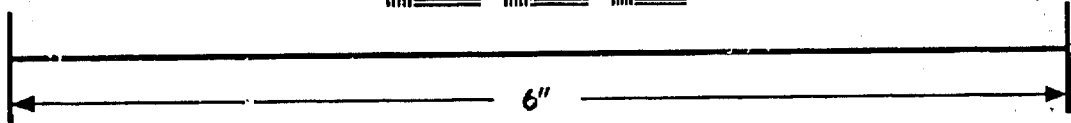
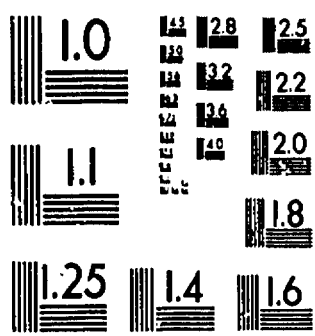
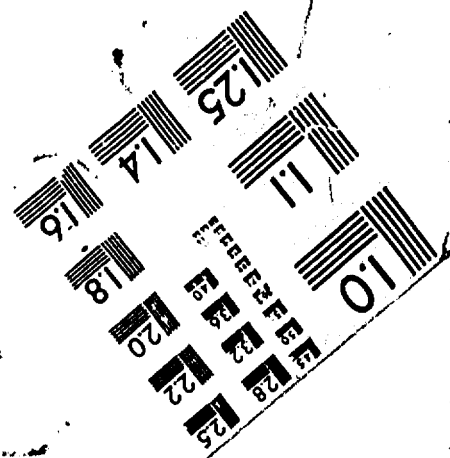
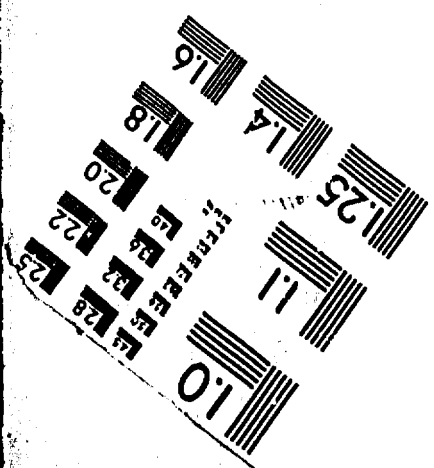


IMAGE EVALUATION TEST TARGET (MT-3)



MICROCOPY RESOLUTION TEST CHART



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FURTHER EXCAVATIONS ON THE SECOND SITE OF THE DOMINICAN PRIORY, OXFORD.

MICROFILM SECTION CONTENTS

Small Finds: Catalogue of Illustrated Objects by Nicola Harris and George Lambrick.	A3
The Tiles by George Lambrick and Maureen Mellor.	A7
The Clay Pipes by Maureen Mellor.	B13
Human Bones by Mary Harman and J. L. Price.	C1
The Biological Evidence	C10
The Animal and Bird bones by Mary Harman.	C11
The Fish Remains by M. R. Wilkinson.	C13
Plant and Invertebrate Remains from Pre-Priory Deposits by Mark Robinson.	D6
Plant and Invertebrate Remains from the Priory Drains by Mark Robinson.	D12

SMALL FINDS: CATALOGUE OF ILLUSTRATED OBJECTS

by NICOLA HARRIS and GEORGE LAMBRICK

The illustrated objects are a selection of those recovered. Amongst the general categories there were further pieces of copper alloy sheets or binding strips; miscellaneous pieces of iron work; numerous coffin nails; other nails most of which were post-medieval; a few other scraps of leather; a few other pieces of structural timber.

All these objects are too fragmentary or too uninformative to be worth publishing in detail.

Dating refers to the context unless typological dating is specified.

Abbreviations:

- Fingerlin: I. Fingerlin, Gurtel des hohen und späten mittelalters, (1971).
- Lambrick and Woods: G. Lambrick and H. Woods, 'Excavations on the Second site of the Dominican Priory, Oxford', Oxoniensia xli (1976), 168-231.

Figure 12

Objects of Copper Alloy

1. Buckle with lobes either side of ridged decoration.
D 1.95cms. of Fingerlin, p. 75, No. 99. 13th to early 14th century type.
W V L508/1, SF 502, ODMS Acc. No. 75.42.2.
2. Staple. L 3.5cms.
W V u/s, SF 519, ODMS Acc. No. 75.42.8.
3. Staple. L 4.9cms. Mid to late 13th century.
SW I L47, SF 18, ODMS Acc. No. 75.42.13.
4. Top of a cauldron leg. W 5.4cms.
SW/S (1979) u/s, SF 35, ODMS Acc. No. 75.42.20.

5. Binding strip in two pieces. L 8.0cms.
Mid to late 13th century.
W V L549, SF 507, ODMS Acc. No. 75.42.4.

Objects of Lead

6. Pencil pointed at one end. L 7.4cms, D 0.6cms. cf Lambrick and Woods,
p. 217, No. 29. Late 13th to early 14th century.
SW I L37, SF 4, ODMS Acc. No. 75.42.11.
7. Pencil broken at both ends. L 5.2cms, D 0.4cms.
Mid to late 13th century.
W V L549, SF 509, ODMS Acc. No. 75.42.6.
8. ? Pencil. A short piece of lead, rectangular section and with flattened
ends. With mortar adhering but too small to be a masonry fitting.
L 39cms. Mid to late 13th century.
W V L510/2, SF 558, ODMS Acc. No. 75.42.10.

Objects of Iron

9. Silvered buckle. W 2.3cms.
S (1979) L202/3, SF 219, ODMS Acc. No. 75.42.14.

Figure 13

10. Masonry spike, flat section with square hole at blunt end.
L 15.2cms, W 1.5cms. Mid late 13th century.
W V L510/2, SF 505, ODMS Acc. No. 75.42.3.
11. Wall anchor with perforated head. The substantial shank was driven into
a mortar joint in masonry, the nailed head serving to hold a fitting
against the wall. Late Medieval.
S (1979) L202/5, SF 220, ODMS Acc. No. 75.42.15.
12. Very large nail, rectangular section, squarish head. L 23.0cms.
Pre-dissolution grave in nave.
W V L526/8, SF 508, ODMS Acc. No. 75.42.5.
13. Spiked, U-shaped eye from a strap-hinge, possibly from the lid of a
coffin. L 6.0cms.

Pre-dissolution grave in cemetery.

W VI L619/1, SF 646, ODMS Acc. No. 75.42.9.

14. Coffin nails with square sections and squarish heads.

L 6.3 - 6.5 cms. Pre-dissolution grave in south aisle.

W V F561, SF 513, ODMS Acc. No. 75.42.26.

15. Knife blade. L 7.3cms. 17th century.

S (1983) L104, SF 102. ODMS Acc. No. 75.42.23.

16. Horseshoe, rectangular nail holes. D 11.1cms. Post-Medieval.

S (1979) L202/1, SF 230, ODMS Acc. No. 75.42.19.

17. Horseshoe arm with rectangular nail holes. 17th century.

S (1983) L111, SF 103, ODMS Acc. No. 75.42.22.

Objects of Stone

18. Part of a whetstone with central grooves in either side. L 6.5cms.

Late 13th to early 14th century.

SW III F21, SF 10, ODMS Acc. No. 75.42.12.

Objects of Bone

19. Plate with two holes, probably from a knife or comb. L 6.4cms, W 1.1cms

W V L548, SF 517, ODMS Acc. No. 75.42.7.

Figure 14

Objects of Leather

20. Forepart of a two-piece right foot sole from a turnshoe with a broad tread and narrow waist. Worn away at the toe, inside edge damaged, and a hole worn in the tread. L 17.4cms, W 3.5 to 8.7cms, Th 0.4cms. 3 stitches per 2cms. Also a length of rand or welt with a single row of stitches. 15th century.

S (1979) L202/5, SF 224, ODMS Acc. No. 75.42.16.

21. Left foot sole from a turnshoe in three pieces, with part of the toe missing and outer edge damaged. Several splits in the leather. L 18.5cms, W 4.3 to 6.1cms, Th 0.3cms. 2 stitches per 2cms. Fragment of upper with several splits. Piece of upper with stitch holes along one edge. Length of binding with stitch marks. Length of welt from around the heel.

S (1979) L202/3, SF 223, ODMS. Acc. No. 75.42.17.

Objects of Wood

22. Length of lath. L 23.0cms, W 3.0cms, Th 0.8 to 1.4cms.

S (1979) L202/3, SF 222, ODMS. Acc. No. 75.42.24.

23. Broken off tenon from a structural oak timber with part of the dowel hole. The diagonal cut on one surface may be modern. L 10.2cms, W 8.5cms, Th 3.9 to 4.4cms.

S (1979) L202/3, SF 222, ODMS. Acc. No. 75.42.24.

THE TILES

by **GEORGE LAMBRICK** and **MAUREEN MELLOR**

Fabrics

The following descriptions are of tile fabrics not previously published in detail for Oxford.

Fabric	IVb	IVc
Inclusions	Quartz, grog and white clay pellets	Grog, flint
Frequency and Sorting	Quartz - moderate Unsorted Grog - moderate White clay pellets - occasionally	Grog - moderate Unsorted
Size	Quartz 0.2 - 1mm Grog 1-2mm White clay pellets 1mm	Grog 1 - 3mm Flint 1mm
Rounding	Quartz - sub-rounded	Flint - angular
Hardness MoH Scale	4 - 5	4 - 5
Forms	Floor	Floor
Fabric colour	Red	Red

Table VIII gives figures for the proportions of different tile fabrics occurring in the stratified sequence of deposits in the south-west area.

TABLE VIII SW AREA TILE FABRICS BY PHASE

		IB		II		III		IIIA		IIIB		IIIC		IIID		IV	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Phase 1	Roof	-	-	-	-	4	-	2	-	-	-	1	-	-	-	-	-
	Misc*	-	-	-	-	41	51	2	3	2	3	12	15	-	-	5	6
	Floor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 2	Roof	-	-	-	-	78	80	4	4	-	-	-	-	-	-	6	7
	Misc	-	-	-	-	5	-	3	-	-	-	-	-	-	-	-	-
	Floor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 3	Roof	-	-	-	-	36	48	11	15	2	3	-	-	1	1	8	11
	Misc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Floor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 4	Roof	-	-	1	1	68	51	17	13	7	5	4	3	-	-	13	10
	Misc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Floor	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Phase 5	Roof	3	4	-	-	30	42	9	13	-	-	4	6	-	-	12	17
	Misc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Floor	-	-	-	-	3	-	2	-	4	-	1	-	-	-	7	-
		3		1		265		49		16		22		1		51	

* probably almost exclusively roof tiles.

		V		VI		VIIA		VIIB		Misc		Total
		No.	%	No.	%	No.	%	No.	%	No.	%	
Phase 1	Roof	-	-	1	2	-	-	-	-	-	-	8
	Misc	-	-	7	9	4	5	-	-	7	9	80
	Floor	-	-	-	-	-	-	-	-	-	-	0
Phase 2	Roof	-	-	1	1	4	4	-	-	8	9	101
	Misc	-	-	-	-	1	-	-	-	-	-	9
	Floor	-	-	-	-	-	-	-	-	-	-	0
Phase 3	Roof	-	-	14	19	1	1	1	1	1	1	75
	Misc	-	-	-	-	-	-	-	-	1	1	1
	Floor	-	-	-	-	-	-	-	-	-	-	0
Phase 4	Roof	-	-	7	5	5	4	4	3	8	6	134
	Misc	-	-	-	-	-	-	-	-	-	-	0
	Floor	-	-	-	-	-	-	-	-	-	-	0
Phase 5	Roof	-	-	14	19	-	-	-	-	-	-	72
	Misc	-	-	-	-	-	-	-	-	1	-	1
	Floor	-	-	-	-	-	-	-	-	1	-	17
		0		44		15		5		27		499

Two-Colour Decorated Floor Tiles

The tiles illustrated in Figs. 20 and 21 are designs not formerly published from Oxfordshire, variants on known designs or more complete examples of designs known only fragmentarily. No. 11 has been published for Oxford sites, but in a work primarily covering Buckinghamshire tiles.

The following abbreviations have been used:

Eames: E. Eames, Catalogue of Medieval and glazed earthenware tiles in the Department of Antiquities, British Museum, (two vols.) (1980).

Haberly: L. Haberly, Medieval English Paving Tiles, Oxford (1937).

Norton: E. C. Norton, 'The Medieval Paving Tiles of Winchester College', Proc. Hants Field Club and Arch. Soc. xxxi (1976).

Gray and Clayton: M. Gray and N. Clayton 'Excavations on the site of Eynsham Abbey, 1971', Oxoniensia xliii (1978), 100-122.

Hohler: C. Hohler 'Medieval Paving Tiles in Buckinghamshire', Records of Bucks. xiv (1942).

Hinton: D. Hinton 'Bicester Priory', Oxoniensia xxxiii (1968), 42-4.

Howard-Drake: A. Howard-Drake, 'Medieval floor tiles from Godstow', Oxoniensia xxxv (1970), 112.

Emden: A. B. Emden, 'Medieval floor tiles in the church of St. Peter in the East, Oxford', Oxoniensia xxxiv (1969), 29-44.

Emden's Corpus: A. B. Emden's corpus of decorated paving tiles from Oxfordshire in the Emden Archive, Department of Antiquities, Ashmolean Museum.

Ward Perkins and Williams Hunt: J. B. Ward Perkins and P. D. R. Williams Hunt, 'Medieval Floor Tiles at St. Mary's Priory, Hurley, Berks', Berks Arch. J. xlii (1938), 117-32.

Mynard: D. Mynard, 'The Little Brickhill tile kilns and their products', Jn. Brit. Arch. Assoc. xxxviii (1975), 55-90.

Figure 20

Inlaid 'Wessex' types

1. One fragment. A floral spray with attached trefoils. Moderate inlay, well cut design. Scooped keys, 2.5cms thick, Fabric III.
Similar to Eames Nos. 2606 - 2611 (second half 13th century).
W II u/s.
2. One fragment. Corner showing pierced circle and fleur de lys. Good inlay, well cut design. Scooped keys, 2.0cms thick, Fabric III.
Norton No. 7 (c. 1300).
W II u/s.
3. Three thick fragments two scored as half tiles (the illustration is a composite of two). Two addorsed birds either side of a stylized tree. Variable inlay, well cut design. Central scooped key, 3.7cms thick, Fabric III.
Similar to Eames Nos. 1966 - 1973 but without the extra floral spray.
E XI L1113; E XI L1103.
4. Two thick fragments (the illustration is composite). A ?lion or leopard passant facing left within a circle. Good inlay, well cut design, poor glaze. The design is not properly centred. Central scooped key, 3.6cms thick, Fabric III.
Similar to Eames Nos. 1781 - 1784 and (reverse) Nos. 1792 - 1796 (second half 13th century).
W V L561; E XI L1102.

Inlaid 'Stabbed Wessex' types

5. Two fragments (the illustration is composite). A rampant lion or wolf facing right within a quatrefoil and with trefoil projections from the corners. Moderate inlay. One is not properly centred on the tile. Stabbed keys, 1.8cms thick, Fabric IIIB.
Variant of Haberly XLIV which has a less elegant head.
W IV u/s; E II L205/1.
6. Thirteen fragments. An eight spoked wheel with curved spokes terminating in fleur de lys which project into the corners of the tile. Between the spokes are thick lobes. Deep inlay, well cut design, poor

glaze. Stabbed keys, 2.0cms thick, Fabric IIIB.

E X L1004.

7. One fragment. Similar but less accomplished design to No. 1. Deep inlay, well cut design. Keying obscured by mortar, 2.2cms thick, Fabric IIIB.

It is similar to Haberly R (from Cumnor) which is also fragmentary but shows more foliage; Emden's Corpus records it in Long Wittenham church. W II L228/1.

8. One fragment. Uncertain design. Deep inlay, well cut design, poor glaze. Pricked keys, 1.8cms thick, Fabric IIIB.

E XI L1106.

9. One fragment. Elaborate design of trefoiled cross in cusping with leaves and T-shaped projections to the centre of each side. Good inlay, well cut design, even glaze. Keying obscured by mortar, 1.8cms thick, Fabric IIIB.

Variant of Haberly I in which the side projections terminate in trefoils. Clayton and Gray No. 8 is a more fragmentary example from Eynsham Abbey.

W I L34.

10. One fragment. Floral spray ending in a trefoil between two curving sprays. Good inlay, well cut design. Pricked keys, 1.8cms thick, Fabric IIIB.

E I F29.

11. Three fragments (illustration is composite of two). Fleur de lys pierced with quatrefoils and trefoils, with quatrefoils between the petals. Good inlay, well cut design, poor glaze. Stabbed keys, 2.2cms thick, Fabric IIIB.

Variant of Haberly XXXII which is not pierced. Hohler No. W9 (recorded for Dorchester, Godstow, North Moreton, Oxford Cathedral) also from recent excavations at Oxford Greyfriars and Osney.

W V L503/1.

12. Two fragments. Four leaves joined to form a square round a central dot. Good inlay, well cut design. Printed keys, 1.6cms thick, Fabric IIIB. Hinton K from Bicester priory; Howard-Drake B from Godstow Nunnery. This fragment gives a clearer version of this part of the design.

E II L205/1.

13. Three fragments. Four fleurs de lys projecting into the corners of the tile from the corners of a square enclosing four small square dots. Good inlay, well cut design. Pricked keys, 1.8cms thick, Fabric IIIB.

Variant of Haberly L1V (wrongly numbered LV) and Emden 3 (which have more elaborate fleurs de lys and concave sides to the square. Also found in excavations at Oxford Greyfriars.

S (1983) L112/3.

14. One fragment. Rampant lion facing left, probably one of a pair. Very thin, poor inlay and glaze. Stabbed keys, 1.8cms thick, Fabric misc. Similar to Eames Nos. 1810 - 12.
E X L1111.

Printed tiles

15. One fragment. A lion passant regardant with forked tail and protruding tongue. Poor glaze, generally very worn. Unkeyed, 2.2cms thick, Fabric IVb.
W II L262.
16. Seven thick fragments (the illustration is composite). Lion mask with protruding tongue and elaborate mane. Two fragments stamped with no slip. Some glazed, one had been laid on a bed of sand and flint to dry. Unkeyed, 3.1 to 3.4cms thick, Fabric IVc (?).
Somewhat similar to Eames No. 1822 from Great Shefford, Berks.
W I/II u/s; W II u/s, L203/1, L219, L228/1.
17. One fragment. A crouched stag facing left within a circle. Well executed design, good glaze. Unkeyed, 2.2cms thick, Fabric IVb.
W II L203/1.
- 18a+ Four fragments, none joining (the illustration is composite of two).
- 18b There is no positive evidence that these two fragments are from the same design, but the reconstruction, as a (?) porcupine with forked tail and three toes to each foot, seems convincing. This would be part of a four-tile pattern of four animals surrounding a central eight petalled flower and enclosed by a zig-zag (or ? rope) circle. The circles thus formed would be interspersed with further eight petalled flowers (represented by the other corner motif), making a very attractive overall design. Some fragments well stamped with good glaze, others poor and very worn. Unkeyed, 1.7 - 2.0cms thick, Fabrics IVb and IVc.
18a W II u/s, L228/1.
18b E XI L1102.
19. Eleven fragments (the illustration is composite). A stag standing facing right with studded collar and a quatrefoil between the legs.

The details of the head and antlers are not clear. Moderately well executed and glazed. All the examples were split and broken so their thickness is unknown, Fabric IV.

W V L504, 504/1, 505/1.

20. One thick complete but very worn tile and fifteen other fragments (the illustration is composite). A king with his hands raised within a double circle and outer square with trefoils in the spandrels at the corners. One fragment well glazed, others very worn. Unkeyed, 3.0cms thick, Fabric IV.

Similar to Haberly CXLI which is the same composition but all the details are different.

W V L504, 504/1.

Figure 21

21. Two thick fragments. Divided leaves on curved stems bending to the left over three shields. Unkeyed, 3.2cms thick, Fabric IV.

Ware Perkins and Williams Hunt No. 14; variant of Haberly XCIII.

W V L504.

22. One thick complete tile. Part of a nine tile pattern. Three pierced, five petalled rosettes in a broad band to the inside of which two large divided leaves are attached. Thick greenish glaze worn at the edges. Unkeyed, 3.0cms thick, Fabric uncertain.

Norton No. 17 (dated c 1412); Eames No. 2637; Emden's Corpus records it at Childrey and a variant at Donnington Castle.

E XI L1115.

23. One thick almost complete tile, but broken with centre of design missing which is partly given by one other fragment (illustration is composite). Part of a four or nine tile pattern. A spray of flowers and leaves emanating from the corner of a ? square formed by pierced bands with two separate, large irregular flowers either side of the base of the spray. In the corner of the suggested central square of the overall pattern is a fleur de lys. Poor glaze. Unkeyed, 3.1cms thick, Fabric III.

Eames No. 2637 lacks the dots on the bands but looks worn; Emden's Corpus records this design or a variant from West Woodhay, Lambourne and Childrey.

W V L505/1.

24. Five thick fragments (illustration is composite). Part of a ? sixteen

or nine tile pattern. A broad band enclosing five petalled flowers surrounds elaborate tracery and a pierced band. Glazed. Unkeyed, 2.7cms thick, Fabric IV (?).

Parts of this pattern are represented by No. 25 below and by Norton 16; Eames No. 3007 and Emden's Corpus records it at West Woodhay and Childrey.

W V L504, 505/1, 508/1; E XI L1106.

25. One thick fragment. Another part of the same pattern (see above for references). Well executed design, patchy glaze. Unkeyed, 3.1cms thick, Fabric IV (?).

E II u/s.

26. One fragment. Part of a nine or sixteen tile pattern, possibly incorporating a canopy and stylized tracery, or a continuous design of interlocking arcs. Poor glaze, worn. Unkeyed, 2.1cms thick, Fabric IVb.

W I u/s.

27. Thirteen thick fragments. Part of a continuous design of interlocking circles with four fleurs de lys pointing towards their centres, the bases of the fleur de lys stems forming cusped quatrefoils between the circles. Very worn glaze, Fabric III.

E XI L1102.

28. One thick fragment. A similar design to No. 27 but very much cruder both in the design itself (which would not produce the same smoothly interlocking continuous pattern) and in its execution. The central square (it is not formed by the curving arcs of circles as in No. 27) contains four roughly rectangular dots. Worn. Unkeyed, 3.3cms thick, Fabric III.

Emden's Corpus records this design at West Woodhay.

W V L504/1.

29. One thick fragment. Probable multiple tile pattern. A four petalled flower with small spandrels between the petals and a central circlet, placed at the corner of the tile and possibly separated from the rest of the design by slightly curving or splaying lines dividing the tile diagonally. Well executed design, worn glaze. Unkeyed, 3.3cms thick, Fabric IVc.

W II L203/1.

30. Two thick fragments. Design uncertain. Worn glaze. Unkeyed, 3.5cms thick, Fabric III.

W II L203/1.

31. Three thick fragments (illustration is composite). Floral spray, worn glaze. Unkeyed, 3.5cms thick, Fabric III(?).
W II u/s.
32. One thick fragment. Uncertain design, good glaze. Unkeyed, 3.2cms thick, Fabric III.
33. Five fragments (illustration composite from three). Part of a continuous pattern. The fleur de lys at corner is in one quadrant of an elaborate circle separated diagonally from the other half of the tile which incorporates triangles containing foliage and further fleurs de lys (of which the petals vary on two fragments). The whole design forms part of an elaborate pattern of subdivided squares and circles. Very worn glaze. Unkeyed, 2.0cms thick, Fabric IVb.
Variant(s) of Haberly CLXXXVIII (which has pierced spandrels) itself derived from Haberly XXIII.
W V L504, 505/1.
34. One fragment. Uncertain design incorporating leaves. Good glaze. Unkeyed, 2.3cms thick, Fabric IVb.
W II L225.
35. Four thick fragments. Gyronny pattern. Unkeyed, 3.0cms thick, Fabric III.
Similar to Norton No. 18.
W IV u/s.
36. One thick fragment. Repeating pattern imitating tile mosaic. Glaze very worn. Unkeyed, 2.9cms thick, Fabric III.
W I u/s.
37. One thick fragment. Part of a multiple tile pattern suggested by the curvature of the broad band enclosing quatrefoils and large dots. The rest of the design is unknown. Glazed. Unkeyed, 3.2cms thick, Fabric III.
W IV u/s.
- 38-42. One fragment each. Uncertain designs. Thin slip on tiles fired purplish or dark brown to give black and white effect. Unkeyed, 2.2 to 2.7cms thick, Fabric IVb.
Generally comparable in technique to Little Brickhill types (cf Eames p. 267-9) but not precisely paralleled. Probably 15th - 16th century.
W II L219, 234/1, 233.

Figure 22

Lozenge Tiles

41. Thick mottled green glaze, worn, unkeyed, Fabric IIIA.
E XI L1102.
42. Thick olive green glaze, largely worn off, central scooped key, Fabric IIIA.
E V u/s.
43. Thick green glaze, largely worn off, over black sooty surface, pricked keys, Fabric IIIA.
E XI L1102.
44. Cut (from upper surface) to form long triangular tile, then cut again (from beneath) and broken to form half triangle. Orange to olive green glaze. Unkeyed, Fabric IIIA.
E II u/s.
45. Partly cut (from upper surface) and broken to form long triangular tile. Thick olive green glaze, pricked keys, Fabric IIIA.
E XI L1120.

Table IX gives the occurrence of different decorated floor tile fragments around the priory. The division of the areas used in the floor tile analysis is as follows:

1. Eastern Choir: choir wall robber trenches, layers within the choir (Trench E XI excluding area S of F1119).
2. Western Choir: choir wall robber trenches, layers within the choir (Trenches E I excluding area S of F14, E III, E VI, E VII, E IX, E X excluding area N of F1002).
3. Slype: Slype wall robber trench, layers within the slype (Trenches E I excluding F14 and area to N and area S of F208, E II, and E XI excluding F1119 and area to N).
4. E Range: Robber trenches of E cloister range and chapter house and layers in area generally S of slype (Trenches E I excluding F208 and area to N, E IV, E V, E VIII, S (1973) trenches at NW corner of Telephone Exchange).
5. Mid Nave: Nave and aisle robber trenches and layers within nave and aisles (Trench W V excluding area S of F505 and L504).

6. W end Nave: West wall robber trench, aisle wall robber trenches and contexts within nave and aisles (Trenches W I area N of F103, W IV F414 and F415 and area to E excluding area N of F403).
7. Nave extension: Extended west end wall robber trench, N wall of W cloister range and layers within extended nave (Trenches W II areas N of F228, E of F203 and W III E of F306 including all these contexts).
8. Galilee and area to W: The galilee passage and ?garden area to the west (Trenches W II areas W of F203 and W III W of F306 excluding these contexts).
9. W end of church (general): Unstratified finds (Trenches W I, W II and W III unspecified areas).
10. Cemetery north of Nave: Robber trench of cemetery wall and finds from other trenches north of the nave (W IV F412, W VI, W VIII to W X).
11. N Cloister walk: Demolition layer over N cloister walk extending into S aisle, robber trench of N cloister walk wall, a few fragments from demolition layers in N part of cloister garth and other layers in N cloister walk (Trench W V L504, contexts S of F505).
12. West Cloister walk: E robber trench of West cloister range, layers and features in W cloister walk, robber trenches of cloister alley wall and demolition layers within this area (Trench W I S of F103).
13. Little Cloister and waterfront: All areas S of great cloister (Trenches S (1973 - 1983) excluding trenches at NW corner of Telephone Exchange).

The following list gives the broad categories to which particular designs were assigned for the assessment of thematic variation in the two-colour tiles from different parts of the Priory (see Fig. 19).

LH = Loyd Haberley types; HINTON = Bicester Priory types; BF = Blackfriars types. For references see catalogue of illustrated tiles above.

FLORAL

LH: XVII, XVIII, XX, XXXII, XLII, CXXVI, CIC, CCXLVI.

HINTON: K.

BF: 10, 11, 30, 31, 34.

FLORAL - CURVILINEAR

LH: I, II, III, VII, XVI, XXII, XXVII, XXXI, XLIX, LIV, LVI, LXIII, LXIV, LXX, LXXII, LXXV, XCIV, IC, CI, CII, CIII, CIV, CXI, CXVI, CXXV, CXXXI, CLXV, CXCI, CCII, CCXV, CCXXVII, CCLI, CCLII, CCLIV, CCLXI.

BF: 1, 2, 6, 9, 22, 23, 24, 25, 27, 29, 37.

FLORAL - GEOMETRIC

LH: L, LI, LV.

BF: 13, 28.

FLORAL - GEOMETRIC - CURVILINEAR

LH: XXIII, CLXXXVIII, CCVIII.

BF: 33.

ANIMALS

LH: LXV, LXVI, CC.

BF: 3, 7, 14, 15, 16, 17, 18, 19.

ANIMALS - CURVILINEAR

LH: IV, XXXVI, XL, XLI, XLIII, XLIV, XLV, XLVI, LX, LXXIII, CLIV, CCVI, CCXIV.

BF: 4, 5, 17.

CURVILINEAR

LH: XI, XII, XXIV, XXV, LIX, XCVIII.

BF: 26.

GEOMETRIC/GEOMETRIC - CURVILINEAR

LH: XXVI, XXVIII.

HINTON: F.

GYRONNY ETC.

BF: 35, 36.

HERALDIC

LH: XV.

BF: 21.

PEOPLE

BF: 20.

BLACK AND WHITE

BF: 38, 39, 40, 41, 42.

TABLE IX DISTRIBUTION OF DECORATED FLOOR TILES

E. Choir			W. Choir			Slype			E. Range		
Type	No.	%	Type	No.	%	Type	No.	%	Type	No.	%
XXV	4	10	XI	2	2	XVI	1	3.5	XXIII	1	-
XXVI	2	5	XVII-VIII	1	1	XXV	5	19	XXV	1	-
XXXII/ BF11	4	10	XXIII	2	2	XXVI	2	7	XXVI	1	-
XXXVI	2	5	XXIV-V	35	42	XXVIII	1	3.5	XLII	1	-
XL	2	5	XXVI	4	5	XXXII	4	14	<u>Inlaid</u>	4	-
XLIV-VI	2	5	XXXII	1	1	XL-I	2	7	CCLII	1	-
L	2	5	XL-I	2	2	XLII	1	3.5	<u>Printed</u>	1	-
BF3	2	5	XLIV-VI	1	1	(XLIV)/BF	1	3.5			
BF6	7	17	XLIX	10	12	5	1	3.5	<u>Total</u>	5	
BF8	1	2	LVI	8	10	XLIX	1	3.5			
BF14	1	2	LIX	2	2	LVI	1	3.5			
<u>Inlaid</u>	29	69	LXIII	1	1	LIX	1	3.5			
CLXXXVIII/ BF33	2	5	LXXII	1	1	LXVI	1	3.5			
CCXLVI	9	21	BF6	4	5	HINTON P	1	3.5			
BF1A	1	2	BF13	1	1	HINTON K	1	3.5			
BF27	1	2	<u>Inlaid</u>	75	89	BF7	1	3.5			
<u>Printed</u>	13	31	CLXXXVIII	1	1	<u>Inlaid</u>	25	86			
			CCXXVII	2	2	CI-III	1	3.5			
<u>Total</u>	42		CCXLVI	3	4	CXCI	1	3.5			
			BF22	1	1	BF22	1	3.5			
			BF24	1	1	BF25	1	3.5			
			BF28	1	1	<u>Printed</u>	4	14			
			<u>Printed</u>	9	11						
			<u>Total</u>	84		<u>Total</u>	29				

No. of	Inlaid	11	Inlaid	15	Inlaid	16	Inlaid	4
Designs	Printed	4	Printed	6	Printed	4	Printed	1

Roman Numerals = Haberly types; Hinton = D Hinton's types from Bicester;
 BF = Blackfriars types illustrated (Figs. 20 and 21).

Table IX continued

Mid Nave			W. end. Nave			Nave Extension			Galilee & Area to West		
Type	No.	%	Type	No.	%	Type	No.	%	Type	No.	%
IV	1	3	I	3	6	XVII-VIII	2	6	I	2	1
VII	1	3	XV	1	2	XXIV-V	10	28	XVII-VIII	54	31
XXIV-V	5	14	XXIII	1	2	XXVIII	1	3	XXIV-V	46	26
XXVIII	1	3	XXIV-V	7	13	XXXI	1	3	XXVI	19	11
(XXXII)/			XXVI	1	2	XLIV-VI	1	3	XXVIII	1	.5
BF11	1	3	XXVIII	1	2	LV	1	3	XXXII	1	.5
XLIV-VI	2	6	XLI	1	2	LXVI	1	3	XLIV-VI	16	9
LV/BF13	2	6	(XLIV)/	1	2	HINTON F	1	3	LI	1	.5
HINTON F	1	3	BF5			BF3	2	6	LXVI	11	6
Inlaid	14	40	LX	3	6	Inlaid	20	56	HINTON F	3	2
CLXXXVIII/			LXIV	2	4	CXI	1	3	Inlaid	154	87
BF33	6	17	LXVI	4	8	CLXXXVIII	1	3	CXXVI	1	.5
CCXLVI	1	3	Inlaid	25	48	CXCI	1	3	CLXXXVIII	3	2
BF20	3	9	CXXV	1	2	CCVIII	1	3	CXCI	2	1
BF23	1	3	CXXVI	1	2	CCXLVI	2	6	CC	2	1
BF24	1	3	CLXXXVIII/	4	8	BF16	3	8	CCXLVI	4	2
BF27	7	20	BF33			BF17	1	3	CCXXV	2	1
BF35	2	5	CCXLVI	2	4	BF18	1	3	BF15	1	.5
Printed	21	60	BF16	4	8	BF27	1	3	BF21	1	.5
Total	35		BF27	3	6	BF29	1	3	BF27	1	.5
			BF29	2	4	BF30	2	6	BF29	1	.5
			BF31	3	6	BF37	1	3	BF38	1	.5
			BF35	1	2	Printed	16	44	BF39	1	.5
			BF36	2	4	Total	36		BF40	1	.5
			BF37	4	8				BF41	1	.5
			Printed	27	52				BF42	1	.5
			Total	52					Printed	23	13
									Total	177	
No. of	Inlaid	8	Inlaid	11		Inlaid	9		Inlaid	10	
Designs	Printed	7	Printed	12		Printed	12		Printed	15	

Table IX continued

W. end of Church (general)			Cemetery N. of Nave			N. Cloister Walk			W. Cloister Walk			Little Cloister & Waterfront		
Type	No.	%	Type	No.	%	Type	No.	%	Type	No.	%	Type	No.	%
I	1	1.5	III	3	4	XXIV-V	4	8	I/BF9	2	1	XXIV-V	1	-
XVII	13	22	VII	4	6	XL-I	1	2	II	2	1	XXVIII	1	-
XXIV-V	8	13	XI	1	1.5	XLIV-VI	4	6	XI-II	12	9	XLIV-VI	3	-
XXVI	11	18	XVII-VIII	3	4	LXVI	2	4	XVII-VIII	34	24	BF6	1	-
XXVIII	2	3	XXIV-V	21	31	HINTON P	1	2	XXIII	1	.5	BF13	1	-
XXXI	1	1.5	XXVI	2	3	Inlaid	12	25	XXIV-V	16	11	Inlaid	7	-
(XXXII)/			XXXII	1	1.5	CIV	3	5	XXVI	24	17	CCII	1	-
BF11	1	1.5	XLIV-VI	3	4	CLXXXVIII/			XXVIII	2	1	BF28	1	-
XLIV-VI	4	7	LIV	4	6	BF33	5	10	XXXI	5	3	Printed	2	-
LV	1	1.5	LVI	2	3	CCII	1	2	XLIII	1	.5	Total	9	-
HINTON P	3	5	LIX	4	6	BF19	5	10	XLIV-VI	9	6			
BF2	1	1.5	LXIV	2	3	BF20	13	27	L	5	3			
Inlaid	46	77	LXV	5	7	BF21	2	4	LI	2	1			
CLXXXVIII/	3	5	HINTON P	1	1.5	BF24	2	4	LXV	1	.5			
BF33			Inlaid	56	84	BF28	3	6	LXXII	1	.5			
CCXLVI	9	15	LXXV	1	1.5	BF32	1	2	BF10	1	.5			
BF16	1	1.5	XCIV	4	6	BF35	1	2	Inlaid	118	84			
BF26	1	1.5	IC	2	3	Printed	36	75	CLXXXVIII	1	.5			
Printed	14	23	CXXV	1	1.5	Total	48		CXCI	1	.5			
Total	60		CXXXI	1	1.5				CIC	1	.5			
			CCVIII	2	3				CCXIV	1	.5			
			Printed	11	16				CCXLVI	18	13			
			Total	67					CCLXI	1	.5			
									Printed	23	16			
									Total	141				
No. of Designs														
Inlaid	11		Inlaid	13		Inlaid	5		Inlaid	16		Inlaid	5	
Printed	4		Printed	7		Printed	10		Printed	6		Printed	2	

THE CLAY PIPES
by MAUREEN MELLOR

Catalogue of pipes illustrated in Fig. 23

1. Milled rim, flat/pedestal foot, bore 7/64. Oxford type A.
S (1983) L110. ODMS Acc No. 75.42.27.
2. Milled rim, pedestal foot, stamped with maker's mark 'JG' as monogram in relief, bore 8/64. Oswald type 4A.
S (1983) L111. ODMS Acc No. 75.42.28.
3. Milled rim splayed pedestal foot, bore 7/64. Oxford type A.
S (1983) L111. ODMS Acc No. 75.42.29.
4. Milled rim oblique flat/pedestal foot, bore 8/64. Oswald type 3/4.
S (1983) L111. ODMS Acc No. 75.42.30.

For 'Oxford' types see A. Oswald, 'Clay pipes' in T. G. Hassall, C. E. Halpin and M. Mellor, 'Excavations in St. Ebbes, Oxford, 1967-76: Part II', Oxoniensia xlviii (1984), 251-3. For 'Oswald' types see A. Oswald, Clay Pipes for the Archaeologist, BAR xiv (1975), 37 and Fig. 3, G.

B14

HUMAN BONES

by MARY HARMAN

with comments on abnormal bones

by DR. J L PRICE

Table X summarises details of each distinct burial from the post-1976 excavations (WV and VI) together with a few previously unreported fragmentary burials from earlier excavations (W IV, E VI). Redeposited and other bones not attributable to specific burials are not included in the table. Table XI summarises the incidence of caries. Full details may be found in the site archive.

Radiographs of the abnormal bones were made by Miss T. I. Molleson of the British Museum (Natural History), and were examined by Dr. J. L. Price, who kindly provided the observations given below. It is striking that among so few specimens there are five cases of probable ulcer osteoma. This is a response to an inflammatory condition of the tropical ulcer type, resulting from nutritional disorder or unhygienic living or a combination of the two. If 423 did have a cleft palate there may have been some membrane between the mouth and the nasal cavity; an infant with an open cleft palate might be unable to feed properly and survive to adulthood. Bones from contexts which do not appear in Table X were not attributable to specific burials.

Observations on the radiographs of the pathological specimens

by J L Price

NAVE

W V 524/3 Developmental asymmetry of mandible.

524/4 Femur has a small bony spur on the medial aspect of the lower end. These occur at the site of muscle or tendinous attachments where there has been some stress injury and probably with some impairment of the local vascular supply.

SOUTH AISLE

W V 513/1 Slight irregularity of the articular surfaces of the vertebral bodies is a manifestation of mild osteochondrosis in youth. This would have been a painful condition.

516/1 Probably ankylosis of the apophyseal joints of thoracic vertebrae. Ankylosing spondylitis is possible, but the specimen is too fragmentary to be convincing.

- 516/2 There is dense subperiosteal new bone on the anteromedial aspect of the tibia. Above this there is some proliferative periostitis. These changes indicate the probability of an ulcer 'ivory' osteoma.
- 518/2 The lateral bowing of the upper right femur is centred on an acute angle and there is buttressing on the medial aspect of the shaft showing that remodelling is taking place. This is probably the result of an old 'stress' or "greenstick" (juvenile) type of fracture.
- 520/1 Facial asymmetry is noted with flattening of the right malar bone and zygoma. The antrum, although reduced in volume, is intact. As all the anatomical structures are present and no bone disease is seen the deformity must be developmental.

NORTH AISLE

- W IV 419 Small osteophytic outgrowths on the bones (tarsal) of the ankle.
423 This might be an example of cleft-palate.
424 Healed fracture of clavicle many years old.
- E VI 603 Probably old healed fractures of the ribs.

CEMETERY

- W VI 603 New bone, mostly subperiosteal, at lower end of right tibial shaft. Either an ulcer osteoma or result of periosteal damage from direct trauma.
- 608/2 Congenital fusion of axis and atlas vertebrae and the anterior margin of the foramen magnum.
- 623 Irregular cortical thickening is present on the shaft of the fibula - a late stage of ulcer or varicose periostitis.
- 624/2 Slight periosteal reaction on left, marked periosteal changes on right with undulating subperiosteal new bone on tibia and fibula. Another example of 'ulcer' osteoma.
- 625/2 The small localized areas of periosteal elevation on the shafts of the femora are most probably due to local injury with a small organizing and calcifying subperiosteal haematoma, or bruising. This sort of injury might be sustained in riding.
- U/S Undulating periosteal change with new bone formation - 'ulcer' osteoma.

TABLE X SUMMARY OF HUMAN REMAINS DATA FOR EXCAVATIONS POST 1976
WITH A FEW FRAGMENTARY SKELETONS NOT PREVIOUSLY REPORTED

Trench and Context No.	Amount Present	Sex	Age	Height	Other Comments	Contents of Grave (items in brackets probably redeposited)
NAVE						
WV 509	largely complete no arms	?	c. 15yrs		Upper 2nd incisors not developed.	Nails (Stone, tile, pottery; animal bone)
524/4	largely complete no head	M	30+		Slight O-A on most T & L vertebrae, sacrum, bump on R femur.	Nails (tile, pottery; animal bone)
525	lower legs	?	Adult			Stone coffin base (nail, tile, pottery; animal bone)
526/2	head	M	40+		Hollow in R parietal, 2 lambdoid wormian bones.	Nail (tile, pottery; animal bone)
564/1	head and neck	M	25-30		3 wisdom teeth not developed.	
570	head	M ?	20-25		1 wisdom tooth not developed, open metopic suture.	Tile
SOUTH AISLE						
WV 513/1	largely complete no lower legs	M	30-35	5'9 " (1.77m)	Upper R canine impacted, 4 lambdoid wormian bones.	Iron object (tile, pottery; animal bone)
516/1	virtually complete	M ?	25-30		Surprisingly high caries incidence, 2 thoracic vertebral arches joined.	Nails (stone, tile, pottery; animal bone)
517	part thorax	?	Young Adult			
519/2	virtually complete	M	25-30	5'6 " (1.68m)	Dental 'pearls'.	Nail (stone, tile, pottery; animal bone)
520/1	virtually complete no legs	M	18-23		Sacral spina bifida occulta, 6th lumbar vertebra.	(pottery; animal bone)
521/1	lower legs	M ?	Adult	5'8 " (1.74m)		(tile)
523	head	F ??	25-30			
531/1	largely complete no head	M	Adult	5'9 " (1.76m)		Nails (pottery; animal bone).
532/1	largely complete no legs	M	18-21		8 lambdoid wormian bones, open metopic suture.	(tile, pottery)
541/2	lower legs	?	Adult			(tile, pottery; animal bone).
550/2	head	M	35-40		About 4 lambdoid wormian bones.	Nail (pottery)
551/2	lower legs	M ?	Adult	5'9" (1.75m)		Nails (animal bone)
552	lower legs	M ?	Adult			
561	head and shoulders	M ?	40+			Nails (tile, animal bone)
565/2	L side	M	Adult	5'9" (1.75m)		Iron object (stone, tile, pottery; animal bone)
569/1	L arm and thigh	M	Adult	6'0" (1.83m)		

Table X continued

NORTH AISLE

KVI 603	thorax, L arm, R hip	M	Adult		Slight O-A on lower T & L vertebrae, 2 fractured ribs.		
607/1	skull	F ?	Adult		One lambdoid wormian bone.	(Tile)	
609/1	thighs	?	Adult			(Tile)	
611	part skull, R arm	M ??	30+				
616/1	feet	?	Adult			(Tile)	
619	lower arms, hips	F ?	Adult				
WIV 424	thorax	?	Adult		L clavicle has a healed fracture.		
423	head, some limbs	?	30-35		Lesions on skull, palate absence.	(Pottery)	
421	feet	?	Adult				
CLOISTER ALLEY							
541	upper part of body	F ?	25-30		At least 3 lambdoid wormian bones.	(Stone; tile; pottery; animal bone)	
515/1	head and neck	M	20-25			Iron objects; (Stone; tile; pottery)	
518/2	largely complete, no head	F ?	Adult		R femur pathological	Nails (Tile; animal bone)	
CEMETERY							
WVI 608/2	virtually complete, no legs	M	35-40		1st cervical vertebra joined to skull, lesion on L molar, lesions on 3 metacarpals, sacralised 6th lumbar vertebra.	(Tile; pottery; animal bone)	
609/1	head, thorax, part arms	M ?	18-22		24 lambdoid wormian bones, lower wisdom teeth not developed.	(Tile; pottery; animal bone)	
610/1	head and neck	M	25-30		One lambdoid wormian bone.		
612/1	R arm and hip	M	18-22				
615/2	virtually complete	M ?	16-19			(Tile; pottery)	
616/1	legs	?	Adult			(Tile)	
618	L arm	?	Adult			(Pottery)	
619	virtually complete	M	25-30	5'6" (1.67m)	One wisdom tooth, not developed.	Iron object (Tile; pottery)	
622	R lower arm, legs	M ?	16-19			(Tile; pottery)	
623	R lower leg	?	Adult			(Tile; pottery)	
624/2	largely complete, no head, R arm	M	Adult	5'10 " (1.79m)	Inflammation on lower legs, R ankle.	(Tile; pottery; animal bone)	
625/2	largely complete, no head	M ??	20-30	5'7 " (1.72m)	Both femora pathological	(Tile; pottery; animal bone)	
626/1	virtually complete, no lower legs	M ?	18-22	5'8 " (1.75m)	At least 2 lambdoid wormian bones, open metopic suture.	Nail (pottery; animal bone)	

Table X continued

628	virtually complete, no legs	M	40+	5'8 " (1.75m)	5 lambdoid wormian bones, 1 wisdom tooth not developed.	(Pottery; animal bone)
628/2	head	M	25-30			
629/2	virtually complete, no feet	F ?	20-25	5'6 " (1.68m)		(Tile; pottery; animal bone)
630/2	head	M	25-30		All wisdom teeth not developed.	(Stone; tile; pottery; animal bone)
633/2	head and shoulders	M ??	18-22			Iron object; nail (pottery; animal bone)
634/2	largely complete, no legs	M	40+		Osteo arthritis on most vertebrae.	(Pottery; animal bone)
635/1	head	M ??	25-30?		At least 1 lambdoid wormian bone.	Nail (Pottery; animal bone)
635/2	head	F ??	20-25			
636/2	head	M ??	20-25		At least 4 lambdoid wormian bones, open metopic suture, denticle by lower L premolars.	(Tile; pottery)

**TABLE XI INCIDENCE OF CARIES, ABSCESSES AND TEETH LOST ANTE MORTEM
IN NUMBER OF TEETH AND TOOTH SOCKETS PRESENT IN DIFFERENT
AGE GROUPS**

Number of People	Age	Caries	Abscess	Loss
10	17 - 25	10/248 4%	3/277 1%	0/283 0%
10	25 - 30	36/246 15%	5/279 2%	5/286 2%
9	over 30	12/188 6%	19/234 8%	13/248 5%

BIOLOGICAL EVIDENCE

Table XII gives approximate proportions of different categories of refuse recovered from sieved samples from the scullery area (trenches in the SW Area).

TABLE XII

Range of % (by weight) of different identifiable types of domestic refuse recovered from 11 sieved samples of c. 2 to 10 litres using 2.5 to 3mm mesh.

	Drains (SW L106/2 - 5; S (1979) L202/4)	Layers (SW L33; L36; L45)
Bird bone	0 - 7	0 - 9
Mammal bone	0 - 43	6 - 42
Fish bone	2 - 23	30 - 64
Egg shell	1 - 14	5 - 55
Marine molluscs	1 - 48	insignificant
Pottery	0.5 - 53	insignificant
Weight of sieved residue	0.5 - 3.5	0.5 - 2.0
% of identifiable items	9 - 11	2 - 6

The remainder of the biological evidence included in the microfiche is divided into sections following those in the main text: Animal Bones by Mary Harman; Fish Bones by Michael Wilkinson; Plant and Invertebrate Remains from pre-priory Deposits by Mark Robinson; and Plant and Invertebrate Remains from the Priory Drains by Mark Robinson.

THE ANIMAL AND BIRD BONES

by MARY HARMAN

The following list gives the contexts included in each of the groups under which the results are summarised in the main text.

Group 1: W V L508/2 - 508/6; L510/1 - 510/3; L534; L545; L5452; L546; L547; L548; L549; L566; L567.

SW 1 L45; L47; L48; L60; L65; L67; L70; L71; L72; L74; L76; L77; L83 - 83/1; L85; L86; L89 -89/3; L91 -91/2; L92; L94.

Group 2: SW I L7; L8; L9; L13/1 - L13/7; L14; L15; L16; L117; L18; L19; L21; L23; L23/1; L30; L31; L32; L33; L39; L42; L43; L49/1; L54; L55/1; L56; L57; L58; L80; L90.

Group 3: S L202/3 - 202/6.

Group 4: S L115 - 115/2.

Table XIII gives a detailed breakdown of identified bones from contexts in Group 1.

TABLE XIII. NUMBERS OF BONE FRAGMENTS FROM DIFFERENT SPECIES
IN GROUP 1 CONTEXTS

	Cattle			Sheep			Pig		
	L	R		L	R		L	R	
Skull	10	6	3	7	4	7	3	1	1
Maxilla	1		1	2		5			3
Mandible	8	1	12	10		7	4		2
Tooth		10			4			2	
Vertebra		31			20			3	
Rib		83			102			1	
Scapula	3	9	3	9	3	1		1	1
Humerus	7	3	10	8		12	1		3
Radius + Ulna	6	1	5	10	1	6			3
Metacarpal	4	3	4	4	8	5	1		1
Pelvis	5	5	7	7		9	1		1
Femur	1	14	6	4	9	4	1	3	
Tibia	5	1	5	8	2	10	4		1
Astragalus	3		6				1		
Calcaneum	2		5			2			1
Metatarsal	5	3	7	8	7	6			1
Phalanx 1	11		5	4		5		1	
Phalanx 2	6		2						
Phalanx 3	3		5						1

Total (excluding teeth, vertebra and rib frags.)

213	194	42
47%	43%	9%

Also: Horse: humerus: R; femur: L; astragalus: R; splint bone: 1;
phalanx 3: 1

Dog: humerus: R

Cat: humerus: R, radius: R; femur: R; tibia: L, R

Hare: radius: L; metacarpal: 1

Roe Deer?: antler: fragment

THE FISH REMAINS

by M.R. WILKINSON

The material submitted for identification had been sorted by Mary Harman, Bob Wilson and James Bron. It consisted of sieved samples from 7 deposits and a number of bones collected in the normal course of excavation from several others.

Sieved samples

SW Area, Phase 2, Layer 45/1 Occupation deposit.

45/1	Sturgeon	scute and frags	4
	Herring	vertebrae	64
	Cod	vertebrae	14
	Haddock	supracleithrum	
	Haddock	pharyngeal	
	Haddock	vertebrae	5
	Whiting	vertebrae	8
	Unident	frags	

SW Area, Phase 3, L33 Occupation deposit

33	Sturgeon	scutes 6 and frags 2	
(Sample 1)	Salmon/Trout	vertebrae	2
	Herring	vertebrae	587
	Herring	articular	2
	Eel	vomerine	2
	Eel	dentary	
	Eel	vertebrae	72
	Cyprinid sp	pharyngeal	7
	Cyprinid sp	dentary	
	Cyprinid sp	vertebrae	10
	Cod	vertebrae	27
	Whiting	otolith frags	2
	Gurnard sp	vertebrae	5
	Flatfish sp	pharyngeal	
	Unident	frags	

33	Sturgeon	scutes 2 and frags	3
(Sample 2)	Herring	articular	4
	Herring	vertebrae	803
	Eel	vomerine	
	Eel	dentary	2
	Eel	cleithrum	
	Eel	vertebrae	94
	Cyprinid sp	dentary	3
	Cyprinid sp	maxilla	
	Cyprinid sp	articular	
	Cyprinid sp	operculum	
	Cyprinid sp	pharyngeal	5
	Cyprinid sp	vertebrae	7
	Cod	vertebrae	16
	Cod	hyomandibular	
	Cod	pharyngeal	
	Cod	articular	
	Cod	otolith frags	5
	Cod	vertebrae	16
	Haddock	premaxilla	
	Haddock	vertebrae	2
	Whiting	vertebrae	13
	Gurnard sp	cleithrum frag	
	Gurnard sp	vertebrae	2
	Unident	frags and vertebrae	

SW Area, Phase 3, L36 Occupation deposit

36	Sturgeon	scutes	2
	Salmon/Trout	vertebrae	3
	Herring	vertebrae	159
	Eel	vertebrae	39
	Cyprinid sp	pharyngeal	2
	Cyprinid sp	vertebra	
	Cyprinid sp	hyomandibular	
	Gadoid sp	pharyngeal	
	Whiting	vertebrae	5
	Unident	frags	

36	Herring	vertebrae	4
	Eel	vomerine	
	Eel	vertebrae	4
	Gadoid sp	vertebra	
	Unident	frags	

SW Area, 715th century drain silts

106/2 An 8 litre sample was passed through a 2mm seive. Half the material collected was sorted. This was done by passing it through a 3mm sieve. The bones collected were fully sorted (A). The material which passed through was selectively sorted (C) except for four 5ml samples which were fully sorted (B).

106/2 3mm sort (A)

Sturgeon	scutes	2
Eel	vomerine	
Eel	vertebrae	52
Salmon/Trout	vertebrae	10
Herring	vertebrae	25
Thornback ray	buckler	
Shark/Ray	denticles	3
Conger eel	jaw frag	
Mackerel	vertebrae	2
Red gurnard	premaxilla	
Gurnard sp	vertebra	
Cod	vertebra and frags	
Whiting	vertebrae	10
Haddock	premaxilla	
Haddock	vertebrae	5
Plaice	dentary	
Plaice	1st anal pterygiophore	
Plaice	vertebrae	2
Unident	frags	

106/2 4x5ml samples of 2mm sort (B)

Herring	vertebrae	10
Salmon/Trout	jaw frag	
Unident	frags	

106/2 selected bones from remaining 2mm sort (C)

Eel	vertebrae	42
Herring	vertebrae	95
Mackerel	vertebra	
Shark/Ray	denticles	4
Shark/Ray	tooth	
Gudgeon	pharyngeals	2
Cyprinid sp	vertebrae	9

SW Area, 715th century drain silts

106/4 sieved 2 litre sample

Herring	vertebra	
Cod	vertebra frag	
Whiting	maxilla	
Whiting	vertebrae	4

SW Area, 715th century drain silts

106/5 sieved 10 litre sample

Herring	ceratohyals	9
Herring	articulars	3
Herring	maxilla	
Herring	vertebrae	76
Eel	vertebrae	6
Whiting	maxilla	
Whiting	dentary	
Whiting	vertebrae	3
Plaice	premaxilla	
Plaice	dentary	
Plaice	1st anal pterygiophore	
Unident	frags	

S Area 15th century silts in culvert

202/4	Shark/Ray	tooth	
(Sample 1)	Salmon/Trout	vertebra	
	Herring	vertebrae	24
	Conger eel	vertebra	
	Eel	vertebra	
	Gadoid sp	vertebra	
	Cod	vertebrae	2
	Cod	pharyngeal	
	Cod	quadrate	
	Flatfish sp	premaxilla	
	Unident	frags and vertebrae	

202/4	Shark/Ray	denticle	
(Sample 2)	Shark/Ray	vertebrae	2
	Salmon/Trout	vertebra	
	Herring	vertebrae	18
	Conger eel	palatine	
	Eel	parasphenoid	
	Eel	vertebrae	5
	Cod	ceratohyal	
	Cod	vertebrae	6
	Haddock.	dentary	
	Unident	frags and vertebrae	

202/4	Shark/Ray	teeth	2
(Sample 3)	Shark/Ray	vertebra	
	Sturgeon	scute frags	7
	Herring	vertebrae	15
	Eel	vertebrae	2
	Cod	dentaries	2
	Cod	vertebrae	7
	Haddock	supracleithrum	
	Unident	frags and vertebrae	

Bones collected during excavation

W V 13th century dumped soil beneath floor of nave

510/3	Unident	frags	3
546	Conger eel	jaw frag	
	Unident	frags	2
510/1	Unident	frags	12
566	Conger eel	branchiostegal	
567	Conger eel	branchiostegal	
	Conger eel	hyomandibular	
	Unident	frag	

SW I 13th - 14th century scullery/kitchen deposits

Phase 1

48/1	Haddock	vertebrae	2
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Phase 2

45	Unident	frag	
	Sturgeon	scute frags	2

Phase 2-3

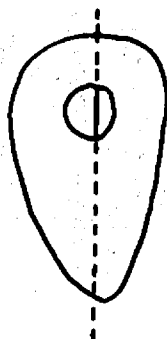
64	Sturgeon	scute frags	7
72	Sturgeon	scute	

Phase 3

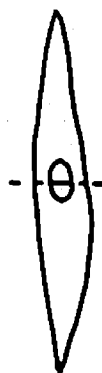
9	Sturgeon	scute frags	2
21	Cod	articular	
23	Haddock	cleithrum	
23/1	Conger eel	vomerine	
	Unident	frag	
54	Cod	vertebra	
	Unident	articular	

54	Sturgeon	scute frags	2
56	Unident	frag	
58	Haddock	parasphenoid	
	Conger eel	jaw frag	
	Unident	frag	
42	Sturgeon	scute frag	
	Cod	cleithrum	
	Unident	frag	
43	Conger eel	vertebra	
	Unident	vertebra	
Phase 4			
13/1	Conger eel	articular	
13/2	Cod	vertebra	
	Conger eel	vomerine	
	Unident	frag	
13/4	Cod	vertebra	
	Unident	frag	
	Conger eel	vertebra	
15	Unident	frags	2
16	Cod	vomer	
	Cod	basioccipital	
	Unident	frag	
19	Unident	frags	2

One minor point is the recognition of butchery on a number of vertebrae, with different patterns for roundfish (cod 2 vertebrae) and flatfish (plaice 2); this is explicable in terms of the distribution of meat in the body of the fish:



cod



plaice

PLANT AND INVERTEBRATE REMAINS FROM PRE-PRIORY DEPOSITS

by MARK ROBINSON

Detailed results from analysis of samples submitted are set out below.

TABLE XIV

	Minimum No. of Individuals				Other Samples	
	Column Samples W V 512				B	C
	0.70 to 0.79	0.79 to 0.89	0.89 to 0.96	0.96 to 1.02		
MOLLUSCA						
GASTROPODA						
NERITIDAE						
<u>Theodoxus fluviatilis</u> (L.)	-	-	-	-	3	4
VALVATIDAE						
<u>Valvata cristata</u> Mull.	6	-	-	-	3	13
<u>V. macrostoma</u> Morch	3	-	-	-	-	-
<u>V. piscinalis</u> (Mull.)	-	-	-	-	4	-
<u>V. macrostoma</u> Morch or <u>piscinalis</u> (Mull.)	2	-	-	-	-	-
BITHYNIIDAE						
<u>Bithynia tentaculata</u> (L.)	-	-	-	-	16	-
<u>B. leachi</u> (Shep.)	-	-	-	-	2	-
<u>Bithynia</u> sp.	3	-	1	1	26	1
ELLOBIIDAE						
<u>Carychium</u> sp.	19	5	6	1	3	-
LYMNAEIDAE						
<u>Lymnaea truncatula</u> (Mull.)	63	27	25	6	1	1
<u>L. palustris</u> (Mull.)	3	-	-	-	-	-
<u>L. auricularia</u> (L.)	-	-	-	-	2	-
<u>Lymnaea</u> spp.	14	6	7	1	2	-

Table XIV continued

	Column Samples W V 512				Other Samples	
	0.70 to 0.79	0.79 to 0.89	0.89 to 0.96	0.96 to 1.02	B	C
PLANORBIDAE						
<u>Planorbis planorbis</u> (L.)	3	-	-	1	2	3
<u>Anisus leucostoma</u> (Milt.)	32	1	2	3	3	2
<u>Bathymphalus contortus</u> (L.)	2	-	-	-	-	-
<u>Armiger crista</u> (L.)	1	-	-	-	-	-
<u>Planorbarius corneus</u> (L.)	-	-	-	-	1	3
SUCCINEIDAE						
<u>Succinea</u> or <u>Oxyloma</u> sp.	6	1	-	2	3	-
COCHLICOPIDAE						
<u>Cochlicopa</u> sp.	-	1	1	1	1	-
VERTIGINIDAE						
<u>Vertigo antivertigo</u> (Drap.)	1	-	-	-	-	-
VALLONIDAE						
<u>Vallonia pulchella</u> (Mull.)	-	4	3	7	4	-
<u>Vallonia</u> sp.	4	19	15	20	6	-
ARIONIDAE						
<u>Arion</u> sp.	+	+	+	+	+	-
MILACIDAE						
<u>Limax</u> or <u>Deroceras</u> sp.	3	2	3	6	1	-
HELICIDAE						
<u>Trichia hispida</u> sp.	-	-	-	2	-	-
BIVALVIA						
SPHAERIIDAE						
<u>Sphaerium</u> sp.	1	-	-	-	32	1
<u>Pisidium</u> sp.	-	-	-	-	1	1
Total	116	66	64	51	116	29

TABLE XV

	Column Samples W V 512				Other Samples	
	0.70	0.79	0.89	0.96	B	C
	to	to	to	to		
CARBONISED SEEDS	0.79	0.89	0.96	1.02		
<u>Vicia</u> or <u>Lathyrus</u> sp.	Vetch or Tare	-	-	-	-	1
<u>Anthemis</u> <u>cotula</u> L.	Stinking Mayweed	-	-	-	-	1
<u>Triticum</u> <u>aestivocompactum</u> Schiem.	Wheat	-	-	1	-	4
<u>Secale</u> <u>cereale</u> L.	Rye	-	-	-	-	1
<u>Hordeum</u> sp.	Barley	-	-	-	1	-
<u>Avena</u> sp.	Oats	-	-	-	1	-
Cereal gen. et sp. indent.		-	-	-	1	3

TABLE XVI

WATERLOGGED PLANT REMAINS	Other Samples	
	C	D
SEEDS		
<u>Ranunculus</u> s. <u>Batrachium</u> sp.	Water Crowfoot	1 -
<u>Ranunculus</u> sp.		1 -
<u>Nuphar lutea</u> (L.) Sm.	Yellow Waterlily	2 -
<u>Brassica</u> or <u>Sinapis</u> sp.	Mustard, Charlock etc.	1 -
<u>Agrostemma</u> <u>githago</u> L.	Corn Cockle	1 -
<u>Myosoton</u> <u>aquaticum</u> (L.) Moen.	Water Chickweed	1 -
<u>Stellaria</u> <u>media</u> sp.	Chickweed	1 -
<u>Chenopodium</u> cf <u>polyspermum</u> L.	All-seed	1 -
<u>Linum</u> <u>catharticum</u> L.		1 -
<u>Epilobium</u> sp.	Willow-herb	- +
<u>Conium</u> <u>maculatum</u> L.	Hemlock	1 -
<u>Oenanthe</u> sp.	Water Dropwort	1 -
<u>Bryonia</u> <u>dioica</u> Jacq.	White Bryony	1 -
<u>Rumex</u> sp.	Dock	2 -
<u>Urtica</u> <u>urens</u> L.	Small Nettle	1 -
<u>u. Dioica</u> L.	Stinging Nettle	1 -
<u>Corylus</u> sp.	Hazel	1 -
<u>Menyanthes</u> <u>trifoliata</u> L.	Bogbean	1 +
<u>Mentha</u> cf <u>aquatica</u> L.	Water Mint	3 -
<u>Lycopus</u> <u>europaeus</u> L.	Gipey-wort	1 -
<u>Sambucus</u> <u>nigra</u> L.	Elder	3 -
<u>Valeriana</u> sp.	Valerian	1 -
<u>Anthemis</u> <u>cotula</u> L.	Stinking Mayweed	1 -
<u>Sagittaria</u> <u>sagittifolia</u> L.	Arrow-head	3 -
<u>Potamogeton</u> sp.	Pondweed	9 -
<u>Schoenoplectus</u> <u>lacustris</u> (L.) Pal.	Bulrush	11 -
<u>Carex</u> spp.	Sedge	13 +
Ignotum		1 -
Total No. of Seeds		65

Table XVI continued

OTHER PLANT REMAINS

		Other Samples	
		C	D
Deciduous leaf fragments		+	-
<u>Linum usitatissimum</u> L.	(Flax) Capsule fragments	36	-
<u>Salix</u> sp.	(Willow) Bud scales	+	-
Wood fragments		+	-

+ - present but unquantified

TABLE XVII

Minimum No. of Individuals

COLEOPTERA

Other Samples

C

<u>Rhantus</u> sp.	1
<u>Colymbetes fuscus</u> (L.)	4
<u>Helophorus</u> sp. (<u>brevipalpis</u> size)	1
<u>Cercyon</u> sp.	1
<u>Limnebius papposus</u> Muls.	1
<u>Stenus</u> sp.	1
<u>Aphodius</u> sp.	1
<u>Hippodamia tredecimpunctata</u> (L.)	1
<u>Donacia</u> sp.	1
<u>Donacia</u> or <u>Plateumaris</u> sp.	1
<u>Apion</u> sp.	1
<u>Sitona</u> sp.	1

TRICHOPTERA

Larval cases gen. et. sp. indet.	2
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PLANT AND INVERTEBRATE REMAINS FROM THE PRIORY DRAINS

by MARK ROBINSON

This microfiche section gives sample descriptions, methods and detailed results.

The Samples

- SW II 106/5 Grey organic clayey silt. The lowest layer excavated in the side drain.
- SW II 106/4 Brown sandy gravel with some silt. No organic preservation. The layer above 106/5.
- SW II 106/2 Dark grey gritty loam with many eggshell fragments. No organic preservation. A layer later than 106/4 in the sequence.
- S (1979) 202/5 Mixed grey and brown sandy gravel with a little silt and some limestone fragments. Some organic preservation. The bottom layer of the main culvert.
- S (1979) 202/4 Brown organic silt. The layer above 202/5.
- S (1979) 202/3 Dark grey highly organic silt with many leaf fragments. The layer above 202/4.

Methods and Results

Each sample was divided into two sub-samples, A and B. Sub-sample A was subjected to a wash-over process onto a 0.2mm aperture sieve in order to recover organic remains. The mineral fraction was then sieved over a 0.5mm mesh. The sieve residues were sorted for the full range of macroscopic plant and invertebrate remains. If preserved organic material was present, sub-sample B was subjected to paraffin flotation onto a 0.2mm sieve. The material that did not float was sieved over a 2mm mesh. The sieve residues were sorted for insect remains and any macroscopic plant remains not recorded from the first sub-sample. In some instances further material from these deposits was sieved over a 2.5mm mesh in order to recover small bones, primarily from fish. Additional macroscopic plant remains were recovered from these samples. Table XVIII shows the size of sub-samples A and B for each context and whether samples were also sieved for fish bones.

The results of the identifications are given in Tables XIX to XXIV. Nomenclature follows Clapham, Tutin and Warburg for the plants except for Prunus dulcis, Kerney and Walden for the molluscs, and the second edition of Kloet and Hincks for the Coleoptera (see footnote in main text for references). Tables XV to XXII give the minimum number of individuals in sub-samples A, while Tables XXIII to XXIV give the minimum number of individuals in sub-samples A + B. Plant and invertebrate remains were absent from Samples 106/4 and 106/2 apart from two calcium phosphate-replaced seeds of Brassica or Sinapis in sub-sample A of 106/2.

TABLE XVIII
SAMPLES FROM THE DRAINS
(SW II F106, S (1979) F202)

Context	Weight (kg) of sub-sample		Fish bone bulk sample
	A	B	
106/5	0.25	1.0	+
106/4	1.0	-	-
106/2	1.0	-	-
202/5	0.25	1.0	-
202/4	0.25	1.0	+
202/3	0.25	1.0	-

TABLE XIX

WATERLOGGED SEEDS		Number of Seeds			
		106/5	202/5	202/4	202/3
RANUNCULACEAE					
<u>Ranunculus</u> Sect. <u>Ranunculus</u> sp.	Buttercup	1	4	4	8
<u>R. sceleratus</u> L.		-	-	-	2
NYMPHAEACEAE					
<u>Nuphar lutea</u> (L.) Sm.	Yellow Waterlily	-	1	-	-
PAPAVERACEAE					
<u>Papaver rhoeas</u> L. <u>dubium</u> L.					
<u>lecoqii</u> Lam. or <u>hybridum</u> L.	Poppy	-	-	-	+
<u>P. somniferum</u> L.	Opium Poppy	-	-	-	+
<u>Chelidonium majus</u> L.	Greater Celandine	-	-	+	-
CRUCIFERAE					
<u>Brassica</u> cf. <u>nigra</u> (L.) Koch.	Black Mustard	27	26	23	+
<u>Brassica</u> or <u>Sinapis</u> sp.	Mustard, Charlock etc.	-	-	-	+
<u>Barbarea vulgaris</u> R.Br.	Yellow Rocket	-	2	4	2
<u>Rorippa</u> sp.		-	-	-	1
<u>Alliaria petiolata</u> (Bieb.) C.O.G.	Hedge Garlic	-	-	+	+
HYPERICACEAE					
<u>Hypericum</u> sp.	St. John's Wort	-	-	-	1
CARYOPHYLLACEAE					
<u>Silene</u> cf. <u>vulgaris</u> (Moen.) Gke.	Bladder Campion	-	-	1	+
<u>Lychnis flos-cuculi</u> L.	Ragged Robin	1	2	1	+
<u>Agrostemma githago</u> L.	Corn Cockle	-	1	1	1
<u>Cerastium</u> cf. <u>holosteoides</u> Fr.		-	-	-	1
<u>Stellaria media</u> sp.	Chickweed	+	2	+	1
<u>Arenaria</u> sp.		-	-	-	+

TABLE XXIV

		Minimum No. of Individuals			
		106/5	202/5	202/4	202/3
OTHER INSECTS					
ODONATA					
Gen. et sp. indet.		-	-	1	1
DERMAPTERA					
<u>Forficula auricularia</u> L.		-	-	1	-
HEMIPTERA					
Aphidoidea gen. et sp. indet.		-	-	1	3
<u>Behirus</u> sp.		-	-	1	-
<u>Scolopostethus</u> sp.		-	-	1	-
Heteroptera gen. et sp. indet.		-	-	-	1
TRICHOPTERA					
<u>Ithytrichia</u> sp.	Larval Case	-	1	35	43
<u>Orthotrichia</u> sp.	Larval Case	-	-	2	4
Gen. et sp. indet. (not above)	Larval Case	-	1	1	12
HYMENOPTERA					
<u>Myrmica ruginodis</u> Nyl.					
or <u>sulcinodis</u> Nyl.	Worker	-	-	-	1
<u>M. scabrinodis</u> sp.	Worker	-	-	1	-
<u>Stenamma westwoodii</u> West	Worker	-	-	1	1
<u>Lasius niger</u> sp.	Worker	-	-	1	1
<u>Lasius</u> sp. (not <u>fuliginosus</u>)	Queen	-	-	1	-
<u>Lasius</u> sp.	Male	-	-	1	1
<u>Apis mellifera</u> L.	Worker	-	-	1	-
Gen. et sp. indet (not above)		-	2	-	7
DIPTERA					
<u>Dilophus</u> sp.		-	-	1	1
Gen. et sp. indet.		-	-	2	2
Chironomidae	Larval head capsules	-	-	-	+
Diptera	Puparia	1	-	3	9

Table XIX continued

106/5 202/5 202/4 202/3

<u>Spergula arvensis</u> L.	Corn Spurrey	-	-	1	-
CHENOPODIACEAE					
<u>Chenopodium album</u> L.	Fat Hen	-	-	2	2
<u>C. ficifolium</u> Sm.	Goosefoot	+	-	-	-
<u>C. rubrum</u> L. or <u>botryodes</u> sm.		-	1	-	-
<u>Atriplex</u> sp.	Orache	1	1	-	-
MALVACEAE					
<u>Malva sylvestris</u> L.	Common Mallow	-	-	+	-
LINACEAE					
<u>Linum catharticum</u> L.		-	-	-	+
GERANIACEAE					
<u>Geranium robertianum</u> L. or <u>purpureum</u> Vill.	Herb Robert	-	-	5	1
ACERACEAE					
<u>Acer</u> cf. <u>campestre</u> L.	Common Maple	-	-	1	-
VITACEAE					
<u>Vitis vinifera</u> L.	Grape	f	1	1	+
PAPILIONACEAE					
<u>Medicago lupulina</u> L.	Black Medick	-	-	+	1
ROSACEAE					
<u>Filipendula ulmaria</u> (L.) Maxim.	Meadow-sweet	-	-	-	1
<u>Rubus idaeus</u> L.	Raspberry	-	-	-	1
<u>Potentilla anserina</u> L.	Silverweed	-	-	-	2
<u>Fragaria vesca</u> L.	Wild/Alpine Strawberry	-	+	3	10
<u>Geum</u> sp.	Avens	-	-	+	-
<u>Prunus domestica</u> L.	Plum	-	-	f	-

Table XIX continued

106/5 202/5 202/4 202/3

<u>P. dulcis</u> (Mill.) Webb	Almond	f	-	f	-
<u>P. avium</u> L.	Cherry	f	-	-	-
<u>Pyrus communis</u> L.	Pear	-	-	1	+
<u>Malus sylvestris</u> Mill.	Apple	-	-	-	1
CALLITRICHACEAE					
<u>Callitriche</u> sp.	Starwort	-	-	+	2
HYDROCOTYLACEAE					
<u>Hydrocotyle vulgaris</u> L.	Pennywort	-	-	+	-
UMBELLIFERAE					
<u>Anthriscus sylvestris</u> (L.) Hof.	Cow Parsley	-	-	+	-
<u>Conium maculatum</u> L.	Hemlock	+	-	-	-
<u>Apium nodiflorum</u> (L.) Lag.	Fool's Watercress	-	-	+	6
<u>Oenanthe</u> cf. <u>fistulosa</u> L.	Water Dropwort	-	-	-	+
POLYGONACEAE					
<u>Polygonum aviculare</u> agg.	Knotgrass	+	3	+	-
<u>P. persicaria</u> L.	Red Shank	1	+	-	-
<u>P. convolvulus</u> L.	Black Bindweed	-	-	1	-
<u>Rumex crispus</u> L.	Dock	-	-	+	-
<u>R. conglomeratus</u> Mur.	Dock	-	-	-	1
<u>Rumex</u> spp.	Dock	2	3	1	5
URTICACEAE					
<u>Urtica urens</u> L.	Small Nettle	-	-	1	+
<u>U. dioica</u> L.	Stinging Nettle	7	33	90	172
ULMACEAE					
<u>Ulmus</u> sp.	Elm	-	-	3	-
MORACEAE					
<u>Ficus carica</u> L.	Fig	+	7	9	15

Table XIX continued

106/5 202/5 202/4 202/3

JUGLANDACEAE

<u>Juglans regia</u> L.	Walnut	f	-	f	-
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BETULACEAE

<u>Alnus glutinosa</u> (L.) Gert.	Alder	-	-	1	-
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CORYLACEAE

<u>Corylus</u> sp.	Hazel	-	1	+	-
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PRIMULACEAE

Primulaceae gen. et sp. indet.		+	-	-	-
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OLEACEAE

<u>Fraxinus excelsior</u> L.	Ash	-	+	2	5
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MENYANTHACEAE

<u>Menyanthes trifoliata</u> L.	Bogbean	-	-	+	+
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BORAGINACEAE

<u>Myosotis</u> sp.	Forget-me-not	-	-	-	+
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SOLANACEAE

<u>Hyoscyamus niger</u> L.	Henbane	1	-	+	-
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<u>Solanum</u> cf. <u>dulcamara</u> L.	Woody Nightshade	-	-	1	+
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<u>S. nigrum</u> L.	Black Nightshade	-	-	1	+
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SCROPHULARIACEAE

<u>Pedicularis palustris</u> L.	Red-rattle	-	-	+	+
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LABIATAE

<u>Mentha</u> cf. <u>aquatica</u> L.	Water Mint	-	+	3	2
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<u>Lycopus europaeus</u> L.	Gipsy-wort	-	-	1	1
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<u>Prunella vulgaris</u> L.	Self-heal	+	+	-	3
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<u>Stachys</u> cf. <u>sylvatica</u> L.	Woundwort	-	-	3	-
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Table XIX continued

106/5 202/5 202/4 202/3

<u>Stachys</u> sp.	Woundwort	-	+	-	+
<u>Ballota nigra</u> L.	Black Horehound	1	-	-	1
<u>Lamium</u> sp.	Dead-nettle	-	+	-	1
<u>Glechoma hederacea</u> L.	Ground Ivy	1	-	-	-
<u>Ajuga</u> sp.	Bugle	-	-	+	+
PLANTAGINACEAE					
<u>Plantago major</u> L.	Plantain	1	1	1	1
RUBIACEAE					
<u>Galium aparine</u> L.	Goosegrass	-	-	+	-
<u>Galium</u> sp. (not <u>aparine</u>)	Bedstraw	-	-	+	1
CAPRIFOLIACEAE					
<u>Sambucus nigra</u> L.	Elder	-	-	1	1
VALERIANACEAE					
<u>Valeriana</u> sp.	Valerian	-	-	-	1
COMPOSITAE					
<u>Bidens</u> sp.	Bur-marigold	-	1	-	-
<u>Calendula</u> sp.	Marigold	f	-	-	-
<u>Anthemis cotula</u> L.	Stinking Mayweed	1	4	2	1
<u>Chrysanthemum segetum</u> L.	Corn Marigold	-	-	1	-
<u>C. leucanthemum</u> L.	Ox-eye Daisy	-	-	1	-
<u>Arctium</u> sp.	Burdock	f	-	-	1
<u>Centaurea</u> cf. <u>cyanus</u> L.	Cornflower	-	-	-	1
<u>Centaurea</u> sp.	Cornflower, Knapweed	-	-	1	-
<u>Lapsana communis</u> L.	Nipplewort	+	+	1	1
<u>Leontodon</u> sp.	Hawkbit	-	1	+	1
<u>Lactuca</u> cf. <u>serriola</u> L.	Wild Lettuce	-	1	-	-
<u>Mycelis muralis</u> (L.) Dum	Wall Lettuce	-	-	+	-
<u>Sonchus oleraceus</u> L.	Sow-thistle	-	-	+	2
<u>S. asper</u> (L.) Hill	Sow-thistle	3	-	-	+

Table XIX continued

106/5 202/5 202/4 202/3

<u>Hieracium</u> sp.	Hawkweed	-	-	+	+
<u>Taraxacum</u> sp.	Dandelion	-	-	+	1
Compositae gen. et sp. indet.		-	-	-	1
ALISMATACEAE					
<u>Alisma</u> sp.	Water Plantain	+	-	6	3
<u>Sagittaria sagittifolia</u> L.	Arrow-head	+	-	-	1
JUNCACEAE					
<u>Juncus effusus</u> gp.	Rush	-	-	11	10
<u>J. articulatus</u> gp.	Rush	-	-	10	51
<u>Luzula</u> sp.	Woodrush	-	-	-	+
LEMNACEAE					
<u>Lemna</u> sp.	Duckweed	-	-	-	1
CYPERACEAE					
<u>Eleocharis</u> s. <u>Palustres</u> sp.		-	-	+	3
<u>Carex</u> spp.	Sedge	-	2	4	11
Cyperaceae gen. et sp. indet.		-	-	-	8
GRAMINEAE					
of. <u>Triticum</u> sp.	Wheat	-	-	P	P
Gramineae gen. et sp. indet.	Grass	-	-	3	11
Ignota		-	-	-	+
Total		48	98	207	362

P, present but unquantified; +, present in insect sample;
f, present in fish bone sample

TABLE XX

OTHER WATERLOGGED PLANT REMAINS	106/5	202/5	202/4	202/3
Bud Scales	-	+	+	+
<u>Buxus sempervirens</u> L. (box) Leaf	-	-	+	+
Deciduous Leaf Fragments	+	+	+	+
of. <u>Fraxinus excelsior</u> L. (ash) Bud Scales	+	-	+	-
Leaf Abscission Pad	-	+	+	+
<u>Malus sylvestris</u> Mill. (apple) Endocarp Fragments	+	-	+	+
Moss Fragments	+	+	+	+
<u>Pteridium aquilinum</u> (L.) Kuhn (bracken) Frond Fragments	-	+	+	-
of. <u>Rosa</u> sp. (rose) Prickles	+	+	+	-
<u>Salix</u> sp. (willow) Bud Scales	+	+	+	+
<u>Salix</u> sp. (willow) Capsules	+	+	+	+
<u>Trifolium</u> sp. (clover) Calyx	-	-	-	+
Twig Fragments	-	-	+	+
<u>Ulex</u> sp. (gorse) Spiney Twigs	-	-	+	+

+, present in seed and mollusc sample

TABLE XXI

CARBONISED PLANT REMAINS	106/5	202/5	202/4	202/3
<u>Euphrasia/Odontites</u> sp. Seed	+	-	-	-
<u>Triticum aestivocompactum</u> Schiem. (wheat) Grain	+	-	-	-
<u>Ulex</u> sp. (gorse) Spiney Twigs	-	-	-	+
<u>Vicia/Lathyrus</u> sp. (vetch, tare) Seed	f	-	-	-

+, present in seed and mollusc sample;

f, present in fish bore sample

TABLE XXII

	Minimum No. of Individuals			
	106/5	202/5	202/4	202/3
MOLLUSCA				
GASTROPODA				
NERITIDAE				
<u>Theodoxus fluviatilis</u> (L.)	-	-	1	-
VIVIPARIDAE				
<u>Viviparus coniectus</u> (Milt.)	-	-	3	2
VALVATIDAE				
<u>Valvata cristata</u> Mull.	-	1	1	2
<u>V. piscinalis</u> (Mull.)	-	6	14	-
BITHYNIIDAE				
<u>Bithynia tentaculata</u> (L.)	-	-	8	-
<u>B. leachi</u> (Shep.)	-	1	-	-
<u>Bithynia</u> sp.	-	1	4	6
LYMNAEIDAE				
<u>Lymnaea truncatula</u> (Mull.)	-	1	-	-
<u>L. stagnalis</u> (L.)	-	-	2	-
<u>L. peregra</u> (Mull.)	-	-	1	-
PLANORBIDAE				
<u>Planorbis planorbis</u> (L.)	-	-	1	1
<u>Anisus vortex</u> (L.)	1	-	2	-
<u>Bathymphalus contortus</u> (L.)	-	1	1	-
<u>Gyraulus acronicus</u> (Fer.)	1	-	1	-
<u>Armiger crista</u> (L.)	1	-	2	-
ACROLOXIDAE				
<u>Acroloxus lacustris</u> (L.)	-	-	-	1

Table XXII continued

106/5 202/5 202/4 202/3

COCHLICOPIDAE

Cochlicopa sp.

- - 1 -

PYRAMIDULIDAE

Pyramidula rupestris (Drap.)

- 1 - -

ENDODONTIDAE

Discus rotundatus (Mull.)

- 1 1 -

ARIONIDAE

Arion sp.

- + + -

ZONITIDAE

Zonitoides nitidus (Mull.)

- - - 1

HELICIDAE

Helix aspersa Mull.

- - 1 -

BIVALVIA

UNIONIDAE

Unio pictorum (L.)

- 1 - -

SPHAERIIDAE

Sphaerium corneum (L.)

- - 2 1

Pisidium sp.

2 1 6 -

Total

5 15 52 14

TABLE XXIII

COLEOPTERA	Minimum No. of Individuals			
	106/5	202/5	202/4	202/3
CARABIDAE				
<u>Leistus spinibarbis</u> (F.)	1	-	1	-
<u>Nebria brevicollis</u> (F.)	-	1	1	-
<u>Clivina collaris</u> (Hbst.) or fossor (L.)	-	-	-	1
<u>Trechus micros</u> (Hbst.)	1	-	-	-
<u>Bembidion properans</u> Steph.	-	-	-	2
<u>B. gilvipes</u> Stm.	-	-	-	1
<u>B. biguttatum</u> (F.)	-	-	1	-
<u>B. cf. guttula</u> (F.)	-	-	-	2
<u>Pterostichus diligens</u> (Stm.)	-	-	1	1
<u>P. strenuus</u> (Pz.)	-	-	-	-
<u>Amara</u> sp.	-	-	1	-
<u>Harpalus affinis</u> (Schr.)	-	-	-	1
<u>Acupalpus</u> sp.	-	-	1	-
<u>Dromius</u> sp.	1	-	1	1
HALIPLIDAE				
<u>Halplus</u> sp.	-	-	-	1
DYTISCIDAE				
<u>Hydroporus</u> sp.	-	-	-	1
<u>Graptodytes</u> sp.	-	-	-	1
<u>Colymbetes fuscus</u> (L.)	-	-	1	1
GYRINIDAE				
<u>Gyrinus</u> sp.	-	-	1	-

HYDROPHILIDAE

<u>Helophorus aquaticus</u> (L.) or <u>grandis</u> (Ill.)	-	-	-	1
<u>Helophorus</u> spp. (<u>brevipalpis</u> size)	1	1	5	2
<u>Cerocyon</u> spp.	1	-	3	4
<u>Hydrobius fuscipes</u> (L.)	-	-	-	1
<u>Laccobius</u> sp.	-	-	-	1
<u>Chaetarthria seminulum</u> (Hbst.)	-	-	1	-

HYDRAENIDAE

<u>Octhebius</u> sp.	-	-	-	2
<u>Hydraena</u> sp. (not <u>testacea</u>)	-	-	2	2
<u>Limnebius papposus</u> Muls.	-	-	2	3

LEIODIDAE

<u>Choleva</u> or <u>Catops</u> spp.	-	-	2	-
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STAPHYLINIDAE

<u>Lesteva</u> sp.	1	-	3	2
<u>Omalium</u> sp.	-	-	-	1
<u>Coprophilus striatulus</u> (F.)	1	-	1	-
<u>Platystethus arenarius</u> (Fourc.)	-	-	-	1
<u>Anotylus rugosus</u> (F.)	-	-	2	1
<u>A. sculpturatus</u> (Gr.)	-	-	-	2
<u>Oxytelus sculptus</u> Gr.	-	-	-	2
<u>Stenus</u> sp.	-	-	1	1
<u>Gyrophypnus fracticornis</u> (Mull.)	-	-	-	1
<u>G. atratus</u> (Heer) or <u>fracticornis</u> (Mull.)	1	-	-	-
<u>Xantholinus linearis</u> (Ol.)	-	-	-	2
<u>X. linearis</u> (Ol.) or <u>longiventris</u> Heer	-	-	2	-
<u>Philonthus</u> sp.	-	-	-	2
<u>Quedius</u> sp.	-	-	1	-
<u>Tachyporus</u> sp.	-	-	-	1

PSELAPHIDAE

<u>Rybaxis laminata</u> (Mots.) or <u>longicornis</u> (Leach)	-	-	-	1
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TROGIDAE

<u>Trox scaber</u> (L.)	-	-	-	1
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GEOTRUPIDAE

<u>Geotrupes</u> sp.	-	-	-	1
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SCARABAEIDAE

<u>Aphodius contaminatus</u> (Hbat.)	-	-	-	1
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<u>A. cf. sphaelatus</u> (Pz.)	-	-	-	1
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<u>Aphodius</u> spp. (not above)	-	-	-	2
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<u>Aphodius</u> spp.	1	-	2	-
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CLAMBIDAE

<u>Calyptomeres dubius</u> (Marsh.)	-	-	1	-
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SCIRTIDAE

<u>Cyphon</u> sp.	-	-	3	1
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DRYOPIDAE

<u>Dryops</u> sp.	-	-	-	1
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ELMIDAE

<u>Oulimnius</u> sp.	-	-	1	1
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ELATERIDAE

<u>Agriotes</u> sp.	-	-	1	-
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cf. <u>Adrastus pallens</u> (F.)	-	-	1	-
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CANTHARIDAE

<u>Cantharis</u> sp.	-	-	-	1
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Table XXIII continued

106/5 202/5 202/4 202/3

DERMESTIDAE

Anthrenus sp.

- - - 1

ANOBIIDAE

Xestobium rufovillosum (De G.)

- - - 2

Anobium punctatum (De G.)

- - 3 3

PTINIDAE

Tipnus unicolor (P. & M.)

- - 2 8

Ptinus fur (L.)

1 - 2 2

CLERIDAE

Korynetes caeruleus (De G.)

- - 1 -

NITIDULIDAE

Brachypterus urticae (P.)

- - 1 -

Meligethes sp.

1 - 1 1

SILVANIDAE

Oryzaephilus mercator (Fauv.) or surinamensis (L.)

- - - 1

CRYPTOPHAGIDAE

Atomaria sp.

- - - 1

Cryptophagidae indet. (not above)

- - 1 2

PHALACRIDAE

Olibrus sp.

1 - - -

COCCINELLIDAE

Coccinella sp.

1 - 1 -

ENDOMYCHIDAE

Mycetaea hirta (Marsh.)

- - 3 -

Table XXIII continued

106/5 202/5 202/4 202/3

LATHRIDIIDAE

<u>Lathridius minutus</u> sp.	-	-	-	1
<u>Lathridius transversus</u> (Ol.)	-	-	-	1

COLYDIIDAE

<u>Aglenus brunneus</u> (Gyll.)	-	-	-	1
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CHRYSOMEIIDAE

<u>Gastrophysa viridula</u> (De G.)	-	-	1	-
<u>Plagiodera versicolora</u> (Laich.)	1	-	-	1
<u>Phyllotreta nigripes</u> (F.)	-	-	-	1
<u>P. vittula</u> Redt.	1	-	3	-
<u>Longitarsus</u> sp.	-	-	-	1
<u>Chaetocnema concinna</u> (Marsh.)	1	-	1	1

APIONIDAE

<u>Apion malvae</u> (F.)	-	1	-	-
<u>A. ulicis</u> (Forst.)	-	-	-	1
<u>A. cracca</u> (L.)	-	-	-	1
<u>Apion</u> spp. (not above)	-	-	2	2

CURCULIONIDAE

<u>Phyllobius</u> sp.	-	-	1	1
<u>Barypeithes</u> sp.	-	-	-	1
<u>Sitona</u> sp.	-	-	1	1
<u>Alophus triguttatus</u> (F.)	-	-	-	1
<u>Leiosoma deflexum</u> (Pz.)	-	-	-	1
<u>Sitophilus granarius</u> (L.)	-	-	1	2
Ceutorhynchinae gen. et sp. indet.	-	-	2	2
<u>Rhynchaenus alni</u> (L.)	-	-	2	1

SCOLYTIDAE

<u>Leperisinus varius</u> (F.)	-	-	-	2
<u>Acrantus vittatus</u> (F.)	-	-	-	1
Total	16	3	72	100