

Excavations at Beddington Sewage Farm 1992--2009: Neolithic pits, later Bronze Age land division and a Tudor deer park
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Table 1 Radiocarbon dates

Lab ref	Sample reference	Material	Date BP	δC^{13} (IRMS)	calibration (2 sig. 95.4%)
SUERC-81890	BDN92_Cremation deposit (6044)	Bone (cremated human bone): Fragment of long bone, femur?	3063±28	-18.30‰	1420–1230 cal BC
UBA-40435	BDN92_Cremation deposit (6044) <3018>	Wood charcoal: <i>Corylus avellana</i>	2948±25		1260–1050 cal. BC
UBA-40434	BDN92_Pit [11149] (11151) <12002>	Waterlogged plant remains: <i>Linum</i> sp., <i>Rubus</i> sp., <i>Crataegus monogyna</i> seeds	2893±34		1210–940 cal BC

Table 2 Summary of finds from Middle Neolithic features

Feature	Pottery (no/weight, (g))	Flint (no)	Burnt flint (no/weight, g)	Charred hazelnut shells	Animal bone*
Keepers Gate					
4625 (pit)	48/317	60	11/111	+	*
4627 (pit)	38/533	32	5/86	-	*
4645 (Tree-throw hollow)	1/1g	44	3/6	-	-
4693 (pit)	49/136	2	-	+	*
Great Favourite					
5021 (pit)	75/684	1	-	-	* (includes cattle pelvis & red deer metatarsal – split for marrow extraction)
5046 (pit)	12/46	4	-	-	-
5076 (pit)	2/7	9	-	-	-
5092 (pit)	9/16	-	-	-	-
5356 (pit)	1/2	-	-	-	-
5764 (pit)	65/271	2	-	-	*
11132 (pit)	22/79	3	-	-	-
11157 (pit)	3/27	6	-	-	* (includes cattle metatarsal & calcaneus)
11298 (tree-throw hollow)	1/2	-	-	-	-
11443/11445/11446 (tree-throw hollow)	2/5	20	42/164	-	-

+ - present * - mostly unidentifiable fragments including some burnt pieces (identifiable fragments)

Table 3 Summary of worked flint

Cores, core fragments	Blades, blade-like flakes, bladelets	Flakes	Irregular waste	Chips	Retouched forms	Total
53	57	670 (including 6 core rejuvenation flakes)	34	33	68 (17 scrapers, 1 denticulate, 2 piercers, 6 serrated flakes/blades, 1 leaf-shaped arrowhead, 2 hammerstones, 1 mace-head, 3 retouched flakes, 1 backed blade, 34 miscellaneous retouch)	915

Table 4 Summary of flint from pits associated with Middle Neolithic Peterborough Ware

Pit	Cores, core fragments	Blades, blade-like flakes, bladelets	Flakes	Irregular waste	Retouched forms	Total
4625	-	6	44 (including 2 core rejuvenation flakes)	4	6 (4 scrapers, 2 retouched flakes)	60
4627	1	2	25 (including a flake from a polished implement)	2	2 (1 serrated flake, 1 knife)	32
4693	-	-	2	-	-	2
5021	-	-	-	-	1 (mace-head)	1
5764	-	1	1	-	-	2
5076	-	-	9 (including a flake from a polished implement)	-	-	9
11132	-	-	2	-	1 (serrated flake)	3
11157	-	-	4	-	2 (retouched flakes)	6
Total	1	9	87	6	12	115

Table 5 Prehistoric pottery totals by chronological period and fabric

Period	Fabric	No of sherds	Weight (g)	MSW* (g)
Early Neolithic	F4	6	11	
	QF1	1	5	
	V1	1	42	
<i>EN sub-total</i>		8	58	7.3
Middle Neolithic	F1	199	1502	
	F2	19	86	
	F3	65	271	
	GF1	32	213	
	GF2	2	9	
	QF1	54	79	
<i>MN sub-total</i>		371	2160	5.8
Neolithic unspecified	F1	8	31	
	F2	9	56	
	F3	3	10	
	F4	24	190	
	QF1	3	14	
<i>Neo unsp sub-total</i>		47	301	6.4
Middle-Late Bronze Age	F5	97	679	
	F6	98	424	
	F7	9	1	
	F8	36	110	
<i>M-LBA sub-total</i>		240	1214	5.1
Iron Age	F8	20	63	
	QF2	15	60	
	VF1	8	29	
<i>IA sub-total</i>		43	152	3.5
Prehistoric unspecified	F7	4	4	
	F8	7	9	
	F99	58	47	
	QF99	3	7	
<i>Preh unsp sub-total</i>		72	67	1.0
<i>Total</i>		781	3952	5.1

* Mean Sherd Weight

Table 6 Summary of Middle Neolithic pottery from key pit groups by fabric (no of sherds/weight (g))

Pit	F1	F2	F3	GF1	GF2	QF1	Total
4625	11/101	5/37	-	21/127	2/9	2/2	41/276
4627	39/498	1/10	-	4/7	-	1 / 2	45/517
4693	2/22	2/18	-	-	-	51/75	55/115
5021	75/671	-	-	-	-	-	75/671
5076	3/7	-	-	-	-	-	3/7
5092	11/14	-	-	-	-	-	11/14
5764	-	-	65/271	-	-	-	65/271
11132	22/80	-	-	-	-	-	22/80
11157	-	-	-	2/15	-	-	2/15
<i>Total</i>	<i>163/1393</i>	<i>8/65</i>	<i>65/271</i>	<i>27/199</i>	<i>2/9</i>	<i>54/79</i>	<i>319/1966</i>

Table 7 Middle to Late Bronze Age pottery by feature type (no of sherds/weight (g))

Feature type	No of sherds	Weight (g)	MSW (g)
Pit	109	496	4.6
Ditch	96	589	6.1
Waterhole	18	101	5.6
Tree-throw hollow	16	24	1.5
Posthole	1	4	4
<i>Total</i>	<i>240</i>	<i>1214</i>	<i>5.1</i>

Table 8 Number of identified animal bones (or NISP) by period

Species	Middle Neolithic	Middle Bronze Age	Middle-Late Bronze Age	Medieval	Post-medieval	Undated	Total
Cattle	3	4	8	-	6	7	28
Sheep/goat	-	1	-	-	-	7	8
Pig	-	1	-	-	2	-	3
Horse	-	-	-	1	6	4	11
Dog	-	-	1	2	-	-	3
Cat	-	-	-	2	-	-	2
Red deer	1	1	-	-	-	-	2
Fallow deer	-	-	-	-	360	-	360
Deer	-	-	-	-	2	2	4
Rabbit	-	-	-	-	2	-	2
Total identified	4	7	9	5	378	20	423
Total unidentifiable	10	48	22	1	33	54	168
Overall total	14	55	31	6	411	74	591

Table 9 Charred plant remains

	Period	Middle Neolithic				Middle/Late Bronze Age		
	Feature	Pit			Pit	Pit	Pit	Ditch
	Feature number	4625			4693	5409	5232	4595
	context type	Fill	Fill	Fill	Fill	Fill	Fill	Fill
	context number	4798	4802	4912	4921	5238	5413	4596
	sample number	133	137	139	142	3006	3008	146
	vol (l) processed soil	10	10	10	5	8	4	10
	vol flot (ml)	60	225	110	40	100	100	15
Latin name	English name							
Cereal grains								
<i>Triticum dicoccum</i> Schubl.	emmer wheat					1		
<i>T. dicoccum/spelta</i>	emmer/spelt wheat					1		
<i>Triticum</i> spp.	wheat					2		
cf. <i>Triticum</i> spp.	?wheat					8		2
<i>Hordeum vulgare</i> L.	barley, hulled twisted					1		
<i>H. vulgare</i> L.	barley, hulled indet.					1		
<i>H. vulgare</i> L.	barley, indet.					5		
cf <i>H. vulgare</i>	?barley, indet.					9		
cf. <i>Avena</i> sp.	?oat					1		
Cerealialia	indet. cereal (estimate)					126	4	2
Cerealialia	indet cereal fragments <1mm					++	+	+
Cereal chaff								
<i>Triticum dicoccum</i> Schubl.	emmer wheat spikelet fork					1	1	
<i>T. dicoccum</i> Schubl.	emmer wheat glume base					1	1	
<i>T. dicoccum/monococcum</i>	einkorn/emmer wheat spikelet fork					7		
<i>T. spelta</i> L.	spelt glume base						1	
<i>T. spelta</i> L.	spelt rachis						1	
<i>Triticum</i> sp(p).	wheat spikelet forks					4	1	
<i>Triticum</i> sp(p).	wheat glume bases					8	1	
<i>Triticum</i> sp(p).	wheat spikelet bases					7	1	
<i>Triticum</i> sp.	wheat rachis fragments					1		
<i>Hordeum vulgare</i> L.	barley rachis (dense and lax-eared)					1	5	
<i>Avena</i> spp.	oat awn fragments					2		
Other plant/weed seeds								
<i>Corylus avellana</i> L.	hazelnut shell fragments	109 (1.3g)	616 (7.2g)	492 (5.2g)	18 (0.2g)			
<i>Chenopodium</i> sp.	goosefoot etc					1		
<i>Persicaria</i> cf <i>lapathifolia</i>	?pale persicaria					1		
<i>Persicaria</i> sp(p).	knotweed					6	1	
<i>Rumex</i> sp(p).	dock					1	2	
<i>Plantago lanceolata</i> L.	ribwort plantain						1	
<i>Eleocharis palustris/uniglumis</i>	spike-rush					1		

indeterminate	wood charcoal	+++++	+++++	+++++	+++++	+++++	+++	++
total no of items		109	616	492	18	197	20	4
item density (per litre of processed soil)		10.9	61.6	49.2	3.6	24.6	5	0.4

item frequency: +=1-10; ++ = 11-50; +++ = 51-150; ++++ = 151-250; +++++ = >250 items

Table 10 Waterlogged plant remains

Period			Middle to Late Bronze Age						Prehistoric		
Feature			Pit/W H	Pit	Pit	Pit	Pit/W H	Pit	WH	Pit	WH
Feature number			5421	6778	6808	6808	5303	5232	11158	11149	11316
context number			5113	6779	6815	6770	5334	5413	11177	11151	11315
sample number			3013	184W	188W	187W	3005	3008	12004	12002	12032
vol soil processed (l)			1	1	1	1	1	1	20	10	1
vol flot (ml)			20	10	35	60	10	8	40	55	25
Latin name	English name	HAB codes									
<i>Pteridium aquilinum</i> (L.) Kuhn	bracken fronds	CDGH									+
<i>Ranunculus acris/repens/bulbo sus</i>	buttercups	ABCDE G		++	+	+	+	+		+	++
<i>R. sardous</i> Crantz.	hairy buttercup	ABE						+			
<i>R. flammula</i> L.	lesser spearwort	EG						+			
<i>R.</i> subgen. <i>Batrachium</i> (DC) A Gray	crowfoots	E				++					
<i>Ranunculus</i> spp.	butercups	ABCDE G		+					+		+
<i>Fumaria officinalis</i> L.	common fumitory	A									+
<i>Urtica dioica</i> L.	common nettle	BCDEFG H	++	+++	+++	++++	+++	++	+++		+++
<i>U. urens</i> L.	small nettle	AB									+
<i>Corylus avellana</i> L.	hazelnut shell fragments	CF	+								+
cf. <i>C. avellana</i>	hazelnut shell fragment	CF						+			
<i>Chenopodium ficifolium</i> Sm.	fig-leaved goosefoot	AB					++	+			
<i>C. album</i> L.	fat hen	ABFH		+		+	++	+		+	
<i>Chenopodium</i> spp.	goosefoot etc	ABCDF H		+		+	+++	+++		+	++
<i>Atriplex</i> spp.	orache	ABFGH		+	+	+	++++	+++			++
Chenopodiaceae indet.	–	–			+					+	
<i>Montia fontana</i> ssp. <i>chondrosperma</i> (Fenzl) Walters	blinks	AE			+	+		+			
<i>Moehringia trinervia</i> (L.) Ehrh.	three-nerved sandwort	C	++								
<i>Stellaria nemorum</i> L.	wood stitchwort	CE		+							
<i>S. media</i> (L.) Vill.	common chickweed	ABCDE	++	+		+	++	++			+
<i>S. graminea</i> L.	lesser stitchwort	D								+	+
<i>Stellaria</i> spp.	stitchworts	ABCDE G	+	+	+	+	++	+		+	+

<i>Silene</i> spp.	campion/ catchfly	ABCFD									+		
Caryophyllaceae indet.	-	-		+									
<i>Persicaria maculosa</i> Gray	redshank	ABEH							++				
<i>P. lapathifolia</i> (L.) Gray	pale persicaria	ABE							++		+		
<i>Persicaria</i> spp.	knotweed	ABCDEF G					+		++		+		
<i>Polygonum aviculare</i> L.	knotgrass	ABG	+					+	++		+++		
<i>Fallopia convulvulus</i> (L.) A Love	black bindweed	ABF									+		
<i>Polygonum</i> spp.	knotgrass	ABCDEF G						+					
<i>Rumex conglomeratus</i> Murray	clustered dock fruit	DE							+				
<i>R. obtusifolius</i> L.	broad-leaved dock	BD									+		
<i>Rumex</i> spp.	dock	ABCDEF G			+	+	+		+++		+	+	
Polygonaceae indet.	-	-	+										
<i>Viola</i> spp.	violet	ABCDG			+					+	+	+	
<i>Rubus idaeus</i> L.	raspberry	CFG			+								
<i>R. sect. Glandulosus</i> Wimm. & Grab.	blackberry	CFGH											
<i>R. fruticosus/ idaeus</i>	blackberry/ raspberry	CFGH			+	+	+	+			++	+	+
<i>Rubus</i> spp.	brambles etc seed fragments	CFGH											
<i>Potentilla</i> cf. <i>reptans</i>	?creeping cinquefoil	BCD											
<i>Potentilla</i> spp.	cinquefoil/ tormentil	BCDEFG H											
<i>Agrimonia</i> spp.	agrimony seed head	C	+	+									
<i>Prunus spinosa</i> L.	sloe/ blackthorn	CFG											
cf. <i>P. spinosa</i>	sloe/ blackthorn stone fragments	CFG											
<i>Crateagus monogyne</i> Jacq.	hawthorn	C											
Rosaceae indet.	thorns (hawthorn, brambles etc)												
cf. <i>Epilobium/Pedicularis</i> <i>sp.</i>	?willowherb/l ousewort	ABCE											
<i>Cornus sanguinea</i> L.	dogwood	CH									+		
cf. <i>Rhamnus</i> sp.	?buckthorn	C											
<i>Linum usitatissimum</i> L.	flax	HI											
<i>L. catharticum</i> L.	fairy flax	D											
<i>Chaerophyllum temulum</i> L.	rough chervil	CD											
<i>Aethusa cynapium</i> L.	fool's parsley	A	+										
<i>Angelica/Pastinaca</i> <i>spp.</i>	angelica/pars nip	BCDEI											
<i>Pastinaca sativa</i> L.	wild parsnip	BD											
cf. <i>P. sativa</i>	?wild parsnip	BD									+		

<i>Torilis</i> spp.	hedge-parsleys	ACD				+						+
cf. <i>Torilis</i> spp.	?hedge-parsleys	ACD			+							
Apiaceae indet.	–	–	+		+	+			+		+	+
<i>Solanum nigrum</i> L.	black nightshade	BF				+	++	+	+	++	++	++
<i>Solanum</i> spp.	nightshade	BD				+	+			+	++	+
cf. <i>Ballota nigra</i>	?black horehound	CG					+					
<i>Lamium album</i> L.	white dead-nettle	BC							+			
<i>Lamium</i> spp.	dead-nettles	ABC					+	+	+	+		+
<i>Galeopsis</i> spp.	hemp-nettle	ABCD				+						
<i>Ajuga reptans</i> L.	bugle	CDE								+	+	+
<i>Prunella vulgaris</i> L.	self-heal	BCDG					+			+		+
Lamaiceae indet.	–	–				+	+	+	+	+		
<i>Plantago major</i> L.	greater plantain	ABDEG	+					+	+			+
<i>Sambucus nigra</i> L.	elder	BCFGH	+			+				+	+	
<i>Sambucus</i> spp.	elder seed fragments	BCFGH							+			
<i>Valerianella dentata</i> (L.) Pollich	narrow-fruited cornsalad	A								+		
<i>Carduus/Cirsium</i> spp.	thistles	ABDEG			+	+		+	+	+		
<i>Lapsana communis</i> L.	nipplewort	BCF	+			+	+			+		
<i>Sonchus asper</i> (L.) Hill	spiny milk-/sow-thistle	AB	+			+		++	+	+		+
<i>Sonchus</i> spp.	milk-/sow-thistle	ABE	+	+				+	+	+	+	
<i>Lemna</i> spp.	duckweed	E					+					
<i>Juncus</i> spp.	rush	ADEH	+			+		+++	+++		++	+
<i>Carex</i> spp.	sedge	CDEH			+	+		+	+	+	+	++
Poaceae indet.	grasses (small)	ABCDEFH					++	+	+		+	
indeterminate	bud fragments				++	++	++				+	++
indeterminate	stem fragments		+			++	++	++	++			
indeterminate	wood/twig fragments		++		++++	++++	++++	++++	++++	++++	++++	++++
indeterminate	charcoal		++		+++	+++	+++	+++	++	++	+++	+++
indeterminate	leaf abscission pads								+			
indeterminate	–		+	+	+	+	+	+	+	+	+	+
Bryophyta indet.	moss					+	+				+++	++

Item frequency: + = 1-10 items; ++ = 11-50 items; +++ = 51-150 items; ++++ = 150-250; +++++ >250 items

Habitat codes: A=weeds of cultivated land;

B=weeds of waste places and disturbed ground;

C=plants of wood, scrub, hedgerows;

D= grassland plants ;E=plants of wet/damp environments

F=edible plants;

G=medicinal and poisonous plants;

H=commercial/industrial use;

I=cultivated plants

WH =waterhole