

6 CHARRED PLANT REMAINS by Gill Campbell

6.1 Tables of charred plant remains from specific features

Table 1. Charred plant remains from Late Iron Age contexts at Grateley

	Sample	2847	3141	3362	3368
	Context	F708/3	F735/3	F793/8	F793/14
	% of sample analysed	25%	25%	100%	100%
TAXON					
<i>Pteridium aquilinum</i> (L.) Kuhn (pinnule frag.)		-	1	-	-
<i>Ranunculus acris/repens/bulbosus</i>		-	-	2	-
<i>Corylus avellana</i> L. (nutshell frag.)		-	1	-	-
<i>Chenopodium</i> cf. <i>album</i> L.		-	2	1	1
<i>Atriplex</i> sp.		64	-	3	3
Chenopodiaceae indet.		-	-	1	1
<i>Silene</i> sp.		-	1	-	-
<i>Stellaria media</i> gp.		-	3	-	-
<i>S. graminea</i> L.		-	1	-	-
cf. <i>Spergula arvensis</i> L.		-	-	-	1
Caryophyllaceae indet.		-	-	1	-
<i>Polygonum aviculare</i> agg.		5	1	-	-
<i>Fallopia convolvulus</i> (L.) A. Love		2	1	-	-
<i>Rumex</i> sp(p).		4	1	3	1
cf. <i>Rumex</i> sp.		-	-	1	-
Polygonaceae indet.		3	4	1	1
<i>Malva</i> sp.		1	-	-	-
cf. <i>Brassica</i> (fruit case frag.)		-	-	-	1
<i>Potentilla/Fragaria</i> sp.		-	1	-	-
<i>Aphanes arvensis sens. Lato</i>		-	1	-	-
<i>Prunus spinosa</i> L.		-	-	-	1
<i>Vicia/Lathyrus</i> sp.		5	10	9	2
cf. <i>Pisum sativum</i> L.		-	-	1	-
<i>Medicago</i> type		1	1	1	1
Fabaceae (large) indet.		-	1	-	4
Fabaceae (small) indet.		3	5	3	-
Apiaceae indet.		-	5	2	-
<i>Lithospermum arvense</i> L.		3	13	-	1
<i>Plantago media/lanceolata</i>		-	1	-	-
<i>Euphrasia/Odontites</i> sp.		-	-	2	1
<i>Sherardia arvensis</i> L.		2	5	1	-
cf. <i>S. arvensis</i> L.		-	1	-	-
<i>Galium</i> cf. <i>aparine</i> L.		12	30	5	-
<i>Galium</i> sp (p).		-	1	5	1
<i>Sambucus nigra</i> L.		1	1	-	-
<i>Valerianella dentata</i> (L.) Pollich		1	3	2	-
<i>Anthemis arvensis</i> L.		7	33	-	-
<i>Tripleurospermum</i> sp.		2	19	4	1
Asteraceae (large) indet.		-	-	1	-
Cyperaceae indet.		-	-	-	1
<i>Lolium</i> sp.		4	7	13	-

	Sample	2847	3141	3362	3368
	Context	F708/3	F735/3	F793/8	F793/14
	% of sample analysed	25%	25%	100%	100%
<i>Avena</i> sp.		-	1	-	-
<i>Bromus</i> sp.		1	-	4	1
Poaceae (large) indet.		-	2	3	1
Poaceae (small) indet.		15	33	54	16
Poaceae indet. (chaff)		-	-	1	-
Poaceae indet. (straw/stem)		-	-	-	1
cf. Poaceae indet.		2	-	-	-
<i>Triticum spelta</i> L. (glume base)		8	27	36	9
<i>T. spelta</i> L. (rachis internode)		1	1	-	-
<i>T. spelta</i> type (grain)		1	1	1	-
<i>T. cf. spelta</i> (glume base)		-	-	4	1
<i>T. cf. spelta</i> (spikelet fork)		1	-	-	1
<i>T. dicoccum/spelta</i> (glume base)		8	34	18	12
<i>T. dicoccum/spelta</i> (spikelet fork)		-	3	1	2
<i>T. dicoccum/spelta</i> type (grain)		7	4	-	2
<i>Triticum</i> sp. (grain)		24	11	14	2
<i>Triticum</i> sp. (glume base)		1	3	-	-
<i>Triticum</i> sp. (spikelet fork)		-	1	-	-
<i>Triticum</i> sp. (rachis internode)		-	1	-	-
cf. <i>Triticum</i> sp. (grain)		-	-	2	-
<i>Hordeum vulgare</i> L. (rachis)		-	3	3	-
<i>Hordeum</i> sp. (hulled straight grain)		4	1	-	-
<i>Hordeum</i> sp. (hulled straight sprouted grain)		2	-	-	-
<i>Hordeum</i> sp. (hulled twisted grain)		7	-	-	-
<i>Hordeum</i> sp. (hulled grain)		22	3	4	4
<i>Hordeum</i> sp. (hulled sprouted grain)		1	-	-	-
<i>Hordeum</i> sp. (grain)		35	10	6	-
<i>Hordeum</i> sp. (floret base)		-	1	-	-
<i>Hordeum</i> sp. (rachis)		-	2	2	-
<i>Secale/Hordeum</i> sp. (rachis)		1	3	4	-
Cereales indet. (grain)		62	47	34	10
Cereales indet. (chaff)		-	3	1	2
Cereal size (embryo)		2	-	1	-
Cereal size (sprout)		1	-	-	-
Poaceae size (culm node)		-	-	-	1
Bud		-	-	1	-
Leaf/bud scar		-	1	-	-
Indeterminate		5	12	8	7
Total number of items identified		331	361	264	94
Number of litres processed		20	20	18	24
Number of items per litre		66	72	15	4
Total weeds		137	187	122	39
Total grain		165	77	61	18
RATIO 3		0.8303	2.42857	2	2.16667

	Sample	2847	3141	3362	3368
	Context	F708/3	F735/3	F793/8	F793/14
	% of sample analysed	25%	25%	100%	100%
Total glume bases		17	64	58	22
Total spikelet forks		1	4	1	3
Spikelet forks x 2		2	8	2	6
Total wheat chaff		19	72	60	28
Total wheat grain		32	16	17	4
Plus percentage indet. grain		19	25	22	5
Total wheat grain		51	41	39	9
RATIO 1		0.37255	1.7561	1.5385	3.11111
Total barley chaff		1	8	9	0
Total barley grain		71	14	10	4
Plus percentage indet. grain		43	22	13	
Total barley grain		114	36	23	4
RATIO 2		0.00877	0.22222	0.3913	

Table 2. Charred plant remains from corn drying ovens 1, 2 and 3 at Grateley

Sample	3326	3447 ¹	3358 ²	3359	3360	3355	3356	3357	3325	3349
	CD1 left	CD1 left	CD2 left	CD2 left	CD2 left	CD2 right	CD2 right	CD2 right	CD3 left	CD3 left
	longitud'nl	longitud'nl	cross	cross	cross	cross	cross	cross	cross	longitud'nl
Context	F827/1	F827/466	F820/7	F820/7	F820/7	F819/8	F819/8	F819/8	F844/2	F845/6/7/8
% of sample analysed	100	12.50%	25%	25%	50%	25%	25%	25%	100%	6.25%
TAXON										
<i>Ranunculus acris/repens/bulbosus</i>	-	-	-	-	-	-	-	-	-	1
<i>Papaver somniferum</i> L.	8	-	-	-	-	-	-	1	4	42
<i>Papaver rhoeas/dubium/hybridum</i>	-	-	-	-	-	-	-	-	2	11
<i>Papaver rhoeas/dubium/hybridum</i> - silicified	-	-	-	-	-	-	-	-	-	60
<i>Papaver argemone</i> L.	-	-	-	-	-	-	-	-	-	1
<i>Papaver</i> sp.	-	-	-	-	3	-	-	1	2	56
<i>Papaver</i> sp. – silicified	-	40	-	-	-	-	-	-	-	-
cf. <i>Papaver</i> sp.	4	-	-	-	-	-	-	-	-	-
<i>Atriplex</i> sp.	-	-	-	-	-	-	-	-	1	14
<i>Silene</i> sp.	-	-	-	-	1	-	-	-	-	-
Chenopodiaceae/Caryophyllaceae indet.	-	-	-	-	-	-	-	-	-	1
<i>Persicaria</i> sp.	-	-	-	-	-	-	-	-	-	1
<i>Polygonum aviculare</i> type	-	-	-	-	-	-	-	-	-	4
<i>Fallopia convolvulus</i> (L.) A. Love	-	-	-	-	1	-	-	-	-	1
<i>Rumex</i> sp(p).	14	1	-	-	-	1	-	-	2	10
Polygonaceae indet.	1	-	-	-	-	-	-	-	1	-
<i>Potentilla</i> sp.	12	-	-	-	-	-	-	-	-	-
<i>Potentilla/Fragaria</i> sp.	-	1	-	-	-	-	-	-	-	1
<i>Prunus/Crateagus</i> sp. (thorn)	-	-	-	-	-	-	1	-	-	-
cf. <i>Lathyrus nissolia</i> L.	-	-	-	-	-	-	-	-	-	1
<i>Vicia/Lathyrus</i> sp.	-	-	1	-	-	-	1	-	1	-
cf. <i>Medicago lupulina</i> L.	-	-	-	-	-	-	-	-	-	1
<i>Medicago</i> type	1	-	-	-	-	-	-	-	-	-
Fabaceae (large) indet.	-	-	-	-	-	-	-	-	1	-
Fabaceae (small) indet.	-	-	-	-	1	-	-	-	1	14

Sample	3326	3447 ¹	3358 ²	3359	3360	3355	3356	3357	3325	3349
	CD1 left	CD1 left	CD2 left	CD2 left	CD2 left	CD2 right	CD2 right	CD2 right	CD3 left	CD3 left
	longitud'n/l	longitud'n/l	cross	cross	cross	cross	cross	cross	cross	longitud'n/l
Context	F827/1	F827/466	F820/7	F820/7	F820/7	F819/8	F819/8	F819/8	F844/2	F845/6/7/8
% of sample analysed	100	12.50%	25%	25%	50%	25%	25%	25%	100%	6.25%
Fabaceae indet. (pod frag.)	-	-	-	-	-	-	-	-	1	-
Apiaceae indet.	-	1	-	-	1	-	-	-	-	-
<i>Lithospermum arvense</i> L.	-	-	-	-	1	-	-	-	10	4
<i>Prunella vulgaris</i> L.	-	-	-	-	-	-	-	-	-	1
cf. <i>Prunella vulgaris</i> L.	-	-	-	-	-	-	-	-	-	1
<i>Galeopsis</i> sp.	-	-	-	-	-	3	2	1	-	-
<i>Plantago media/lanceolata</i>	2	-	-	-	-	-	-	-	-	1
cf. <i>Fraxinus excelsior</i> (frag. of key)	-	-	-	-	-	-	-	-	-	1
<i>Galium</i> cf. <i>aparine</i> L.	-	-	-	1	-	-	-	-	4	-
<i>Centaurea nigra</i> L.	-	1	-	-	-	-	-	-	1	3
<i>Centaurea</i> sp.	-	1	-	-	-	-	-	-	-	-
<i>Anthemis cotula</i> L.	-	-	-	-	-	-	-	-	3	-
<i>Tripleurospermum</i> sp.	4	-	-	1	18	7	6	35	6	26
Asteraceae (large) indet.	-	-	-	-	-	-	-	1	1	6
Asteraceae (small) indet.	-	-	-	-	1	-	-	1	1	2
<i>Carex</i> sp.	4	-	-	-	2	-	-	-	-	-
Cyperaceae indet.	-	-	-	-	-	-	-	1	-	-
<i>Lolium</i> sp.	-	-	-	-	-	-	1	-	2	4
cf. <i>Lolium</i> sp.	-	-	-	-	2	-	-	-	-	-
<i>Poa annua</i> type	-	-	-	-	2	-	-	-	-	17
<i>Avena</i> sp.	-	-	-	-	-	-	1	-	-	1
<i>Avena</i> type (awn)	-	-	-	-	-	-	-	-	-	1
<i>Bromus hordeaceus</i> type	-	-	-	-	-	-	-	-	-	1
<i>Bromus</i> sp.	1	-	-	-	1	1	-	-	-	1
Poaceae (large) indet.	8	2	-	-	3	-	-	-	-	-
Poaceae (small) indet.	8	2	1	-	4	1	1	1	12	73
Poaceae indet. (spikelet)	4	-	-	-	-	-	-	-	-	1
Poaceae indet. (chaff) – silicified	-	-	-	-	-	-	-	-	-	20
<i>Allium vineale</i> type (bulbil)	-	-	-	-	4	5	2	-	-	-

Sample	3326	3447 ¹	3358 ²	3359	3360	3355	3356	3357	3325	3349
	CD1 left	CD1 left	CD2 left	CD2 left	CD2 left	CD2 right	CD2 right	CD2 right	CD3 left	CD3 left
Context	longitud'nl	longitud'nl	cross	cross	cross	cross	cross	cross	cross	longitud'nl
	F827/1	F827/466	F820/7	F820/7	F820/7	F819/8	F819/8	F819/8	F844/2	F845/6/7/8
% of sample analysed	100	12.50%	25%	25%	50%	25%	25%	25%	100%	6.25%
<i>Triticum</i> sp. hexaploid, free-threshing (rachis)	-	-	-	-	-	-	-	-	-	2
<i>Triticum</i> sp. free-threshing type (grain)	-	-	1	-	1	3	1	-	-	-
<i>Triticum spelta</i> L. (glume base)	41	108	3	5	13	34	7	9	65	199
<i>T. spelta</i> L. (spikelet fork)	-	2	-	2	10	19	5	1	4	5
<i>T. spelta</i> L. (rachis internode)	-	20	2	3	5	5	1	3	11	51
<i>T. spelta</i> type (grain)	1	-	4	6	26	85	11	31	19	14
<i>T. spelta</i> type (sprouted grain)	-	-	-	-	26	-	-	-	-	-
<i>T. spelta</i> type (short, fat grain)	-	-	1	-	4	2	1	1	-	-
<i>T. spelta</i> type (grain with insect attack)	-	-	-	-	-	-	-	1	-	-
<i>T. cf. spelta</i> (glume base)	6	35	-	2	1	8	-	-	4	16
<i>T. cf. spelta</i> (spikelet fork)	-	-	-	1	-	6	-	-	-	6
<i>T. dicoccum/spelta</i> (glume base)	245	194	10	9	17	20	10	17	63	443
<i>T. dicoccum/spelta</i> (spikelet fork)	12	36	4	9	14	20	9	6	10	18
<i>T. dicoccum/spelta</i> type (grain)	4	-	14	23	112	61	27	30	23	11
<i>T. dicoccum/spelta</i> type (sprouted grain)	9	2	3	8	131	4	3	-	13	-
<i>Triticum</i> sp. (grain)	24	4	-	58	208	130	73	67	60	16
<i>Triticum</i> sp. (sprouted grain)	17	1	-	5	-	1	2	-	12	1
<i>Triticum</i> sp. (glume beak)	-	49	-	-	-	-	-	-	-	-
<i>Triticum</i> sp. (glume beak) – silicified	-	760	-	-	-	-	-	-	-	180
<i>Triticum</i> sp. (glume base)	164	-	-	-	-	-	1	1	-	16
<i>Triticum</i> sp. (spikelet fork)	45	-	-	-	1	-	-	2	1	7
<i>Triticum</i> sp. (rachis internode)	13	13	-	1	5	2	-	-	13	65
<i>Triticum</i> sp. (chaff)	44	-	1	-	-	-	-	-	-	-
cf. <i>Triticum</i> sp. (grain)	-	-	-	2	23	16	-	-	-	11
<i>Triticum/Secale</i> sp. (awn)	-	-	-	1	-	-	-	-	3	18
<i>Triticum/Secale</i> sp. (awn) – silicified	48	558800	2	-	-	-	-	241	-	4260
<i>Hordeum vulgare</i> L. (rachis)	-	-	-	-	1	-	-	-	-	-
<i>Hordeum</i> sp. (hulled, straight grain)	-	-	-	-	1	2	-	-	2	-
<i>Hordeum</i> sp. (hulled, straight, sprouted grain)	-	-	-	1	2	-	-	-	1	1

Sample	3326	3447 ¹	3358 ²	3359	3360	3355	3356	3357	3325	3349
	CD1 left	CD1 left	CD2 left	CD2 left	CD2 left	CD2 right	CD2 right	CD2 right	CD3 left	CD3 left
	longitud'nl	longitud'nl	cross	cross	cross	cross	cross	cross	cross	longitud'nl
Context	F827/1	F827/466	F820/7	F820/7	F820/7	F819/8	F819/8	F819/8	F844/2	F845/6/7/8
% of sample analysed	100	12.50%	25%	25%	50%	25%	25%	25%	100%	6.25%
<i>Hordeum</i> sp. (hulled, twisted grain)	1	-	-	-	2	1	-	1	2	1
<i>Hordeum</i> sp. (hulled, twisted, sprouted grain)	-	-	-	-	2	-	-	-	1	-
<i>Hordeum</i> sp. (hulled grain)	-	-	1	-	1	5	2	2	8	-
<i>Hordeum</i> sp. (sprouted, hulled grain)	-	-	-	-	1	-	-	-	1	-
<i>Hordeum</i> sp. (grain)	2	-	-	-	9	1	1	1	5	-
<i>Hordeum</i> sp. (awn)	-	-	-	-	-	-	-	10	-	10
<i>Hordeum</i> sp. (awn) – silicified		440	-	-	-	-	-	-	-	-
<i>Hordeum</i> sp. (rachis)	5	-	-	-	1	2	-	-	-	2
cf. <i>Hordeum</i> sp. (grain)	-	-	3	-	3	1	-	-	-	2
<i>Secale/Hordeum</i> sp. (rachis)	-	1	-	-	-	-	-	-	-	3
Cereales indet. (grain)	70	20	28	14	193	159	64	44	112	9
Cereales indet. (sprouted grain)	5	-	-	-	1	-	-	-	-	-
Cereales indet. (culm node)	-	-	1	-	-	-	-	-	-	-
Cereales indet. (chaff)	10	-	-	-	-	1	-	-	-	8
Cereal size (embryo)	27	-	4	3	2	4	5	6	4	11
Cereal size (sprout)	988	41	6	14	130	6	2	4	42	22
?Mouse dropping	-	-	-	-	1	5	8	2	4	-
Charred insect larva/pupa	-	-	-	-	-	-	-	-	1	4
Indeterminate mineralized seed	-	-	-	-	-	-	-	-	1	-
Charred Ignota	15	3	3	1	2	2	-	2	12	18
Total number of items identified	1867	560578	93	170	994	623	248	524	553	5813
Number of litres processed	2	30	8	8	8	9	10	7.5	12	27
Items per litre	934	149487	47	85	249	277	99	279	46	3445

¹ Only 1/40 of the sub-sample was sorted for silica

² This sample also contained the lower jaw of a house mouse

	Sample	3326	3447 ¹	3358 ²	3359	3360	3355	3356	3357	3325	3349
		CD1 left	CD1 left	CD2 left	CD2 left	CD2 left	CD2 right	CD2 right	CD2 right	CD3 left	CD3 left
		longitud'n'l	longitud'n'l	cross	cross	cross	cross	cross	cross	cross	longitud'n'l
	Context	F827/1	F827/466	F820/7	F820/7	F820/7	F819/8	F819/8	F819/8	F844/2	F845/6/7/8
	% of sample analysed	100	12.50%	25%	25%	50%	25%	25%	25%	100%	6.25%
Total weeds		67	49	2	2	45	18	14	42	55	360
Total sprouted grain		22	1	0	6	32	1	2	0	15	2
Total grain		133	27	55	117	746	471	185	178	259	66
		17%	4%	0%	5%	4%	0%	1%	0%	6%	3%
RATIO 3		0.503759	1.814815	0.03636	0.01709	0.06032	0.03822	0.07568	0.23596	0.212355	5.4545455
Total glume bases		456	337	13	16	31	62	18	27	132	674
Total spikelet forks		57	38	4	12	25	45	14	9	15	36
Spikelet forks x 2		114	76	8	24	50	90	28	18	30	72
Total wheat chaff		570	413	21	40	81	152	46	45	162	746
Total hulled wheat grain		55	7	23	102	531	302	118	130	127	53
Plus percentage indet. grain		75	20	23	14	186	152	62	43	97	8
Total hulled wheat grain – corrected		130	27	46	116	717	454	180	173	224	61
%Hulled wheat in sample		95	100	82	99	96	96	97	97	86	92
RATIO 1		4.38	15.30	0.46	0.34	0.11	0.33	0.26	0.26	0.72	12.23
Total barley chaff		5	1	0	0	2	2	0	0	0	5
Total barley grain		3	0	4	1	21	10	3	4	20	4
		0.529191	0	0.06452	0.08235	0.13078	0.00963	0.00806	0.00763	0.075949	0.0037846

Table 3. Plant remains from Corn Drier 4

SAMPLE	3196	3214	3200	3218	3219	3205	3223	3209	3227	3210
LOCATION	SQ1/1	SQ2/2	SQ2/1	SQ2/2	SQ3/2	SQ4/1	SQ4/2	SQ5/1	SQ5/2	SQ6/1
volume sieved in litres	0.51	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	12.50%	25%	12.50%	25%	25%	12.50%	25%	12.50%	25%	12.50%
TAXA										
Agrostemma githago L.	8	-	-	-	-	-	-	2	4	-
Caryophyllaceae indet.	-	-	-	-	4	-	-	-	4	-
Rumex sp.	-	-	8	-	-	-	-	-	-	-
Anthemis cotula L.	8	-	-	-	-	-	-	8	-	-
Tripleurospermum sp. Schultz Bip	8	-	-	-	-	-	-	-	-	-
Carduus/Cirsium sp.	-	-	-	-	-	-	-	8	-	-
Asteraceae (large) indet.	-	-	-	-	-	-	-	24	-	-
Asteraceae (small) indet.	16	-	-	-	-	-	-	8	-	-
Bromus hordeaceus type	8	-	-	-	-	-	-	8	-	-
cf. Bromus sp.	-	-	-	-	-	-	-	-	4	-
Avena sp. (grain)	-	8	-	-	4	8	16	16	24	8
Avena cf. fatua L. (floret)	-	-	-	-	-	-	-	16	4	-
cf. Avena sp. (awn)	8	-	-	-	-	-	-	8	-	-
Poaceae (large) indet.	-	16	-	-	12	-	8	-	72	8
Poaceae (small) indet.	8	-	16	-	-	-	-	-	4	8
cf. T. dicoccum (Schrank.) Schulb. (spikelet fork)	-	-	-	-	-	8	-	-	-	-
Triticum dicoccum (Schrank.) Schulb. type (grain)	8	-	-	-	-	-	-	-	-	-
cf. Triticum dicoccum (Schrank.) Schulb. type (grain)	8	-	-	-	-	-	-	8	16	-
Triticum, free-threshing type (grain)	-	-	16	-	28	-	40	-	-	16
T. spelta L. (spikelet)	-	-	-	-	-	-	-	31	-	-
T. spelta L. (glume base)	112	28	64	16	64	40	108	592	112	32
T. spelta L. (spikelet fork)	136	28	56	12	48	88	24	411	108	32
T. spelta L. (terminal spikelet fork)	24	-	-	-	-	8	-	-	-	-
T. spelta L. (rachis internode)	24	-	8	-	-	1	-	40	-	8
Triticum spelta L. type (grain)	121	149	-	82	264	43	276	1582	180	65

SAMPLE	3196	3214	3200	3218	3219	3205	3223	3209	3227	3210
LOCATION	SQ1/1	SQ2/2	SQ2/1	SQ2/2	SQ3/2	SQ4/1	SQ4/2	SQ5/1	SQ5/2	SQ6/1
volume sieved in litres	0.51	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	12.50%	25%	12.50%	25%	25%	12.50%	25%	12.50%	25%	12.50%
Triticum spelta L. type (sprouted grain)	-	-	-	-	-	-	-	-	-	-
Triticum spelta L. type (short fat grain)	-	-	-	-	-	-	-	72	-	-
T. dicoccum/spelta (glume base)	200	-	184	16	-	128	8	-	-	48
T. dicoccum/spelta (spikelet fork)	136	-	112	-	-	40	-	688	-	64
Triticum diococcum/spelta type (grain)	248	44	56	8	180	128	142	1100	489	209
Triticum diococcum/spelta type (sprouted grain)	-	-	-	-	-	-	-	-	-	-
T. diococcum/spelta type (tail grain)	8	-	-	-	-	-	-	-	-	-
T. dicoccum/spelta (terminal glume base)	-	-	-	-	-	-	-	24	-	-
T. dicoccum/spelta (terminal spikelet fork)	-	-	-	-	-	-	-	48	-	-
T. dicoccum/spelta (rachis internode)	3	-	8	-	-	-	-	48	-	-
Triticum sp. (grain)	1908	460	904	1688	648	488	1380	1347	484	585
Triticum sp. (glume base)	176	24	40	20	16		8	448	20	88
Triticum sp. (spikelet fork)	280		16	60	4	120	4	560	32	32
Triticum sp. (rachis internode)	40	4	-	-	-	24	-	40	-	-
cf. Triticum sp. (grain)	-	-	-	-	-	-	-	64	-	-
Triticum/Secale sp. (grain)	-	-	-	-	-	-	-	8	-	-
Triticum/Secale sp. (awn)	584	-	42	60	40	195	44	2072	142	368
Triticum/Secale sp. (awn) – silicified	-	-	336	-	-	-	-	-	-	-
Hordeum vulgare L. (spikelet)	-	-	-	-	-	-	-	5	-	-
Hordeum sp. (hulled straight grain)	-	-	-	-	-	-	-	8	6	-
Hordeum sp. (hulled twisted grain)	-	-	-	-	-	-	-	8	6	-
Hordeum sp. (hulled grain)	8	12	-	4	28	16	32	196	52	-
Hordeum sp. (grain)	-	-	1	-	-	57	-	88	-	8
Hordeum sp. (awn)	8	-	8	-	-	16	-	184	-	-
Hordeum sp. (rachis)	-	-	-	-	-	-	-	-	-	-
cf. Hordeum sp. (grain)	24	-	8	-	-	-	-	-	-	-
cf. Hordeum sp. (spikelet)	-	-	1	-	-	-	-	-	-	-
Cereales indet. (grain)	3232	1364	3395	2180	1704	1624	500	2664	648	2184
Cereales indet. (chaff)	-	12	-	32	16	-	28	-	16	56
Cereales sprout. (embryo)	128	-	3	4	-	16	24	568	40	32

	SAMPLE	3196	3214	3200	3218	3219	3205	3223	3209	3227	3210
	LOCATION	SQ1/1	SQ2/2	SQ2/1	SQ2/2	SQ3/2	SQ4/1	SQ4/2	SQ5/1	SQ5/2	SQ6/1
	volume sieved in litres	0.51	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
		12.50%	25%	12.50%	25%	25%	12.50%	25%	12.50%	25%	12.50%
Cereales size (sprout)		-	8	-	-	-	-	8	-	-	-
Ignota		-	8	16	28	4	8	12	-	20	-
Total number of items identified		7480	2165	5280	4210	3064	3056	2662	12966	2487	3851
Items per litre		14667	4330	8800	8420	6128	6112	5324	25932	4974	7702
Total weeds		56	24	24	0	20	8	24	74	112	24
Grain identified to genus		2333	665	984	1782	1148	732	1870	4481	1233	883
Cereales indet. (grain)		3232	1364	3395	2180	1704	1624	500	2664	648	2184
Total grain		4248	1400	3685	2280	1816	2036	632	5772	884	2712
Total glume bases		488	52	288	52	80	168	124	1064	132	168
Total spikelet forks		576	28	184	72	52	248	28	1707	140	128
Spikelet forks x 2		1152	56	368	144	104	496	56	3414	280	256
Total wheat chaff		1640	108	656	196	184	664	180	4478	412	424
Total hulled grain		2301	653	960	1778	1092	659	1798	4181	1169	859
Plus percentage indet. grain		3188	1339	3312	2175	1621	1462	481	2486	614	2125
Total hulled grain corrected		5489	1992	4272	3953	2713	2121	2279	6667	1783	2984
RATIO 1		0.298797	0.054206	0.153551	0.049581	0.067825	0.313053	0.078991	0.671702	0.2310239	0.1421084
Total barley chaff											
Total barley grain		32	12	8	4	28	73	32	300	64	8
TOTAL WHEAT AND BARLEY		2333	665	984	1782	1148	732	1870	4481	1233	883
		98.62838	98.19549	97.56098	99.77553	95.12195	90.02732	96.14973	93.305066	94.809408	97.281993

Table 3 cont. Plant remains from Corn Drier 4

SAMPLE	3298	3300	3301	3302
LOCATION	flue/centre 1	flue/east 2	flue/centre 2	flue/west 2
volume sieved in litres	0.5	0.5	0.5	0.5
TAXA				
Agrostemma githago L.	-	-	-	-
Caryophyllaceae indet.	-	-	-	-
Rumex sp.	-	-	-	-
Anthemis cotula L.	-	-	-	-
Tripleurospermum sp. Schultz Bip	-	-	-	-
Carduus/Cirsium sp.	-	-	-	-
Asteraceae (large) indet.	-	4	-	-
Asteraceae (small) indet.	2	-	-	4
Bromus hordeaceus type	-	-	-	-
cf. Bromus sp.	-	-	-	-
Avena sp. (grain)	-	-	-	-
Avena cf. fatua L. (floret)	-	-	-	-
cf. Avena sp. (awn)	-	-	-	-
Poaceae (large) indet.	-	-	-	-
Poaceae (small) indet.	-	-	-	-
cf. T. dicoccum (Schrank.) Schulb. (spikelet fork)	-	-	-	-
Triticum dicoccum (Schrank.) Schulb. type (grain)	-	-	-	-
cf. Triticum dicoccum (Schrank.) Schulb. type (grain)	-	-	-	-
Triticum, free-threshing type (grain)	-	-	-	-
T. spelta L. (spikelet)	-	-	-	-
T. spelta L. (glume base)	-	2	-	8
T. spelta L. (spikelet fork)	-	6	-	10
T. spelta L. (terminal spikelet fork)	-	-	-	-
T. spelta L. (rachis internode)	-	-	-	-
Triticum spelta L. type (grain)	-	-	-	2

SAMPLE	3298	3300	3301	3302
LOCATION	flue/centre 1	flue/east 2	flue/centre 2	flue/west 2
volume sieved in litres	0.5	0.5	0.5	0.5
Triticum spelta L. type (sprouted grain)	-	-	-	-
Triticum spelta L. type (short fat grain)	-	-	-	-
T. dicoccum/spelta (glume base)	-	-	-	-
T. dicoccum/spelta (spikelet fork)	-	-	-	-
Triticum diococcum/spelta type (grain)	-	-	-	-
Triticum diococcum/spelta type (sprouted grain)	-	-	-	-
T. diococcum/spelta type (tail grain)	-	-	-	-
T. dicoccum/spelta (terminal glume base)	-	-	-	-
T. dicoccum/spelta (terminal spikelet fork)	-	-	-	-
T. dicoccum/spelta (rachis internode)	-	-	-	-
Triticum sp. (grain)	59	92	77	130
Triticum sp. (glume base)	15	4	4	2
Triticum sp. (spikelet fork)	12	7	7	3
Triticum sp. (rachis internode)	-	-	-	10
cf. Triticum sp. (grain)	-	-	-	-
Triticum/Secale sp. (grain)	-	-	-	-
Triticum/Secale sp. (awn)	290	1	16	348
Triticum/Secale sp. (awn) – silicified	60	228	340	1260
Hordeum vulgare L. (spikelet)	-	-	-	-
Hordeum sp. (hulled straight grain)	-	-	-	-
Hordeum sp. (hulled twisted grain)	-	-	-	-
Hordeum sp. (hulled grain)	-	-	-	-
Hordeum sp. (grain)	-	1	-	4
Hordeum sp. (awn)	-	30	-	-
Hordeum sp. (rachis)	-	-	1	-
cf. Hordeum sp. (grain)	-	-	-	-
cf. Hordeum sp. (spikelet)	-	-	-	-
Cereales indet. (grain)	98	56	104	162
Cereales indet. (chaff)	4	64	1	26
Cereales sprout. (embryo)	-	1	3	14
Cereales size (sprout)	-	-	-	60

	SAMPLE	3298	3300	3301	3302
	LOCATION	flue/centre 1	flue/east 2	flue/centre 2	flue/west 2
	volume sieved in litres	0.5	0.5	0.5	0.5
Ignota		-	-	6	-
Total number of items identified		540	268	559	2043
Items per litre		1080	536	1118	4086
Total weeds		2	4	0	4
Grain identified to genus		59	93	77	136
Cereales indet. (grain)		98	56	104	162
Total grain		403	92	124	516
Total glume bases		15	6	4	10
Total spikelet forks		12	13	7	13
Spikelet forks x 2		24	26	14	26
Total wheat chaff					
Total hulled grain		59	92	77	132
Plus percentage indet. grain		98	55	104	157
Total hulled grain corrected		157	147	181	289
RATIO 1		0	0	0	0
Total barley chaff					
Total barley grain		0	1	0	4
TOTAL WHEAT AND BARLEY		59	93	77	136
		100	98.924731	100	97.058824

Table 4. Charred plant remains from small ovens of Roman date at Grateley

	Sample	2749	2734	2879	3462	3461	3240	3243
	Context	F688/2	F674/1	F736/2	F769/6	F782/2	F783/1	F783/1
	% of sample analysed	50%	50%	25%	12.50%	6%	3%	3%
TAXON								
<i>Ranunculus</i> Subgen. <i>Ranunculus</i>		1	-	-	-	-	-	-
<i>Papaver somniferum</i> L.		-	-	-	2	-	-	-
<i>Papaver rhoeas/dubium/hybridum</i>		-	-	-	1	-	-	-
<i>Papaver argemone</i> L. (capsule top)		-	-	-	-	-	-	1
<i>Papaver</i> sp.		-	-	-	3	-	-	-
<i>Corylus avellana</i> L. (nutshell frag.)		5	-	-	-	-	-	-
<i>Agrostemma githago</i> L.		1	-	-	-	6	1	1
cf. <i>Agrostemma githago</i> L.		-	-	-	-	1	-	-
Caryophyllaceae indet. (capsule fragment)		-	-	-	2	1	1	1
<i>Rumex</i> spp.		-	-	1	3	-	-	1
Polygonaceae indet.		1	-	-	1	-	-	-
<i>Vicia/Lathyrus</i> sp.		1	1	-	1	1	-	-
<i>Medicago</i> type		-	-	-	1	-	-	-
cf. <i>Pisum</i> sp.		-	-	-	-	-	1	-
Fabaceae (small) indet.		-	-	2	4	-	-	-
Fabaceae indet. (pod frag.)		-	-	-	-	-	4	2
<i>Daucus carota</i> L.		-	-	-	1	-	-	-
<i>Galeopsis</i> sp.		-	-	-	2	-	-	-
<i>Plantago media/lanceolata</i>		-	-	2	-	-	-	-
<i>Euphrasia/Odontites</i> sp.		1	-	-	2	-	-	-
Rubiaceae indet.		-	-	-	1	-	-	-
<i>Centaurea</i> sp.		-	-	1	-	-	-	1
cf. <i>Centaurea</i> sp.		-	-	1	-	-	-	-
<i>Anthemis arvensis</i> L.		1	-	-	-	-	-	-
<i>A. cotula</i> L.		-	-	-	4	-	-	-
<i>Tripleurospermum</i> sp.		-	1	-	1	1	1	1
Asteraceae (large) indet.		-	-	-	1	1	1	1
Asteraceae (small) indet.		-	-	-	2	-	-	-
<i>Carex</i> sp.		-	-	2	-	-	-	-
<i>Lolium</i> sp.		-	-	-	-	2	-	-
<i>Poa annua</i> type		-	-	-	15	1	-	-
<i>Avena</i> sp.		-	-	-	-	-	2	7
<i>Avena</i> type (awn)		-	-	-	-	1	-	1
cf. <i>Avena fatua</i> type (floret base)		-	-	-	-	-	-	1
<i>Bromus sterilis</i> type		-	-	-	1	1	-	-
<i>Bromus hordeaceus</i> type		-	-	-	1	1	-	-
<i>Bromus</i> sp.		-	-	-	1	5	-	-
<i>Hordeum</i> cf. <i>murinum</i> L.		-	-	-	-	1	-	-
Poaceae (large) indet.		-	-	-	4	1	-	3
Poaceae (small) indet.		-	-	-	46	-	1	-
<i>Allium vineale</i> type (bulbil)		-	-	-	-	3	-	-
<i>Triticum dicoccum</i> type (grain)		-	-	-	1	12	-	3
<i>T.</i> cf. <i>dicoccum</i> type (grain)		-	-	-	-	-	2	-
<i>Triticum</i> sp. free-threshing (rachis)		-	-	-	-	-	-	1

	Sample	2749	2734	2879	3462	3461	3240	3243
	Context	F688/2	F674/1	F736/2	F769/6	F782/2	F783/1	F783/1
	% of sample analysed	50%	50%	25%	12.50%	6%	3%	3%
<i>Triticum</i> sp. free-threshing type (grain)		-	-	-	-	-	3	2
<i>Triticum spelta</i> L. (glume base)		5	-	31	50	160	34	73
<i>T. spelta</i> L. (spikelet fork)		-	-	1	2	40	11	23
<i>T. spelta</i> L. (rachis internode)		-	-	4	9	7	-	5
<i>T. spelta</i> type (grain)		1	-	-	31	201	44	175
<i>T. spelta</i> type (short, fat grain)		-	-	-	6	4	2	12
<i>T. spelta</i> type (sprouted grain)		-	-	-	3	-	-	-
<i>T. cf. spelta</i> (glume base)		-	-	-	11	9	3	12
<i>T. cf. spelta</i> type (grain)		-	-	-	6	-	9	-
<i>T. dicoccum/spelta</i> (glume base)		7	-	106	152	125	39	58
<i>T. dicoccum/spelta</i> (spikelet fork)		3	-	1	13	25	8	25
<i>T. dicoccum/spelta</i> (rachis internode)		-	-	3	-	-	-	10
<i>T. dicoccum/spelta</i> type (grain)		2	-	1	51	115	13	116
<i>T. dicoccum/spelta</i> type (tail grain)		-	-	-	5	4	-	-
<i>T. dicoccum/spelta</i> type (sprouted grain)		1	-	-	2	5	-	-
<i>Triticum</i> sp. (grain)		33	49	10	15	110	37	82
<i>Triticum</i> sp. (tail grain)		-	-	-	4	-	-	-
<i>Triticum</i> sp. (glume base)		-	-	15	16	2	4	-
<i>Triticum</i> sp. (spikelet fork)		1	-	2	3	2	2	-
<i>Triticum</i> sp. (rachis internode)		-	-	-	32	3	2	-
<i>Triticum</i> sp. (chaff)		-	-	2	11	-	-	-
cf. <i>Triticum</i> sp. (grain)		-	-	-	-	-	5	-
<i>Triticum/Secale</i> sp. (awn)		-	-	-	-	-	27	6
<i>Hordeum vulgare</i> L. (rachis)		-	-	-	-	1	-	1
<i>Hordeum</i> sp. (hulled, straight grain)		-	-	-	1	16	2	2
<i>Hordeum</i> sp. (hulled, straight, sprouted grain)		-	-	-	-	1	-	-
<i>Hordeum</i> sp. (hulled, twisted grain)		-	-	-	4	25	2	8
<i>Hordeum</i> sp. (hulled grain)		-	1	-	12	6	10	12
<i>Hordeum</i> sp. (sprouted, hulled grain)		-	-	-	1	-	-	-
<i>Hordeum</i> sp. (grain)		-	3	-	1	2	26	3
<i>Hordeum</i> sp. (awn)		-	-	-	-	-	2	-
<i>Secale/Hordeum</i> sp. (rachis)		-	-	-	3	1	1	-
Cereales indet. (grain)		70	113	13	41	112	16	31
Cereales indet. (sprouted grain)		-	-	-	1	-	-	-
Cereal size (embryo)		-	-	-	11	2	11	7
Cereal size (sprout)		1	-	-	9	7	-	-
Bud		-	1	-	-	-	-	-
IGNOTA		5	-	4	3	2	-	1
Total number of items identified		140	169	202	610	1026	327	689
Number of litres processed		10	10	10	8	10	7	7
Items per litre		28	33.8	80.8	610	1710	1557.1	3281
Total weeds		6	2	9	98	26	6	17
Total grain		107	166	24	185	613	171	446
RATIO 3		0.056	0.012	0.375	0.53	0.042	0.04	0.04

	Sample	2749	2734	2879	3462	3461	3240	3243
	Context	F688/2	F674/1	F736/2	F769/6	F782/2	F783/1	F783/1
	% of sample analysed	50%	50%	25%	12.50%	6%	3%	3%
Total glume bases		12	0	152	229	296	80	143
Total spikelet forks		4	0	4	18	67	21	48
Spikelet forks x 2		8	0	8	36	134	42	96
Total wheat chaff		20	0	160	265	430	122	239
Total hulled wheat grain		37	49	11	124	451	112	388
Plus percentage indet. grain		70	104	13	36	101	12	39
Total hulled wheat grain (corrected)		107	153	24	160	552	124	427
RATIO 1		0.187		6.667	1.656	0.779	0.98	0.56
Total barley chaff		0	0	0	3	2	1	1
Total barley grain		0	4	0	19	50	40	25

Table 5. Charred plant remains from other features of Roman date at Grateley

	Sample	3345	2863	3446	3295
	Context	F815/2	427	F780/3	451
	% of sample analysed	100%	25%	3%	6.25%
TAXON					
<i>Papaver</i> sp.		2	-	-	-
<i>Agrostemma githago</i> L.		-	-	-	1
<i>Persicaria</i> sp.		1	-	-	-
<i>Rumex</i> sp.		1	1	-	-
cf. Brassicaceae (large) capsule frag.		1	-	-	-
<i>Vicia/Lathyrus</i> sp.		-	3	2	-
<i>Medicago</i> type		2	-	-	-
Fabaceae (small) indet.		3	-	-	-
<i>Lithospermum arvense</i> L.		2	-	-	-
<i>Euphrasia/Odontites</i> sp.		-	-	1	-
<i>Galium</i> cf. <i>aparine</i> L.		1	-	-	-
cf. <i>Tripleurospermum</i> sp.		-	1	-	-
<i>Avena</i> sp.		-	-	1	2
cf. <i>Avena</i> sp. (grain)		-	-	1	-
<i>Bromus</i> cf. <i>hordeaceus</i> type		-	1	-	-
<i>Bromus</i> sp.		1	-	-	-
Poaceae (large) indet.		7	1	-	1
Poaceae (small) indet.		19	8	-	-
<i>Allium vineale</i> type (bubil)		1	1	-	-
<i>Triticum dicoccum</i> type (grain)		-	-	2	-
<i>T.</i> cf. <i>dicoccum</i> (glume base)		-	1	-	-
<i>Triticum</i> sp. free-threshing type (grain)		-	-	-	2
<i>Triticum spelta</i> L. (glume base)		1	37	5	-
<i>T. spelta</i> L. (spikelet fork)		-	5	-	-
<i>T. spelta</i> L. (rachis internode)		1	-	-	-
<i>T. spelta</i> type (grain)		-	5	18	34
<i>T. spelta</i> type (short, fat grain)		-	-	3	7
<i>T.</i> cf. <i>spelta</i> (glume base)		-	1	-	-
<i>T.</i> cf. <i>spelta</i> type (grain)		-	-	1	-
<i>T. dicoccum/spelta</i> (glume base)		2	63	3	1
<i>T. dicoccum/spelta</i> (spikelet fork)		-	11	1	-
<i>T. dicoccum/spelta</i> type (grain)		-	29	55	82
<i>T. dicoccum/spelta</i> type (sprouted grain)		-	-	-	13
<i>Triticum</i> sp. (grain)		4	44	100	59
<i>Triticum</i> sp. (glume base)		1	-	-	-
<i>Hordeum vulgare</i> L. (rachis)		1	-	-	-
<i>Hordeum</i> sp. (hulled, straight grain)		1	-	1	4
<i>Hordeum</i> sp. (hulled, twisted grain)		2	-	2	6
<i>Hordeum</i> sp. (hulled grain)		6	1	10	29
<i>Hordeum</i> sp. (sprouted, hulled grain)		-	-	-	2
<i>Hordeum</i> sp. (grain)		14	6	1	-
Cereales indet. (grain)		62	56	56	65
Cereal size (embryo)		1	5	3	1

	Sample	3345	2863	3446	3295
	Context	F815/2	427	F780/3	451
	% of sample analysed	100%	25%	3%	6.25%
Root fragment - monocot		-	1	-	-
IGNOTA		9	2	2	-
Total number of items identified		146	283	268	309
Number of litres processed		10	5	5	10
Items per litre		15	226	1718	494
Total weeds		40	16	5	4
Total grain		89	141	249	303
RATIO 3		0.4494	0.11348	0.02008	0.0132
Total glume bases		4	102	8	1
Total spikelet forks		0	16	1	0
Spikelet forks x 2			32	2	
Total wheat chaff		4	134	10	1
Total hulled wheat grain		4	78	179	195
Plus percentage indet. grain		9	51	52	37
Total hulled wheat grain		13	129	231	232
RATIO 1		0.3077	0.7907	0.03463	0.00431
Total barley chaff		1	-	-	-
Total barley grain		23	7	14	41
Plus percentage indet. grain					
Total barley grain					
RATIO 2					