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An assessment of biological remains from excavations at land adjacent to the former Gibraltar Farm, Kingswood, Kingston upon Hull (site code: GIB97)

by

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Summary

One hundred and eleven sediment samples, eight monolith samples and five boxes of hand collected bone, from deposits of pre-Roman to modern date excavated at land adjacent to the former Gibraltar Farm, Kingswood, Hull, were submitted for an assessment of their potential for bioarchaeological analysis.

Although plant and invertebrate macrofossils were recovered from some of the samples these were of only limited use for interpretation of the site as they appeared to represent undisturbed reed swamp—presumably the natural pre-Roman wetland environment or disuse.

Examination of the microfossil content of the monolith samples proved incapable of addressing any archaeological questions. It is possible that these may be more successfully investigated by thin section analysis.

The broad dating framework and small size of the vertebrate assemblage renders this material of little interpretative significance.

Keywords: GIBRALTAR FARM; KINGSWOOD; KINGSTON UPON HULL; PRE-ROMAN; ROMANO-BRITISH; MEDIEVAL; POST-MEDIEVAL; ASSESSMENT; PLANT REMAINS; CHARRED PLANT REMAINS; MICROFOSSILS; DIATOMS; INVERTEBRATE REMAINS; INSECTS; BONE

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Introduction

Excavations at Gibraltar Farm, Kingswood, Kingston upon Hull, undertaken in late 1997 (following earlier trial trenching in October 1996 and March 1997) by Humber Archaeology Partnership, revealed deposits of pre-Roman to modern date which were sampled extensively. One hundred and eleven samples of sediment, five boxes of hand-collected bone and eight monolith samples from these deposits have been examined to evaluate their bioarchaeological potential.

The deposits have been assigned to five phases (by the excavator) as listed below:

- Phase 0 - pre Roman
- Phase 1 - Romano-British
- Phase 2 - medieval (13th/14th century)
- Phase 3 - post-medieval (?18th/19th century)
- Phase 4 - modern (20th century)

Sediment samples

Each sediment sample was individually numbered but, in some cases, there were multiple samples from single contexts. For three of the contexts examined these multiple samples were combined to be processed together as single bulk samples. Vouchers of unprocessed sediment have been retained from individual samples.

Monolith samples

Of the eight monolith samples submitted, four (Samples 21 to 24) formed a sequence through a series of laminated silts in Trench A. It was hoped that examination of microfossils from these deposits might provide some insight into their method of formation.

Two of the samples (Samples 64 and 66) were from a possible turfline within Trench B. It was hoped that examination of microfossils from these samples might provide evidence of land usage (crops/animal husbandry).

Vertebrate remains

Vertebrate remains were recovered from a total of 161 contexts (5 boxes each of approximately 16.5 l). For the purposes of this assessment, material from 21 contexts (approximately two boxes) was chosen, either on the basis of number of fragments (in this case those with greater than 20 fragments) or else specifically to provide information for a representative range of context types. Material from eight contexts (approximately one box), described by the excavator as unstratified and/or modern, was excluded, whilst bones from the remaining deposits were briefly scanned.

Methods

Sediment samples

One hundred and eleven samples of sediment ('GBAs' and 'BSs' *sensu* Dobney *et al.* 1992) were submitted (all from Trench A). The samples were inspected in the laboratory and a description of their lithologies recorded using a standard *pro forma*. Subsamples of 1 to 3 kg were taken from nine of the samples for extraction of macrofossil remains, following procedures of Kenward *et al.* (1980; 1986). Four samples (or multiple samples from the same context—see Introduction) were processed as bulk samples, primarily to recover artefacts, small bones and larger plant macrofossils.

Plant macrofossils were examined from the residues, flots and washovers resulting from processing, and the flots and washovers were examined for invertebrate remains. The residues were sorted for bone, shell, larger plant macrofossils and artefacts. Artefacts were removed from the residues to be returned to the excavator.

Two samples (Sample 56, Context 51 and Sample 93, Context 70) were examined for the eggs of intestinal parasitic nematodes using the 'squash' method of Dainton (1992).

Monolith samples

Three of the eight monolith samples submitted were selected for examination; one (Sample 21) from the sequence through the laminae in Trench A and two from Trench B, thought to represent a turfline (Samples 64 and 66). These samples were examined using the 'squash' method of Dainton (*op. cit.*) which was originally

developed for the detection of the eggs of intestinal parasitic nematodes but has proved more generally useful for quickly surveying a sample's microfossil content.

Vertebrate remains

The vertebrate assemblage was recorded electronically directly into a series of data tables using a graphical input system and *Paradox* software. Brief, semi-subjective data were recorded for each context regarding the state of preservation, colour and appearance of broken surfaces ('angularity'). In addition, semi-quantitative records were made concerning the size of the fragments, dog gnawing, butchery, fresh breakage and burning.

Identification was carried out using the reference collections of the Environmental Archaeology Unit. Records were made for each species within each of the selected contexts, consisting of the total number of fragments, the number of each anatomical element present, along with the numbers of 'A' bones (Dobney *et al.* forthcoming), i.e. mandibular teeth and mandibles for age-at-death analysis, measurable fragments, and the number of unfused and juvenile fragments.

Fragments not identifiable to species were grouped into categories: large mammal (assumed to be cattle, horse or large cervid), medium-sized mammal (assumed to be caprovid, pig or small cervid) and bird. In addition to counts of fragments, weights of identifiable species and unidentified categories were recorded.

Results

The sediment samples

The results of the investigations are presented in context number order with information provided by the excavator in brackets.

Context 51 [Romano-British tertiary pit fill]
Sample 56 (microfossil 'squash')

Just moist, light to mid grey to light orange brown, crumbly (working plastic), silty clay with modern rootlets and algae present.

The 'squash' was mostly inorganic with a trace of organic detritus.

No intestinal parasitic nematode eggs were seen suggesting that this was not a cess pit.

Context 70 [Roman channel fill]
Sample 93 (2 kg paraffin flotation and microfossil 'squash')

Moist, varicoloured (shading from light to mid grey brown through to black), brittle and with jumbled layering (working soft and slightly plastic), humic clay silt with fine and coarse herbaceous detritus (including 'straw'/reeds). Charcoal, wood and modern rootlets were present in the sample.

The very small flot contained *Phragmites australis* (Cav.) Trin. ex Steudel (common reed), *Mentha aquatica* L. (water mint), charcoal, wood fragments and quartz grains. There was also a large invertebrate assemblage—mostly of aquatic beetle forms with some taxa typical of emergent or waterside vegetation but including a component of terrestrial taxa associated with litter and/or dung. *Daphnia ephippia* (water flea 'resting eggs') were also noted. There were no insects strongly associated with human habitations.

No eggs of intestinal parasitic nematodes were seen in the 'squash'.

The large residue was of coarse sand and pebbles (to 10 mm), large *P. australis* leaf fragments, wood fragments and charcoal (to 12 mm) with some *Carex* sp. (sedge) nutlets and epidermis, *Juncus* sp. (rush) seeds and *Daphnia ephippia*.

Samples 85 to 92, 94 and 95 (77 kg bulk sieved to 1 mm, washover to 1 mm)

The small washover was mostly of plant remains of the same taxa as from the GBA sample (Sample 93) outlined above.

The small residue was mostly stones, charcoal and fine plant detritus with some twigs and a little sand, brick/tile, pot, wood, fruit stones, large mammal bone (some burnt) and bird bone. One kilogram of the residue was sorted for bone and contained 66 fragments of animal bone (weighing 32.1 g). These included a single pig mandible and a small duck (?teal, cf. *Anas crecca* L.) coracoid fragment, the rest being classified as unidentifiable.

The biological remains from this context provided some evidence of dumping of food waste. It should be noted, however, that the small number of recovered remains was hardly indicative of intensive usage for rubbish dumping, and the lack of insects associated with intensive occupation was striking. No eggs of intestinal parasitic nematodes were seen in the 'squash' suggesting that the deposit did not contain faecal material.

Context 241 [Romano-British ditch fill]
Sample 14 (NFA)

Moist, light to mid grey with slight red-brown mottling, stiff (working plastic), slightly sandy silty clay. Root channels or burrows were abundant in the sample and charcoal and fragments of burnt bone were present.

No further analysis of this sample was undertaken since it appeared to be barren of identifiable organic remains.

Context 392 [Romano-British pit fill]
Sample 16 (2 kg paraffin flotation)

Moist, mid to dark grey (with 1 to 10 mm-scale, orange mottling—oxidation/reduction), sticky (working soft), clay silt. Charcoal was common in the sample.

The tiny flot was mostly *Juncus* sp. seeds with some *Scirpus lacustris* L. (bulrush) seeds, highly humified wood, quartz sand grains, herbaceous rootlets and *Thalictrum flavum* L. (common meadow rue). No

more than traces of invertebrates were present.

The moderate-sized residue was mostly rounded sandstone pebbles, charcoal and fine organic silt with some rounded brick/tile fragments, unidentified bone fragments and herbaceous rootlets.

The plant remains suggest a wet, relatively undisturbed, swamps but cannot provide further interpretation of the feature. The artefactual remains were too rare to suggest strongly dumping or industrial processes. There was no evidence to suggest that this was a cess pit.

Sample 19 (NFA)

Description as for Sample 16 but with less charcoal.

No further analysis of this sample was undertaken.

Context 404 [Romano-British ditch fill]

Sample 45 (3 kg paraffin flotation)

Description as for Sample 14 but more grey, with no charcoal and containing modern rootlets and algae.

The very small flot was of unidentified organic material, quartz grains, herbaceous rootlets and seeds of *Urtica dioica* L. (stinging nettle). No invertebrate remains were noted.

The small residue was mostly coarse sand with some sandstone pebbles (to 8 mm), quartz pebbles (to 20 mm), brick/tile fragments, charcoal, bone and modern rootlets.

The small amounts of recovered charcoal and brick/tile may have been of industrial origin but certainly did not suggest any large scale industrial process. There was no evidence of crops, animal husbandry, food residues or water.

Context 429 [Romano-British gully fill]

Sample 20 (2 kg paraffin flotation)

Moist, light grey (with light reddish-brown mottling), crumbly (working plastic), very slightly sandy clay silt. Lumps of light orange-red burnt soil, charcoal and modern rootlets were present in the sample.

The very small flot was mostly unidentified organic material with some quartz grains, woody and herbaceous rootlets, and *Juncus* sp. (highly decayed

outer epidermis only) and *Scirpus lacustris* L. seeds. No invertebrates were seen.

The smallish residue was mostly lumps of burnt sandy material (?brick/tile) mixed with charcoal with some quartz grains, woody roots, rootlets and unidentified bone fragments (some burnt).

As for Context 392, the plant remains suggested a wet, relatively undisturbed, swamp and there is no evidence to suggest cess. The artefactual remains were more numerous but still insufficient to indicate any large scale industrial process.

Context 443 [Romano-British secondary ditch fill]

Sample 51 (3 kg paraffin flotation)

Just moist, light grey (with light reddish-brown mottling), stiff to crumbly (working plastic), silty clay with very small stones (2 to 6 mm) present. A single modern seedling was also noted.

The tiny flot consisted of unidentified organic material, quartz grains and herbaceous rootlets in approximately equal amounts.

The small residue was mostly coarse sand with some angular pebbles (to 70 mm), charcoal, quartz grains and herbaceous rootlets.

Although no interpretable organic remains were recovered, the angular (uneroded) nature of the residual pebbles perhaps suggests that the ditch was either dry or contained standing water.

Context 444 [Lower fill of southern boundary ditch]

Sample 57 (NFA)

Moist, light brown, stiff (working plastic), slightly silty clay. Modern rootlets, algae and mould were noted.

No further analysis of this sample was undertaken.

The sample appeared to be barren of identifiable, ancient organic remains.

Context 498 [Romano-British fill of outer NE boundary ditch]

Sample 25 (NFA)

Just moist, light grey (locally slightly purplish and with reddish brown mottling along root channels),

stiff (working plastic), slightly sandy silty clay with abundant modern rootlets.

The sample appeared to be barren of identifiable, ancient organic remains.

No further analysis of this sample was undertaken.

Context 511 [Romano-British primary pit fill]
Sample 34 (2 kg paraffin flotation)

Moist, light to mid grey to light brown (colours jumbled), crumbly and sticky (working soft), very slightly sandy clay silt. Burnt clay/soil, charcoal and modern rootlets were present. A 'void' approximately 15 mm in diameter was also noted in one block of sediment.

The very small flot contained a small assemblage of plant remains including seeds of *Thalictrum* sp., *Juncus* spp., *S. lacustris* (some charred) and *Urtica dioica*, *Carex* sp. nutlets, Caryophyllaceae fruits and charcoal. The remainder of the flot was composed of unidentified organic matter, fine sand grains (including quartz), rotted traces of insect cuticle and a single ?contaminant hymenopteran wing.

The residue was of fine and coarse sand, rounded ?sandstone pebbles and charcoal (to 20 mm) with some smaller pebbles (some angular, some rounded to 10 mm), rounded brick/tile fragments, quartz grains, silt and herbaceous detritus.

Once again, (as Contexts 392 and 429), the plant remains suggested a wet, relatively undisturbed swamp and there is no evidence to suggest cess. Only the brick/tile fragments and charcoal suggested possible industrial usage but they were present in such small amounts that this seems highly unlikely.

Context 550 [Riverbank]
Sample 67 (2 kg paraffin flotation)

Moist, mid slightly purplish brown to light to mid brown (internally), brittle (working soft), humic very slightly sandy silt with fine and coarse herbaceous detritus (including fragments of reed).

The small flot contained large fragments of *Phragmites australis* epidermis, *Carex* sp. nutlets and epidermis and *Mentha aquatica* nutlets together with abundant invertebrate remains. These latter included aquatic taxa (*Helophorus* sp., *Hydraena* sp. and *Ochthebius* sp.) indicative of weedy, sluggish water,

waterside taxa (*Carpelimus* sp., *Dryops* sp. and *Bembidion* sp.) and a component of terrestrial forms suggesting litter (*Enicmus* sp., *Cercyon* sp. and Corticariinae sp.) and, perhaps, dung (*Aphodius* sp.). *Daphnia ephippia* and a few mites were also noted.

The residue was mostly *Phragmites* epidermis and rootlets with some *Carex* sp. epidermis, *Potamogeton* (pondweed) fruits, *Equisetum* sp. (horsetail) epidermis, *Menyanthes trifoliata* L. (bogbean) seeds and a few quartz grains.

Samples 68 and 69 (11 kg bulk sieved to 500 m, washover to 300 m)

The washover and residue were mostly of plant remains of the same taxa as noted for the GBA sample outlined above (Sample 67).

The plant and invertebrate remains indicated undisturbed reed bed in still to sluggish water, although there seemed to be a slight admixture of insects associated with drier litter (which may have been natural since no species primarily associated with artificial habitats were present).

Context 551 [Riverbank]
Sample 71 (2 kg paraffin flotation)

Description as for Sample 67.

The small flot was of well preserved large leaf fragments of *Phragmites*, some fruits of cf. *Ranunculus* Subgenus *Batrachium* (water crowfoot), a single bryozoan (*Lophopus crystallinus* (Pallas) indicative of clean water) and a few beetle fragments (including *Notaris* sp.—waterside vegetation and *Tanysphyrus lemnae* (Paykull), associated with duckweeds (*Lemna* spp.)).

Samples 70, 72, 73 and 98 (14 kg bulk sieved to 500 m, washover to 300 m)

The washover and residue were mostly of plant remains of the same taxa as noted for the GBA sample outlined above (Sample 71).

The plant and invertebrate remains again indicated undisturbed reed bed.

Context 586 [?]
Sample 75 (1 kg paraffin flotation and 3 kg bulk sieved to 300 m)

Moist, mid purplish-brown, brittle (working soft), humic slightly sandy silt with fine and coarse herbaceous detritus (including fragments of reed). A few modern roots were noted.

The very small flots contained large leaf fragments of *Phragmites*, fruits of *Carex* sp., *Scirpus lacustris* L. and *Potamogeton* sp. and herbaceous rootlets.

The moderate-sized residue was predominantly of finely matted plant material—mostly *Phragmites* roots and leaves with some fine and coarse sand, silt, *S. lacustris* and woody root fragments. A few mites were also noted.

There was no residue from bulk sieving of this sample. The washover was mostly of plant remains of the same taxa as noted for the GBA sample outlined above.

The plant and invertebrate remains indicate undisturbed reed beds in still to sluggish water.

Monolith samples

Four subsamples were taken from the laminae within monolith sample 21. Two were from the lighter, more sandy layers and two from the darker more silty layers.

With the exception of the uppermost subsample (taken from a sandy layer 53-54 mm from the top of the monolith) which contained a single diatom, the subsamples were devoid of biological remains which might have indicated how the laminae had formed.

One subsample was taken from each of the two monoliths from Trench B. These were effectively barren of interpretative biological remains and thus this examination could not confirm or deny if the samples represented a palaeo-turfline.

Vertebrate remains

The hand-collected vertebrate remains

Deposits from the 21 contexts examined contained a total of 994 bone fragments (weighing 9366 g), of which 209 (weighing 5118 g) were identifiable to species (Table 1). Overall, preservation was 'variable', mostly being described as a mixture of 'poor' and 'fair' with a few 'good' fragments. The appearance of the broken surfaces ('angularity') was recorded as 'variable', with material from most

contexts classified as 'battered', with some 'spiky' fragments also present. Colour was also variable, with most contexts containing fragments of varying shades of brown.

The material was quite fragmented, with nearly half the contexts containing greater than 20% of fragments less than 5 cm in all dimensions. The proportion of butchered, burnt and dog gnawed fragments was consistently low (0-10% in most cases). Fresh breakage was more in evidence, commonly affecting 10-20% of fragments in each context.

Most of the material assessed was recovered from deposits dated to Phase 1 (Romano-British), the exception being bones from Context 20 (Phase 0 - Pre-Roman). Table 2 gives details of material from Context 20. There was very little vertebrate material from any of the other phases (a rapid visual scan, of the remaining 23 contexts, revealed only three additional 'A' bones).

Phase 1

Material from a total of 20 contexts (of 134 from this phase) was examined. Table 3 gives the numbers of fragments, numbers of 'A' bones and weights (by species) for this phase. The identified mammals included horse (*Equus* f. domestic), pig (*Sus* f. domestic), cattle (*Bos* f. domestic) and sheep/goat (caprovid), with single fragments of swan (*Cygnus* sp.), goose (*Anser* sp.) and duck (*Anas* sp.) also identified.

A preliminary examination of skeletal element representation for the main domesticates showed that both meat and non-meat bearing elements were present. However, head and distal limb elements appeared to dominate the cattle remains suggesting that much of this material may have been primary butchery waste. Numbers of fragments were too small for this to be more than a tentative suggestion.

Thirty-nine measurable bones were recorded from this phase, along with 30 subadult bones, four mandibles and 17 loose teeth.

Table 4 gives the number of fragments by deposit class. The number of fragments involved is too small for any differences to be significant.

Discussion and statement of potential

The plant assemblages were very consistent in representing swamp dominated by *Phragmites* (common reed) or other reed-like plants, and the invertebrates added little except to suggest that terrestrial habitats included dryish plant litter and some fouler matter.

There are no crop plant remains and a distinct lack of synanthropic insects. Further analysis, of larger processed subsamples, may yield a little additional information on the aquatic environment (Contexts 550 and 551) and possibly on human usage (Context 70) but this seems unlikely to add greatly to the interpretation of the site.

The attempted investigation of the possible methods of formation of the laminae in Trench A, and of the putative palaeoturfline in Trench B, through examination of the monolith samples' microfossil content has proved fruitless. It may still be possible to address these questions via analysis of thin sections from these samples, but such investigation is beyond the scope of this assessment.

The recorded vertebrate assemblage from Gibraltar Farm produced limited numbers of fragments which could be used to obtain biometrical and age at death information. Additionally, the scanned material from phases 0, 2 and 3 provided few 'A' bones and as such has limited zooarchaeological potential.

The remaining 103 contexts from Phase 1 contained small numbers of 'A' bones (19 contain measurable bones and 15 contain mandibles or loose teeth). The broad dating framework (i.e. Romano-British) of the

deposits from Phase 1 and the small size of the assemblage recovered renders further work on this material of little interpretative significance.

There is only limited evidence from the biological remains which relates to the project objectives.

It appears likely that the Roman wetland environment was dominated by reed swamp, but there is almost no indication of terrestrial habitats at any stage. No organisms suggested a tidal environment or salinity. River level was presumably at, or near to, the level of the reedy deposits.

Biological remains gave evidence of occupation through bones, but remains of food plants were absent and there were no insects strongly associated with human occupation. Evidence concerning craft and industry was lacking. The bone presumably represents waste disposal, but it seems unlikely that large amounts of organic waste (e.g. stable manure) were dumped. This is perhaps not surprising in a rural settlement where such material would be used for as fertiliser.

The pits do not appear to have been rubbish or cess pits; it seems unlikely that the reed was dumped and a natural means of entry into the deposit cannot be ruled out. Their function is therefore obscure.

As the evidence for reed swamp is found in Roman features, it appears that an episode of reduced activity or abandonment is represented. The mixed preservation of bone may indicate that it was, at least in part, residual.

Recommendations

There appears to be no reason to carry out large-scale investigation of the plant and invertebrate macrofossils, although it would be desirable to make full identifications for selected assemblages, to confirm the preliminary interpretation and to create an objective archive for future reference. It would be useful to process larger subsamples in order to increase assemblage size if this is to be done.

Should further investigation of the monolith samples be required it is recommended that this be undertaken by analysis of thin sections.

It is recommended that only a basic archive of all the bone dated to Phase 1 deposits be prepared. Further, more detailed, recording and analysis is not appropriate.

Retention and disposal

The remaining sediment and monolith samples should be retained for the present pending possible future investigation.

The bone assemblage should be retained for the present.

Archive

All extracted fossils from the test subsamples, and the residues and flots are currently stored in the Environmental Archaeology Unit, University of York, along with paper and electronic records pertaining to the work described here.

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Table 1. Archaeological information and phasing of contexts recorded for the assessment of material from Gibraltar Farm, Kingswood, Kingston upon Hull.

Phase	Context	Description	Type of deposit
0	20	Subsoil	Subsoil
1	13	Secondary ditch fill	Ditch
1	22	Secondary ditch fill	Ditch
1	44	Tertiary ditch fill	Ditch
1	51	Tertiary pit fill	Pit
1	53	Pit fill	Pit
1	63	Ditch	Ditch
1	70	Channel fill	Channel
1	72	Animal skeleton	Skeleton
1	180	Secondary pit fill	Pit
1	185	Primary pit fill	Pit
1	241	Ditch fill	Ditch
1	392	Secondary pit fill	Pit
1	404	Ditch fill	Ditch
1	443	Secondary ditch fill	Ditch
1	479	Primary ditch fill	Ditch
1	510	Pit fill	Pit
1	511	Primary pit fill	Pit
1	537	Secondary pit fill	Pit
1	553	Primary ditch fill	Ditch
1	561	Primary ditch fill	Ditch

Table 2. Numbers of fragments recorded by species for Context 20 (Phase 0) from Gibraltar Farm, Kingswood, Kingston upon Hull.

Taxa		No. Measurable	No. Unfused	No. Juvenile	No. Mandibles	No. Teeth*	No. Frags	Weight (g)
Horse	<i>Equus f. domestic</i>	1	-	-	-	-	3	85
Pig	<i>Sus f. domestic</i>	1	-	-	-	-	4	19
Cow	<i>Bos f. domestic</i>	-	-	2	-	1	9	134
Sheep/goat	Caprovid	2	1	-	1	2	7	31
Subtotal		4	1	2	1	3	23	269
Large mammal		-	-	-	-	-	27	371
Medium mammal		-	-	-	-	-	48	
Bird		-	-	-	-	-	2	
Unidentified		-	-	-	-	-	39	
Subtotal		0	0	0	0	0	116	371
Total		4	1	2	1	3	139	640

*Includes only those teeth of use for ageing or sexing information.

Table 3. Numbers of fragments recorded by species for Phase 1 from Gibraltar Farm, Kingswood, Kingston upon Hull.

Taxa		No. Measurable	No. Unfused	No. Juvenile	No. Mandibles	No. Teeth*	No. Frags	Weight (g)
Horse	<i>Equus f. domestic</i>	3	1	-	1	2	16	867
Pig	<i>Sus f. domestic</i>	1	3	1	-	2	15	137
Cow	<i>Bos f. domestic</i>	20	3	12	-	7	92	3202
Sheep/goat	Caprovid	12	9	1	3	6	60	620
Swan	<i>Cygnus sp.</i>	1	-	-	-	-	1	15.7
Goose	<i>Anser sp.</i>	1	-	-	-	-	1	6.4
Duck	<i>Anas sp.</i>	1	-	-	-	-	1	1.1
Subtotal		39	16	14	4	17	186	4849
Large mammal		-	-	-	-	-	306	3877
Medium mammal		-	-	-	-	-	270	
Bird		-	-	-	-	-	2	
Unidentified		-	-	-	-	-	91	
Subtotal		0	0	0	0	0	669	3877
Total		39	16	14	4	17	855	8726

*Includes only those teeth of use for determining age or sex.

Table 4. Numbers of fragments by context type for Gibraltar Farm, Kingswood, Kingston upon Hull.

Taxa		Ditches	Pits	Skeleton	Channel	Subsoil	Total
Horse	<i>Equus f. domestic</i>	14	2	-	-	3	19
Pig	<i>Sus f. domestic</i>	7	6	-	2	4	19
Cow	<i>Bos f. domestic</i>	43	29	16	4	9	101
Sheep/goat	Caprovid	42	18	-	-	7	67
Swan	<i>Cygnus sp.</i>	1	-	-	-	-	1
Goose	<i>Anser sp.</i>	-	1	-	-	-	1
Duck	<i>Anas sp.</i>	1	-	-	-	-	1
Large mammal		167	111	-	28	27	333
Medium mammal		126	134	-	10	48	318
Bird		1	1	-	-	2	4
Unidentified		54	26	-	11	39	130
Total		456	328	16	55	139	994