Landscape, Community and Colonisation: the North Somerset Levels during the 1st to 2nd millennia AD

by Stephen Rippon

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Tables and figures

Table 3.2 Soil micromorphology, Home Ground: summary descriptions of contexts in thin section

context	thickness	composite properties	mineral components	organic components	pedofeatures
242	>18cm	Vughy microstructure with 10% porosity. Horizontally bedded.	Silty clay. Few fine sand-sized grains. Grey and brown (PPL); grey, brown and orange (OIL).	Rare. Highly fragmented and strongly decomposed. Very dark brown cell contents.	• gleying features • soil fauna features • slaking features
281 (upper dark horizon)	2cm	Vughy-channel microstructure with 15% porosity. No bedding.	Silty clay. Few fine sand-sized grains. Dark grey and brown (PPL); grey and brown (OIL).	Rare. Highly fragmented and strongly decomposed. Reddish/brown and very dark brown cell contents.	• earthworm granules • gleying features • soil fauna features • reworked fragments of other contexts
282	5cm	Vughy-channel microstructure with 5% porosity. No bedding.	Silty clay. Few fine sand-sized grains. Greyish/brown (PPL); grey and brown (OIL). Rare fine charcoal fragments.	Rare. Highly fragmented and strongly decomposed. Dark brown cell contents.	• silty clay coatings on pore walls • earthworm granules • reworked fragments of other contexts • gleying features • slaking features
283	>25cm	Vughy microstructure with 10% porosity. No bedding.	Silty clay. Few fine and rare medium sand-sized grains. Whole and fragmented shells. Rare charcoal flecks. Grey (PPL and OIL).	Rare. Highly fragmented and strongly decomposed. Dark brown cell contents.	• soil fauna features • silty clay coatings on pore walls • gleying features • reworked fragments of other contexts • slaking features

Table 3.4 Assessment of pollen from sediment samples from the upper part of the Home Ground alluvial sequence

	context	**242**	**281**	**281**	**281**	**314**
	sample depth in cm from top of tin 1	**15–16**	**17–17.5**	**18–18.5**	**19–20**	**67–68**
	total pollen counted	**30**	**28**	**45**	**77**	**10**
	***Lycopodium* recovered**	**56**	**50**	**90**	**92**	**63**
TREES AND SHRUBS						
	Pinus (pine)	1	3		4	
	Quercus (oak)	3	1			
	Alnus (alder)	1		2	1	1
	Corylus-type (hazel)	1	2	1		
HERBACEOUS TYPES						
d	*Plantago lanceolata* (ribwort plantain)	4		1		1
d	*Plantago major* (greater plantain)	1				
d	Lactuceae (dandelion and related Asteraceae)	1	1	21	58	2
d, m	*Ranunculus acris*-type (buttercup family)				1	
d	Brassicaceae (cabbage family)	1			2	
d	*Cirsium*-type (thistles)				1	
d	Dipsacaceae (teasel family)					1
v	Poaceae (grasses)	12	14	17	5	1
v	Cyperaceae (sedges)		3	1	1	
v, c	*Cereal-type* (cereals etc)			1		
s, d	Chenopodiaceae (goosefoot family)	3	3	1	1	3
s	*Plantago coronopus* (buck's horn plantain)		1			1
v	Apiaceae (carrot family)				2	
h	Ericaceae (heaths)	1				
f	*Sparganium emersum*-type (bur reeds, lesser bulrush)	1				
Counted Outside Pollen Sum						
	Filicales undifferentiated (ferns)	4	8	9	32	4
	Polypodium vulgare (polypody fern)	2	3	3	12	8
	Pteridium aquilinum (bracken)	12	15	1	8	2
	Sphagnum (bog moss)	1			1	
	Spirogyra spores			1	7	
	Mougeotia spores			2	5	
	Spore Type 128			10	38	
	Degraded grains (unidentified)	16	13	41	85	12
	Crumpled grains (unidentified)	3	1			
	Pollen preservation	P	P	P	VP	VP
	Pollen concentration	VP	P	P	P	P
	Relative concentration of charcoal >40 μm	8000	9000	75000	56000	10100

Habitat preferences: v, various; d, disturbed ground; m, meadows or grazed land; c, cultivated land; s, saltmarsh or other maritime habitat; h, heathland; f, freshwater ditch. Preservation and concentration categories: P = poor; VP = very poor

Table 3.5 Foraminifera from the Home Ground alluvial sequence. Depths are below present ground surface. Numbers of forams are in 10cm^3 of wet sediment

depth	context	no. of forams	species present	ecology of individual species
50cm (4.40m OD)	218 (upper dark horizon)	<10	*Haynesina germanica* *Agglutinated* sp.	brackish, mid/low marsh–mudflat brackish, high–mid marsh
60cm (4.30m OD)	219	<100	*Haynesina germanica* *Elphidium williamsoni* *Ammonia beccarii v. limnetes*	brackish, mid/low marsh–mudflat brackish, mid/low marsh brackish–marine
70cm (4.20m OD)	219	<100	*Haynesina germanica* *Elphidium williamsoni* *Brizalina* sp. <125u	brackish, mid/low marsh–mudflat brackish, mid/low marsh estuary mouth–marine
80cm (4.10m OD)	219	>100	*Haynesina germanica* *Elphidium williamsoni* *Brizalina* sp. <125u	brackish, mid/low marsh–mudflat brackish, mid/low marsh estuary mouth–marine
90cm (4.00m OD)	321	>200	*Elphidium williamsoni* *Haynesina germanica* *Nonion depressulus* *Elphidium* sp	brackish, mid/low marsh brackish, mid/low marsh–mudflat estuary mouth–marine estuary mouth–marine
100cm (3.90m OD)	321	>200	*Elphidium williamsoni* *Haynesina germanica* *Nonion depressulus* *Elphidium* sp	brackish, mid/low marsh brackish, mid/low marsh–mudflat estuary mouth–marine estuary mouth–marine
110cm (3.80m OD)	321	>200	*Elphidium williamsoni* *Haynesina germanica* *Nonion depressulus* *Elphidium* sp	brackish, mid/low marsh brackish, mid/low marsh–mudflat estuary mouth–marine estuary mouth–marine
120cm (3.70m OD)	321	>200	*Elphidium williamsoni* *Haynesina germanica* *Nonion depressulus* *Elphidium sp*	brackish, mid/low marsh brackish, mid/low marsh–mudflat estuary mouth–marine estuary mouth–marine
130cm (3.60m OD)	324 (?palaeochannel associated with lower dark horizon)	>100	*Elphidium williamsoni* *Haynesina germanica* *Ammonia beccarii* Agglutinated marsh sp *Elphidium* sp.	brackish, mid/low marsh brackish, mid/low marsh–mudflat brackish–marine brackish, high/mid-marsh estuary mouth–marine
140cm (3.50m OD)	252	>200	*Elphidium williamsoni* *Haynesina germanica* *Elphidium* sp. *Ammonia beccarii* Agglutinated marsh sp.	brackish, mid/low marsh brackish, mid/low marsh–mudflat estuary mouth–marine brackish–marine brackish, high/mid-marsh
150cm (3.40m OD)	252	*c* 100	*Elphidium williamsoni* *Haynesina germanica* *Elphidium* sp. *Ammonia beccarii* Agglutinated marsh sp. *Brizlina* sp. <125u	brackish, mid/low marsh brackish, mid/low marsh–mudflat estuary mouth–marine brackish–marine brackish, high/mid-marsh estuary mouth–marine

Table 3.6 Plant macrofossils from upper dark horizon (context 417) at Hardingworth

	context	**417**	
	size of sample	**25.8kg/26 litres**	
	size of residue	**7g**	
	size of float	**25ml**	
WATERLOGGED PLANT REMAINS			**habitat**
CHARACEAE			
Chara spp	Stonewort	3	A
RANUNCULACEAE			
Ranunculus subg. *Batrachium* (DC.)A.Gray	Water Crowfoot	2	APR
LAMIACEAE			
Lycopus europaeus L.	Gipsywort	1	FRw
SCROPHULARIACEAE			
Veronica beccabunga L.	Brooklime	1	BMPR
ASTERACEAE			
Eupatorium cannabinum L.	Hemp-agrimony	freq frags	w-shade or open
ALISMATACEAE			
Alisma spp	Water Plantain	4	APR
POTAMOGETONACEAE			
Potamogeton spp	Pondweed	2	APR
LEMNACEAE			
Lemna spp	Duckweed	79	A
JUNCACEAE			
Juncus spp	Rush	168	GMRw
POACEAE			
Poaceae indet	Grasses	22	G
TYPHACEAE			
Typha spp	Bulrush	53	PR-reed swamp
	Total	335	

Key for habitats in all plant macrofossil tables

A: Aquatic
B. Bankside
C: Cultivated/Arable
D: Disturbed
E: Heath/Moor
F. Fens/Bogs
G: Grassland
H: Hedgerow
M: Marsh
P: Ponds, ditches — stagnant/slow-flowing water
R: Rivers, streams
S: Scrub
W: Woodland

a: acidic
br: base rich
c: calcareous
d: dry soils
h: heavy soils
l: light soils
n: nitrogen-rich soils
o: open habitats
p: phosphate-rich soils
s: coastal
w: wet/damp soils
cultivated plant/of economic importance

Table 4.4 Diatom remains from ditch F.365 context 375 (basal fill of upper cut). Numbers indicate valves or fragments and symbols '+' present, '++' abundant

diatoms and salinity group	sample depth		
	29.5–30.0cm	32.0–33.0cm	36.0–37.0cm
Polyhalobous			
Podosira stelligera	1	1	
Polyhalobous to Mesohalobous			
Pseudopodosira westii	1	3	1
Mesohalobous			
Nitzschia navicularis	1		1
Oligohalobous Indifferent			
Pinnularia major	8	11	1
Unknown Salinity Preference			
Navicula sp.			1
Unknown diatom fragments	27	23	1
Unknown Naviculaceae	5	1	1
Chrysophyte stomatocysts	35	31	3
centric diatom girdle band	2	2	
cf. sponge spicules	++	+	+

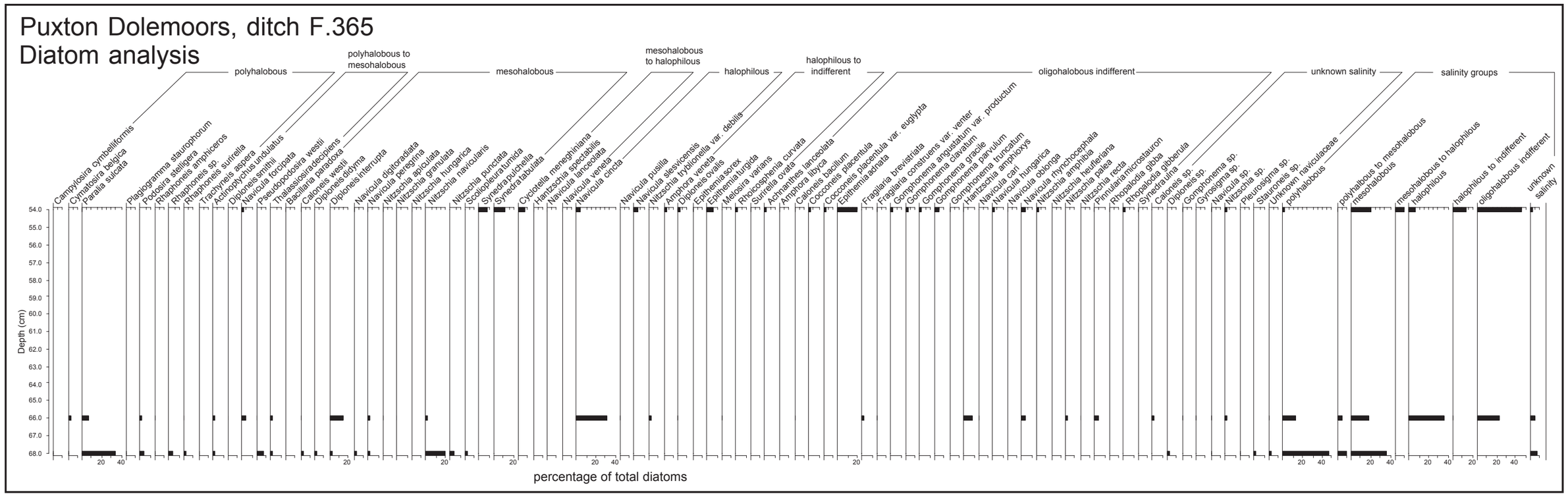

Figure 4.9 Diatom diagram for F.365 (drawing by Nigel Cameron)

Table 4.5. Foraminifera from Dolemoor ditch F.365

depth (from top of monolith tin)	context	number of tests >125μm in 10cm³ wet sediment	species present and total		ecology of individual species
29.5–30.5cm	375 (lower fill, upper cut)	0			
33–33.5cm	375 (lower fill, upper cut)	1	*Jadammina macrescens*	1	brackish, high–mid marsh
36–37cm	375 (lower fill, upper cut)	0			
54–55cm	381 (lower cut)	0			
66–67cm	381 (lower cut)	0			
68–68.5cm	381 (lower cut)	12	*Jadammina macrescens*	7	brackish, high–mid marsh
			Haplophragmoides wilberti	5	brackish, high–mid marsh

Table 4.6 Plant macrofossils from features at Dolemoor

		pit F.301	ditch F.365					
			lower cut			upper cut		
			middle fill		upper fill	basal fill	middle fill	
	context	**322**	**382**	**381**	**376**	**375**	**366**	
	sample size (kg/litres)	**18.4/20**	**23.7/20**	**5.7/5**	**21.5/20**	**21.6/20**	**23.6/20**	
	size of float (ml)	**60**	**700**	**300**	**150**	**400**	**35**	**habitat**
WATERLOGGED PLANT REMAINS								
CHARACEAE								
Chara spp	Stonewort				1			A
CERATOPHYLLACEAE								
Ceratophyllum c.f. *demersum* L.	Rigid Hornwort				45 + f			PR
RANUNCULACEAE								
Ranunculus acris / repens / bulbosus	Meadow/Creeping/ Bulbous Buttercup		1	1		1		DG
Ranunculus lingua L.	Greater Spearwort				2			M
Ranunculus sardous Crantz	Hairy Buttercup		25	1	4			CDW
Ranunculus sceleratus L.	Celery-leaved Buttercup		1		4			MPR
Ranunculus subg. Batrachium (DC.) A.Gray	Water Crowfoot	1	2500+	76	150	107	18	APR
CHENOPODIACEAE								
Atriplex spp	Orache		102	1	1	1		CDn
Chenopodium album L.	Fat-hen	17						CDn
Chenopodium rubrum / glaucum L.	Red/Oak-leaved Goosefoot			2	4			Ds
Suaeda maritima (L.)Dumort	Annual Sea-blite		1					mid/lower saltmarsh
CARYOPHYLLACEAE								
Cerastium spp	Chickweed		2					CDG
Stellaria media (L.)Villars	Common Chickweed		7					CD
POLYGONACEAE								
Polygonum aviculare L.	Knotgrass		3	1				CD

(table continued)

Table 4.6 (*cont.*) Plant macrofossils from features at Dolemoor

		pit F.301	ditch F.365					
			lower cut			upper cut		
			middle fill		upper fill	basal fill	middle fill	
	context	**322**	**382**	**381**	**376**	**375**	**366**	
	sample size (kg/litres)	**18.4/20**	**23.7/20**	**5.7/5**	**21.5/20**	**21.6/20**	**23.6/20**	
	size of float (ml)	**60**	**700**	**300**	**150**	**400**	**35**	**habitat**
Rumex c.f. *hydrolapathum* Hudson	Water Dock		2					MPR
Rumex spp	Dock		94	3				DG
BRASSICACEAE								
Rorippa nasturtium-aquaticum (L.)Hayek	Water-cress				8			BPR
Thlaspi arvense L.	Field Penny-cress		1					CD
ROSACEAE								
Potentilla anserina L.	Silverweed		6	2	1			DG, sand-dunes
Rubus sect. *Glandulosus* Wimmer and Grab	Bramble	1	2					DHSW
FABACEAE								
Medicago lupulina L.	Black Medick			1				GR
HALORAGACEAE								
Myriophyllum c.f. *spicatum* L.	Spiked Water-milfoil		1					PR br
APIACEAE								
Conium maculatum L.	Hemlock		1					Bw
Hydrocotyle vulgaris L.	Marsh Pennywort				1			FM
Oenanthe fistulosa L.	Tubular Water-dropwort				3			MPw
Oenanthe pimpinelloides L.	Corky-fruited Water-dropwort				2			MPw
Oenanthe spp	Water-dropwort				10			MPw
SOLANACEAE								
Hyoscyamus niger L.	Henbane		2					D, maritime sand and shingle
MENYANTHACEAE								
Menyanthes trifoliata L.	Bogbean					3		F, shallow water
LAMIACEAE								
Lycopus europaeus L.	Gipsywort				7			FRw
Mentha aquatica L.	Water Mint				67	10		MPw
Prunella vulgaris L.	Selfheal		1					DG
HIPPURIDACEAE								
Hippuris vulgaris L.	Mare's-tail				15			APR
PLANTAGINACEAE								
Plantago major L.	Greater Plantain		1		3			CDG o

(table continued)

Table 4.6 (*cont.*) Plant macrofossils from features at Dolemoor

		pit F.301	ditch F.365					
			lower cut			upper cut		
			middle fill		upper fill	basal fill	middle fill	
	context	**322**	**382**	**381**	**376**	**375**	**366**	
	sample size (kg/litres)	**18.4/20**	**23.7/20**	**5.7/5**	**21.5/20**	**21.6/20**	**23.6/20**	
	size of float (ml)	**60**	**700**	**300**	**150**	**400**	**35**	**habitat**
SCROPHULARIACEAE								
Odontites / Euphrasia sp	Bartsia/Eyebright		1					CD
Rhinanthus minor L.	Yellow Rattle			1				G
CAPRIFOLIACEAE								
Sambucus nigra L.	Elder		1		2	3		DHSWn
ASTERACEAE								
Cirsium c.f. *arvense* (L.)Scop	Creeping Thistle		55	16	1			CDGH
Cirsium spp	Thistle			31				DGMW
Cirsium / Carduus spp	Thistle		29	7	2	1		various
Hypochaeris sp	Cat's-ear		1					GW
Picris hieracioides L.	Hawkweed Oxtongue		2					DGoc
Sonchus asper (L.)Hill	Prickly Sow-thistle		15	2				CD
Sonchus oleraceus L.	Smooth Sow-thistle			8				CDW
Taraxacum sect *Ruderalia*	Dandelion			1				D, G/dw
ALISMATACEAE								
Alisma plantago-aquatica L.	Water Plantain				10			APR
Alisma spp	Water Plantain				85	3		APR
JUNCAGINACEAE								
Triglochin maritimum L.	Sea Arrowgrass		4	1				saltmarshes and salt sprayed G
POTAMOGETONACEAE								
Potamogeton spp	Pondweed		276	516	8	5		APR
ZANICHELLIACEAE								
Zanichellia palustris L.	Horned Pondweed		431	7				APR–fresh and brackish
LEMNACEAE								
Lemna spp	Duckweed			5	398	176	4	A
JUNCACEAE								
Juncus spp	Rush					14	5	GMRw
CYPERACEAE								
Carex spp	Sedge		5	2	9	4	1	GMPRW
Carex flacca Schreber	Glaucous Sedge				1			G, wd
Carex sylvatica Hudson	Wood-sedge		12					HSW damp
Carex vulpina L.	True Fox-sedge		3	5	22			Wh/M ditches
Cladium mariscus (L.)Pohl	Great Fen-sedge		4					FRw
Eleocharis palustris / uniglumis	Spike-rush		2	1	19			MPw

(table continued)

Table 4.6 (*cont.*) Plant macrofossils from features at Dolemoor

		pit F.301	ditch F.365					
			lower cut			upper cut		
			middle fill		upper fill	basal fill	middle fill	
	context	**322**	**382**	**381**	**376**	**375**	**366**	
	sample size (kg/litres)	**18.4/20**	**23.7/20**	**5.7/5**	**21.5/20**	**21.6/20**	**23.6/20**	
	size of float (ml)	**60**	**700**	**300**	**150**	**400**	**35**	**habitat**
Schoenoplectus lacustris (L.)Palla	Common Club-rush		24	11	42			BPR–shallow
Schoenoplectus tabernaemontani (C.Gmelin) Palla	Grey Club-rush				30			BPRs
POACEAE								
Poaceae indet	Grass		27	8	109		3	G
TYPHACEAE								
Typha spp	Bulrush				9	57	4	PR–reed swamp
	Total:	**19**	**3645+**	**710**	**1075**	**385**	**35**	
CHARRED PLANT REMAINS								
Grain								
Avena sp	Oat	5						#
c.f. *Avena* sp	Oat	3						#
Hordeum sp	Barley	13						#
c.f. *Hordeum* sp	Barley	10	1					#
Secale cereale	Rye	2						#
Triticum sp	Wheat	6						#
Cereal indet		15						#
	Total:	**54**	**1**	**0**	**0**	**0**	**0**	
Chaff								
Avena sp *(pedicel - fatua / ludoviciana type)*	Wild Oat	1						#
Avena sp (awns)	Oat	1						#
Triticum spelta (glume base)	Spelt wheat	2	1					#
Triticum sp (hulled wheat glume base)	Hulled wheat	3	1					#
Triticum sp (hulled wheat spikelet fork)	Hulled wheat	1						#
Triticum sp (awns - silicified)	Wheat	50+						#
Cereal embryo area		3						#
	Total:	**61+**	**2**	**0**	**0**	**0**	**0**	
Weeds								
CARYOPHYLLACEAE								
Stellaria media (L.)Villars	Common Chickweed	1						CD
BRASSICACEAE								
Raphanus raphanistrum ssp *raphanistrum* (pod frags)	Wild Radish	7						CD

(table continued)

Table 4.6 (*cont.*) Plant macrofossils from features at Dolemoor

		pit F.301	ditch F.365					
			lower cut			upper cut		
			middle fill		upper fill	basal fill	middle fill	
	context	**322**	**382**	**381**	**376**	**375**	**366**	
	sample size (kg/litres)	**18.4/20**	**23.7/20**	**5.7/5**	**21.5/20**	**21.6/20**	**23.6/20**	
	size of float (ml)	**60**	**700**	**300**	**150**	**400**	**35**	**habitat**
PLANTAGINACEAE								
Plantago lanceolata L.	Ribwort Plantain		1					G
SCROPHULARIACEAE								
Odontites/*Euphrasia* spp	Bartsia/Eyebright	4						CD
CYPERACEAE								
Carex spp	Sedge	14						GMPRW
Carex sylvatica Hudson	Wood-sedge	20						HSW damp
Carex vulpina L.	True Fox-sedge	6						Wh/M ditches
Cladium mariscus (L.)Pohl	Great fen-sedge	7						FRw
Eleocharis palustris/*uniglumis*	Spike-rush	2						MPw
Schoenoplectus lacustris (L.)Palla	Common Club-rush	10						BPR–shallow
Schoenoplectus tabernaemontani (C.Gmelin)Palla	Grey Club-rush	7						BPRs
POACEAE								
Bromus sp	Brome	1						CD
Poa/*Phleum* spp	Meadow-grass/Cat's-tail	7						G
Poaceae indet	Grasses	11						G
Total:		**97**	**1**	**0**	**0**	**0**	**0**	

Key for habitats: see Table 3.6

Table 4.7 Plant habitat groups at Dolemoor

wet places: marsh, by or in ditches or streamsides

bankside/boggy places		***aquatics***	
Carex vulpina (CW)	True Fox-sedge	*Alisma plantago-aquatica* (W)	Water Plantain
Carex spp (CW)	Sedge	*Ceratophyllum demersum* (W)	Rigid Hornwort
Cladium mariscus (CW)	Great Fen-sedge	*Chara* spp (W)	Stonewort
Eleocharis palustris/uniglumis (C)	Spike-rush	** *Hippuris vulgaris* (W)	Mare's-tail
** *Hippuris vulgaris* (W)	Mare's-tail	*Lemna* spp (W)	Duckweed
** *Hydrocotyle vulgaris* (W)	Marsh Pennywort	*Myriophyllum spicatum* (W)	Spiked Water-milfoil
Juncus spp (W)	Rush		
Lycopus europaeus (W)	Gipsywort	*Potamogeton* spp (W)	Pondweed
Mentha aquatica (W)	Water Mint	*Ranunculus* subg. *Batrachium* (W)	Water Crowfoot
Menyanthes trifoliata (W)	Bogbean	** *Zanichellia palustris* (W)	Horned Pondweed
Oenanthe fistulosa (W)	Tubular Water-dropwort		
Oenanthe pimpinelloides (W)	Corky-fruited Water-dropwort	***brackish indicators***	
Ranunculus lingua (W)	Greater Spearwort	** *Carex flacca* (W)	Glaucous Sedge
Ranunculus sceleratus (W)	Celery-leaved Buttercup	*Suaeda maritima* (W)	Annual Sea-blite
Rorippa nasturtium aquaticum (W)	Water-cress	*Schoenoplectus tabernaemontani* (C)	Grey Club-rush
Rumex hydrolapathum (W)	Water Dock	*Triglochin maritimum* (W)	Sea Arrowgrass
Schoenoplectus lacustris (CW)	Common Club-rush	** *Zanichellia palustris* (W)	Horned Pondweed
Typha spp (W)	Bulrush		

dry pasture/rough grassy places/fields		**meadows/damp pasture**	
Bromus sp (C)	Brome	** *Carex flacca* (W)	Glaucous Sedge
****Cirsium arvense* (W)	Creeping Thistle	** *Conium maculatum* (W)	Hemlock
** *Hypochaeris* spp (W)	Cat's-ear	** *Hydrocotyle vulgaris* (W)	Marsh Pennywort
Medicago lupulina (W)	Black Medick	** Poaceae (CW)	Grass
** *Odontites/Euphrasia* (CW)	Bartsia/Eyebright	*Potentilla anserina* (W)	Silverweed
Picris hieracioides (W)	Hawkweed Oxtongue	*Ranunculus acris/repens/bulbosus* (W)	Meadow/ Creeping/ Bulbous Buttercup
Plantago lanceolata (C)	Ribwort Plantain		
** *Plantago major* (W)	Greater Plantain	*Ranunculus sardous* (W)	Hairy Buttercup
Poa/Phleum (C)	Meadow-grass/Cat's-tail		
** Poaceae (CW)	Grasses		
Prunella vulgaris (W)	Selfheal		
Rhinanthus minor (W)	Yellow Rattle		
** *Taraxacum* sect *Ruderalia* (W)	Dandelion		

waste/disturbed/arable ground		**Woodland/hedgerow/scrub**	
Atriplex spp (W)	Orache	*Carex sylvatica* (CW)	Wood-sedge
Cerastium sp (W)	Chickweed	****Cirsium arvense* (W)	Creeping Thistle
Chenopodium album (W)	Fat-hen	** *Hypochaeris* spp (W)	Cat's-ear

(table continued)

Table 4.7 (*cont.*) Plant habitat groups at Dolemoor

Chenopodium rubrum/*glaucum* (W)	Red/Oak-leaved Goosefoot	** *Rubus* sect. *Glandulosus* (W)	Bramble
***Cirsium arvense* (W)	Creeping Thistle	*Sambucus nigra* (W)	Elder
** *Conium maculatum* (W)	Hemlock		
Hyoscyamus niger (W)	Henbane		
** *Odontites*/*Euphrasia* (CW)	Bartsia/Eyebright	**cultivated/of economic importance**	
** *Plantago major* (W)	Greater Plantain	*Avena* sp (C)	Oat
Polygonum aviculare (W)	Knotgrass	*Hordeum* sp (C)	Barley
Raphanus raphanistrum		*Secale cereale* (C)	Rye
ssp *raphanistrum* (C)	Wild Radish	*Triticum* sp (C)	Wheat
** *Rubus* sect. *Glandulosus* (W)	Bramble		
Rumex spp (W)	Dock		
Sonchus asper (W)	Prickly Sow-thistle		
Sonchus oleraceus (W)	Smooth Sow-thistle		
Stellaria media (CW)	Common Chickweed		
** *Taraxacum* sect *Ruderalia* (W)	Dandelion		
Thlaspi arvense (W)	Field Penny-cress		

key
** occurring in 2 habitat groups
*** occurring in 3 habitat groups
C charred
M mineralised
W waterlogged

Table 6.3 Medieval pottery collected from farmsteads and houses shown on the Tithe Maps by the North Somerset Levels Project (in plain text) and Linda Jenkins (in italics)

settlement	tenement	Tithe No.	pottery
Wick St Lawrence	Appleton Farm	Wi 162	two sherds of 12th- to 13th-century coarseware (fabrics Px04 and U4), *and one sherd of 12th- to 13th-century Ham Green ware*
	Banksea Farm and Cottages	Wi 228-30	*two sherds of 13th- to 14th-century pottery*
	Gervinia Cottage	Wi 235	*one sherd of 11th- to 12th-century pottery, one sherd of 12th- to 13th-century Ham Green ware and three sherds of 13th- to 14th-century pottery*
	Castle Cottages	Wi 171	*three sherds of 12th- to 13th-century pottery, and two sherds from the 15th–16th centuries*
	Old School House	Wi 233a	*two sherds of 12th- to 13th-century Ham Green ware and five sherds of 13th- to 14th-century pottery*
	Jenkins Orchard	Wi 238-9	*one sherd of 11th- to 12th-century pottery and five sherds from the 13th–14th centuries*
	The Cedars	Wi 155	*two sherds of 12th- to 13th-century Ham Green ware and 21 sherds of 13th- to 14th-century pottery*
	Mulberry Farm	Wi 156	*two sherds of 12th- to 13th-century pottery and eight sherds from the 13th–14th centuries*
	Lower Wick Farm	Wi 62	*no medieval pottery*
	Chapel House	Wi 219	*no medieval pottery*
	Quinces	Wi 84	*no medieval pottery*
Ebdon	Barnfield Farm	Wi 203	*no medieval pottery*
	Barnfield Cottage	Wi 197	*no medieval pottery*

(table continued)

Table 6.3 (*cont.*) Medieval pottery collected from farmsteads and houses shown on the Tithe Maps by the North Somerset Levels Project (in plain text) and Linda Jenkins (in italics)

settlement	tenement	Tithe No.	pottery
Icleton	Icelton Farm	Wi 98	*one sherd of of 13th- to 14th-century pottery*
	Baytree Farm	Wi 141	*two sherds of 12th- to 13th-century Ham Green ware and two sherds of 13th- to 14th-century pottery*
	Rose Court Farm	Wi 125	*one sherd of 12th- to 13th-century Ham Green ware and three sherds of 13th- to 14th-century pottery*
south east Wick	Hippisleys Farm	Wi 279	*four sherds of 13th- to 14th-century pottery*
	Hodders Farm	Wi 294	*one sherd of 15th- to 16th-century pottery*
		Wi 298	*two sherds of 13th- to 14th-century pottery were also recovered from the plot opposite Hodders Farm, now occupied by Mendip View Cottage*
	Sluice Farm	Wi 308	one sherd possibly of fabric AA2 (?late 10th–11th centuries), one sherd of 12th- to 13th-century Ham Green ware, and five sherds of 16th century pottery (Malvern ware, Frenchen Stoneware and South Somerset ware). *One sherd of 11th-12th century, two sherds of 12th-13th century Ham Green ware, and four sherds of 13th- to 14th-century date*
	Old House	Wi 289	*no medieval pottery*
Bourton Green	Bourton Cottage	Wi 406	*no medieval pottery*
	Bourton Mill	Wi 338	*no medieval pottery*
	Jasmine Cottage	Wi 341	*no medieval pottery*
Bourton	Court Farm		one sherd of ?12th- to 13th-century coarseware
	Manor Farm	Wi 396	one sherd of a mid-12th-century Ham Green jug; *and two other sherds of 12th- to 14th-century pottery*
	Willow Farm	Wi 438	*one sherd of 11th- to 12th-century pottery and one sherd of the 13th–14th centuries*
	Lilac Cottage	Wi 452	*two sherds of 12th- to 13th-century Ham Green ware and ten sherds of 13th- to 14th-century pottery*
	north of Lilac Cottage	Wi 453	ten sherds of medieval pottery from fieldwalking including 12th- to 13th-century fabrics U4 and PX03
Hewish	Palmers Elm Farm	Co 34	possible sherd of 16th century South Somerset ware
Congresbury Marsh	Chestnut Farm	Co 135	eight sherds of 12th- to 13th-century pottery (fabrics PX03, PX04, U4, Ham Green), two sherds of 13th- to 14th-century pottery (fabrics AAA and Minety ware)
	Bindings	Co 107	over 50 sherds of medieval pottery collected from test pits and rhyne cleaning, including 12th- to 13th-century Ham Green wares
East Rolstone	Land House	Ba 719	two sherds of medieval coarseware. 59 sherds of medieval pottery, including green glazed ware, and a coin of Edward II (1307–27) previously recorded (SMR 217 and 2483)
	opposite Box Bush Farm	Ba 770	29 sherds of medieval pottery from fieldwalking
	Gout House Farm	Ba 828	two sherds of medieval courseware, including 12th- to 13th-century fabric PX03; 37 sherds of 12th- to 13th-century pottery previously recorded from the site (SMR 368)
Puxton	Old Chestnut Farm	Px 17	sixteen sherds of medieval pottery including 12th- to 13th-century Ham Green ware and fabrics PX03 and PX08
	cottage west of Myrtle Farm	Px 17	three sherds of 13th- to 15th-century pottery (fabric AAA)
	Puxton Court	Px 148	one sherd of 13th- to 15th-century pottery (fabric AAA) and a fragment of possible 13th- to 14th-century roof tile
St Georges	Grove Farm	Ba 28	medieval pottery from archaeological evaluation (CAT 2002a, 2002c)
	Poplar Farm	Ba 36	13th century pottery from archaeological evaluation (CAT 2002b)
	St Georges Farm	Ba 79	two medieval pits with 11th- to 13th-century pottery from archaeological evaluation and excavation (Lankstead 2003)

Table 8.2 The tenements in Puxton in the 16th-century court rolls, pre-1642 rental and *c* 1770 survey, placed in order of their acreages

Modern name *	1770 survey					<1642 Rental			15th- to 16th-century court rolls
	tenement	occupier	house (H) and cust. acres		statut. acres	tenant	cust. acres	annual rent	
Appletree Cottage	X	HAYNE, Mary	H	2a	1a 3r 0p	Thomas Hamon for Northhouse	2	2s 0d	
(Sharps, TM 93)	ptS	pt of Hammond's holding of 20a		[5a]		Thos Moors for Sharps	5	5s 0d	1491 Thos Urche 4 acres 'Sharps'
(Cheekes, TM 12)	H	MAY, Mark (late Cheekes)	H	5a	4a 2r 35p	Pither, Richard	5.5	4s 10d	
(Northwall, CoTM 793–4)	f	HARRIS, Thomas (Northwall)		8a	7a 3r 32p	William Norvall part of Northhouse	8	8s 0d	
(Dovers, TM 158–9)	A	GAGE, Wm (Dovers) lt Mary Helliers		15a	15a 3r 36p	John Irish jun. for Dobers	8	8s 0d	1548: John and Agnes Irish hold two closes called Dovers, 8 acres, 8s 1d
						COOKE, Judith	8	8s 0d	
Old Chestnut Farm	M	HURDITCH, John (Mays)	H	11a	10a 0r 29p	KNIGHT, Marg. (2 tenements)	10	11s 0d	1547: Lewis Marks surrendered to Rich. Spryng alias Whatley tenement and 10 acres for 10s
(Butts, TM 38)	W	CREASE, Thomas (Taylors)		11a	10a 1r 8p	BURGS, John	11	10s 6½d	[part of:] 1567: lease to John Comer of 2 tenements (1 ruinous), 22.5 acres, 21s 6d (in 1547 the Court Roll records that Wm Chalcrofte and Wm Clercke were to dig their ditch in Collishey [Coles Hay, TM 31] and Burts [Butts, TM 38]on pain of 3s 4d
						PITHER, Richard	11	10s 6d	
						IRISH, wid	13	14s 0d	1557: lease to Richard Coke of a tenement and 13 acres
(Coxes, TM 113)	ptS	pt of Hammond's holding of 20a		[15a]		COOKE, Joseph	15	14s 8d	
(Weeks)	E	JONES, Thomas (Week's)	H	16a	15a 1r 35p	HASKINS, Elizabeth	15	15s 1d	1569: Joan Down inherits a tenement and 15 acres from parents Wm and Joan
Myrtle Farm	L	ATHAY, lt Samuels Extors (Taylors)	H	28a	23a 0r 15p	INMAN, Thomas	16	14s 9d	1566: Wm and Isabel Hayne holds tenement (once Seyleys), 15 acres, 14s 9d
Mayfield	C	CREASE, Thomas (Dowlings)	H	18a	16a 0r 32p	Longes (2 tenements)	17.5	11s 1½d	1570: John Lange holds 2 tenements (1 roofless), 17.5 acres, 11s 0½d
(part of Shalvers)	N	BAILEY, John (Shalvers)		19a	16a 1r 4p	SHALMER, William	19	18s 2½d	
Heathgate Farm	c	COUNSELL, William			27a 2r 14p	INMAN, John (2 tenements)	24	£1 3s 2d	
The Bungalow	K	SYMON, William	H	24a	20a 3r 13p	AVERY, Thomas	25	£1 5s 4d	

(table continued)

Table 8.2 (*cont.*) The tenements in Puxton in the 16th-century court rolls, pre-1642 rental and *c* 1770 survey, placed in order of their acreages

Modern name *	1770 survey					<1642 Rental			15th- to 16th-century court rolls
	tenement	occupier	house (H) and cust. acres		statut. acres	tenant	cust. acres	annual rent	
Goose Acre Farm	R	MILLARD, widow (Nichols)	H	24a	23a 2r 15p	HOSKINS, Henry	25	£1 4s 0d	
(Days)	G	BAILEY, John (late Ruth Days)		26a	23a 3r 25p	HARRIS, Thos (2 roofless tenements)	26.5	£1 4s 4d	1567: Emota and Alice Webbe hold 2 tenements (1 ruinous), 26.5 acres, £1 4s 6d
						COOKE, John	27	£1 7s 0d	
Blackhouse	B	HARDWICK, Sarah (Upholds)		28a	25a 2r 10p	IRISH, Mathew for Blackhouse	28	£1 6s 8d	
South Farm	U	BROOKMAN, widow (Warnell's)	H	29a	27a 0r 0p	IRISH, Agnes for Wornells	30.25	£1 8s 0d	
Puxton Court	D	KNUTCHBALL, Norton (late Long's)	H	48.5a	47a 1r 27p	WHIPPEY, George (Keen's 13 Eliz)	40.5	£2 3s 4d	1552: Philip Geve held two tenements (one roofless called Blackstones), 40.5 acres; passed to Richard Kene
Church View	J	HEWLETT, Samuel (Horts)	H	42a	36a 0r 6p	INMAN, Thomas (4 tenements)	51	£1 19s 1d	1570: John and Agnes Atwill, 3 tenements (2 ruinous), 40.5 acres, £1 19s 1d; 1571: Agnes Atwyll holds 4 tenements
Puxton Moor Farm	(outside manor: George Hardwick)					? pt INMAN, John (demeans)	? pt 59	not given	
(Sheephouse, TM 109)	T	Hardwick, George (Cooks)		21a	19a 0r 9p	? pt INMAN, John (demeans)	? pt 59	not given	
FREEHOLDS		1755 rental				1642 rental			
tenement		occupier			rent	occupier		rent	
Balls Barn		PAULETT, Earl			0s 9d	PAULETT, Lord John		9s 0d	1496: PAYNE, Thomas, 1 acre freehold called Tredgoldshay; 1547: PAYNE, Thomas, a barn called Paynes Barn
Rushworthys		MERTON COLLEGE			0s 6d	MERTON COLLEGE		6s 0d	1547: Merton College
Easthays		MAY, Mark			3s 6d	MASON, Thomas		£3 6s 0d	1547: BURGES, John and GEVE, Flora; 1567: 15.5 acres
Full Quart (TM 214–15)		COUNSELL, William (late Brooks)			3s 6d	KNIGHT, William		£3 6s 0d	1547: BUSTELL, John
Purbecks						HAWKINS		an acus	1547: PURBECKS, John
Villa Farms		HARDWICK, Samuel (late Knights)			5s 0d	COOKE, Joseph		£5 0s 0d	1552: COOKE, John; 1569: half virgate and 15a 1r

* modern name is given where tenement is occupied by a farmstead/cottage; where the tenement now comprises an area of fields the customary name is given in brackets with the tithe map number)

Table 8.3 The tenements in Rolstone in the 1651 rental (West Rolstone: WRO 2667/23/38) and *c* 1770 survey, placed in order of their acreages (excludes tenements located in Kewstoke, Woolvershill and Worle)

modern name	*c* 1770				1651 rental of West Rolstone			
	tenement	occupier	cust. acres	stat. acres		cust. acres	annual rent	
WEST ROLSTONE								
Upper Gout House	P	Brookman, widow	4	1a 3r 18p	Branch, John	4a	3s	4d
north of Box Bush Fm	B	Miller, Jas lt Thos Urch (Crockers)	5	5a 1r 38p	Stock, Hen., Wm. and Ann	5a	6s	0d
Bosse Close and Blackstones	C	Athays, Sam. Extors [executors?] lt Berekleys	8	7a 2r 12p	Raynes, Joanne and Thomas	7a	7s	0d
Stuntree Farm (pt): 'Yards'	v	Beard, Wm, pt of Jolliefs (Yards)	8	5a 3r 21p	Conway, Thomas	*	£2 13s	3d
Stuntree Farm (pt)	t	Gage, Wm pt of Jolliefs	9	7a 3r 38p	Conway, Thomas	*	£2 13s	3d
Little Knights	x	Urch, Jn (Moors)	10	10a 3r 29p	Inman, Prudence	9a	£1 0s	0d
Stuntree Farm (pt): Castle Moor	S	Jones, Thos pt of Jolliefs	14	12a 1r 5p	Conway, Thomas	*	£2 13s	3d
Stuntree Farm	R	Keene, Jn pt of Jolliefs	24	18a 2r 4p	Conway, Thomas	*	£2 13s	3d
Swaynes	O	lt Athays, Sam extors (Swains als Sandford)	25.25	20a 3r 28p	Swaine, Robert	23a	13s	8d
Rockers	A	lt Hurditches extors	26	23a 3r 35p	Cox, John	26a	11s	0d
Wolvershill	N	Keene, wid. Lt Giles Hemen	34	25a 3r 27p	Bradford, Christian	34a	7s	10d
west of Box Bush Fm	I	lt Urch, Jn, Parkers	37	32a 2r 6p	Parker, Mary, Jn and Thos	34a	£1 12s	0d
Fryplace	C	lt Walker, George [at Woolvershill]	40.25	38a 0r 32p	Andrews, Alice for Fryplace	40a	19s	4d
Kencutt's and Old House	y	Jones, Thos, Court Grove late Moors	46.5	41a 2r 22p	Kencott, Robert	40a	£1 15s	2d
Rolstone Court	W	Counsells, Rich (Latches and Hatchhouse)	66	56a 3r 29p	[absent but Sayer, Thos in 1648]	63a	£3 9s	10d
EAST ROLSTONE								
Day Paddock	H	Cook, Jn lt Ambrose Wall	6	6a 1r 32p	Sayer, Edmund	6a	7s	0d
Bosse Close and Blackstones	C	Athays, Sam. Extors lt Berekleys	8	7a 2r 12p	Raynes, William	2a 3r	2s	4d
Swaynes tenement	J	Beard, Wm lt Jn Lane	13.25	12a 1r 19p	Wilmott, Edith	13a 1r	13s	8d
Upper Gout House	P	lt Mary now Dinah Payne, Gouthouse	16	15a 0r 4p	Stock, Thos and Mary	16a	16s	0d
Balls Barn	O	Gage, Wm lt Hosiers	19.5	15a 2r 34p	Arundell, Hen. + Hosier, Eliz.	18a	£1 1s	6d
[down Havadge Drove]	q	Hunt, Joseph and Bishop, Jas (lt Wid. Urch)	23	22a 1r 16p	Lam, … + Sprudd, Edmund	22a	£1 5s	4d
New Ditch	L251	Beaks, Robert	30	30a 1r 19p	Tuckey, John	31a	£2 8s	8d
Land Farm	N	Jones, Thos (Court Place) lt Blackburrows	31.25	31a 2r 24p	Inman, Thos, Wm and Marg.	41a 3r	£1 16s	2d
Laurel Farm	M	Gilling, Samuel (Malpasses)	44	36a 0r 33p	Inman, Wm	42a	£ 1 15s	8d

* In 1651 Thomas Conway held a 50-acre tenement that by c 1770 had been divided in four (the four parts were later reunited as Stuntree Farm)

Table 9.2 Soil micromorphology, Church Field: summary descriptions of contexts in thin section

context	thickness	composite properties	mineral components	organic components	pedofeatures
502	>14cm	Spongy microstructure with 20% porosity. Vughs and channels. No bedding.	Silty clay loam. Dark brown (PPL); brown (OIL).	Few. Highly fragmented and strongly decomposed. Reddish/brown or very dark brown cell contents.	• earthworm granules • soil fauna excrements • gleying features
503	12cm	Spongy microstructure with 10% porosity. Vughs and channels. No bedding.	Silty clay loam. Brown (PPL and OIL).	Rare. Highly fragmented and strongly decomposed. Reddish/brown or very dark brown cell contents.	• earthworm granules • soil fauna excrements • gleying features • silty clay coatings on pore walls • reworked fragments of other contexts
523 (?buried ground surface)	14cm	Vughy microstructure with 10% porosity. Lower 4cm show weak horizontal bedding.	Silty clay loam (upper); silty clay (lower). Brown (PPL); mixed brown and orange (OIL).	Rare. Highly fragmented and strongly decomposed. Brown cell contents.	• earthworm granules • soil fauna excrements • gleying features • silty clay coatings on pore walls • reworked fragments of other contexts
524	>10cm	Vughy microstructure with 5% porosity. Horizontally bedded structure.	Clay silt. Brown (PPL); mixed brown and orange (OIL).	Rare. Highly fragmented and strongly decomposed. Dark brown cell contents.	• gleying features • silty clay coatings on pore walls • reworked fragments of other contexts

Table 9.3 Quantification of pottery from Church Field (Trenches 1, 2, 3, 11, and 12)

fabric	phase 5		phase 6		phase 7		phase 8		phase 9		phase 10	
	nos	g	nos.	g	nos	g	nos	g	nos	g	nos	g
AA1	3	26	49	852							31	366
PX01			2	30								
Bristol A-B	5	38	13	240					3	43		
PX03	3	11	129	568					15	84	70	306
PX04	35	273	621	5648					14	85	143	918
PX08	1	10	58	544					11	79	36	260
U1	3	33	27	236					2	40	13	90
U4	8	34	91	527					9	40	37	171
SE Wilts	1	20	1	4							1	3
Y			1	15								
XX			2	17							1	10
AA2			3	30								
Proto Ham Green			26	278					3	11	6	21
PX09			18	98					1	4	7	144
SS			2	6					1	1	8	65
AAA	1	3	11	46					4	28	5	25
Q			2	3					1	3		
Stamford ware											1	7
OO											4	43
C27											1	1
Malvern Chase											2	50
C7									4	25	9	102
Delftware											1	1
M/KK											5	20
plain or blue decorated pearlware			1	5					1	1	2	2
press-moulded salt-glazed white stoneware											1	12
Nottingham stoneware											1	1
modern English stoneware									1	10		
unidentified	1	1	18	16							9	13
total	61	449	1075	9163					70	454	394	2631

Table 9.4 Pottery from fieldwalking in Church Field

	sherds	%
PX08	21	8.9
U4	17	7.2
PX04	16	6.8
AA1	14	5.9
U1	11	4.6
PX03	6	2.5
Malvern Chase	5	2.1
Bristol ware jugs	5	2.1
Y	4	1.7
PX09	4	1.7
Q	3	1.3
Proto Ham Green coarsewares	2	0.8
Ham Green jugs	1	0.4
unidentified	1	0.4
Ham Green cw	1	0.4
Frechen	1	0.4
C8	1	0.4
modern stoneware	1	0.4
C2	1	0.4
C3	2	0.8
C7	50	21.1
A1	4	1.7
M/KK	5	2.1
Westerwald stoneware	1	0.4
North Devon gravel-tempered	3	1.3
sponged ware	2	0.8
pearlware	33	13.9
creamware	5	2.1
Industrially made red wares	12	5.1
porcelain	1	0.4
bone china	1	0.4
factory slipwares	1	0.4
yellow ware	2	0.8

Table 9.5 Comparison of pottery assemblages from shovel test pits

fabric	Flemans		Butts		Coles		Haynes		Totals		Bindings	
	sherds	g	sherds	g	sherds	g	sherds	g	sherds	g	sherds	g
post-medieval	3	35	19	173	17	59	13	57	52	324	61	273
% of total pottery	4.2	10.3	9.5	17.0	39.5	41.8	43.3	51.4	15.1	20.2	59.2	46.5
late medieval	14	56	21	99	3	17	9	25	47	197	13	118
% of total pottery	19.4	16.5	10.6	9.8	7.0	12.1	30.0	22.5	13.7	12.3	12.6	20.1
11th to 13th centuries	55	248	159	743	23	65	8	29	245	1085	29	196
% of total pottery	76.4	73.2	79.9	73.2	53.5	46.1	26.7	26.1	71.2	67.6	28.2	33.4
11th–13th C as % of medieval	79.7	81.6	88.3	88.2	88.5	79.3	47.1	53.7	83.9	84.6	69.0	62.4
Total	72	339	199	1015	43	141	30	111	344	1606	103	587

Table 10.1 Assessment of pollen from Church Field, buried ground surface beneath enclosure bank. Sample depths are from the top of the monolith tin, which was 0.28m below the present ground surface

	sample depth in cm	**14–15cm**	**21–22cm**	**26.5–27.5cm**
	total pollen counted	**17**	**19**	**9**
	Lycopodium recovered	**62**	**50**	**79**
TREES AND SHRUBS				
	Pinus (pine)	1		1
	Corylus-type (hazel)	1		
HERBACEOUS TYPES				
v	Poaceae (grasses)	7	8	2
m	*Centaurea nigra* (knapweed)			1
d	Lactuceae (dandelion and related Asteraceae)	4	9	3
d	Brassicaceae (cabbage family)	1		
d, s	*Solidago virgaurea*-type (daisy, sea aster and related Asteraceae)	2	2	2
s, d	Chenopodiaceae (goosefoot family)	1		
Counted Outside Pollen Sum				
	Filicales undifferentiated (ferns)	9	6	4
	Polypodium vulgare (polypody fern)	2	2	5
	Pteridium aquilinum (bracken)	1	5	2
	Ascaris egg (round worm)	1		
	Degraded grains (unidentifed)	23	7	10
	Pollen preservation	VP	VP	VP
	Pollen concentration	P	P	P
	Relative concentration of charcoal >40µm	102000	56000	37000

Habitat preferences: v, various; d, disturbed ground; m, meadows or grazed land; s, saltmarsh or other maritime habitat.
Preservation and concentration categories: P = poor; VP = very poor

Table 10.3 Assessment of pollen from sediment samples from Church Field, ditch F.103

	context	**107**	**134**	**163**	**163**
	sample depth from top of tin	**8–9cm**	**28–29cm**	**32–33cm**	**38–39cm**
	total pollen counted	**60**	**157**	**130**	**160**
	Lycopodium recovered	**89**	**46**	**36**	**32**
TREES AND SHRUBS					
	Pinus (pine)	1	1		1
	Betula (birch)		1	4	
	Quercus (oak)		1	2	1
	Alnus (alder)	1	1		
	Corylus-type (hazel)	1		1	4
	Fagus (beech)		1		1
	Fraxinus (ash)				1
	Salix (willow)	1	9	14	25
HERBACEOUS TYPES					
c	*Centaurea cyanus* (cornflower)		1		
d	*Rumex* spp. (docks)			1	1
d	*Plantago lanceolata* (ribwort plantain)		3		
d	Lactuceae (dandelion and related Asteraceae)	10	4	3	8
d, m	Ranunculus acris-type (buttercup)		1	1	4
d	Brassicaceae (cabbage family)	25	24	23	28
d, m	*Cirsium*-type (thistles)		1		1
d, s	*Solidago virgaurea*-type (daisy, sea aster and related Asteraceae)	5	3	5	
d	*Artemisia*-type (mugwort)				2
d, c, m	*Achillea*-type (yarrows, chamomiles)		1	2	1
s, d	Chenopodiaceae (goosefoot family)		15	8	10
v	Poaceae (grasses)	5	51	45	29
v	Cyperaceae (sedges)	1	3	1	14
v, c	Cereal-type (cereals etc)	4	10	9	9
v	Apiaceae (carrot family)		12	2	5
v	*Polygonum* (knotgrasses)	5	8	5	7
v	Fabaceae (pea family)				2
v	Caryophyllaceae (pink family)		1		1
v	Rosaceae (rose family)		1	1	
f	Potamogeton (pondweeds)	1			
f	*Menyanthes* (bogbean)		2	3	5
f	Lemnaceae (duckweed)		2		
counted outside pollen sum					
	Filicales undifferentiated (ferns)	8	3	10	5
	Polypodium vulgare (polypody fern)	9	3	3	2
	Pteridium aquilinum (bracken)	2		4	3
	Sphagnum (bog moss)				1
	degraded grains (unidentifed)	25	40	34	26
	pollen preservation	P	P	P	P–M
	pollen concentration	P	G	G	G
	relative concentration of charcoal >40µm	106000	82000	24000	268000

Habitat preferences: v, various; d, disturbed ground; c, cultivated land; m, meadows or grazed land; s, saltmarsh or other maritime habitat; f, freshwater ditch.
Preservation and concentration categories: P = poor; M = moderate; G = good

Table 10.5 Assessment of pollen from sediment samples from Church Field, ditch F.128

	context	**144**	**150**	**152**	**152**
	sample depth from top of tin	**17.5–18.5cm**	**28.5–29.5cm**	**36–37cm**	**47–48cm**
	total pollen counted	**119**	**52**	**89**	**103**
	Lycopodium recovered	**84**	**78**	**60**	**37**
TREES AND SHRUBS					
	Pinus (pine)	1	1	1	1
	Betula (birch)	1	1		3
	Quercus (oak)	4	4	3	1
	Alnus (alder)	5	2		1
	Corylus-type (hazel)	1	2	2	3
	Ulmus (elm)			2	
	Fraxinus (ash)				1
	Salix (willow)	1			1
HERBACEOUS TYPES					
d	*Rumex* spp. (docks)				1
d	Lactuceae (dandelion and related Asteraceae)	10	5	6	11
d, m	*Ranunculus acris*-type (buttercup family)				1
d	Brassicaceae (cabbage family)	27	13	22	11
d, m	*Cirsium*-type (thistles)			1	
d, s	*Solidago virgaurea*-type (daisy and related Asteraceae)	6	1	4	10
d	*Artemisia*-type (mugwort)		1		
d, c, m	*Achillea*-type (yarrows)			2	
s, d	Chenopodiaceae (goosefoot family)	12	3	6	
v	Poaceae (grasses)	42	15	25	48
v	Cyperaceae (sedges)	5		1	1
v, c	Cereal-type (cereals etc)	3	3	9	8
v	Apiaceae (carrot family)		1		
v	Dipsacaceae (teasel family)			1?	
v	Fabaceae (pea family)	1		2	
h	Ericaceae (heaths)			1	
v	Rosaceae (rose family)			1?	
f, v	*Veronica* (speedwells)				1?
counted outside pollen sum					
	Filicales undifferentiated (ferns)	13	12	8	6
	Polypodium vulgare (polypody fern)	9	2	6	1
	Pteridium aquilinum (bracken)	7	7	7	
	Sphagnum (bog moss)	2			
	degraded grains (unidentifed)	43	12	43	36
	pollen preservation	P	P	P	P
	pollen concentration	M	P	P	M
	relative concentration of charcoal >40μm	64000	53000	153000	331000

Habitat preferences: v, various; c, cultivated ground; d, disturbed ground; s, saltmarsh or other maritime habitat; h, heathland; f, fresh-water ditch. Identifications marked ? are uncertain because of poor preservation.
Preservation and concentration categories P = poor, M = moderate.

Table 10.6a Waterlogged plant macrofossils from features at Church Field

		buried soil	enclo-sure ditch	ditch basal fill	ditch earliest cut/ lower fill		ditch upper fill	ditch upper fill	ditch basal fill	ditch basal fill	ditch mid-fill	habitat
	feature		**F.103**	**F.115**	**F.128**		**F.128/140**	**F.135**	**F.510**	**F.526**		
	context	**503**	**134**	**116**	**152**	**150**	**141**	**131**	**525**	**528**	**527**	
	size of sample (kg/litres)	**42.2/40**	**30.3/18.5**	**19/12**	**25.5/15**	**16.2/10**	**7.2/4.5**	**14.1/9**	**46.3/38**	**47.5/44**	**49.2/45**	
	size of float (ml)		**35**	**120**		**200**	**15**	**50**	**15**	**40**	**25**	
CHARACEAE												
Chara sp	Stonewort									1		A
RANUNCULACEAE												
Ranunculus acris / repens / bulbosus	Meadow/Creeping/ Bulbous Buttercup			2	115	17	14					DG
Ranunculus flammula L.	Lesser Spearwort				1	1						MPRw
Ranunculus lingua L.	Greater Spearwort				2							M
Ranunculus sardous Crantz	Hairy Buttercup				2	4						CDW
Ranunculus sceleratus L.	Celery-leaved Buttercup				10	4	13					MPR
R. subg. *Batrachium* (DC.)A. Gray	Water Crowfoot				20	140	123			1		APR
MORACEAE												
Ficus carica L.	Fig					3						#
URTICACEAE												
Urtica dioica L.	Common nettle		8		333	797	115			5	2	DGHWp
BETULACEAE												
Betula sp	Birch					1						WEl aw
Corylus avellana L. (nut frags)	Hazel				45	3						HSW
CHENOPODIACEAE												
Atriplex spp	Orache		12		104	21	1	4	4	3	1	CDn
Chenopodium album L.	Fat-hen	1	2		8			7	7	2	2	CDn
Chenopodium ficifolium Smith	Fig-leaved Goosefoot	1	7		79	10		43	21	24	7	CD
Chenopodium polyspermum L.	Many-seeded Goosefoot										1	CD

(table continued)

Table 10.6a (*cont.*) Waterlogged plant macrofossils from features at Church Field

		buried soil	enclo-sure ditch	ditch basal fill	ditch earliest cut/ lower fill		ditch upper fill	ditch upper fill	ditch basal fill	ditch basal fill	ditch mid-fill	habitat
	feature		F.103	F.115	F.128		F.128/140	F.135	F.510	F.526		
	context	503	134	116	152	150	141	131	525	528	527	
	size of sample (kg/litres)	42.2/40	30.3/18.5	19/12	25.5/15	16.2/10	7.2/4.5	14.1/9	46.3/38	47.5/44	49.2/45	
	size of float (ml)		35	120		200	15	50	15	40	25	
Chenopodium rubrum / glaucum	Red/Oak-leaved Goosefoot	1				1	3	1				CDs
Chenopodiaceae indet	Goosefoot family		2		22	15	2					various
CARYOPHYLLACEAE												
Cerastium spp	Chickweed	3	4		3		2	1				CDG
Stellaria media (L.)Villars	Common Chickweed	3			5	1		2	2	3	12	CD
POLYGONACEAE												
Persicaria lapathifolia (L.)Gray	Pale Persicaria			1						7		Cdow
Persicaria maculosa Gray	Redshank			1	9				2			Cdo
Polygonum aviculare L.	Knotgrass					1						CD
Rumex spp	Dock		1		3	8	10					DG
BRASSICACEAE												
Brassica / Sinapis / Raphanus sp	Mustard/Rape/Cole etc				1							CD#
Coronopus squamatus (Forsskaol)Asch	Swine Cress				5		1					Do
Rorippa nasturtium-aquaticum (L.)Hayek	Water-cress					3	62					BPR
RESEDACEAE												
Reseda luteola L.	Weld					1						CDGo
ROSACEAE												
Crataegus monogyna Jacq	Hawthorn					1 + f	2f					HSW
Potentilla anserina L.	Silverweed				1							DG, sand-dunes
Rosaceae indet (thorn)	Rose family					1						HSW
Rubus sect. *Glandulosus* Wimmer and Grab	Bramble				8	2	23		1f			DHSW

(table continued)

Table 10.6a (*cont.*) Waterlogged plant macrofossils from features at Church Field

		buried soil	enclo-sure ditch	ditch basal fill	ditch earliest cut/ lower fill		ditch upper fill	ditch upper fill	ditch basal fill	ditch basal fill	ditch mid-fill	habitat
	feature		**F.103**	**F.115**	**F.128**		**F.128/140**	**F.135**	**F.510**	**F.526**		
	context	**503**	**134**	**116**	**152**	**150**	**141**	**131**	**525**	**528**	**527**	
	size of sample (kg/litres)	**42.2/40**	**30.3/18.5**	**19/12**	**25.5/15**	**16.2/10**	**7.2/4.5**	**14.1/9**	**46.3/38**	**47.5/44**	**49.2/45**	
	size of float (ml)		**35**	**120**		**200**	**15**	**50**	**15**	**40**	**25**	
FABACEAE												
Ulex sp (spine)	Gorse				1							EGWo
LINACEAE												
Linum usitatissimum L. (seeds)	Flax								19	1	1	#
Linum usitatissimum L. (capsule frags)	Flax								18			#
Linum spp (stem frags)	Flax								5			#
APIACEAE												
Aethusa cynapium L.	Fool's Parsley				9	4	9					C
Conium maculatum L.	Hemlock		13 + f		9	45	29					Bw
Heracleum sphondylium L.	Hogweed				1	1	2					DG
Torilis spp	Hedge-parsley				7	3						CGHW
SOLANACEAE												
Solanum dulcamara L.	Bittersweet					5	10					DHS
LAMIACEAE												
Ballota nigra L.	Black Horehound		3			6	1					HW
Lycopus europaeus L.	Gipsywort				1							FRw
Mentha aquatica L.	Water Mint						4					MPw
Stachys sylvatica L.	Hedge Woundwort						1					HSW
PLANTAGINACEAE												
Plantago major L.	Greater Plantain				13	12	1					CDG-o
SCROPHULARIACEAE												
Odontites / Euphrasia spp	Bartsia/Eyebright				6	1						CD

(table continued)

Table 10.6a (*cont.*) Waterlogged plant macrofossils from features at Church Field

		buried soil	enclo-sure ditch	ditch basal fill	ditch earliest cut/ lower fill		ditch upper fill	ditch upper fill	ditch basal fill	ditch basal fill	ditch mid-fill	habitat
	feature		**F.103**	**F.115**	**F.128**		**F.128/140**	**F.135**	**F.510**	**F.526**		
	context	**503**	**134**	**116**	**152**	**150**	**141**	**131**	**525**	**528**	**527**	
	size of sample (kg/litres)	**42.2/40**	**30.3/18.5**	**19/12**	**25.5/15**	**16.2/10**	**7.2/4.5**	**14.1/9**	**46.3/38**	**47.5/44**	**49.2/45**	
	size of float (ml)		**35**	**120**		**200**	**15**	**50**	**15**	**40**	**25**	
CAPRIFOLIACEAE												
Sambucus nigra L.	Elder		14 + f	20	33	131	26 + f	54	11	53	473	DHSWn
ASTERACEAE												
Anthemis cotula L.	Stinking Chamomile				10	9						CDh
Arctium minus (Hill)Bernh.	Lesser Burdock					1						DW
Cirsium c.f. *arvense* (L.)Scop	Creeping Thistle				11	12	1					CDGH
Cirsium c.f. *palustre* (L.)Scop.	Marsh Thistle						7					MGP(w) W(o)
Cirsium c.f. *vulgare* (Savi)Ten.	Spear Thistle				17	4						CDW
Cirsium spp	Thistle				5	2						DGMW
Eupatorium cannabinum L.	Hemp-agrimony				1							w-shade or open
Lapsana communis L.	Nipplewort						4					DH
Picris echioides L.	Bristly Oxtongue					1	1					DHWc
Sonchus asper (L.)Hill	Prickly Sow-thistle				2	3	1		1			CD
Sonchus oleraceus L.	Smooth Sow-thistle					1						CDW
ALISMATACEAE												
Alisma plantago-aquatica L.	Water Plantain					1	16					APR
Alisma spp	Water Plantain				4	5	117					APR
LEMNACEAE												
Lemna spp	Duckweed		254		267	40	742	2	20	29		A
JUNCACEAE												
Juncus spp	Rush	1	35		12		6			73		GMRw
CYPERACEAE												
Carex spp	Sedge				5	3	4			3		GMPRW

(table continued)

Table 10.6a (*cont.*) Waterlogged plant macrofossils from features at Church Field

		buried soil	enclo-sure ditch	ditch basal fill	ditch earliest cut/ lower fill		ditch upper fill	ditch upper fill	ditch basal fill	ditch basal fill	ditch mid-fill	habitat
	feature		**F.103**	**F.115**	**F.128**		**F.128/140**	**F.135**	**F.510**	**F.526**		
	context	**503**	**134**	**116**	**152**	**150**	**141**	**131**	**525**	**528**	**527**	
	size of sample (kg/litres)	**42.2/40**	**30.3/18.5**	**19/12**	**25.5/15**	**16.2/10**	**7.2/4.5**	**14.1/9**	**46.3/38**	**47.5/44**	**49.2/45**	
	size of float (ml)		**35**	**120**		**200**	**15**	**50**	**15**	**40**	**25**	
Carex flacca Schreber	Glaucous Sedge				1		20				1	G- wd
Carex hirta L.	Hairy Sedge				32	3	30					G (damp)
Carex riparia Curtis	Greater Pond-sedge				9		6					PMN, w
Carex sylvatica Hudson	Wood-sedge						1					HSW damp
Carex vulpina L.	True Fox-sedge				21	39	124					Wh/M ditches
Eleocharis palustris/uniglumis	Spike-rush				104	16						MPw
POACEAE												
Poaceae indet	Grasses	3			58	33	53					G
TYPHACEAE												
Typha spp	Bulrush		1		1					5		PR-reed swamp
	Total:	13	356	24	1416	1416	1585	114	111	210	500	

Table 10.6b Carbonised plant macrofossils from features at Church Field

		buried soil	enclo-sure ditch	ditch basal fill	ditch earliest cut/ lower fill		ditch upper fill	ditch upper fill	ditch basal fill	ditch middle fill	ditch basal fill	ditch mid-fill	habitat
	feature		**F.103**	**F.115**	**F.128**		**F.128/ 140**	**F.135**	**F.510**		**F.526**		
	context	**503**	**134**	**116**	**152**	**150**	**141**	**131**	**525**	**517**	**528**	**527**	
Grain													
Avena sp	Oat		25	2	148	16		6	5	7	7	9	#
c.f. *Avena* sp	Oat								1		3		#
Hordeum sp	Barley		6	5	42	6		24	21	11	38	4	#
Hordeum sp (hulled)	Barley		1	1	9	1							#
Hordeum sp (straight)	Barley											1	#
Hordeum sp (hulled/straight)	Barley											2	#
c.f. *Hordeum* sp	Barley		1	5				1	6	4	4		#
Hordeum sp (hulled/tail grain)	Barley				2								#
Hordeum sp (tail grain)	Barley				3	4		1		7			#
Secale cereale	Rye				33								#
Triticum sp	Wheat		39	22	843	68	1	185	31	54	42	25	#
c.f. *Triticum* sp	Wheat	2	21	6	174	17		56	35	65	30	11	#
Triticum sp (tail grain)	Wheat					13		5		2		1	#
Cereal indet		1	18	14	121	23	1	119	52	103	48	22	#
	Total:	**3**	**111**	**55**	**1375**	**148**	**2**	**397**	**151**	**253**	**172**	**75**	
Chaff													
Avena sp (pedicel)	Oat				1								#
Avena sp (pedicel – *fatua* / *ludoviciana* type)	Wild Oat				2								#
Avena sp (awns)	Oat		61		7			16					#
Hordeum sp (rachis internode)	Barley		1		10	1				2	1		#
Triticum sp (tough rachis internode)	Free-threshing wheat		7	1	523	17		39	2	10	13	2	#
Triticum sp (rachis internode base)	Wheat		4		20	2		5	4				#

(table continued)

Table 10.6b (*cont.*) Carbonised plant macrofossils from features at Church Field

		buried soil	enclo-sure ditch	ditch basal fill	ditch earliest cut/ lower fill		ditch upper fill	ditch upper fill	ditch basal fill	ditch middle fill	ditch basal fill	ditch mid-fill	habitat
	feature		F.103	F.115	F.128		F.128/ 140	F.135	F.510		F.526		
	context	503	134	116	152	150	141	131	525	517	528	527	
Triticum sp (basal rachis internode)	Wheat				8							1	#
Triticum sp (tetraploid rachis frag)	Free-threshing wheat				15								#
Triticum sp (c.f. tetraploid rachis frag)	Free-threshing wheat				16								#
Triticum sp (free-threshing rachis frag)	Free-threshing wheat				3			1					#
Triticum spelta (spikelet fork)	Spelt wheat				2								#
Triticum spelta (glume base)	Spelt wheat					1							#
Triticum sp (hulled wheat glume base)	Hulled wheat				25	1							#
Triticum sp (hulled wheat spikelet fork)	Hulled wheat				11								#
Triticum sp (awns)	Wheat				27	1							#
Triticum sp (awns - silicified)	Wheat				1			freq					#
Cereal embryo area			1	1	4			3		2	1	3	#
Poaceae culm node	Grass				10								
Poaceae culm node (silicified)	Grass				14								
Poaceae culm base	Grass				2								
	Total:	**0**	**74**	**2**	**701**	**23**	**0**	**64**	**6**	**14**	**15**	**6**	
Weeds													
RANUNCULACEAE													
Ranunculus acris / repens / bulbosus	Meadow/ Creeping/ Bulbous Buttercup			1	5								DG
Ranunculus flammula L.	Lesser Spearwort				1								MPRw

(table continued)

Table 10.6b (*cont.*) Carbonised plant macrofossils from features at Church Field

		buried soil	enclo-sure ditch	ditch basal fill	ditch earliest cut/ lower fill		ditch upper fill	ditch upper fill	ditch basal fill	ditch middle fill	ditch basal fill	ditch mid-fill	habitat
	feature		F.103	F.115	F.128		F.128/ 140	F.135	F.510		F.526		
	context	503	134	116	152	150	141	131	525	517	528	527	
Ranunculus spp	Buttercup								1f			1f	DMPR
BETULACEAE													
Corylus avellana L. (nut frags)	Hazel			6	5f				2	4f	7		HSW
CHENOPODIACEAE													
Atriplex spp	Orache		8		107							2	CDn
Chenopodium ficifolium Smith	Fig-leaved Goosefoot		3		10								CD
Chenopodiaceae indet	Goosefoot family		3			2			1				various
CARYOPHYLLACEAE													
Agrostemma githago L.	Corncockle				1								C
Cerastium sp	Chickweed		1		1								CDG
Stellaria media (L.)Villars	Common Chickweed				1								CD
POLYGONACEAE													
Persicaria lapathifolia (L.)Gray	Pale Persicaria			1	8								Cdow
Persicaria maculosa Gray	Redshank			1	7								Cdo
Rumex acetosella L.	Sheep's Sorrel				1								Ho, CG, a,sandy
Rumex spp	Dock		12	1	31	3		6	4	2	10	13	DG
BRASSICACEAE													
Brassica c.f. *nigra* (L.)Koch	Black Mustard		7			2		3					DRWs
Brassica/Sinapis/ *Raphanus* spp	Mustard/Rape/ Cole etc		4		9								CD#
FABACEAE													
Lathyrus c.f. *nissolia* L.	Grass Vetchling									2f			G
Lathyrus/*Vicia* spp	Pea/Vetch		2						1	3f	1 + f	1	DG

(table continued)

Table 10.6b (*cont.*) Carbonised plant macrofossils from features at Church Field

		buried soil	enclo-sure ditch	ditch basal fill	ditch earliest cut/ lower fill		ditch upper fill	ditch upper fill	ditch basal fill	ditch middle fill	ditch basal fill	ditch mid-fill	habitat
	feature		F.103	F.115	F.128		F.128/ 140	F.135	F.510		F.526		
	context	503	134	116	152	150	141	131	525	517	528	527	
Lathyrus / Vicia / Pisum spp	Vetch/Garden Pea		4		6f	3			1 + f				CDG#
Medicago lupulina L.	Black Medick		1										GR
Pisum sativum L.	Garden Pea				3								#CD
c.f. *Pisum sativum* L.	Garden Pea				1								#CD
Trifolium / Medicago spp	Clover/Medick		1		5	1			1		3	2	DGR
Vicia faba L.	Celtic/Horse Bean			2 + f	7 + 17f	1 + f		1f		2f	2		#
Vicia hirsuta (L.)Gray	Hairy Tare		1										DG
Vicia tetrasperma (L.)Schreber	Smooth Tare									1			G
APIACEAE													
Bupleurum rotundifolium L.	Thorow-wax				2								C
SOLANACEAE													
Solanum nigrum L.	Black Nightshade		1										CD
PLANTAGINACEAE													
Plantago major L.	Greater Plantain		5		4						1		CDG-o
SCROPHULARIACEAE													
Odontites / Euphrasia spp	Bartsia/ Eyebright		3		18			1	2		4	3	CD
RUBIACEAE													
Galium aparine L.	Cleavers			1	2								CHSo
CAPRIFOLIACEAE													
Sambucus nigra L.	Elder										1	1	DHSWn
ASTERACEAE													
Anthemis cotula L.	Stinking Chamomile		85		135	8		16			3	4	CDh
Chrysanthemum segetum L.	Corn Marigold											1	Ca

(table continued)

Table 10.6b (*cont.*) Carbonised plant macrofossils from features at Church Field

		buried soil	enclo-sure ditch	ditch basal fill	ditch earliest cut/ lower fill		ditch upper fill	ditch upper fill	ditch basal fill	ditch middle fill	ditch basal fill	ditch mid-fill	habitat
	feature		F.103	F.115	F.128		F.128/ 140	F.135	F.510		F.526		
	context	503	134	116	152	150	141	131	525	517	528	527	
Lapsana communis L.	Nipplewort				1								DH
JUNCACEAE													
Juncus spp	Rush										3		GMRw
CYPERACEAE													
Carex spp	Sedge				3						1		GMPRW
Carex vulpina L.	True Fox-sedge				1								Wh/M ditches
Eleocharis palustris/uniglumis	Spike-rush		1		15								MPw
POACEAE													
Bromopsis c.f. *erecta* (Hudson) Fourr.	Upright Brome				1								Gdc
Bromus racemosus/ hordaceus/secalinus	Smooth/Soft/ Rye Brome		7		9	1							DG/DG/CD
Bromus sp	Brome			1				1	1	1		1	CD
c.f. *Bromus* spp	Brome							2					CD
Cynosurus cristatus L.	Crested Dog's -tail				6	1							G
Poa/Phleum spp	Meadow-grass/ Cat's-tail		20		43						5		G
Poaceae indet	Grasses		6		52	3		14		2	2	3	G
	Total:	0	175	14	490	25	0	43	12	6	43	31	
Charcoal fragments			abund	abund	abund	freq	few	freq	freq	freq		freq	
Charcoal frags >2mm			<200	400+	<400	<50		100+	100+	50+		<100	

Key for habitats: see Table 3.6

Table 10.6c Mineralised plant macrofossils from features at Church Field

		ditch basal fill	ditch basal fill	ditch middle fill	habitat
	feature	**F.510**	**F.526**		
	context	**525**	**528**	**527**	
RANUNCULACEAE					
Ranunculus spp	Buttercup		1	38	DMPR
URTICACEAE					
Urtica dioica L.	Common nettle	15		11	DGHWp
Urtica urens L.	Small nettle			2	CDl
CHENOPODIACEAE					
Atriplex spp	Orache			40	CDn
Chenopodiaceae indet	Goosefoot family	7		104	various
POLYGONACEAE					
Persicaria lapathifolia (L.)Gray	Pale Persicaria			42	Cdow
Polygonum c.f. *aviculare* L.	Knotgrass			8	CD
Polygonum spp	Knotgrasses			6	various
Rumex spp	Dock	44		164	DG
MALVACEAE					
Malva spp	Mallow	16			DW
BRASSICACEAE					
Brassica/*Sinapis*/*Raphanus* spp	Mustard/Rape/Cole etc	15		105	CD#
VITACEAE					
Vitis vinifera L.	Grape	17			#
APIACEAE					
Bupleurum rotundifolium L.	Thorow-wax	37		11	C
LAMIACEAE					
Prunella vulgaris L.	Selfheal			12	DG
PLANTAGINACEAE					
Plantago lanceolata L.	Ribwort Plantain			1	G
Plantago major L.	Greater Plantain	1		5	CDG–o
SCROPHULARIACEAE					
Odontites/*Euphrasia* spp	Bartsia/Eyebright	1		6	CD
CAPRIFOLIACEAE					
Sambucus nigra L.	Elder	2		19	DHSWn
ASTERACEAE					
Anthemis spp	Chamomile			14	Cd
CYPERACEAE					
Carex spp	Sedge	2		10	GMPRW
POACEAE					
Poaceae indet	Grasses	10		48	G
CEREALS					
Avena sp (grain)	Oat			1	#
Avena sp (grain with partial floret)	Oat			1	#
c.f. *Hordeum* sp (grain)	Barley			1	#
Secale cereale (grain)	Rye			2	#
	Total:	**167**	**1**	**651**	

Table 10.7 Plant habitat groups at Church Field

wet places: marsh, by or in ditches or streamsides

bankside/boggy places

Carex riparia (W)	Greater Pond-sedge
Carex vulpina (CW)	True Fox-sedge
Carex spp (CMW)	Sedge
** *Cirsium palustre* (W)	Marsh Thistle
Eleocharis palustris/uniglumis (CW)	Spike-rush
** *Eupatorium cannabinum* (W)	Hemp Agrimony
** *Filipendula ulmaria* (W)	Meadowsweet
Juncus sp (CW)	Rush
Lycopus europaeus (W)	Gipsywort
Mentha aquatica (W)	Water Mint
Ranunculus lingua (W)	Greater Spearwort
Ranunculus sceleratus (W)	Celery-leaved Buttercup
** *Ranunculus flammula* (CW)	Lesser Spearwort
Rorippa nasturtium-aquaticum (W)	Water-cress
Typha spp (W)	Bulrush

aquatics

Alisma plantago-aquatica (W)	Water Plantain
Chara spp (W)	Stonewort
Lemna spp (W)	Duckweed
Ranunculus subg. *Batrachium* (W)	Water Crowfoot

brackish indicators

** *Carex flacca* (W)	Glaucous Sedge

dry pasture/rough grassy places/fields

Bromopsis erecta (C)	Upright Brome
** *Bromus racemosus/hordaceus/secalinus* (C)	Smooth/Soft/Rye Brome
*** *Cirsium arvense* (W)	Creeping Thistle
** *Cirsium vulgare* (W)	Spear Thistle
Cynosurus cristatus (C)	Crested Dog's-tail
** *Eupatorium cannabinum* (W)	Hemp Agrimony
** *Heracleum sphondylium* (W)	Hogweed
Lathyrus nissolia (C)	Grass Vetchling
Lathyrus/Vicia spp (C)	Pea/Vetch
** *Malva* spp (CM)	Common Mallow
Medicago lupulina (C)	Black Medick
** *Odontites/Euphrasia* (CMW)	Bartsia/Eyebright
Plantago lanceolata (M)	Ribwort Plantain
** *Plantago major* (CM)	Greater Plantain
Poa/Phleum spp (C)	Meadow-grass/Cat's-tail
**Poaceae (CM)	Grass
Prunella vulgaris (M)	Selfheal
Rumex acetosella (C)	Sheep's Sorrel
Torilis spp (W)	Hedge-parsley
Trifolium/Medicago spp (C)	Clover/Medick
Vicia hirsuta (C)	Hairy Tare
Vicia tetrasperma (C)	Smooth Tare

meadows/damp pasture

** *Carex flacca* (W)	Glaucous Sedge
Carex hirta (W)	Hairy Sedge
** *Cirsium palustre* (W)	Marsh Thistle
** *Conium maculatum* (W)	Hemlock
** *Filipendula ulmaria* (W)	Meadowsweet
**Poaceae indet (CMW)	Grass
Potentilla anserina (W)	Silverweed
Ranunculus acris/repens/bulbosus (W)	Meadow/ Creeping/Bulbous Buttercup
** *Ranunculus flammula* (CW)	Lesser Spearwort
Ranunculus sardous (W)	Hairy Buttercup
Ranunculus sp (CM)	Buttercup

waste/disturbed/arable ground

Aethusa cynapium (W)	Fool's Parsley
** *Arctium minus* (W)	Lesser Burdock
Atriplex spp (CMW)	Orache

cornfields

Agrostemma githago (C)	Corncockle
Anthemis cotula (CW)	Stinking Chamomile
Anthemis spp (M)	Chamomile
Bupleurum rotundifolium (CM)	Thorow-wax
Chrysanthemum segetum (C)	Corn marigold

heath/downland/common

Ulex sp (W)	Gorse

(table continued)

Table 10.7 (*cont.*) Plant habitat groups at Church Field

Brassica c.f. *nigra* (C)	Black Mustard	**cultivated/of economic importance**	
Brassica/*Sinapis*/*Raphanus* spp (CMW) Mustard/Rape/Cole etc	*Avena* sp (CM)	Oat	
** *Bromus racemosus*/	Smooth/Soft/ Rye Brome	*Ficus carica* (W)	Fig
hordaceus/*secalinus* (C)	*Hordeum* sp (CM)	Barley	
Cerastium sp (CW)	Chickweed	*Linum usitatissimum* (W)	Flax
Chenopodium album (W)	Fat-hen	*Pisum sativum* (C)	Garden Pea
Chenopodium ficifolium (CW)	Fig-leaved Goosefoot	*Secale cereale* (CM)	Rye
Chenopodium polyspermum (W)	Many-seeded Goosefoot	*Triticum* sp (C)	Wheat
Chenopodium rubrum/*glaucum* (W)	Red/Oak-leaved Goosefoot	*Vicia faba* (C)	Celtic/Horse Bean
Chenopodiaceae indet (CMW)	Goosefooot	*Vitis vinifera* (M)	Grape-vine
*** *Cirsium arvense* (W)	Creeping Thistle		
** *Cirsium vulgare* (W)	Spear Thistle		
** *Conium maculatum* (W)	Hemlock		
Coronopus squamatus (W)	Swine Cress		
** *Galium aparine* (C)	Cleavers		
** *Lapsana communis* (CW)	Nipplewort		
waste/disturbed/arable ground		**woodland/hedgerow/scrub**	
** *Malva* spp (M)	Mallow	** *Arctium minus* (W)	Lesser Burdock
** *Odontites*/*Euphrasia* (CMW)	Bartsia/Eyebright	*Ballota nigra* (W)	Black Horehound
Persicaria lapathifolia (CMW)	Pale Persicaria	*Betula* spp (W)	Birch
Persicaria maculosa (CW)	Redshank	*Carex sylvatica* (W)	Wood-sedge
Picris echioides (W)	Bristly Oxtongue	*** *Cirsium arvense* (W)	Creeping Thistle
** *Plantago major* (CMW)	Greater Plantain	*Corylus avellana* (CW)	Hazel
Polygonum aviculare (MW)	Knotgrass	*Crataegus monogyna* (W)	Hawthorn
Reseda luteola (W)	Weld	** *Galium aparine* (C)	Cleavers
** *Rubus* sect. *Glandulosus* (W)	Bramble	** *Heracleum sphondylium* (W)	Hogweed
Rumex sp (CMW)	Dock	** *Lapsana communis* (W)	Nipplewort
Solanum nigrum (C)	Black Nightshade	Rosaceae (W)	Rose Family
Sonchus asper (W)	Prickly Sow-thistle	** *Rubus* sect. *Glandulosus* (W)	Bramble
Sonchus oleraceus (W)	Smooth Sow-thistle	*Sambucus nigra* (CMW)	Elder
Stellaria media (CW)	Common Chickweed	*Solanum dulcamara* (W)	Bittersweet
Urtica dioica (MW)	Common nettle	*Stachys sylvatica* (W)	Hedge Woundwort
Urtica urens (M)	Small nettle		

Key
** occurring in 2 habitat groups
*** occurring in 3 habitat groups
C charred M mineralised W waterlogged

Table 10.8a Waterlogged plant macrofossils from features at Home Ground

		buried soil	between buried soils	ditch lower fill		ditch	lower pit fill	upper pit fill	gully	ditch	habitat
	feature			**F.267**		**F.308**	**F.265**		**F.243**	**F.209**	
	context	**281**	**321**	**285**	**285**	**323**	**280**	**266**	**244**	**230**	
	sample	**145**	**146/147**	**139/140**	**141/142**	**152/153**	**137/138**	**135/136**	**131/132**	**127/128**	
	Sample size (kg/litres)	**3.7/4**	**54.6/46**	**29.9/33**	**37.9/44**	**36.3/42**	**29.1/34**	**27.7/30**	**24.2/28**	**45.9/42**	
	Size of float (ml)	**<1**	**none**	**100**	**140**	**4**	**25**	**16**	**8**	**170**	
RANUNCULACEAE											
Ranunculus acris/repens/bulbosus	Meadow/Creeping/ Bulbous Buttercup			4		2	1			25	DG
Ranunculus lingua L.	Greater Spearwort									1	M
Ranunculus sceleratus L.	Celery-leaved Buttercup									18	MPR
R. subg. *Batrachium* (DC.)A.Gray	Water Crowfoot				3	9	7		1	2	APR
URTICACEAE											
Urtica dioica L.	Common nettle			2	1					425	DGHWp
CHENOPODIACEAE											
Atriplex spp	Orache				1				2	2	CDn
Chenopodium ficifolium Smith	Fig-leaved Goosefoot								1		CD
Chenopodiaceae indet	Goosefoot family									2	various
CARYOPHYLLACEAE											
Cerastium spp	Chickweed						1	1		2	CDG
POLYGONACEAE											
Rumex sp	Dock									1	DG
BRASSICACEAE											
Rorippa nasturtium-aquaticum (L.)Hayek	Water-cress									1	BPR
ROSACEAE											
Crataegus monogyna Jacq	Hawthorn									10 + 40f	HSW
Potentilla anserina L.	Silverweed									1f	DG, sand-dunes
Rosaceae indet (thorn)	Rose family									7	HSW
Rubus sect. *Glandulosus* Wimmer and Grab	Bramble							1		39	DHSW

(table continued)

Table 10.8a (*cont.*) Waterlogged plant macrofossils from features at Home Ground

		buried soil	between buried soils	ditch lower fill		ditch	lower pit fill	upper pit fill	gully	ditch	habitat
	feature			F.267		F.308	F.265		F.243	F.209	
	context	281	321	285	285	323	280	266	244	230	
	sample	145	146/147	139/140	141/142	152/153	137/138	135/136	131/132	127/128	
	Sample size (kg/litres)	3.7/4	54.6/46	29.9/33	37.9/44	36.3/42	29.1/34	27.7/30	24.2/28	45.9/42	
	Size of float (ml)	<1	none	100	140	4	25	16	8	170	
APIACEAE											
Aethusa cynapium L.	Fool's Parsley									1	C
Anethum graveolens L.	Dill									1	CD#
Conium maculatum L.	Hemlock									28	Bw
Heracleum sphondylium L.	Hogweed									1f	DG
Torilis spp	Hedge-parsley									2f	GHWo
SOLANACEAE											
Solanum dulcamara L.	Bittersweet									12	DHS
LAMIACEAE											
Ballota nigra L.	Black Horehound									2	HW
Lycopus europaeus L.	Gipsywort									2	FRw
Mentha sp	Mint									1	CDPW
Stachys sylvatica L.	Hedge Woundwort									21	HSW
PLANTAGINACEAE											
Plantago major L.	Greater Plantain									1	CDG-o
CAPRIFOLIACEAE											
Sambucus nigra L.	Elder					2			3	16	DHSWn
ASTERACEAE											
Chrysanthemum segetum L.	Corn marigold			2							Ca
Cirsium arvense (L.)Scop	Creeping Thistle									9	CDGH
Cirsium/*Carduus* sp	Thistle			1				1		12	DGMW
Leontodon spp	Hawkbit									1	G
Picris echioides L.	Bristly Oxtongue									2	DHWc
Sonchus asper (L.)Hill	Prickly Sow-thistle									2	CD

(table continued)

Table 10.8a (*cont.*) Waterlogged plant macrofossils from features at Home Ground

		buried soil	between buried soils	ditch lower fill		ditch	lower pit fill	upper pit fill	gully	ditch	habitat
	feature			**F.267**		**F.308**	**F.265**		**F.243**	**F.209**	
	context	**281**	**321**	**285**	**285**	**323**	**280**	**266**	**244**	**230**	
	sample	**145**	**146/147**	**139/140**	**141/142**	**152/153**	**137/138**	**135/136**	**131/132**	**127/128**	
	Sample size (kg/litres)	**3.7/4**	**54.6/46**	**29.9/33**	**37.9/44**	**36.3/42**	**29.1/34**	**27.7/30**	**24.2/28**	**45.9/42**	
	Size of float (ml)	**<1**	**none**	**100**	**140**	**4**	**25**	**16**	**8**	**170**	
ALISMATACEAE											
Alisma plantago-aquatica L.	Water Plantain									5	APR
Alisma spp	Water Plantain									15	APR
POTAMOGETONACEAE											
Potamogeton sp	Pondweed					1					APR
LEMNACEAE											
Lemna spp	Duckweed	2		38	335	57	1	1	1	21	A
JUNCACEAE											
Juncus spp	Rush	20		20	12	10	32	3	16		GMRw
CYPERACEAE											
Carex spp	Sedge									3	GMPRW
Carex flacca Schreber	Glaucous Sedge									71	G, wd
Carex hirta L.	Hairy Sedge									1	G (damp)
Carex sylvatica Hudson	Wood-sedge									1	HSW damp
Carex vulpina L.	True Fox-sedge									7	Wh/M ditches
Eleocharis palustris/uniglumis	Spike-rush									1	MPw
POACEAE											
Poaceae indet	Grass								1	8	G
TYPHACEAE											
Typha spp	Bulrush				1				2	4	PR
	Total:	**22**	**0**	**67**	**353**	**81**	**42**	**7**	**27**	**787**	

Table 10.8b Charred plant macrofossils from features at Home Ground

			buried soil	ditch	ditch	ditch	lower pit fill	upper pit fill	gully	habitat
		feature		F.267		F.308	F.265		F.243	
		context	281	285	285	323	280	266	244	
		sample	145	139/140	141/142	152/153	137/138	135/136	131/132	
Grain										
Avena sp	Oat			8	2	9		2	5	#
Hordeum sp	Barley			2	8	7	1	2	7	#
Hordeum sp (hulled)	Barley					1				#
c.f. *Hordeum* sp	Barley				3	2				#
Hordeum sp (tail grain)	Barley			5	1				1	#
Triticum sp	Wheat			9	11	32	1	3	9	#
c.f. *Triticum* sp	Wheat			1	3	24		7	8	#
Triticum sp (tail grain)	Wheat					3			4	#
Cereal indet				7	18	41	1	9	12	#
	Total:		0	32	46	119	3	23	46	
Chaff										
Avena sp (awns)	Oat			23	20		1	1	12	
Hordeum sp (rachis internode)	Barley					1			3	#
Triticum sp (tough rachis internode)	Free-threshing wheat		1		1	1		6	46	#
Triticum sp (basal rachis internode)	Wheat								8	#
Triticum/*Hordeum* sp (awns)	Wheat/barley				5		1		1	#
Triticum/*Hordeum* sp (awns - silicified)	Wheat/barley			5	10	50	4			#
Cereal embryo area									2	#
Poaceae culm node (silicified)	Grass				1					
	Total:		1	28	37	52	6	7	72	
Weeds										
CHARACEAE										
Chara sp	Stonewort								1	A
BETULACEAE										
Corylus avellana L. (nut frags)	Hazel								1f	HSW
CHENOPODIACEAE										

(table continued)

Table 10.8b (cont.) Charred plant macrofossils from features at Home Ground

			buried soil	ditch	ditch	ditch	lower pit fill	upper pit fill	gully	habitat
		feature		F.267		F.308	F.265		F.243	
		context	281	285	285	323	280	266	244	
		sample	145	139/140	141/142	152/153	137/138	135/136	131/132	
Atriplex sp	Orache							1	1	CDn
POLYGONACEAE										
Rumex spp	Dock					2			4	DG
BRASSICACEAE										
Brassica / *Sinapis* / *Raphanus* sp	Mustard/Rape/Cole etc			1	1			1		CD#
FABACEAE										
Lathyrus / *Vicia* sp	Pea/Vetch			1		1				DG
Trifolium / *Medicago* sp	Clover/Medick							1	1	DGR
Vicia faba L.	Celtic/Horse Bean			1	1 + f	2 + f				#
PLANTAGINACEAE										
Plantago major L.	Greater Plantain								1	CDG-o
SCROPHULARIACEAE										
Odontites / *Euphrasia* spp	Bartsia/Eyebright							2	2	CD
ASTERACEAE										
Anthemis cotula L.	Stinking Chamomile			6	1			3	5	CDh
JUNCACEAE										
Juncus sp	Rush								1	GMRw
POACEAE										
Poa / *Phleum* sp	Meadow-grass/Cat's-tail					1				G
Poaceae indet	Grasses		1					2	8	G
	Total:		**1**	**9**	**3**	**6**	**0**	**10**	**24**	

Table 10.8c Mineralised plant macrofossils from features at Home Ground

			ditch lower fill	ditch	habitat
			F.267	F.308	
		context	285	323	
CHENOPODIACEAE					
Chenopodium sp	Goosefoots		1		various
POLYGONACEAE					
Rumex acetosella L.	Sheep's Sorrel			1	Ho, CG, a sandy
BRASSICACEAE					
Brassica / *Sinapis* / *Raphanus* sp	Mustard/Rape/Cole etc			1	CD#
FABACEAE					
Trifolium / *Medicago* spp	Clover/Medick			1	DGR
	Total:		**1**	**3**	

Key for habitats: see Table 3.6

Table 10.9 Plant habitat groups at Home Ground

wet places: marsh, by or in ditches or streamsides			
bankside/boggy places		***aquatics***	
Carex vulpina (W)	True Fox-sedge	*Alisma plantago-aquatica* (W)	Water Plantain
Carex spp (W)	Sedge	*Chara spp* (C)	Stonewort
Eleocharis palustris / *uniglumis* (W)	Spike-rush	*Lemna* spp (W)	Duckweed
Juncus spp (CW)	Rush	*Potamogeton* spp (W)	Pondweed
Lycopus europaeus (W)	Gipsywort	*Ranunculus* subg. *Batrachium* (W)	Water Crowfoot
Mentha spp (W)	Water Mint		
Ranunculus lingua (W)	Greater Spearwort		
Ranunculus sceleratus (W)	Celery-leaved Buttercup	***brackish indicators***	
Rorippa nasturtiun-aquaticum (W)	Water-cress	** *Carex flacca* (W)	Glaucous Sedge
Typha spp (W)	Bulrush		
dry pasture/rough grassy places/fields		**meadows/damp pasture**	
****Cirsium arvense* (W)	Creeping Thistle	** *Carex flacca* (W)	Glaucous Sedge
***Heracleum sphondylium* (W)	Hogweed	*Carex hirta* (W)	Hairy Sedge
Lathyrus / *Vicia* spp (C)	Vetch	** *Conium maculatum* (W)	Hemlock
Leontodon spp (W)	Hawkbit	** Poaceae indet (CW)	Grass
***Odontites* / *Euphrasia* (C)	Bartsia/Eyebright	*Potentilla anserina* (W)	Silverweed
Poa / *Phleum* spp (C)	Meadow-grass/Cat's-tail	*Ranunculus acris* / *repens* / *bulbosus* (W)	Meadow/ Creeping/ Bulbous Buttercup
** *Plantago major* (CW)	Greater Plantain		
Poaceae (CW)	Grasses		
Rumex acetosella (M)	Sheep's Sorrel		
Torilis spp (W)	Hedge-parsley		
Trifolium / *Medicago* (CM)	Clover/Medick		

(table continued)

Table 10.9 (*cont.*) Plant habitat groups at Home Ground

waste/disturbed/arable ground		**cornfields**	
Aethusa cynapium (W)	Fool's Parsley	*Anthemis cotula* (C)	Stinking Chamomile
Atriplex spp (CW)	Orache	*Chrysanthemum segetum* (W)	Corn Marigold
Brassica / *Sinapis* / *Raphanus* spp (CM)	Mustard/Rape/Cole etc		
Cerastium spp (W)	Chickweed		
Chenopodium ficifolium (W)	Fig-leaved Goosefoot	**cultivated/of economic importance**	
Chenopodium spp (M)	Goosefoot	*Anethum graveolens* (W)	Dill
****Cirsium arvense* (W)	Creeping Thistle	*Avena* sp (C)	Oat
*** *Conium maculatum* (W)	Hemlock	*Hordeum* sp (C)	Barley
***Odontites* / *Euphrasia* (C)	Bartsia/Eyebright	*Secale cereale* (C)	Rye
Picris echioides (W)	Bristly Oxtongue	*Triticum* sp (C)	Wheat
*** *Plantago major* (CW)	Greater Plantain	*Vicia faba* (C)	Celtic/Horse Bean
*** *Rubus* sect. *Glandulosus* (W)	Bramble		
Rumex spp (CW)	Dock		
Sonchus asper (W)	Prickly Sow-thistle		
Urtica dioica (W)	Common nettle		
woodland/hedgerow/scrub			
Ballota nigra (W)	Black Horehound		
Carex sylvatica (W)	Wood-sedge		
****Cirsium arvense* (W)	Creeping Thistle		
Corylus avellana (C)	Hazel		
Crataegus monogyna (W)	Hawthorn		
*** *Heracleum sphondylium* (W)	Hogweed		
Rosaceae (W)	Rose family		
*** *Rubus* sect. *Glandulosus* (W)	Bramble		
Sambucus nigra (W)	Elder		
Solanum dulcamara (W)	Bittersweet		
Stachys sylvatica (W)	Hedge Woundwort		

Key
** occurring in two habitat groups *** occurring in three habitat groups
C charred M mineralised W waterlogged

Table 10.10 Charcoal from medieval contexts at Church Field and Home Ground (numbers of fragments identified)

context	*Alnus*	*Corylus*	*Fraxinus*	*Ilex*	Pomoideae	*Prunus*	*Quercus*	*Tilia*	bark (unidentified)
266	–	–	–	–	–	1	–	–	–
297	2	2r	4h	1	6	–	10h, 1r	–	–
504	–	–	–	–	–	–	1h	–	1 (10mm thick)
505	–	–	1	–	1	–	–	–	–
519	–	–	2	–	–	–	–	–	–
521	–	–	–	–	–	–	–	4	–

Key: h = heartwood; r = roundwood (diameter <20mm)

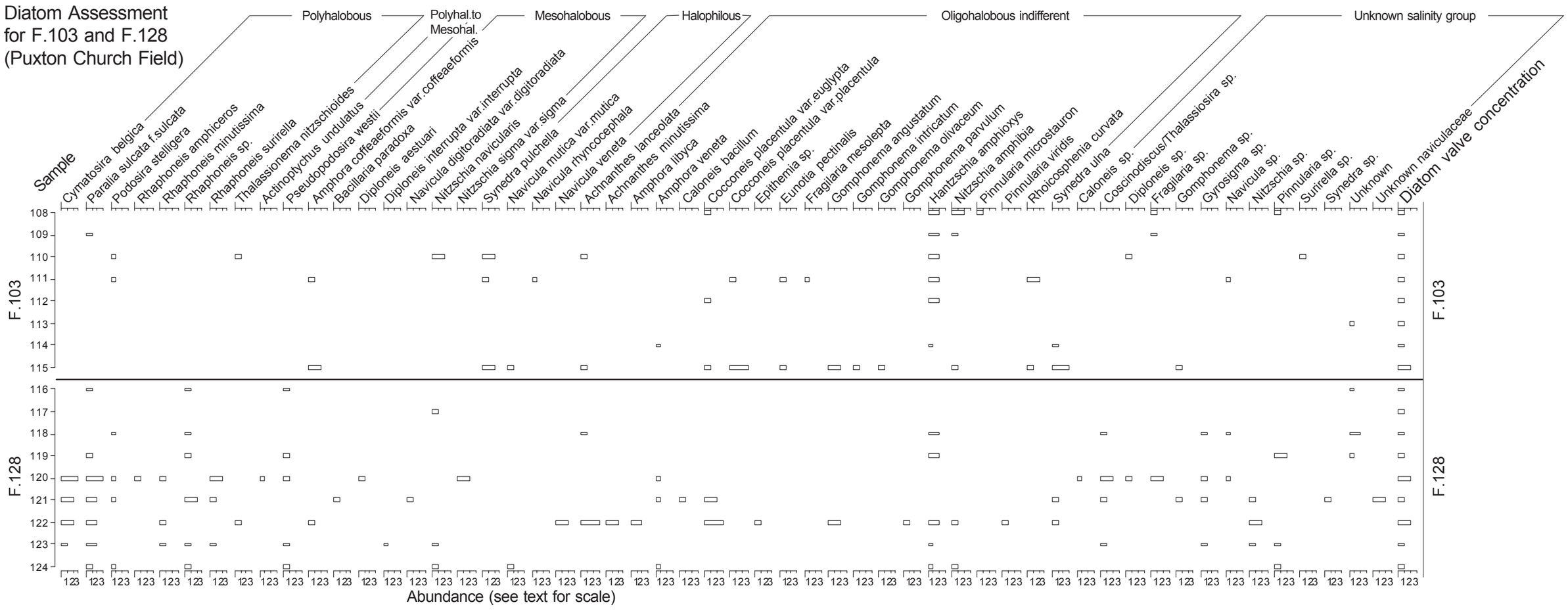

Figure 10.1 Diatoms from Church Field F.103 and F.128/F.140 (drawing by Nigel Cameron)

Table 10.11 Foraminifera from Church Field enclosure ditch F.103

depth from top of monolith tin)	context	number of tests >125μm in 10cm^3 wet sediment	species present and total		ecology of individual species
			Ammonia beccarii	1	brackish–marine
1–2cm	107	4	*Haynesina germanica*	3	brackish, mid/low marsh–mudflat
			Haynesina germanica	5	brackish, mid/low marsh–mudflat
			Ammonia beccarii v. limnetes	2	brackish–marine
8–9cm	107	8	*Elphidium williamsoni*	1	brackish, mid/low marsh
			Haynesina germanica	9	brackish, mid/low marsh–mudflat
			Elphidium williamsoni	6	brackish, mid/low marsh
13–14cm	134	18	*Ammonia beccarii*	3	brackish–marine
28–9cm	134	1	*Elphidium williamsoni*	1	brackish, mid/low marsh
32–3cm	163	0			
			Ammonia beccarii v. limnetes	13	brackish–marine
			Haynesina germanica	7	brackish, mid/low marsh–mudflat
38–9cm	163	29	*Elphidium williamsoni*	9	brackish, mid/low marsh

Table 10.12 Foraminifera from Church Field boundary ditch F.128

depth (from top of monolith tin)	context	number of tests >125μm in 10cm^3 wet sediment	species present and total		ecology of individual species present
7.5–8.5cm	144	0			
17.5–18.5cm	144	2	*Ammonia beccarii v. limnetes*	1	brackish–marine
			Elphidium williamsoni	1	brackish, mid/low marsh
28.5–29.5cm	150	3	*Ammonia beccarii v. limnetes*	2	brackish–marine
			Elphidium williamsoni	1	brackish, mid/low marsh
36–7cm	152	1	*Elphidium williamsoni*	1	brackish, mid/low marsh
47–8cm	152	0			

Table 10.13 Foraminifera from Home Ground boundary ditch F.267. Depth are below present ground surface

depth	context	number of forams in 10cm^3 wet sediment	species present	ecology of species present
100cm (4.18m OD)	268	<10	*Haynesina germanica*	brackish, intertidal flats
			Elphidium williamsoni	brackish, intertidal flats
			Ammonia beccarii	brackish–marine
110cm (4.08m OD)	285	<10	*Elphidium williamsoni*	brackish, intertidal flats
120cm (3.98m OD)	285	<10	*Haynesina germanica*	brackish, intertidal flats
			Elphidium williamsoni	brackish, intertidal flats
			Brizalina sp. <125u	marine inner shelf
130cm (3.88m OD)	285	<10	*Haynesina germanica*	brackish, intertidal flats
			Ammonia beccarii	brackish–marine
			Agglutinated sp.	high marsh

Table 10.14 Mollusca from Puxton Dolemoor, Church Field and Home Ground, nomenclature following Kerney (1999)

	Dolemoor		Church Field					Home Ground				
Feature (context)	**(361)**	**F.311 (373)**	**F.156 (157)**	**F. 128 (152)**	**F.135 (131)**	**F. 140 (141)**	**F.103 (134)**	**F.308 (323)**	**F.267 (285)**	**F.265 (280)**	**F.209 (230)**	**321**
Valvata cristata	–	–	–	–	–	–	–	–	–	–	1	–
Valvata macrostoma	–	–	–	1	–	–	–	–	–	–	–	–
Valvata piscinalis	1	–	–	5	–	1	1	2	–	–	–	–
Hydrobia ventrosa	48	1	–	1	–	–	–	2	–	13	2	300+
Hydrobia ulvae	–	–	–	–	–	–	–	–	–	–	5	50
Ovatella myosotis	–	–	–	1	–	–	–	–	–	–	–	–
Aplexa hypnorum	–	–	–	2	–	–	–	–	–	–	–	–
Bithynia tentaculata	–	–	–	4	–	–	–	1	–	–	–	–
Lymnaea palustris	–	5	–	1	–	1	–	–	4	–	–	–
Lymnaea truncatula	–	2	–	–	–	–	–	–	11	–	8	–
Lymnaea peregra	–	24	–	32	–	15	33	3	13	–	9	–
Anisus leucostoma	6	56	–	63	–	200+	90	2	200+	–	82	–
Bathyomphalus contortus	–	–	–	–	–	–	–	–	–	–	1	–
Gyraulus albus	–	–	–	2	–	–	–	–	–	–	–	–
Gyraulus crista	1	32	–	6	–	500+	41	–	–	–	4	–
Planorbis planorbis	–	–	–	–	–	–	–	–	–	–	3	–
Succineidae	–	3	59	–	–	–	1	–	1	–	3	–
Carychium minimum	–	–	–	20	–	10	11	1	–	–	4	–
Carychium tridentatum	–	–	–	7	–	–	3	–	–	–	1	–
Cochlicopa lubrica	–	–	–	17	–	4	45	–	23	–	8	–
Vertigo pygmaea	–	–	–	3	–	–	4	1	2	–	1	–
Pupilla muscorum	3	–	–	–	–	–	–	–	–	–	1	–
Vallonia costata	–	–	–	7	1	5	24	6	3	–	16	–
Vallonia excentrica	–	–	–	–	–	–	1	1	–	–	1	–
Vallonia sp.	15	–	–	–	–	4	5	–	–	–	–	–
Discus rotundatus	–	–	–	37	4	1	–	–	–	–	17	–
Vitrea spp.	–	–	–	22	–	–	25	–	5	–	3	–
Nesovitrea hammonis	–	–	–	3	–	4	–	2	2	2	2	–
Aegopinella nitidula	–	–	–	6	–	–	49	–	22	–	39	–
Oxychilus cellarius	–	–	–	11	–	9	10	–	2	–	4	–
Cecilioides acicula	–	–	–	34	–	–	2	–	4	1	–	–
Clausilia bidentata	–	–	–	–	–	–	–	–	–	–	2	–
Trichia hispida	–	–	–	7	1	39	41	2	72	1	117	–
Helix aspersa	–	–	–	–	–	–		1	5	–	7	–

Table 10.15 Marine shellfish from Church Field and Home Ground

feature	context	date	*Littorina littorea*	*Patella vulgata*	*Ostrea edulis*	*Cardium edule*	*Mytilus edulis*	*Venus striatula*
CHURCH FIELD								
F.518	519	C11th–12th			1			
F.526	527	C11th–12th			3			
	528	C11th–12th			12			
F.531	522	C11th–12th			2			
F.103	108	C12th–13th	1					
F.115	116	C12th–13th	12		2			
F.119	120	C12th–13th			5			
F.128	130	C12th–13th			5			
	132	C12th–13th	1		1			
	144	C12th–13th			1			
F.135	131	C12th–13th	27	1	4			
	149	C12th–13th	10		2			
F.154	155	? C12th–13th	1	1				
F.510	517	C12th–13th	2	1	2			
	525	C12th–13th	2					
occupation layers	106/118	C12th–13th	19		7			
	121	C12th–13th	1					
	133	C12th–13th	2		1			
	151	C12th–13th	6		2			
	504	C12th–13th	2	1	2			
	505	C13	3		1			
F.140	109	C17th–18th	2	2	1			
	141	C17th–18th	2					
HOME GROUND								
F.203	279	C12th–13th			1			
'garden soil'	213	C14 th –15th			1			
	245	C14 th –15th			1			
Occupation layer	353	C16 th			1		1	
F.207	208	C16 th –18 th					1	
F.203	233	C17 th –18 th			1			
F.209	230	C17 th –18 th			1			
F.308	309	C17 th –18th	2		21	2	20	
	323	C17 th –18th			2		34	
occupation layer	211	C17 th –18 th		1				
	222	C17 th –18 th		1	2			
topsoil	350	–		2 (s)	12	1	1	1

Table 10.16 Identifications of large mammal bone by species and element for Church Field (all contexts) given as NISPs with species totals also given in form of MNEs and MAUs

element	*Bos*	*Ovicaprid*	*Sus*	*Equus*	*Capreolus*	*Canis*	*Felis*	*Lepus*
Horn Core/Antler	6	0	–	–	1	–	–	–
Maxilla	5	7	30	0	0	1	0	0
Mandible	27	21	31	0	1	0	2	1
Occipitus	4	0	0	2	0	1	0	0
Atlas	1	0	1	0	0	0	0	0
Axis	0	1	0	0	0	0	0	0
Scapula	9	6	13	1	0	0	0	0
P. Humerus	12	3	5	1	0	0	2	2
D. Humerus	25	9	19	1	0	1	4	1
P. Radius	11	16	6	1	3	0	1	0
D. Radius	7	12	3	1	1	0	1	0
Ulna	10	0	9	0	1	1	0	1
P. Metacarpal	7	11	10	1	0	0	0	0
D. Metacarpal	7	6	6	1	0	0	0	0
Pelvis	16	7	4	0	0	0	3	0
P. Femur	13	8	6	0	0	1	0	0
D. Femur	14	5	4	0	0	1	0	1
P. Tibia	11	13	9	0	1	0	0	2
D. Tibia	12	21	5	0	1	1	0	2
Astragalus	8	3	5	2	0	0	0	0
Calcaneum	9	1	6	0	0	0	0	3
P. Metatarsal	0	6	10	0	0	0	0	1
D. Metatarsal	5	7	7	0	0	1	0	0
1st Phalange	15	3	11	0	0	0	0	1
2nd Phalange	9	0	4	1	0	0	0	0
3rd Phalange	5	1	5	0	0	0	0	0
TOTAL NISP	**248**	**167**	**209**	**12**	**9**	**8**	**13**	**15**
TOTAL MNE	**232**	**159**	**197**	**12**	**9**	**8**	**13**	**15**
TOTAL MAU	**215.25**	**157**	**166.5**	**13.5**	**9**	**8.25**	**13**	**13.375**

Table 10.17 Identifications of large mammal bone by species and element for Church Field (medieval contexts) given as NISPs with species totals also given in form of MNEs and MAUs

element	*Bos*	*Ovicaprid*	*Sus*	*Equus*	*Capreolus*	*Canis*	*Felis*	*Lepus*
Horn Core/Antler	6	0	–	–	1	–	–	–
Maxilla	4	6	23	0	0	0	0	0
Mandible	25	18	24	0	1	0	1	0
Occipitus	3	0	0	1	0	1	0	0
Atlas	1	0	1	0	0	0	0	0
Axis	0	1	0	0	0	0	0	0
Scapula	9	6	11	0	0	0	0	0
P. Humerus	9	3	3	0	0	0	2	1
D. Humerus	16	9	14	0	0	0	4	1
P. Radius	9	12	4	1	3	0	1	0
D. Radius	6	8	2	1	1	0	1	0
Ulna	10	0	8	0	1	1	0	1
P. Metacarpal	6	7	10	1	0	0	0	0
D. Metacarpal	5	5	5	1	0	0	0	0
Pelvis	13	5	3	0	0	0	3	0
P. Femur	11	7	5	0	0	1	0	0
D. Femur	11	4	3	0	0	1	0	1
P. Tibia	8	12	5	0	1	0	0	1
D. Tibia	10	16	2	0	1	0	0	1
Astragalus	7	3	3	2	0	0	0	0
Calcaneum	8	1	4	0	0	0	0	2
P. Metatarsal	0	3	9	0	0	0	0	0
D. Metatarsal	3	5	7	0	0	1	0	0
1st Phalange	15	2	10	0	0	0	0	0
2nd Phalange	7	0	3	1	0	0	0	0
3rd Phalange	5	1	5	0	0	0	0	0
TOTAL NISP	**207**	**134**	**164**	**8**	**9**	**5**	**12**	**8**
TOTAL MNE	**197**	**130**	**157**	**6**	**9**	**5**	**12**	**8**
TOTAL MAU	**177.75**	**128.75**	**129**	**6.5**	**9**	**5.25**	**12**	**8**

Table 10.18 Identifications of large mammal bone by species and element for Home Ground (medieval contexts) given as NISPs with species totals also given in form of MNEs and MAUs

element	*Bos*	*Ovicaprid*	*Sus*	*Equus*	*Dama*	*Canis*	*Felis*
Horn Core/Antler	0	0	0	–	0	–	–
Maxilla	0	0	1	0	0	0	0
Mandible	0	0	1	0	0	0	0
Occipitus	0	0	0	0	0	0	0
Atlas	1	0	0	0	0	0	0
Axis	0	0	0	0	0	0	0
Scapula	1	1	0	0	0	0	0
P. Humerus	0	0	1	0	0	0	0
D. Humerus	0	2	2	0	0	0	0
P. Radius	1	1	0	0	0	0	0
D. Radius	2	0	0	0	0	0	0
Ulna	0	1	0	0	0	0	0
P. Metacarpal	1	2	2	0	0	0	0
D. Metacarpal	1	0	0	0	0	0	0
Pelvis	2	2	4	0	0	0	0
P. Femur	0	0	0	0	0	0	0
D. Femur	1	0	0	0	0	0	0
P. Tibia	1	2	0	0	0	0	0
D. Tibia	1	2	3	0	0	0	0
Astragalus	1	0	0	0	0	0	0
Calcaneum	3	1	1	0	0	0	0
P. Metatarsal	1	1	0	0	0	0	0
D. Metatarsal	1	1	0	0	0	0	0
1st Phalange	0	0	0	0	0	0	0
2nd Phalange	2	0	2	0	0	0	0
3rd Phalange	0	0	0	0	0	0	0
TOTAL NISP	**20**	**16**	**17**	**0**	**0**	**0**	**0**
TOTAL MNE	**20**	**16**	**17**	**0**	**0**	**0**	**0**
TOTAL MAU	**19.5**	**16**	**14.5**	**0**	**0**	**0**	**0**

Table 10.19 Identifications of large mammal bone by species and element for Home Ground (post-medieval contexts) given as NISPs with species totals also given in form of MNEs and MAUs

element	*Bos*	*Ovicaprid*	*Sus*	*Equus*	*Dama*	*Canis*	*Felis*
Horn Core/Antler	0	0	0	–	0	–	–
Maxilla	0	1	3	0	0	0	0
Mandible	2	0	2	0	0	0	2
Occipitus	1	0	0	0	0	0	0
Atlas	0	0	0	0	0	0	0
Axis	0	0	0	0	0	0	0
Scapula	2	1	1	0	0	0	0
P. Humerus	2	3	5	0	0	0	0
D. Humerus	4	7	7	0	0	0	0
P. Radius	3	3	4	0	0	0	0
D. Radius	3	0	2	0	0	0	0
Ulna	0	0	7	0	0	0	1
P. Metacarpal	2	2	1	0	0	0	0
D. Metacarpal	2	2	0	0	0	0	0
Pelvis	5	3	0	0	0	0	0
P. Femur	3	0	0	0	0	0	0
D. Femur	4	0	0	0	0	0	0
P. Tibia	2	2	2	1	0	0	0
D. Tibia	2	7	5	0	0	0	0
Astragalus	2	2	1	0	0	0	0
Calcaneum	3	0	3	0	0	0	0
P. Metatarsal	2	2	1	0	0	1	0
D. Metatarsal	5	2	1	0	0	1	0
1st Phalange	5	1	1	0	1	0	0
2nd Phalange	8	0	2	1	0	0	0
3rd Phalange	2	1	2	0	0	0	0
TOTAL NISP	**64**	**39**	**50**	**2**	**1**	**2**	**3**
TOTAL MNE	**63**	**38**	**48**	**2**	**1**	**2**	**3**
TOTAL MAU	**53.5**	**36.5**	**42.75**	**1.5**	**0.25**	**0.5**	**3**

Table 10.20 Bird bone from Church Field

feature	context	stork	goose	mallard/ domestic duck	other ducks	fowl	crane	heron	waders	raptors	pigeons	raven	other corvid	passerine	unident.	totals
topsoil	100	–	1	–	2	3	–	–	–	1	–	–	–	1	6	14
"	101	–	–	–	–	1	–	–	–	1	–	–	–	1	3	6
17th/18th century																
F.128	109	–	–	–	–	1	–	–	–	9	–	–	–	–	–	10
"	129	–	–	–	–	–	–	–	–	–	–	1	–	–	–	1
F.140	141	–	–	–	–	2	–	–	–	–	–	–	–	–	–	2
12th/13th century																
F.115	116	–	–	–	–	4	1	–	–	–	–	–	–	–	3	8
F.119	120	–	–	–	–	1	–	–	–	–	–	–	–	–	–	1
F.122	123	1	–	–	–	–	–	–	1	2	–	–	–	–	–	4
F.128	150	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
F.135	131	–	–	1	1	2	–	–	1	10	1	–	–	–	1	17
"	136	–	–	–	–	5	1	–	–	6	–	–	–	–	–	12
"	145	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1
F.135	149	–	–	–	–	–	–	–	1	1	–	–	–	–	–	2
F.510	511	–	–	1	–	2	–	–	–	1	–	–	2	–	–	6
"	517	–	2	–	–	–	–	–	–	–	–	–	–	–	2	4
F.512	513	–	1	–	1	1	–	–	–	–	–	–	–	–	–	3
F.518	519	–	–	–	–	–	–	–	1	–	–	–	–	–	–	1
F.520	521	–	–	–	–	–	–	–	–	–	–	–	1	–	–	1
"	533	–	1	–	1	1	–	–	–	–	–	–	–	–	1	4
F.526	527	–	2	2	1	6	–	–	–	–	–	–	–	–	1	12
"	528	–	1	–	1	1	–	–	–	–	–	–	–	–	–	3
occupation layer	106	–	–	1	–	1	–	–	–	–	–	2	–	–	3	7
"	118	–	1	1	–	–	–	–	–	–	–	–	1	–	2	5
"	133	–	–	–	–	1	–	–	–	3	–	–	–	–	–	4
"	151	–	1	–	–	2	–	–	–	–	–	1	–	–	1	5
"	504	–	1	4	2	7	–	–	1	1	–	–	–	–	4	20
"	505	–	–	5	2	1	–	1	1	1	–	–	–	–	–	11
	Total	1	11	15	11	42	2	1	6	37	1	4	4	2	28	165
	%	0.6	6.7	9.1	6.7		1.2	0.6	3.6		0.6	2.4	2.4	1.2	17	
% goose, duck and fowl																68

stork	cf. white, *Ciconia ciconia*
goose	domestic goose or greylag, *Anser anser*
domestic duck or mallard	*Anas platyrhynchos*
other duck	cf. wigeon, *Anas penelope*, and teal, *Anas crecca*
fowl	domestic fowl
crane	*Grus grus*
heron	grey heron, *Ardea cinerea*
waders	cf. woodcock, *Scolopax rusticola*, and smaller waders
raptors	cf. buzzard, *Buteo buteo*, goshawk, *Accipiter gentilis*, and marsh harrier, *Circus aeruginosus*
raven	*Corvus corax*
corvid	cf. rook/crow, *Corvus corone/frugilegus*, and jay, *Garrulus glandarius*
passerine	songbirds of thrush and sparrow size

Table 10.21 Bird bone from Home Ground

feature	context	goose	m/dom. duck	fowl	turkey	raptors	owl	corvid	passerine	unident.	Totals
topsoil	201	–	–	1	–	–	–	–	–	1	2
17th/18th century											
F.203	204	–	1	–	–	–	–	–	–	–	1
F.205	206	–	–	–	–	–	1	–	–	–	1
	227	–	–	–	–	–	2	–	–	–	2
F.209	210	–	–	–	1	–	–	–	–	–	1
F.207	215	–	–	–	–	–	–	–	–	1	1
F.308	309	–	–	4	–	–	–	1	–	–	5
–	221	1	–	–	–	–	–	–	–	–	1
14th–16th century											
F.203	264	–	–	–	–	–	–	–	1	–	1
F.312	313	–	–	–	–	1	–	–	–	–	1
353	–	1	–	–	–	–	–	–	–	–	1
12th/13th century											
F.243	244	–	–	1	–	–	–	–	–	–	1
F.265	266	1	–	–	–	–	–	–	–	–	1
F.267	268	–	–	1	–	–	–	–	–	–	1
F.304	305	–	–	–	–	–	–	–	–	1	1
	Total	3	1	7	1	1	3	1	1	3	21
	%	14.3	4.8	33.3	4.8	4.8	14.3	4.8	4.8	14.3	
% goose, duck and fowl		27.3	9.1	63.6							11

Table 10.22 Minimum Number of Individuals of small mammals by phase at Church Field and Puxton

		Church Field			Home Ground	
species	**common Name**	**C12–C13**	**C17–C18**	**topsoil**	**C12–C13**	**C17–C18**
Mus musculus	House mouse	2	–	–	–	–
Apodemus sp.	Wood mouse	2	–	–	1	–
Microtus agrestis	Field vole	2	1	–	–	4
Arvicola terrestis	Water vole	1	–	–	–	2
Sorex araneus	Common shrew	2	–	–	2	1
Talpa europaea	Mole	–	–	1	–	–
Erinaceus europaeus	Hedgehog	–	–	1	–	–

Table 10.23 Taxonomy of the small mammal species identified from the upper fill of ditch F.205 (context 227)

class	order	family	species	common names
Mammalia	Rodentia	Cricetidae	*Microtus agrestis*	Field vole, Short-tailed vole
			Clethrionomys glareolus	Bank vole
			Arvicola terrestris	Water vole
		Muridae	*Micromys minutus*	Harvest mouse, Red mouse
			Mus musculus	House mouse
			Apodemus sp.	Wood mouse and/or yellow–necked mouse
			Rattus sp.	Rat
	Insectivora	Soricidae	*Sorex araneus*	Common shrew
			Sorex minutus	Pygmy shrew
		Talpidae	*Talpa europaea*	Mole
Amphibia	Anura	Ranidae	*Rana temporaria*	Common frog
			Rana sp.	

Table 10.24 MNI of mammal species identified from the small mammal cranial material from the upper fill of ditch F.205 (context 227)

species	skull			mandible		MNI
	'whole'*	right side	left side	right	left	
Field vole (*Microtus agrestis*)	5	1	1	13	13	13
Bank vole (*Clethrionomys glareolus*)	1	–	1	3	3	3
Water vole (*Arvicola terrestris*)	1	–	–	–	1	1
Unidentified voles	68	–	3	56	58	71
Harvest mouse (*Micromys minutus*)	–	–	1	–	–	1
House mouse (*Mus musculus*)	–	1	2	2	2	2
Wood mouse (*Apodemus* sp.)	–	10	10	2	9	10
Rat (*Rattus* sp.)	–	–	–	1	–	1
Unidentified Murinae	–	–	–	1	2	2
Common shrew (*Sorex araneus*)	7 + 29	7	14	62	57	62
Pygmy Shrew (*Sorex minutus*)	5	–	–	3 + 2	2 + 5	8
Mole (*Talpa europaea*)	–	–	–	1	–	1
Unknown ?insectivore	–	–	–	1	–	1
Total small mammal Fauna						176

* 'Whole' skulls refers to specimens where the snout and palate region was in one piece, even if the cranium was broken or missing. Where two figures are given, the first represents larger ('adult') specimens and the second is smaller ('juvenile') specimens.