JAMES S RIDEOUT (ED)

LOWER GREENYARDS, BANNOCKBURN

MICROFICHE CONTENTS

Table 6 Coarse pottery catalogue

V J McLellan, Ann MacSween, Jenny Lee

Note :- T = thickness, Wt = Weight, Dia = diameter, Ht = height.
The pottery is grouped together by vessel.

Fort 1982 Season

CONTEXT	SF no	SF Description
Ditch 0	45/529	1 abraded body sherd. Orange with grey core. Fine clay tempered with 20% angular rock fragments (11-14 mm). T = 20 mm, Wt = 44 g.
Palisade 2	45/224	3 abraded body sherds Red exterior, grey interior. Very fine clay tempered with 10% angular rock fragments (8-10 mm). Probably slipped. T = 14 mm, Wt = 24 g.
Ditch 0	45/642	
Area 4, unstrat	45/573	
House 1, ring groove	45/115 45/248	4 body sherds, 2 surface flakes of a coil-constructed vessel. Bright orange exterior, buff interior, pale grey core. Fine clay with micaceous content, tempered with 20% angular rock fragments (5-7 mm), many of which protrude through the surface of the vessel. T = 11-14 mm, Wt = 135 g.
House 1, poss innermost ring post F33	45/410	
Palisade 0	45/250	
Palisade 2	46/646	
Area 1, unstrat	45/18	
House 1, ring-groove	45/107	Internal surface flake. Buff. Untempered fine micaceous clay. Wt = 1 g.

CONTEXT	SF no	SF Description
House 1, ring-groove	45/121	Possible rim (plain). Buff. Fine clay with some possible quartz sand addition. T = 8 mm, Wt = 1.5 g.
House 1 ring-groove	45/226	5 abraded body sherds. Orange exterior, grey interior. Very fine micaceous clay tempered with 10% small mixed gravel (5-8 mm). T = 9 mm, Wt = 33 g.
Palisade 0	45/227	
Ditch 0	45/641	
Area 1, A-horizon	45/146 45/156	
House 1, ring-groove	45/460	3 surface fragments. Orange. Untempered fine clay. Wt = 7 g.
Area 2, ditch (narrow) fill	45/257	
Palisade 0	45/409	Surface flake. Orange exterior, grey core. Wt = 7 g.
Fire plt F30	45/532	6 surface fragments. Buff exterior and grey core. Fine clay tempered with 10% angular rock fragments (6-8 mm).
Area 1, fire plt F35	45/571	1 rim, 1 surface fragment. Probable plain rim. Orange with a grey core.
Area 1, B/C horizon	45/58	Very fine micaceous clay, tempered with 20% angular rock inclusions (3-8 mm). T = 13 mm, Wt = 9 g.

CONTEXT	SF no	SF Description
Area 1, misc pit	45/229	1 body sherd, 2 exterior flakes. Red. Untempered fine micaceous clay.
Area 1, B/C horizon	45/64 45/96	Wt = 9. g.
Area 1, misc pit	45/422	Surface flakes. Red. Very fine untempered clay. Wt = 5.7 g.
Area 4, ditch	45/255	1 body sherd. Grey interior, red exterior. Very fine clay tempered with 30% angular rock fragments (7-11 mm). T = 19 mm, Wt = 79 g.
Area 4, Ditch	45/579 45/580 45/586	Rim sherd, basal sherd and 2 body sherds (one is from the flat part of the base and has a raised centre) from a decorated vessel. Plain rim and pedestal base. Probably slipped on the exterior. Exterior decorated with finely incised lines. A line runs horizontally below the rim, and below this is a further pair of horizontal lines parallel to it. Directly below this pair of lines are pairs of diagonal lines forming a 'basket weave' pattern which extends to the base of the vessel. Coil constructed. Fine clay with 10% of well-ground (1-2 mm) inclusions. T = 7 mm, Wt = 57 g, rim Dia = 105 mm.
Area 4, ditch	45/587 45/588	2 rim sherds, 1 body sherd. Rim rolled and sharply everted. Grey with buff exterior surface. Very fine clay with large inclusions of quartz and siltstone (up to 5 mm). T = 10 mm, Wt = 28 g.

CONTEXT	SF no	SF Description
Area 6, pit recut	45/635	2 exterior flakes. Red exterior, grey interior. Fine micaceous clay tempered with
Area 6, A-horizon	45/47	10% angular rock inclusions (1-3 mm). Wt = 5g.
Area 1, animal disturbance	45/62	External surface flake. Red surface, dark grey core. Untempered fine micaceous clay (grits are from secondary burning). Wt = 4.6 g.
Area 1, A-horizon	45/144	1 body sherd. Buff exterior, orange interior. Very fine micaceous clay tempered with 40% angular rock inclusions (3-5 mm). T = 13 mm, Wt = 14 g.
Area 1, A-horizon	45/168	1 rim sherd, rounded. Grey with buff surfaces. Very fine clay with 10% quartz sand. T = 6-10 mm, Wt = 4.2 g, Dia = indeterminate.
Area 1, B/C horizon	45/60	1 body sherd, abraded. Buff with a red core. Untempered fine micaceous clay. Has undergone secondary burning. Wt = 4.5 g.
Area 1, B/C horizon	45/74	Exterior surface flake. Buff. Very fine micaceous clay tempered with 10% angular rock fragments (10-13 mm). Wt = 17.5 g.
Area 1, B/C horizon	45/76 45/77	1 body sherd. Buff with a grey core. Very fine micaceous clay tempered with 30% angular rock inclusions (4-10 mm). T = 23 mm, Wt = 54 g.

CONTEXT	SF no	SF Description
Area 1, B/C horizon	45/84	1 sherd, from flat part of base. Red. Clay has natural igneous inclusions. The base has organic impressions probably due to the modelling of the base on the ground. T = 8 mm, Wt = 7 g.
Area 1, B/C horizon	45/88	Abraded body sherd Grey with red exterior surface. Very fine micaceous clay tempered with 10% angular rock inclusions (up to 11 mm). Coil constructed. T = 12 mm, Wt = 6 g.
Area 1, B/C horizon	45/110	Interior surface fragment. Dark grey. Very fine micaceous clay tempered with 20% angular rock inclusions (7-12 mm). Wt = 3g.
Area 3, A-horizon	45/51	1 body sherd. Red. Very fine clay with a mica content tempered with 10% angular rock inclusions (2-8 mm). T =10 mm, Wt = 3.1 g.

Fort 1985 Season

CONTEXT	SF no	SF Description
Ditch 2, upper cut	94/97	1 body sherd, slipped on the exterior and interior. Orange with a grey core. Coil constructed. Fine clay tempered with 20% angular rock fragments (6-11 mm). T = 19 mm, Wt = 61 g.
Ditch 2, high	94/100	1 body sherd, slipped on the exterior and interior. Grey with buff surfaces. Fine clay tempered with 30% angular rock fragments (5-8 mm). T = 16 mm, Wt = 42.4 mm.
Ditch 2	Sample G2601	1 small rim fragment, rounded lip. Pale grey with orange surfaces. Very fine clay with 10% rock inclusions (up to 4 mm). Wt = 2 g.
Ditch 2 Ditch 5	94/114 94/67	2 body sherds, exterior slipped. Red exterior, grey interior. Fine clay tempered with 10% angular rock fragments (8-11 mm). T = 11-18 mm, Wt = 102 g.
Ditch 2	94/116	2 body sherds. Grey with orange surfaces. Fine clay with 10% angular rock fragments. T = 13 mm, Wt = 14 g.

CONTEXT	SF no	SF Description
Ditch 2	94/126 94/155	About a third of a coil-built vessel, forming a complete rim to base profile. Exterior has remains of a thick slip. Shouldered vessel with an inturned rim. Fine clay with 30% angular rock inclusions. T = 18-22 mm, Ht = 366 mm, Wt = 2420 g.
Ditch 2, terminal	94/109 94/118 94/119	2 body sherds, 2 fragments, exterior slipped. Orange exterior, grey core. Fine clay with 10% angular rock fragments. T = 12 mm, Wt = 36 mm.
Ditch 5	94/58 94/60 94/62 94/63 94/65 94/69 94/71 94/72 94/73 94/75 94/78	1 base (rounded angle), 3 rim sherds (heavily inverted), 4 body sherds, 4 flakes (3 exterior, 1 interior). Buff with grey core. Fine clay tempered with 20% angular rock fragments (15-18 mm). N-shaped coil junctions. T = 21 mm, Dia = 400 mm, Wt = 385 g.
Ditch 2	94/115	
Ditch 5	94/59 94/61 94/86 94/89 94/70	5 body sherds (2 have exterior surfaces only), slipped on the interior and exterior. Buff with grey core. Very fine clay tempered with 30% angular rock fragments (14-22 mm). N-shaped coil junctions. T = 19-24 mm, Wt = 175 g.

CONTEXT	SF no	SF Description
Ditch 5	94/79 94/80 94/82 94/88 94/111	6 body sherds (5 have one surface only). Buff exterior, grey interior. Fine clay tempered with 30% angular rock fragments (11-16 mm). T = 11-18 mm, Wt = 102 g.
Area 8, ditch fill Area 8, hillwash	94/94 94/98 94/92	1 rim sherd, 2 surface fragments. Orange exterior, grey interior. Fine clay tempered with 10% angular rock fragments (5-13 mm). T = 12 mm, Wt = 17 g.
Area 8, hillwash	94/96	Abraded exterior surface flake. Grey with a buff core. Fine clay with occasional inclusions (4-8 mm), probably natural. Wt = 13.6 g.
Area 8, ditch fill	94/133	Body sherd. Buff exterior, orange core, grey interior. Fine clay tempered with 10% mixed gravel inclusions. T = 18 mm, Wt = 11 g.
Antenna 1 Area 9, animal disturbance	94/56 Sample G2577	1 rim (plain), 1 body sherd. Grey with orange exterior. Fine, untempered clay. Wt = 4 g.
Area 10, A-horizon	94/31	Exterior surface fragment. Dark grey with orange surface. Fine, untempered clay. Wt = 8.5 g.

Homestead 1, 1984 Season

CONTEXT	SF no	SF Description
Palisade main fill	60/18	1 pottery fragment, abraded. Red. Fine clay tempered with small angular rock inclusions (2-3 mm). Wt = 0.9 g.
Post-pipe in palisade	60/23	1 pottery fragment, abraded. Brown with red exterior surface. Fine clay tempered with mixed gravel (2-7 mm). Wt = 6.4 g.
Packing soil in palisade	60/26	1 rim sherd, beaded, with small incised lines below the beading on the exterior. Brown. Fine clay with small angular inclusions up to 2 mm. T = 10 mm, Wt = 9 g.
Post-pipe in palisade	60/27	1 body sherd. Grey with red exterior margin. Tempered with small angular r inclusions (2-4 mm). T = 10 mm, Wt = 9.3 g.
Dumbbell - shaped pit	60/28	1 body sherd. Grey with brown exterior surface. Fine clay, inclusions up to 5 mm in length (may be natural). T = 10 mm, Wt = 4.3 g.

Table 7 Medioval pottery finds list

Derek Hall

Fort 1982 Season (FInds 45/--)

Context	Find No.
Area 1, misc posthole	411
Area 2, upper fill of later, broad, ditch cut	253
Area 1, A-horizon	6
"	23
"	13
"	14
"	20
"	21
"	22
"	164
"	633
Area 1, B-horizon	37
Area 1, B/C-horizon	26
"	65
"	71
"	73
"	86
"	87
"	104
"	105

Rideout: medieval pottery - Sheet 1/B13-C2

Context	Find No.
Area 1, B/C-horizon	108 + 109
"	117
"	119
"	466
Area 1, modern quarry	400
Area 3, A-horizon	53
Area 3, hillwash	97
Area 3, modern lynchet	114
Area 3, modern pit	135
Area 4, A-horizon	166
"	169

Fort 1985 Season (Finds 94/--)

Context	Find No.
Ditch 1, top fill	127
Ditch 2, B-horizon	90
Ditch 3, B-horizon	14
"	16
"	22
"	23
Ditch 4, A-horizon	4
"	76

Rideout: medieval pottery - Sheet 1/B13-C2

Context	Find No.
Ditch 5, B-horizon	7
"	9
"	11
"	12
"	50-52
Palisade 6	55
Palisade 8	44
Antenna 4	107
House 3, wall-groove	148
Area 10, misc pit	102
Area 8, A-horizon	49
Area 8, hillwash	110
Area 9, A-horizon	2
"	3
Area 10, A-horizon	18
"	20
"	21
"	25
"	29
"	32
"	33
"	34
"	35
"	36

Rideout: medieval pottery - Sheet 1/B13-C2

Context	Find No.
Area 10, A-horizon	37
"	38
Area 10, B-horizon	24
Area 10, hillwash	141
Area 10, tree-root hole	156
Unstratified	46
"	66
"	103
"	113
"	139
"	143
"	152

Homestead 1 (Finds 60/---)

Context	Find No.
A-horizon	13
B-horizon	10
Medieval topsoil	3-4
"	8
"	11
Outer house slot	17
Post-pipe in outer ring posthole HF15	16
Misc. pit HF20	2

Table 8 Chemical composition of the Bannockburn glass bead SF 45/160 (weight percent oxide)

Julian Henderson

Analysis No.	1	2	3
Glass colour	**opaque blue**	**transparent blue**	**opaque white**
Element oxide			
Na_2O	11.0	12.8	7.6
MgO	1.0	1.0	1.0
Al_2O_3	2.6	2.7	2.6
SiO_2	69.4	70.0	71.2
P_2O_5	ND	ND	ND
SO_3	0.4	0.3	0.3
Cl	1.1	1.1	1.1
K_2O	0.9	0.8	0.8
CaO	7.5	7.4	6.8
TiO_2	0.09	0.09	0.09
MnO	0.6	0.5	0.8
Fe_2O_3	1.0	1.0	1.1
CoO	ND	ND	ND
NiO_2	ND	ND	ND
CuO	0.7	0.7	0.8
As_2O_3	ND	ND	ND
SnO_2	0.1	0.1	6.0
Sb_2O_3	1.6	1.4	0.4
PbO	1.0	0.85	10.8

Note: ND = not detected.

Table 9 Copper alloy catalogue

J S Rideout

Two copper-alloy finds recovered from the 1982 season were believed to have been mislaid when the metalwork report (Jenny Shiels) was prepared. The descriptions are given here.

Context	SF no	SF Description
B-horizon	45/30	Small rectangular piece of copper alloy sheet. 16 mm x 9 mm x 1 mm.
Area 3, Modern pit	45/127	Small scrap of copper alloy sheet, less than 10 mm wide.

Table 10 Iron finds catalogue

Amanda Clydesdale

Fort 1985 Season

Context	SF no	SF Description
B-horizon over Ditch 5	94/5	Fragments of an iron nail shaft. Lab no 870946.
A-horizon	94/19	Iron 'curry' comb bearing a disc of copper-based alloy on which the word 'Jockeys Choice' are printed. The disc has pellets round its edge and a seven-petalled flower in the centre. It most probably dates to the early decades of this century. Length 100 mm, Width 112 mm. Lab no 870947.
B-horizon over Ditch 5	94/41	Thin iron strip bent midway along its length to form a loop like a shepherd's crook. No indication of its function is possible and it bears no other features. Length 170 mm, Width 20 mm. Lab no 870945.
B-horizon over Ditch 5	94/42	Heavily corroded iron nail shank with no identifiable features. Lab no 870944.

Homestead 1 (1984 Season)

Context	SF no	SF Description
Cinder spread beside rectangular building	60/1	Iron nail with a rectangular shaft and flat-topped rectangular head, bent from one third of the way up from the tip and formed into a hook. Length 86 mm, width 3 mm, thickness 2 mm. Lab no 870942.
Subsoil surface	60/7	Corroded iron nail, too fragmented to have recognisable characteristics. Length 53 mm. Lab no 870943.
Dumbbell-shaped pit	60/22	Iron knife with a whittle tang. Such knives are common in medieval Scotland between the 14th and 16th centuries. Length 137 mm. Lab no 870959.

At the time that this catalogue was prepared, it was believed that the iron objects from the 1982 season had been lost. They have since been recovered and are listed below. Unlike the metalwork from the 1984 and 1985 seasons, the following finds have not been treated for conservation.

Fort 1982 Season

Context	SF no	SF Description
Ditch 0	45/574	Small, irregular lumps of corroded iron.
Ditch 0	45/576	Iron corrosion attached to a small stone. Function unknown.
Area 1, possible posthole	45/697	From Sample 359. Badly corroded iron loop or nail bent almost double. Bent length 40 mm, surviving thickness 4 mm.
A-horizon	45/151	Small fragments of corroded iron. Probably originally a small piece of flat sheet.
A-horizon	45/153	Badly corroded possible nail fragment. Length c 45 mm.
A-horizon	45/154	Broken corroded iron bar - function unknown. Original length greater than 60 mm.
B/C-horizon	45/80	Small corroded fragments of iron.
Modern pit	45/474	Corroded iron object - L-shaped with long side flatter and wider than the short side. 30 mm long, 12 mm maximum width.
Subsoil	45/31	Lump of iron corrosion
Animal	45/294	From Sample 42. Tiny fragments of disturbance corroded iron.
Area 3, Modern pit	45/113	Recorded as a modern builder's line leaf. Badly corroded and broken into fragments making identification impossible. Length at least 75 mm.

Table 11 Chipped Stone catalogue

Bill Finlayson

Measurements in millimetres

Fort 1982 season

CONTEXT	SF no	SF Description
Ditch 0	45/634	Burnt flint flake, 20 x 22 x 4, original colour lost during burning. Edges heavily damaged by heat fracturing.
Ditch 0	45/703	Quartz flake, 14 x 13 x 8, on fine-grained milky quartz. Probably deliberately flaked.
Fire pit F30	45/534	Translucent dark grey flake (< 10 mm max dimension). Possibly from bladelet core.
"	"	Translucent orange chalcedony flake (< 10 mm max dimension). Parallel dorsal ridges indicate that it is possibly from a bladelet core, truncated by a burin blow (as a microburin), but no associated microlithic retouch.
Pit F36	45/706	Very badly burnt flint flake, 15 x 20 x 7, with no clear trace of original flake morphology other than a thick platform with pronounced bulb of percussion. Some cortex remaining.
Area 1, misc. posthole	45/196	Tiny (< 0.5 mm max dimension) pale grey flake.
Area 1, misc. pit	45/284	Tiny (< 0.5 mm max dimension) translucent dark grey flint flake. Terminates with a hinge fracture, but dorsal ridges suggest that the flake may have come from a bladelet core.
Area 1, misc. pit	45/504	Tiny (< 0.5 mm max dimension) translucent dark grey flint flake.

Rideout: chipped stone - Sheet 1/C7-C11

CONTEXT	SF no	SF Description
Area 1, B/C horizon	45/49	Translucent quartz flake, 16 x 20 x 5, deliberately manufactured.
Area 1, modern pit	45/252	Flake, probably chert, 20 x 5 x 3.
Area 5, hillwash	45/661	Quartz flake, 29 x 16 x 6, of grey, coarse-grained material. The blank is a flake from the outside of a quartz pebble, and it is unclear whether or not it was deliberately made. However, there are clear traces of deliberate secondary modification. The two long convergent edges have been abruptly retouched to form a thick pointed tool, or awl. The point of this tool has damage that appears to initiate from the tip, presumably resulting from pressure occurring during tool use.
Area 3, hillwash	45/82	Burnt and discoloured flake of chert or flint, 16 x 15 x 3.
Area 3, misc. posthole	45/199	Grey flint flake, 11 x 11 x 2. It has fine normal abrupt retouch down one lateral margin, and is truncated by inverse abrupt retouch. The piece is split longitudinally by a burin break, either during or after the secondary modification. The piece does not fall into any typological category, although in size and type of retouch, it has a distinctly 'microlithic' appearance.
Area 4, ditch	45/577	Flaked siltstone, 26 x 24 x 7. Some abrasion of edges and some deliberate secondary flaking.

CONTEXT	SF no	SF Description
Area 4, ditch	45/527	Large quartz flake, 67 x 47 x 20. The material is coarse and grainy. Some of the quartz pebble's original weathered surface is still present, forming a 'naturally backed' flake with the opposed side straight and sharp. This edge has continuous minute flake removals on both faces, suggesting use, probably as a cutting tool.
Area 4, ditch	45/528	Secondary flake of coarse-grained quartz, 31 x 15 x 5, of a similar material to, if not from the same block, as 45/527.
Area 4, A-horizon	45/19	Thick flint flake, 17 x 15 x 8. The flint is heavily patinated, and much of the dorsal surface is chalky cortex. The flake has been modified to form a thick scraper on the proximal end, with the retouch removing the bulb of percussion. The retouch extends nearly completely around the flake.
Area 4, A-horizon	45/167	Dark grey flint chunk, 26 x 24 x 16. Some battered (beach pebble type) cortex remaining. Several flakes removed from the chunk, which has also been damaged and crushed, possibly by ploughing.
Area 6, pit recut	45/709	Fragment of a flake (possibly bladelet segment, < 10 mm max dimension) of pitchstone (green/black).
Area 6, pit recut	45/712	Semi-translucent grey flint flake, 16 x 21 x 8. Retouched into a 'thumbnail scraper', with a thick (8 mm) convex scraper edge distal end. Pressure flakes removed from proximal end to thin bulb of percussion.
Area 6, pit recut	45/638	Shattered milky quartz pebble, 33 x 27 x 15. Impossible to determine whether the piece is the result of a failed knapping attempt or of non-anthropogenic origin.

Rideout: chipped stone - Sheet 1/C7-C11

Fort 1985 season

CONTEXT	SF no	SF Description
Ditch 1, uppermost fill	94/135	Agate (banded), inner, irregular flake with battered edges, 11 x 10 x 5
Ditch 4, B-horizon	94/27	Quartz, flake, possibly deliberate, 22 x 27 x 14,
Ditch 5, B-horizon	94/13	Flint (dark grey), inner, irregular flake, 16 x 12 x 3
Ditch 5, B-horizon	94/39	Agate (banded), secondary, irregular flake, battered edges, 13 x 12 x 6
Ditch 5, B-horizon	94/53	Coarse stone, flake, probably made by the heat shattering of a cobble
Ditch 5, high in last recut	94/57	Flint, inner, irregular flake, burnt (burning makes material identification difficult), 21 x 12 x 5
Ditch 5, high in last recut	94/99	Chert/Flint, secondary, irregular flake, burnt, (burning makes material identification impossible), 25 x 18 x 12
Palisade 4	94/137	Agate/Flint, inner, irregular flake, burnt (burning makes material identification difficult), 23 x 14 x 6,
Palisade 8	94/43	Quartzite, inner, regular flake, definitely struck, point of percussion clearly visible, 25 x 23 x 13
Antenna 1	94/101	Flint, inner, irregular flake, burnt, 23 x 20 x 4
Area 9, A-horizon	94/130	Flint, inner, irregular flake, burnt, possibly retouched, but damage caused by burning makes it impossible to be sure, 22 x 14 x 12
A-horizon	94/105a	Quartz, irregular flake, retouched, 13 x 12 x 5

Rideout: chipped stone - Sheet 1/C7-C11

A-horizon	94/105b	Quartz, irregular flake, possibly retouched, 14 x 11 x 5
Unstratified	——	Agate (banded), inner, irregular flake, 9 x 9 x 4

Homestead 1 (1984 season)

CONTEXT	SF no	SF Description
Post-pipe in palisade	60/29	Chert (grey), inner, irregular flake, 15 x 13 x 4.
Palisade fill	60/30	Flint (red brown), inner, irregular flake, 9 x 10 x 5

Table 12 Coarse Stone Artefacts catalogue

Ann Clarke

Measurements in millimetres

Fort 1985 season

CONTEXT	SF no	SF Description
House 1, F4	45/188	Fragment of a sandstone slab. One face is completely flat and has been worn very smooth. Thickness 27.
Palisade 0	45/414	Saddle quern of sandstone, sub-trapezoidal in plan. One face is concave and parts have been worn right out to the edges, although on one edge there is a flat undeveloped rim. 350 x 220 x 85.
Ditch 0	45/585	Fragment of a shale ring which has been cleaved from one face. Probable D-shaped section. Inner diameter 18, outer diameter 24.
Area 1, misc. posthole	45/412	Saddle quern. The greater part of a sub-rectangular slab of coarse grit. Very fragmented and burnt. One face is shallow concave in section and has been worn right out to the edges. 450 x 330 x 70.
Area 1, misc. posthole	45/519	Flat sandstone cobble. Burnt. No signs of wear. 118 x 91 x 48.
Area 1, misc. pit	45/628	Fragment of a sandstone cobble. Both faces are smooth, possibly natural. No measurements.
Area 1, subsoil surface	45/695	Very small fragment of ?jet. Impossible to tell if worked. No measurements.
Area 1, B/C horizon	45/67	Battle axe of quartz dolerite. Broken across shaft-hole with butt end surviving. The butt is expanded with a flattened end. Ground all over, the shaft-hole has a polished interior. 52 thick (38 at shaft-hole), 43 wide, diameter of shaft-hole 21.

CONTEXT	SF no	SF Description
Area 1, A-horizon	45/2	Spindle whorl of sandstone. Ground all over with rounded faces and sides. Central perforation is bi-conical in section. Diameter 40, thickness 17, diameter of hole 6, weight 43 g.
Area 1, A-horizon	45/17	Fragment of shale, sub-rectangular in shape. Small perforation made in the centre. Width 25, thickness 5, diameter of hole 4.
Area 1, A-horizon	45/136	Elongated oval cobble of sandstone, burnt. Possibly lightly pecked area on one end. 114 x 54 x 46.
Area 1, A-horizon	45/161	Fragment of a cobble of coarse dolerite. One face is smooth and shiny and has been worn right out to the edges. Probable grinder. No measurements.
Area 1, A-horizon	45/461	Unworked pebble of agate.
Area 1, unstrat.	45/89	Fragment of coarse grit. One face has been worn right out to the edges. Probable grinder. No measurements.
Area 1, unstrat.	45/90	Sub-rectangular pebble of coarse sandstone. Most probably used as a hone although the wear is not fully developed. 117 x 40 x 33.
Area 1, unstrat	45/91	Fragment of sandstone slab. One face is gently convex in section and has been worn very smooth. Thickness 31.
Area 1, unstrat	45/---	Irregular block of sandstone, burnt. One face is heavily pecked to form a rough hollow. 290 x 255 x 115.
Area 3, modern pit	45/129	Small rough piece of ?jet. Unworked. The surface is very shiny. No measurements.

Homestead 1 (1984 season) Catalogue

CONTEXT	SF no	SF Description
B-horizon	60/9	?Spindle whorl of siltstone. Fragment. Ground all over with flat faces and sides. Perforation is straight sided. Diameter 35, thickness 5, diameter of hole 6.
Dumbbell - shaped pit	60/15	Small natural rounded pebble of sandstone. ?slingstone. 29 x 26 x 21.
Recut in palisade	60/25	Cobble of coarse sandstone. Smooth facets have been worked around most of the perimeter, sometimes forming a slight ridge 75 x 71 x 49.

Note - when the above catalogue was created by Ann Clarke, the coarse stone finds from the 1985 Fort season had been mislaid. They have since been recovered. All but one of the 'finds' were naturally-shaped stones. The exception, detailed below, does not alter the interpretation of the finds.

Fort 1985 season

CONTEXT	SF no	SF Description
unstrat 'pin-	*94/132*	*Slightly irregular stone disc of shale with a tiny prick' in its centre representing the start of a perforation. 46 x 42 x 5.*

Table 13 Carbonised seeds catalogue

Alan Fairweather

Fort 1982 Season

Context	Site Context No.	Sample No.	Species	Quantity
Ditch O	A261	352	*Hordeum*	1
			Avena	1
			Legume of *Lathyrus* sp	1
"	A262	363	*Hordeum* (& fragments)	6
			Arena	23
			Stellaria media	2
			Chenopodium cf *album* frag	1
			Eleocharis uniglumis / palustris	1
"	A262	364	*Hordeum vulgare* hulled	200
			Avena cf *sativa*	100
			Persicaria maculosa / lapathifolia	21
			Raphanus raphanistrum	1
			Galeopsis tetrahit agg	3
			Chenopodium album	14
			Stellaria media	1
			Lapsana communis	10
"	B270	340	*Hordeum*	5
"	B270	341	*Triticum*	2
			Hordeum	5
			Spergula arvensis	1
			Corylus shell fragment	1
"	B270	370	*Hordeum*	5
			Corylus shell fragment	1
"	B270	373	*Hordeum* (& fragments)	5
			Legume cf *Lathyrus* sp	1
"	B281	365	*Hordeum* (& fragments)	8
			Avena (")	12
			Lapsana communis	1

Rideout: carbonised seed - Sheet 1/D1-E1

Context	Site Context No.	Sample No.	Species	Quantity
Ditch 0	B282	366	*Hordeum*	70
			Avena	70
			Spergula arvensis	7
			Rumex obtusifolius / crispus	4
			Fallopia convolvulus	1
			Rubus fruticosus agg	1
			Chenopodium cf *album*	8
			Silene dioica	1
			Stellaria media	1
			Lapsana communis	1
			Poa annua	1
			Gramineae (indeterminate)	1
Palisade 2	A226	302	cf *Corylus* shell fragment	1
"	B069	344	*Avena* fragments	-
			Persicaria maculosa / lapathifolia	1
"	B071	312	*Hordeum*	1
			Avena	1
			Polygonum aviculare agg	1
"	B071	313	*Hordeum* fragments	-
			Rumex acetosella	1
"	B071	314	*Avena* fragment	1
"	B106	82	*Avena* sp	1
"	B143	134	*Hordeum* sp	1
			Persicaria maculosa / lapathifolia	1
"	B148	337	*Triticum*	1
			Thlaspi arvense	1
			Persicaria maculosa / lapathifolia	1
"	B249	319	cf *Chenopodium* fragment	1
"	B249	330	Cereal cf *Hordeum* frags	2
"	B263	338	*Chenopodium* fragment	1

Rideout: carbonised seed - Sheet 1/D1-E1

Context	Site Context No.	Sample No.	Species	Quantity
Palisade 1	A219	306	Cereal fragments	-
			Stellaria media	1
Antenna 2	B072	318	Fucoid Algae	2 thali
"	B254	316	*Hordeum* fragment	1
House 1, ring-groove fill	A010	139	*Hordeum*	1
			Avena	1
			Spergula arvensis	1
"	A010	140	*Hordeum* sp	3
			Avena fragment	1
			Spergula arvensis	1
			Chenopodium album	2
			Persicaria maculosa / lapathifolia	1
"	B079	55	*Hordeum vulgare*	1
			Chenopodium album	1
House 1, ring-groove fill	B079	131	*Hordeum* fragment	1
			Chenopodium album	4
			Persicaria maculosa / lapathifolia	2
"	C010	138	*Hordeum* sp	2
			Chenopodium album	1
			Stellaria media	1
"	C010	146	*Avena* sp	1
House 1, ring-groove post-pipe	A137	211	*Avena* fragment	1
			Cereal cf *Hordeum*	1
			Corylus shell fragment	1
"	A139	212	Cereal cf *Hordeum*	1
			Viola subgenus *viola* sp	1
			Rumex crispus / obtusifolius	1
"	A141	213	*Hordeum*	1
			Avena (& fragments)	3
			Atriplex sp	1
"	A143	214	*Hordeum*	1
			Avena (& fragments)	2

Rideout: carbonised seed - Sheet 1/D1-E1

Context	Site Context No.	Sample No.	Species	Quantity
"	A145	215	*Avena*	4
			Hordeum (& fragments)	4
			Chenopodium cf *album*	1
			Corylus shell fragment	1
"	A147	220	abraded seeds	3
House 1, ring-groove, post-pipe	A171	249	*Triticum* cf *aestivo compactum*	1
			Hordeum	3
			Stellaria media	1
			Spergula arvensis	1
			(ignotum)	1
"	A172	252	*Chenopodium / Atriplex* sp	1
"	A173	251	*Triticum*	1
House 1, Inner ring F1	A077	137	*Hordeum* sp	1
			Hordeum fragment	1
House 1, Inner ring F2	A057	123	*Hordeum vulgare*	2
			Avena sp	2
			Viola sp	1
			Sinapis cf *arvensis*	2
			Legume cf *Trifolium* sp	1
House 1, Inner ring F4	A031	45	*Hordeum vulgare*	1
			Persicaria maculosa / lapathifolia	1
"	A031	50	*Hordeum vulgare*	1
House 1, Inner ring F6	A029	46	*Pinus sylvestris*?	1
House 1, Inner ring F7	C036	61	*Stellaria media*	1
"	C037	62	*Hordeum vulgare*	1
House 1, Inner ring F8	C042	75	*Hordeum vulgare*	1
			Cereal fragments	-

Rideout: carbonised seed - Sheet 1/D1-E1

Context	Site Context No.	Sample No.	Species	Quantity
House 1, Inner ring F9	A129	218	*Hordeum* fragment	1
			Avena fragment	1
			Corylus	1
House 1, Inner ring F10	A155	233	*Hordeum* (& fragments)	1
			Avena fragments	-
House 1, Inner ring F11	A134	215	*Hordeum*	3
			Avena	4
			Chenopodium cf *album*	1
			cf *Galeopsis tetrahit* agg	1
			Corylus shell fragment	1
House 1, Entrance F22	B011	143	*Hordeum* fragment	1
			Avena sp	1
House 1, Entrance F24	B223	284	*Avena* (& fragments)	3
			Cereal fragments	-
House 1, Entrance F25	B043	15	Gramineae	1
House 1, Entrance F26	A085	154	*Avena* sp	1
House 1, Entrance F27	A169	248	*Triticum* cf *aestivo compactum*	1
			Hordeum	1
			cf *Spergula*	1
House 1, Entrance F28	A177	263	*Avena*	1
House 1, Entrance F29	A071	115	*Hordeum Vulgare* fragment	1
			Avena sp fragments	2
			Empetrum nigrum	8
House 1, Outer ring F14	A027	40	Cereal fragment cf *Hordeum*	1

Rideout: carbonised seed - Sheet 1/D1-E1

Context	Site Context No.	Sample No.	Species	Quantity
House 1, Outer ring F15	A016	28	*Hordeum vulgare* hulled	1
House 1, Outer ring F16	A040	57	*Avena* *Persicaria maculosa / lapathifolia*	1 1
House 1, Outer ring F19	A201	280	*Hordeum* *Avena* fragments	1 -
House 1, Outer ring F20	A168	250	Cereal cf *Hordeum* frags	1
House 2	A007	245	*Hordeum* (& fragments) *Avena* (") *Galeopsis tetrahit* agg	2 5 1
Palisade O	A034	63	*Hordeum vulgare*	1
"	A042	64	*Spergula arvensis* *Chenopodium album* *Fumaria officinalis*	1 1 1
"	A052	95	*Hordeum vulgare* " " fragment *Avena* fragment	1 1 1
"	B037	79	*Avena* sp	1
Fire pit F35	A043	77	*Avena* sp *Hordeum vulgare*	1 1
"	A043	102	*Hordeum vulgare* " " fragments *Stellaria media* Corylus shell fragment	5 4 1 1
Pit F36	A225	305	*Hordeum* (& fragments) *Avena* (& fragments) cf *Corylus* fragment	3 3 1

Rideout: carbonised seed - Sheet 1/D1-E1

Context	Site Context No.	Sample No.	Species	Quantity
Pit F36	A225	317	*Hordeum* *Avena* *Chenopodium* cf *album* *Polygonum aviculare* agg *Silene* cf *dioica* Fucoid algae (ie *Fucus* or *Pelvetia* sp)	2 2 1 1 1 main body of carbonised material
"	A244	324	*Hordeum* " fragment Fucoid Algae	1 1
"	A245	324	Gramineae caryopsis Fucoid Algae	1
"	A245	353	*Hordeum* *Avena* fragment *Silene* cf *dioica* *Chenopodium* cf *album*	5 1 1 1
"	A255	350	*Hordeum* *Stellaria media* *Corylus* shell fragment	1 1 1
E Flank, Ditch	E023	68	Cereal, fused *Atriplex* cf *patula* *Chenopodium album* *Persicaria maculosa / lapathifolia* *Rubus fruticosus* agg	1 1 1 1 1
E Flank, Pit 63	J006	382	*Corylus* shell fragment	1
"	J006A	389	*Hordeum* *Fumaria officinalis* agg	1 1
"	J006B	390	cf *Urtica urens* *Chenopodium album*	1 1
E Flank, Ditch fill 571	H008	395	cf *Hordeum* fragment	1

Rideout: carbonised seed - Sheet 1/D1-E1

Fort 1985 Season

The context numbers refer to details in the Archive; the main context descriptions (ditches) are given as headings to sections separated by lines

Site Context no.	Sample No.	Sieve Size (µm)	Species	Quantity
Ditch O				
1701	G2579	180	*Rumex acetosella*	1
1703	G2581	600	*Avena* sp	185
			Hordeum vulgare	200
			Rumex acetosella	1
			Rumex cf *acetosa*	4
			Persicaria maculosa	33
			Chenopodium album	17
			Stellaria	2
			Spergula arvensis	11
			Galeopsis tetrahit agg	7
			Fumaria cf *officinalis*	2
			Lapsana communis	7
			Gramineae - various caryopses indet.	17
1704	G2582	180	*Hordeum vulgare*	1 + frags
1705	G2583	600	*Avena* sp	171
			Hordeum vulgare	47
			Avena cf *strigosa*	6
			Rumex acetosella	4
			Rumex acetosa	1
			Persicaria maculosa	12
			Polygonum aviculare agg	3
			Chenopodium album	6
			Stellaria	1
			Spergula arvensis	1
			Galeopsis	5
			Fumaria cf *officinalis*	1
			Lapsana communis	4
1706	G2582	600	*Hordeum*	4
			Avena	5
			Polygonum cf *persicaria*	1
			Chenopodium cf *album*	4

Rideout: carbonised seed - Sheet 1/D1-E1

Site Context no.	Sample No.	Sieve Size (µm)	Species	Quantity
1707	G2636	600	*Avena*	52
			Hordeum	153
			Cereal fragments	30
			Chenopodium	1
			Polygonum	1
			Galeopsis	3
			(Ignota)	1
1708	No samples			
Ditch 1				
1101	G2775	600	*Juncus*	1
			(Ignota-abraded)	1
1103	G2726	600	*Avena*	1
			Empetrum nigrum	1
1105	G2727	600	No seeds	
1106	G2691	600	No seeds	
1107	G2728	600	Cereal fragment cf *Hordeum*	1
1110	G2731	600	No seeds	
1108	G2729	600	No seeds	
1109	G2730	600	No seeds	
1118	G2734	600	No seeds	
1111	G2776	600	*Chenopodium album*	1
1112	G2777	600	No seeds	
1113	G2778	600	No seeds	
1114	G2780	600	No seeds	
1115	G2781	600	No seeds	
1116	No sample			

Rideout: carbonised seed - Sheet 1/D1-E1

Site Context no.	Sample No.	Sieve Size (µm)	Species	Quantity
1104	G2692	600	Cereal fragment cf *Hordeum*	1
1117	G2732	600	No seeds	
Ditch 8				
1631A	G2782	600	No seeds	
1631B	G2783	600	No seeds	
1631C	G2785	600	No seeds	
1631D	G2784	600	Cereal fragment cf *Avena* *Spergula arvensis*	1 1
Ditch 2 (Cutting D2/II)				
2247/2	G2671	600	*Galeopsis* sp. cf *tetrahit* *Rubus* cf *fruticosis* agg (Broken shelled ignotum)	1 1 1
2248/2	G2673	600	No seeds	
2249	G2672	600	Cereal fragments	2
2257/1	G2670	600	Cereal fragment	1
2257/2 to 2258/3	No samples			
Ditch 6 (Cutting D2/II)				
2601/1	G2764	600	No seeds	
2601/2	No sample			
2601/3	No sample			
2602/1	G2763	600	No seeds	

Rideout: c. onised seed - Sheet 1/D1-E1

Site Context no.	Sample No.	Sieve Size (µm)	Species	Quantity
2603/1	G2766	600	Cereal fragment	1
2604	G2765	600	No seeds	
2605/1	G2667	600	No seeds	
2605/2	G2668	600	No seeds	
2606	G2669	600	No seeds	
Ditch 2 (Cutting D2/IIa)				
2241	G0156	600	Cereal fragment cf *Hordeum*	1
2242	G0157	600	No seeds	
2243	No sample			
2244	G0159	600	No seeds	
2245	G0158	600	No seeds	
2246	G0160	600	No seeds	
2230	G0161	600	*Hordeum* *Empetrum nigrum* Compositae Gramineae	1 1 1 1
2231	G0162	600	No seeds	
2232	No sample			
Ditch 3, first cut (Cutting D3/I)				
1410	G2521	600	No seeds	
Ditch 3, second cut (Cutting D3/I)				
1401	G2509	600	*Chenopodium album* *Galeopsis* cf *tetrahit*	4 1

Rideout: carbonised seed - Sheet 1/D1-E1

Site Context no.	Sample No.	Sieve Size (µm)	Species	Quantity
1400	G2507	600	*Hordeum vulgare*	2
			Persicaria maculosa	1
			Polygonum aviculare agg	1
			Chenopodium album	1
			Gramineae cf *Poa / Alopecurus*	1
			(Ignota cf *Brassica* sp?)	1
1411	No sample			
1402	G2510	600	*Persicaria maculosa*	2
			Polygonum aviculare agg	3
			Chenopodium album	2
			Galeopsis tetrahit agg	3
			Empetrum nigrum	1
			Plantago major	2
			Ranunculus repens / bulbosus / acris	1
			Juncus sp	10
			Gramineae	6
1403	G2511	600	*Avena*	3
			Hordeum fragment	1
			Rumex acetosella	1
			Chenopodium album	10
			Galeopsis tetrahit agg	3
			Ranunculus sp	3
			Juncus sp	1
			Gramineae	1
1404	G2513	<1 mm	small abraded pieces cf *Spergula*	3
1405	G2514	600	*Hordeum*	1
			Chenopodium album	1
			Spergula arvensis	2
1406	No sample			
1407	G2518	<1mm	(ignota - fragments)	6
1408	G2519	600	*Juncus* sp	1
1409	G2520	600	No seeds	

Rideout: carbonised seed - Sheet 1/D1-E1

Site Context no.	Sample No.	Sieve Size (µm)	Species	Quantity
Ditch 4, first cut (Cutting D4/I)				
1306	G2541	600	No seeds	
1307	G2542	600	*Galeopsis tetrahit agg*	1
Ditch 4, second cut (Cutting D4/I)				
1300	G2535	600	*Hordeum* fragments *Lapsana communis*	2 1
1301	G2536	600	*Hordeum*	4
1314	No sample			
1302	G2537	600	No seeds	
1315	No sample			
1303	G2538	600	*Hordeum*	1
1304	G2539	600	Gramineae caryopsis	1
1308	G2543	600	No seeds	
1309	G2544	600	No seeds	
1310	G2545	600	Cereal fragments	2
1305	G2540	600	No seeds	
Ditch 5, first cut to S (Cutting D5/I)				
1514	G2560	600	*Plantago lanceolata*	1
1516	G2563		Not identified	
1517	No sample			
1521	G2567		No seeds	
1522	G2568		No seeds	

Rideout: carbonised seed - Sheet 1/D1-E1

Site Context no.	Sample No.	Sieve Size (µm)	Species	Quantity
Ditch 5, first cut to N				
1510	G2556		No seeds	
1511	G2557		No seeds	
1512	G2558		Not identified	
1513	G2559		No seeds	
Ditch 5, second cut				
1530	G2555		No seeds	
Ditch 5, third cut				
1100 (B-horizon)	G2547	600	Cereal fragment	1
1501	G2548	600	*Rumex acetosella*	1
1506	G2549	600	Fucoid Algae	
1502	G2550	600	No seeds	
1503	G2551	600	No seeds	
1504	G2552	600	Cereal fragment cf *Avena*	1
1505	No sample			
1507	No sample			
1532	No sample			
1508	G2553	600	No seeds	
1509	G2554	600	No seeds	
1520	G2566	600	(Ignotum)	1
1518	G2564	600	No seeds	

Rideout: carbonised seed - Sheet 1/D1-E1

Site Context no.	Sample No.	Sieve Size (µm)	Species	Quantity
1519	G2565	600	*Hordeum* Cereal fragment	1 1
1523	G2569	600	No seeds	
1524	G2570	600	No seeds	
1515	G2561	600	No seeds	

Table 14 Burnt bone from main structural elements (1982)

Lin Barnetson

Context	Site Context No.	Find No.	Species	Description
Ditch O	A243	589	*Bos* sp.?	Diaphysis fragment
"	A262	583	Ovicaprid	Rib frags
Palisade 2	B007	174	Ovicaprid?	Frontal (cranium) frag
"	B069	575	*Bos* sp.	Frag metacarpal diaphysis? & diaphysis frags Ovicaprid? Diaphysis frags
"	B249	570	*Bos* sp.	Frag proximal 1st phalanx & diaphysis frags
House 1, ring-groove	A010	178	*Bos* sp.?	Axis vertebra frag
"	A010	243	*Bos* sp. Ovicaprid	Diaphysis frag - tibia? Frag of vertebra
"	A010	247	*Bos* sp.	Diaphysis frag - one with cut mark 5th metacarpal
"	A010	407	Ovicaprid	Diaphysis frag
"	A010	541	Ovicaprid	Metacarpal diaphysis frag
"	P010	554	?	Tooth root frag
"	A139	569	Ovicaprid?	Frags of scapula and diaphysis
"	B005	478	Ovicaprid?	Diaphysis frag
"	B012	92	Ovicaprid	Distal humerus frag
"	B079	181	Ovicaprid	Diaphysis frags
"	B079	485	*Bos* sp.	Rib frag
"	B181	416	*Sus* sp.	Tooth enamel frags

Rideout: burnt bone - Sheet 1/E2-E4-

Context	Site Context No.	Find No.	Species	Description
House 1, inner ring, F13	B110	406	*Bos* sp.	Diaphysis frags & rib? frag
House 1, entrance F22	B010	75	*Bos* sp.	Ilium frag
House 1, entrance F22	B011	251	*Bos* sp.	Diaphysis frags & distal tibia and vertebral frag
Fire pit F30	B009	465	Ovicaprid	Diaphysis frag & rib frag Cranium frag
"	B009	533	*Bos* sp. & Ovicaprid *Sus* sp.?	Frags of Diaphysis, flat bones, vertebrae Frag of tooth enamel?
Palisade O	A012	225	*Bos* sp.	Piece of mandible (ramus)
"	A021	179	*Bos* sp.	Diaphysis frags
"	A034	352	?	Frag, possibly rib with 2 thin, parallel cuts
"	B037	390	?	Small frag, possibly cut?
"	B183	561	*Sus* sp.?	Metapoidal? frag
Area 2, ditch	G016	258	Ovicaprid?	Diaphysis frag
Area 4, ditch	F026	259	Ovicaprid	Distal frag of metapodial
"	E023	254	*Bos* sp. Ovicaprid	1st phalanx frags Frags of rib, phalanx & diaphysis frags
"	E023	367	Ovicaprid	3 frags of metatarsal diaphysis
"	E013	139	*Bos* sp. & Ovicaprid	Long bone & rib frags

Rideout: burnt bone - Sheet 1/E2-E4-

Context	Site Context No.	Find No.	Species	Description
Area 4, ditch	E005	186	*Bos* sp.	Frags of metatarsal proximal end & diaphysis
"	E006	507	Ovicaprid?	Diaphysis frags & frag of phalanx, tooth root frag
Area 6, pit fill	J008	639	Ovicaprid?	Diaphysis frag
Area 6, pit recut	J006	636	Ovicaprid?	Diaphysis frag?

Wood Report

Rod McCullagh

Charcoal

Samples I, 6, 149, 152, 162, 187, 300, 345, 347, were submitted. The samples were damp and uncleaned.

Cleaning was effected by the use of a sonic bath (Dawe Sonicleaner) and distilled water. This removed most of the soil particles but in several cases (samples 149, 345, 347) the sample had to be dried and then separated from the adhering soil in a elutriator. After processing every sample was washed in distilled water and dried in a warm oven.

Identification was executed using a Kyowa SD-ZP stereo-scope and was checked against the illustrations of Schweingruber (1978). Samples marked with an asterisk were submitted for radiocarbon assay.

Sample 1 E Flank Ditch F462

All the charcoal bore insect channels and in several instances was radially split due to decay prior to burning. About 40% of the volume of the cleaned sample was soil particle material. All charcoal examined was of small diameter branch or twig wood and was very fragmentary.

Alnus glutinosa 1; *Corylus avellana* 3; *Salix* sp. 1

Because of the diminutive nature of the sample few specimens could be identified.

Weight: 22.1 g

Sample 6 E Flank Ditch F462

For the same reasons as sample 1 few specimens could be identified, indeed few were of a size to be identified. Most displayed signs of decay prior to burning, the eroded cells frequently infilled with soil particles; insect channels abound.

Corylus avellana 1 *Salix* sp. 2

Weight: 22.1 g

Sample 149 E Flank Ditch

The sample is very small, consisting mostly of twig-wood, after cleaning there remained some soil adhering to the charcoal.

All specimens examined (5) were *Corylus avellana*, and all the remainder appeared identical.

Weight: 9.8 g

Sample 152 E Flank Ditch

This sample was obtained by on-site flotation. The bulk of the sample was at the smaller end of the size range, retained by the 2.0 mm sieve size, however no seeds nor any organic debris other than wood charcoal was seen

Alnus glutinosa 5; *Betula* sp. 6; *Corylus avellana* 7; *Salix* sp. 2

All were fragments of round-wood charcoal, often decayed prior to burning.

Diameters range from c.3.0 cm to 0.5 cm.

There are some modern root hairs included in the sample which is split into fine and coarse fractions.

Weight: fine. 110.0 g coarse: 111.0 g

The coarse fraction is recommended for a date estimate.

Sample 162 House 1 N Porch groove (F22)

The same comments as used in Samples 1 and 6 apply here.

Alnus glutinosa 4; *Betula* sp. 1; *Corylus avellana* 1; *Quercus* sp. 4

All fragments were of small diameter round-wood, some small root fibres are included.

Weight: 8.2 g

Sample 187 * House 1 Ring-groove

All the specimens examined were *Quercus* sp. and although no piece was larger than 3.0 cm^3 the ring spacing and curvature suggested, in most cases, a diameter of, at least, 5.0 cm.

Weight: 18.1 g

Sample 300 * Fire pit F30

Corylus avellana 1; *Quercus* sp. 19

The specimens of *Quercus* in all but one case were of slow grown, stressed timber of fairly large diameter (say more than 10.0 cm) and several displayed severely distorted vessels. In many examples some decay had occurred before burning.

Weight: 31.9 g

Sample 345 * Pit F35

All the specimens identified were *Corylus avellana*.

All were fragments of round-wood with diameters ranging from c 1.0 cm to 3.0 cm.

Weight: 15.2 g

Sample 347 * Pit F35

Alnus sp. 7, *Corylus avellana* 3

All were fragments of round-wood of small diameter (eg 1.5 cm max).

About half were infected by insect channels. Some modern root fibres were present.

Weight: 17.8 g

Results

The species present, *Alnus glutinosa* (alder), *Betula* sp. (birch) *Corylus avellana* (hazel), *Quercus* sp. (oak), *Salix* sp. (willow) are typical of the tree cover of much of Scotland since the development of Zone VIIa (Atlantic). The type of timber represented by the charcoal is mostly small branches and twigs, the kind of thing expected from small faggots or bavins and probably used as fuel.

Wood

Sample 396 (FInd 647) * Bog

Two fragments of a large oak (*Quercus* sp.) timber were submitted for examination. The missing segment had been cut on site (with a chain saw) for dispatch to the Belfast lab.

The wood has been riven to form a substantial tangentially-split timber tapering outwards towards the sapwood. At its waist the cross-section describes a segment in which the cord dissects the pith-wood and at each end. The cords cut only the outermost rings of the heart-wood.

Several branch nodes occur at the broader end, one was sectioned to reveal the direction of growth. This clearly showed that the broader end was nearest the apex of the tree.

The timber, as well as being split from a large bole, had lost much of its sap-wood. This remained as a spongy fibrous layer covering about one third of the surface. This residual sap-wood survives to a maximum thickness of 4 cm which may approach its original thickness, although most is only 1 cm thick.

A sample was cut from the outer rings of the heart-wood as it was felt that the sap-wood was probably in receipt of contamination from the muddy matrix of the context. The weight of the sample was 386 g.

In addition to the marks caused by the chain-saw in the course of sampling the timber, several other tool marks were also visible. Although there is a possibility that these resulted from impact of modern excavation tools, the weathered surfaces on these tool marks suggest that they were formed either when the timber was felled, split or converted. In addition to the tools used to fell and convert the timber, presumed to have been an axe, a series of wedges and a large mell or beetle (*cf* Darragh 1982), the use of a broad-bladed axe and a chisel is indicated by the extent of the scars. Given the precision with which a skilled wood worker can apply to the process of splitting a timber, especially oak, it is reasonable to presume that the shape of this find was intentional and that the subsequent tooling scars also represent a further stage in shaping to a specific design. It is unlikely that this work was undertaken on timber set aside for use as fuel. If the preservation of the timber indicates that the wood was discarded before it had acquired a specific practical shape, it may serve as a comment upon either the nature of the abandonment of the site or of the profligacy of the occupants. It is also possible that the achieved shape represents the completed object and it may merely have served as a play or trial piece. A further alternative must focus on the possible ritual connotations of a deposit of oak in a watery context.

Sample 386 * W Flank Ditch F241

As presented the material appeared to be amorphous lumps of sodden wood. This was cleaned in distilled water in a sonic bath. As clean it was seen to be a mass of bark in a fine silty matrix, as much of the silt was removed as possible. Identification was only possible on two fragments to which some wood remained attached. The bark was contorted but in several instances retained a silvery patina, as of silver birch (*Betula pendula* Roth.). The thin sections of the wood confirmed that it was birch (*Betula* sp).

The sections also showed that the wood was in an advanced state of decay with only the bark retaining anything of its original structure.