	270-84	11
154	7	268-70	10
160	-	268-70	10
162	18	138-61	6
164	31	320-3	13a
165	40	4th century	
166	1	340-64	
170	31	275-364	

200	53	335-40	13b
201	18	260-402	
205	18	260-8	10
210	1	270-84	11
225	1	330-5	13b
227	31	270	10
237	31	320-3	13a
238	31	320-3	13a
240	31	316-20	13a
245	31	270-4	10
254	91	347-8	13b
260	31	320-4	13a
261	31	320-3	13a
266	31	320-3	13a
267	31	324-8	13a
270	31	270	10
272	31	275-84	11
274	34	364-78	15a
275	34	270-4	10
278	2	335-40	13b
279	2	270-4	10
280	2	337-40	13b
290	90	3rd-4th century	
321	31	293-6	11
325	31	330-5	13b
330	31	324-5	13a
336	38	3rd-4th century	
337	136	320-3	13a
343	34	270-4	10
345	53	316-20	13a
346	34	364-78	15a
370	34	364-78	15a
375	34	270-84	11
395	34	323-4	13a
430	128	253-60	9b
432	34	69-79	3
448	128	354-64	14
452	182	270-4	10
458	34	270-4	10
464	128	322-4	13a
468	-	260-96	
469	34	268-93	
492	34	I don't consider this to be a coin. Triangular metal fragment.	
539	-	161-80	7a
564	128	260-8	10
613	-	259-68	10
620	128	313-15	12

624	128	270-84	11
626	72	313-17	12
630	14	270-84	11
634	128	270-84	11
635	128	321-4	13a
660	u/s	310-13	12
662	-	259-68	10
667	136	341-6	13b
743	230	270-4	10
749	230	268-70	10
759	-	270-84	11
760	14	270-84	11
761	-	259-68	10
762	270	1st-2nd century	
763	270	138-61	6
766	272	270-84	11
815	272	270-84	11
831	278	270-84	11
835	230	260-74	
837	30	320-3	13a
840	276	270-4	10
850	251	270-84	11
872	246	330-5	13b
880	223	270-84	11
893	454	270-84	11
904	29	193-211	8
927	431	270-84	11
973	007	270-84	11
1024	721	270-84	11
1048	736	388-95	16
1086	122	270-84	11
1099	71	1st-2nd century	
1113	704	270-84	11
1180	829	253-60	9b
1190	815	3rd-4th century	
1208	760	330-5	13b
1244	760	341-6	13b
1387	929	316-20	13a
1514	1179	324-8	13a

Weaver's Bridge

7		347-8	13b
8		330-5	13b
13	(uncleaned coin)	354-64	14
15		316-20	13a
38		330-5	13b

40	330-5	13b
43	320-3	13a
55	337-40	13b
57	330-5	13b
66	330-5	13b
67	347-8	13b

The remaining 40 coins need cleaning. They are all broadly 3rd-4th century in date.

Conclusions

The coins recovered from Birdlip Quarry and Weaver's Bridge comprise substantial assemblages and present the possibility of a much fuller understanding of the chronological and spatial development of those sites. The groups from the other five sites are much more modest in size but again, represent essential evidence for the understanding and interpretation of the excavations.

Over the last twenty years archaeologists and numismatists have benefitted from a more quantitative and numerical interpretation of coin assemblages from Romano-British sites. It has been recognised that full coin lists, including unstratified finds, should be compiled for all sites in order that complete site profiles can be prepared and comparison made between sites in this respect. In this way we can understand more about the kinds of occupation in different types of settlement.

Some of the important and distinctive features of the Birdlip Quarry and Weaver's Bridge coins have been outlined above. The possibilities of a full analysis are promising. Birdlip Quarry, in particular, exhibits interesting patterns and its analysis is fundamental to a full interpretation of the site in both chronological and spatial terms.

Report to be prepared

I propose a full catalogue of all coins from the seven sites, each in chronological order. Brief notes will accompany the identifications for Fields Farm, Daglingworth Quarry, Burford Road, Street Farm and St. Augustine's Lane. A report will accompany the catalogue in the cases of Birdlip Quarry and Weaver's Bridge, in which some comparison will be made with other British assemblages. Individual items of numismatic interest will also be described and considered.

Estimate

Full identifications of all Roman coins (include. COWBQ EX4)	6 days
Catalogue and report	2 days

Total	8 days

APPENDIX 7: Flint Assessment

By T Durden

Introduction

A total of 775 pieces of flint were recovered in the course of excavations on the road scheme sites. An as yet uncertain amount of material from soil samples has to be added to this total. Over half this material came from one site, Duntisbourne Grove (364 pieces + c. 100 from sieve residue). The next largest assemblages were Trinity Farm and Birdlip Quarry with 68 and 153 pieces respectively. Other sites produced very small collections of struck flint. Flint is not native to most of the area under discussion and so would have been imported chalk flint from the south or east. Drift flint from the gravels of the Upper Thames valley may also have been used.

Duntisbourne Grove (DRDG96)

Of interest on this site were a number of prehistoric pits; 94, 142 and 144, from which most of the flint from the site was derived. These contained broad flakes and a number of flake cores including a partly discoidal flake core and a possible tortoise core. A smaller number of more blade-like flakes and a few retouched and serrated flakes were also present. Pit 94 contained a crude chisel arrowhead. A mixture of hard and soft hammers were used. The technological traits of the debitage and the few diagnostic pieces in the pits would suggest a broad Later Neolithic date for this material, although the identification of possible Middle Iron Age pottery from 94 is not in accord with this. An additional pit containing fill 63 contained a higher proportion of bladelike material and so may be slightly earlier in date. This is supported by possible Earlier Neolithic pottery from this feature.

Trinity Farm (BAGTF96)

Most of the flint (46 pieces) from this site came from the fill of a pit (fill no. 9). Apart from a number of flakes, some retouched, and some irregular waste, the pit was of interest as it contained a large number of scrapers, including a discoidal type and a thumbnail scraper. The presence of the thumbnail scraper would suggest a Beaker date for this context and this date is supported by the associated Beaker sherds. The considerable quantity of worked pieces in this context is reminiscent of the Beaker pit 1260 from Roughground Farm, Lechlade (Allen et al. 1993, 18). Another fill (7) contained only 14 flints, but may be assigned a similar date, supported by the presence of Beaker sherds. Context 11, another pit fill, also contained flakes, a scraper and Beaker sherds.

Birdlip Quarry (COWBQ96)

Although a fairly large number of flints were recovered from this site (153), most contexts contained only a few pieces. Much of this number is made up of small flakes recovered from the sieving of two contexts (81 and 89). These small flakes may indicate the presence of the later stages of flint knapping. Context 81 also contained a fragment of a flint hammerstone.

Flakes in general were mostly broad, with smaller amounts of blade-like material. A mixture of hard and soft hammers were used. The presence of a small blade core, and blade core fragment, part of a core tablet and a leaf arrowhead suggest some Earlier Neolithic activity on the site; the broad flakes, discoidal cores and steeply flaked scraper would also indicate a Later Neolithic presence. There was no associated pottery.

Other sites

The remaining sites had too few flints (39 or less), with only a few per context, to comment with any certainty on dates of related features or activity on the site. Pottery identified by A. Barclay unless specified 'JT' (Jane Timby).

<u>Site and no. of flints</u>	<u>comments</u>
COHH: 2	
DRSWS: 1	
DAGWGH: 3	
BAUHBN: 17	serrated flakes and bladelike core suggest some E/M Neolithic activity.
PRWPL: 6	
DAFF: 2	
DAMD: 22	poss. leaf arrowhead roughout- E.Neo. rest Neo/EBA?
CIRCL: 11	microlith from treehole, E. Meso, and undiagnostic flakes.
PRENC: 28	probable mix of Neo and EBA- laurel leaf, barbed and tanged arrowhead, fabricator, some fine scrapers. Most pottery of IA date, though the few beaker sherds present (JT) tie in datewise with the arrowhead and fabricator.
DADL: 3	barbed and tanged arrowhead in ploughsoil.
BAUEXB: 1	
PRNOF: 39	mix of narrow and broad flakes, blade core fragment, serrated flake- Neolithic?
PRSAL: 4	undiagnostic flakes, though beaker and other prehistoric sherds on site.
PRSTAS: 21	mix broad and narrow flakes- broad Neolithic. Pottery on site consists of 1 poss E. Neo sherd, other prehistoric and 1 EBA sherd, long duration of prehistoric activity possible.
DRLF: 3	
LAWF: 2	
LARP: 2	
LATST: 6	undiagnostic flakes; possible earlier prehistoric pottery sherds (JT)
LACFM: 7	
CIRENBW: 1	probable barbed and tanged arrowhead, broken.
LATWB: 8	undiagnostic flakes. 1 Acheulian (Middle Palaeolithic) handaxe in rolled condition.

Recommendations

All lithic material will require basic recording and quantification, leading to a basic flint report for each site with a sufficiently large assemblage, and brief comments on sites with only a small number of pieces. The larger assemblages may then be discussed in their local or regional context. Gloucestershire has relatively little evidence for Later Neolithic and Beaker settlement (Darvill 1987, 68-81), so the larger assemblages will serve to add to the picture. A maximum of 3,000 words is estimated for the flint report. It is felt that the character and quantity of material does not warrant further analysis in the form of detailed technological or metrical study.

Time required

Recording all lithic material.	4 days
Analysis of recorded material, research and report writing, preparation of drawing brief.	4 days
Total	8 days

3 days for flint drawing by illustrator is estimated.

References

- Allen, T.G.; Darvill, T.C.; Green, L.S. and Jones, M.U.
1993 Excavations at Roughground Farm, Lechlade, Gloucestershire: a prehistoric and Roman landscape. Thames Valley Landscapes: the Cotswolds Water Park, Volume 1, Oxford Archaeological Unit.
- Darvill, T.C.
1987 Prehistoric Gloucestershire. Alan Sutton, Gloucester.

Site Name	Site Code	No. of Flints
Birdlip Quarry	COWBQ 96	153
Highgate House	COHH 96	2
Duntisbourne Leer	DADL 96	3
Field's Farm	DAFF 96	2
Sly's Wall South	DRSWS 96	1
Middle Duntisbourne	DAMD 96	22
Duntisbourne Grove	DRDG 96	364
Warren Gorse House	DAGWGH 96	3
Trinity Farm	BAGTF 96	68
Hare Bushes North	BAUHBN 96	17
Cherry Tree Lane Compound	CIRCL 96	11
Norcote Farm	PRNOF 96	39
Witpit Lane	PRWPL 96	6
Preston Enclosure	PRENC 96	28
St. Augustine's Lane	PRSAL 96	4
St. Augustine's Farm South	PRSTAS 96	21
Lower Street Furlong	DRLF 96	3
Westfield Farm	LAWF 96	2
Latton 'Roman Pond'	LARP 96	2
Street Farm	LATST 96	6
Court Farm	LACFM 96	7
Cirencester Watching Brief	CIRENWB 96	1
Latton Watching Brief	LATWB 96	8

APPENDIX 8: Assessment of the Worked Stone

By F Roe

A total of 571 pieces of stone have been examined, and the distribution of these across the sites is shown on Table 1. A large proportion of the finds consists of burnt stone, virtually all of it local Jurassic limestone. There are 54 pieces of worked stone, 21 of these being listed separately as items of building stone, for which different varieties of the local Jurassic limestone were utilised. This building stone all comes from Cowley, Birdlip Quarry, and is likely to be Roman.

The worked stone objects include 16 quern and millstone fragments, 7 of which come from the Roman site at Cowley, Birdlip Quarry. There are also 5 whetstones, 7 small quartzite pebbles possibly used as slingstones and five other small items, including a complete Iron Age spindlewhorl from Cowley, Highgate House.

The value of this assemblage lies in the fact that it will provide for the first time evidence in published form for the use of stone in this area of Gloucestershire. Although nearly all the objects are fragmentary, much information about trading contacts can be obtained from the materials used. The two finds of May Hill sandstone rubbers from possible Neolithic pits at Duntisbourne Rouse are of great interest, and comparisons with Crickley Hill will be taken into account. A further two fragments of this sandstone are likely to be of Middle Iron Age date. The use of Upper Old Red Sandstone from the Forest of Dean/South Wales area can be demonstrated from at least the Iron Age until the Post-Medieval period by a series of nine querns and a millstone. A single rotary quern fragment of Roman date made from igneous rock is unusual, and requires further investigation, including thin sectioning. The whetstones and other small items however fit into the expected picture, and can be compared with other Gloucestershire finds.

An estimated 3-4 days further work would be needed to produce a report and a catalogue with more detailed descriptions.

Six of the objects warrant illustration.

COHH 96	210,1	Spindlewhorl
DRDG 96	111, 257 & 258	Rubber Fragments
BAUBHN 96	1010,1	Pebble-hammer
CIRCL 96		Point Sharpener

Provisional Catalogue of Stone Finds

I: OBJECTS

COWBQ 96 Cowley, Birdlip Quarry

Box	Context	SF	description:	type of stone
ST 3	w/s	1490	fragment small, slender whetstone, rectangular cross-section, worn sides	Kentish Rag
ST 1	31	263	fragment of rotary quern, disc igneous, fairly coarse-type, traces of grooved grinding, grained, possibly gabbro; surface needs thin sectioning	
ST 1	"	287	fragment rotary quern, upper with part of central quartz conglomerate hole, worn shiny round outer edge	Upper Old Red Sandstone
ST 1	"	296	fragment rotary quern, lower stone, good grooving of grind-quartz conglomerate surface	Upper Old Red Sandstone
ST 2	90	281	quern fragment, probably from saddle quern, from layer of probable hill wash; Iron Age residual?	May Hill sandstone
ST 2	190	496	fragment rotary quern with part of central hole, neatly trimmed quartz conglomerate circumference and trace of small hopper	Upper Old Red Sandstone
ST 2	368	836	fragment rotary quern, upper stone, top surface pecked into quartz conglomerate shape, possibly a small hopper	Upper Old Red Sandstone
ST 2	1198	1542	fragment rotary quern, upper stone, possible traces of raised rim on upper side, so might be early Roman?	Niedermendig lava

ST 3	16	1100	crude whetstone, weathered, worn along one edge fine-grained, sandy	Jurassic limestone
ST 3	34	1200	pebble with slight traces of use as polisher on three sides	quartzitic sandstone
ST 5	807	-	small pebble, possible slingstone	quartzite
ST 3	840	1388	two small pebbles, possibly slingstones	quartzite
ST 3	875	1283	small whetstone with wear on or two edges	fine-grained sandstone phyllite
ST 5	1139	-	two small pebbles, possible slingstones	quartzite
ST 3	1325	1604	disc, unevenly worked edge	Jurassic limestone, fine-grained
COHH 96 Cowley, Highgate House				
ST 1	210	1	spindlewhorl, disc type with straight bored hole	Jurassic limestone fine-grained, micaceous
DAMD 96 Duntisbourne Abbots, Middle Duntisbourne				
misc	138	-	quern fragment with one worked surface	Upper Old Red Sandstone
DRDG 96 Duntisbourne Rouse, Duntisbourne Grove				
ST 1	53	10	quern fragment	Upper Old Red Sandstone/quartz conglomerate
ST 1	111	257	small fragment from rubber for saddle quern	May Hill sandstone
ST 1	111	258	fragment bun shaped rubber for saddle quern	May Hill sandstone

ST 1	168	-	small pebble, possibly slingstone	quartzite
ST 1	168	210	small chip with no clear evidence of working, but a sandstone quern material	Upper Old Red Sandstone
BAUHBN 96 Baunton, Hare Bushes North				
misc	1010	1	two fragments pebble-hammer, burnt, hour-glass perforation	quartzite
CIRCL 96 Cirencester, Cherry Tree Lane				
misc	6	-	small slab used as point sharpener, one fairly coarse groove	Pennant sandstone
PRNOF 96 Preston, Norcote Farm				
misc	146	3	part of quern, possibly saddle	Upper Old Red Sandstone/quartz conglomerate
PRENC 96 Preston Enclosure				
misc	8	8	fragment saddle quern with concave grinding surface	Upper Old Red Sandstone
misc	64/65	-	small fragment saddle quern, worn thin, concave grinding surface	May Hill sandstone
PREM 96 Preston, Ermine Farm				
misc	83	-	small pebble, possible slingstone	quartzite
LATST 96 Latton, Street Farm				
loose	329	17	fragment from large millstone with part of central hole and	Upper Old Red Sandstone quartz

			keyhole shaped socket for rhynd fittings; very thick, depth approximately 27 cm	conglomerate
misc	500	18	whetstone, rectangular slab type with two grooves from use as sharpening stone	grey sandstone,
misc	500	19	whetstone, long and slender,	Eidsborg schist

II: BUILDING STONE

Box	context	SF	description	type of stone
COWBQ 96 Cowley, Birdlip Quarry				
ST 5	7	-	fragment roofing tile or more probably paving stone	Jurassic limestone, fine-grained
ST 5	12	-	fragment possible paving stone burnt	" "
ST 3	34	-	block of burnt stone, probably building stone	" "
ST 5	38	-	fragment possible paving stone burnt	" "
ST 5	40	-	weathered slab, possible paving stone, burnt	" "
ST 5	72	-	fragment possible paving stone burnt	" "
ST 5	95	-	fragment possible paving stone burnt	" "
ST 3	128	668	fragment possible paving stone	" "
ST 3	128	676	fragment possible paving stone weathered, slightly burnt	" "
loose	199	-	part of rectangular block of dressed building stone, burnt	Jurassic limestone, oolitic
ST 3	223	-	fragment roofing tile or paving stone	Jurassic limestone, fine-grained
loose	276	353	large post pad with square socket, top part of pad partly shaped into a rectangular block, bottom half left rough	" "
loose	297	722	large post pad; nearly square block with a square socket	Jurassic limestone, oolitic, light coloured

loose	298	774	large post pad, rectangular block with square socket	"	"
ST 5	705	-	fragment possible paving stone burnt	Jurassic limestone, fine-grained	
loose	730	1335	approximately rectangular grooved block with crudely pecked out groove running round three sides	"	"
ST 5	825	-	fragment with worn surface possible paving stone	"	"
loose	841	1502	very large elongated block, about the size for a threshold stone, one side weathered, especially in centre where it may first have been worn down; other side is crudely grooved, perhaps in order to work it to shape?	Jurassic limestone, coarse, shelly and oolitic	
ST 5	848	-	fragment from burnt slab possible tile or paving stone	Jurassic limestone, fine-grained	
ST 5	914	-	fragment from slab, possible paving stone	"	"
ST 3	1323	1603	block of possible building stone	"	"

III: BURNT STONE

Box	context	SF	description	type of stone
COWBQ 96 Cowley, Birdlip Quarry				
ST 5	3		1 fragment	Jurassic limestone, fine-grained
ST 5	7		4 fragments	Jurassic limestone, 3 fine-grained, 1 shelly
ST 5	14		1 small fragment	Jurassic limestone
ST 5	18		5 small fragments	Jurassic limestone, 3 fine-grained, 2 shelly
ST 5	19		4 small fragments	Jurassic limestone, 3 fine-grained, 1 shelly
ST 5	31		8 small fragments	Jurassic limestone, 7 fine-grained, 1 shelly
ST 5	34		12 small fragments	Jurassic limestone, 11 fine-grained, 1 shelly
ST 5	53		1 small slab	Jurassic limestone, fine-grained
ST 5	60		1 fragment	" "
ST 5	68		2 fragments	" "
ST 5	79		2 fragments	" "
ST 5	84		1 fragment	Jurassic limestone, shelly
ST 5	90		10 flat fragments	Jurassic limestone, fine-grained
ST 5	95		3 fragments	Jurassic limestone, shelly
ST 5	99		1 small flat fragment	" "

ST 5	114	1 small flat fragment	Jurassic limestone, fine-grained
ST 5	128	8 small fragments	Jurassic limestone, 7 fine-grained, 1 shelly
ST 5	140	1 small flat fragment	Jurassic limestone, fine-grained
ST 5	171	3 small fragments	" "
ST 5	171	10 fragments	Jurassic limestone, 5 fine-grained, 2 shelly, 3 oolitic
ST 5	188	1 fragment	Jurassic limestone, fine-grained
ST 5	190	1 fragment	" "
ST 5	193	2 fragments	Jurassic limestone, shelly
ST 5	198	1 fragment	Jurassic limestone, fine-grained
ST 5	704	2 fragments	" "
ST 5	711	1 fragment	" "
ST 5	731	2 fragments	" "
ST 5	837	2 fragments	" "
ST 5	848	3 fragments	Jurassic limestone, 2 fine-grained, 1 shelly
ST 5	851	3 fragments	Jurassic limestone, fine-grained
ST 5	880	2 fragments	" "
ST 5	1187	1 fragment	" "
ST 5	1210	7 fragments	" "
ST 5	1225	1 fragment	" "

ST 5	1244	1 fragment	"	"
ST 5	1289	1 fragment	"	"
ST 5	1291	1 fragment	"	"

COHH 96 Cowley, Highgate House

ST 1	110	1 fragment	Jurassic limestone, fine-grained
ST 1	133	11 fragments	" "
ST 1	139	1 larger piece, slightly burnt	Jurassic limestone, shelly
ST 1	211	2 small fragments	Jurassic limestone
ST 1	"	4 fragments	" "

DAMD 96 Duntisbourne Abbots, Middle Duntisbourne

misc	4	5 fragments	Jurassic limestone
misc	11	4 fragments	" "
misc	12	2 fragments	" "
misc	39	1 fragment	" "
misc	41	16 fragments	" "
misc	52	1 fragment	" "
misc	57	5 fragments	" "
misc	"	3 fragments	" "
misc	69	4 fragments	" "
misc	154	3 fragments	" "
misc	163	1 fragment	" "
misc	251	1 fragment	" "

misc	282	1 fragment	" "
DRDG 96 Duntisbourne Rouse, Duntisbourne Grove			
ST 1	9	6 fragments	Jurassic limestone
ST 1	15	3 fragments	" "
ST 1	25	2 fragments	" "
ST 1	39	4 fragments	" "
ST 1	46	5 fragments	" "
ST 1	47	6 fragments	" "
ST 1	64	4 fragments	" "
ST 1	133	1 fragment, (2 fitting pieces)	" "
ST 1	162	1 fragment	" "
BAGTF 96 Bagendon, Trinity Farm			
misc	7	4 fragments	Jurassic limestone, oolitic
misc	9	1 fragment	Jurassic limestone, shelly & oolitic
misc	"	3 fragments	Jurassic limestone
misc	"	9 fragments	" "
misc	11	3 fragments	" "
misc	74	27 fragments	" "
BAUHBN 96 Baunton, Hare Bushes North			
misc	1010	1 fragment	Jurassic limestone, shelly

CIBFRD 96 Cirencester, Burford Road

misc	318	2 fragments	Jurassic limestone
misc	323	4 fragments	" "

PRENC 96 Preston Enclosure

misc	10	1 fragment	Jurassic limestone
misc	30	1 fragment	Jurassic limestone, shelly

LATST 96 Latton, Street Farm

misc	269	1 fragment	Jurassic limestone, shelly & oolitic
misc	304	1 fragment	" "

LACFM 96B 1996/1 Latton, Court Farm

misc	7	1 fragment	Jurassic limestone, clayey
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misc	132	1 pebble	quartzite
misc	227	1 fragment	Jurassic limestone, clayey
misc	286	1 fragment	Jurassic limestone, shelly
misc	287	2 fragments	Jurassic limestone, shelly & clayey
misc	288	1 fragment	" "
misc	314	1 fragment	Jurassic limestone, shelly
misc	320	1 fragment	Jurassic limestone, clayey

misc	479	1 fragment	Jurassic limestone, shelly & clayey
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misc	481	1 fragment	Jurassic limestone, shelly
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misc	482	2 fragments	Jurassic limestone, shelly
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LAWBR 96 B 1996/1 Latton, Weavers Bridge

misc	51 59	2 fragments	Jurassic limestone, shelly
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IV: UNWORKED STONE

Box	context	description	type of stone
COWBQ 96 Cowley, Birdlip Quarry			
ST 5	4	1 fragment	Jurassic limestone, fine-grained
ST 5	7	2 fragments	Jurassic limestone, 1 fine-grained, 1 shelly
ST 5	26	1 small fragment	Jurassic limestone, fine-grained
ST 5	47	5 small fragments	Jurassic limestone, shelly
ST 5	72	2 fragments	Jurassic limestone, 1 fine-grained, 1 shelly
ST 5	90	2 fragments	Jurassic limestone, fine-grained
ST 5	114	1 fragment	Jurassic limestone
ST 5	120	1 fragment	Jurassic limestone
ST 5	136	2 fragments	Jurassic limestone, 1 fine-grained, 1 shelly
ST 5	146	1 fragment	Jurassic limestone, fine-grained
ST 5	153	1 fragment	Jurassic limestone, shelly
ST 5	190	1 fragment	Jurassic limestone, fine-grained
ST 5	223	1 fragment	Jurassic limestone, shelly
ST 5	303	2 fragments	Jurassic limestone, fine-grained

ST 5	597	1 fragment	Jurassic limestone, shelly
ST 5	606	1 fragment	Jurassic limestone, oolitic & shelly
ST 5	774	1 fragment	Jurassic limestone, fine-grained
ST 5	848	2 fragments	Jurassic limestone
ST 5	851	1 fragment	Jurassic limestone, shelly
ST 5	914	1 fragment	Jurassic limestone
ST 5	916	1 fragment	Jurassic limestone
ST 5	922	2 fragments	Jurassic limestone, fine-grained
ST 5	1139	1 fragment	Jurassic limestone
ST 5	1216	3 fragments	Jurassic limestone, 2 fine-grained, 1 oolitic
ST 5	1247	1 fragment	Jurassic limestone, fine-grained
ST 5	1305	1 fragment	Jurassic limestone
COHH 96 Cowley, Highgate House			
ST 1	106	2 fragments	Jurassic limestone, 1 fine-grained, 1 oolitic
ST 1	109	11 fragments	Jurassic limestone
ST 1	110	3 fragments	Jurassic limestone
ST 1	111	7 small fragments	Jurassic limestone
ST 1	128	1 fragment	Jurassic limestone
ST 1	133	1 fragment	Jurassic limestone
ST 1	210	4 fragments	Jurassic limestone

ST 1	211	51 small fragments	Jurassic limestone
ST 1	221	16 small fragments	Jurassic limestone

DAMD 96 Duntisbourne Abbots, Middle Duntisbourne

misc	11	3 fragments	Jurassic limestone
misc	12	1 fragment	quartzite pebble
misc	39	4 fragments	Jurassic limestone
misc	45	19 fragments	Jurassic limestone
misc	66	1 fragment	Jurassic limestone
misc	69	4 fragments	Jurassic limestone
misc	85	5 fragments	Jurassic limestone
misc	154	3 fragments	Jurassic limestone
misc	216	1 fragment	Jurassic limestone
misc	217	5 fragments	Jurassic limestone
misc	251	3 fragments	Jurassic limestone

DRDG 96 Duntisbourne Rouse, Duntisbourne Grove

ST 1	9	5 fragments	Jurassic limestone
ST 1	47	2 fragments	Jurassic limestone
ST 1	64	17 fragments	Jurassic limestone
ST 1	134	2 fragments	Jurassic limestone
ST 1	228	1 fragment	quartzite pebble

CIBFRD 96 Cirencester, Burford Road

misc	318	1 small fragment	Jurassic limestone
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misc	320	5 tiny fragments	Jurassic limestone
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misc	323	2 tiny fragments	Jurassic limestone
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PRENC 96 Preston Enclosure

misc	60	2 fragments	Jurassic limestone
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misc	64/65	1 fragment	Jurassic limestone, shelly
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misc	84	1 fragment	Jurassic limestone
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DRLF 96 Driffield, Lower Street Furlong

misc	27	1 fragment	Jurassic limestone, shelly
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LACFM 96B Latton, Court Farm

misc	288	tiny pebble	Jurassic limestone
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misc	307	tiny pebble	Jurassic limestone
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misc	314	tiny pebble	Jurassic limestone
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misc	331	tiny pebble	Jurassic limestone
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misc	428	tiny pebble	Jurassic limestone
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LAWBR 96 B 1996/1 Latton, Weavers Bridge

misc	9	1 fragment and gravel 5 tiny pebbles	Jurassic limestone
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Table 1 Summary of Stone Finds

Code	Site	O	Bld	B	U	Total
COWBQ 96	Cowley, Birdlip Quarry	17	21	111	39	188
COHH 96	Cowley, Highgate House	1	-	19	96	116
DAMD 96	Duntisbourne Abbots, Middle Duntisbourne	1	-	47	49	97
DRDG 96	Duntisbourne Rouse, Duntisbourne Grove	5	-	32	27	64
BAGTF 96	Bagendon, Trinity Farm	-	-	47	-	47
BAUHBN 96	Baunton, Hare Bushes North	1	-	1	-	2
CIBFRD 96	Cirencester, Burford Road	-	-	6	8	14
CIRCL 96	Cirencester, Cherry Tree Lane Compound	1	-	-	-	1
PRNOF 96	Preston, Norcote Farm	1	-	-	-	1
PRENC 96	Preston Enclosure	2	-	2	4	8
PREM 96	Preston, Ermin Farm	1	-	-	-	1
DRLF 96	Driffield, Lower Street Furlong	-	-	-	1	1
LATST 96	Latton, Street Farm	3	-	2	-	5
LACFM 96	Latton, Court Farm	-	-	13	5	18
LAWBR 96	Latton, Weavers Bridge	-	-	2	6	8
totals		33	21	282	235	571

O = Objects, Bld = Building, B = Burnt & U = Unworked

APPENDIX 9: Glass Assessment

By C Cropper

A total of 380 glass fragments were recovered from the overall road scheme, representing 17 sites. The context, date and preliminary identification of each object (which may include more than one fragment) are dealt with in the tables below. The data was examined visually.

BAGTF 96

Context	Object	Description	Date
5	Bottle	Kicked in base, yellow-green, mould-blown	Post Med.
13	Window	Colourless, blue-green tinted	19/20thC
16	Bottle	Body fragment, brown, mould-blown	19/20thC
26	Window	Colourless, blue-green tinted	19/20thC
	Bottle	Body/shoulder fragment, colourless, mould-blown	

BAUEXB 96

5	Bottle	Kicked in base, yellow-green mould-blown	Post Med.
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BAULT 96

5	Bottle	Body fragment, colourless blue-green tinted, mould blown	19/20thC
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CIBFRD 96

106	Bottle	Kicked in base fragment, green, mould-blown	18/19thC
111	Bottle	Body fragment, green, mould-blown	18/19thC
209	Bottle	Base fragment, green, mould-blown	Post Med.
	Bottle	?Base fragment, green, mould-blown	Post Med.
	Bottle	?Neck fragment, green, mould-blown	Post Med.
	Vessel	Body fragment, green tinted, mould-blown	Post Med.
	Vessel	Body fragment, olive green, mould-blown	20thC
533	Bottle	Base fragment, opaque	Post Med.

CIRCL 96

20	Misc	Piece of amber ?melt glass with impurities	?
1	Linen smoother	Base fragment, weathered opaque	16/17thC
6	Bottle	Kicked in base fragment, ?amber, mould-blown	Post Med.
8	Bottle	Kicked in base fragments, green, mould-blown	Post Med.

COWBQ 96

U/S	Bead	Green, hexagonal bead	Roman
6	Vessel	Body fragment, colourless, ?free-blown	?
10	Vessel	Body fragment, colourless, ?mould-blown	?Roman
	Vessel	Body fragment, colourless, ?mould-blown	Roman
18	Vessel	Body fragment, colourless, ?free-blown	?Roman
	?Bottle	Body fragment, green-blue tinted, mould-blown	Roman
	Bottle	Body fragment, blue-green tinted, mould-blown, prismatic	Roman
	Bottle	Body fragment, blue-green tinted, mould-blown, cylindrical	Roman
	Bottle	Body fragment, blue-green tinted, ?free-blown, cylindrical	Roman
31	Vessel	Body fragment, colourless, ?mould-blown glass	Roman
	Vessel	Body fragment, colourless, slight yellow-tint, ?free-blown	Roman
	Vessel	Body fragment, colourless, ?mould-blown	Roman
	Vessel	Body fragment, colourless, ribbed, ?mould-blown	Roman
	Vessel	Body fragment, colourless, ?mould-blown	Roman
	Bottle	Body fragment, green-blue tinted, mould-blown, prismatic	Roman
34	Vessel	Rim fragment, colourless, ?free-blown	Roman
	Vessel	Body fragment, colourless, blue-green tinted, mould-blown	Roman
	Window	Colourless, blue-green tinted, cast	?Roman
64	Bottle	Body fragment, green-blue tinted, mould-blown, prismatic	Roman
	?Bottle	Colourless, blue-green tinted chip	Roman
72	Vessel	Body fragment, green-blue tinted, free-blown	Roman
125	Bottle	Body & neck fragment, colourless, green tinted, mould-blown, ?palm frond motif	?
	Bottle	Body fragment of green-blue tinted, mould-blown, prismatic	Roman
127	Bottle	Body fragment, green-blue tinted, mould-blown, prismatic	Roman
128	Bottle	Body/neck fragment, colourless, blue-green tinted, mould-blown	?Roman
140	Bead	Fragment, flattened ovoid, colourless, blue-green tinted	Roman
209	Vessel	Body fragment, colourless, blue-green tinted, ?free-blown, ?enamel painted line	?Roman

252	Bottle	Body fragment, colourless, blue-green tinted, mould-blown, prismatic	Roman
736	Vessel	Rim fragment, colourless, green-blue tinted, free-blown	Roman
837	Vessel	Body fragment, colourless, green-blue tinted, mould-blown	Roman
846	Vessel	Body fragment, colourless, green-blue tinted, ?mould-blown	?Roman
984	Vessel	Body fragment, colourless, green-blue tinted, ?mould-blown	Roman
1210	Bottle	Neck/Body fragment, colourless, green-blue tint, mould-blown	Roman
1211	Bottle	Body fragment, colourless, green-blue tinted, mould-blown, prismatic	Roman
1235	Vessel	?Body fragment, colourless, slight yellow tint, free-blown	?Roman
1236	?Window	Colourless, blue-green tinted, double glossy, free-blown	Roman
1281	Bead	Colourless, slight yellow-green tint, annular with two-coloured cables	Roman
1291	Window/Bottle	Colourless, green-blue tinted, matt-glossy	Roman
1307	Bottle	Base fragment, yellow-green Two body fragments, yellow-green	18/19th
1312	Bottle	Body fragment, yellow-green	18/19th
1313	Vessel	Body fragment, colourless, slight blue green tinted, free-blown	Roman

DAFF 96

89	Bottle	Body fragments, green-blue, mould-blown, prismatic	Roman
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DAGQ 96

120	Bottle	Base & body fragment, octagonal sided, green-tinted, mould-blown	20thC
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DAMD 96

1	Vessel	Body fragment, colourless, green tinted, mould-blown	Med/Post Med
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DRLF 96

27	Bottle	Body fragment, green, mould-blown	19/20thC
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ITLAY BUND 96

67	Bottle	Fragments, colourless, green-blue tinted, mould-blown, partial inscription on base reads 'W & A...EY LD, 25' and in the centre a cross.	19/20thC
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LACFM 96

Context	Object	Description	Date
487	Bottle	Kicked in base fragment, olive-green, mould-blown	Post Med.
120	Unident.	Fragment, green-blue tinted, mould-blown	Roman

LARP 96

112	Bottle	Body fragment, yellow-green, mould blown	Post Med.
174	Bottle	Rim and neck fragment, colourless, blue-green tinted, mould-blown	Post Med.
405	Bottle	Kicked in base, green, mould-blown	Post Med.
	Bottle	Body fragment, colourless, mould-blown	Post Med.
412	Bottle	Shoulder fragment, colourless, green-blue tinted, mould-blown	Post Med.

LATST 96

190	Bottle	Shoulder fragment, yellow-green, mould-blown	Post Med.
	Window	Colourless, green tinted	19/20 th
196	Bottle	Body fragment, yellow-green, mould-blown	19/20 th
225	Window	Colourless, green tinted	19/20thC
	Bottle	Body fragment, colourless, mould-blown	20thC
	Bottle	Fragments kicked in base, yellow-green, mould blown	Post Med
227	Window	Colourless, green tinted	20thC
	Tumbler	Fragments, colourless, mould-blown	20thC
	Bottle	Body fragments, colourless, blue-green tinted, cylindrical	20thC
	Bottle	Body fragments, yellow-brown, mould-blown, cylindrical	20thC
	Bottle	Body fragments, yellow-brown, mould-blown, cylindrical	Post Med.
	Bottle	Neck & rim fragments, yellow-green, mould-blown	Post Med.
229	Bottle	Body fragment, opaque, mould-blown	Post Med.
	Bottle	Base fragment, green, mould-blown	Post Med.
	Bottle	Base fragments, yellow-green, mould-blown	19/20 th
232	Vessel	Body fragment, colourless, mould-blown	Post Med.
	Bottle	Body fragment, green tinted, mould-blown	Post Med.
235	?	Fragment, colourless, green-tinted	19/20thC
	Bottle	Body fragment, yellow-green, mould-blown, prismatic	Post Med.
	Bottle	Rim & neck fragment, yellow-	Post Med.

	Bottle	green, mould-blown Base, neck and shoulder fragments, yellow-green, mould- blown, cylindrical	Post Med.
237	Bottle	Base fragment, yellow-green, mould-blown, cylindrical	Post Med.
	Bottle	Base fragment, colourless, green- blue tinted, cylindrical	19/20thC
240	Bottle	Body & kicked in base fragments, yellow-green, mould-blown, cylindrical	Post Med.
	Bottle	Body & kicked in base fragments, green, mould-blown, cylindrical	Post Med.
	Bottle	Neck, body and kicked in base fragments, yellow-green, mould- blown, cylindrical	Post Med.
258	Bottle	?Neck fragment, colourless, green- blue tinted, mould-blown	Post Med.
	Window	Colourless, green tinted	Post Med.
	Window	Colourless	20thC
267	Dish	Base & side fragment, colourless, impressed mould-blown	20thC
	Bottle	Body fragment, colourless, mould- blown, octagonal	20thC
	Vessel	Body fragment, yellow-green, mould-blown	Post Med.
	Bottle	Blue-green, mould-blown, cylindrical	Post Med.
	Bottle	Body fragments, green, mould- blown, cylindrical	20thC
268	?Drinking glass	Solid, drawn stem fragment, colourless	19/20thC
	Bottle	Body fragment, green tinted, mould-blown	Post Med.
269	Bottle	Fragment, green tinted, mould- blown	Post Med.
273	Bottle	Body and handle fragment, colourless, green-blue tinted, mould-blown, prismatic	Roman
277	Bottle	Body fragment, yellow-green, mould-blown, cylindrical	Post Med.
281	Jars	4 complete Shippams paste	20thC
	Jar	Complete brown 'Virol'	20thC
	Bottle	Complete colourless medicine bottle 'Wellcome Chemworks 105'	20thC
	Bottle	Body fragments amber, mould- blown, prismatic	20thC
	Bottle	Body/neck fragment, green, mould-blown, prismatic	20thC
	Bottle	Body fragments, colourless, mould-blown, prismatic	20thC
287	Bottle	Kicked in base fragment, yellow- green, mould-blown	Post Med.
290	Bottle	Body fragment, brown, mould- blown	Post Med.
291	Bottle	Base & body fragment, colourless, blue-tinted, mould-blown,	19/20thC

		octagonal	
304	Window Window Bottle	Colourless Colourless, green tinted Body fragment, yellow-green, mould-blown, cylindrical	19/20thC 19/20thC 19/20thC
312	Bottle Window Window Bottle Window	Body fragment, colourless, blue tinted, mould-blown, cylindrical Colourless, green-tinted Colourless, blue-green tinted Body fragment, colourless, blue tinted, mould-blown, prismatic Colourless, blue-green tinted	19/20thC 19/20thC 19/20thC 20thC 19/20thC
313	Window	Colourless, green tinted	19/20 th
357	Window	Colourless, green tinted	Post Med.
389	Window	Colourless, green tinted	19/20thC
390	Bottle Bottle	?Base fragment, green-yellow tinted, mould-blown Rim & neck fragment, colourless, green-tinted, mould-blown	19/20thC Post Med.
395	Bottle	Base & body fragment, green- yellow, mould-blown, cylindrical(?=390)	19/20thC
420	Bottle Vessel Window	Body fragment, yellow-green tinted, mould-blown Body fragment, colourless, green tinted, mould-blown Colourless, green tinted	Post Med. Post Med. Post Med.
438	Bottle Bottle Bottle Bottle Window	Base and body fragment, m yellow- green, mould-blown, cylindrical Body fragment, opaque, mould- blown Body fragment, brown-yellow, mould-blown Rim & neck fragment, yellow- green tinted, mould-blown Colourless, green-blue tinted	Post Med./ Modern Post Med. ?Post Med. Post Med. Post Med.
443	Bottle Bottle Bottle Bottle Bottle	Body & base fragments, colourless, blue tinted, mould- blown Rim & neck fragments, colourless, blue-green tinted, mould-blown Body & kicked in base fragments, yellow-brown, mould-blown, cylindrical Body fragment, colourless, green tinted, mould-blown Body fragments, yellow-green, mould-blown	Post Med./Modern Post Med./ Modern Post Med. Post Med./ Modern Post Med./ Modern
446	Bottle Window	Body & kicked in base fragments, green, mould-blown, cylindrical Colourless, green-tinted	Post Med. Post Med.
458	Bottle Bottle Bottle	Shoulder fragment, green tinted, mould-blown Body fragments, green tinted, mould-blown Body fragment, green, mould-	Post Med. Post Med. Post Med.

	Bottle	blown Body fragment, colourless, mould-blown	Post Med.
	Window	Colourless	19/20thC
	Window	Colourless, rolled, ribbed	20thC
518	Bottle	Kicked in base fragment, green tinted, mould-blown	Post Med.
	Bottle	Kicked in base fragment,	Post Med.
	Bottle	Body & base fragments,	Post Med.
	Bottle	Rim and neck fragment, colourless, blue-green tinted, mould-blown	?Roman
542	Bottle	Body fragment, yellow-green tinted, mould-blown	Post Med.
545	Window	Colourless, green tinted	19/20thC
551	Bottle	Kicked in base fragments, green, mould-blown	Post Med.
589	Bottle	Body fragments, colourless, blue tinted, mould-blown	Post Med./Modern
	Window	Colourless, blue-green tinted	19/20thC
591	Bottle	Base fragment, opaque, mould-blown	Post Med.
	Bottle	Base fragment, opaque, mould-blown	Post Med.
	Bottle	Body fragment, green, mould-blown, cylindrical	19/20thC
	Window	Colourless, blue tinted	19/20thC
	Window	Colourless	19/20thC
605	Bottle	Body fragment, colourless, mould-blown, prismatic	19/20thC
	Vessel	Body fragment, colourless, green tinted, mould-blown	19/20thC
	Window	Colourless, blue tinted	19/20thC
611	Bottle	Base & body fragments, colourless, green tinted, mould-blown	19/20thC
	Bottle	Body fragments, yellow-green, mould-blown, cylindrical	19/20thC
	Bottle	Base fragment, brown, mould-blown, cylindrical	19/20thC
	Jar	Body fragment, yellow-brown, mould-blown	19/20thC
	Bottle	Neck fragment, green, mould-blown	Post Med.
	Bottle	Rim & body fragments, green tinted, mould-blown	Post Med.
	Bottle	Rim, shoulder & body fragments, green, mould-blown, cylindrical	Post Med.
	Bottle	Base fragment, yellow-green, mould-blown	19/20thC
	Window	Colourless, green tinted	19/20thC
702	Bottle	Two body fragments, yellow-green, ?octagonal mould-blown	18/19thC
	Bottle	?Base fragment, yellow, mould-blown	18/19thC
706	Window	Colourless	20thC
737	Window	Two fragments, colourless	17/18thC

	Bottle	Three fragments, opaque	17/18thC
739	Bottle	Body fragment, yellow-brown, cylindrical	19thC
749	Window	Thirteen fragments, colourless	17/18thC
762	Bottle	Base fragment, yellow-green	17/18thC
784	Window	Fragment, colourless	17/18thC
812	Window	Two diamond quarry fragments, yellow-green tint	17/18thC
873	Bottle	?Base fragment, yellow-brown	17/18thC
	Bottle	Body and base, colourless, blue-green tinted, octagonal, mould-blown	19thC
	Bottle	Body fragment, brown	19/20thC
	Window	Two fragments, colourless	19/20thC
936	Bottle & Stopper	Bottle finish and neck with 'club-sauce' stopper, colourless blue-green tinted, mould-blown	19th/20thC
	Bottle	Body fragment, colourless, octagonal, mould-blown	19/20thC
	Bottle	Body fragment, colourless green-blue tint, cylindrical, mould-blown, partial inscription	20thC
	Bottle	Finish and neck, colourless	19/20thC
	Container	Undiagnostic, green tinted, mould-blown	19/20thC

NOSNIWB 96

CH.3180/ 5	Jar	Complete, colourless, mould-blown	20thC
	Bottle	Complete, green, mould-blown	20thC
	Bottle	Complete, colourless, blue-green tinted, mould-blown, inscription on side 'Dinneford's (Made in England) Magnesia	20thC
CH.4600/8	Bottle	Body fragment, colourless, mould-blown, cylindrical	20thC
CH.5700/1	Window	Colourless	20thC
	Window	Colourless, blue-green tinted	20thC
	Bottle	Base frag, green, mould-blown, partial inscription includes 'Co Ld' & '41'	20thC
CH7400-7850/2	Bottle	Body fragment, colourless, mould-blown	20thC

PRNOF 96

47	?	Chip, colourless, yellow tinted	Post Med./Modern
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PRSAL 96

68	Bottle	Body fragment, blue-green tinted, mould-blown, prismatic	Roman
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Statement of Potential

The Roman glass assemblage

Roman glass is represented at DAFF 96, LACFM 96, LATST 96, PRSAL 96 but the majority (just over 85%) was recovered from the Roman settlement at COWBQ 96. Vessel glass, some quite fine, was represented as much as bottle (mostly prismatic), and there was at least one possible piece of cast window glass. All was very fragmentary, denying, at this time, more specific dates than a range of 2nd to 4th centuries AD. Three glass beads were also recovered, one in particular, from context 1281, which is possibly exotic.

There was no Medieval glass recovered.

The Post-Medieval assemblage

The majority of this group comprises mainly of bottle fragments of the 17th to 18th centuries. A couple of large bottle bases with shallow kicks (LARP 96, LATST 96) suggest a squat, bulbous bodied form, prevalent between 1650-1750. Later examples are also present, from the second half of the 18thC.

Of particular interest is a fragment of the head of a 'linen-smoother' or slick-stone, from CIRCL 96. The slightly convex head and the remains of the 'stalk' in the centre confirm the typical mushroom shape of these objects used for smoothing processes. The diameter and state of weathering propose a 16/17thC date. From the same site is a lump of what appears to be melt or molten glass possibly dropped during the processes of gathering prior to blowing, since the amber glass is mixed with impurities. Slick-stones are found on glass-house sites in the 16thC (Charleston, 1984) and although the evidence is hardly conclusive both these objects together teasingly suggest the presence of a glass-house in the vicinity of the excavated site.

The Nineteenth and Twentieth Centuries

In the first quarter of the 19thC the glass industry saw the mechanisation of manufacturing, and this transition is seen in the collection of bottles from this period. There is no glass, either vessel, bottle or window, of any significance.

Aims and Methods

Further work then must concentrate on;

- a) the Roman assemblage associated with settlement at COWBQ 96
- b) the Post Medieval assemblage as a whole but with particular focus on that associated with the settlement at LATST 96, and an investigation into the potential for a glass house at CIRCL 96.

Both groups of assemblages can be fitted into existing typologies and further into a local and national framework.

A computerised catalogue of the glass assemblage is also recommended for archive.

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Estimates for time for the final report are as follows:

Catalogue for archive purposes	2 days
Research and Report	6 days
Illustrations	3 days

APPENDIX 10: Clay Pipe Assessment

By R.J. Williams

Introduction

The excavations at COWBQ 96, CIRBAT 96, DAFMH 96, LACFM 96, DAMD 96, BAUEXB 96, CIRCL 96, DRSWS 96, BAULT 96, DAFF 96, CIBFRD 96, PRNOF 96, LARP 96 and LATST 96 produced a total of 202 fragments of clay tobacco pipes. Of this total almost 75% (149 fragments derive from the excavations at Latton Street Farm (LATST 96). This preponderance from the excavation at Street Farm is not entirely surprising given its close proximity to the modern village of Latton. It was also the only site excavated on the entire scheme which revealed any significant quantity of post-medieval features, other than those associated with agricultural practices such as furrows and land drains.

Methodology

All fragments were examined for evidence of markings, decoration and name stamps. Unmarked bowls have been dated by reference to Oswald's general typology (Oswald 1975), and where possible names and initials have been compared to the lists of makers referred to by Oswald (*ibid.*). No attempt has been made to consider the bowl shapes in terms of regional variations, or to research the possible pipe makers by reference to more recently published regional lists. Plain stems have been counted. No attempt has been made to assess their dates based on stem bore analysis, since none of the groups contain sufficient numbers to allow this to be carried out with any degree of accuracy. Other diagnostic pipe fragments have been briefly described and recorded where relevant.

Results

The results of the assessment are tabulated below (Table 1) by site and by context within each site. Given the extent and duration of the excavations relatively few clay pipes were recovered and, apart from those from Latton Street Farm, most pieces derive from either topsoil deposits or agricultural features such as furrow fills and drains.

Of the total of 202 individual fragments there are only thirteen near complete bowls and nine stems/spurs with makers names/initials. At present five of these have been provisionally identified to a maker, town and date. Decorated bowls seem to be under-represented within the assemblage, most examples being plain bulbous bowls predating the early 19th century when bowl decoration became more common.

Only Latton Street Farm has produced any significant number of pipes from stratified deposits. A brief assessment of the pipe-producing contexts indicates that the pipes come from a wide range of deposit types including the fill of a limestone-lined pit (227), wall make-up (267), cobbled surface (269), quarry pit fill (749), gravel dump (812) and a ditch fill (936).

SITE & CONTEXT No.	STEM COUNT	DIAGNOSTIC FRAGMENTS	COMMENTS
COWBQ			
20	1		
1198	1		
CIRBAT			
1	10	1 stem nameODEN / ...ELY Incuse stamp along one side of stem - almost certainly <i>Roden</i> family of Broseley - 19th cent.
DAFMH			
1	1		
LACFM			
345	4		
486	1		
487	1		
DAMD			
163	1		
BAUEXB			
2	1		
13	2		
CIRCL			
1	3		
6	1		
DRSWS			

SITE & CONTEXT No.	STEM COUNT	DIAGNOSTIC FRAGMENTS	COMMENTS
3	1		
BAULT			
6	2		
DAFF			
24	1		
2	1		
2		spur	Unmarked
CIBFRD			
206	4		
310	1		
426	3		
514	1		
533	2		
540	2		
PRNOF			
9		spur	Damaged - raised initials I ?
13	1		
23	1		
27	1		
66	2		
LARP			
113	1		
LATST			

SITE & CONTEXT No.	STEM COUNT	DIAGNOSTIC FRAGMENTS	COMMENTS
1	2		
1		spur	unmarked
119		bowl frag.	Side of bowl with floral decoration - 19th cent.
173	1		
190	1		
225	2		
227	10		
227		complete bowl	Decorated with fluted facets and leaf decoration on seams - no spur - post 1850
227		bowl and stem	Plain bowl with pointed spur c. 1840 - 1880
227		damaged bowl, spur and stem	Plain bowl with raised initials I R on spur - c. 1840 - 1880
227		complete bowl with flat spur	Upright bowl with oak leaf decoration on the seams. Plain oval-shaped splayed spur- c. 1840 - 1880
229	2		
232	3		
235	1		
240	1		
255	2		
255		spur	Unmarked
258	14		
258		stamped stem	Incuse stamp ROGE../ANDRU.. in ? shield-shaped frame - probably <i>Roger Andrews</i> of Marlborough (1718)
265	2		
267	1		
267		spur and stem	Plain oval flat-bottomed splayed spur with unusual triangular "web"

<i>SITE & CONTEXT No.</i>	<i>STEM COUNT</i>	<i>DIAGNOSTIC FRAGMENTS</i>	<i>COMMENTS</i>
			between stem and spur - 19th cent.
269	1	damaged bowl and spur	Plain upright bowl with oak leaf decoration on the seam. Pointed spur with raised initials J S. Bowl style mid 19th cent. Possibly <i>John Skeates</i> 1858 - 1875 of Salisbury
276	1		
285	1		
304	3		
358	3		
358		damaged bowl and spur	Bowl slightly flared with lip parallel to stem and plain spur c.1700 - 1750
383	2		Burnt and encrusted with ? slag
389	1		
390	1		
420		bowl frag	Late 18th - 19th cent.
444	6		
446	2		
469	1		
470	2		
518	2		
545	2		
589	1		
605	2		
606	2		
611	11		
611		2 bowl frags	Probably late 18th - 19th cent.
706	1		
710	1		
730	2		
730		bowl frag	Unidentifiable

SITE & CONTEXT No.	STEM COUNT	DIAGNOSTIC FRAGMENTS	COMMENTS
730		spur and bowl base	Unmarked base with remains of narrow fluting - 19th cent.
733	2		
739	2		
749	15		
749		spur	Unmarked
749		broken bowl	Probably 17th cent.
749		2 complete bowls	Both large bulbous bowls, one rouletted other lined. Both have plain oval/heart-shaped flat bases. c. 1660 - 1680.
749		damaged bowl with spur and stamped stem	Medium sized bulbous bowl with damaged rim. Forward angled spur c. 1650 - 1700.
			Incuse stamp on top of stem GILES / CHAP / LIN - probably <i>Giles Chaplin</i> (1700) of Malmesbury, Gloucestershire.
753	4		
753		spur	Unmarked
768		bowl frag.	Unidentifiable
773	1		
773		stamped stem	Incuse ? shield-shaped stamp on top of stem. badly stamped and unreadable - ? 18th cent.
784	2		
812	2		
812		complete bowl	Complete bowl with rouletted rim and oval flat base with unreadable incuse stamp - c. 1640 - 1660.
936		damaged bowl	Damaged bowl, spur and stem missing. decorated in relief with four ? footballers and football - 19th cent.
Unstrat.	4		
Unstrat		bowl frag.	17th cent.

SITE & CONTEXT No.	STEM COUNT	DIAGNOSTIC FRAGMENTS	COMMENTS
		bowl, spur and stem	Long unrouletted bowl of mid to late 17th cent. style. Oval base with incuse stamp ED / HIGGEN(S) - <i>Edward Higgens</i> (1698 - 1710) of Salisbury

Table 1: *Incidence of clay pipe stems and diagnostic fragments by site and context*

Potential for further analysis

Only the assemblage of 149 fragments from Latton Street Farm merit any further analysis. The principal purpose will be to provide a more accurate guide to the dating of certain contexts by the close dating of the diagnostic pipes from the sealed contexts. This date is often even more accurate than that provided by ceramic dating, since clay pipes rarely survived in use more than a few years and the changing styles and makers names frequently allow dating to a forty year period. To a lesser degree the further analysis will provide a small group of named pipe makers from the Wiltshire/Gloucestershire border to compare with the known local and regional distributions. With further research it ought to prove possible to identify the uncertain marks and to confirm the provisional identifications.

Estimated Timings

Further work to identify/check makers marks 1 day

Detailed catalogue, checking of regional styles and comparison with other published assemblages 1 day

Report preparation 1 day

Bibliography

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APPENDIX 11: Worked Bone Assessment

By L Allen

There were 5 worked bone objects recovered from 3 of the excavations along the route of the Swindon-Gloucester DBFO Road Scheme. There were 3 hand-cut pins from COWBQ 96. Two have globular heads and are highly polished, similar examples have been recovered from Wilcote Farm, Skakenoak, Oxon (Brodrigg *et al.* 1971, 110-111, Fig. 37, No 16) and Fishbourne, Sussex (Cunliffe 1971, 147-148, Fig. 68, No.23) where they were found in contexts dating to the 3rd-4th century AD. A similar drilled boars tusk to the example from PREM 96 was also found at Shakenoak (Brodrigg *et al.* 1971, 110-111, Fig.37, No.2) in a late 3rd-4th century AD context. The handle from LAWBR 96 with the ring and dot motif probably dates to the late Roman or Saxon period (Brodrigg *et al.* 1971, 110-111, Fig. 37, No.3). The bone species of the objects has not been identified at this stage.

Site Code	Object	SF.No	Description
COWBQ	Pin	883	Roughly worked pin with hand cut globular head, the shank is slightly expanded at the centre, the tip is missing. There are traces of polish on the head.
	Pin	1087	Pin with hand cut globular head, the shank is slightly expanded at the centre, the tip is missing. The pin is highly polished.
	Pin	1253	Hand cut pin, with curving rectangular sectioned shank, the head is a roughly square expansion with slight shoulders delineating it from the shank. The pin is polished.
PREM	Tusk	1	Boars tusk, drilled and highly polished.
LAWBR	Handle	4	Nine fragments from a decorated handle for a whittle tang implement. The handle is square with a circular hole for the tang. The handle is decorated with irregularly spaced (sometimes overlapping) ring and dot motif.

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APPENDIX 12: Marine Shell Assessment

By G Campbell

Summary of Results

Approximately 270 identifiable and 120 fragmentary marine shells recovered from eight sites in the project were available for assessment. All of the shell was from oyster, and all of the identifiable shells were the Roman or edible oyster *Ostrea edulis* L. The upper and lower valves were counted within each context, and the number of fragments were counted for the smaller groups and estimated for the larger groups. This quantification is presented in Table XXX below.

Refitting was not attempted, but the assemblage could be accounted for by 140 individual oysters. Upper and lower valves occurred in relatively similar amounts regardless of site or deposit. Shells appear to be confined to deposits resulting from intense human activity (middens, pit fills and floor surfaces principally) during the Roman era. The great majority of the deposits had only one or two shells recovered, with two exceptions:

- 1) Birdlip Quarry, Cowley (COWBQ): A small group of 33 shells in the sequence of occupation layers 1318, 1322, 1324 and stone surfaces 1323, 1319.
- 2) Weaver's Bridge, Latton (LAWBR): The largest single group at any of the sites includes the largest single group in one deposit, a midden (context 57) containing 154 shells.

Potential

Overall, further potential information from this assemblage is small. Even if the midden deposit at the Weaver's Bridge site (LAWBR context 57) is closely datable (to half a century or less), the number of individuals is still probably too small for any conclusions regarding Roman oyster bed management to be statistically valid, despite this being the largest single group in the assemblage.

Of greater importance is the association of oyster shell with other materials in the same contexts. The dates of these contexts will identify whether the consumption of oysters was restricted to a specific period of time, or was occurring throughout the Roman period. The implication from this assessment that the consumption of oysters was restricted to the Roman period needs to be confirmed.

Understanding of the typical method by which oysters were consumed may be improved by identifying whether oyster shell is associated with 'kitchen rubbish' or with 'table waste'. It is clear from the similar number of upper and lower valves recovered that oysters were not served 'on the half-shell' principally. It remains to be resolved if they were shelled (and probably cooked) before they were brought to the table, or by the diners themselves.

Note on the hand-recovered terrestrial shell:

Terrestrial snails were recovered from one or two deposits at seven of the sites in the project. Since these were recovered only in small numbers, it is unlikely that any were collected as food. This view is reinforced by the small size of the shells; the larger shells are more likely to be the Common Garden Snail, (*Helix aspersa*) rather than that mammoth of British land snails, the Roman or Apple Snail (*H. pomatia*). The groups are biased heavily towards the larger snails, making them useless in reconstructing deposit formation or ecology.

Table 1: Oyster Shell Assessment

Site Code	Cxt No	No. Bases	No. Upper Valves	No. Frags
CIBFRD	323	1	2	
	533	1		
CIRCL	6	2	1	
COWBQ	7		1	
	19	2	1	
	26	1		
	34		1	
	40			1
	47	1	1	
	53	1		
	72		1	
	86	1		
	128		1	
	136	4	4	
	154	1		
	190		1	
	223	1		
	251			1
	253	1		
	272		1	
	294			2
	335		1	
	431			1
	435		1	
	505			1
	671		1	
	703	1		
	704	1		
	731			1
	736	1	1	
	766			1
	774			1
	780			5
	803		1	
	825			1
	849	1		1
	875		1	
	918	1		

Site Code	Cxt No	No. Bases	No. Upper Valves	No. Frags
	990			1
	1198	1		
	1218	1		
	1224		1	
	1225		1	
	1226	1		
	1228	1		
	1240		1	
	1244	1		
	1262		1	
	1296			1
	1314			2
	1318	8	5	5
	1322			1
	1323	2	3	6
	1324	7	8	9
COWBQ	Total	45	38	41
DAMD	39			1
	210	1	1	
	330		2	1
	Total	1	3	2
LACFM	34	1		
LATST	431	1		
	500	1	3	
	611		1	
	887	1		
	888		2	
	889			1
	Total	3	6	1
LAWBR	51	3	2	6
	57	71	83	770
	71	2	4	
	113	1		
	99		1	
	Total	77	90	780
NOSNIWB	8		1	
TOTAL	69	131	138	7130

APPENDIX 13: Slag and Residue Assessment

By Dr G McDonnell

Introduction

The material classed as slags and other residues recovered from the excavations are described and listed in Table 1. Sieved residues from soil samples were examined using magnetic susceptibility to assess the presence of (iron) metalworking debris. These results are given in Table 2.

Slag Classification

The slags were visually examined and the classification is solely based on morphology. In general slags and residues are divided into two broad groups; diagnostic and non-diagnostic slags. The diagnostic slags, can be attributed to a particular industrial process. These comprise the ironworking slags, i.e. smelting or smithing slags, and the non-ferrous residues, e.g. crucibles. The non-diagnostic residues cannot be directly ascribed to a process, but may be identified with a process by association with diagnostic residues, e.g. clay furnace lining with smelting slag.

Ferrous Diagnostic Slags and Residues

Hearth Bottom (HB) - a plano-convex accumulation of fayalitic slag formed in the smithing hearth. The dimensions (major diameter*minor diameter*depth in mm) are given in the Comment column.

Smithing Slag (SSL) - randomly shaped pieces of fayalitic slag generated by the smithing process.

Hammer Scale (HS) - it occurs in two forms, flake and spheroidal. The former is believed to derived from scaling (oxidation) of the surface of the iron being worked, and would be removed from the metal during hammering and deliberately knocked from the surface prior to insertion in the fire. Spheroidal scale is formed during fire welding. Slag is trapped between the two pieces of iron being welded and is ejected during hammering of the weld which form droplets that freeze in flight.

Cinder (CIN) - high silica smithing debris, often formed at the reaction zone between the smithing slag and the hearth lining.

Non-Ferrous Diagnostic Residues

Crucible - fragments or complete ceramic vessels used to melt non-ferrous metals.

Non-Diagnostic Slags and Residues

Cinder (Cin) - a high silica slag that can either be formed by high temperature reaction between silica and ferruginous material. It can be ascribed to either the non-diagnostic slags or the diagnostic slags depending on its iron content and morphology.

Furnace/Hearth Lining (FL or HL) - the clay lining of an industrial hearth, furnace or kiln which has been subjected to high temperature oxidising conditions. It is characterised by a vitrified surface inner face. In some cases the tuyere mouth may be preserved. Furnace Lining is considered non-diagnostic, since it cannot be ascribed to a process on grounds other than archaeological association, i.e. there is as yet no diagnostic feature which will distinguish vitrified lining from a smithing hearth from that from an iron smelting furnace.

Clinker - clinker or ash probably derived from steam boilers.

Other Material (Other) - which normally comprises fragments of fuel etc., and in this instance includes coal/shale

Discussion of Slag Types

The identification of the slags is given in Table 1. The majority of fragments were either smithing slags (SSL or SSL/CIN) or of modern derivation, probably clinkers from fireboxes (notably Site LATST 96). There is no significance to the amount of smithing debris, and it can all be considered as 'background' noise. The modern material probably derives from steam powered engines. The clay lining (LATST 96 - 719) and the slag/clinker lining (LATST 96 - 870) probably could have derived from some (modern) industrial process. The following discussion relates to individual pieces that require specific attention.

COWBQ 96 Context 33

This large pieces of slag (1480g) is either a large hearth bottom derived from smithing or a slag cake formed by tapping the slag from a smelting furnace into a small pit in front of the furnace. The slag lacks the vesicular appearance of hearth bottoms, and has clearly been fully liquated. However one single pieces of smelting slag is not of great importance, but should if excavations are planned adjacent to the site in the future.

Table 1: Identification of Slags by Site

Site	Context	Find	Identification	Mass	Comment
COWBQ 96	33	156	HB or Slag Cake	1480	130*120*50mm
	781	1146	SSL/CIN	6.5	
DRDG 96	26		CIN?	4	
CIBFRD 96	206		Clinker	17	
CIRCL 96	6		HB	133.5	55*50*25mm
PRENC 96	202		SSL?	35	
PRSAI 96	143		Clinker?	14	
LAWF 96	12		SSL	130	
LATST 96	17		SSL/CIN	3	
	119		Clinker	29	
	199		Clinker?	110	
	304		Coal/Shale?	293	
	719		Clay Lining	82	
	870		Slag/Clinker?	200	
	888		SSL	85	
	889		Clinker	3.5	
LACFM 96	286	4	SSL	67	
	33		CIN	19	
	43		SSL	48.5	
LAWBR 96	57		Limestone?	23	Ca DETECTED
NOSNI 96	9	2590	Clinker	744	
BAGTF 96	9	1	Limestone?	41	Ca DETECTED
PREM 96		8	Crucible		Cu, Sn minor Pb

LAWBR 96 Context 57

This piece is not a slag, but probably altered limestone or other sedimentary rock. XRF analysis detected Calcium as the major element.

BAGTF 96 Context ; Finds Number 1

This is not a slag, and again is probably altered limestone/sedimentary rock. XRF analysis detected Calcium as the major peak.

PREM 96 Finds Number 8

The pieces are fragments of crucible. XRF analysis detected copper, tin and a low level of lead, indicating the melting and casting of tin bronze.

Examination of Sieved Soil Samples from COWBQ 96

Soil samples from an oven (Context 199) were sieved and the residues sent for examination to assess the presence of metalworking residues. The samples were weighed and their magnetic susceptibility measured. It would be expected that if the oven/hearth had been used for ironworking then hammerscale, other micro-slugs and metal fragments would be present in the samples. These residues have very magnetic susceptibility and their presence could be readily detected without recourse to microscopic study. The results are given in Table 2. They have been corrected to a standard mass of 50g, and the values obtained from a sample of hammerscale are also provided. These results demonstrate that there is no enhanced magnetic susceptibility due to ironworking, but that there may be some enhancement due to burning.

Table 2: Magnetic Susceptibility Results (Units $\times 10^{-8} \text{ m}^3/\text{kg}$)

Context	S.S. No	Mass g	Mag Sus	Corrected
198	15	148	123	42
204	26	92	107	58
266	93	42	150	179
267	98	68	268	197
532	58	169	125	37
532	59	97	165	85
532	60	76	120	79
885	125	61	37	30
1127	131	74	98	66
Standard	HS	18	1200	3333

Conclusions and Recommendations

- 1) Identification of the slags has shown no evidence for metalworking in the areas excavated. The presence of ironworking debris on Sites , COWBQ 96, CIRCL 96, PRENC 96, LAWF 96, LATST 96, LACFM 96 should be noted for future excavations in adjacent areas. Further excavations may encounter more evidence for ironworking. Gradiometer surveys would locate such activities. It should be noted that all the evidence points to the slags deriving from smithing, but with such small samples it is not possible to be completely certain that some of the slags may be smelting slags. In particular the large piece from COWBQ 96 could be a smelting slag, but if there was further evidence for smelting 10-100'skg of slag would be expected.
- 2) The two samples of (altered?) limestone?, should be examined by a geologist if they are thought to be of significance.
- 3) Comparative data should be sought for the crucible fragments recovered from PREM 96.
- 4) That there are no archaeometallurgical reasons for undertaking further work on the assemblage

APPENDIX 14: Assessment Report on the Shale Objects

By L Allen

There were two shale objects recovered from 2 of the 15 sites excavated along the route of the Swindon-Gloucester DBFO Road Scheme. Both objects are fragments from bracelets of plain form. Further work involves finding local parallels. But it is unlikely that any other information will be forthcoming as scientific analysis is unable to accurately pinpoint the source of shale unless the assemblage is large.

Site Code	Object	SF.No	Description
COWBQ	Bracelet fragment	-	1 fragment from a simple undecorated shale bracelet. The section is circular the original diameter is c.100 mm.
PRENC	Bracelet fragments	5	11 fragments from a simple undecorated shale bracelet. The section is circular the original diameter c.105mm.

APPENDIX 15: Fired Clay

By A Barclay

Introduction

The overall assemblage was recovered from 14 excavated sites and is relatively small, consisting of 248 fragments weighing a total of 1.043 kg. The fired clay was recovered from a variety of feature types including pits, ditches, a midden and hillwash deposits.

The total assemblage includes only a few object fragments, while most of the fired clay consists of amorphous material. The assemblage includes a small number of loomweight fragments from Court Farm (LACFM 96) and Weavers Bridge (LAWBR 96) and an important group of fired clay from a Neolithic pit at Duntisbourne Grove (DRDG 96). There was no evidence for structural clay (with timber impressions), metalworking debris (e.g. moulds or crucibles) or for salt containers (briquetage).

Method

The material was quantified by number of fragments and weight. It was examined for evidence of wattle or other impressions, possible objects and structural pieces. It occurs in a variety of fabrics. Most of the amorphous fragments occur in a fabric which contains no visible inclusions (NAT). Loomweight fragments also occur in this fabric and to a lesser extent in a fabric with calc gravel inclusions. The remaining fabrics account for only a small component of the overall assemblage and are associated with amorphous fragments.

Fabrics

NAT	No added temper or inclusions.
Sand	Sandy clay matrix with no other inclusions.
Coarse sand	Coarse quartz sand inclusions.
Shell	Coarse shell platelet inclusions.
Calc gravel	Calc gravel inclusions.
Clay pellets	Well rounded clay pellet inclusions.
Organic	Burnt out organic inclusions.

Quantification

Table 1 (below) gives a breakdown of the quantity (number of fragments, weight) of material from each site and context. In general, the overall quantity of fired clay was low with relatively few sites producing more than 10 fragments.

Discussion

The majority of the fired clay consists of oxidised amorphous fragments. This material no doubt derives from ovens and hearths used for domestic and industrial activities. Most but not all of this material is fired a reddish-brown colour. In addition, a significant quantity (11, 230 g) of unburnt clay was recovered from context 368, site COWBQ 96. Of interest is the quantity of fired clay from the Neolithic pit (fill 168) at

Duntisbourne Grove (DRDG 96). Fired clay is a rare find from Neolithic contexts and when it does occur it tends to be in rather small quantities. The relatively high quantity of, albeit, amorphous fired clay from a Neolithic pit in association with pottery, worked flint and charred plant remains is of some importance and is a good indicator of domestic activity (either hearth debris or burnt structural clay). Small quantities of fired clay were found in pit deposit associated with later Neolithic Peterborough Ware at Cam, Glos and Stanton Harcourt, Oxon. (Smith 1968; Hamlin 1963).

The only recognisable object fragments are the pieces of loomweight from Court Farm (LACFM 96) and Weavers Bridge (LAWBR 96). These fragments are probably from triangular loomweights which could be of either Iron Age or even early Roman date. These weights provide direct evidence for textile production.

Bibliography

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Recommendation for further work

The assemblage warrants no further analysis. It should be possible to integrate the results from the assessment into the publication report. The fired clay from the Neolithic pit is unusual and may require further comment in the text (e.g. comparanda). The small number of loomweight fragments should be described in further detail and the larger of the two perforated fragments could be illustrated.

Time estimate

1 day To write an overall summary report on the fired clay, to expand the discussion of the Neolithic fired clay and to add a catalogue entry and discussion for the loomweight fragments.

Table 1

Context	Number, weight	Fabric	Comment
COHH 96			
128	1, 15g	Shelly	One oxidised surface
DAMD 96			
216	1, 2g	Shelly	Amorphous
256	1, 4g	NAT	Amorphous
330	13, 5g	Sandy	Amorphous
DRDG 96			
108	1, 2g	Sandy	Amorphous
113 <13>	4, 6g	NAT	Amorphous
168 <15>	29, 110g	NAT	Amorphous
168 <10>	86, 278g	NAT	Amorphous
168 sf199	31, 76g	NAT	Amorphous
228	2, 3g	Coarse sand	Amorphous
BAGTF 96			
57	10, 64g	NAT	Amorphous
CIBFRD 96			
309	1, 1g	NAT	Amorphous
CIRCL 96			
6	8, 15g	Sandy	Amorphous
PRWPL 96			
7	1, 1g	NAT	Amorphous
PRENC 96			
87	2, 12g	NAT	Finger moulded amorphous lump
285	1, 5g	Clay pellets	Amorphous
PRSTAS 96			
3127	1, <1g	NAT	Amorphous
DRLF 96			
31	1, 3g	Sandy	?Tile fragment
31	2, 27g	Calc gravel	Amorphous
LACFM 96			
286	1, 37g	NAT	Flat side. Probable loomweight fragment

Context	Number, weight	Fabric	Comment
317	3, 13g	NAT	As above
402	2, 48g	NAT	Two fragments with broken perforations. Probable loomweight fragments.
LAWBR 96			
57	12, 23g	NAT	Loomweight fragment?
57	1, 4g	Calc gravel	Loomweight fragment?
NOSNI 96			
CH6300(2)	13, 14g	Organic	Amorphous
COWBQ 96			
81	1, 10g	Shelly	Amorphous
368 <48>	11, 230g	NAT	Amorphous unburnt clay
619	3, 1g	NAT	Amorphous
1225	1, 20g	Sandy	Amorphous
1313	4, 14g	NAT	Amorphous
Total	248,1053g		

APPENDIX 16: Ceramic Building Material Assessment

By L Allen

Introduction

A total of 27.180 killogrammes of ceramic building material was recovered from fifteen separate excavations along the line of the Swindon to Gloucester DBFO road scheme.

Methodology

The whole assemblage was initially scanned and divided into either Roman or Medieval material. The Medieval material was weighed but no further analysis of type or fabric has been attempted. The Roman tile fragments were weighed, measured (where a complete dimension existed) and assigned to one of the following tile type categories tegula (A), imbrex (B), tubuli (C), plain tile (D) or brick (E). Fragments with no distinguishing characteristics or measurable thickness were assigned to the miscellaneous category. The fragments within the 5 recognizable tile type categories were examined macroscopically with a x 20 hand lens to identify the fabric type, 7 distinct fabric type were identified.

Results

Site code	Ctx	Description	Type	Fabric	Weight	Date
CIRENB	1		Misc	-	50	-
	1		C	1	75	RB
LAWBR	51	RB layer	D	3	550	RB
	57	Domestic RB waste	A	1	150	RB
	57	"	A	1	150	RB
	57	"	D	?	500	-
	57	"	D	?	175	-
	62	Fill of gully	D	1	50	RB
	80	Fill of circular feature	D	1	50	RB
	134	Large ditch	Misc	-	10	-
LACFM	38	Fill of pit	D	1	100	RB
	223	Fill of re-cut ditch	D	1	75	RB

	314	Fill of Quarry pit	A	1	350	RB
	482	Ditch fill	Misc	-	50	-
PRENC	93	Segment through gully	D	-	25	Med
	160	Fill of furrow	D	-	50	Med
	u/s	Furrows	D	-	300	Med
LAWF	10	Fill of boundary ditch	Field drain	-	325	Modern
DAMD	12	Finds reference	Misc	-	5	-
	54	Fill of Roman ditch	Misc	-	5	-
BAULT	5	Cobbled surface	Misc	-	35	-
	6	Layer of silty clay	Misc	-	5	-
	12	Silty deposit	Misc	-	5	-
CIBFRD	306	Pebbled surface	Misc	-	25	-
	318	Quarry pit fill	Misc	-	5	-
	320	Silt over surface	Misc	-	50	-
	323	Silty build up on surface	C	3	50	RB
	323	"	Misc	-	175	-
	323	"	Misc	-	50	-
	325	Silty material on top of 323	Misc	-	35	-
	407	Compact surface	D/E	4	300	RB
	409	Silty build up on top of road surface	Misc	-	5	-
	419	Quarry fill	Misc	-	10	-

	523	Road make up	D/E	1	450	RB
	523	"	D	1	100	RB
	523	"	Misc	-	10	-
	523	"	D	-	50	Med
	525	Road make up	A	2	200	RB
	525	"	Misc	-	5	-
	661	Road make up	D/E	5	275	RB
BAUEXB	19	Fill of ditch	A	1	250	RB
PRNOF	9	Subsoil T.P 4	Misc	-	5	-
	18	Topsoil T.P 10	Misc	-	10	-
	20	Topsoil T.P 11	Misc	-	10	-
	37	Topsoil T.P 20	Misc	-	5	-
	44	Topsoil T.P 24	Misc	-	5	-
	47	Topsoil T.P 26	Misc	-	10	-
	50	Topsoil T.P 28	Misc	-	5	-
	60	Topsoil T.P 33	Misc	-	5	-
	62	Topsoil T.P 34	Misc	-	5	-
	101	Finds ref.	Misc	-	25	-
	102	Finds ref.	D	-	200	Med
	181	Ditch	Misc	-	10	-
	189	Plough soil	D	-	100	Med
LATST	1	Topsoil	D	-	25	Med
	191	PM deposit under topsoil	Misc	-	50	Med
	196	PM layer redeposited	Misc	-	100	Med
	197	Deposit overlying pit	D	-	200	Med

	198	PM pit fill	D	-	50	Med
	199	PM pit fill	Misc	-	50	Med
	225	Deposit over quarry pits	Misc	-	100	Med
	232	Secondary fill of pit	D/E	-	750	Med
	232	"	Misc	-	400	Med
	262	Surface within building	D	-	450	Med
	275	Primary fill of pit	Misc	-	125	Med
	277	18th/19th century cultivation soil	D	-	75	Med
	291	Layer of dumping	D	-	75	Med
	304	Top fill of well	Misc	-	400	Med
	305	Fill of well	D/E	-	700	Med
	313	Spread of domestic rubbish	D	-	25	Med
	420	Fill of 19th century pit	Misc	-	50	Med
	551	Surface over oven	D	-	150	Med
	591	Fill of stone lined pit	Field drain	-	100	Modern
	605	Buried soil	D	-	100	Med
	611	Finds ref.	Field drain	-	1200	Med
	750		Misc	-	200	Med
	702		Misc	-	125	Med
	737		Misc	-	100	Med
	721		Field drain	-	150	Modern
	710		Misc	-	250	Med
	761		E	-	175	Med
	708		Misc	-	25	Med

	773		Misc	-	25	Med
	730		Misc	-	50	Med
	780		Misc	-	50	Med
	762		Misc	-	25	Med
	706		Misc	-	50	Med
	734		Misc	-	100	Med
	758		D/E	-	450	Med
	952		D	-	275	Med
	873		Misc	-	300	Med
	713		C	1	75	RB
	887		C	1	75	RB
	762		E	-	625	Med
CIRCL(Phase 1)	2	Colluvial hill wash	Misc	-	25	-
	6	"	D	1	75	RB
	6	"	D	2	150	RB
	6	"	A	1	75	RB
	6	"	Misc	-	225	RB
CIRCL (Phase II)	20	Modern topsoil	Misc	-	25	-
	27	Layer sealing burnt mound	Misc	-	10	-
NOSNI	1	Topsoil	D	-	50	Med
	4	Quarry PM	E	-	100	Med
	5	"	D	-	75	Med
	8	Occupation layer	D	1	50	RB

COWBQ	7	Occupation Layer	C	1	25	RB
	8	Modern land drain	Misc	-	25	-
	10	Fill of drain	Misc	-	25	-
	19	Occupation layer	D	1	100	RB
	31	"	E	2	150	RB
	34	Stone layer	D	1	150	RB
	34	"	D	1	50	RB
	34	"	Misc	-	50	-
	34	"	A	6	100	RB
	64	Fill of gully	Misc	-	25	-
	72	Occupation material	Misc	-	25	-
	79		A	1	150	RB
	83	Secondary fill of ditch	A	1	1000	RB
	83	"	D	3	325	RB
	86	Rubble layer	D	3	450	RB
	86	"	Misc	-	200	-
	86	"	D	1	50	RB
	90	Colluvium	A	6	100	RB
	90	"	D	1	50	RB
	90	"	Misc	-	25	-
	128	Cobbling	D	1	300	RB
	128	"	Misc	-	50	-
	128	"	D	1	50	RB
	128	"	C	1	50	RB
	128	"	C	1	25	RB
	131	Furrow fill	C	1	25	RB
	150	Lynchet fill	Misc	-	75	-
	157	Ditch fill	A	1	1350	RB
	206	Stoney occupation layer	A	1	600	RB

	223	Stoney layer	A	1	150	RB
	223	"	D	2	200	RB
	223	"	D	1	300	RB
	234	Ditch fill	A	3	200	RB
	250	Poss colluvium	D	1	25	RB
	278	Trample layer	Misc	-	50	-
	656	Furrow fill	D	3	100	RB
	705	Occupation layer	C	3	50	RB
	729	Stone floor	D	1	200	RB
	729	"	D	7	100	RB
	729	"	D	1	250	RB
	729	"	A	7	150	RB
	729	"	A	7	75	RB
	729	"	D	7	50	RB
	738	Ditch fill	C	3	50	RB
	774	Rubble wall	D	7	75	RB
	807	Dumping layer	B	1	150	RB
	807	"	D	1	75	RB
	807	"	Misc	-	30	-
	815	Rubble layer	D	1	50	RB
	815	"	B	7	75	RB
	815	"	A	1	175	RB
	819	Ditch fill	B	7	100	RB
	846	Well fill	D	3	50	RB
	851	Ditch fill	Misc	-	10	-
	860	Well fill	Misc	-	100	-
	863	Post-hole fill	Misc	-	50	-
	903	Roman soil	Misc	-	100	-
	938	Occupation layer	A	7	250	RB
	953	Ditch fill	B	1	150	RB

	1005	Pitched stone	A	7	100	RB
	1009	Occupation layer	Misc	-	25	-
	1013	Make-up for floor	C	3	25	RB
	1060	Deposit of burnt material	D	7	50	RB
	1060	"	A	7	75	RB
	1064	Rubble	A	7	350	RB
	1064	"	A	7	500	RB
	1064	"	A	7	200	RB
	1064	"	D	7	600	RB
	1128	Stoney layer	Misc	-	50	-
	1139	Stone surface	Misc	-	25	-
	1140	Colluvium	D	3	50	RB
	1140	"	D	3	100	RB
	1140	"	D	3	50	RB
	1140	"	Misc	-	25	-
	1210	Post Occupation material	D	1	50	RB
	1210	"	Misc	-	75	-
	1224	Pitched stone	D	7	75	RB
	1225	Occupation layer	Misc	-	50	-
	1225	"	A	7	350	RB
	1236	Occupation depsit	D	1	275	RB
	1317	Cobbled surface	D	1	25	RB
	1500		A	1	75	RB
	1500	"	Misc	-	50	-
	1500	"	D	3	100	RB
	1500	"	D	3	50	RB
	1500	"	Misc	3	100	RB

Summary

The table below summarises the results of the analysis, giving the total weight in grammes of the Roman, Medieval and miscellaneous fragments recovered from each of the individual sites.

Site Code	Total weight in grammes	Roman tile weight in grammes	Medieval and later tile weight in grammes	Misc tile weight in grammes
CIRENB	125	75	-	50
LAWBR	1635	950	675	10
LACFM	575	525	-	50
PRENC	375	-	375	-
LAWF	325	-	325	-
DAMD	10	-	-	10
BAULT	45	-	-	45
CIBFRD	1795	1375	50	370
BAUEXB	250	250	-	-
PRNOF	395	-	300	95
LATST	8300	150	5575	2575
CIRCL(I)	550	300	-	250
CIRCL(II)	35	-	-	35
NOSNI	275	50	225	-
COWBQ	12490	11350	-	1140
TOTAL	27180	15025	7525	4630
Percentage of total	100%	55%	28%	17%

Synthesis

The Medieval tile

The total assemblage includes 7525 grammes of Medieval tile, no further analysis of tile type or fabric has been carried out at this stage.

The Roman tile

There were five types of tile identified in the assemblage, tegulae, imbrices, tubuli, plain tiles and bricks. The information is summarized by site in the table below:

Site Code	Total weight of Roman tile	Tegulae A(No. of fragments and weight in grammes)		Imbrices B(No. of fragments and in weight in grammes)		Tubuli C (No. of fragments and weight in grammes)		Plain tiles D(No. of fragments and weight in grammes)		Bricks E (No. of fragments and weight in grammes)	
CIREN WB	75					1	175				
LAWBR	950	2	300					3	650		
LACFM	525	1	350					2	175		
CIBFRD	1375	1	200			1	50	4	1125		
BAUEXB	250	1	250								
LATST	150					2	150				
CIRCL1	300	1	75			2	225				
NOSNI	50							1	50		
COWBQ	11350	19	5950	4	475	7	250	33	4525	1	150
TOTAL	15025	25	7125	4	475	13	750	43	6525	1	150
%	100%		47%		3%		6%		43%		1%

Tegulae were identified by the existence of a flange, a groove at the base of the flange or traces of an incised semi-circular design or signature at one end of the tegula. There were 25 fragments of tegulae in the assemblage weighing 7125 grammes (47% of the total Roman material).

Imbrices are the curved tiles which cover the tegulae flanges on the roof, they taper along their length. There were only 4 fragments from imbrices identified in the assemblage weighing 475 grammes(3% of the total).

Tubuli were identified by the presence of a key for plaster or remains of the perforation in the side through which the air would have passed. There were 13 fragments weighing 750 grammes (6% of the total Roman material).

The plain tile category includes fragments of tile with thicknesses that range from 17 mm-39 mm (fragments with a thickness greater than 40mm have been classified as bricks (see below). These fragments could originate from tile types A-C although they have none of the distinguishing features mentioned above alternatively they may be from any one of the great variety of floor tiles or pilae. There were 43 fragments of plain tile weighing 6525 grammes(43% of the total).

There was one fragment of brick recovered weighing 150 grammes (1% of the total Roman material). It possibly originated from a floor or bonding tiles such as a Lydion, pedalis or sesquipedalis.

Tile Fabrics

There were 7 distinct fabric types identified in the assemblage(see table below).

Fabric 1	Fabric 2	Fabric 3	Fabric 4	Fabric 5	Fabric 6	Fabric 7
8125 gms	700 gms	2200 gms	300 gms	275 gms	200 gms	3225 gms
54%	4.7%	14.7%	2%	1.8%	1.3%	21.5%

Fabric 1 was predominant comprising 8125 grammes of tile (54% of the total assemblage). This fabric has a soft, soapy matrix, reddish-pink in colour with a variable degree of streaks and swirls of badly mixed lighter coloured clay. The inclusions comprise of abundant very fine quartz, abundant fragments of grog and frequent fine mica particles. Tile fragments of this fabric have been recovered from other OAU excavations in Gloucestershire notably at Fairford, Claydon Pike and Somerford Keynes, Neigh Bridge its source is probably the nearby tile kilns of Minety in Gloucestershire.

The remaining 6 fabrics have not been fully described at this stage.

Potential

The total quantity of tile recovered from the 15 separate sites was very small and the fragments were very abraded. There were only 15025 grammes of tile identifiable as Roman, nearly 50% of which came from fragments classified as plain tiles which could originate from a wide variety of floor tile types. The other large group consists of roof tiles, predominantly tegulae with very few examples of imbrices. Very little further work can be carried out on the tile types and the information that it can yield is slight. Further work could be carried out on the source of the remaining 6 Roman tile fabrics to ascertain where tile was being produced.

APPENDIX 17: Animal Bone Assessment

By A Powell

This assessment considers the bone recovered from 29 sites excavated by the Oxford Archaeological Unit in 1996 prior to construction work on the A419/A417 Swindon to Gloucester DBFO road scheme. Bone was recovered from features dating from the Neolithic through to modern, and the size of the assemblage is 32,855 fragments. This includes bone retrieved from bulk soil samples taken for faunal remains, but excludes any bone present in residues of samples taken for other purposes - although some of these contained small bone fragments, these were not examined at the time of assessment.

Methods

The bones were assessed at Oxford Archaeological Unit on the 4th, 5th and 6th of December 1996. In view of the size of the assemblage a sampling strategy was decided upon: for the three sites with the largest assemblages, Birdlip Quarry, Middle Duntisbourne and Duntisbourne Grove, the bone was sampled according to feature type and preliminary dating information supplied at the time of assessment with the aim of examining c. 20%. The proportion of identifiable bone in the examined fraction was then applied to the figures supplied by Oxford Archaeological Unit to derive the estimated total identifiable in each assemblage (Tables 1 and 2). The remaining small assemblages were examined in their entirety (Table 3), with the exception, due to time constraints, of Street Farm and Weaver's Bridge, the total identifiable fraction was estimated for the two latter in the same way as for the larger assemblages (Table 2). A total of 12,612 fragments were examined in the course of the assessment.

The condition of the bone affects its identifiability and the amount of other information which can be recovered, and hence an assemblage's suitability for further analysis. Therefore, the condition of the examined bone was rated on a scale of 1 to 5 for each group of fragments (context or bag). Condition 1 describes bone in excellent or very good preservation, with little post-depositional damage; condition 2 describes bone which may be identifiable to species but which may not retain fully such other data as butchery or gnawing; condition 3 describes bone identifiable to species and element but with little other information preserved; condition 4 indicates few bones identifiable beyond element; and condition 5 describes greatly altered material, just identifiable as 'bone'. The results are summarised in Table 4 for Birdlip Quarry, Middle Duntisbourne and Duntisbourne Grove, and Table 5 for the smaller assemblages. For the latter an arbitrary lower limit of 100 fragments present was set for inclusion in the table.

The proportions of the main domestic animals in the identified fraction of the assemblage has also been calculated (Tables 6 and 7), although as with condition, sites with assemblages containing less than 100 fragments are excluded from Table 7.

Results

Each site is briefly described here, moving from the north-west end of the road to the south-east.

Birdlip Quarry (COWBQ 96)

A total of 16,589 bones was retrieved from this site, of which 4,274 were seen at the time of assessment. Occupation is suggested for the 3rd and 4th centuries AD with some 2nd century, more precise dating is not yet available, so the assemblage is described on the basis on feature type. The condition of the assemblage is largely good, particularly so for the bone from 'well' contexts, but less so for the 'possible cremation' and 'other' contexts, and there is a relatively high degree of identifiable bone. Cattle bones are the most frequently represented overall, followed by sheep/goat; horse is present in almost as great a proportion, and is particularly common in 'well' contexts. Pig is also present. There is some variation in species frequency between feature types. Other species present include red deer (*Cervus elaphus*), roe deer (*Capreolus capreolus*), dog and possibly fox, shrew, bird and frog. Jaws and bones retaining ageing and sexing information, as well as measurable bones and pathological specimens, are frequent. Evidence of butchery, gnawing and burning is present.

An assemblage of this size has intrinsic value. In this case further analysis would investigate intrasite variation, in addition to reconstructing husbandry information. The bone from 'other' contexts can be excluded from further analysis as it consists of types such as cleaning layers and furrow fills. Should final dating evidence result in a very small sample from the 2nd century, this too could be excluded.

Highgate House (COHH 96)

The bone from this site comes from features ranging from Prehistoric to Romano-British in date, however most is from the Middle-Late Iron Age and Late Iron Age. The level of identification overall is low (17%) and the condition of the bone is moderate to poor. The bones of cattle are the most frequent in all the dated groups and include an articulating adult radius and ulna pair. Sheep/goat and horse bones are also frequent, the former including neonatal material. Pig is present in low numbers. A skull and partial skeleton of a water vole (*Arvicola terrestris*) occurs in a sample from the undated context 139. Butchery marks, gnawing and burning are present. The identified portion of the assemblage is not large enough to repay more detailed analysis, no further work recommended.

Five Mile House (DAFMH 96)

Two bones in poor condition were retrieved from this site, the single identifiable bone is sheep/goat. No further analysis recommended.

Duntisbourne Leer (DADL 96)

A single unidentifiable fragment of bone. No further analysis recommended.

Field's Farm (DAFF 96)

There is only one identifiable bone in this assemblage, a pelvis from an adult horse, the remainder consist mainly of eroded fragments, including some splinters of sheep-sized long bone. No further analysis recommended.

Middle Duntisbourne (DAMD 96)

A total of 5,626 bones were retrieved from this site, of which 3,674 (32%) were seen during the assessment, and the condition of the assemblage is moderate in general. No bone identifiable to species is present in the Romano-British material. With the exception of a few bird bones, only domestic mammals are represented. The bones of cattle and pig are the most frequent, followed by sheep/goat, horse remains are infrequent. Ageing and sexing information is present, as are measurable bones. Evidence of butchery and gnawing occurs.

The size of the identifiable assemblage from the Iron Age is appropriate for further analysis, the high representation of pig is unusual for an Iron Age site and particularly interesting. See Duntisbourne Grove below for more detailed recommendations.

No further work is recommended for the bone from the Romano-British ditch or the undated quarry pits.

Duntisbourne Grove (DRDG 96)

This site produced 5,444 bones, of which 1,856 were seen at the time of assessment. While the bone from the Romano-British ditch is mostly well preserved, the material from other features is in moderate to poor condition, with none of the bone from the Neolithic pits identifiable to species. Most of the identifiable bone came from the Iron Age features, primarily the ditches, and is dominated by the bones of cattle. Sheep/goat and pig bones are equally represented, and horse is present. Cattle bones are even more frequent in the Romano-British ditch, and horse is more common as well. Other species are represented by a single roe deer bone in both periods. Ageing and sexing information is present, as are measurable bones. Evidence of butchery and gnawing occurs.

The proximity of this site to Middle Duntisbourne, the similarity in the types of features producing bone and their contemporaneity make these assemblages ideal for comparison. The assemblages from the ditches at both sites should be analysed fully to see if the marked differences in species exploited, which is apparent at assessment level, is borne out, and if other differences in husbandry practice may be seen. They should be considered in the light of the possible higher status of Middle Duntisbourne indicated by the pottery assemblage, compared with the assemblages from nearby

sites such as Ditches hillfort and Bagendon. The bone from the Iron Age sub-soil can be excluded from this analysis.

While the presence of Romano-British bone allows comparison through time at this site, the estimated size of the identifiable material suggests that it little information would result from further work, and that the temporal comparison is of less value than that between the Iron Age at the two sites. No further analysis is recommended.

No further analysis on the Neolithic assemblage.

Daglingworth Quarry (DAGQ 96)

The large identifiable portion of this assemblage consists of a partial toad skeleton. No further analysis recommended.

Ermin Street Sections (ERMIN 96)

Much of the bone in this assemblage is in good condition, and a high proportion is identifiable to species (70%). Almost half of these are sheep/goat, both adult and juveniles represented, with the remainder largely cattle and pig, equally divided, and one specimen of horse. Gnawmarks are present. No further analysis recommended.

Lynches Trackway (BAULT 96)

The condition of the bone from this site is variable: the Early Iron Age/Romano-British and some of the undated material is in good condition, and most of the Early Romano-British bone is moderately well preserved. However, the remainder of the bone, including the largest group from the site, the Iron Age/Romano-British, is in poor condition. This has resulted in a relatively low degree of identifiability overall (17%). Cattle bones are the most frequent in all the dated groups, while the proportion of sheep/goat appears to increase through time. Horse bones are present in the Early Romano-British material. The skull of a small vole occurs in the undated group, it may represent a burrowing intrusion. The assemblage is not large enough or closely enough dated to yield much information on husbandry practice. No further analysis is recommended.

Burford Road (CIBFRD 96)

Most of the bone in this assemblage is from Medieval to Post-medieval and Post-medieval/modern contexts. The later material is mostly in moderate condition, while the remainder is largely in poor condition. The single identifiable Romano-British bone is cattle, while sheep/goat and pig are present in the Medieval to Post-medieval material, and horse, cattle and sheep/goat bones are present in the Post-medieval/modern. No further analysis is recommended.

Cherry Tree Lane (CIRCL 96)

The bone in this assemblage is in poor condition, consisting mainly of eroded unidentifiable fragments. The identifiable bone consists of fragments of cattle humerus, pelvis and femur. No further analysis recommended.

Norcote Farm (PRNOF 96)

The bone is poorly preserved and largely unidentifiable, the identifiable bone consists of a horse pelvis from the undated material, and 2 fragments of cattle tibia from the 1st century AD. No further work is recommended.

Witpit Lane (PRPWL 96)

Although most of the bone from this site is in poor condition, some is moderately well preserved. Nevertheless, the identifiable fraction is small: a cattle humerus and a loose lower third molar from an adult sheep in the Post-medieval contexts, and a horse second phalanx from the late 12th-14 century. No further analysis is recommended.

Preston Enclosure (PRENC 96)

Most of the bone in this assemblage is in moderate to poor condition and the proportion of identifiable bone is 23%. The bones of cattle and sheep/goat, in similar proportions, comprise the bulk of the identifiable material, while horse, followed by pig, is less frequent. The only bones of other species present are two of dog. Measurable bones are present, as is evidence of gnawing. Although this site has produced one of the largest groups of identifiable bone from the smaller assemblages, the information derived from more detailed work would be minimal. Not recommended for further analysis.

St. Augustine's Lane (PRSAL 96)

The condition of the bone in this assemblage is variable, the bone from the Bronze Age and Post-medieval contexts is in moderately good condition, the former comprises six loose adult horse teeth, and the latter an adult sheep/goat mandible and a cattle tibia which has been sawn through. The remaining bone, from prehistoric and undated contexts, is in poor condition, the identifiable material is cattle. No further work is recommended.

St. Augustine's Farm South (PRSTAS 96)

The condition of the bone in this assemblage is poor, largely due to the high frequency of eroded or calcined material. The identifiable bones are two fragments of a horse radius and one cattle bone, large mammal limb bone fragments are frequent in the remainder. No further analysis is recommended.

Ermin Farm (PREM 96)

The bone from this site, particularly from the earlier, Middle to Late Iron Age contexts, is mostly in moderate to good condition. Sheep/goat bones predominate in the identified material and include ageable jaws and bones. Cattle is the only other species present in the Middle to Late Iron Age contexts, however horse and pig (the latter more frequent than cattle and including a male canine) are also present in the Iron Age contexts. Burnt and gnawed bone occurs. Although there is a relatively high proportion of identifiable bone present (31%), much of the bone is from undated contexts, and the quantity of identifiable bone is small. No further analysis is recommended.

Cirencester Road (LADCRI 96)

A single unidentifiable fragment of bone is present, no further analysis recommended.

Lower Street Furlong (DRLF 96)

Several fragments of eroded large mammal long bone, unidentifiable to species. No further analysis recommended.

Westfield Farm (LAWF 96)

The bones from this site are in poor condition, the high fragment count in the Romano-British and undated material is due to the presence in each case of one highly fragmented long bone from a large mammal. No further analysis recommended.

Latton Roman Pond (LARP 96)

This group of bones is one of the largest of the smaller assemblages, but has a low proportion of identified material, related to the high degree of fragmentation and the poor condition of much of the bone, although a substantial proportion is in moderate condition. Horse and cattle bones dominate the assemblage, sheep/goat is only represented by two bones. The fragmentary head, vertebrae and ribs of an adult male horse occur in the undated context 395, and it is possible that the limb bones from the dated contexts come from the same animal. No further analysis is recommended.

Street Farm (LATST 96)

This site produced bone from features ranging in date from the Medieval to Post-medieval/modern, of which c. 50% were examined at assessment. There is a high level of identification and the condition of the bone is moderate to good overall, although it is poorer in the earlier groups. Sheep/goat bones are the most frequent of the domestic species in the Medieval and Medieval to Post-medieval groups and, although the bones of cattle become more frequent in the Post-medieval/modern group, sheep/goat bones are still numerous and include a pathological specimen of a radius. Horse and pig bones are also present. Other species represented are cat (several bones from an undated context) and unidentified bird (two bones) in the Post-

medieval/modern. Butchery marks are present. The estimated number of identified bones from each period is not large enough to justify more detailed work. No further analysis recommended.

Court Farm (LACFM 96)

The bone from this site comes from features ranging from ?Bronze Age to Post-medieval/modern, however most of the material is Iron Age and Romano-British, and most of the identifiable bone is Early Romano-British. The higher level of identifiability in this group is related to the condition of the bone: moderate to good, whereas the bone from the other groups is more poorly preserved. Sheep/goat bones are the most frequent overall and include, in the Early Romano-British group, a pair of right and left goat frontals and horn cores, the only positively identified goat in the entire assemblage. Also in this group, cattle bones are slightly more common than sheep/goat, horse bones are relatively frequent, pig is present and gnawed and burnt bone occurs. Measurable bones are present. However, the amount of identifiable bone is not large enough to justify more detailed examination, no further analysis is recommended.

Weaver's Bridge (LAWBR 96)

The proportion of this assemblage which was examined at the time of assessment (69%) has a low content of identified bone, although the condition of the assemblage is moderate as a whole. Cattle bones are the most frequent, but sheep/goat are also frequent. Horse and pig are present in lower numbers in the dated contexts, the former including loose juvenile cheek teeth. One bird bone is present. Although this is the largest collection of bones among the smaller assemblages, the low level of identifiability means that more detailed work would not yield substantially more information. No further analysis is recommended.

Watching Brief: NOSNI section (NOSNIWB)

A high proportion of the few bones present are identifiable, but although some of the material is in moderately good condition (2), much of it is poorly preserved. Most of the identifiable fragments are cattle, with sheep/goat also common, one bone each of horse and pig occurs. No further analysis recommended.

Watching Brief: Cirencester section (CIRENWB)

The single bone recovered is of pig. No further analysis recommended.

Watching Brief: Latton section (LATTONWB)

The few bones in this assemblage are in poor condition (4), the identifiable material consists mainly of cattle, with one sheep/goat bone. No further analysis recommended.

Watching Brief: (SWGLWB)

One bone unidentifiable to species, no further analysis is recommended.

Summary

The assemblage from Birdlip Quarry is substantial and its analysis would make a significant contribution to knowledge of husbandry practices at contemporary rural settlements in the Cotswolds, about which little is known. Several small assemblages have been analysed (Noddle 1987), however there are few large assemblages. These include Frocester Court (Noddle 1979), Barnsley Park (Noddle 1985), Kingscote (Noddle 1987) and the ritual complex at West Hill, Uley (Levitan 1993). Two directions to pursue further are the high proportion of horse bones present, and the apparent spatial variation in species representation.

Similarly, the assemblages from Middle Duntisbourne and Duntisbourne Grove, although not as large as Birdlip Quarry, also represent important potential for increasing our knowledge of Late Iron Age husbandry practice in this region, since there are few analysed assemblages of comparable size. Exceptions are the Ditches (Rielly 1988), near Bagendon, and Beckford (Noddle 1987).

The opportunity for comparing animal husbandry at different periods and in different environments, provided by this project's transect across the Cotswolds, is unfortunately unable to be realised, since the quantity of identifiable bone from the smaller assemblages is too little to make meaningful comparisons. However, it may be said that in all the assemblages containing more than 100 fragments, whether Iron Age or Romano-British, cattle is the species most frequently represented, except at Preston Enclosure, Ermin Farm, and the Medieval and Medieval/Post-medieval groups from Street Farm, where sheep/goat bones are more frequent.

The following recommendations are made:

- 1) Full analysis of the bone from Birdlip Quarry, excluding the bone from 'other' contexts, paying attention to intrasite variation, with the aim of elucidating the nature of the animal husbandry at a low status agricultural settlement in comparison with higher status sites in the region such as Frocester and Barnsley Park.
- 2) Analysis of the bone from the Iron Age ditch deposits from Middle Duntisbourne and Duntisbourne Grove, considering the two sites together and investigating their differences in relation to nearby sites.
- 3) No further analysis of the remaining bone from the other sites.

Time Estimates

Birdlip: Identification, analysis, catalogue and report	165	days
Other sites: Identification, analysis, catalogue and report	83	days

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TABLE 1: Bone from Birdlip Quarry.

<i>Feature type</i>	Seen	No. ident.	% ident.	Total	% seen	Est. total ident.
Structural features	725	205	28	3130	23	885
Ditch	960	255	27	4280	22	1137
Pit	269	87	32	942	29	305
Well	546	137	25	1458	37	366
Layers	1675	460	27	6419	26	1763
Possible cremation	9	0	0	9	100	0
Other	90	40	44	351	26	156
Total	4274	1184	28	16589	26	4596

TABLE 2: Bone from Middle Duntisbourne, Duntisbourne Grove, Street Farm and Weaver's Bridge.

Site	Date	Feature	Seen	No. ident.	% ident.	Total	% seen	Est. total ident.
Middle Duntisbourne	RB	Ditch	6	0	0	7	86	0
	IA	Ditch	1752	347	20	5548	32	1099
	Undated	Quarry pit	63	13	21	71	89	15
	Sub-total		1821	360	20	5626	32	1112
Duntisbourne Grove	Neolithic	Pit	7	0	0	7	100	0
	RB	Ditch	177	49	28	572	31	158
		Quarry pit	25	3	12	50	50	6
		Silting layer	-	-	-	5	0	-
	IA	Ditch	1533	214	14	4695	33	655
		Subsoil	114	22	19	114	100	22
	Undated	Cleaning	1	1	100	1	100	1
	Sub-total		1856	288	16	5444	34	845
Street Farm	Medieval		31	13	42	55	56	23
	Med-Post-medieval		12	6	50	161	7	81
	Post-med/Modern		52	22	42	83	63	35
	Undated		161	55	34	204	79	70
	Sub-total		256	96	38	503	51	189
Weaver's Bridge	ERB		-	-	-	5	0	-
	LRB		521	64	12	760	69	93
	Undated		123	17	14	167	74	23
	Sub-total		644	81	13	932	69	117
	Total		4577	825	18	12505	37	2263

TABLE 3: Bone from the remaining smaller assemblages.

Site		Date																	Total			
		7BA	Prehistoric	IA/Prehist.	EIA/RB	M-LIA	LIA	IA	IA/RB	ERB	LRB	RB	?RB/Later	RB/Med.	RB/P-med	Med.	Med-P-med	Prehist./P-med		P-med/Modern	Undated	
Highgate House	Total		13	168		176	254	48			8									85	752	
	Ident.		1	22		25	40	13			1									25	127	
Five Mile House	Total																		2		2	
	Ident.																		1		1	
Duntisbourne Leer	Total									1											1	
	Ident.									0											0	
Field's Farm	Total									6	54										60	
	Ident.									0	1										1	
Daglingworth Quarry	Total																		27		27	
	Ident.																		25		25	
Ermin St Sections	Total																			44	44	
	Ident.																			31	31	
Lynches Trackway	Total				22				218	99									1	30	370	
	Ident.				14				19	24									0	6	63	
Burford Road	Total									1	1					20				7	43	
	Ident.									1	0					4				2	16	
Cherry Tree Lane	Total		4					2								24	2			19	51	
	Ident.		0					0								4	0			0	4	
Norcote Farm	Total									8										57	65	
	Ident.									2										1	3	
Witpit Lane	Total														10					19	29	
	Ident.														1					2	3	
Preston Enclosure	Total					685															685	
	Ident.					157															157	
St Augustine's Lane	Total	6	48																	2	17	73
	Ident.	6	0																	2	3	11
St Augustine's Farm	Total		99																		99	
South	Ident.		3																		3	
Ermin Farm	Total					32		47													45	124
	Ident.					7		16													16	39

TABLE 3 (Continued)

Site		Date																		Total	
		7BA	Prehistoric	IA/Prehist.	EIA/RB	M-LIA	LIA	IA	IA/RB	BRB	LRB	RB	7RB/Later	RB/Med.	RB/P-med.	Med.	Med-P-med	Prehist./P-med	P-med/Modern		Undated
Cirencester Road	Total Ident.																			10	10
Lower Street Furlong	Total Ident.		70																		70
Westfield Farm	Total Ident.										190								10	320	520
Latton Roman Pond	Total Ident.								414	328	369	1850	63	268						41339	73971
Court Farm	Total Ident.	10	10				904	315	25566		75					22			221	693	47886
nosniwb	Total Ident.																			4217	4217
cirenwb	Total Ident.																			11	11
latwb	Total Ident.																			148	148
swglwb	Total Ident.																			10	10
Total	Total Ident.	76	1724	16822	2214	893189	25440	18733	24924	41197	328	12516	1850	63	268	123	448	20	8840	877152	3761667

TABLE 4: Condition of bone at Birdlip Quarry, Middle Duntisbourne and Duntisbourne Grove.

Site	Date	Feature Type	Condition (% seen)				
			1	2	3	4	5
Birdlip Quarry	RB	Structural features	0	30	32	37	1
		Ditch	0	29	37	34	0
		Pit	0	24	34	39	3
		Well	18	62	7	13	0
		Layers	0	17	67	14	1
		Possible cremation	0	0	0	100	0
		Other	3	0	41	56	0
	Sub-total		2	28	44	25	1
Middle Duntisbourne	LA	Ditch	0	17	57	22	4
	RB	Ditch	0	0	0	0	100
	Undated	Quarry pit	0	0	100	0	0
	Sub-total		0	16	59	21	4
Duntisbourne Grove	Neolithic	Pit	0	0	0	0	100
	RB	Ditch	0	53	47	0	1
		Quarry pit	0	0	0	100	0
	LA	Ditch	0	6	33	24	37
		Subsoil	0	0	0	100	0
	Undated	Cleaning	0	100	0	0	0
	Sub-total		0	10	32	27	31

TABLE 5: Condition of the bone in the smaller assemblages.

Site	Date	Condition				
		1	2	3	4	5
Highgate House	?Prehistoric	0	0	0	0	100
	IA/Prehist.	0	0	9	21	70
	M-LIA	0	0	22	65	13
	LIA	0	4	25	71	0
	IA	0	0	8	92	0
	RB	0	0	0	75	25
	Undated	0	1	48	0	51
	Sub-total	0	1	22	51	26
Lynches Trackway	EIA/RB	0	100	0	0	0
	IA/RB	0	0	0	0	100
	ERB	0	0	79	21	0
	Post-med.	0	0	0	0	100
	Undated	0	13	10	0	77
	Sub-total	0	7	22	6	65
Preston Enclosure	MLIA	0	0	41	37	22
Ermin Farm	M-LIA	0	41	38	0	22
	IA	0	2	79	11	9
	Undated	0	0	53	47	0
	Sub-total	0	11	59	21	9
Latton Roman Pond	ERB	0	3	6	84	6
	LRB	0	22	3	0	75
	RB	0	2	41	17	39
	?RB/Later	0	0	0	0	100
	RB/Med.	0	83	17	0	0
	RB/P-med.	0	8	69	0	23
	Undated	0	1	61	17	20
	Sub-total	0	3	40	14	43
	Street Farm	Medieval	0	10	48	35
Med-Post-medieval		0	17	75	8	0
Post-med/Modern		0	46	13	38	2
Undated		3	20	25	30	21
Sub-total		2	24	28	32	14
Court Farm	?BA	0	0	100	0	0
	Prehistoric	0	0	0	0	100
	IA	1	1	17	66	16
	IA/RB	0	0	0	65	35
	ERB	0	18	33	10	38
	RB	0	0	86	0	14
	Medieval	0	100	0	0	0
	Post-med.	0	0	0	100	0
	Undated	0	0	17	0	83
	Sub-total	0	10	24	27	38
Weaver's Bridge	LRB	0	0	97	3	0
	Undated	0	2	3	94	0
	Sub-total	0	0	79	20	0

TABLE 6: Main domestic mammals at Birdlip Quarry, Middle Duntisbourne and Duntisbourne Grove.

Site	Date	Feature Type	% of identified fragments				n
			Horse	Cattle	Sheep	Pig	
Birdlip Quarry	RB	Structural features	9	39	37	15	205
		Ditch	14	56	21	6	255
		Pit	10	7	18	2	87
		Well	53	33	12	1	137
		Layers	20	39	31	9	460
		Other	13	43	18	20	40
	Sub-total		20	39	26	9	1184
Middle Duntisbourne	LIA		3	34	26	35	347
	Undated		0	23	69	8	13
Duntisbourne Grove	LIA		1	61	18	18	236
	RB		6	73	10	10	52
	Cleaning		0	0	100	0	1

TABLE 7: Main domestic mammals in the smaller assemblages.

Site	Date	% of identified fragments				n
		Horse	Cattle	Sheep	Pig	
Highgate House	?Prehistoric	0	100	0	0	1
	IA/Prehist.	27	68	0	5	22
	M-LIA	0	60	40	0	25
	LIA	13	68	15	5	40
	IA	19	63	19	0	16
	RB	0	100	0	0	1
	Undated	23	5	5	5	22
Lynches Trackway	EIA/RB	0	93	7	0	14
	IA/RB	0	63	37	0	19
	ERB	21	58	21	0	24
	Undated	17	17	0	0	6
Preston Enclosure	MLIA	13	39	41	5	157
Ermin Farm	M-LIA	0	29	71	0	7
	IA	6	6	75	13	16
	Undated	0	0	100	0	16
Latton Roman Pond	ERB	100	0	0	0	4
	LRB	0	100	0	0	8
	RB	89	11	0	0	9
	RB/Med.	67	33	0	0	3
	RB/P-med.	50	38	13	0	8
	Undated	51	49	3	0	39
Street Farm	Medieval	15	23	38	23	13
	Med-Post-medieval	33	0	67	0	6
	Post-med/Modern	14	41	27	9	22
	Undated	20	20	18	7	55
Court Farm	IA	25	75	0	0	4
	IA/RB	0	20	80	0	5
	ERB	17	36	30	2	66
	RB	0	0	100	0	5
	Medieval	0	0	100	0	2
	Post-med.	100	0	0	0	1
	Undated	0	33	0	67	3
Weaver's Bridge	LRB	6	61	30	3	64
	Undated	71	0	24	0	17

APPENDIX 18: The human skeletal assemblage

By A Boyle

Introduction and quantification

A small group of inhumations and cremation deposits were recovered from a number of the sites excavated.

Bagendon, Trinity Farm (BAGTF 96)

A small quantity of burnt bone was recovered from the fill (9) of a Beaker pit.

Baunton, Lynches Trackway (BAULT 96)

A single inhumation (103) was orientated north-west - south-east and buried in a tightly crouched position within a probable oval grave located on the scarp of a hill.

Birdlip Quarry (COWBQ 96)

A small quantity of cremated bone (988) was recovered from within a pottery vessel (978). The vessel had been placed near the entrance of a building and may have been a foundation deposit. The fill (943) associated with a second vessel was also sampled but found to contain no cremated bone. Both these features were Roman in date.

Cirencester, Watching Brief (CIRENWB - task 014)

A single cremation was recovered from the fill of a pit (2). It was associated with pottery and a copper alloy object of Roman date.

Latton, Weavers Bridge (LAWBR 96)

A single human skull (sf 1) was recovered from an undated layer of silty clay (4).

Preston, St Augustine's Farm South (PRSTAS 96)

A pit (3109) was found within a ring ditch, though it was not centrally located. It was interpreted as the remains of a secondary cremation and was consequently sampled. It contained a small quantity of unidentifiable burnt bone.

Methodology

The conclusions based on this report are based on the rapid scanning and sample examination of the material. The inhumation and the skull were assessed according to preservation, degree of completeness of skeleton, potential for ageing and sexing of the remains. Pathology was recorded where seen although it was incidental to the assessment and does not necessarily reflect the true incidence. The age and sex estimations must be treated with caution as they are preliminary and based on minimal

examination of the material. The cremations were judged by assessment of weight, average fragment size and quantity of identifiable bones.

Results of the assessment

The results of the assessment are summarised in tables 1 and 2 below.

Potential for further analysis

Baunton, Lynches Trackway (BAULT 96)

The inhumation (103) has been identified as a young adult male and has survived in excellent condition. The crouched position of the burial is suggestive, though not indicative of, a prehistoric date. The position of the burial is unusual, located as it is on the scarp of a hill. Full analysis is recommended and additionally the possibility of obtaining a radiocarbon date on the burial should be considered.

Cirencester Watching Brief (CIRENWB - task 014)

The cremation is of sufficient size (416 g) to merit detailed analysis although it can only be representative of a complete cremation. The weight range of a complete average adult cremation has been estimated as anything between 1500-3000 g (McKinley 1994) depending to an extent on age and sex (McKinley 1993, 285). However, in this case we cannot be certain whether or not this is evidence of deliberate selection as the feature containing the cremation was damaged by machine during stripping of the area.

The remaining deposits described in section 1, above, do not merit further analysis.

Estimated timings

Analysis of the inhumation and report writing	1 day
Analysis of the cremation and report writing	1 day

Total 2 days

Bibliography

McKinley, J.I.

1993 'Bone fragment size and weights of bone from modern British cremations and the implications for the interpretation of archaeological cremations', *Internat. J of Osteoarchaeology* 3, 283-287

McKinley, J.I.

1994 *The Anglo-Saxon cemetery at Spong Hill, North Elmham. Part VIII: the cremations* East Anglian Archaeology 69, Gressenhall

Table 1: Summary of the inhumations

Context	Preservation and completeness	Age	Sex	Comments
BAULT 96 (103)	preservation good, virtually complete	18-25 y	M?	cribra orbitalia, alveolar recession
LAWBR 96 (4)	skull only, broken and incomplete	35-45 y	M?	four surviving teeth are carious

Table 2: Summary of the cremations

Context	Weight	Identification	Comments
BAGTF 96 (9)	2 g	nothing identifiable	white and blue-grey in colour, no further work recommended
CIRENB 96 (2)	416 g	skull vault, femur, tibia	Adult?, full analysis recommended
COWBQ 96 (943)	-	no bone present	
COWBQ 96 (988)	not sorted	nothing identifiable	white in colour, no further work recommended
PRSTAS 96 (3113)	not sorted	nothing identifiable	fragments very small, further work not recommended

APPENDIX 19: Environmental Data

Part 1: Pollen Assessment of Latton Pond and the Churn Valley

By R Scaife

1) FIELDWORK

Aims and Objectives of Fieldwork

Pollen assessment study carried out for Cotswold Archaeological Trust (CAT) in 1991 illustrated the potential for obtaining a record of the changing vegetation and environment of the Churn valley. The principal aim of the recent investigation was to characterise the deposits and obtain the longest temporal record. For this, stratigraphical profiling of the Churn valley floodplain was required. Two site visits were made with the principle objectives of:

- Cross profiling the Churn valley floodplain to find the deepest sedimentological sequence and to provide a valley cross stratigraphical profile. This might provide the longest temporal sequence available for pollen analysis.
- To establish the position of lateral palaeochannels noted in the original assessment of CAT.
- Once a fuller understanding of the stratigraphy of the Churn valley was established, to obtain core and/or monolith samples for palynological analysis and material for radiometric dating (radiocarbon measurement) and samples for plant macrofossils and possibly insects.
- The tentatively identified 'Romano-British Pond' (LARP 96) was also examined and sampled to provide data on the character and land-use of the adjacent agricultural field systems.

The Churn Valley

The overall floodplain stratigraphy was studied by an auger transect at regular (maximum 10 metre) intervals across the breadth of the valley. For this, a 1 m long gouge corer with extension rods was used. A total of 14 boreholes plus a number of exploratory sections were examined and sampled for characterisation in the laboratory (Department of Geography, University of Southampton). The borehole sequences were described 'on-site' and their positions were surveyed accurately. The preliminary stratigraphical description of these is as follows:

(NB: The Core numbers are those used for survey purposes. The negative numbers relate to the distance 'back' (west) from the survey starting point. The order of the profiles as given below is sequential across the Churn valley floodplain following the line of road construction from the west/site depot side.

LATERAL RIVER BANK AT -20 METRES

Core 12 (-20 m)

0-20 cm Top soil; machine disturbed.
 20-56 cm Brown, oxidised alluvial silt.
 56-92 cm Brown/grey, gleyed alluvium.
 <92 cm Base.

Core 13 (-10 m)

0-30 cm Disturbed ground. Abandoned/disturbed/Cotswold backfill.

Core 11 (-5 m)

0-52 cm Brown, humic/detrital peat.
 52-76 cm Peat and silt + charcoal.
 76-93 cm Highly humified detrital peat.
 <93 cm Basal calcareous/marls.

Core 14 (-4 m)

0-15 cm Black/brown, detrital peat= monocot frags.
 15-43 cm Peaty gleyed soil.
 43-92 cm Brown humic detrital peat. Monocot structure.
 92-94 cm Basal calcareous grit/marl

Core 1 (0 m)

0-25 cm Brown top soil.
 25-95 cm Brown/grey, gleyed clay/silt.
 95-154 cm Pale grey and buff clay/silt.
 154-190 cm Grey alluvium. (non-oxidised).
 <190 cm Basal calcareous grit (?tufaceous).

Core 2 (10 m)

0-25 cm Brown top soil (A and B horizons). Gleyed in base.
 25-70 cm Pale brown, gleyed silt.
 70-75 cm Transition
 75-117 cm Dark grey alluvium. Silt.
 117-151 cm Grey Silt with sand +comminuted shell fragments.
 <151 cm Basal calcareous grit/marls.

Core 3 (20 m)

0-14 cm Top soil Brown, ('A' horizon)
 14-160 cm Soil ('B') horizon grading into pale brown mottled (gleyed) silt/clay.
 160-166 cm Grey silt alluvium.
 <166 cm Base.

Core 4 (30 m)

0-17 cm Brown soil 'A' horizon.
 17-43 cm Pale brown alluvium (clay/silt).
 43-134 cm Pale brown and 'blotchy' grey alluvium (gleying/oxidation).
 134-145 cm Grey alluvial silt.
 145-147 cm Sand/silt horizon.
 147-185 cm Grey alluvial silt.
 185-205 cm Sand/silt containing comminuted shell fragments. Small wood fragments.
 <205 cm Base.

Core 5 (40 m)

0-18 cm Brown topsoil ('A').
 18-103 cm Buff coloured/mottled (gleying) silt.
 103-106 cm Calcareous basal grit/marl.
 <106 cm Base

Core 6 (50 m)

0-15 cm Brown topsoil ('A') horizon.
 15-90 cm Buff/grey coloured (mottled silt).
 90-95 cm Basal calcareous grit/marl.
 <95 cm Base.

Core 7 (60 m)

0-18 cm Brown top soil ('A') horizon.
 18-90 cm Buff clay becoming mottled grey.
 90-95 cm Basal calcareous calcareous grit with orange staining.
 <95 cm Base.

Core 8 (70 m)

0-36 cm Brown top soil ('A') horizon.
 36-50 cm Buff/pale brown gleyed silt and clay.
 50-77 cm Becoming grey mottled clay/silt.
 77-80 cm Basal calcareous grit/marl.

Core 9 (80 m)

0-25 cm Brown top soil ('A') horizon.
 25-85 cm Buff/pale brown silt/clay.
 85-90 cm Basal calc. grit/marl.

Core 10 (90 m)

0-16 cm Brown top soil ('A') horizon.
 16-18 cm Grit layer at base of 'A' soil horizon.
 18-110 cm Brown alluvial silt.
 <110 cm Basal calc. grit/marl.

RIVER AT 94-102 METRES

(channel 1 m deep)

TO BREAK OF SLOPE=115 METRES

These data have been converted into a valley cross profile (Fig. 15).

This stratigraphical profiling elucidated the character of the valley profile and the most suitable places and stratigraphy for pollen and radiocarbon sampling.

Essentially, the valley is asymmetrical in profile, although not markedly so. The fill of the valley at this locality is thicker on the middle to west side and comprises predominantly inorganic alluvial silts and clays; the deepest sequence recorded was 205 cm at core 4. Incised into this alluvial fill are the modern main and lateral river channels. It is clear that these channels have meandered across this floodplain leaving a number of abandoned meander features in which freshwater sediments and peat accumulated until the channel were full. One of these was particularly evident on the west side and appears to have been the material sampled by Cotswold Archaeological Trust for pollen assessment (Scaife 1991).

Environmental Sampling

As a result of the stratigraphical survey, two areas were highlighted for detailed pollen, plant macrofossil and radiocarbon sampling. These comprised firstly, the deepest alluvial section and secondly, the organic filled palaeo-meander channel.

The Valley Alluvium

Because of the plasticity of the clay silt alluvium and the high water table, it was not possible to obtain monolith columns from an open section. Consequently, 50 cm long cores were obtained using a standard Russian/Jowsey corer. This is the standard device for obtaining undisturbed cores from peat and sediment for pollen analysis. The upper gleyed sediments and soil was not sampled. A 1.18 m core was obtained from the basal unoxidised silt and clay. These were wrapped in cellophane and are stored in a freezer pending sampling.

The palaeo-meander channel

A machine dug trench was opened exposing the 1 m of predominantly organic/peat deposits noted during the borehole survey. This confirmed that the peats occupy a palaeochannel at a lower level than the existing river channel. The lower 20 cm of the channel fill comprised organic, reduced silts containing freshwater molluscs. Overlying this were detrital monocot. peat with cf. *Phragmites*. The detailed stratigraphy of the sections was plotted/drawn and environmental sampling undertaken.

Pollen: Two 75 cm long monoliths were taken from (a) the deepest/most representative section of the palaeochannel and (b) the inorganic sediments into which the palaeochannel was cut. It appears that this is the same sequence which has already been shown to contain sub-fossil pollen of possible Saxon age.

Plant macrofossils: Bulk samples of c.10 litres were taken at 10 cm intervals through the organic fills of the palaeochannel. These samples should suffice for analysis of the insect and mollusc remains. These samples were taken from the same section as the pollen monolith allowing close comparison of the resulting data.

Radiocarbon samples: A series of samples was taken through the meander fills at 10 cm intervals. Enough organic material was taken from each level for standard radiocarbon measurements. Pollen monolith cores would also provide additional/back-up material if required and which could be closely correlated with changes in the pollen stratigraphy (and therefore vegetation/environment).

Preliminary Thoughts On Environmental Change in the Churn Valley

The fluvial history of this valley and its floodplain sediment infills is clearly complex and polycyclic. Absence of peat in the central part of the valley is not unusual and possibly represents progressive build up of overbank sediments under condition of higher fluvial discharge. The general absence of monocot remains may be attributed to oxidation in an environment with fluctuating ground water. Although the valley is substantial, representing major incision, the sediment fills described above are likely to be of much more recent age than its formation. It is suggested that prehistoric activity and forest clearance on the interfluves from the Neolithic (and most likely Bronze Age) resulted in destabilised soils, erosion and transportation of sediments into the river system. If pollen is present in these calcareous sediments, this possibility can be addressed.

It is clear that the river has had a history of lateral meandering across this floodplain which resulted in the palaeomeander channels which can be seen at various points along the valley. The organic fills of these channels accumulated in the freshwater environment afforded by the cut-offs. Typically, freshwater silts and subsequently peat accumulation resulted until the palaeochannel became filled. The channel sampled here is typical of this. The stratigraphical position below the modern lateral stream (mill ?) channel implies an earlier date to be confirmed by radiocarbon.

Sampling of Latton 'Roman Pond' (LARP 96)

This site was examined and was found to comprise a shallow silty layer containing freshwater molluscs overlain by a silty peat and modern agricultural soil. The whole sequence appears to sit in a shallow depression in the Thames floodplain gravels (of much earlier/Devensian age). The formation implies localised waterlogging through a higher ground water table. At present the age of the sequence is not known. Samples for pollen analysis were taken using a monolith tin and samples for radiocarbon dating also obtained from the open section. The site had previously been sampled by Dr Mark Robinson for plant macrofossils. If present, it is possible that information on the land-use of the nearby fields may be obtained.

2) POLLEN ASSESSMENT

Introduction

Pollen analysis/assessment was undertaken from the Churn Valley alluvial deposits, the palaeo-meander (designated BAULT 96) and LARP 96 with the following intention:

- To ascertain if pollen and spores are present in the sampled peat and sediments and if so, their state of preservation and the feasibility of obtaining 'full' pollen counts and construction of standard pollen diagrams.
- If pollen is present, to provide preliminary information on the pollen taxonomic content.
- Although pollen analysis is no longer a dating technique for the Holocene, in certain cases estimates can be given based on a general understanding of the overall vegetation changes which have occurred during the last 10 Ka.
- To examine the possible extent of human influences evident in the pollen record.
- To appraise the overall potential of the sites for reconstruction of the local and regional vegetation and environmental history.

It is noted that there are few pollen data from this region and thus details of the prehistoric vegetation. This is due in large part to the absence of suitable pollen preserving peats and sediments and due to the overall alkalinity of the bedrock lithology.

Methodology

Samples for pollen analysis were taken using monolith tins directly from open archaeological sections at Latton Pond and from the Mill Channel. The deeper alluvial sediments of the Churn Valley were sampled using a 50 cm chamber Russian/Jowsey peat corer. These monoliths and cores were sub-sampled for pollen in the laboratory and are available for future more detailed analysis if required. Pollen extraction was carried out using standard techniques (Moore and Webb 1978; Moore *et al.* 1991) which are detailed in Appendix 1. Although small numbers of pollen were identified and counted for this assessment, preliminary pollen diagrams have been constructed (Figs. 1-3). The pollen sum was, however, small and, though showing basic taxonomic content and changes in vegetation, the figures presented may differ somewhat with detailed analysis at closer sampling intervals.

Assessment Results

The pollen characteristics of the three sites are as follows:

Latton Roman Pond (Fig. 1)

This site was sampled for pollen in conjunction with Dr. M. Robinson for insects and plant macrofossils (seeds). A 50 cm monolith was taken which spans organic silts/peaty material which fills a sub-surface depression in the basement gravel. A total of 6 pollen samples were processed and found to contain well preserved but not abundant pollen. Of the three sites examined this site had the best preserved pollen with little evident exine degradation. Preliminary pollen counts (pollen sum) of 100 grains per level excluding marsh types and spores of ferns were made.

The pollen is dominated by herbs throughout the profile with only small values arboreal and shrubs. Dominant herbs are the 'on-site' (autochthonous) components and notably *Cyperaceae* (sedges) indicating that the environment was a wet fen rather than wooded alder/willow carr environment. No true aquatic taxa were found which indicate open water conditions. Pollen of aquatic types (e.g. water lily-*Nuphar*) are notably under-represented in pollen spectra. *Typha angustifolia/Sparganium* (reedmace and bur-reed) was present similarly indicating wet fen/reed swamp.

Dry-land taxa are dominated by *Poaceae* (grasses) although some of these may also have been elements of the fen community noted above. Associated herbs include segetal elements and cereal pollen indicating near-by cereal processing and/or cultivation. Of particular note is *Centaurea cyanus* (blue corn flower) and possibly *Sinapis* type (Charlocks).

Trees and shrub pollen numbers are small and comprise *Quercus* (oak to 15 %) with small numbers of *Ulmus* (elm), *Fagus* (beech), *Alnus* (alder) and *Corylus avellana* type (hazel and/or sweet gale). *Tilia* is present (5 %) in the basal levels and is of some significance. Although only small percentages are present, lime/lindens are entomophilous, produce smaller numbers of grains than most tree taxa and is thus largely under-represented in pollen spectra. It is possible, therefore, that there was local growth *Tilia*. Furthermore, the absence of *Tilia* from 32 cm may be the frequently described 'lime decline'. This event has been seen in pollen diagrams from its central areas of growth in southern and Eastern England. Once thought to be due to climatic deterioration, it is now recognised as due to human deforestation (Turner 1962). Dates for this span the Neolithic (Scaife 1980) to Saxon period (Baker *et al.* 1978) although the majority appear for c. 3500-3000 BP (middle-late Bronze Age). This occurrence here would correspond well if the sequence is considered to be of Roman age. Radiocarbon dating is required for this profile.

BAULT 96: The Palaeo-meander

Two pollen monoliths were taken from the fills of this marginal (mill leat) channel. Five pollen samples from monolith 1 were prepared for pollen and a preliminary diagram prepared (Fig. 2). Pollen was variable in preservation ranging from well

preserved to abraded. This possibly reflects a diverse taphonomy with in-washed/derived pollen present. However, sufficient pollen was recoverable to enable preliminary pollen counts. This site has been previously examined for the Cotswold Archaeological Trust (Scaife unpublished 1991) with similar results.

The pollen spectra are dominated by herbs with few trees evident. **Poaceae** and **Lactucaae** (dandelion types) are dominant. The latter are prevalent at 32-16 cm (60 %). This causes a reduction in percentages of **Poaceae** from 60 % to 25 %. Cereal pollen (*Hordeum/Triticum* type-wheat and barley) is present throughout but notably in the lower part of the profile. This is evidence of cereal cultivation in close proximity to the site. Herbaceous diversity is also greater at the base of the profile. *Secale cereale* (rye) is noted at 16cm. Significant quantities of **Cyperaceae** (to 30 %) show the local dominance of sedge fen in the River Churn valley. The substantial numbers/dominance of **Lactucaae** and **Poaceae** with other taxa such as *Plantago lanceolata* are suggestive of grassland/pasture. High values of **Lactucaae** noted are in part due to differential preservation of this robust pollen type. This has skewed the pollen data to some extent as seen by the reduction in **Poaceae**.

Overall, the view is one of open agricultural land both pastoral and arable with few trees in the local vicinity. The 'on' and 'near' site vegetation of the Churn valley was sedge fen and possibly wet grassland/pasture. There is no evidence of carr or coppice withy bed.

The Churn Valley Alluvial Sediments

A cross valley stratigraphical transect was carried out to assess the overall depth and character of the alluvial fills of the Churn Valley along the proposed road corridor. From this survey, a suitable point was chosen for pollen coring (Russian/Jowsey). Only the lower half of the sediment profile was sampled since the upper stratigraphy was gleyed and oxidised. A 1.25 m sequence was recovered. The sequence comprises inorganic, grey alluvial clays with silt. Due to the local alkalinity of the bedrock and the highly inorganic character of the material examined, little pollen was expected. Pollen preservation was found to be poor and preliminary/assessment counts and diagram (Fig. 3) were obtained only with difficulty. The data should therefore be treated carefully. The very substantial numbers of pre-Quaternary palynomorphs attests this and reflects the derived (allochthonous) origins of the sediment and possibly much of the pollen.

Spectra at 80 cm and 60 cm have greater number of trees with *Quercus* (oak) and *Corylus avellana* type (hazel/sweet gale) with some *Tilia* (lime) and *Fraxinus* (ash). Herbs are dominated by **Lactucaae** and **Poaceae**. The former were in general poorly preserved and are strong evidence of differential preservation and resulting skewed pollen spectra. This is also evidenced by the substantial numbers of fern spores and pre-Quaternary palynomorphs already noted. **Cyperaceae** reflect the character of the 'on-site' vegetation which appears to have been sedge/grass fen marginal to the river. This would have been subject to overbank deposition and sediment/alluvial deposition. Little more can be deduced from this site as pollen preservation/numbers were very poor.

Conclusions

Pollen was obtained from all of the three sites examined. However, the alluvial sediments of the Churn valley were unsatisfactory with differential preservation and skewed pollen assemblages. No further work is suggested for this site. The sites of Latton Pond and Bault 96 both contained satisfactory pollen/assemblages. These illustrate the character of the local vegetation which at Latton has some evidence of lime woodland at the base of the profile and a possible 'Tilia decline'. The profiles, however, generally show an open/cleared landscape with agriculture. These profiles would repay further pollen analysis with higher numbers of grains identified and counted and at closer sampling intervals of 4 or 8 cm. This would provide some of the first pollen data for the region. This work would also require radiocarbon or artefact dating of the profiles which are thought to be of late-prehistoric and historic age.

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Estimate of Time Required for Further Work

Pollen Analysis to publication standard will be carried out from the two sites of Latton Roman Pond and the Churn Valley Mill Leat (BAULT 96).

Total number of pollen samples to be prepared and counted 32

Pollen Extraction	2	days
Pollen Counting	18	days
Data Tabulation and Diagrams	1	day
Report Preparation	4	days

Pollen extraction will be carried out in the Department of Geography, University of Southampton. Standard pollen counts of 300-400 grains per level will be identified and counted where possible.

Appendix 1

Standard pollen extraction procedures were used in the analysis of the three sites discussed above. This included; deflocculation with 5% KOH; sieving at 150 μ for removal of coarse debris; HF removal of silica; micromesh sieving (10 μ) for removal of the clay fraction and Erdtman acetolysis for cellulose removal. This was undertaken in the Department of Geography, University of Southampton. Pollen was identified and counted using an Olympus Biological Research microscope at magnifications of x400 and x1000 with phase contrast facility. Pollen data and diagrams were calculated and plotted using Tilia and Tilia Graph in the Department of Geography, University of Southampton.

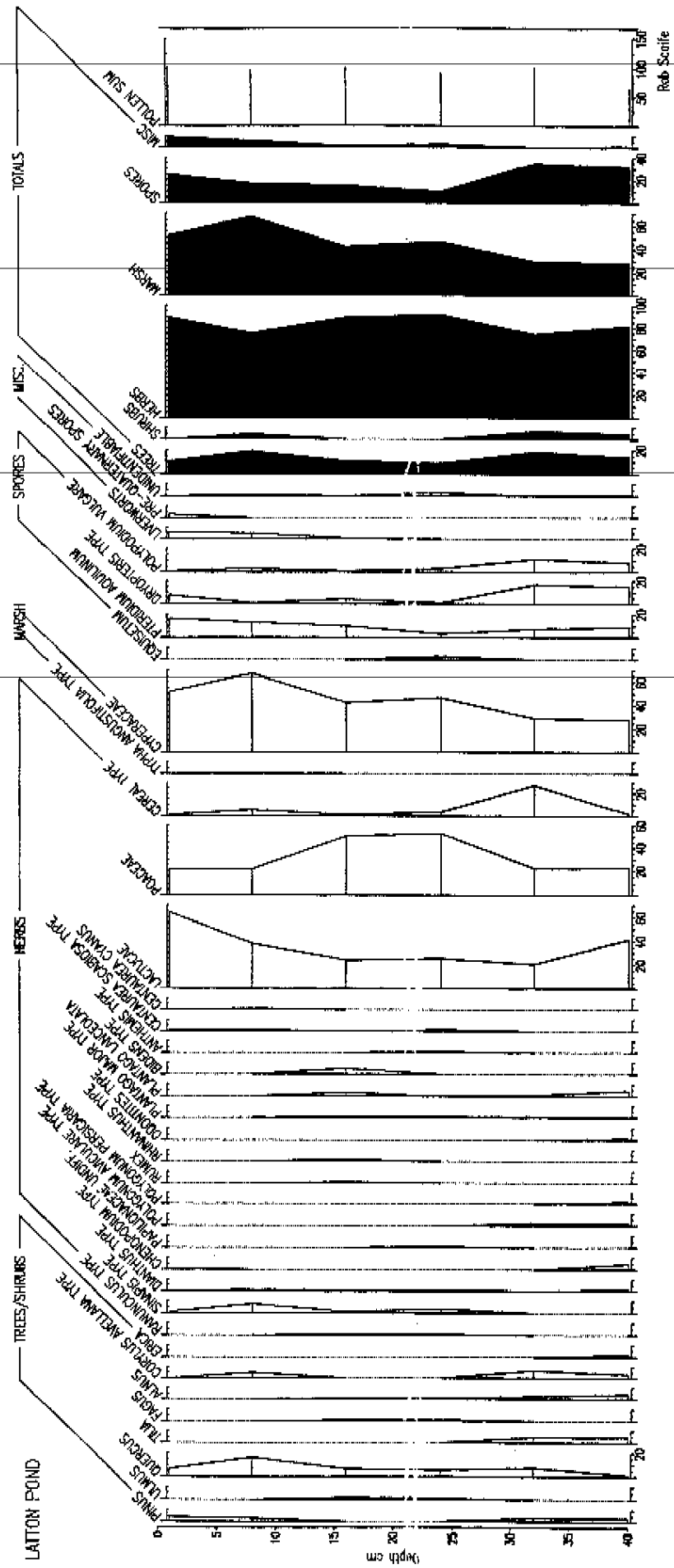


Figure 1

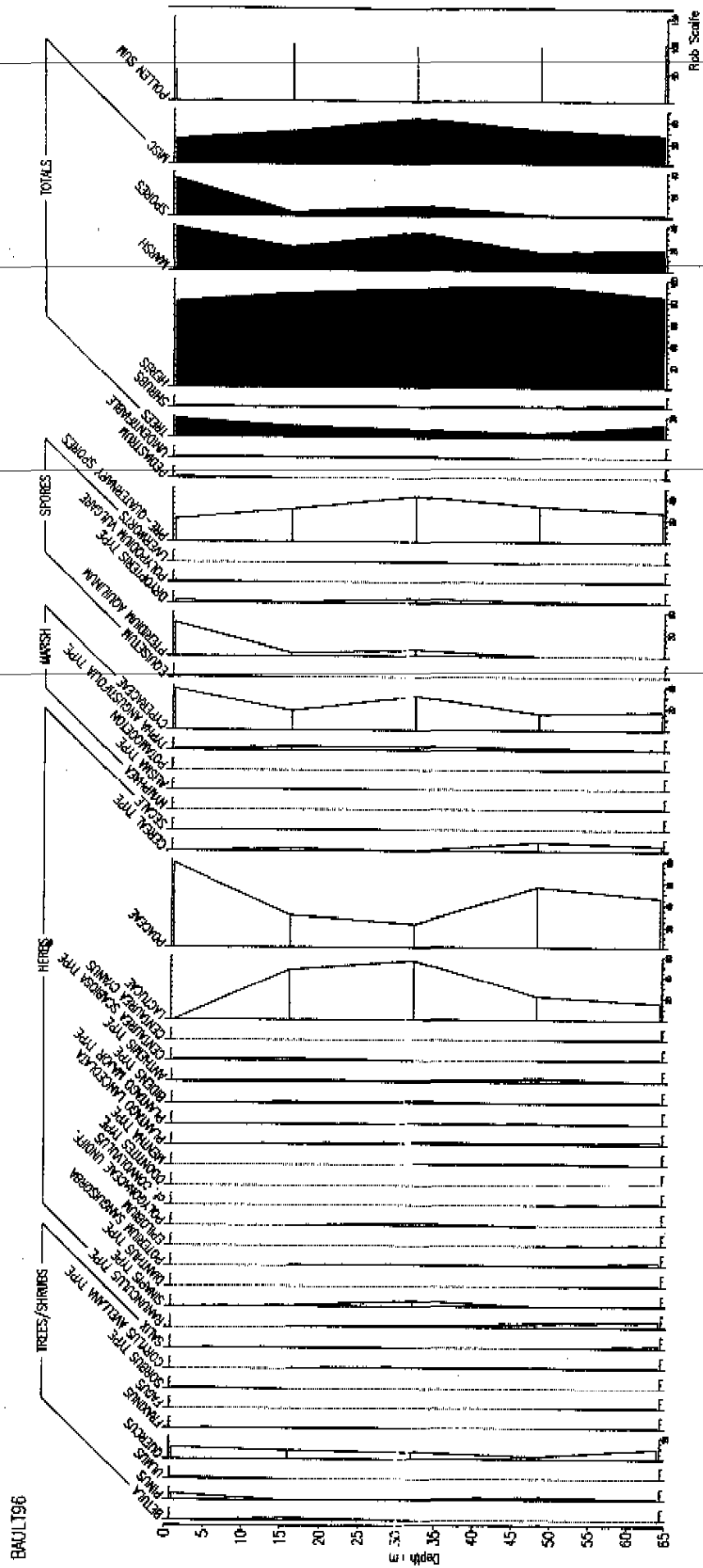


Figure 2

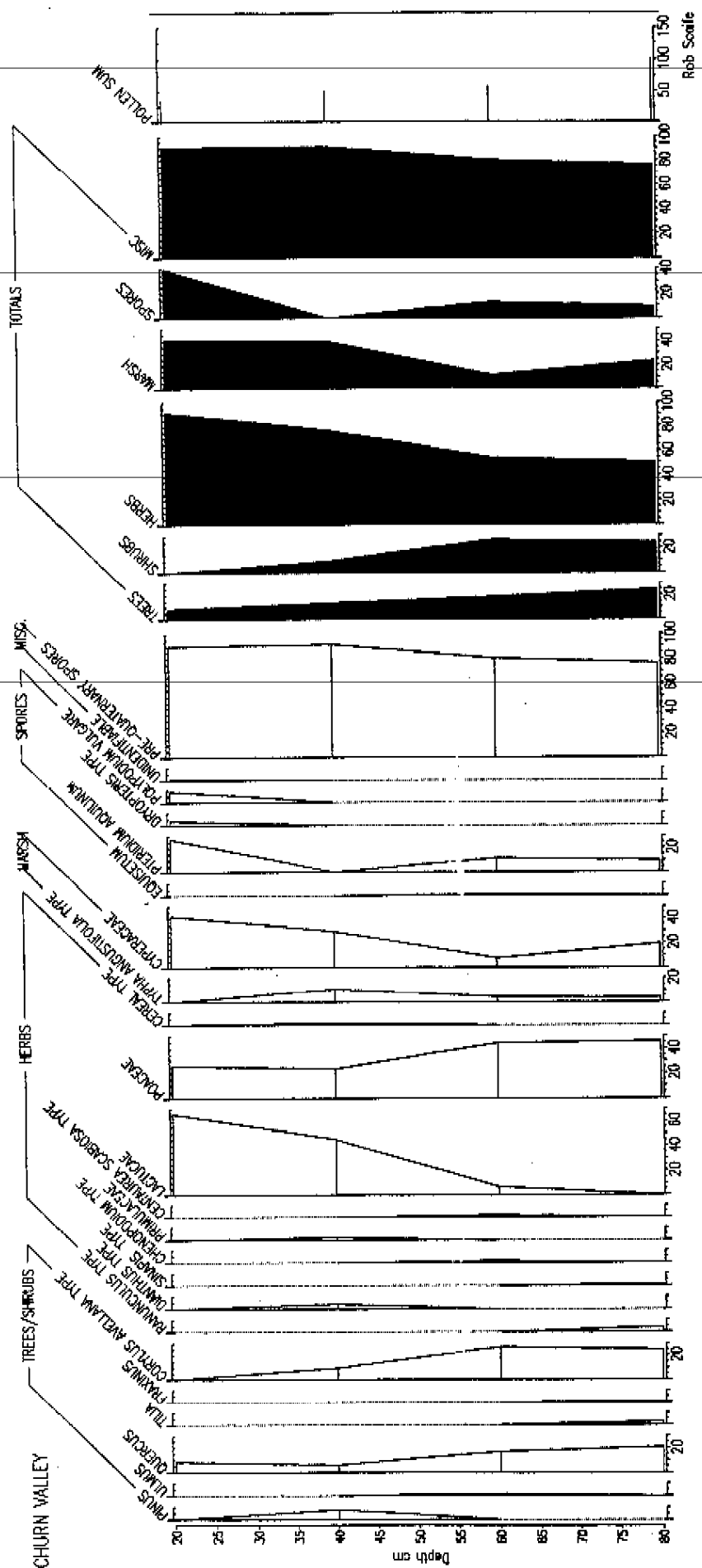


Figure 3

APPENDIX 19: Environmental Data (contd.)

Part 2 - Mollusca

By M Robinson

Introduction

The length of the Swindon-Gloucester Road under consideration between Birdlip and Cricklade runs entirely over calcareous substrate from the Oolitic Limestone of the Cotswold Hills between Birdlip and Cirencester, the Cornbrash on the edge of the Thames Valley below Cirencester to the Pleistocene terrace gravels of the Thames system around Cricklade. Such conditions might seem ideal for the palaeoecological investigation of Mollusca from archaeological sediments and buried soils. However, the Jurassic limestones of the Cotswolds and the Pleistocene gravels derived from them are hard. Deeper soil profiles over them tend to be circumneutral rather than calcareous unless they have been disturbed, so are not always conducive to the survival of shells. The brashy nature of the limestone, other than where it is in the form of Pleistocene gravel, can present problems of interpretation for land molluscs because some species which are usually characteristic of woodland can also find favourable conditions in the interstices to the fills of archaeological features.

During the excavations, snail shells were observed in the sediments of many of the sites and extensive sampling was undertaken. A selection of these samples was then assessed for the range of molluscs present in them and their archaeological implications.

Quantification of Material

A total of 221 samples were taken for molluscan analysis from 17 of the excavations. Of these samples, 173 were from sequences through deposits which made up a total of 23 sample columns and the remaining 48 were isolated samples from deposits. Each sample was of just over 1 kg of soil / sediment.

Data Collection Method Statement

A representative range of 92 samples was selected for assessment. 1 kg of each sample was weighed out, broken up in water and any shells which floated were poured off onto a 0.5 mm mesh and dried. The residue was then sieved over a 0.5 mm mesh and dried. Flotation is not a thorough means for the extraction of shells and many will have remained in the residue. It does, however, have the virtue of concentrating shells such that no sorting is required for assessment. The flots were scanned at up to x20 magnification under a binocular microscope. The shells observed were identified and an estimate made of their abundance. Some residues were checked to ensure that sufficient shells had floated for assessment. Summary results are given in Table 1 on a site by site basis.

Statement of Potential

All the sites samples yielded at least some snails, although in many cases the concentrations were very low. They do, however, show evidence of environmental change with time and provide contrasts related to topography. The results are first considered on a site-by-site basis and then overall themes are developed.

Birdlip Quarry (COWBQ 96)

A sequence of samples was examined from Section 275 through a Roman ditch cut into limestone and continuing into colluvial sediments overlaying the ditch. Shells are very sparse and uninformative from the ditch fill itself. The samples from the overlying deposits, however, contain open-country molluscan assemblages, particularly of *Vertigo pygmaea*, *Vallonia excentrica* and *Trichia hispida* gp.

Highgate House (COHH 96)

Samples were assessed from a series of colluvial sediments in Trench 3 through what is now a small dry valley (Section 18), a pit in Trench 1 (Section 11) and a rock-cut Iron Age ditch also in Trench 1 (Section 7). Molluscs are absent from the colluvial deposits of Trench 3 apart from Context 306 which was sediment of Iron Age or perhaps earlier date. It contains numerous shells of *Anisus leucostoma*, suggesting that there was formerly water seepage in the valley. The samples from the pit and Iron Age ditch are virtually devoid of shells apart from *Cecilioides acicula*, a burrowing species.

Duntisbourne Leer (DADL 96)

Snails other than *C. acicula* are again almost absent from a rock-cut prehistoric gully (Section 4).

Field Farm (DAFF 96)

Columns of samples were investigated through the ditch fill of a possible Iron Age / Roman square barrow (Section 6) and two Roman trackway ditches (Sections 10 and 5). All ditches were cut in to limestone. The lower deposits of the barrow ditch contain high concentrations of dry ground, open country molluscs, especially *Vallonia excentrica* but also *Pupilla muscorum* and *V. costata*. Concentrations of shells are lower in the trackway ditches but *P. muscorum* is again present.

Middle Duntisbourne (DAMD 96)

A sample from beneath an undated road surface (Section 49) contains few shells. However, rich assemblages were found in the lower fills of a rock-cut late Iron Age

enclosure ditch (Section 29). The fauna almost certainly comprised shade-loving species, particularly *Discus rotundatus*, *Aegopinella nitidula* and *Carychium* cf. *tridentatum*. Large numbers of *Carychium* sp. show that they are true woodland assemblages rather than rock rubble faunas. The occurrence of *Acicula fusca* in Sample 67 suggests an established woodland element to the fauna.

Duntisbourne Grove (DRDG 96)

A single sample was assessed from a rock-cut ditch of probable Iron Age date (Section 30). It too contains a rich woodland fauna with numerous shells of *Carychium* cf. *tridentatum*. *Discus rotundatus* and *Oxychilus cellarius* are also well represented.

Ermin Street Sections (ERMIN 96)

A few open-country molluscs, including *Pupilla muscorum* and the amphibious species *Lymnaea truncatula*, were identified from beneath a road surface in Trench 2 (Sample 201).

Trinity Farm (BAGTF 96)

Molluscs were assessed from three shallow rock-cut pits of late Neolithic to Beaker date (Section 11). One of them, (Sample 2), contains both open country (*Pupilla muscorum* and *Vallonia excentrica*) and shade-loving species (*Discus rotundatus* and *Oxychilus cellarius*), although the latter could represent a rock-rubble element to the fauna. The other two pits (Samples 1 and 3) contain little apart from the burrowing species *Cecilioides acicula* and a species of Helicellinae other than *Helicella itala* and therefore probably a medieval introduction to Britain, which had probably been introduced into the pits by burrowing animals.

Burford Road (CIBFRD 96)

A buried soil of uncertain date overlying the bedrock and beneath some metalled road surfaces (Sample 1) contains numerous shells of open country molluscs especially *Pupilla muscorum*, *Vallonia costata* and *V. excentrica*.

Cherry Tree Lane Compound (CIRCL 96)

Apart from the burrowing mollusc *Cecilioides acicula*, shells are almost entirely absent from two rock-cut pits of probable Iron Age date (Sections 13 and 10).

Preston Enclosure (PRENC 96)

Shells are virtually absent from a shallow early Bronze Age rock-cut pit (Section 32) and an Iron Age gully (Section 43). The sample column from a deeper rock-cut Iron Age enclosure ditch (Section 14) contains a rather sparse open-country fauna.

St. Augustine's Lane (PRCAL 96)

Samples from some lengths of rock-cut ditches of presumed prehistoric date (Sections 10, 4 and 8) only contain a very few shells.

St. Augustine's Farm South (PRSTAS 96)

Numerous samples were assessed from a pit (Section 84), a discontinuous ditch (Section 36) and a pair of conjoined ring ditches (Sections 82 and 83). All these features are prehistoric, possibly Bronze Age, in date and rock-cut. Shells are very sparse in these samples with, for example, only a couple of specimens of *Vallonia* sp. being recorded from the 10 samples examined from the ring ditches.

Ermin Farm (PREM 96)

Sparse molluscan assemblages were also recorded from some enclosure ditches of Iron Age date (Sections 1, 8 and 11).

Latton "Roman Pond" (LARP 96)

A column of samples (Section 12) was examined from the modern topsoil to the peaty fill of a shallow palaeochannel in the top of the terrace gravels. The organic sediments are perhaps Iron Age to Roman in date. The shells recorded from the organic sediments (Samples 30 and 27) are all *Trichia hispida* gp., a marsh and terrestrial species. Further up the sequence, wet conditions are suggested by *Lymnaea truncatula*, an amphibious species (Sample 25). The top two samples (Samples 24 and 23) contain typical recent ploughsoil forms with *Vallonia excentrica*, *Trichia hispida* gp. and *T. striolata*.

Street Farm (LATST 96)

A sample was examined from a buried soil overlying the terrace gravels and perhaps sealed by Ermin Street (Section 28). The soils from it give evidence of open conditions, with *Vallonia excentrica* predominating.

Weaver's Bridge (LAWBR 96)

A column of alluvial clay sediment was examined from the floodplain of the River Churn (Section 12). It overlay the Pleistocene gravels and contained some charred plant remains, including cereals, at the base. It had been assumed that the charred debris at the bottom of this section was Roman in date, but their assessment showed them to be of Saxon / medieval character, (see above). This impression was confirmed by the occurrence of a shell of a species of Helicellinae other than *Helicella itala* in this layer (Sample 8). With the exception of *H. itala*, the inland species of Helicellinae which now occur in Britain are regarded as medieval introductions. The majority of shells from the alluvium are aquatic or amphibious species, *Lymnaea truncatula* and *Anisus leucostoma* being particularly abundant. The range of species is very much what would be expected for Thames floodplain alluvium of either Roman or medieval date.

Overview

Probably as a result of the hard nature of the limestone giving circumneutral soils on some of the sites, only 10 of the 17 sites have molluscan assemblages with the potential for more detailed analysis. Unfortunately, the survival of shells was worst on Neolithic and Bronze Age sites, perhaps because the soils had experienced less mixing from cultivation and therefore did not have limestone fragments incorporated into them. One of the Neolithic or Beaker pits at Trinity Farm contained a mixed assemblage of open country and shade-loving species which could have been a reflection of a landscape with some scrub but could also have been the result of a rock rubble fauna in the pit. Somewhat surprisingly, the only two Iron Age or possible Iron Age sites with good molluscan assemblages, the enclosure ditch at Middle Duntisbourne and the ditch at Duntisbourne Grove, both produced woodland faunas. This might suggest a specialised function for these sites because a largely open agricultural landscape would be expected in this region by the Iron Age. The Roman assemblages all comprise open country faunas with the best evidence coming from the Birdlip Quarry settlement, the square barrow at Field Farm and the road at Street Farm.

The molluscs also provide evidence of changing hydrological conditions. There was apparently water seepage during the Iron Age in what is now a dry valley at Highgate House. The shallow palaeochannel at Latton showed a rise in water table had occurred perhaps around the Iron Age / Roman periods while alluviation from the River Churn was occurring on the floodplain at Weaver's Bridge probably during the medieval period.

Potential for Further Work

Molluscan assemblages with the potential for more detailed work were identified from:

Birdlip Quarry (COWBQ)	- Roman ditch and colluvium
Highgate House (COHH)	- seepage layer in dry valley
Field Farm (DAFF)	- Roman square barrow ditch
Middle Duntisbourne (DAMD)	- Iron Age enclosure ditch
Duntisbourne Grove (DRDG)	- possible Iron Age ditch
Trinity Farm (BAGTF)	- Neolithic or Beaker pit
Burford Road (CIBFRD)	- soil beneath road
Latton "Roman Pond" (LARP)	- palaeochannel fill
Street Farm (LATST)	- soil beneath Roman road
Weaver's Bridge (LAWBR)	- alluvial sequence

Updated Project Design

The assessment has shown that the molluscs from the Road Scheme do have the potential for further analysis. Of the ten sites listed above as showing potential, the results from Birdlip Quarry and Burford Road are unlikely to be of much archaeological significance. It is therefore recommended that work be concentrated on the remaining eight sites. The samples should be analysed by the conventional technique, sieving sub-samples of 1 kg down to 0.5 mm and fully sorting the dried residues. Identification of shells should be by comparison with modern reference material as necessary. The results should be interpreted along with the sedimentary evidence of the deposits to provide palaeoenvironmental reconstructions for the site. Once all the environmental archaeology of the sites has been completed, the molluscan evidence ought to be incorporated into an overview bringing together the results from all the Road Scheme sites.

Task List and Time Estimates

The list gives the technician time to sieve and sort samples along with the specialist time to identify and report on the molluscs. Limited work on the macroscopic plant remains from the same samples has also been included for Weaver's Bridge:

<u>Site</u>	<u>Columns</u>	<u>Spot Samples</u>	<u>Technician Days</u>	<u>Specialist Days</u>
Highgate House - dry valley	1	-	0.5	0.5
Field Farm - Roman square barrow ditch	1	-	3.0	2.0
Middle Duntisbourne - Iron Age enclosure ditch	1	-	6.0	3.0
Duntisbourne Grove - possible Iron Age ditch	-	4	3.0	2.0
Trinity Farm - Neolithic or Beaker pit	-	1	0.5	0.5
Latton "Roman Pond" - palaeochannel fill	1	-	3.0	2.0
Street Farm - soil beneath Roman Road	-	1	0.25	0.25
Weaver's Bridge - alluvial sequence and ditches	1	2	3.0	2.0
Molluscan component of overview			0	2.0

In addition, some time will be required for drawing up molluscan diagrams.

Table 1: Molluscs

Site	COWBQ	columns (samples) spot samples samples assessed					
		1	(7)	9	7		
Column/Section	275						
Sample	150	150	150	150	150	150	150
Context	1345	1334	1332	1324	1323	1318	1313
Depth (m.)	1.07	0.87	0.78	0.68	0.56	0.40	0.20
	-1.15	-0.96	-0.83	-0.75	-0.64	-0.50	-0.30
<i>Pomatias elegans</i>	-	-	-	-	-	-	-
<i>Acicula fusca</i>	-	-	-	-	-	-	-
<i>Carychium cf. tridentatum</i>	-	-	-	-	+	-	-
<i>Lymnaea truncatula</i>	-	-	-	-	-	-	-
<i>L. peregra</i>	-	-	-	-	-	-	-
<i>Planorbis planorbis</i>	-	-	-	-	-	-	-
<i>P. carinatus</i>	-	-	-	-	-	-	-
<i>Anisus leucostoma</i>	-	-	-	-	-	-	-
<i>Bathyomphalus contortus</i>	-	-	-	-	-	-	-
<i>Gyraulus albus</i>	-	-	-	-	-	-	-
<i>Cochlicopa sp.</i>	-	-	+	-	-	+	+
<i>Vertigo pygmaea</i>	-	-	-	-	-	-	-
<i>Pupilla muscorum</i>	-	-	-	-	-	+	+
<i>Vallonia costata</i>	-	-	-	-	-	-	-
<i>V. excentrica</i>	-	-	-	-	-	-	+
<i>Vallonia sp.</i>	-	-	-	-	-	-	-
<i>Ena obscura</i>	-	-	-	-	-	-	-
<i>Punctum pygmaeum</i>	-	-	-	-	-	-	-
<i>Discus rotundatus</i>	-	-	-	-	-	-	-
<i>Vitрина pellucida</i>	-	-	-	-	-	-	-
<i>Vitrea sp.</i>	-	-	-	-	-	-	-
<i>Aegopinella pura</i>	-	-	-	-	+	-	-
<i>A. nitidula</i>	-	-	-	-	-	-	-
<i>Oxychilus cellarius</i>	-	-	-	-	-	-	-
<i>Cecilioides acicula</i>	-	+	-	-	+	-	+
<i>Cochlodina laminata</i>	-	-	-	-	-	-	-
<i>Clausilia bidentata</i>	-	-	-	-	-	-	-
<i>Helicella itala</i>	-	-	-	-	-	-	-
Helicellinae indet.	-	-	-	-	-	+	+
<i>Trichia hispida</i> gp.	+	-	+	+	-	+	+
<i>T. striolata</i>	-	-	-	-	-	-	-
<i>Arianta arbustorum</i>	-	-	-	-	-	-	-
<i>Cepaea sp.</i>	-	-	-	-	-	-	-
<i>Helix aspersa</i>	-	-	-	-	-	-	-

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	COHH	columns		(samples)		spot	samples		
		6	(25)	1	9	assessed			
Column/Section	18					11	7		
Sample	36	34	33	32	35	23	14	13	12
Context	312	308	307	306	309	119	130	128	126
Depth (m.)				0.4					
				-0.5					
<i>Pomatias elegans</i>	-	-	-	-	-	-	-	-	-
<i>Acicula fusca</i>	-	-	-	-	-	-	-	-	-
<i>Carychium cf. tridentatum</i>	-	-	-	-	-	-	-	-	-
<i>Lymnaea truncatula</i>	-	-	-	-	-	-	-	-	-
<i>L. peregra</i>	-	-	-	-	-	-	-	-	-
<i>Planorbis planorbis</i>	-	-	-	-	-	-	-	-	-
<i>P. carinatus</i>	-	-	-	-	-	-	-	-	-
<i>Anisus leucostoma</i>	-	-	-	++	-	-	-	-	-
<i>Bathyomphalus contortus</i>	-	-	-	-	-	-	-	-	-
<i>Gyraulus albus</i>	-	-	-	-	-	-	-	-	-
<i>Cochlicopa</i> sp.	-	-	-	-	-	-	-	-	-
<i>Vertigo pygmaea</i>	-	-	-	-	-	-	-	-	-
<i>Pupilla muscorum</i>	-	-	-	-	-	-	-	-	-
<i>Vallonia costata</i>	-	-	-	-	-	-	-	-	-
<i>V. excentrica</i>	-	-	-	-	-	-	-	-	-
<i>Vallonia</i> sp.	-	-	-	-	-	+	-	-	-
<i>Ena obscura</i>	-	-	-	-	-	-	-	-	-
<i>Punctum pygmaeum</i>	-	-	-	-	-	-	-	-	-
<i>Discus rotundatus</i>	-	-	-	-	-	-	-	-	-
<i>Vitrina pellucida</i>	-	-	-	-	-	-	-	-	-
<i>Vitrea</i> sp.	-	-	-	-	-	-	-	-	-
<i>Aegopinella pura</i>	-	-	-	-	-	-	-	-	-
<i>A. nitidula</i>	-	-	-	-	-	-	-	-	-
<i>Oxychilus cellarius</i>	-	-	-	-	-	-	-	-	-
<i>Cecilioides acicula</i>	-	-	-	-	-	+	+	+	+
<i>Cochlodina laminata</i>	-	-	-	-	-	-	-	-	-
<i>Clausilia bidentata</i>	-	-	-	-	-	-	-	-	-
<i>Helicella itala</i>	-	-	-	-	-	-	-	-	-
Helicellinae indet.	-	-	-	-	-	+	-	-	-
<i>Trichia hispida</i> gp.	-	-	-	-	-	-	-	-	-
<i>T. striolata</i>	-	-	-	-	-	-	-	-	-
<i>Arianta arbustorum</i>	-	-	-	-	-	-	-	-	-
<i>Cepaea</i> sp.	-	-	-	-	-	+	-	-	-
<i>Helix aspersa</i>	-	-	-	-	-	-	-	-	-

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	DADL		spot samples	
			2	2
Column/Section	4			
Sample	5	3		
Context	9	8		
Depth (m.)				
<i>Pomatias elegans</i>	-	-		
<i>Acicula fusca</i>	-	-		
<i>Carychium cf. tridentatum</i>	-	-		
<i>Lymnaea truncatula</i>	-	-		
<i>L. peregra</i>	-	-		
<i>Planorbis planorbis</i>	-	-		
<i>P. carinatus</i>	-	-		
<i>Anisus leucostoma</i>	-	-		
<i>Bathyomphalus contortus</i>	-	-		
<i>Gyraulus albus</i>	-	-		
<i>Cochlicopa sp.</i>	-	-		
<i>Vertigo pygmaea</i>	-	-		
<i>Pupilla muscorum</i>	-	+		
<i>Vallonia costata</i>	-	-		
<i>V. excentrica</i>	-	-		
<i>Vallonia sp.</i>	-	-		
<i>Ena obscura</i>	-	-		
<i>Punctum pygmaeum</i>	-	-		
<i>Discus rotundatus</i>	-	-		
<i>Vitrina pellucida</i>	-	-		
<i>Vitrea sp.</i>	-	-		
<i>Aegopinella pura</i>	-	-		
<i>A. nitidula</i>	-	-		
<i>Oxychilus cellarius</i>	-	-		
<i>Cecilioides acicula</i>	+	+		
<i>Cochlodina laminata</i>	-	-		
<i>Clausilia bidentata</i>	-	-		
<i>Helicella itala</i>	-	-		
<i>Helicellinae indet.</i>	-	-		
<i>Trichia hispida gp.</i>	-	-		
<i>T. striolata</i>	-	-		
<i>Arianta arbustorum</i>	-	-		
<i>Cepaea sp.</i>	-	-		
<i>Helix aspersa</i>	-	-		

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	DAFF				columns			(samples)			samples assessed
					3			(15)			
Column/Section	6				10			5			
Sample	18	18	18	18	19	19	19	21	21	21	
Context	52	51	50	20	79	78	76	49	48	26	
Depth (m.)											
<i>Pomatias elegans</i>	-	+	-	-	-	-	-	-	-	-	
<i>Acicula fusca</i>	-	-	-	-	-	-	-	-	-	-	
<i>Carychium cf. tridentatum</i>	-	+	+	-	-	-	-	-	-	-	
<i>Lymnaea truncatula</i>	-	-	-	-	-	-	-	-	-	-	
<i>L. peregra</i>	-	-	-	-	-	-	-	-	-	-	
<i>Planorbis planorbis</i>	-	-	-	-	-	-	-	-	-	-	
<i>Anisus leucostoma</i>	-	-	-	-	-	-	-	-	-	-	
<i>Bathyomphalus contortus</i>	-	-	-	-	-	-	-	-	-	-	
<i>Gyraulus albus</i>	-	-	-	-	-	-	-	-	-	-	
<i>Cochlicopa</i> sp.	-	+	-	-	+	-	+	-	-	-	
<i>Vertigo pygmaea</i>	-	+	-	-	+	-	-	-	-	-	
<i>Pupilla muscorum</i>	+	+	-	-	+	+	+	-	-	-	
<i>Vallonia costata</i>	-	+	+	-	-	-	-	-	-	-	
<i>V. excentrica</i>	++	+++	-	-	-	-	-	-	-	+	
<i>Vallonia</i> sp.	+	+	-	-	+	-	+	-	-	-	
<i>Ena obscura</i>	-	-	-	-	-	-	-	-	-	-	
<i>Punctum pygmaeum</i>	-	-	-	-	-	-	-	-	-	-	
<i>Discus rotundatus</i>	-	-	-	-	-	-	-	-	-	-	
<i>Vitrina pellucida</i>	-	-	-	-	-	-	-	-	-	-	
<i>Vitrea</i> sp.	-	-	+	-	-	-	-	-	-	-	
<i>Aegopinella pura</i>	-	-	-	-	-	-	-	-	-	-	
<i>A. nitidula</i>	-	-	+	-	-	-	-	-	-	-	
<i>Oxychilus cellarius</i>	+	-	-	-	-	-	-	-	-	-	
<i>Cecilioides acicula</i>	-	+	-	-	-	-	-	-	+	+	
<i>Cochlodina laminata</i>	-	-	-	-	-	-	-	-	-	-	
<i>Clausilia bidentata</i>	-	-	-	-	-	-	-	-	-	-	
<i>Helicella itala</i>	+	-	-	-	-	+	-	-	-	-	
Helicellinae indet.	-	-	-	-	-	-	-	-	-	-	
<i>Trichia hispida</i> gp.	+	++	+	+	+	+	-	+	+	+	
<i>T. striolata</i>	-	-	-	-	-	-	-	-	-	-	
<i>Arianta arbustorum</i>	-	-	-	-	-	-	-	-	-	-	
<i>Cepaea</i> sp.	-	+	-	-	-	-	-	-	-	-	
<i>Helix aspersa</i>	-	-	-	-	-	-	-	-	-	-	

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	DAMD		columns		spot samples		samples assessed	
	49	29	2	(samples) (43)	1	8		
Column/Section	49	29						
Sample	14	69	67	61	60	56	53	44
Context	55	58	57	57	56	153	54	55
Depth (m.)			0.90	0.85				
			-0.95	-0.90				
<i>Pomatias elegans</i>	-	-	-	-	-	-	-	-
<i>Acicula fusca</i>	-	-	+	-	-	-	-	-
<i>Carychium cf. tridentatum</i>	+	-	++	+++	+	+	+	-
<i>Lymnaea truncatula</i>	-	-	-	-	-	-	-	-
<i>L. peregra</i>	-	-	-	-	-	-	-	-
<i>Planorbis planorbis</i>	-	-	-	-	-	-	-	-
<i>P. carinatus</i>	-	-	-	-	-	-	-	-
<i>Anisus leucostoma</i>	-	-	-	-	-	-	-	-
<i>Bathyomphalus contortus</i>	-	-	-	-	-	-	-	-
<i>Gyraulus albus</i>	-	-	-	-	-	-	-	-
<i>Cochlicopa</i> sp.	-	-	-	+	-	-	+	-
<i>Vertigo pygmaea</i>	-	-	-	-	-	-	-	-
<i>Pupilla muscorum</i>	+	-	-	-	-	-	+	-
<i>Vallonia costata</i>	-	-	-	-	+	+	+	-
<i>V. excentrica</i>	-	-	-	-	-	-	-	+
<i>Vallonia</i> sp.	-	-	-	-	-	-	-	-
<i>Ena obscura</i>	-	-	-	-	-	-	-	-
<i>Punctum pygmaeum</i>	-	-	+	+	-	-	-	-
<i>Discus rotundatus</i>	-	+	++	++	+	+	-	-
<i>Vitrina pellucida</i>	-	-	-	-	-	-	-	-
<i>Vitrea</i> sp.	-	-	-	-	-	-	-	-
<i>Aegopinella pura</i>	-	-	+	+	-	+	-	+
<i>A. nitidula</i>	-	-	+	++	-	-	+	-
<i>Oxychilus cellarius</i>	-	-	-	-	-	-	-	-
<i>Cecilioides acicula</i>	-	-	+	+	-	-	-	-
<i>Cochlodina laminata</i>	-	-	-	+	-	-	-	-
<i>Clausilia bidentata</i>	-	-	-	+	-	-	-	+
<i>Helicella itala</i>	-	-	-	-	-	-	-	-
Helicellinae indet.	-	-	-	-	-	-	-	-
<i>Trichia hispida</i> gp.	-	+	+	+	-	+	+	+
<i>T. striolata</i>	-	-	+	+	-	-	-	-
<i>Arianta arbustorum</i>	-	-	-	-	-	-	-	-
<i>Cepaea</i> sp.	-	-	-	-	-	-	+	-
<i>Helix aspersa</i>	-	-	-	-	-	-	-	-

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	DRDG	spot	samples	ERMIN	spot	samples
		samples	assessed		samples	assessed
		10	1		1	1
Column/Section	30			T2		
Sample	9			201		
Context	134			20		
Depth (m.)						
<i>Pomatias elegans</i>	-			-		
<i>Acicula fusca</i>	-			-		
<i>Carychium cf. tridentatum</i>	+++			-		
<i>Lymnaea truncatula</i>	-			+		
<i>L. peregra</i>	-			-		
<i>Planorbis planorbis</i>	-			-		
<i>P. carinatus</i>	-			-		
<i>Anisus leucostoma</i>	-			-		
<i>Bathyomphalus contortus</i>	-			-		
<i>Gyraulus albus</i>	-			-		
<i>Cochlicopa</i> sp.	+			-		
<i>Vertigo pygmaea</i>	-			-		
<i>Pupilla muscorum</i>	-			+		
<i>Vallonia costata</i>	-			-		
<i>V. excentrica</i>	-			-		
<i>Vallonia</i> sp.	+			+		
<i>Ena obscura</i>	-			-		
<i>Punctum pygmaeum</i>	-			-		
<i>Discus rotundatus</i>	++			-		
<i>Vitrina pellucida</i>	-			-		
<i>Vitrea</i> sp.	+			-		
<i>Aegopinella pura</i>	-			-		
<i>A. nitidula</i>	-			-		
<i>Oxychilus cellarius</i>	++			-		
<i>Cecilioides acicula</i>	-			+		
<i>Cochlodina laminata</i>	+			-		
<i>Clausilia bidentata</i>	+			-		
<i>Helicella itala</i>	-			-		
Helicellinae indet.	-			+		
<i>Trichia hispida</i> gp.	+			-		
<i>T. striolata</i>	+			-		
<i>Arianta arbustorum</i>	+			-		
<i>Cepaea</i> sp.	-			-		
<i>Helix aspersa</i>	-			-		

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	BAGTF	spot samples		CIBFD	samples assessed	
		3	3		1	1
Column/Section	11			8		
Sample	1	2	3	1		
Context	9	11	7			
Depth (m.)						
<i>Pomatias elegans</i>	-	-	-	-		
<i>Acicula fusca</i>	-	-	-	-		
<i>Carychium cf. tridentatum</i>	-	-	-	+		
<i>Lymnaea truncatula</i>	-	-	-	-		
<i>L. peregra</i>	-	-	-	-		
<i>Planorbis planorbis</i>	-	-	-	-		
<i>P. carinatus</i>	-	-	-	-		
<i>Anisus leucostoma</i>	-	-	-	-		
<i>Bathymphalus contortus</i>	-	-	-	-		
<i>Gyraulus albus</i>	-	-	-	-		
<i>Cochlicopa sp.</i>	-	-	-	+		
<i>Vertigo pygmaea</i>	-	-	-	+		
<i>Pupilla muscorum</i>	-	+	-	+++		
<i>Vallonia costata</i>	-	-	-	++		
<i>V. excentrica</i>	-	+	-	+++		
<i>Vallonia sp.</i>	-	-	-	++		
<i>Ena obscura</i>	-	-	-	+		
<i>Punctum pygmaeum</i>	-	-	-	+		
<i>Discus rotundatus</i>	-	+	-	-		
<i>Vitrea pellucida</i>	-	-	-	-		
<i>Vitrea sp.</i>	-	-	-	+		
<i>Aegopinella pura</i>	-	-	-	-		
<i>A. nitidula</i>	-	-	-	-		
<i>Oxychilus cellarius</i>	-	+	-	-		
<i>Cecilioides acicula</i>	+	+	+	+		
<i>Cochlodina laminata</i>	-	-	-	-		
<i>Clausilia bidentata</i>	-	-	-	-		
<i>Helicella itala</i>	-	-	-	+		
Helicellinae indet.	+	-	+	-		
<i>Trichia hispida</i> gp.	-	-	-	-		
<i>T. striolata</i>	-	-	-	-		
<i>Arianta arbustorum</i>	-	-	-	-		
<i>Cepaea sp.</i>	-			-		
<i>Helix aspersa</i>	-	-	-	-		

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	CIRCL	columns		(samples)	spot samples	samples assessed
		1		(3)	1	4
Column/Section	13			10		
Sample	17	14	13	9		
Context						
Depth (m.)						
<i>Pomatias elegans</i>	-	-	-	-		
<i>Acicula fusca</i>	-	-	-	-		
<i>Carychium cf. tridentatum</i>	+	-	-	-		
<i>Lymnaea truncatula</i>	-	-	-	-		
<i>L. peregra</i>	-	-	-	-		
<i>Planorbis planorbis</i>	-	-	-	-		
<i>P. carinatus</i>	-	-	-	-		
<i>Anisus leucostoma</i>	-	-	-	-		
<i>Bathymorphalus contortus</i>	-	-	-	-		
<i>Gyraulus albus</i>	-	-	-	-		
<i>Cochlicopa</i> sp.	-	-	-	-		
<i>Vertigo pygmaea</i>	-	-	-	-		
<i>Pupilla muscorum</i>	-	-	-	-		
<i>Vallonia costata</i>	-	-	-	-		
<i>V. excentrica</i>	-	-	-	-		
<i>Vallonia</i> sp.	+	-	-	-		
<i>Ena obscura</i>	-	-	-	-		
<i>Punctum pygmaeum</i>	-	-	-	-		
<i>Discus rotundatus</i>	-	-	-	-		
<i>Vitrina pellucida</i>	-	-	-	-		
<i>Vitrea</i> sp.	-	-	-	-		
<i>Aegopinella pura</i>	-	-	-	-		
<i>A. nitidula</i>	-	-	-	-		
<i>Oxychilus cellarius</i>	-	-	-	-		
<i>Cecilioides acicula</i>	+	+	+	+		
<i>Cochlodina laminata</i>	-	-	-	-		
<i>Clausilia bidentata</i>	-	-	-	-		
<i>Helicella itala</i>	-	-	-	-		
Helicellinae indet.	-	-	-	-		
<i>Trichia hispida</i> gp.	-	-	-	-		
<i>T. striolata</i>	-	-	-	-		
<i>Arianta arbustorum</i>	-	-	-	-		
<i>Cepaea</i> sp.	-	-	-	-		
<i>Helix aspersa</i>	-	-	-	-		

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	PRENC		samples assessed								
			columns 2		(samples) (9)			spot samples 2		11	
Column/Section	43		32			14					
Sample	14	11	17	16	15	29	28	27	26	25	24
Context	168	174	131	13	133	60	61	62	63	64	65
Depth (m.)			2								
<i>Pomatias elegans</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Acicula fusca</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Carychium cf. tridentatum</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Lymnaea truncatula</i>	-	-	-	-	-	-	-	+	-	-	-
<i>L. peregra</i>	-	-	-	-	-	+	-	-	-	-	-
<i>Planorbis planorbis</i>	-	-	-	-	-	-	-	-	-	-	-
<i>P. carinatus</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Anisus leucostoma</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Bathyomphalus contortus</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Gyraulus albus</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Cochlicopa sp.</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Vertigo pygmaea</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Pupilla muscorum</i>	-	-	-	-	-	-	-	+	+	+	-
<i>Vallonia costata</i>	-	-	-	-	-	-	-	-	-	-	-
<i>V. excentrica</i>	-	-	+	+	-	-	-	+	+	+	+
<i>Vallonia sp.</i>	-	-	-	-	-	-	+	+	-	-	-
<i>Ena obscura</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Punctum pygmaeum</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Discus rotundatus</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Vitrina pellucida</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Vitrea sp.</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Aegopinella pura</i>	-	-	-	-	-	-	-	-	-	-	-
<i>A. nitidula</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Cecilioides acicula</i>	-	-	-	-	-	-	-	-	+	-	-
<i>Cochlodina laminata</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Clausilia bidentata</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Helicella itala</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Trichia hispida</i> gp.	-	-	-	-	-	-	-	+	-	-	-
<i>T. striolata</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Arianta arbustorum</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Cepaea sp.</i>	-	-	-	-	+	-	-	-	-	-	-
<i>Helix aspersa</i>	-	-	-	-	-	-	-	-	-	-	-

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	PRSAL		spot samples		samples assessed
			columns 1	(samples) (4)	
Column/Section	10	4	8		
Sample	1	5	3		
Context	33	17	21		
Depth (m.)	0.35	0.10	0.15		
	-0.45	-0.15	-		
			0.25		
<i>Pomatias elegans</i>	-	-	-		
<i>Acicula fusca</i>	-	-	-		
<i>Carychium cf. tridentatum</i>	-	-	-		
<i>Lymnaea truncatula</i>	+	-	-		
<i>L. peregra</i>	-	-	-		
<i>Planorbis planorbis</i>	-	-	-		
<i>P. carinatus</i>	-	-	-		
<i>Anisus leucostoma</i>	-	-	-		
<i>Bathyomphalus contortus</i>	-	-	-		
<i>Gyraulus albus</i>	-	-	-		
<i>Cochlicopa</i> sp.	-	-	-		
<i>Vertigo pygmaea</i>	-	-	-		
<i>Pupilla muscorum</i>	-	-	-		
<i>Vallonia costata</i>	-	-	-		
<i>V. excentrica</i>	-	-	-		
<i>Vallonia</i> sp.	+	-	-		
<i>Ena obscura</i>	-	-	-		
<i>Punctum pygmaeum</i>	-	-	-		
<i>Discus rotundatus</i>	-	+	-		
<i>Vitrina pellucida</i>	-	-	-		
<i>Vitrea</i> sp.	-	-	-		
<i>Aegopinella pura</i>	-	-	-		
<i>A. nitidula</i>	-	-	-		
<i>Oxychilus cellarius</i>	-	-	-		
<i>Cecilioides acicula</i>	+	-	-		
<i>Cochlodina laminata</i>	-	-	-		
<i>Clausilia bidentata</i>	-	-	-		
<i>Helicella itala</i>	-	-	-		
Helicellinae indet.	-	-	+		
<i>Trichia hispida</i> gp.	-	-	-		
<i>T. striolata</i>	-	-	-		
<i>Cepaea</i> sp.	+	-	-		
<i>Helix aspersa</i>	-	-	-		

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	PRSTAS						
						columns 5	(samples) (58)
Column/Section	84						
Sample	18	18	18	18	18	18	18
Context	3082	3081	3080	3079	3078	3077	3076
Depth (m.)	0.95	0.90	0.70	0.50	0.40	0.25	0.10
	-1.00	-0.95	-0.75	-0.55	-0.45	-0.30	-0.15
<i>Pomatias elegans</i>	-	-	-	-	-	-	-
<i>Acicula fusca</i>	-	-	-	-	-	-	-
<i>Carychium cf. tridentatum</i>	-	-	-	+	-	-	-
<i>Lymnaea truncatula</i>	-	-	-	-	-	-	-
<i>L. peregra</i>	-	-	-	-	-	-	-
<i>Planorbis planorbis</i>	-	-	-	-	-	-	-
<i>P. carinatus</i>	-	-	-	-	-	-	-
<i>Anisus leucostoma</i>	-	-	-	-	-	-	-
<i>Bathyomphalus contortus</i>	-	-	-	-	-	-	-
<i>Gyraulus albus</i>	-	-	-	-	-	-	-
<i>Cochlicopa sp.</i>	-	-	+	-	-	-	-
<i>Vertigo pygmaea</i>	-	-	-	-	-	-	-
<i>Pupilla muscorum</i>	-	-	-	-	-	-	-
<i>Vallonia costata</i>	-	-	-	-	-	-	-
<i>V. excentrica</i>	-	-	-	-	-	-	-
<i>Vallonia sp.</i>	+	-	-	-	-	-	-
<i>Ena obscura</i>	-	-	-	-	-	-	-
<i>Punctum pygmaeum</i>	-	-	-	-	-	-	-
<i>Discus rotundatus</i>	-	-	-	-	-	-	-
<i>Vitrina pellucida</i>	-	-	-	-	-	-	-
<i>Vitrea sp.</i>	-	+	+	-	-	-	-
<i>Aegopinella pura</i>	-	-	-	-	-	-	-
<i>A. nitidula</i>	-	-	-	+	-	-	-
<i>Oxychilus cellarius</i>	-	+	-	-	+	-	-
<i>Cecilioides acicula</i>	-	-	-	-	+	-	-
<i>Cochlodina laminata</i>	-	-	-	-	-	-	-
<i>Clausilia bidentata</i>	-	-	-	-	-	-	-
<i>Helicella itala</i>	-	-	-	-	-	-	-
Helicellinae indet.	-	-	-	-	-	-	-
<i>Trichia hispida</i> gp.	-	-	+	-	-	-	-
<i>T. striolata</i>	-	-	-	-	-	-	-
<i>Arianta arbustorum</i>	-	-	-	-	-	-	-
<i>Cepaea sp.</i>	-	-	-	-	+	-	-
<i>Helix aspersa</i>	-	-	-	-	-	-	-

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	PRSTAS contd.				samples assessed 19			
	Column/Section Sample Context	36 19 318 4	19 3183	82 21 3100	21 3015-3018	83 23 3049	23 3050	23 3051-3053
Depth (m.)	0.4 0 - 0.4 3	0.05 -0.10	0.51 -0.56	0.15 -0.45		0.35 -0.40	0 -0.30	
<i>Pomatias elegans</i>	-	-	-	-	-	-	-	-
<i>Acicula fusca</i>	-	-	-	-	-	-	-	-
<i>Carychium cf. tridentatum</i>	-	-	-	-	-	-	-	-
<i>Lymnaea truncatula</i>	-	-	-	-	-	-	-	-
<i>L. peregra</i>	-	-	-	-	-	-	-	-
<i>Planorbis planorbis</i>	-	-	-	-	-	-	-	-
<i>P. carinatus</i>	-	-	-	-	-	-	-	-
<i>Anisus leucostoma</i>	-	-	-	-	-	-	-	-
<i>Bathyomphalus contortus</i>	-	-	-	-	-	-	-	-
<i>Gyraulus albus</i>	-	-	-	-	-	-	-	-
<i>Cochlicopa sp.</i>	-	-	-	-	-	-	-	-
<i>Vertigo pygmaea</i>	-	-	-	-	-	-	-	-
<i>Pupilla muscorum</i>	-	-	-	-	-	-	-	-
<i>Vallonia costata</i>	-	-	-	-	-	-	-	-
<i>V. excentrica</i>	-	-	-	-	-	+	-	-
<i>Vallonia sp.</i>	-	+	+	-	-	-	-	-
<i>Ena obscura</i>	-	-	-	-	-	-	-	-
<i>Punctum pygmaeum</i>	-	-	-	-	-	-	-	-
<i>Discus rotundatus</i>	-	-	-	-	-	-	-	-
<i>Vitrea pellucida</i>	-	-	-	-	-	-	-	-
<i>Vitrea sp.</i>	-	-	-	-	-	-	-	-
<i>Aegopinella pura</i>	-	-	-	-	-	-	-	-
<i>A. nitidula</i>	-	-	-	-	-	-	-	-
<i>Oxychilus cellarius</i>	-	-	-	-	-	-	-	-
<i>Cecilioides acicula</i>	+	+	-	-	-	-	-	-
<i>Cochlodina laminata</i>	-	-	-	-	-	-	-	-
<i>Clausilia bidentata</i>	-	-	-	-	-	-	-	-
<i>Helicella itala</i>	-	-	-	-	-	-	-	-
Helicellinae indet.	-	-	-	-	-	-	-	-
<i>Trichia hispida</i> gp.	-	-	-	-	-	-	-	-
<i>T. striolata</i>	-	-	-	-	-	-	-	-
<i>Arianta arbustorum</i>	-	-	-	-	-	-	-	-
<i>Cepaea</i> sp.	-	-	-	-	-	-	-	-
<i>Helix aspersa</i>	-	-	-	-	-	-	-	-

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	PREM			spot samples	samples assessed
				7	3
Column/Section	1	8	11		
Sample	1	3	5		
Context	5	41	57		
Depth (m.)					
<i>Pomatias elegans</i>	-	-	-		
<i>Acicula fusca</i>	-	-	-		
<i>Carychium cf. tridentatum</i>	-	+	-		
<i>Lymnaea truncatula</i>	-	-	-		
<i>L. peregra</i>	-	-	-		
<i>Planorbis planorbis</i>	-	-	-		
<i>P. carinatus</i>	-	-	-		
<i>Anisus leucostoma</i>	-	-	-		
<i>Bathyomphalus contortus</i>	-	-	-		
<i>Gyraulus albus</i>	-	-	-		
<i>Cochlicopa sp.</i>	-	-	-		
<i>Vertigo pygmaea</i>	-	-	-		
<i>Pupilla muscorum</i>	-	-	-		
<i>Vallonia costata</i>	-	-	-		
<i>V. excentrica</i>	+	-	-		
<i>Vallonia sp.</i>	-	-	-		
<i>Ena obscura</i>	-	-	-		
<i>Punctum pygmaeum</i>	-	-	-		
<i>Discus rotundatus</i>	-	-	-		
<i>Vitrina pellucida</i>	-	-	-		
<i>Vitrea sp.</i>	-	+	-		
<i>Aegopinella pura</i>	-	-	-		
<i>A. nitidula</i>	-	-	-		
<i>Oxychilus cellarius</i>	-	-	-		
<i>Cecilioides acicula</i>	+	-	-		
<i>Cochlodina laminata</i>	-	-	-		
<i>Clausilia bidentata</i>	-	-	-		
<i>Helicella itala</i>	-	-	-		
Helicellinae indet.	-	-	-		
<i>Trichia hispida</i> gp.	+	-	+		
<i>T. striolata</i>	-	-	-		
<i>Arianta arbustorum</i>	-	-	-		
<i>Cepaea sp.</i>	-	-	+		
<i>Helix aspersa</i>	-	-	-		

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	LARP	columns				spot samples		samples assessed
		1	(6)	4	6			
Column/Section	12							
Sample	30	27	26	25	24	23		
Context	247	113	112	140	149	160		
Depth (m.)								
<i>Pomatias elegans</i>	-	-	-	-	-	-	-	
<i>Acicula fusca</i>	-	-	-	-	-	-	-	
<i>Carychium cf. tridentatum</i>	-	-	-	-	-	-	-	
<i>Lymnaea truncatula</i>	-	-	-	+	-	-	-	
<i>L. peregra</i>	-	-	-	-	-	-	-	
<i>Planorbis planorbis</i>	-	-	-	-	-	-	-	
<i>Anisus leucostoma</i>	-	-	-	-	-	-	-	
<i>Bathyomphalus contortus</i>	-	-	-	-	-	-	-	
<i>Gyraulus albus</i>	-	-	-	-	-	-	-	
<i>Cochlicopa sp.</i>	-	-	-	-	-	-	-	
<i>Vertigo pygmaea</i>	-	-	-	-	-	-	-	
<i>Pupilla muscorum</i>	-	-	-	-	-	-	+	
<i>Vallonia costata</i>	-	-	-	-	-	-	-	
<i>V. excentrica</i>	-	-	-	-	+	+	+	
<i>Vallonia sp.</i>	-	-	-	+	+	+	+	
<i>Ena obscura</i>	-	-	-	-	-	-	-	
<i>Punctum pygmaeum</i>	-	-	-	-	-	-	-	
<i>Discus rotundatus</i>	-	-	-	-	-	-	-	
<i>Vitrea pellucida</i>	-	-	-	-	-	-	-	
<i>Vitrea sp.</i>	-	-	-	-	-	-	-	
<i>Aegopinella pura</i>	-	-	-	-	-	-	-	
<i>A. nitidula</i>	-	-	-	-	-	-	-	
<i>Oxychilus cellarius</i>	-	-	-	-	-	-	-	
<i>Cecilioides acicula</i>	-	-	-	-	-	-	-	
<i>Cochlodina laminata</i>	-	-	-	-	-	-	-	
<i>Clausilia bidentata</i>	-	-	-	-	-	-	-	
<i>Helicella itala</i>	-	-	-	-	-	-	-	
Helicellinae indet.	-	-	-	-	-	-	-	
<i>Trichia hispida</i> gp.	+	+	-	+	+	++	++	
<i>T. striolata</i>	-	-	-	-	-	-	+	
<i>Arianta arbustorum</i>	-	-	-	-	-	-	-	
<i>Cepaea sp.</i>	-	-	-	-	-	-	-	
<i>Helix aspersa</i>	-	-	-	-	-	-	-	

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	LATST	spot samples 1	samples assessed 1
Column/Section Sample Context Depth (m.)	28 2 365		
<i>Pomatias elegans</i>	-		
<i>Acicula fusca</i>	-		
<i>Carychium cf. tridentatum</i>	-		
<i>Lymnaea truncatula</i>	-		
<i>L. peregra</i>	-		
<i>Planorbis planorbis</i>	-		
<i>P. carinatus</i>	-		
<i>Anisus leucostoma</i>	-		
<i>Bathyomphalus contortus</i>	-		
<i>Gyraulus albus</i>	-		
<i>Cochlicopa</i> sp.	-		
<i>Vertigo pygmaea</i>	-		
<i>Pupilla muscorum</i>	-		
<i>Vallonia costata</i>	-		
<i>V. excentrica</i>	++		
<i>Vallonia</i> sp.	-		
<i>Ena obscura</i>	-		
<i>Punctum pygmaeum</i>	-		
<i>Discus rotundatus</i>	-		
<i>Vitrina pellucida</i>	+		
<i>Vitrea</i> sp.	-		
<i>Aegopinella pura</i>	-		
<i>A. nitidula</i>	-		
<i>Oxychilus cellarius</i>	-		
<i>Cecilioides acicula</i>	-		
<i>Cochlodina laminata</i>	-		
<i>Clausilia bidentata</i>	-		
<i>Helicella itala</i>	-		
<i>Helicellinae</i> indet.	+		
<i>Trichia hispida</i> gp.	+		
<i>T. striolata</i>	-		
<i>Cepaea</i> sp.	-		
<i>Helix aspersa</i>	-		

+ present, ++ some, +++ many

Table 1 ctd: Molluscs

Site	LAWBR	samples assessed		
		columns 1	(samples) (3)	spot samples 3
Column/Section	23			
Sample	8	3	5	
Context	92	91	91	
Depth (m.)				
<i>Pomatias elegans</i>	-	-	-	
<i>Acicula fusca</i>	-	-	-	
<i>Carychium cf. tridentatum</i>	-	-	-	
<i>Lymnaea truncatula</i>	+	++	+++	
<i>L. peregra</i>	-	+	+	
<i>Planorbis planorbis</i>	+	+	+	
<i>P. carinatus</i>	-	+	-	
<i>Anisus leucostoma</i>	+	+	++	
<i>Bathyomphalus contortus</i>	+	-	-	
<i>Gyraulus albus</i>	-	+	-	
<i>Cochlicopa</i> sp.	-	-	-	
<i>Vertigo pygmaea</i>	-	-	-	
<i>Pupilla muscorum</i>	-	-	-	
<i>Vallonia costata</i>	-	-	-	
<i>V. excentrica</i>	-	-	-	
<i>Vallonia</i> sp.	-	-	+	
<i>Ena obscura</i>	-	-	-	
<i>Punctum pygmaeum</i>	-	-	-	
<i>Discus rotundatus</i>	-	-	-	
<i>Vitrina pellucida</i>	-	-	-	
<i>Vitrea</i> sp.	-	-	-	
<i>Aegopinella pura</i>	-	-	-	
<i>A. nitidula</i>	-	-	-	
<i>Oxychilus cellarius</i>	-	-	-	
<i>Cecilioides acicula</i>	-	-	-	
<i>Cochlodina laminata</i>	-	-	-	
<i>Clausilia bidentata</i>	-	-	-	
<i>Helicella itala</i>	-	-	-	
Helicellinae indet.	+	-	-	
<i>Trichia hispida</i> gp.	+	-	+	
<i>T. striolata</i>	-	-	-	
<i>Arianta arbustorum</i>	-	-	-	
<i>Cepaea</i> sp.	-	-	-	
<i>Helix aspersa</i>	-	-	-	

+ present, ++ some, +++ many

APPENDIX 19: Environmental data (contd.)

Part 3 - Macroscopic Plant Remains

By M. Robinson and R. Pelling

Introduction

During the spring and summer of 1996, the Oxford Archaeological Unit conducted excavations on a series of sites in advance of the construction works associated with the Gloucester to Swindon road widening scheme and the Cirencester ring road.

Soil samples were taken for the analysis of charred plant remains from 23 sites. The volume of soil taken ranged from 1 to 104 litres. The samples were processed using a bulk water separation machine and were floated onto a 0.5mm mesh. Samples were taken for the retrieval of waterlogged occupational deposits from two sites, Latton, Court Farm and Weavers Bridge.

A total of 284 samples from prehistoric to post-medieval contexts were submitted for the assessment of their potential for analysis of charred macroscopic plant remains. Five samples were submitted for the assessment of their potential for waterlogged material. The samples assessed were selected to best represent the full range of deposits sampled, while reducing the amount of work at the assessment stage of the analysis.

Assessment Methods

Each sample submitted for assessment of its potential for analysis of charred plant remains was examined. The samples were first put through a stack of sieves. Each fraction was then scanned under a binocular microscope at x10 magnification. The charred seeds and chaff observed were provisionally identified and an estimate of their abundance was made. The scanning of flots will undoubtedly result in the under estimation of smaller seeds and chaff, but does serve to characterise the samples. The scanning results are displayed on tables 1, 3, 4, 5, 7, 9 - 14, 16, 18 and 19.

Charcoal fragments retained in the 4mm mesh were broken transversely and examined at x40 magnification. While this provides appropriate means for the identification of the ring-porous taxa (*Quercus*), the identification of the diffuse porous taxa (*Pomoideae*, *Alnus/Corylus* sp., *Rhamnus* sp. and *Prunus* sp.) must be taken as tentative. Summary results of the charcoal assessment are given in tables 2, 6, 8, 15, 17 and 19. Each table gives the number of samples in which the taxon is present by period and/or context type.

One litre sub-samples taken from selected waterlogged samples and were processed using the bulk water separation machine and floated onto a 0.25mm mesh. The flots were kept wet and scanned under water while species present were identified and abundance estimated. A few waterlogged samples were also processed as bulk samples for charred material and the flots allowed to dry out. Preservation was poor due to shrinkage and matting during drying. The samples were therefore scanned and predominant species only were noted. This is not a thorough assessment method for

waterlogged samples, but does provide some idea of potential for processing and analysis under laboratory conditions. The summary results of the scanning of the dried waterlogged material are shown in table 21 while the results of the assessment of sub-samples kept wet are shown in table 22.

Results

The summarised results are displayed in tabular form below. For charred seeds and chaff and for charcoal, tables are only included when two or more samples contain material. A total of 19 sites produced non-charcoal charred plant remains, while a further single site produced charcoal only. Three sites produced flots of dried out waterlogged material. Of the two sites specifically assessed for waterlogged remains, only the Latton, Weavers Bridge samples were found to contain useful material. The results of the assessment are discussed on a site by site basis.

Cowley, Birdlip Quarry (COWBQ 96)

A total of 103 samples were assessed. Samples investigated come from a corn dryer, ovens and hearths, pit and ditch features, occupation layers and well deposits. Each feature type produced charred plant macrofossil remains in a total over 71 samples, with an average density of 41.5 items per litre.

The prehistoric occupation at the site is represented by pit features. Four samples from these pits contain small quantities of charred material. Assemblages comprise of fragments of *Corylus avellana* (hazel) nut shell and occasional grains of *Hordeum* sp. (barley) and free-threshing *Triticum* sp. (bread type wheat). Such an assemblage is characteristic of Neolithic or earlier Bronze Age assemblages. Two pits contain identifiable charcoal fragments. Species provisionally identified include *Quercus* sp. (oak), *Pomoideae* (hawthorn, crab apple etc.) and *Corylus/Alnus* sp. (hazel/alder)

Roman period deposits were available from a range of feature types. The corn dryer produced three very rich samples, each containing well in excess of 1000 items, and three smaller samples. The assemblages are dominated by the glume bases of hulled wheat, many of which are identifiable as *Triticum spelta* (spelt wheat). Cereal grain is also numerous, again dominated by *Triticum spelta*, although with some free-threshing wheat and some *Hordeum* sp. (barley) grain. Grain showing signs of germination were noted, as were detached embryo sprouts, in the three richer samples. Weed seeds are present in small numbers and appear to be dominated by grasses.

The three small assemblages are from the upper fills of the corn dryer so can not be directly related to the original use of the feature. The rich samples, however, are from the primary fill and are thus more likely to represent the final episode of use in its original form. The presence of germinated grain and detached embryos are indicative of the malting process. These samples are therefore likely to represent the malting waste and chaff which were thrown back into the corn dryer, presumably to be used as fuel, while the germinated grain was removed for the next stage in the malting process.

Unfortunately any spacial implications will have to be very crudely examined as samples are available by context only.

Two corndryer samples, one from the lower deposits and one from the upper fills, contain identifiable charcoal. *Quercus* sp. (oak) and Pomoideae (hawthorn etc.) were provisionally identified from the lower samples, while *Quercus* sp., cf. *Rhamnus* (buckthorn) and *Corylus/Alnus* sp. (hazel/alder) were identified from the upper fills. It will be of interest to investigate possible origins of the charcoal, for example if any has derived from fuel or from structural material.

Of the samples assessed from Roman period pit features three samples contain large quantities of material. These samples are dominated by *Triticum spelta* glume bases, *T. spelta* grain and detached germinated embryos. Some grain of *Hordeum* sp. (barley) and free-threshing wheat are also present. In addition there is a large number of silica chaff fragments. Weeds are fairly frequent. On the basis of the scanning results it is evident that these pit samples are very similar in nature to the corndryer samples and appear to be similarly derived from malting waste.

The remaining Roman pit samples contain scatters of grain and chaff most frequently of *T. spelta* (spelt). Occasional grains of *Hordeum* sp. (barley) and free-threshing *Triticum* were also noted, as were occasional grains showing signs of germination. Such assemblages are likely to represent background scatters of cereal processing and domestic waste. Several of the pit features contain small amounts of charcoal provisionally identified as *Quercus* sp. (oak), *Corylus/Alnus* (hazel/alder) and Pomoideae (hawthorn etc).

The samples taken from the ditch sections, floor layers and the well are similar in nature to the smaller of the pit samples. They are likely to reflect general background scatters of processing and domestic waste. As with the pit samples the scanning results suggest *Triticum spelta* to be the dominant cereal type represented.

Four samples each were assessed from oven and hearth features which have been interpreted as possibly being of industrial rather than domestic function. The scanning results indicate that the density of remains are generally low. The oven samples are of a better potential than the hearth samples, with three containing up to 100 items. Both glume bases and cereal grain are represented, largely of *Triticum spelta*, while one sample contains a large number of weed seeds. If an industrial rather than domestic use can be demonstrated then the results would suggest the use of cereal waste as kindling for the fires. Small quantities of charcoal, provisionally identified as *Quercus* sp. (oak), *Corylus/Alnus* sp. (hazel/alder) and Pomoideae (hawthorn etc.) are present. The context would suggest that the charcoal has derived from fuel. The small quantities of both charcoal and cereal remains could simply be a result of poor preservation, especially if the material was subjected to extremely high temperatures as the archaeological evidence suggests.

The large samples from the primary corndryer deposits merit thorough analysis. The samples are very large so a fraction of each will be sufficient. Although there have been several botanical studies of corndriers, very little work has concentrated on the malting

aspects. The samples therefore offer a very exciting opportunity for a thorough and useful study. Analysis should be aimed towards testing the hypothesis that the comdryer was used for malting and if not to establish other possible functions. Spacial implications will be difficult to establish, although it will be possible to look at gross variation between samples from the flue and samples from the main bowl. The three smaller samples merit investigation to look at changes in the assemblages once the primary function of the comdryer had ceased.

The three large pit samples require thorough investigation and analysis to fully establish their relationship with the comdryer. It will be equally useful to look at the differences between the two sets of samples, for example the occurrence of silica chaff in the pit samples and not in the comdryer samples, to establish if these are differences in preservation, or in the origin of the material. A selection of other pit samples should also be analyzed in detail to provide an unbiased picture of pit samples across the site.

The three richer oven samples merit closer analysis to investigate a possible source of the material and to enable the analysis of possible fuel types. A selection of the larger samples from the hearths, floor layers ditches and the wells merit analysis so as to provide a record for each context type, and to provide an unbiased analysis of the general background material of the site. As the richer samples appear to be associated with the comdryer and the malting activity they will provided a biased picture of the economy of the site based on a unique process which may be unrepresentative of the site as a whole. It is therefore important to look at a selection of samples from all context types to provide an unbiased picture of the general economy.

Cowley, Highgate House (COHH 96)

A total of 28 samples were taken from middle to late Iron Age features including ditch and pit features and occupation layers. Several of the samples contain charred or partially charred *Triticum aestivum* type (bread type wheat) rachis and grain which are modern in appearance. In addition these samples contain uncharred grain and rachis fragments and charred cereal size rhizomes, roots and culm nodes. These assemblages are interpreted as the remains of recent stubble burning. Of the remaining samples 16 contain small quantities of ancient charred remains, with an average density of 0.1 items per litre. *Triticum spelta* (spelt wheat) is represented by occasional grain and glume bases while *Hordeum* sp (barley) is represented by a few grains. The few weed seeds noted were all of grasses. The cereals represented are typical of Iron Age sites. Charcoal is also scarce, with only one sample containing occasional fragments of *Quercus* sp (oak) and Pomoideae (hawthorn etc.). Good samples of faunal remains were recovered during the excavation, thus it is possible that the paucity of plant remains is a reflection of a pastoral rather than arable economy. It is unlikely that any further analysis will provide additional significant information. The potential for charred plant remains in the event of any future excavation and sampling is also low.

Ermin Street Sections (ERMIN 96)

Samples were taken from sections of road deposits. Five samples were assessed, of which three contain small quantities of charred material. The remains are very limited, consisting of occasional grains and glume bases of *Triticum spelta* (spelt wheat), occasional grains of *Hordeum* sp. (barley) and one *Arrhenatherum* grass tuber. The density of remains was low with an average of 0.13 items per litre and a maximum of 0.5 items per litre deposit. One sample contains occasional fragments of *Quercus* sp. (oak) charcoal. No further work is recommended for these samples.

Duntisbourne Abbots, Fields Farm (DAFF 96)

A total of 22 samples were taken from the ditch of the square barrow, road side ditches and quarry features, and from a possible tree-throw pit in the centre of the square barrow. Of the 18 samples submitted for analysis of the potential for charred plant remains only one sample contained charred material consisting of one stone of *Crataegus* sp. (hawthorn) and one grass tuber. The site offers no potential for further analysis of charred material.

A total of eight samples contain dried out waterlogged material. The waterlogged remains were badly degraded, although it is difficult to assess how great a degree of decay has resulted from the material being allowed to dry out. The species present are generally suggestive of disturbed habitats (eg. *Stellaria media* agg. and *Sambucus nigra*) with some wet or damp ground species (*Ranunculus* subgen *Batrachium* and Cyperaceae) and the presence of hedgerow or scrub land vegetation (eg. *Rubus* cf. *fruticosus* and *Crataegus* sp.). The quantity of material is low. Given this and the poor preservation, no further analysis is recommended for the waterlogged material.

Duntisbourne Abbots, Duntisbourne Leer (DADL 96)

Five samples were taken from possible Roman ditch sections either side of a road and from a single prehistoric pit feature. Three samples were assessed. The ditch sections contain no charred material. The samples from the prehistoric pit contains in excess of 100 fragments of *Corylus avellana* (hazel) nut shell fragments. No cereal remains were present. Such assemblages are characteristic of earlier prehistoric assemblages and reflect the utilization of wild plant resources such as hazel. Any future excavation at the site should include sampling of prehistoric pit features. The potential for information from a single sample is limited, although detailed analysis would be useful to gain a conclusive species list and would also add to the general evidence for the region.

Duntisbourne Rouse, Sly's Wall South (DRSWS 96)

A single sample was taken from a possible ditch terminus, sealed by cobbling. The sample was assessed for charred plant remains. Charred remains were unfortunately

very sparse consisting of five Gramineae (grass) seeds only. No other organic remains were present. No further analysis is necessary.

Duntisbourne Abbots, Middle Duntisbourne (DAMD 96)

A total of 23 samples were taken from ditch deposits. Of 8 samples which were assessed 5 contain charred material, 3 from deposits dated to 40-99AD, and two of unknown date. The quantities of material were low with only one sample containing over 10 items and an average density of 0.12 items per litre. Cereal remains are represented by *Hordeum* sp. (barley) and hulled *Triticum* sp. (wheat) grains. The hulled *Triticum* is likely to be of *T. spelta* given the Roman date for the deposit, although preservation was poor. A few weed seeds were also noted. The undated samples contain no remains sufficient to assign the features to period. Charcoal was equally scarce, with only two samples producing fragments of charcoal of a sufficient size for identification. *Quercus* sp. (oak), *Corylus/Alnus* (hazel/alder) and Pomoideous wood (apple, pear, hawthorn etc.) were noted. The paucity of charred remains is consistent with the absence of archaeological evidence for any internal occupation or domestic features. Conversely the presence of low density scatters of charred cereal remains suggests possible settlement activity in the vicinity as suggested by the quantity of finds from the southern enclosure ditch. No further work is recommended for these samples, although any future excavation should include a comprehensive sampling strategy should settlement features be observed.

Duntisbourne Rouse, Duntisbourne Grove (DRDG 96)

Samples were taken from possible prehistoric and Roman features, and one undated feature. A total of 21 samples were assessed of which 14 contain charred plant remains. Five of the possible prehistoric samples contain over 50 items, although they are dominated by nut shell fragments of *Corylus avellana* (hazel). Occasional grains of both hulled and free-threshing *Triticum* sp. (wheat) and of *Hordeum* sp. (barley) are also present. A single stone of *Crataegus* sp. (hawthorn) was also identified. The hazel nut shell fragments are likely to represent edible resources collected in the wild. The *Crataegus* sp. stone may simply have entered the deposit with fire wood. Three samples contain identifiable charcoal including Pomoideae (hawthorn etc.). This is an assemblage typical of Neolithic/Early Bronze Age settlement features where the cereal cultivation is represented but plays a minor role in the diet compared to collected wild plant resources. More detailed analysis of the larger samples may reveal additional wild plant remains.

The Roman and undated samples contain fewer remains. The assemblages are very similar in nature to the prehistoric assemblages, being dominated by fragments of *Corylus avellana* nut shell. Very occasional grains of free-threshing *Triticum* sp and *Hordeum* sp. are also present. Given the archaeological evidence for Roman quarrying activity and the shallowness of the soil above the limestone, it is likely that the remains represent residual material derived from prehistoric features obscured by the later activity. No further work is therefore recommended for the samples from Roman

features. Any future excavation does, however, have the potential for useful sampling of prehistoric features.

Bagendon, Trinity Farm (BAGTF 96)

Three samples were assessed from pits of Beaker or possible Beaker date. All three samples contain large numbers of nut shell fragments of *Corylus avellana* (hazel), while one sample (sample 1) also contains occasional grain of *Hordeum* sp. (barley). One pit also contains charcoal provisionally identified as *Quercus* sp. (oak), *Corylus/Alnus* (hazel/alder) and Pomoideae (hawthorn etc.). Such assemblages are typical of a Late Neolithic or Early Bronze Age date. The potential for further analysis is fairly low, although remains of this period are sufficiently scarce that any information gained is useful. It is therefore recommended that all three samples are analysed fully.

Baunton, Lynches Trackway (BAULT 96)

Twenty samples were taken during the excavation of archaeological features and the environmental investigation of alluvial deposits in the Churn Valley. Two samples were submitted for analysis of their potential for charred plant remains. One sample (25) contains *circa*. 15 glume bases of *Triticum* sp. (hulled wheat), and a few charred roots. The dating for this feature was unclear, although the presence of hulled wheat would suggest a Roman date is more likely than a medieval date. The potential for further analysis is low so further work is not recommended.

The second sample (12) contains dried waterlogged material including large fragments of waterlogged wood. The samples proved to consist largely of large roots and wood fragments, while the identifiable plant remains were relatively few in number. Only seven plant species were recognised, thus environmental information is slight. The presence of disturbed ground is suggested by seeds of *Rumex* sp. (docks) and *Sambucus nigra* (elder), while wetter conditions are suggested by seeds of Cyperaceae and *Carex* sp. and *Potamogeton* sp. (pondweed) and *Zannichellia palustris* point towards open water.

Baunton, Exhibition Barn (BAUEXB 96)

One sample was taken from an archaeological context, a possible hearth of Roman date. Two further samples were taken from a natural deposit and a treehole. The Roman hearth sample contains 50-100 items, predominantly cereal grain. *Triticum spelta* (spelt wheat) and *Hordeum* sp. (barley) are the most commonly represented cereals, while occasional free-threshing *Triticum* sp. (bread type wheat) is also present. Occasional weeds and an *Arrhenatherum* grass tuber were noted. The cereal assemblage is typical of the Roman period. Given the paucity of archaeology on the site and the fact that the hearth is an isolated feature, any further analysis is unlikely to provide useful additional information. Therefore, no further work is recommended.

The natural feature and the treehole produced very little material as would be expected. Occasional grains and one rachis internode of *Hordeum* sp. (barley) are likely to represent no more than a general background scatter of material. No further work is necessary for these samples.

Cirencester, Burford Road (CIBFRD 96)

One sample was taken from a section of the possible Roman road. No charred or waterlogged material was present.

Cirencester, Cherry Tree Lane Compound (CIRCL 96)

A total of 13 samples were assessed. Two pit samples were found to contain charred material other than charcoal, one of Iron Age date and the other dated as Iron Age/post-medieval. The remains are sparse in both samples, with an average density of 0.02 items per litre, and are therefore tabulated in full (below, table 11). The Iron Age/post-medieval sample contains a grain of *Triticum spelta* (spelt wheat) which suggests an Iron Age rather than post-medieval date. A single grain of *Hordeum* sp. (barley) is also present in each sample. No further work is recommended for the charred macrofossil remains.

Four samples from a charcoal deposit in a pit and two samples from a second pit contain large amounts of charcoal. Provisional analysis suggests the charcoal to be all or predominantly of Pomoideous wood (apple, hawthorn etc.). More detailed analysis of two or three of these samples would be useful to determine if indeed the charcoal is all of one type and if so to enable speculation as to whether the features may be a tree throw hole rather than archaeological in origin.

Preston, Norcote Farm (PRNOF 96)

A single sample was taken during excavation. DATE/CONTEXT ?? The sample proved to contain a reasonable quantity of charcoal, provisionally identified as *Quercus* sp. (oak) and *Corylus/Alnus* sp. (hazel/alder). Given the limited archaeological information and the absence of any comparable samples from the site, further work will not be informative and is therefore not recommended.

Preston Enclosure (PRENC 96)

A total of 30 samples were taken from features within the ditched enclosure and from the enclosure ditch itself. Of these 19 samples were assessed, eight of which were found to contain low densities of charred plant remains with an average density of 0.03 items per litre. Cereal remains were poorly preserved, thus identification was only possible as far as hulled *Triticum* sp. (spelt/emmer wheat) for both grain and glume bases. Occasional grains of *Hordeum* sp. (barley) were also noted as well as occasional weed

seeds. Fragments of *Quercus* sp. (oak) charcoal were provisionally identified from one pit. The cereals identified are in keeping with the Iron Age date of the features. The remains occur in such low densities that no further work is recommended.

Preston, St. Augustine's Lane (PRSA 96)

Of the 11 samples taken during excavation, seven were assessed for charred plant remains. Six samples contain very low scatters of poorly preserved material with an average density of 0.07 items per litre of deposit. Very occasional grains of indeterminate *Triticum* sp. (wheat) were noted in possible prehistoric and post-medieval/Roman samples, while *Hordeum* sp. (barley) and a large legume were noted in undated samples. One stone of *Crataegus* sp. (hawthorn) was also noted in the post-medieval/Roman sample. If, as the archaeology suggests, the ditch features are the result of linear stone quarrying, possibly for the construction of field boundaries, then it is perhaps to be expected that domestic remains are scarce. No further work is recommended given the dubious dating and the absence of material.

Preston, St. Augustine's Farm South (PRSTAS 96)

A total of 39 samples were taken, 26 of which were assessed for their charred plant content. Only three samples contained charred plant remains other than charcoal and this consisted of very occasional weeds, *Hordeum* sp. (barley) grain or indeterminate cereal grain. Two further deposits produced some charcoal of identifiable size, which provisional analysis suggests is all of *Quercus* sp. (oak). The absence of any useful quantities of charred material from the linear features is consistent with their interpretation as quarried field boundaries. No further work is recommended.

Preston, Ermin Farm (PREM 96)

Seven samples were taken and assessed. Four samples, all from ditch sections, contain charred plant remains. Two of the samples are of Iron Age date and two are undated. The dated samples contain small quantities of *Triticum spelta* (spelt wheat) grain and glume bases, *Hordeum* sp. (barley) grain and weed seeds. Also present are occasional fragments of *Quercus* sp. (oak) and Pomoideous (hawthorn etc.) charcoal. Such remains are characteristic of Iron Age deposits. The presence of both grain and glume bases would suggest some cereal processing, although the density (average density of 0.82 items per litre) is so low it is unlikely to have occurred on the site itself. This would be consistent with the view of a settlement somewhere near by. One of the undated samples produced similar cereal remains, but is significantly different in that it contains a large weed assemblage with in excess of 100 seeds. Weed species provisionally identified include *Papaver* sp. (poppy), *Juncus* sp. (rushes) and small seeded Gramineae (grasses). The cereal assemblage is similar in nature to the richer Iron Age sample, thus a similar date would be conceivable. Given that it is a single sample any information gained from detailed analysis would be limited, although as a low priority project it would be interesting to determine whether the sample represents cereal processing waste

or has derived from an alternative source. If any future excavation work centres on the settlement itself the potential for sampling would be high.

Latton, Street Farm (LATST 96)

Eight samples were taken from within the limestone building, covering the occupation from the pre-medieval period through to the 15-16th century. Samples come from an oven and from burnt occupation deposits. All samples produced charred material, five of which contain well in excess of 100 items each. The average density of remains is 172.64 items per litre of deposit. Free-threshing *Triticum* sp. (bread type or rivet wheat) and *Hordeum* sp. (barley) are the dominant cereals present. Occasional rachis remains suggest both hexaploid and tetraploid wheats to be present. Closer analysis may provide an indication of their relative importance. Grains of *Avena* (oat) are also present in each phase. Additional cereal evidence is available in the presence of silica chaff fragments in two of the undated samples. Large legumes were present in all phases, notably in the 12-14th century deposits where preservation was sufficient to identify *Pisum sativum* (pea), *Vicia sativa* subsp. *sativa* (cultivated vetch) and *Vicia faba* (field bean). Weeds were also present in each sample in large numbers and could thus prove useful in determining the origin of arable crops represented, agricultural conditions, or the use of fuel types.

Large amounts of charcoal, predominantly of *Quercus* (oak), are present in two samples, although it is noticeable that the oven sample contains no charcoal fragments of quantifiable or identifiable size.

The quantity of material and the preservation is such that any analysis will be informative. The legumes especially are very well preserved, many still retaining their testa and hila. The samples are taken from successive deposits of similar nature, and given that the contexts are consistent they should provide a good sequence of plant remains over time. The one pre-medieval sample is quite small, but could be included in any analysis to complete the sequence. It has been speculated that the building may have been a brew- or bake-house or a kitchen related to a larger complex of buildings. While there is no evidence of brewing activity from the samples, it would be interesting to explore the possibility of a bake-house or a kitchen associated with a larger complex. It is therefore recommended that the richer samples should be analyzed in full and smaller samples should be included to cover all phases of occupation/use represented. The potential for very useful material resulting from any future excavation work is very high.

Latton, Court Farm (LACFM 96)

Two samples were taken from Romano-British quarrying pits. Assessment demonstrated that the only charred material present is one charred *Avena* sp. (oat) seed from one samples and small fragments of *Quercus* sp. (oak) charcoal in the other. Given the date and the lack of any associated cereal remains it is likely that the *Avena*

sp. is a wild rather than cultivated species. No further work is necessary on this material.

Latton, Weavers Bridge (LAWBR 96)

A total of eight samples were taken, four of which were assessed for charred plant remains. Two samples produced charred material as well as waterlogged material which had dried out. A third sample contains further dried out water-logged material only. The samples containing charred material are from a buried soil horizon and from a drainage channel of unknown date. The assemblage from the drainage channel is small but it is of interest in that it contains a very high percentage of free-threshing *Triticum* sp. rachis. Hexaploid rachis (bread type wheat) was most frequently identified, although tetraploid (rivet wheat) rachis also appears to be present. Grain is a minor component of the assemblage represented by single grains of *Hordeum* sp. (barley) and *Avena* sp. (oat) and occasional free-threshing *Triticum* sp. (wheat). The sample taken from the buried soil deposit is, conversely, dominated by grain, predominantly of free-threshing *Triticum* sp. Occasional *Triticum* rachis is also present. Additional food plants are represented by occasional grains of *Hordeum* sp. (barley) a few large legumes and a single fragment of *Corylus avellana* (hazel) nut shell fragment. It was originally thought that the buried soil was Roman in date. Both assemblages are, in fact, medieval in character, suggesting a medieval date is more plausible. Indeed, the sample taken from the buried soil was found to contain a mollusc, *Helicella* sp., generally believed to be a medieval introduction. Closer analysis is recommended to confirm this assumption.

Four samples were sub-sampled and assessed for their potential for waterlogged material. A column of samples were taken through a series of water deposited silt/clay layers, two of which (samples 1 and 4) were assessed. Both were very poor in terms of plant remains. Some of the species present are suggestive of open, possibly slow flowing water, such as *Potamogeton* sp. (pond weed) and *Alisma plantago-aquatica* (water plantain), while grassy and/or disturbed habitats are suggested by *Polygonum persicaria* (red shank) and *Plantago major* (plantain). Sample 4 also contains aquatic molluscs. Neither sample contains waterlogged economic plants, although occasional indeterminate charred cereal grains were present.

Samples 7 and 6 were taken from the fills of two man made channels (contexts 22 and 128). A dried flot taken for charred plant remains was also taken from context 128. A range of plant species were noted, generally species common in or on the edge of slow flowing streams or ponds such as *Ranunculus* subgen *Batrachium* (crowfoot), *Apium nodiflorum* (fools watercress), *Oenanthe aquatica* agg. (water dropwort), *Menyanthes trifoliata* (bog bean), *Lycopus europaeus* (gipsywort) and *Zannichellia palustris* (horned pondweed). The presence of *Rumex maritimus* (golden dock) suggests nutrient rich muddy ground, and there are beetles present which suggest the presence of plenty of waterside decaying vegetation such as *Coelostoma orbiculare*. The insects in general suggest lush vegetation as well as possible grazing land or hay meadow. Plant species indicative of waste ground or disturbed land were also present such as *Papaver* sp. (poppy) and *Stellaria media* agg. (chickweed). Neither sample contains waterlogged economic plant species, although sample 6 contained a few well preserved cereal

remains including free-threshing *Triticum* sp. grain and a hexaploid (bread type wheat) rachis. The potential for fuller analysis of waterlogged material from the man made channels is good if the phasing can be better established.

Overview and Regional Significance

The cultivated and wild edible plant remains identified for each period are displayed in summarised form in Table 23. The charcoal species recognised are summarised by period in Table 24.

The crop remains from the Neolithic and/or Early Bronze Age sites suggests a low intensity of agricultural activity and a reliance on collected wild resources, notably hazel nuts. The charcoal evidence suggests a landscape which was supporting oak woodland and possibly with areas of scrub land. It appears on the available evidence that the Neolithic and Early Bronze Age activity is concentrated on the higher land to the west of the River Churn, possibly with a move towards the river valley by the Beaker period. This would be consistent with evidence from the Chilterns and Oxfordshire Downs.

The occurrence of *Triticum spelta* (spelt wheat) at all the Iron Age sites suggest it to be the dominant cereal crop, with *Hordeum* sp. (barley) an additional cereal. This is in keeping with the evidence gained from other regions such as the Upper Thames Valley. The presence of chaff would seem to indicate that some cereal processing activity was occurring. However, the quantities of material are very low at all sites. It is possible that the Iron Age landscape consisted of small scale settlements with low intensity subsistence agriculture, or that the settlements were more of a pastoral than arable nature. This would certainly be feasible for Cowley, Highgate House which has produced a good faunal assemblage. It is equally possible that the main centres of excavation were removed from the areas of occupation. It has been suggested, for example that the square ditched enclosure at Preston, Ermin Street Farm has indications of settlement activity near by. If this is the case then it is perfectly feasible that the available samples represent activity occurring on the periphery of settlement sites and therefore under-represent the scale of agricultural activity.

The evidence of agricultural activity during the Roman period is much greater than previous periods, although it is not consistent along the length of the road scheme area. Birdlip Quarry represents a fairly busy settlement site with evidence for agricultural, industrial and brewing activity. Excavations at Preston, St. Augustine's Lane and St. Augustine's Farm South have conversely concentrated on quarried features possibly representing field boundaries. While a busy settlement site can be expected to yield charred remains, it would not be expected that much burning activity would be taking place in the vicinity of a field boundary, and hence little material would be preserved. Similarly the evidence gained from road sections is likely to be limited. It is possible, however that this variation in site type and in plant remains is related to geographical location. It is feasible that the agricultural activity at the Birdlip Quarry site was quite intense, and that the site was a centre of activity, which included industrial activity as well as brewing and agricultural activity and may also be related to near by villa sites. The other Roman period sites are located on lower ground, closer to the river and

floodplain. It is equally feasible, therefore that the economy of these sites was more pastorally orientated, thus resulting in much lower densities of charred remains.

Evidence for the medieval economy and landscape comes from the building at Latton St. Farm and the channel and buried soil at Latton, Weaver's Ditch. A range of food crops were being cultivated by this point, including both rivet and bread type wheat, oat and barley, pea and other pulses. No fruit remains were noted, although these tend to be better preserved by calcium phosphate mineralisation which is absent from the available samples. The full range of cereal and legume crops available during the period were certainly being utilized.

Recommendations

Environmental and economic evidence from the region have to date been limited. The analyses undertaken for the assessment have been useful in shedding some light on the economic development of the region from the Neolithic to the medieval period. The charcoal analysis has provided some hints regarding ground cover, at least as far as the type of woodland resources available. Several of the sites offer no or limited potential for further analysis. Overall, however, the results from the assessment analysis will be useful in producing an integrated study with those sites that do merit further study.

A number of sites merit more detailed analysis of the charred plant remains. The Neolithic and Early Bronze Age pit samples provide the opportunity to clarify the view of limited agricultural activity and reliance on wild resources. It may also be possible to extend the list of wild species utilized, both for food and for construction/fire wood. It is therefore recommended that the richer samples from the relevant sites are analysed in full, including all three Beaker pits.

Although the Iron Age material is limited in quantity this is in itself of interest when compared to the quantities of charred remains recovered from, for example, the gravel terrace sites of the Upper Thames valley. It is recommended that some time is spent bringing the assessment results together to further explore possible explanations for the lack of material, such as the settlements relying more on a pastoral than arable economy. This could involve sorting and full analysis of a limited selection of samples.

The site of Birdlip Quarry has the potential for some very useful and detailed analysis. This should include a detailed study of the corndryer to further explore the possibility of malting as a function, and the three pits displaying signs of containing malting waste. Further, the site offers the potential for a thorough study of the economy of a Roman period agricultural settlement. The remaining Roman period sites offer limited potential for further work.

Very rich and well preserved assemblages are available from Latton, Street Farm. Detailed analysis is recommended and should be aimed towards establishing functions for the building as well as providing a species list and for establishing the relative roles of rivet and bread type wheats. The two samples from Weavers Ditch which were found to contain charred material could also be examined more closely to confirm the opinion

that the deposits are medieval in date rather than Roman. The waterlogged deposits at the site offer some potential for environmental analysis.

Task List for Charred And Waterlogged Plant Remains.

<u>Task</u>	<u>Staff</u>	<u>Days</u>
Sorting of Neolithic/Bronze Age pit samples from Birdlip Quarry, Duntisbourne Leer and Duntisbourne Grove, Trinity Farm (13 samples). Analysis and reporting on the remains.	Technician Specialist	4 2
Further identification of charcoal from four/five samples.	Specialist	2
Sorting of Iron Age samples (4/5 samples). Analysis and reporting, including search of literature.	Technician Specialist	2 2
Sorting of Roman period samples from Birdlip Quarry, including the corndryer and pit samples (c.20 samples) Analysis and reporting.	Technician Specialist	25 20
Further charcoal identification of selected samples.	Specialist	5
Further identification of charcoal from three/four samples from Cherry Tree Land Compound.	Specialist	2
Sorting of six/seven samples from Latton, Street Farm. Analysis and reporting.	Technician Specialist	15 15
Further charcoal identification for two samples.	Specialist	2
Sorting of two charred samples from Weavers Bridge. Analysis and reporting.	Technician Specialist	1 1
Sorting of up to three waterlogged samples from Weavers Bridge	Technician	5
(One sample for insects - sorting) Analysis and reporting.	Technician Specialist	2 5
(One sample for insects - analysis)	Specialist	2
Overview and production of intergrated report.	Specialist	5

TABLE 1: Cowley, Birdlip Quarry (COWBQ 96)

Samples taken 139, Samples assessed 103, Samples with charred material 71.

Density of charred remains (items per litre deposit): minimum 0; maximum 4000; average 41.52.

	Total	Prehis pits	corn- dryer	oven	hearth	layer	pit	ditch	well
No. samples with 1-10 items	43	3	-	1	2	11	7	11	6
11-50 items	13	-	2	-	2	4	3	1	1
51-100 items	7	1	1	3	-	-	1	-	1
101-1000 items	1	-	-	-	-	-	1	-	-
>1000 items	5	-	3	-	-	-	2	-	-
Total samples	69	4	6	4	4	15	14	12	8
<i>Triticum spelta</i> spelt wheat		+	++++	++	+	+	++++	+	+
<i>T.sp.</i> free-threshing wheat			++		+	+	++		
<i>Hordeum sp.</i> barley		+	++	+	+	+	+		+
<i>T.spelta</i> glume			1000+	++		+	1000	++	++
							+		
<i>T.sp.</i> glume			++++	+			1000		
							+		
Cerealia indet sprouts			+++				++++		
Indet silica chaff							++++		
Weeds		+	++	+++	++	+	+++		++
<i>Corylus avellana</i> hazel nut shell		+++						+	

+ 0-10; ++ 11-50; +++51-100; ++++ 101-1000 items

TABLE 2: Charcoal From Cowley Birdlip Quarry (COWBQ 96)

		- roman features -							
		Prehis pits	corn- dryer	oven	hearth	layer	pit	ditch/ gully	well
No. flots with charcoal		2	2	3	2	5	9	2	4
		No. samples with charcoal							
<i>Alnus/Corylus sp.</i>	alder/hazel	1	1		2		3	1	1
cf <i>Rhamnus sp.</i>	buckthorn		1		1	2		1	
<i>Quercus sp.</i>	Oak	1	2	2	1	6	7	2	2
cf. <i>Prunus sp.</i>									1
cf. <i>Pomoideae</i>	hawthorn etc	1	1	3	1	4	8	4	2

TABLE 3: Cowley, Highgate House (COHH 96)

Total number of samples 39; Total assessed 28; Total with material 16.

Density of charred remains (items per litre deposit): minimum 0; maximum 0.83; average 0.08.

	Total	Pit	Ditch
No. samples with 0-10 items	15	5	8
11-50 items	1		1
<i>Triticum spelta</i> spelt wheat grain		+	+
<i>T.spelta</i> glume base			+
<i>T. sp.</i> glumed wheat grain			+
<i>Hordeum sp.</i> barley grain		+	+
Weeds			+

TABLE 4: Ermin Street Sections (ERMIN 96)

Total number of samples 5; Total assessed 5; Total with material 3.

Density of charred remains (items per litre deposit): minimum 0; maximum 0.5; average 0.13

No. samples with 0-10 items	11
<i>Triticum spelta</i> spelt glume base	+
<i>T. sp.</i> indet wheat grain	+
<i>Hordeum sp.</i> barley grain	+
<i>Arrhenatherum</i> tuber	+

TABLE 5: Duntisbourne Abbots, Middle Duntisbourne (DAMD 96)

Total number of samples 23; Total assessed 8; Total with material 5.

Density of charred remains (items per litre deposit): minimum 0; maximum 1.0; average 0.12

	40-99 AD	undated
No. samples with 0-10 items	2	2
11-50 items	1	
<i>Triticum sp.</i> hulled wheat grain	+	
<i>Hordeum sp.</i> barley grain	++	
Indet grain		+
Weeds	+	+

TABLE 6: Charcoal from Duntisbourne Abbots, Middle Duntisbourne (DAMD 96)

		40-99AD	undated
		1	1
No. samples with charcoal			
<i>Corylus/Alnus</i> sp.	Hazel/alder	1	
<i>Quercus</i> sp.	Oak	1	1
Pomoideae	Hawthorn etc.	1	1

TABLE 7: Duntisbourne Rouse, Duntisbourn Grove (DRDG 96)

Total number of samples 23; Total assessed 21; Total with material 14.

Density of charred remains (items per litre deposit): minimum 0; maximum 13; average 1.39

	?Prehistoric	Roman	Undated
No. samples with 0-10 items	2	3	
11-50 items	2	1	1
51-100 items	2		
>100 items	3		
<i>Triticum</i> sp. free-threshing wheat grain	+	+	
<i>T.</i> sp. hulled grain	+		
<i>Hordeum</i> sp. barley grain	+	+	
<i>Corylus avellana</i> nut shell frags	++++	++	++
<i>Crataegus</i> sp. hawthorn stone	+		
Weeds		+	

TABLE 8: Charcoal from Duntisbourne Rouse, Duntisbourne Grove (DRDG 95)

		Prehist	Roman
Total samples		3	2
No. samples with charcoal			
<i>Corylus/Alnus</i>	Hazel/Alder	3	1
cf. Pomoideae	Hawthorn etc	3	1
cf. <i>Prunus</i>	Sloe/Plum		1

TABLE 9: Bagendon, Trinity Farm (BAGTF 96)

Total number of samples 3; Total assessed 3; Total with material 3.

Total samples with charcoal 1 (*Corylus/Alnus* sp., *Quercus* sp., Pomoideae)

Density of charred remains (items per litre deposit): minimum 0.54; maximum 20.5; average 7.21

	Beaker pit	Beaker/IA pit
No. samples with 0-10 items		
11-50 items	2	
51-100 items		1
<i>Hordeum</i> sp. barley grain		+
<i>Corylus avellana</i> nut shell frags.	++	+++

TABLE 10: Baunton, Exhibition Barn (BAUEXB 96)

Total number of samples 3; Total assessed 3; Total with material 3.

Volume hence DENSITY unknown

	Roman hearth	Undated natural/treehole
No. samples with 0-10 items		2
11-50 items		
51-100 items	1	
<i>Triticum spelta</i> spelt wheat grain	++	
<i>T. sp.</i> free-threshing wheat grain	+	
<i>Hordeum</i> sp. barley grain	++	+
<i>H. sp.</i> barley rachis		+
<i>Arrhenatherum tuber</i>	+	
Weeds	+	

TABLE 11: Cirencester, Cherry Tree Lane Compound (CIRCL 96)

Total number of samples 19; Total assessed 13; Total with charred seeds and chaff 2;
Total with charcoal 6 (Pomoideae).

Density of charred remains (items per litre deposit): minimum 0; maximum 0.19;
average 0.02

	Sample	10	9
	Context	18	17
<i>Triticum spelta</i> spelt wheat grain		1	
<i>Hordeum</i> sp. barley grain		1	1
Indet grain			1
Total		2	2

TABLE 12: Preston Enclosure (PRENC 96)

Total number of samples 30; Total assessed 19; Total with charred seeds and chaff 8;
Total with charcoal (*Quercus* sp.) 1.

Density of charred remains (items per litre deposit): minimum 0; maximum 0.31;
average 0.03

	Ditch	Pit	Gully	Treehole
No. samples with 0-10 items	1	3	3	1
<i>Triticum</i> sp. hulled wheat grain		+		
<i>T.</i> sp. hulled wheat glume base		+		
<i>T.</i> sp. wheat grain	+			
<i>Hordeum</i> sp. barley grain		+	+	+
Weeds		+	+	

TABLE 13: Preston, St. Augustine's Lane (PRSAL 96)

Total number of samples 11; Total assessed 7; Total with material 6.

Density of charred remains (items per litre deposit): minimum 0; maximum 0.27; average 0.07

	?Prehistoric	P.Med/Roman	Undated
No. of samples with 0-10 items	2	1	3
<i>Triticum</i> sp. wheat grain	+	+	
<i>Hordeum</i> sp. barley grain			+
Large Legume			+
Weeds			+
<i>Crataegus</i> sp. hawthorn stone		+	

TABLE 14: Preston, St. Augustine's Farm South (PRSTAS 96)

Total number of samples 39; Total assessed 26; Total with material 3.

Density of charred remains (items per litre deposit): minimum 0; maximum 0.10; average 0.01

	?Prehistoric	Undated
No. samples with 0-10 items	1	2
Cereal indet. grain		+
<i>Hordeum</i> sp. barley rachis		+
Weeds indet	+	+

TABLE 15: Charcoal from Preston, St. Augustine's Farm South (PRSTAS 96)

		Prehist	Undated
Total samples		1	1
No. samples with Charcoal			
<i>Quercus</i> sp.	Oak	1	1

TABLE 16: Preston, Ermin Farm (PREM 96)

Total number of samples 7; Total assessed 7; Total with material 4.

Density of charred remains (items per litre deposit): minimum 0; maximum 3.75; average 0.82

	Iron Age	Undated
No. samples with 0-10 items	1	1
11-50 items	1	
51-100 items		
100+ items		1
<i>Triticum spelta</i> spelt wheat grain	+	+
<i>T.spelta</i> spelt wheat glume base	+	+
<i>Hordeum</i> sp. barley grain	+	+
Weeds	++	++++

TABLE 17: Charcoal from Preston, Ermin Farm (PREM 96)

Total samples		2
		No. samples with charcoal
<i>Quercus</i> sp.	Oak	1
Pomoideae	Hawthorn etc.	2

TABLE 18: Latton, Street Farm (LATST 96)

Total number of samples 8; Total assessed 8; Total with material 8.

Density of charred remains (items per litre deposit): minimum 0.29; maximum 800; average 172.64

	?Pre Med	12-14th C.	15-16th C.	Undated
No. samples with 0-10 items				1
11-50 items	1			1
51-100 items				
101-1000 items		1	1	2
>1000 items		1		
<i>Triticum</i> sp. free-threshing wheat grain	+	++++	+++	++++
<i>T.</i> sp. free-threshing wheat rachis		+	+	++
<i>Hordeum</i> sp. barley grain	++	++++	++	+++
<i>Avena</i> sp. oat grain	+	+++	++	++
Cerealia silica chaff				+++
<i>Pisum sativum</i> pea		+		
<i>Vicia sativa</i> subsp. <i>sativa</i> cultivated vetch		+		
<i>Vicia faba</i> field bean		+		
Large legume	+	++++	++	+++
Weeds	++	++++	++	+++

TABLE 19: Charcoal from Latton, Street Farm (LATST 96)

	Undated	Pre-Med	12-14thC	15-16thC
Total samples	1	1	2	1
	No. samples with charcoal			
<i>cf. Rhamnus</i> sp. Buckthorn			1	
<i>Quercus</i> sp. Oak	1	1	2	1

TABLE 20: Latton, Weavers Bridge (LAWBR 96)

Total number of samples 8; Total assessed 4; Total with charred material 2;

Total with waterlogged material 3.

Density of charred remains (items per litre deposit): minimum 0; maximum 4.5; average 0.92

	Channel	Buried soil
No. samples with 0-10 items		
11-50 items	1	
51-100 items		1
<i>Triticum</i> sp. free-threshing wheat grain	+	+++
<i>T.</i> sp. free-threshing wheat rachis	++	+
<i>Hordeum</i> sp. barley grain	+	+
<i>Avena</i> sp. oat grain	+	
<i>Corylus avellana</i> hazel nut shell frag.		+
Large legume		+
Weeds	+	+

TABLE 21: Dried Waterlogged Flots

Sitecode		BAUL	LAW	DAFF
No. of samples with 0-10 items				2
11-100 items		1	2	6
101-1000 items			1	
<i>Ranunculus acris/repens/bulbosus</i> L.	Buttercup		+	+
<i>Ranunculus</i> subgen <i>Batrachium</i>	Crowfoot		++	+
<i>Raphanus raphanistrum</i> L.	Wild radish		+	
<i>Silene</i> sp.	Campion/Catchfly		++	+
<i>Stellaria media</i> agg.	Chickweed		++	+
Chenopodiaceae				+
<i>Rubus</i> cf. <i>fruticosus</i> agg.	Blackberry/bramble			+
<i>Prunus</i> sp.			+	
<i>Crataegus</i> sp.	Hawthorn		+	+
Umbelliferae			++	
<i>Aethusa cynapium</i> L.	Fools parsley		+	
Polygonaceae			++	
<i>Polygonum persicaria</i> L.	Red shank		++	+
<i>Rumex</i> sp.	Docks	+		
<i>Solanum</i> sp.	Nightshade		+	
Labiatae			++	+
cf. <i>Mentha</i> sp.	Mint	++	++	
<i>Sambucus nigra</i> L.	Elder	+	+	++
Compositae			+	+
<i>Carduus/Cirsium</i>	Thistle	+	+	+
<i>Potamogeton</i> sp.	Pondweed	+	+	
<i>Zannichellia palustris</i>	Horned pondweed	+	+	
Cyperaceae			++	++
<i>Carex</i> spp.	Sedges	+	+	

+ 0-10; ++ 11-100; +++ >100 items

TABLE 22: Waterlogged Logged Samples from Latton, Weavers Bridge (LACFM 96)

Sample		2	7	6	4
<i>Ranunculus bulbosus</i> L.	Bulbous Buttercup		++		
<i>R. acris/repens/bulbosus</i>	Buttercup	+	++	++	
<i>Ranunculus</i> subgen. <i>Batrachium</i>	Crowfoot	+	++	+	
<i>Nuphar lutea</i> (L.) Sm.	Yellow Water-lily			+	
<i>Papaver</i> sp.	Poppy	+			
<i>Stellaria media</i> agg.	Chickweed		++	+	
<i>Stellaria</i> sp.			+		
<i>Atriplex</i> spp.	Orache		+	+	
<i>Rubus</i> cf. <i>fruticosus</i> agg	Blackberry/Bramble		+		
<i>Apium nodiflorum</i> (L) Lag.	Fools Watercress	+	+	+	
<i>Oenanthe aquatica</i> agg.	Water-Dropwort		+	++	+
Umbellifereae				+	
<i>Polygonum persicaria</i> L.	Red Shank	+	++	++	
<i>Rumex maritimus</i> L.	Golden Dock			+	
<i>Rumex</i> sp.	Dock		++		
<i>Menyanthes trifoliata</i> L.	Bogbean			+	
cf. <i>Mentha</i> sp.	Mint	+		++	
<i>Lycopus europaeus</i> L.	Gipsywort		+	+	
<i>Plantago major</i>	Plantain	+	+		
<i>Carduus/Cirsium</i>	Thistle		+	+	
<i>Picris echioides</i>	Bristly Ox-Tongue		+		
<i>Alisma plantago-aquatica</i> L.	Water-Plantain	+	+		
<i>Potamogeton</i> sp.	Pondweed	+	+	+	
<i>Zannichellia palustris</i>	Horned Pondweed		+	+	
<i>Juncus</i> sp.	Rushes			+	
<i>Sparganium</i> sp.	Bur-reed			+	
Cyperaceae			++		
<i>Carex</i> spp	Sedges		+	+	
<i>Chara</i> sp.	Stonewort			+	
CHARRED REMAINS					
<i>Triticum</i> sp.	Free-threshing wheat grain			+	
<i>Tr.</i> sp. hexaploid	Bread-type wheat rachis			+	
Cerealia indet	grain	+		+	+
<i>Hordeum/Secale</i> sp.	barley/rye rachis			+	
Cerealia indet	culm node			+	
Leguminosae	large legume			+	

TABLE 23: Presence of Edible Charred and Waterlogged Plants by Period

		Neol/ EBA	Iron Age	Roman	Medieval
<i>Triticum spelta</i>	spelt wheat	.	+	+	+
<i>Triticum</i> sp.	free-threshing wheat	+	.	+	+
<i>Hordeum</i> sp.	hulled barley	+	+	+	+
<i>Avena</i> sp.	oat	.	.	.	+
<i>Pisum sativum</i>	pea	.	.	.	+
<i>Vicia sativa</i> subsp. <i>sativa</i>	cultivated vetch	.	.	.	+
<i>Vicia faba</i>	field bean	.	.	.	+
<i>Corylus avellana</i>	hazel nut	+	.	.	+
w. <i>Rubus</i> cf. <i>fruticosus</i>	bramble/blackberry	.	.	.	+
w. <i>Prunus</i> sp.	sloe/plum/cherry	.	.	.	+

+ present; w. waterlogged.

TABLE 24: Presence of Charcoal by Period

		Neol/ EBA	Iron Age	Roma n	Medieva l
<i>Corylus/Alnus</i>	hazel/alder	+	.	+	.
cf. <i>Rhamnus</i>	buckthorn	.	.	+	.
<i>Quercus</i>	oak	+	+	+	+
cf. <i>Prunus</i>	sloe etc.	.	.	+	.
Pomoideae	hawthorn etc.	+	+	+	.

WATERLOGGED MACROSCOPIC PLANT AND INSECT REMAINS FROM NON-SETTLEMENT SITES

Introduction and Assessment of Potential

Bulk samples were taken for analysis of macroscopic plant and invertebrate remains from potentially waterlogged deposits at Lynches Trackway and Latton "Roman Pond". A total of 13 samples were taken in the form of two column sequences plus an additional 4 isolated samples.

Sub-samples of 1 kg from 9 of these samples were floated onto a 0.25 mm mesh and the flots scanned under a binocular microscope at up to x20 magnification. The plant and insect remains observed were identified and an estimate made of their abundance. Summary results are given in Tables 25 and 26.

Lynches Trackway (BAULT 96)

The column of samples from organic deposits in the bottom of the Churn Valley (Samples 15, 17 and 18) contain low concentrations of badly preserved seeds and high concentrations of very badly preserved insect remains. (Mollusc shells are absent). The seeds are from fen and aquatic plants, such as *Caltha palustris* (kingcup), *Ranunculus S. Batrachium* sp. (water crowfoot) and *Iris pseudacorus* (yellow flag). There is an element to the insect assemblages of species which require clean flowing water, including the elmid beetle *Normandia* or *Riolus* sp. and the caddis fly *Ithytrichia* sp. These habitats are very much what would be expected in and alongside the River Churn.

Latton "Roman Pond" (LARP 96)

Waterlogged seeds and insect remains are present in the bottom three samples (Samples 30, 27 and 26) from the column through the peaty fill of the "Roman Pond", a shallow palaeochannel in the top of the terrace gravels. (Mollusc shells are also present and they are included in the molluscan assessment report). These deposits are perhaps Iron Age to Roman in date. Unfortunately, the preservation of the seeds is poor and the preservation of the insect remains very poor. The most numerous seeds are from *Juncus articulatus* gp. (rushes) but seeds from other plants of swampy places such as *Apium nodiflorum* (fool's watercress) and annual weeds of disturbed ground, such as *Polygonum persicaria* (redshank) were also identified. The "pond" was perhaps a wet hollow in an agricultural landscape.

Potential for Further Work

Any potential for further work is severely limited by the poor preservation of the organic remains, although it would be possible to produce more detailed species lists for both sites.

Updated Project Design

The results from Lynches Trackway are unexceptional and no further work is recommended. The waterlogged seeds from Latton "Roman Pond" add usefully to the information about the waterlogging of the palaeochannel and provide background information relevant to the nearby scheduled Roman site. It is therefore recommended that they be analysed from the samples from this site also to be analysed for molluscs. This would require Samples 30, 27 and 26 to be sieved down to 0.25 mm rather than 0.5 mm and sorted wet rather than dry. The time estimate for this work has been included in the mollusc assessment report.

Table 25: Waterlogged Seeds

Site Column / Section Sample Context	BAULT			LARP			
	15	17	18	12 30 247	27 113	26 112	
<i>Caltha palustris</i>	kingcup	-	-	+	-	-	-
<i>Ranunculus cf. acris</i>	meadow buttercup	+	-	-	-	-	-
<i>R. cf. repens</i>	creeping buttercup	-	-	-	+	+	-
<i>Ranunculus S. Batrachium sp.</i>	water crowfoot	+	-	+	-	-	-
<i>Cerastium cf. fontanum</i>	mouse-ear chickweed	-	-	-	+	-	-
<i>Atriplex sp.</i>	orache	-	-	-	-	+	-
<i>Rubus fruticosus</i> agg.	blackberry	+	-	-	-	-	-
<i>Crataegus sp.</i>	hawthorn	-	-	+	-	-	-
<i>Apium nodiflorum</i>	fool's watercress	-	-	-	+	+	+
<i>Polygonum persicaria</i>	redshank	-	-	-	+	+	-
<i>Rumex sp.</i>	dock	-	-	+	+	-	-
<i>Urtica dioica</i>	stinging nettle	-	-	-	-	+	-
<i>Mentha sp.</i>	mint	+	-	-	-	-	-
<i>Lycopus europaeus</i>	gypsy wort	-	-	-	+	-	-
<i>Juncus articulatus</i> gp.	rush	-	-	-	+	+	+++
<i>Iris pseudacorus</i>	yellow flag	-	-	+	-	-	-
<i>Schoenoplectus lacustris</i>	bulrush	-	-	+	-	-	-
<i>Carex sp.</i>	sedge	-	+	-	-	+	+

+ present, ++ some, +++ many

Table 26: Insects

Site Column / Section Sample Context	BAULT			LARP		
	15	17	18	12 30 247	27 113	26 112
COLEOPTERA						
<i>Dyschirius globosus</i>	+	-	-	-	-	-
<i>Bembidion</i> sp.	+	-	-	-	-	-
<i>Agabus bipustulatus</i>	-	-	-	-	+	-
<i>Helophorus</i> sp. (<i>brevipalpis</i> size)	+	+	-	-	+	-
<i>Coelostoma orbiculare</i>	-	-	+	-	-	-
<i>Philonthus</i> sp.	-	-	-	+	-	-
<i>Aphodius</i> sp.	-	-	-	-	+	+
<i>Dryops</i> sp.	-	-	-	-	+	-
<i>Normandia</i> or <i>Riolus</i> sp.	+	-	-	-	-	-
<i>Donacia</i> or <i>Plateumaris</i> sp.	-	-	+	-	-	-
Ceuthorhynchinae indet.	+	-	-	-	-	-
OTHER INSECTS						
<i>Ithytrichia</i> sp. - case	+	-	-	-	-	-
Trichoptera indet. - larva	+	-	-	-	-	-
Trichoptera indet. - case	-	-	+	-	-	-

+ present, ++ some, +++ many

APPENDIX 20: Waterlogged Wood Assessment

By N Mitchell

Introduction

Remains of 14 waterlogged wooden posts and/or stakes, largely of oak, were recovered from three sites on the roadscheme; BAULT 96, LARP 96 and LAWBR 96. None of the pieces warrants further detailed analysis.

Key to records

- 1 = condition / preservation
- 2 = conversion; bark, heartwood (HW), sapwood (SW)
- 3 = toolmarks
- 4 = dimensions
- 5 = species
- 6 = other comments

Lynches Trackway BAULT 96

24 (= sample number)

- 1. good
- 2. roundwood, bark, HW and SW
- 3. 'axe-marks' tapering to a tip on 2/3 of circumference, creating 3 faces of working, tool width at least: 44 mm, very flat faced blade with very straight end. Tooling starts 330 mm from tip
- 4. 950 x 85 mm
- 5. oak
- 6. in parts HW is light yellowish-brown and SW is dark blackish-brown, perhaps the result of fungal attack;
fast-grown, ring width: 2-5 mm, approx. 15 years old when felled;
bend 700mm from tip, 15 degrees;
distinct tool blade damage

This is a roundwood oak post. It is tapered to a tip by a series of axe-marks, creating 3 faces of tooling on 2/3 of the post's circumference, starting 325 mm from the tip. The blade of the axe is very flat and very straight ended, and has distinct striations due to damage all across the blade-face. The parent tree was fast-grown with an average ring width of 3 mm, and was probably grown in an open environment.

Further Work: photograph and illustrate

Latton Roman Pond LARP 96

61 (from peat context 113)

This consists of two tiny (15 x 3mm) bark fragments originally bagged and kept as 'COAL'! Of no interest.

Further Work: none

96 (Labelled as **95**, and is from fill of ditch 268)

1. fair-good
2. radial split, HW only
3. 6 marks, approx. 50 mm long, 2 mm deep, on one surface. Parallel, may be trowel marks
4. 710 x 85 x 55 mm
5. oak
6. 2 bends = waving of grain

This is a 1/8 radially split oak piece which, in its present form, tapers to a point, although there are no axe-marks to show this is deliberate. It could, however, have been used as an upright stake. The 6 parallel surface marks on one surface are likely to be trowel damage since the iron-staining of the rest of the wood's surface is absent from within these marks.

Further Work: Photograph

99 (context 316 ? or 268 ? = fill of ditch)

1. fair- good
2. roundwood, bark on half circumference all way to tip, HW and SW;
3. 4 axe-marks to taper to tip starting 90 mm from tip;
4. 106 x 38 mm
5. non-oak
6. No record of excavation. This is the tip a small stake with four clear tool marks tapering half the circumference to a tip. Each facet shows numerous clear striations resulting from the use a damaged tool. The blunted and crumpled tip is good evidence for its having been driven in as an upright. Beetle attack beneath bark.

Further Work: - Species I.D. under microscope, by NDM at Flag Fen; Photograph

The pieces below, 114, 115, 116, were found in separate post-holes of a single alignment of ten post-holes, 1 metre apart, running north - south. Badly decayed as they are, none of the pieces, in themselves, show any evidence of use as posts, and no tool-marks are visible.

114 (From post-hole 288)

1. poor
2. probably remnants of roundwood, HW only
3. none
4. 120 x 210 x 50 mm
5. oak
6. Medium growth rate (ave. ring width: 1-2 mm)

This is apparently (from excavation records) the remnant of the post from post-hole 288. It is, however, only a hollowed shell of a larger timber, now rotted away; diameter estimated as at least 220 mm. There are no signs of working or tapering for use as a post.

Further Work: None

115 (From within cut of post-hole 300)

1. poor
2. very approximate radial split, and tangential split/ break, (HW only)
3. none
4. 115 x 40 x 70 mm
5. oak
6. medium-slow growth rate, ave. ring width: 1 mm

This, according to the packing label, is the remnant of the post from post-hole 300. It is sharply pointed, although in its poor condition it is not possible to know if this is the point of the post tip or if it is the result of natural forces splitting it radially and tangentially, with the growth rings.

Further Work: None.

116 (From within post-hole context 315)

1. poor
2. probably remnant of roundwood, HW only
3. none
4. 60 x 150 x 110 mm
5. oak
6. medium-slow growth rate, ave. ring width: 1 mm

This, according to small-finds list, is the remnant of a post from post-hole 315. It is, however, only a shell of a larger timber, now rotted, diameter estimated as at least 180 mm, (estimated from 1/3 circumference). There are no signs of working or tapering for use as a post.

Further Work: None.

129 (From clay and peat plough-soil context 366)

1. fair
2. approximately radially split, HW only
3. one possibly ancient feature: right-angle step, 12 mm deep
4. 320 x 45 x 55 mm
5. oak

(Small-finded as a 'stake' but with no further records). Both ends of this oak piece are pointed but there is no evidence by either axe-marks or crumpling of the tips, that either end was used as a stake-tip. 125 mm from one end, the wood is 'stepped' to a perfect right-angle. A single cut 12 mm deep, it may have been cut in antiquity as, in keeping with the rest of the piece, its surface is smooth and is stained by iron.

Further Work: Photo

130 (From clay-peat plough-soil 366)

1. fair
2. radial split, HW only
3. vague marks are probably remnants of toolmarks, tapering wood
4. 240 x 42 x 30mm
5. oak

Small -finded as a 'stake', but no further records. This is a radially split oak piece which is roughly pointed. There are two marks which, although badly weathered, may be the remnants of tooling, tapering the piece to a tip.

Further Work: None.

132 (Within post-hole fill 319)

1. poor
2. rotted tangentially, or possibly split, HW only
3. no obvious tooling
4. 260 x 170 x 110mm
5. oak
6. flattish surface, 120 x 100mm, cutting across the grain, may have been chopped to this shape, but much decayed; ave. growth ring width: 2 mm

This badly degraded oak piece was found within post-hole fill 319 and may be the remnant of the post itself. It may have been chopped at 45° to the grain but the surface is too poorly preserved to show any tooling.

Further Work: None.

Weaver's Bridge LAWBR 96

All the five posts, (105-107, 139), of LAWBR 96 are made from oak heartwood, now mineralized but rotted at their tops. They are all characterized by the same long, slender point resulting from careful, or at least very regular, tooling. They all have numerous axemarks, struck towards the tip, which create 7 or 8 faces of tooling along the wood's length. These faces are all of regular width except on post 108 which differs in having 4 major faces with the edges chamfered. The best preserved of these posts, 105, shows a minimum width of axe-blade of 48 mm. It also shows that the blade was very flat-faced with a moderately rounded cutting edge, and had considerable damage to that edge. All the tips of these posts are slightly blunted and/or crumpled, showing that these posts were, at least in part, driven into the ground.

105

1. mineralized, good tip, poor elsewhere
2. roundwood, HW (and SW in patches), no bark
3. numerous toolmarks start 325 mm from tip, creating 8 distinct faces around whole circumference. Axe profile, very flat, with medium-rounded blade end (2 mm with 41 mm width). Minimum blade width: 48 mm
4. 620 x 120 mm;
5. oak
6. slightly blunted tip

This roundwood oak post has been axed to a tip in a very regular fashion. Numerous axe-marks result in 8 very regular faces of tooling, tapering the post to a fine tip.

Further Work: photograph and illustrate, as being typical of and best preserved of this group

106

Exactly the same as 105 above, except;

4. dimensions: 435 x 100 mm
6. tool-marks create 7 regular faces tapering to a fine slightly blunted tip. Tooling starts 270 mm from tip.

Further Work: photograph as part of group

107

1. mineralized tip, rest in poor condition: only 110 mm survive with surface intact.
4. 375 x 75 mm, diameter measurement is very distorted by decay and this post may have been of equal size to 105 or 106.

As far as the poor preservation shows, this is the same as the above two posts, with 7 regular faces created by numerous axe-marks tapering wood to a fine, slightly blunted tip.

Further Work: photograph as part of group.

108

1. mineralized, fair at tip, poor elsewhere
2. roundwood
3. axe tapering to a point creating 4 major faces along all length of wood but with chamfered edges, very regular execution. Minimum axe blade width 40 mm, flat-faced blade. Shaping begins above existing length of wood
4. 505 x 82 mm
5. oak
6. slightly blunted tip

This oak post differs from the others of this structure in the shaping of its tip. It has 4 major faces of tooling but the edges are chamfered along their whole length. The finished effect is again very regular.

Further work: photograph as part of group.

139

1. mineralized, good at tip, poor elsewhere
2. roundwood, HW only
3. numerous axemarks creating 8 regular faces, starting above the decayed level
4. 495 x 105 mm
5. oak
6. slightly blunted tip

(Same as 105, 106, 107)

Further Work: photograph as part of group.

APPENDIX 21: Assessment of Radiocarbon Dating Proposals

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Introduction

The results from the 35 excavated sites do not form a single coherent research project because of their temporal, spatial and typological range. Consequently no extensive radiocarbon-dating programme on a scheme-wide basis would be appropriate. However, the publication of the results will be considered along broad temporal themes, and samples will be submitted for radiocarbon dating where there are specific problems of phasing groups of features, or to resolve a particular dating problem (e.g. to date the unaccompanied burial at Lynches Trackway).

Summary of radiocarbon potential and proposal

A series of 15 dates to answer project and site specific research aims is proposed (see table 1) and it is expected that some of these results will provide some important new dates for more wider regional and national research programmes and synthetic studies (e.g. the date of the Beaker pits, the inhumation burial, the change from ritual to domestic landscapes, the onset of alluviation in the Churn Valley, the appearance and use of certain economic resources {e.g. cereals} in the earlier prehistoric period).

Trinity Farm presents the opportunity to obtain high value radiocarbon dates for a Wessex/Middle Rhine Beaker assemblage (rarely found in domestic contexts) in secure association with charred plant remains and flintwork. The dates obtained for this site would be of interest for chronological studies as the establishment of an absolute radiocarbon framework for Beaker ceramics is an issue of national importance (*cf.* The British Museum Beaker dating programme Kinnes *et. al.* 1991).

Radiocarbon dating provides the only possible solution to the precise dating of the flat grave burial from Lynches Trackway. Conceivably this burial could be of Neolithic or Bronze Age date. The radiocarbon result might demonstrate that the burial belongs to either the growing corpus of either earlier Neolithic or late Bronze Age flat graves now known from southern England. Alternatively, the burial may belong to the Beaker flat grave tradition which is so predominant in the Upper Thames region. Confirmation of any one of these scenarios would be of regional/national importance.

Sample potential

The environmental sampling of archaeological deposits for charred plant remains from 23 separate sites will provide suitable specialist identified material for radiocarbon dating. In addition, five samples taken for the assessment of waterlogged material, mostly plant remains but also wood charcoal, have the potential to produce suitable samples. A summary of the charcoal remains has been presented in Tables 2, 6, 8, 15, 17, and 19 of Appendix 19. As well as the above, many features sampled for charred plant remains also produced quantities of animal bone. In most cases the bone is well

preserved because of the generally alkaline ground conditions. A small number of waterlogged wood samples were also collected, either as worked fragments or lengths of twigs/branches. These have been or will eventually be, identified to species and a ring count made to establish their growth pattern and age. For conventional radiocarbon dating purposes the larger fragments of wood charcoal, waterlogged wood and animal bone can be submitted for determinations, although in many cases sample size will necessitate the use of Accelerator Mass Spectrometry (AMS) dating, which can utilise relatively small samples (e.g. individual charred seeds).

Recommended samples for radiocarbon dating

Only six of the excavated sites merit consideration for radiocarbon dating for addressing specific dating problems and these are summarised below.

DUNTISBOURNE GROVE

Earlier Prehistoric Pits

A group of pits containing concentrations of worked flints, charred plant remains (mostly hazelnuts some cereal) and a very small number of pottery sherds. The flint assemblage suggests a later Neolithic date and, although rather tentative, this is supported by the pottery dating. The charred plant assemblage also suggests a Neolithic/Early Bronze Age date. Carbonised cereal (if identified) is surprisingly rare in Neolithic/early Bronze Age contexts and given the rarity of domestic features of this date in the Cotswolds, at least two of the pits will be dated.

Two radiocarbon determinations should confirm these deposits of flintwork, pottery and charred plant remains as later Neolithic in date.

TRINITY FARM

Beaker Pits

Three Beaker pits of late Neolithic/early Bronze Age date were located in one corner of the large area stripped to examine a linear boundary, which was subsequently found to be of post-medieval date. The pits contained a reasonable assemblage of Beaker flintwork, over 100 fragments of fine decorated pottery of Clarke's Wessex/Middle Rhine Style and a charred plant assemblage similar to that from the pits at Duntisbourne Grove.

Radiocarbon dates for the Beaker pits would answer a multitude of questions and the site has the potential to produce some high quality results.

The objectives will be to provide dates for secure Beaker associated pit deposits with diagnostic flintwork and charred plant remains; to provide a date for Wessex/Middle Rhine (W/MR) Beaker from an apparent 'domestic' context (W/MR in this type of

context is rare and any dates would be of regional/national importance (*cf. Kinnes et. al. 1991*) and most dates are on human bone from burials). To test whether this Style was used contemporaneously for both funerary and domestic activities or whether the style was later downgraded as a domestic ware; and to date the cultivation of whatever cereal remains are present. The association of Beaker, in this case the rare WMR, is of regional/national importance.

LYNCHEs TRACKWAY

Prehistoric Burial

An unaccompanied inhumation of assumed prehistoric date was discovered in an oval grave on the upper/middle part of the scarp slope above the Roman trackway. The crouched position of the burial is suggestive of a prehistoric date. Since the burial was unaccompanied the only way of dating it is by radiocarbon dating of the bones themselves.

It is proposed that two AMS dates will be undertaken to minimise the destruction of the human remains and to provide a more precise date. Since the burial was located in an unusual topographic location, if it proves to be of prehistoric date, this may have implications for our understanding of the siting of prehistoric burials elsewhere. It is also worth noting that the probable Beaker domestic site at Trinity Farm (above) is located within view of the burial on the opposite side of the Churn Valley.

LYNCHEs TRACKWAY/CHURN VALLEY

Palaeoenvironmental sequence

Core sampling at 10 m intervals across the Churn Valley between the mill leat on the western side and the river channel on the east side, established the sub-surface cross valley profile sealed beneath the later alluvial deposits. At the deepest point, towards the middle to west side, a Russian core was used to obtain an undisturbed core of the peat and sediments for pollen analysis. Towards the base at the interface with the underlying gravel a thin lens of waterlogged organic material was recovered. It is proposed that an AMS date on this deposit should establish the earliest date of the floodplain sediment infills, thereby placing the proposed pollen work in context.

Following the core transect a machine dug trench was positioned across a palaeochannel nearer to the mill leat. Previous evaluation work has indicated that this may be a palaeomeander channel of Saxon date. Two pollen monoliths were taken from the deepest/most representative section. Substantial incremental bulk samples were also taken for plant macrofossil, insect and mollusc analysis. A smaller group of samples were taken for radiocarbon dating purposes. It is proposed that following the post-excavation assessments, the full pollen and other analyses are undertaken on this waterlogged deposit. Two radiocarbon dates will be obtained to establish an absolute

chronology. One will be on the base of the pollen column at the commencement of the organic sequence and a second date will be undertaken, either for the top of the sequence or to date any significant change in the vegetational sequence resulting from the pollen or plant macrofossil analysis.

ST AUGUSTINE'S LANE

The objective is to obtain a series of radiocarbon dates for two contiguous early Bronze Age barrows and for a system of prehistoric land boundaries, which arguably on spatial grounds should post-date them. These dates should provide an absolute chronology for the change in landscape use from funerary in the early Bronze Age to more domestic and settled in the later Bronze Age/iron age.

Prehistoric land boundary

The excavation at St Augustine's Lane revealed a simple arrangement of interrupted shallow "ditches", thought to be associated with the construction of early land boundaries. One section of the interrupted ditch configuration produced a small assemblage of pottery which may be of Bronze Age or Iron Age date, although the overall possible date range extends from Neolithic to Roman. Although the results of the evaluation had indicated a Bronze Age date for the ditch in question. Given the uncertainty over dating, two securely stratified samples of charcoal or possibly animal bone will be submitted for a radiocarbon dating.

The results from the radiocarbon dating should determine a date range within the later prehistoric period for the likely construction of the boundaries and whether the boundaries at St Augustine's Lane and St Augustine's Farm South are contemporary and, therefore, potentially part of the same system of land division. Despite the well recognised problems with the radiocarbon calibration around the interval 750-400 cal BC, from the radiocarbon results it should be able to determine whether the boundaries are later Bronze Age, late Bronze Age-early Iron Age or middle Iron Age in date.

ST AUGUSTINE'S SOUTH

Ring ditch

The principal archaeological work at St Augustine's Farm concentrated on two contiguous ring ditches. A single, unaccompanied and secondary cremation deposit was found within one ring ditch, although both ditches failed to produce any closely dateable artefacts.

There is little doubt that the ring ditches are of early Bronze Age date (2000-1500 cal BC). However, radiocarbon determinations will provide a closer date range for the monuments and a date for contiguous ring ditches which will be of use in the study of Bronze Age barrow typology. A sample of charcoal or bone from a securely stratified

position within the primary ditch fill will be submitted for radiocarbon dating. This should provide a *terminus post quem* for the barrow construction.

Prehistoric land boundaries

The excavations at St Augustine's Farm South and the subsequent watching brief together with a reassessment of the cropmark evidence has demonstrated the existence of another, even longer, interrupted "ditch", which may also relate to that recorded at St Augustine's Lane, described above. Numerous sections were excavated across the feature but no dateable finds were recovered.

Two radiocarbon dates for this boundary obtained from either identified wood charcoal or bone from securely stratified primary contexts should provide a *terminus post quem* for its construction. The ditches appeared to respect the barrows and the expected determinations should be post-early Bronze Age (after 1500 cal BC).

LATTON ROMAN POND

Palaeoenvironmental sequence

A broad shallow palaeochannel within the Roman Scheduled Ancient Monument was found to contain a shallow silty layer overlain by a silty peat and finally sealed by the modern agricultural soil. Few features were found cut into the deposit and most adjacent ditches, including those of Roman date, appeared to have respected the site of the channel. Roman artefacts were found within the peaty deposit, certainly derived from the nearby settlement.

In the Pleistocene the site is thought to have been an active channel in the gravel terrace. However, by the Holocene the channel was dry with trees growing in its bed. A rise in the local water table and the reactivation of the channel resulted in the formation of very humic soil and organic sediments in tree-throw holes. Eventually shallow water fen or carr developed.

By analogy with events further downstream in the Upper Thames Valley, the rising water table was perhaps occurring during the first millennium BC as a response to tree clearance in the Cotswolds. A monolith column was taken for pollen analysis and bulk samples taken for general macroscopic and invertebrate remains.

To establish the date for the commencement of the peaty channel infill a sample of small roundwood from the base of the deposit will be submitted for a radiocarbon date.

Bibliography

Kinnes, I, Gibson, A, Ambers, J, Bowman, S, Leese, M and Boast, R, 1991 Radiocarbon dating and British Beakers: the British Museum programme, *Scottish Archaeol Review* 8, 35-68

Table 1:

<i>Site Name</i>	<i>Feature to be dated</i>	<i>Material to be dated</i>	<i>No. of AMS Dates</i>
Duntisbourne Grove	Two different Neolithic pits	Charred plant remains	2
Trinity Farm	Two different Beaker pits	Charred plant remains	2
Lynches Trackway	Probable prehistoric human burial	Human bone collagen	2
Churn Valley	Organic deposit from base of valley sediments	Humic material	1
Churn Valley	Base of organic sequence in palaeochannel	Humic material	1
Churn Valley	Top of organic sequence or significant environmental episode change in palaeochannel	Plant remains	1
St Augustine's Lane	Prehistoric land boundary	Animal bone or charred plant remains	2
St Augustine's Farm south	Prehistoric land boundary	Animal bone or charred plant remains	2
St Augustine's Farm South	Primary fill of Ring Ditch	Animal bone or charred plant remains	2
Latton Roman Pond	Base of organic sequence in palaeochannel	Humic material	1
TOTAL			15