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**Archaeological excavations at Layerthorpe Bridge
and in Peasholme Green, York (site code: 1996-7.345):
assessment of the interpretative potential of biological remains**

by

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Summary

Samples and bones from deposits of Roman to modern date revealed in two trenches excavated in advance of major works at the Layerthorpe Bridge, and in Peaseholme Green, York, have been assessed for their potential in post-excavation analysis. Preservation of material by anoxic waterlogging was generally good and often excellent, especially in the Anglo-Scandinavian, medieval and 19th century levels. Providing the dating can be confirmed, the bioarchaeological material has potential in addressing a variety of questions. Plant and insect remains from Anglo-Scandinavian and medieval deposits suggest that the river edge was used for polluting activities such as retting flax and for tanning. The site may also have potential for research into differential patterns of residuality in bioarchaeological and artefactual materials.

Keywords: LAYERTHORPE BRIDGE; YORK; ASSESSMENT; ROMAN; ANGLO-SCANDINAVIAN; MEDIEVAL; EARLY MODERN; PLANT REMAINS; INVERTEBRATES; INSECTS; MOLLUSCS; BONE; RETTING; TANNING

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Introduction

Excavations and a watching brief were undertaken by Malton Archaeological Projects Ltd. at Layerthorpe Bridge, York (NGR SE 60855209) during 1996 and 1997 in association with work for City of York Council to realign the existing river bridge and create a series of new road junctions. The site has also been referred to as 'Fossbank' and 'Foss Bridge'. Two trenches were excavated: Trench 1 (two areas, Contexts 1000-2999) was opened in deposits under the present river bed immediately to the north-west of the existing bridge, and Trench 2 (Contexts 3000+) was immediately under the pavement in Peaseholme Green along the street frontage of the King's Pool development site. Some hand-collected bone from the 'watching brief' undertaken during this project is also considered.

A variety of General Biological Analysis samples, bulk-sieved residues, site-riddled samples (GBA, BS, and SRS respectively *sensu* Dobney *et al.* 1992), 'spot' samples, and hand-collected bone were all submitted for an assessment of their biological potential. The following material was used for this assessment:

- Bone: 17 boxes of bone (13 were 50cm x 22cm x 22cm, and four were 58cm x 33cm x 33 cm, giving a total of 504 litres)
- 8 SRS residues
- 27 BS residues
- 30 GBAs (34 were examined and subsamples from 30 of these were processed)
- 7 SPOTs examined/processed

For the deposits from Trench 1, questions to be addressed relate to the development and exploitation of the Foss and to aspects of the river regime (topics including river levels,

rates of flow, water quality, waste disposal, economic exploitation of the river itself, and land use and activity on the river banks). The deposits encountered in Trench 2 were mostly of Roman date; biological remains might be expected to offer some insight into activity and land use close to the Foss at this early date.

Methods

Sediment samples

The selection of material for assessment was based on inspection in the laboratory and information supplied by the excavator. A description of the lithology of all the selected GBA samples was recorded using a *pro forma*. Subsamples of between one and three kilogrammes were processed from each sample for extraction of macrofossil remains, following procedures of Kenward *et al.* (1980; 1986). The flots, washovers, and residues resulting from processing were examined for their content of plant and invertebrate macrofossils. Notes were made of the quantity of fossils and principal taxa present. The spot samples were initially inspected and subsamples processed if necessary.

The BS samples were processed on site using 1 mm aperture mesh and a 500 µm aperture washover sieve, and the SRS samples were processed through 9 mm aperture mesh. The wet residues were examined in the laboratory and notes on the principal components made.

Vertebrate remains

Material from 72 of the 157 bone-bearing contexts was recorded in detail; subjective records were made of preservation, angularity (i.e. the nature of the broken surfaces) and colour, whilst

quantities and identifications were noted where appropriate. All fragments not identified to species or species group were recorded as 'unidentified'. These included skull, vertebra, rib and shaft fragments and various other elements. Material from the remaining 85 contexts were scanned and brief notes were made on bones of use for biometrical and age-at-death analysis. Table 3 shows the number of contexts scanned or recorded by area and by date. Bone was recorded from deposits where there were more than five identifiable recovered fragments or where interesting additional species were present.

Results

Details of the nature of the sediments, and the results obtained from analyses of plant and invertebrate macrofossils, are presented in Table 1. The results of examination of the BS and SRS residues are presented in Table 2. A full list of taxa recorded from the deposits is given in Table 7, whilst Tables 8-11 present lists of plant and insect remains and some statistics for the insect groups.

Vertebrate remains

In the following discussion, the hand-collected vertebrate assemblage is considered by type of intervention (i.e. watching brief and excavation) and by each separate area excavated (i.e. Trenches 1 and 2). The range of identified species recovered from excavations at Foss Bank is shown in Tables 4-6, together with the total numbers of fragments, numbers of measurable bones and numbers of mandibles with teeth *in situ*.

Examination of the residues from the BS and SR samples provided little additional information, as there were very low concentrations of vertebrate remains (see Table 2). Fish and bird bones were only noted in a few instances, whilst no small mammal remains were observed.

Trench 1, Area 1 (Table 4)

In total, 13 bone-bearing contexts from this

trench were recorded, most being dated broadly to the medieval period. Vertebrate remains were well preserved and mostly dark brown or brown in colour. A small number of fragments from Contexts 1024 and 1026 showed rounded edges, whilst a few of those from Context 1047 were rather battered in appearance. Cattle and caprovid remains predominated, with a few pig, dog, chicken and goose fragments also present. Evidence for very small cattle was provided by a single mandible (Context 1026) and a cranial fragment with horncore attached (Context 1038). Both bones represented adult individuals, but of a size smaller than that of the Dexter cattle in the EAU modern comparative collection. Goat remains were identified from three contexts (1027, 1038 and 1039) and included two horncores, a cranial fragment (with horncore removed) and a metacarpal.

The remains showed heavy and systematic butchery, particularly noticeable being the longitudinal splitting of cattle long bones. Cattle mandibles were also heavily chopped, both across the diastema and through the ascending ramus, the latter cut almost certainly intended to facilitate the removal of the tongue. Context 1039 (medieval) contained a number of scorched and/or burnt teeth and mandible fragments. Another common phenomenon, seen throughout the material from this area, was evidence for the deliberate removal of the occipital and parietal portion of many of the caprovid skulls, presumably for access to the brain. In addition, there were a small number of sheep and goat horncores sawn through their bases, and most of the caprovid crania showed evidence of horn removal (horncores had also been removed from several of the few cattle crania recovered). The unidentifiable fraction was mainly composed of cattle cranial and mandible fragments, although a few vertebra, rib and shaft fragments were also present.

Trench 1, Area 2 (Table 5)

Bones from thirty-two contexts were recorded and 11 groups were scanned. Although most

were of Anglo-Scandinavian and broadly medieval date, a small assemblage which was apparently of Roman date was also recovered. Most of the material was well preserved, and very similar in character to that from Area 1. Most fragments were 'spiky' (i.e. showing sharp broken edges) but almost all the deposits for which material was recovered contained a small number of fragments which were rather rounded, whilst a few contained some battered and eroded bones (always less than 10%). Over half of the context assemblages contained dark brown fragments, and many other bones were mainly or partly dark brown in colour. Deposits from Contexts 2037 and 2038 contained bone which appeared slightly more battered and eroded than that from other contexts in this area. Additionally, bones from Context 2003 were of rather mixed appearance, showing marked variability of colour and preservation. The four Roman contexts contained bone which was similar in appearance to that of later date, showing no marked difference in preservation, colour or 'angularity'. Context 2191 (Roman), however, did contain two human bones, which may have been redeposited material.

Cattle and caprovids were again the best represented species throughout all periods. Although a range of elements was present in the assemblages from this area, it was clear that horncores, mandible fragments, teeth and distal limb elements predominated, particularly in the later periods. Other species present included horse, pig, dog, and cat, with limited numbers of chicken and goose fragments (mainly from deposits of medieval date). Small numbers of goat remains were recovered, including three metacarpals and a single metatarsal (from Contexts 2002, 2189, 2190 and 2191) and four horncores (Contexts 2002, 2011 and 2131). In addition, several very large ram horncores were also recovered (most, once again, having been chopped through the base). Fragments of red deer (*Cervus elaphus*) antler were identified from Contexts 2004 and 2006, one showing traces of scorching at the base of the tine.

Heavy and systematic butchery was noted throughout the material from Area 2 and, on

the whole, similar butchery practices to those inferred from the material from Area 1 were implied; cattle longbones and cattle and caprovid crania had been split longitudinally. Additionally, a single cow scapula was recorded which showed damage consistent with having been hung from a butcher's hook.

Trench 2 (Table 6)

Vertebrate remains from 25 contexts were recorded, whilst those from 74 further contexts were scanned. Most of the bone recovered from Trench 2 was Roman in date. The recorded material was mostly fawn in colour (in 17 of 25 contexts), and preservation was recorded as 'fair' to 'good'. Most deposits (with few exceptions) contained only small numbers of bones—less than 35 fragments per context. Dog gnawing was noted, as was butchery, but appeared to be less extensive than that recorded from Trench 1. However, split metapodials were noted in some of the Roman contexts (3006, 3082 and 3142). Although goose and chicken fragments were not numerous, they were apparently more frequent from Trench 2 than Trench 1. A single goat metacarpal was identified from Context 3004, whilst deposits from Context 3174 produced a cranial fragment from a polled variety of sheep. Of some interest are the remains of rabbit (from Context 3022) and fallow deer (Context 3033), identified from what were apparently deposits of Roman date, although the presence of fragmented and disarticulated human remains from Contexts 3174 and 3183 may suggest the presence of some intrusive material. Although it was difficult to gain an overall view of the material from Trench 2, a result of the small number of fragments from each context, the assemblage did not appear to be very similar to that from Trench 1.

Watching brief

A small quantity of material was recovered during the period of the watching brief, exclusively from Trench 1. Context 41 (?Anglo-Scandinavian), not surprisingly,

contained material similar to that from other deposits of Anglo-Scandinavian and medieval date from Trench 1. Cattle and caprovids were again represented by mandibles, metapodials and phalanges, whilst the effects of butchery (including evidence of the removal of the back of the skulls and the presence of horncores chopped from the skull) were also evident. Material from Context 6 represented part of a skeleton of a cow of extremely modern appearance (the remains were mostly ribs and vertebrae).

Discussion and statement of potential

Biological remains preserved by anoxic waterlogging were abundant in some samples and present in most, although generally sparse in the deposits of Roman date from Trench 2. Bone was widely present but usually in low concentrations. Snail and freshwater bivalve shells were sometimes noted.

Plant and invertebrate remains were often extremely well preserved and for many contexts had clear potential for the reconstruction of the depositional regime and the characterisation of dumped waste material.

The Roman/Romano-British material was of variable quality but that from Trench 1 included assemblages with the potential to provide information about dumping and conditions in the river. However, the 'Late Roman' contexts from this trench yielded some hints of a later, perhaps Anglo-Scandinavian, date (particularly the record of clubmoss from Context 2189). One context from the material from Trench 2 offered evidence for very decayed human faecal material, and any similar deposits sampled from this trench are deserving of further analysis as a source of information about diet, waste disposal and hygiene.

The Anglo-Scandinavian deposits were notable for having in many cases a high proportion of tree bark fragments (and in two cases 'several' *Trox scaber* (see below) and assemblages of fruits and seeds with a large number of weed taxa and few aquatics,

suggesting they formed on land rather than in water. The single 'Early Medieval' deposit examined via a GBA subsample gave a much stronger aquatic component amongst the invertebrates and was notable for a tentatively identified fragment of clubmoss which suggests an Anglo-Scandinavian date. Peatland taxa were often quite frequent; they perhaps originated with heather brushwood.

Medieval assemblages of plants and invertebrates suggested the continuation of dumping. In a number of cases there were abundant bark fragments, and *Trox scaber* was sometimes numerous. Some deposits had a much clearer component of remains from aquatic organisms and acid peatland was again represented (in one case some burnt peat was noted). Remains of seeds and capsule fragments of flax were frequently recorded and one group of samples contained stems which are very likely to be of this plant, probably indicating retting in the river.

In the deposits dated to the Early Modern (C19th) period, aquatic organisms were much more abundant and terrestrial plants and invertebrates mostly sparse. This phase of deposition presumably reflects the control of river level in the Foss by the lock downstream near the confluence with the Ouse.

There are strong suggestions that this part of York was used for foul activities not likely to be tolerated elsewhere and requiring a water supply. The tentatively identified stems of flax probably represent the activity of retting in which bundles of mature stems are steeped in a pond or river for some days in order to rot the soft tissues which surround the fibres. The stench produced by retting was notorious enough in the past to require control of the activity by local statutes (see, for example, the discussion by Keene 1982).

The evidence for tanning is less direct. The large quantities of bark fragments (and the sclereids representing decay of such material, Table 1) gives the suspicion that the material was being employed for some purpose, since there was usually very little wood present with it. Much the most likely process to have

required bark in bulk is tanning (taken here to represent the steeping of hides in pits or vats with tree bark). Support for this come from a somewhat surprising direction. The beetle *Trox scaber* was present in 30 of the samples from this site, at a frequency of 3.6 per sample when present. Five samples contained 'several' individuals and one 'many', on the semi-quantitative scale used for recording. This contrasts with the record from Anglo-Scandinavian 16-22 Coppergate (Kenward and Hall 1995 and Kenward, unpublished database). Although *T. scaber* was present in a large proportion of the samples, there were only three cases where three individuals were noted and five where four were found, the rest being ones or twos and the mean number of individuals per sample where the beetle was present was 1.2. Thus *T. scaber* was significantly more abundant at the present site than at Coppergate.

T. scaber is a scavenger now typically associated with birds' nests but sometimes found in habitats created by human activity. It is possible that it sometimes built up populations in piles of old bones or skins, and at the present site, bearing in mind the presence of large quantities of comminuted bark, it may be that tanning is indicated (though any supporting evidence from vertebrate remains is lacking (see below)). The area excavated might well have been far enough away from centres of (politically powerful) population to be an acceptable location for such a vile-smelling activity, too.

Examination of larger insect assemblages should clarify this; other species likely to be associated with vile material should be sought, as should their larvae. Similarly, systematic analysis of the plant remains (including a more detailed examination of the bark fragments) may shed further light on this question.

This is the first time that such direct evidence for an area devoted to tanning has been detected in York. Five sites have yielded medieval or post-medieval assemblages of sheep limb bones which have been interpreted as waste from hide preparation: 118-126 Walmgate (O'Connor 1984), 148 Lawrence

Street (Carrott *et al.* 1994), North Street (Dobney and Jaques 1993), St Andrewgate (Carrott *et al.* 1993) and The Bedern (Hamshaw-Thomas, in press). Confirmation would represent a significant contribution to our understanding of zonation in medieval York. As an aside, it is worth mentioning that although other sites, particularly that at 6-8 Pavement (Lloyds Bank; Addyman and Hall 1991; Hall *et al.* 1983), have provided ample evidence of leather working, the precursor stage (tanning) has not been located.

Other questions to be addressed by further study of the plant and invertebrate remains from this site include determining in more detail the material being dumped during the Anglo-Scandinavian and medieval periods. There is evidence from house fauna that some of it came from buildings, but of what kind and of what function? The first impression is of waste from lowly buildings or even stables, but in the earliest periods of the medieval (Anglo-Scandinavian and immediately post-Conquest) the distinction between homes and stabling and the like will be harder (but not impossible) to make from dumps.

Water quality in the Foss at some stages should be determinable where the excavated deposits are fluvial, although it will be important to separate the local aquatic fauna and flora from that carried to the site from less polluted places upstream (the elm, associated with clean flowing water, surely was). A brief attempt might be made to establish whether any of the ostracods are pollution- or salt-tolerant forms, the latter to test for possible tidal influence, but recommendation of a more detailed study of this group cannot perhaps be justified at this stage.

The excavations at Layerthorpe Bridge yielded moderate-sized assemblages of well preserved animal bone of Roman, Anglo-Scandinavian and medieval date. Material from Trench 1, from all three major periods, appeared extremely similar in terms of preservation and range of species and skeletal elements represented. This assemblage, with its high proportion of heads and distal limb elements,

is more likely to be primary butchery waste than hide preparation (although some possible direct evidence for tanning has been discussed, see above), and may suggest that the slaughter of domestic livestock (primarily cattle) and initial carcase preparation were being undertaken in the vicinity, the river edge being used as a convenient place for disposal.

Deposits revealed in Trench 2 produced a small quantity of bone that was mainly Roman in date. Although some of the features were described by the excavator as dumps and pit fills, no large-scale dumping of bone was apparent. Butchery was noted on the bone from this trench but was not as systematic or as extensive as that recorded from Trench 1.

The apparent homogeneity of the material from Trench 1 should perhaps cause some doubt concerning chronology of the deposits suggested by examination of the artefacts. The potential for further detailed analysis of the whole assemblage very much depends upon the production of a much more rigorous and well-defined dating framework, since detailed questions concerning the material can only be posed within such a framework. Even then, the moderate size of this assemblage, the history of its deposition, and the narrow range of material recovered, all limit the scope of the research questions that can be addressed.

Well-dated Roman, Anglo-Scandinavian and medieval material from the present site would add an additional corpus of information to that previously published and excavated. Here, comparisons should be made with data from other York sites—the Roman material from Tanner Row (O'Connor 1988) and Wellington Row (Carrott *et al.* 1995), and the Anglo-Scandinavian assemblages from 16-22 Coppergate (O'Connor 1989), 22 Piccadilly (ABC Cinema site, Carrott *et al.* 1995), and North Street (Dobney and Jaques 1993). Medieval comparanda from York should include data from post-Conquest 16-22 Coppergate (Bond and O'Connor, in preparation), The Bedern (Hamshaw-Thomas, in press) and Norman Court (Berg, unpublished).

If the chronological framework cannot be further refined by conventional means, the vertebrate remains, in conjunction with other bioarchaeological and finds assemblages, could be used to address questions of residuality through typological and AMS dating and detailed recording of preservational condition.

Recommendations

One imperative for further bioarchaeological work on the deposits from this site is the need for an accurate dating framework, supported by strategic AMS dates; it will be particularly essential to establish the extent of residuality throughout the sequence and the site may be a suitable one for research into problems of residuality.

We recommend that funding be provided for a full programme of further analysis of plant and invertebrate macrofossils from all well-dated deposits, particularly to address questions concerned with water quality, the nature of dumped material and industrial use of the river margins at some periods. Dating of the last of these is important.

All well-dated hand-collected vertebrate remains should be recorded in detail from both Trenches 1 and 2. Particular attention should be paid to recording skeletal element distribution and butchery practices. All relevant biometrical and age-at-death data should be collected.

Should further, more detailed analysis of stratigraphy and artefacts indicate that the deposits from which the rabbit and fallow deer remains were recovered are definitely of Roman date, then these remains would be of some interest, since both fallow deer and rabbit are generally accepted to have been introduced into this country during the post-Conquest period. It would therefore be extremely important to establish whether or not these remains were intrusive, by the use of radiocarbon dating.

In the event of the need to address the question of residuality, detailed quantitative recording of preservational characteristics (e.g. for the bone, surface changes, fragmentation and colour) should be undertaken on material from a selection of the deposits. This would only prove beneficial if a similar approach was used for other finds assemblages from the same deposits. Some detailed geomorphological and micro-morphological analyses would also be needed, as well as obtaining a series of targeted AMS radiocarbon dates on a range of bioarchaeological remains.

Resources required

A substantial programme of analysis and the commissioning of a series of AMS dates will have considerable implications for cost. An estimate of the time and resource requirements and their financial implications will be provided separately when required.

It should be borne in mind that there are numerous unprocessed GBA samples which in many cases will have as much potential as the subset of about 20% examined in this assessment.

Retention and disposal

All extracted fossils (including all vertebrate remains), as well as the flots, washovers and residues from processed samples, and all unprocessed material should be retained for the present, awaiting decisions concerning further analysis.

Archive

All material is 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. Results of assessment of plant and invertebrate macrofossils from samples from Layerthorpe Bridge, York. Key: A/S: Anglo-Scandinavian; Med.: Medieval; R: Roman; R/RB: Roman/Romano-British. Under 'Priority': I = invertebrates; M = plant remains; P0 = no remains; P1..3 = high..low priority; L indicates cases where a larger subsample would be needed for a study of the invertebrate macrofossil remains).

Period	Context type	Context	Sample	Sample type	Wt (kg)	Description	Comments	Priority
R/RB	basal pit fill	3077	156	GBA	1	Moist, mid, slightly greyish brown, crumbly (working crumbly and locally plastic), angular concretions (to 40 mm) in a silty matrix.	<p>Most of the rather large residue comprised very decayed flaky highly calcareous concretions. There was no doubt that these were faecal in origin (although no parasite eggs were noted in a 'squash' from a subsample of concretion), and with them were mineralised casts or moulds of corncockle seed fragments (likely to have been a grain and therefore flour contaminant) and mineralised seeds and fruitstone material of <i>Prunus</i> and mineralised seeds of apple. The moderately large numbers of mineralised fragments of rat-tailed maggots (<i>Eristalis tenax</i>) also point to the foul nature of the pit fill during its formation.</p> <p>The only invertebrates were 'several' mineralised Eristalinae larvae (rat-tailed maggots') and some earthworm egg capsules.</p> <p>The small number of bone fragments recovered from this sample were rather battered and eroded. A few of the fragments showed acid etching and three of the herring (<i>Clupea harengus</i>) vertebrae had a 'squashed' appearance, characteristic damage consistent with passage through the gut.</p>	I: P0 M: P2
R/RB	dump with charcoal and bone	3178	185	GBA	2	Just moist, light to mid grey/brown, crumbly, locally plastic (working plastic), slightly sandy, silty clay. Internally light-mid brown to light orange/brown layers. Locally more clayey. Some clay inclusions mottled grey/brown. Charcoal and brick/tile were abundant.	<p>The small residue was of sand and gravel with abundant brick/tile; the small washover was of charcoal. Once again, at least one duckweed thallus was recorded, along with water-plantain 'embryos' (cf. Sample 160 from Context 3069).</p> <p>Bone was represented by single fragments of bird and amphibian.</p>	M: P3
?Late R	?	2189	296	GBA	2	Moist, mid grey/brown, crumbly and fissile, slightly humic, silty sand. Local patches of almost pure, light brown sand and ?rotted	<p>Bark formed the largest single component of the moderate-sized residue, with some sand and gravel and a fairly rich assemblage of identifiable plant remains. Heather was represented by trace amounts of a number of parts (buds, capsules, flowers, seeds, and shoot fragments, all uncharred), and there were several mosses which may well have originated on bark or from woodland floor</p>	I: LP1 M: P1

Period	Context type	Context	Sample	Sample type	Wt (kg)	Description	Comments	Priority
						organic matter. Vivianite present.	habitats. Seeds represented weed taxa of various kinds, and there were a few taxa likely to have come from grassland or to have grown close to water or in a damp ditch, for example. Flax seeds and capsule fragments were again recorded and there were traces of stem fragments of the clubmoss <i>Diphasium complanatum</i> . There was a modest aquatic and waterside component amongst abundant invertebrates; a clear occupation site component, probably including house fauna; no grain pests or <i>Tipnus</i> , so perhaps post-Roman? Need larger subsample to pursue both date and ecological implications. A single <i>Valvata piscinalis</i> was recorded; this species is a catholic freshwater snail.	
?Late R	?	2191	311	GBA	1	Moist, mid-dark grey, with a yellowish cast, just consolidated (working unconsolidated), humic sand. Variations in humic and sand content on cm and mm scale. Inclusions present: stones (2-60 mm), brick/tile, vivianite, wood, twigs, horncore, oyster.	The moderately large residue was about 70% by volume organic matter, with very decayed bark and a little wood forming the bulk of this fraction. Seeds were generally sparse but quite well preserved; only annual nettle (<i>Urtica urens</i>) achenes were abundant, though some other weed taxa were present in modest concentrations. Many of the taxa present—rather over one third—were the same as in the sample from 2189. A few aquatic invertebrates, probably a strong waterside component in Carabidae; clear occupation site group including house fauna; several puparia. Larger subsample required. A further single <i>Valvata piscinalis</i> was recorded.	I: LP1 M: P2
A/S	?	2131	280	GBA	1	Moist, dark grey/brown, crumbly (working soft), moderately humic, slightly silty sand. Locally more grey and more brown. Moss, bone, and stones (6-60 mm) present.	The large residue was mainly very decayed bark, especially in the >4 mm and <1 mm fractions (the latter being also very rich in sclereids derived from bark); there was about 20% by volume of sand. Wood fragments present were often very fresh-looking and pale in colour, unlike the very dark and decayed bark. There were also moderate numbers of very decayed stem fragments of clubmoss and a range of plants from a diversity of habitats (mostly in trace amounts): weeds of various kinds, heathland plants, mosses likely to have grown on bark, a few possible food plants, and seed fragments and capsule fragments of flax. Invertebrates mostly terrestrial, predominantly typical occupation site fauna. 'Several' <i>Trox scaber</i> . Deserves investigation to establish nature of dumped	I: LP1 M: P2

Period	Context type	Context	Sample	Sample type	Wt (kg)	Description	Comments	Priority
							material and its likely origin, through larger subsample.	
A/S	?	2160	287	GBA	1	Moist, dark grey/brown, crumbly (working slightly plastic locally), humic, silty sand to sandy silt. Stones (6-60 mm) present. Rare coarse herbaceous detritus. Twigs with cut edge present.	Charcoal and sand made up the largest components of the residue (which was examined dry). Uncharred identifiable plant remains were sparse but well preserved. Amongst these were some very small charred fragments of leaf which appeared to be saw-sedge (<i>Cladium mariscus</i>), perhaps most likely to have been used for thatching and subsequently burnt deliberately or accidentally (charred nutlets of this plant were also present). The charred grass/cereal culm and culm-nodes present in the sample could also originate in burnt thatching material. Many of the other charred remains mixed with uncharred material in this sample might have come from the same source, incidentally (from plants accidentally collected with thatching material). Invertebrates almost all terrestrial; some occupation site fauna and hints of open ground/waste places. Larger subsample should clarify origins.	I: LP1 M: P1
A/S	?river deposit	999 [no context number given at time of sampling]	271	GBA	1	Moist, black, crumbly, fine and woody herbaceous detritus with lenses (to 20 mm) of light-mid grey sand. A few twigs were noted. (N.B. Context no. not assigned during excavation)	This subsample yielded a very large residue which, on standing for some days between initial processing and examination for plant remains 'bled' a reddish leachate. The residue was found to consist largely of bark fragments up to 60 mm (some may have been 'chips'), with much bast (from the layer immediately beneath the bark) and a trace of wood. the few identifiable plant remains included three mosses which may have been corticoles (bark-growing) types but otherwise the identifiable material was sparse (though well preserved) and of little interpretative value. Invertebrate remains were quite abundant and predominantly typical occupation site fauna (only a trace of aquatic or waterside fauna). There were several <i>Trox scaber</i> and some fleas and lice, these parasites indicating dumps of material from within structures. Larger subsample desirable.	I: LP1 M: P2
A/S	organic deposits from ?channel	2178	292	GBA	1	Moist, dark grey/brown (locally light-mid grey/brown), crumbly and layered internally in places, (working plastic), very humic, sandy silt. Fine herbaceous detritus locally. Charcoal (to 15 mm) and 6-60 mm stones present.	Charcoal was the largest single component of the large residue, with moderate amounts of very decayed bark and wood fragments (including 'chips') and traces of a wide range of uncharred seeds and moss shoot fragments (the mosses were very typical of early medieval assemblages in York, being a mixture of taxa from bark, woodland floor and heathland/bog habitats). Various parts of the heather plant were present, as were leaves of cross-leaved heath and a variety of weeds; seeds and capsule fragments of flax were recorded, as were traces of stem fragments of clubmoss, seeds of the salt-marsh plant sea arrow-	I: LP1 M: P1

Period	Context type	Context	Sample	Sample type	Wt (kg)	Description	Comments	Priority
							<p>grass (<i>Triglochin maritima</i>) and wheat/rye 'bran'.</p> <p>Quite large numbers of invertebrates; strong indications of house fauna, and a dumped component was certainly present. Significant numbers of aquatics. Larger subsample would clarify nature of material and depositional regime.</p> <p>Three small fragments of bone were present including a caprovid third phalanx.</p>	
?A/S	?dump into river	38	17	GBA	1	Moist, dark brown, crumbly, very humic, sandy silt with occasional patches (< 1 cm) of grey sand. Small stones (2-6 mm) were present.	<p>Most of the small residue comprised very decayed bark fragments (up to 10 mm in maximum dimension) with some sand and a trace of gravel; sclereids, no doubt from the bark, were frequent in the tiny flot. The identifiable plant remains (which were dilute and often rather fragmentary) were rather mixed in their origins and no one group emerges as especially well represented.</p> <p>Few invertebrate remains; a larger subsample would be unlikely to produce useful assemblage.</p>	I: P3 M: P2
?A/S	river deposit/dump	40	19	GBA	1	Moist, mid to dark grey, crumbly (working just plastic), humic, slightly sandy silt. There were also patches of light grey/brown sand and almost pure, grey silt. Small stones (2-6 mm) and bone were present.	<p>Much of the residue comprised charcoal and very decayed bark (up to 10 mm); seeds were sparse and their preservation moderately good. A variety of habitats was indicated by the identifiable remains: waste ground and cultivated land, aquatic environments and perhaps also grassland, heathland and woodland (though plants representing almost any of these may have originated in materials discarded into the river. Traces of wheat/rye 'bran' perhaps point to food waste or even faecal material being amongst this rubbish. Once again, flax seeds and capsule fragments were present.</p> <p>Small beetle assemblage, aquatics and traces of occupation site fauna; a few plant feeders. Other invertebrates had limited potential. Much larger subsample might clarify origins; is there a dumped component?</p> <p>For the bone, a single herring (<i>Clupea harengus</i>) vertebra was recorded. Twelve were unidentifiable, four of them being burnt.</p>	I: LP1 M: P1
?A/S	river deposit/dump	41	27	GBA	1	Moist, dark grey brown, very crumbly, very humic, sandy silt. Locally more brown and more grey. Charcoal, very decayed wood, mammal and fish bone	<p>Very decayed bark formed the major component of the rather small residue (along with some wood) and the flot appeared to consist largely of tiny 'frass' from wood or bark. The moderately frequent sclereids in the finer fractions were no doubt from bark. The rather few identifiable plant remains present included traces of charred flowers and uncharred flowers and shoot fragments</p>	I: P3 M: P2

Period	Context type	Context	Sample	Sample type	Wt (kg)	Description	Comments	Priority
						were all present.	<p>of heather and of some kind of charred root or rhizome; these might all be from burnt turves, for example. There was also a trace of charred wheat grains, not identifiable beyond the appellation 'hexaploid' (i.e. probably spelt or bread wheat).</p> <p>Invertebrate remains were rare; only a very large subsample might provide an interpretable group.</p> <p>Bone was represented by thirteen unidentifiable fragments, a few of which were burnt.</p>	
Early Med.	brushwood fill	2030	286	GBA	1+0.27	Moist, mid brownish/grey, crumbly (working plastic locally), slightly silty sand with patches of fine black twigs and locally silty clay sand. Twigs abundant, leather present, stones (6-20mm) present.	<p>The small amounts of material in the flot and residue were mainly fine herbaceous detritus and gave the impression of the presence of 'grassy' material; there were certainly moderate numbers of uncharred grass caryopses. The only other remains present in more than trace amounts were shoot and root/twig fragments of heather (flowers and leaves were also present). A tentatively identified stem fragment of clubmoss was recorded from this subsample.</p> <p>Substantial invertebrate assemblage, but rather mixed ecological character. Aquatic/waterside component strong; source of occupation site fauna not clear (?primary dump or redeposited by water). Larger subsample would allow useful analysis of both major components.</p> <p>Also spot sample (0.27 kg), examined to check the nature of the fine twigs visible in the sandy matrix; they were uncharred shoots and root/twig material of heather.</p>	I: LP1 M: P1
Med.		4	6	SPT	0.05	Dark grey humic sandy silt with patches of fresh-looking yellowish herbaceous plant detritus.	A very small subsample disaggregated and the residue examined briefly. The small residue consisted largely of the very fresh-looking plant detritus; it had the appearance of recently deposited dead plant material but with the seeds a mixture of very well preserved and rather thin-walled types. There was no clear indication from the identifiable remains for the nature and origin of the plant remains; there was a mixture of weeds and waste ground plants, some grassland taxa and a single fig seed.	-

Period	Context type	Context	Sample	Sample type	Wt (kg)	Description	Comments	Priority
Med.	?river silt	14	48	GBA	2	Moist, light grey to very dark brown to black, crumbly, very humic, sandy silt with patches of sand and patches of yellow mineral deposition and abundant 20-60 mm sized stones.	<p>This subsample yielded much organic detritus, the coarse fractions mostly very decayed bark (the finer fractions contained moderate numbers of sclereids (thick-walled lignified cell clusters) no doubt derived from it). The few seeds present were moderately well preserved and mostly represented weeds of waste places and cultivated land. There were traces of charred and uncharred ?heather twig/root fragments.</p> <p>The small group of invertebrates included a few aquatics (caddis cases and <i>Daphnia ephippia</i>) and terrestrial insects; of the latter, there were 'several' <i>Trox scaber</i>, making further analysis desirable.</p>	I: LP1 M: P2
Med.	?river silt	15	49	GBA	1	Moist, varicoloured sediment: light brown, to light yellow/brown, to light-mid grey. Texture was also varied: stiff (working plastic) clay, thixotropic silty sand, and crumbly sand. Coal was present, and large stones were abundant.	<p>Very little material from the subsample examined failed to pass the 300 :m sieve; the residue was of sand and gravel, the flot contained some bark sclereids, rootlets and a few seeds of little interpretative value.</p> <p>Invertebrates were rare and of various origins; a much larger subsample might produce an interpretable group.</p>	I: LP2 M: P3
Med.	?river silt	16	52	GBA	1	Moist, very dark brown, crumbly and slightly brittle, very humic, silty sand with burnt mammal bone and 6-20 mm sized stones present, and abundant wood fragments.	<p>Much of the large residue comprised bark and wood fragments (including wood chips), up to 70 mm in the case of the wood, and 15 mm in the case of the bark; with these there was a moderate amount of sand. Amongst the identifiable plant remains, sedge nutlets, fat hen seeds and stinging nettle achenes were the only types present in more than trace amounts; the assemblage as a whole mainly comprised weeds of waste places and cultivated land, but there were a few plants suggestive of fen or marsh and tentatively identified charred and uncharred root/twig fragments of heather. The wood chips, whose largest dimension was about 10 mm, were well preserved, being pale in colour but very firm.</p> <p>A substantial and diverse group of beetles and various other invertebrates was recorded. A clear foul decomposer group was present, and there were numerous beetle larvae and 'several' <i>Trox scaber</i>. A sheep ked <i>Melophagus ovinus</i> was noted from the residue.</p>	I: P1/LP1 M: P2
Med.	?river silt	1029	79	GBA	2	Moist, mid-dark grey brown, just	Very decayed wood and charcoal formed the principal components of the small	I: LP1

Period	Context type	Context	Sample	Sample type	Wt (kg)	Description	Comments	Priority
						consolidated, and soft (working crumbly), humic, sandy silt. Very rotted wood, charcoal, stones (6-20 mm), vivianite, and yellow flecks were present.	residue though there were reasonably large numbers of identifiable remains, especially nutlets of knotgrass, <i>Polygonum aviculare</i> (many of which had been 'holed') and several other weeds of waste places and disturbed ground. Also present in more than trace amounts were charred root/twig fragments tentatively identified as heather, and securely determined charred flowers and shoot fragments of the same plant. The small group of invertebrates included 'several' <i>Trox scaber</i> , suggesting that a large subsample should be examined.	M: P2
Med.	?river silt	1031	84	GBA	2	Moist, dark brown, crumbly, humic, silty sand to sandy silt with abundant patches of light brown fine sand.	Much of the small residue was very decayed bark with some sand and a little gravel. Though low in concentration, identifiable plant remains were mostly well preserved. As in the sample from Context 1029, there were charred (and uncharred) remains of heather and in this case also charred leaves of cross-leaved heath (<i>Erica tetralix</i>). Most of the other remains were weeds or plants with little interpretative value. Invertebrates were rare, although there were three <i>Trox scaber</i> . Most of the bone (28 fragments) was unidentifiable, those identified included amphibian and herring (<i>Clupea harangues</i>) remains. All the fragments were small (<20 mm); 2 were burnt.	I: LP1 M: P2
Med.	(?river) silt below wattle	1033	68	GBA	2	Wet, light to mid grey with an almost pinky, yellowish cast, just plastic, sandy silt. Variations in sand content gave heterogeneity on a mm/cm scale. Various inclusions were present: stones (6-20 mm), ?burnt soil, ?ash, charcoal, and bone.	About two-thirds of the residue comprised sand and gravel, the remainder very decayed wood and bark (more bark than wood); there were few identifiable remains and preservation was often rather poor—some specimens being eroded and more or less decayed. They added little to the interpretation of the deposit. A small mixed group of invertebrates included 'several' earthworm egg capsules and two <i>Trox scaber</i> . Only 2 unidentifiable bone fragments were recovered.	I: LP1 M: P3
Med.	organic deposit	1039	90	GBA	1	Waterlogged, dark brown, crumbly (working soft to slightly plastic), very humic silt to silty amorphous organic sediment with	The small residue was mostly organic material, including very decayed bark; seeds were sparse and preservation varied from moderately good to good. The finest fractions appeared to be mostly 'frass' from the bark. There were moderate numbers of flax capsule fragments.	I: LP1 M: P3

Period	Context type	Context	Sample	Sample type	Wt (kg)	Description	Comments	Priority
						woody herbaceous detritus locally.	Beetles and abundant fly puparia in the quite large insect assemblage indicated foul conditions; there were 'several' <i>Trox scaber</i> .	
Med.	clay/clay silt E of wattle	1047	95	GBA	3	Moist, mid grey/brown, crumbly to slightly sticky (working just plastic), sandy clay to clay sand. Other colours ranged from bright red/orange to light blue grey (mm-cm scale). Bone was present.	Both the residue and washover from this subsample were small and sand was the only component present in more than very small amounts. A modest range of weed taxa was present amongst the identifiable remains (which were often rather eroded) and they represented fairly diverse origins with no one group predominant. The presence of fragments of seeds of corncockle, black bindweed and knapweed/cornflower might be consistent with material derived from milled grain (these are common grain contaminants) but none was abundant. Invertebrates were present in small numbers ; a <i>much</i> larger subsample might clarify their probable origin and implications but the remaining sample may be too small. A single pig maxillary molar was recorded.	P: LP2 M: P3
Med.	clay E of wattle	1052	117	GBA	1	Moist, dark grey/brown, locally dark brown, crumbly (working soft), humic, sandy silt to silty amorphous organic sediment. Part of the sample consisted of light grey sandy silt with vivianite flecks. Wood was also present.	Bark-derived sclereids were frequent in the very small flot and not surprisingly very decayed bark formed the bulk of the very small residue. There were a few rather worn identifiable plant remains of various kinds, including charred shoot fragments and uncharred capsules and shoot tips of heather, ?burnt peat fragments and charred root or rhizome material—perhaps together indicating burnt turves; also present were traces of charred and uncharred hazel nutshell. Although invertebrates were not abundant, there were 'many' <i>Trox scaber</i> . The bone present included 2 herring (<i>Clupea harangues</i>) vertebrae and 6 unidentifiable fragments.	I: LP1 M: P2
Med.	?river deposit	2004	132, 133	SPT	-	132: This spot sample consisted of bundle of stems which were probably flax in a matrix of sand, as in the samples from Contexts 2003 and 2005. 133: Three fragments of wood all		

Period	Context type	Context	Sample	Sample type	Wt (kg)	Description	Comments	Priority
						identified as oak (<i>Quercus</i>).		
Med.	?river deposit	2005	136, 137	SPT	-	These two spot samples consisted of the same material—plant (probably flax) stems in a sand matrix—as in Contexts 2003 and 2004. Sample 136 also contained flax capsule fragments.		M: P1
Med.	pit fill	3169	184	GBA	2	Moist, mid grey/brown, stiff, locally crumbly (working plastic), slightly sandy, slightly silty, clay. Varicoloured buff to light orange/brown. Local patches of very plastic light grey/brown mottled clay. Stones (2-20 mm) present, brick/tile present, charcoal common.	The small residue of sand, gravel, charcoal and brick/tile contained one identifiable plant macrofossils taxon: elderberry seeds. The only invertebrate represented was a single earthworm egg capsule.	I: P0 M: P3
Med.	?river silt	1032 1033	85	GBA	1	Moist, mid greyish-brown just consolidated, soft (working crumbly), humic, silty sand, with some ash and charcoal.	The moderate-sized residue was mostly of very decayed bark, the finest fraction being rich in 'frass' like material probably derived from this. There were very few identifiable plant remains—no seeds were noted from the residue at all. Invertebrates were rare and of no obvious significance.	I: LP3 M: P3
?Med.	?river deposit	2003	147	SPT	0.1	Light-mid grey-brown slightly silty coarse sand with fibrous plant stem fragments visible on broken surfaces.	The small residue consisted of sand and plant stem fragments; the later were mainly devoid of their outer layers, some were branched. With them were flax seeds and capsule fragments and it seems very likely that the stems are of flax, too (some epidermis fragments were examined and strongly resembled published illustrations of this plant). Also present in the sample were identifiable remains of a modest range of plants from various likely sources; they included wheat/rye 'bran' and charred ?heather root/twig fragments.	M: P1
?Med	?ditch fill	2023	206	GBA	1	Moist, dark brown, crumbly, very humic, silty sand. Locally mid grey/brown. Patches of pure mid grey/brown sand. 20-60 mm stones present.	The rather large residue was mostly very decayed bark (to 20 mm) with some wood and charcoal, as well as grit and sand. Identifiable remains were rather sparse but preservation was mostly quite good. Heather was certainly present (as was cross-leaved heath, the two perhaps from burnt turves), and there were seeds and capsule fragments of flax; also present were traces of very decayed stems of the clubmoss <i>Diphasium complanatum</i> recorded throughout Anglo-Scandinavian York.	I: LP1 M: P1

Period	Context type	Context	Sample	Sample type	Wt (kg)	Description	Comments	Priority
							Invertebrates were present in modest numbers, with numerous fly puparia and hints of a house fauna component.	
?Med.	pit fill	3069	160	GBA	2	Moist, light to mid grey/brown, sticky (working plastic and sticky), slightly sandy, slightly silty clay. Varicoloured buff to mid brown to fawn. Patches of very plastic, light brown, grey mottled clay. Brick/tile common, charcoal present.	The residue was small and consisted of angular brick/tile and sand; there were traces of three plant taxa, all likely to have originated in aquatic or waterside habitats (water-plantain 'embryos', rush seeds and duckweed, the last represented by at least one thallus; the duckweed would have lived on the surface of a pond, lake or river). There were no invertebrate remains.	I: P0 M: P3
Early Mod.	?river silt	18	41	GBA	2+1	Moist, mid to dark brown, brittle (working plastic), humic clay silt. Freshwater molluscs were present.	(Separate 1 kg subsample processed specifically to examine molluscs) Both flot and residue consisted mainly of herbaceous plant detritus and the identifiable taxa were primarily aquatic and waterside or wet ditch plants: those present in more than trace amounts were fool's watercress (<i>Apium nodiflorum</i>), yellow water-lily (<i>Nuphar lutea</i>), fine-leaved water-dropwort (<i>Oenanthe aquatica</i>), celery-leaved crowfoot (<i>Ranunculus sceleratus</i>) and great yellow-cress (<i>Rorippa amphibia</i>). Other taxa must have originated in vegetation on land near the river; they included seeds and capsule fragments of flax (<i>Linum usitatissimum</i>). Invertebrates were immensely abundant and indicated a variety of habitats. Aquatics and waterside species were numerous and included insects, snails, ostracods and cladocera. Foul matter was indicated by beetles and fly puparia, and there was a trace of house fauna. Numerous earthworm egg capsules were present. The very small assemblage of freshwater and waterside molluscs included <i>Succinea</i> sp. and several opercula of <i>Bithynia</i> .	I: P1/LP1 M: P1
Early Mod.	?river silt	19	45	GBA	2	Moist, black, oxidising to mid grey brown, slightly crumbly (working plastic), sulphide rich, humic silt. Rootlets (?ancient) were common and molluscs were present.	Preservation of plant remains in the small residue and flot was good though much of it was unidentifiable herbaceous detritus; notable were fibrous remains which might have been from decayed flax stems (flax seed fragments were present and capsule fragments moderately common). All the other more frequent identifiable remains are likely to have originated in weeds of waste ground and cultivated land or plants from disturbed river banks, or in waterside or aquatic vegetation (there was a distinctive component of taxa from biennial and perennial nitrophile weed communities typically found on river banks, by	I: LP1 M: P1

Period	Context type	Context	Sample	Sample type	Wt (kg)	Description	Comments	Priority
							<p>paths and hedges, and in other unshaded and somewhat disturbed habitats, especially <i>Reseda luteola</i> and <i>Marrubium vulgare</i>, but also <i>Conium</i>, <i>Malva</i> and <i>Arctium</i>). Also present were a few remains likely to have come from heathland habitats: heather, cross-leaved heath and perhaps also the moss <i>Leucobryum glaucum</i> (although it also grows in woodland).</p> <p>Invertebrates were abundant, with numerous fly and beetle immature stages. Aquatics were well represented and included <i>Daphnia</i> ephippia. Traces of house fauna were noted and there was a single <i>Oryzaephilus surinamensis</i>, the only grain pest from the site. There were some freshwater and waterside snails including <i>Bithynia tentaculata</i>, a single <i>Succinea putris</i> and a few fragments of planorbids.</p> <p>Four fish bones were recovered, but none could be identified to species.</p>	
Early Mod.	?river silt	20	38	GBA	2	Moist, mid grey brown, crumbly (working sticky, and plastic when wet), clay silt. Flecks of yellow and orange mineral deposits, which may be oxidised organic material, were also noted.	<p>A very small amount of material failed to pass the sieve and most of what was retained comprised undisaggregated sediment. The rather few seeds recorded (mainly from the flot) were from plants likely to have grown in or near a wet ditch or the banks of the river but are not of much interpretative value in isolation.</p> <p>There were modest numbers of invertebrates, but the assemblage was ecologically mixed. A larger subsample might permit clarification of their implication.</p>	I: LP2 M: P3
Early Mod.	?river silt	1024	73	GBA	1+1	Moist, mid slightly greyish brown (internally black), plastic, soft, and sticky, clay silt to silty clay. Large stones (>60 mm) were present and freshwater molluscs were common.	<p>(Separate 1 kg subsample processed specifically to examine molluscs)</p> <p>There was a rather low concentration of identifiable plant remains in the small residue (which consisted largely of gravel and undisaggregated fine sediment). But the predominance of aquatic and waterside taxa was clear—both amongst the plants and the invertebrates. The former included seeds of hornworts (<i>Ceratophyllum</i>), duckweeds (<i>Lemna</i>), yellow water-lily, and pondweed (<i>Potamogeton</i>), the latter, abundant opercula of the freshwater gastropod <i>Bithynia tentaculata</i>, as well as shells of the brackish water gastropod <i>Hydrobia</i> sp., and bivalves <i>Pisidium</i> and a freshwater mussel, other freshwater molluscs, caddis larva cases, and the bryozoan <i>Lophopus crystallinus</i>. Terrestrial material included flax seeds and capsule fragments, a small range of weeds and waste</p>	I: LP2 M: P1

Period	Context type	Context	Sample	Sample type	Wt (kg)	Description	Comments	Priority
							<p>ground taxa and a single fig seed. Identifiable plant remains were sparse but well preserved.</p> <p>Invertebrate remains were abundant, although beetles only moderately so; aquatics were numerous. The terrestrial component probably included material from occupation deposits, but whether the fauna was dumped or of a background origin was not clear.</p> <p>Three unidentifiable fragments of bone were present, one was burnt.</p>	
?	?river deposit	not rec. on site	75	GBA	2	<p>Moist, light to mid yellowish grey, sandy clay silt with mm scale yellow flecks and variation in the organic content on a cm scale. Bone, molluscs, and brick/tile were present. Stones (6-20 mm and 20-60 mm) were also noted.</p>	<p>A large number of plant taxa were noted during examination of the small residue; they appeared to consist of a mixture primarily of aquatics (whose seeds were rather worn) and weeds (in a much better state of preservation); the implication of this might be that the deposit was a dump of terrestrial material containing aquatics previously abstracted from the river and redeposited into it secondarily. Apart from some seeds of plants quite likely to have grown on moist (and perhaps disturbed) soils near the river, all the taxa were present in very small amounts. The biennial/perennial nitrophile weed community represented in the material from context 19 was again present here and there were a few plants which might have originated in grassland or even in cut vegetation from such a habitat. The coarser organic fraction of the residue was mostly very decayed bark and wood, both no larger than 10 mm.</p> <p>There were appreciable numbers of aquatic and waterside molluscs (including <i>Bithynia tentaculata</i>, <i>Valvata piscinalis</i>, <i>Succinea ?oblonga</i>, small freshwater bivalves and fragments of shell of freshwater mussels), ostracods and aquatic and waterside beetles; some house fauna; some terrestrial outdoor species. Numerous insect immatures. Larger subsample would probably clarify if dumped component present.</p>	I: LP1 M: P1

Table 2. Results of assessment of BS and SRS residues from Layerthorpe Bridge, York

Period	Context type	Context	Sample	Total Weight processed	Comments
Roman/Romano-British	pit fill	3005	143-146	39 kg	The small residues were mostly brick/tile (to 70 mm) with a little bone, charcoal, and pottery.
Roman/Romano-British	pit fill	3006	149-152	37 kg	Four very small residues mostly of gravel with a little brick/tile; one of the small washovers was examined in more detail; it was found to contain small ?heather root/twig charcoal and elder seeds. Traces of bone (mostly burnt, including shaft of chicken), wood/twigs/roots, and ?leather were all noted from the residues.
Roman/Romano-British	pit fill	3007	169-170	21 kg	The small residues consisted of brick/tile to 80 mm, with some bone to 100 mm (mostly chopped cattle fragments) and a little charcoal and pottery; the tiny washovers contained a little more charcoal.
Roman/Romano-British	basal pit fill	3077	157-159	27.5 kg	Mostly faecal concretions. Stone, brick/tile, fishbone, and amphibian bone present. Much of the bone was very fragmented, with some bones showing acid etching (characteristic damage consistent with passage through the gut).
Roman/Romano-British	pit lining	3078	154 and 155	22 kg	The small residues were mostly brick/tile and gravel with a little amphibian, fish and mammal bone and pottery; the tiny washovers were of fine charcoal with traces of fish vertebrae.
Roman/Romano-British	dump	3082	172-176	56.5 kg	The small residues consisted mainly of brick/tile with some pottery and bone; the tiny washovers were of fine charcoal and were not examined closely.
Roman/Romano-British	dump deposit	3100	178-181	43 kg	The small residues were mostly brick/tile with a little pottery, large bone (some burnt), shellfish, pottery and gravel; the washovers were very small and comprised charcoal.
Roman/Romano-British	dump with charcoal and bone	3178	186-189	36.5 kg	The small residues were mostly of pottery and brick/tile, with some large bone (some burnt), small bone, bird bone, and ?burnt peat; the small washovers consisted mainly of charcoal. Both burnt bone and burnt oyster shell fragments were also recorded from the residues.
?Anglo-Scandinavian	?dump into river	38	11-16 and 18	total 59.5 kg	The residues from these samples were small and consisted mainly of wood (?also bark) mostly no larger than 10 mm. There were traces of oyster shell, charred grain, nutshell, brick/tile and a few pebbles. Large bone fragments were quite numerous, many showing evidence of butchery.

?Anglo-Scandinavian .	river deposit/dump	40	20 and 22	18.5 kg	The residues were mainly grit and gravel with some bone, whilst the washovers were largely very decayed bark. Large bone, brick/tile, shellfish, wood/twigs, nutshell and burnt bone were all present in small quantities. Mollusc present in washover.
?Anglo-Scandinavian	river deposit/dump	41	23, 25 and 26	25 kg	The small residues contained modest amounts of large bone and very decayed bark and wood, with a trace of oyster shell.
?Anglo-Scandinavian	?river deposit	2037	247-250	45.5 kg	The small residues were of cobbles and gravel with some bone, brick/tile and charcoal; the small washovers of plant detritus were not examined further at this stage.
?Anglo-Scandinavian	?river deposit	2037	246 (SRS)	134 kg	This sample produced a large residue of cobbles, some brick/tile, large bone (few burnt) and traces of pottery.
?Anglo-Scandinavian	silts over clay bank	2038	253-256	40.5 kg	The small residues mainly consisted of small (< 10 mm) wood fragments and gravel with some burnt bone; one of the moderately large washovers (from 253) consisted mainly of wood fragments <4 mm and a mixture of weeds of disturbed places and cultivated land (and especially land with impeded drainage, ditches and the like). Traces of heathland plant remains were also present.
Anglo-Scandinavian	clay bank make-up or river deposit	2065	259-262	42 kg	The small residues were mostly charcoal and angular gravel; the small washovers were of uncharred plant detritus, probably fine woody material. Large bone (including chopped cattle skull), trace of brick/tile, shellfish, wood/twigs, and a trace of bird bone were also present in the residues.
Anglo-Scandinavian	top part of clay bank	2087	265-268	44 kg	The small residues were mostly rounded pebbles with traces of rather abraded brick/tile and pottery, shellfish and a trace of burnt bone; the tiny washovers were of herbaceous detritus (not examined further at this stage).
Anglo-Scandinavian	top part of clay bank	2087	263 (SRS)	117 kg	Mostly large cobbles and pebbles with some bone.
?Medieval	?river deposit/dump	2006	209-212	55 kg	The small residues from these samples were mostly gravel (including cobbles) with some small wood fragments and a little large bone, bird bone, fish bone, pottery, charcoal and shell. The washover from one sample (209, weight originally processed 14 kg) was examined in more detail and yielded a rich diversity of remains in very small amounts: weeds of waste ground, cultivated land, mosses from a variety of terrestrial habitats, plants likely to have been growing on river banks and by tracks, perhaps some heathland plants, aquatics and some probable foodplants, including apple 'core' and wheat/rye 'bran'. The only taxa present in more than trace amounts were flax seeds and capsule fragments and stinging nettle achenes. Some freshwater and marine invertebrate remains were noted: <i>Cristatella</i> statoblasts, <i>Daphnia</i> ephippia,

					bivalve periostracum, oyster shell and snails.
?Medieval	?river deposit	2013	193-196	40 kg	These samples yielded small residues with some oyster and freshwater mussel shell and wood fragments. Stone, brick/tile, pottery, oyster shell and charcoal, were all present. Large bone included two split cattle metatarsals.
?Medieval	?river deposit	2013	197 (SRS)	104 kg	The residue was largely cobbles, charcoal and oyster shell. A moderate quantity of large bone (some burnt) was present, which included cattle, caprovid and pig fragments.
?Medieval	pit fill	3067	166-167	19 kg	The small residues were mostly brick/tile (to 70 mm) with a little charcoal, large bone (some burnt), small bone and pottery (including green-glazed), coal and cinder; the tiny washovers appeared to be of charcoal.
?Medieval	pit fill	3069	161-164	48.5 kg	The residues were mainly of brick/tile (with a little large bone, fish otolith, oyster shell, pottery, charcoal, coal, cinder and gravel); the tiny washovers were of fine charcoal.
Medieval	?river silt	1031	63, 65 and 66	32 kg	There were small residues and moderate-sized washovers from these samples; the latter were mainly very decayed bark with charcoal. Bone included a few bird and fish fragments, traces of burnt bone were also present.
Medieval	(?river) silt below wattle	1033	69-72	51 kg	The small residues from these samples were mostly very decayed bark with some bone and traces of shell and brick/tile. Bone includes goat horncore chopped at base, and a cow phalanx and teeth.
Medieval	organic deposit	1039	91-94	32.5 kg	The small residues were mostly of very decayed bark with a little wood, similarly very rotted; also present were traces of pebbles and large bone.
Medieval	clay/clay silt E of wattle	1047	96-99	58.5 kg	The small residues were mainly pebbles, cobbles and other gravel, with a little large bone and brick/tile.
Medieval	clay E of wattle	1052	118-121	36.5 kg	The small residues were mainly of very decayed bark with some bone and gravel; the washovers were rich in small decayed bark fragments.
Medieval	channel deposit	2018	217 (SRS)	96 kg	The residue from this sample was composed mainly of cobbles, with traces of wood, brick/tile, pottery, oyster shell and charcoal. A ?dog coprolite was also noted. Moderate quantities of large bone was present, including cattle and caprovid skull and metapodial fragments.
Medieval	channel deposit	2019	216 (SRS)	93 kg	The small residue was mostly cobbles, with traces of charcoal and brick/tile and large bone (some burnt).

Medieval	?	2020	218 (SRS)	145 kg	This moderate-sized residue was mainly cobbles, with traces of brick/tile, pottery and charcoal. The few bone fragments were rather rounded, some being burnt and/or scorched.
Medieval	?channel deposit or ditch fill	2022	220 (SRS)	27 kg	The small residue was mostly charcoal and small wood fragments, with traces of brick/tile and large bone.
Medieval	channel deposit	2025	221 (SRS)	127 kg	This sample produced a small residue, mostly composed of cobbles, with traces of charcoal, brick/tile and pottery. Large bone was present, including the remains of cattle, caprovind and pig. Some burnt fragments were noted.
Medieval	pit fill	3169	183	9 kg	There was a very small residue of brick/tile with a little pottery, gravel and bird and fish bone (gadid); the small washover was of charcoal.
Early Modern	dump behind revetment	10	6 and 7	total 18.5 kg	There were two moderate-sized residues from these samples. They were rich in oyster valves (mostly whole and unabraded); with them was some brick/tile (to 140 mm maximum dimension) and a little glass, pottery, bone, mussel shell and clay pipe fragments.
Early Modern	?river silt	1003	32, 33 and 36	23 kg	The very small residues were mostly herbaceous plant detritus with freshwater and waterside gastropod and freshwater mussel shell fragments and a few brick/tile fragments and cobbles. The washovers contained herbaceous detritus likely to have originated largely in aquatic and waterside plants, since the identifiable plant remains included a variety of taxa from such habitats. terrestrial material was also present, represented by a few probable arable or waste ground weeds but also capsule fragments of flax. Amongst the mollusc material, the following were noted: <i>Succinea putris</i> , <i>Bithynia tentaculata</i> , <i>Valvata</i> sp. and planorbids. Fly puparia and fish bone and scales were also noted.

Table 3. Number of recorded and scanned contexts (containing bone) by trench and by date from Layerthorpe Bridge, York.

Area/trench	Trench 1 (watching brief)		Trench 1, Area 1		Trench 1, Area 2		Trench 2	
	No. recorded	No. scanned	No. recorded	No. scanned	No. recorded	No. scanned	No. recorded	No. scanned
?		1						
?Roman						2	2	
Roman					4		18	54
?Anglo-Scandinavian	1				2			
Anglo-Scandinavian					5	2		
?medieval			2		3	1	4	10
medieval		1	10		18	6		8
?post-medieval							1	1
post-medieval								1
early modern			1					
modern	1							
Total	2	2	13	0	32	11	25	74

Table 4. Hand-collected vertebrate remains from Trench 1, Area 1, from Layerthorpe Bridge, York.

Species		?medieval			medieval			early modern		
		No. fragments	No. measurable	No. mandibles	No. fragments	No. measurable	No. mandibles	No. fragments	No. measurable	No. mandibles
<i>Canis f. domestic</i>	dog	1	-	-	-	-	-	1	1	-
<i>Sus f. domestic</i>	pig	2	-	1	4	1	1	-	-	-
<i>Bos f. domestic</i>	cattle	40	8	4	121	17	14	2	2	-
Caprovid	sheep/goat	21	11	5	77	18	24	-	-	-
<i>Anser sp.</i>	goose	-	-	-	2	1	-	-	-	-
<i>Gallus f. domestic</i>	chicken	-	-	-	1	1	-	-	-	-
cf. <i>Gallus f. domestic</i>	?chicken	-	-	-	1	-	-	-	-	-
<i>Sub-total</i>		64	19	10	206	38	39	3	3	-
Unidentifiable		117	-	-	275	-	-	17	-	-
Total		181	19	10	481	38	39	20	3	0

Table 5. Hand-collected vertebrate remains from Trench 1, Area 2, from Layerthorpe Bridge, York. Abbreviations: frags—fragments; mands—mandibles; meas—measurable.

Species		Roman			?Anglo-Scand			Anglo-Scand			?medieval			medieval		
		No. frags	No. meas	No. mands	No. frags	No. meas	No. mands	No. frags	No. meas	No. mands	No. frags	No. meas	No. mands	No. frags	No. meas	No. mands
<i>Canis f. domestic</i>	dog	-	-	-	1	-	1	-	-	-	-	-	-	7	4	1
<i>Felis f. domestic</i>	cat	-	-	-	3	-	1	4	1	-	-	-	-	3	-	1
<i>Equus f. domestic</i>	horse	15	2	-	-	-	-	1	-	-	1	-	-	9	2	-
<i>Sus f. domestic</i>	pig	4	1	-	2	-	-	7	-	-	3	1	-	21	2	1
<i>Cervus elaphus L.</i>	red deer	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-
<i>Bos f. domestic</i>	cattle	39	11	2	87	13	9	133	24	12	80	17	8	304	76	23
Caprovid	sheep/goat	20	14	3	27	5	9	83	25	25	17	9	1	143	56	33
<i>Anser sp.</i>	goose	-	-	-	-	-	-	-	-	-	-	-	-	4	2	-
cf. <i>Anser sp.</i>	?goose	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
<i>Gallus f. domestic</i>	chicken	2	2	-	1	1	-	1	1	-	-	-	-	2	2	-
Fish	fish	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-
<i>Homo sapiens</i>	human	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Sub-total</i>		82	30	5	121	19	20	229	51	37	104	27	9	495	144	59
Unidentified bird		-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Unidentified		83	-	-	175	-	-	295	-	-	104	-	-	663	-	-
<i>Sub-total</i>		83	-	-	175	-	-	296	-	-	104	-	-	663	144	59
Total		165	30	5	296	19	20	525	51	37	208	27	9	1158	144	59

Table 6. Hand-collected vertebrate remains from Trench 2 from Layerthorpe Bridge, York.

Species		?Roman			Roman			?medieval		
		No. frags	No. meas	No. mands	No. frags	No. meas	No. mands	No. frags	No. meas	No. mands
<i>Oryctolagus cuniculus</i> (L.)	rabbit	-	-	-	1	-	-	-	-	-
<i>Canis</i> f. domestic	dog	-	-	-	6	1	1	-	-	-
<i>Felis</i> f. domestic	cat	-	-	-	1	-	-	-	-	-
<i>Equus</i> f. domestic	horse	-	-	-	3	2	-	-	-	-
<i>Sus</i> f. domestic	pig	1	-	-	13	-	1	-	-	-
<i>Dama dama</i> (L.)	fallow deer	-	-	-	2	1	-	-	-	-
<i>Bos</i> f. domestic	cattle	6	2	-	65	7	3	2	1	-
Caprovid	sheep/goat	4	1	-	36	9	5	6	-	-
<i>Anser</i> sp.	goose	1	1	-	7	1	-	5	3	-
cf. <i>Gallus</i> f. domestic	?chicken	-	-	-	0	-	-	1	-	-
<i>Gallus</i> f. domestic	chicken	1	1	-	12	8	-	2	2	-
Fish	fish	-	-	-	2	-	-	2	-	-
<i>Homo sapiens</i>	human	-	-	-	1	-	-	1	-	-
<i>Sub-total</i>		13	5	-	149	29	10	24	6	-
Unidentified bird		-	-	-	1	-	-	-	-	-
Unidentified		38	-	-	331	-	-	38	-	-
<i>Sub-total</i>		38	-	-	332	-	-	38	-	-
Total		51	5	0	481	29	10	62	6	0

Table 7. Complete list of plant and animal remains recorded from deposits at Layerthorpe Bridge, York. Order and nomenclature for plants follow Tutin et al. (1964-80 and Smith 1978, and for insects Kloet and Hincks (1964-77).

PLANTS

- cf. *Diphasium* sp(p). (?clubmoss) [shoot fragment(s)]
Diphasium complanatum (L.) Rothm. (complanate clubmoss) [shoot fragment(s)]
 cf. *Pteridium aquilinum* (L.) Kuhn (?bracken) [stalk fragment(s)]
- Coniferae (conifer) [charcoal fragment(s)]
- Salix* sp(p). (willow) [bud(s), fruit(s)]
Betula sp(p). (birch) [fruit(s)]
Corylus avellana L. (hazel) [charred and uncharred nut(s) and/or nutshell fragment(s)]
Quercus sp(p). (oak) [bud(s) and/or bud-scale(s)]
Ficus carica L. (fig) [seed(s)]
 cf. *Cannabis sativa* L. (?hemp) [mineralised achene(s)]
Urtica dioica L. (stinging nettle) [achene(s)]
U. urens L. (annual nettle) [achene(s)]
Polygonum aviculare agg. (knotgrass) [fruit(s)]
P. hydropiper L. (water-pepper) [fruit(s)]
P. persicaria L. (persicaria/red shank) [fruit(s)]
P. lapathifolium L. (pale persicaria) [fruit(s)]
P. amphibium L. (amphibious bistort) [fruit(s)]
Bilderdykia convolvulus (L.) Dumort. (black bindweed) [fruits, fruit fragment(s), mineralised fruit(s)]
Rumex acetosella agg. (sheep's sorrel) [fruit(s)]
R. cf. maritimus L. (?golden dock) [fruit(s)]
Rumex sp(p). (docks) [charred and uncharred fruit(s); perianth segment(s)]
 Chenopodiaceae (goosefoot family) [seed(s)]
Chenopodium Section *Pseudoblitum* (red goosefoot etc.) [seed(s)]
C. polyspermum L. (all-seed) [seed(s)]
C. murale L. (nettle-leaved goosefoot) [seed(s)]
C. album L. (fat hen) [seed(s)]
Atriplex sp(p). (oraches) [seed(s)]
Stellaria media (L.) Vill. (chickweed) [seed(s)]
Cerastium sp(p). (mouse-ear chickweeds) [seed(s)]
Scleranthus annuus L. (annual knawel) [fruit(s)]
Spergula arvensis L. (corn spurrey) [seed(s)]
Agrostemma githago L. (corncockle) [charred and uncharred seeds, uncharred seed fragment(s), and mineralised casts/moulds of seed fragment(s)]
Silene vulgaris (Moench) Garcke (bladder campion) [charred and uncharred seed(s)]
Nymphaea alba L. (white water-lily) [seed(s)]
Nuphar lutea (L.) Sibth. & Sm. (yellow water-lily) [seed(s)]
Ceratophyllum demersum L. (rigid hornwort) [fruit(s)]
Ceratophyllum sp(p). (hornworts) [fruit(s)]
Ranunculus Section *Ranunculus* (meadow/creeping/bulbous buttercup) [achene(s)]
R. sardous Crantz (hairy buttercup) [achene(s)]
R. sceleratus L. (celery-leaved crowfoot) [achene(s)]
R. flammula L. (lesser spearwort) [achene(s)]
R. Subgenus *Batrachium* (water crowfoots) [achene(s)]
Fumaria sp(p). (fumitories) [seed(s)]
Descurainia sophia (L.) Webb ex Prantl (flixweed) [seed(s)]
Rorippa amphibia (L.) Besser (great yellow-cress) [seed(s)]
R. islandica (Oeder) Borbás (northern marsh yellow-cress) [seed(s)]
Capsella bursa-pastoris (L.) Medicus (shepherd's purse) [seed(s)]

Coronopus squamatus (Forskål) Ascherson (swine-cress) [fruit(s) and seed(s)]
Brassica rapa L. (turnip) [seed(s) and seed fragment(s)]
Brassica sp(p). (cabbages, etc.) [seed(s)]
Brassica sp./*Sinapis arvensis* (brassica/charlock) [seed(s), seed fragment(s) and mineralised cotyledon(s)]
Raphanus raphanistrum L. (wild radish) [pod segments and/or fragment(s)]
Reseda luteola L. (weld/dyer's rocket) [seed(s)]
Rubus fruticosus agg. (blackberry/bramble) [seed(s)]
R. caesius L. (dewberry) [seed(s)]
Rubus/Rosa sp(p). (blackberry, etc./rose) [prickle(s)]
Agrimonia eupatoria L. (agrimony) [fruit(s)]
Potentilla anserina L. (silverweed) [achene(s)]
P. cf. erecta (L.) Rauschel (?tormentil) [achene(s)]
P. cf. reptans L. (?creeping cinquefoil) [achene(s)]
Potentilla sp(p). (cinquefoils, etc.) [achene(s)]
Malus sylvestris Miller (crab apple) [endocarp, mineralised seed(s)/embryo(s), seed(s)]
Crataegus sp./*Prunus spinosa* (hawthorn/sloe) [thorn(s)]
Prunus spinosa L. (sloe) [charred and uncharred fruitstone(s), thorn(s)]
P. domestica ssp. *insititia* (L.) C. K. Schneider (plums, etc.) [fruitstone(s)]
P. Section Cerasus (cherries) [fruitstone(s)]
Prunus sp(p). (sloe/plum/cherry, etc.) [mineralised mesocarp and endocarp]
 Leguminosae (pea family) [flower(s) and/or petal(s), pod(s) and/or pod fragment(s)]
Vicia sp(p). (vetches, etc.) [charred seed(s)]
Linum usitatissimum L. (cultivated flax) [capsule fragment(s), seeds, seed fragment(s), stem fragments with epidermis]
Acer campestre L. (field maple) [fruit(s) (samara(e))]
Malva cf. *sylvestris* L. (?common mallow) [nutlet(s)]
Malva sp(p). (mallows, etc.) [nutlet(s)]
Viola sp(p). (violets/pansies, etc.) [seed(s)]
Myriophyllum verticillatum/spicatum (whorled/spiked water-milfoil) [nutlet(s)]
Hydrocotyle vulgaris L. (marsh pennywort) [mericarp(s)]
Scandix pecten-veneris L. (shepherd's needle) [mericarp(s)]
Oenanthe lachenalii C. G. Gmelin (parsley water-dropwort) [mericarp(s)]
O. fluviatilis (Bab.) Coleman (water-dropwort) [mericarp(s)]
O. aquatica (L.) Poiret in Lam. (fine-leaved water-dropwort) [mericarp(s)]
Aethusa cynapium L. (fool's parsley) [mericarp(s)]
Conium maculatum L. (hemlock) [mericarps, mericarp fragment(s)]
Apium nodiflorum (L.) Lag. (fool's watercress) [mericarp(s)]
Pastinaca sativa/Heracleum sphondylium (wild parsnip/hogweed) [mericarp(s)]
Heracleum sphondylium L. (hogweed) [mericarp(s)]
Daucus carota L. (wild carrot) [mericarp(s)]
 Umbelliferae (carrot family) [mericarp(s)]
Erica tetralix L. (cross-leaved heath) [charred and uncharred leaf/leaves]
E. cinerea L. (bell heather) [leaf/leaves]
Calluna vulgaris (L.) Hull (heather, ling) [bud(s), capsule(s), charred and uncharred flower(s), charred and uncharred shoot fragment(s), leaves, root and/or twig fragment(s), seed(s), shoot tip(s) and twig fragment(s)]
 cf. *Calluna vulgaris* (L.) Hull (?heather, ling) [charred and uncharred root and/or twig fragment(s)]
Anagallis arvensis L. (scarlet pimpernel) [seed(s)]
Menyanthes trifoliata L. (bogbean) [seed(s)]
Myosotis sp(p). (forget-me-nots) [nutlet(s)]
Marrubium vulgare L. (white horehound) [nutlet(s)]
Galeopsis Subgenus *Galeopsis* (hemp-nettles) [nutlet(s)]
Lamium Section *Lamiopsis* (annual dead-nettles) [nutlet(s)]
Stachys sp(p). (woundworts) [nutlet(s)]
Nepeta cataria L. (cat-mint) [nutlet(s)]
Prunella vulgaris L. (selfheal) [nutlet(s)]
Atropa bella-donna L. (deadly nightshade) [seed(s)]
Hyoscyamus niger L. (henbane) [seed(s)]

Solanum nigrum L. (black nightshade) [seed(s)]
Veronica beccabunga-type (brooklime/water/marsh speedwells) [seed(s)]
Odontites verna (Bellardi) Dumort. (red bartsia) [seed(s)]
Plantago major L. (greater plantain) [seed(s)]
Sambucus cf. *ebulus* L. (?danewort) [seed(s)]
Sambucus nigra L. (elder) [charred and uncharred seed(s); seed fragment(s)]
Dipsacus sativus/fullonum (fuller's/wild teasel) [fruit(s)]
Knautia arvensis (L.) Coulter (field scabious) [fruit(s)]
Bidens sp(p). (bur-marigolds) [achene(s)]
Anthemis cotula L. (stinking mayweed) [charred and uncharred achene(s)]
Chrysanthemum segetum L. (corn marigold) [achenes and achene fragment(s)]
 cf. *Senecio* sp(p). (?groundsels/ragworts, etc.) [achene(s)]
Actium sp(p). (burdocks) [achene(s), involucre bract(s)/hook(s)]
Carduus/Cirsium sp(p). (thistles) [achene(s)]
Onopordum acanthium L. (Scotch thistle) [achene(s)]
*Centaura*e sp(p). (knapweeds, etc.) [achenes, achene fragment(s)]
Hypochoeris sp(p). (cat's ears) [achene(s)]
Leontodon sp(p). (hawkbits) [achene(s)]
Sonchus asper (L.) Hill (prickly sow-thistle) [achene(s)]
Sonchus oleraceus L. (sow-thistle) [achene(s)]
Sonchus sp(p). (sow-thistles) [achene(s)]
Lapsana communis L. (nipplewort) [achene(s)]
Sagittaria sagittifolia L. (arrow-head) [carpel(s)]
Alisma sp(p). (water-plantains) [carpel(s) and/or seed(s)]
Triglochin maritima L. (sea arrowgrass) [carpel(s)]
Potamogeton sp(p). (pondweeds) [pyrene(s)]
Juncus sp(p). (rushes) [seed(s)]
Juncus inflexus/effusus/conglomeratus (hard/soft/compact rush) [seed(s)]
J. cf. *gerardi* Loisel. (?mud rush) [seed(s)]
J. bufonius L. (toad rush) [seed(s)]
 Gramineae (grasses) [waterlogged caryopsis/es]
 Gramineae/Cerealialia (grasses/cereals) [charred caryopsis/es, charred culm fragment(s), charred culm node(s)]
 Cerealialia indet. (cereals) [charred caryopsis/es and charred chaff fragment(s), mineralised caryopsis/es]
 cf. *Glyceria* sp(p). (?sweet-grasses) [caryopsis/es]
Triticum sp(p). (wheats) [charred caryopsis/es]
Triticum/Secale (wheat/rye) [waterlogged periderm fragments]
 cf. *Secale cereale* L. (?rye) [charred caryopsis/es]
Hordeum sp(p). (barley) [charred caryopsis/es]
Avena cf. *sativa* L. (?cultivated oat) [charred spikelet(s)/spikelet fragment(s)]
Avena sp(p). (oats) [charred caryopsis/es]
 cf. *Avena* sp(p). (?oats) [charred chaff]
Lemna sp(p). (duckweeds) [frond(s), seed(s)]
Sparganium sp(p). (bur-reeds) [fruit(s)]
Scirpus cf. *maritimus* L. (?sea club-rush) [nutlet(s)]
S. maritimus/lacustris (sea club-rush/bulrush) [nutlet(s)]
S. lacustris sensu lato (bulrush) [nutlet(s)]
Eleocharis palustris sensu lato (common spike-rush) [nutlet(s)]
Cladium mariscus (L.) Pohl (great sedge/saw-sedge) [charred leaf fragment(s), charred and uncharred nutlet(s)]
Carex sp(p). (sedges) [charred and uncharred nutlet(s)]

Mosses (all leaf/leaves and/or shoot fragment(s))

Sphagnum sp(p).
Polytrichum sp(p).
Dicranum sp(p).
Leucobryum glaucum (Hedw.) Ångstr.
Aulacomnium palustre (Hedw.) Schwaegr.
Ulota sp(p).

Leucodon sciuroides (Hedw.) Schwaegr.
Antitrichia curtispindula (Hedw.) Brid.
Neckera crispa Hedw.
N. complanata (Hedw.) Hüb.
Thuidium cf. tamariscinum (Hedw.) Br. Eur.
Cratoneuron filicinum (Hedw.) Spruce
 cf. *Campylium* sp(p).
Campylium stellatum (Hedw.) Lange & Jens.
Drepanocladus sp(p).
Scorpidium scorpioides (Hedw.) Limpr.
Calliergon cuspidatum (Hedw.) Kindb.
Isothecium myurum Brid.
I. myosuroides Brid.
Homalothecium sericeum/lutescens
Pseudoscleropodium purum (Hedw.) Fleisch
Eurhynchium striatum (Hedw.) Schimp.
E. praelongum (Hedw.) Br. Eur.
Eurhynchium sp(p).
Hypnum cf. cupressiforme Hedw.
Pleurozium schreberi (Brid.) Mitt.
Hylocomium splendens (Hedw.) Br. Eur.

ANIMALS		*Eristalini sp. (larva)	w
		*Melophagus ovinus (L.) (puparium)	u
NEMATODA		*Diptera sp. (larva)	u
*?Heterodera sp. (cyst)		*Diptera sp. (puparium)	u
ANNELIDA		* <i>Pulex irritans</i> Linnaeus	ss
*Oligochaeta sp. (egg capsule)	u	*Siphonaptera sp. indet.	u
CRUSTACEA		*Trichoptera sp. (case)	oa-w
*Daphnia sp. (ephippium)		oa-w	
*Ostracoda sp.		Carabus spu	oa
		<i>Nebria</i> sp.	oa
INSECTA		? <i>Loricera pilicornis</i> (Fabricius)	oa
*Dermaptera sp.	u	<i>Dyschirius</i> sp.	oa
		<i>Clivina fossor</i> (Linnaeus)	oa
<i>Drymus</i> sp.	oa-p	<i>Clivina</i> sp. indet.	oa
<i>Anthocoris</i> sp.	oa-p	<i>Trechus obtusus</i> or <i>quadristriatus</i>	oa
Cimicidae sp.	oa-p	<i>Trechus micros</i> (Herbst)	u
Saldidae sp.	oa-d	<i>Trechus</i> sp. indet.	ob
Corixidae sp.	oa-w	<i>Bembidion (Peryphus)</i> sp.	oa
Heteroptera sp.	u	<i>Bembidion (Philochthus)</i> sp.	oa
*Aphidoidea sp.	u	<i>Bembidion</i> spp.	oa
*Coccoidea sp.	u	<i>Pterostichus melanarius</i> (Illiger)	ob
Hemiptera sp.	u	<i>Pterostichus</i> sp.	ob
		<i>Agonum</i> sp.	oa
*?Louse s.l. sp.	u	<i>Amara</i> spp.	oa
		<i>Harpalus</i> sp.	oa
*Diptera sp. (adult)	u	? <i>Bradycellus</i> sp.	oa
*Bibionidae sp.	u	<i>Chlaenius</i> sp.	u
*Syrphidae sp. (larva)	u	<i>Metabletus</i> sp.	oa
*?Scatopse notata (Linnaeus)	r	Carabidae spp. and spp. indet.	ob
†*Sphaeroceridae sp. (puparium)	rt	Halipilidae sp.	oa-w
*Sepsidae sp. (puparium)	u	Hydroporinae spp.	oa-w
*Muscidae sp. (puparium)	u	<i>Agabus</i> or <i>Ilybius</i> sp.	oa-w

<i>Colymbetes fuscus</i> (Linnaeus)	oa-w	<i>Gyrophypnus</i> sp. indet.	rt
Colymbetinae spp. indet.	oa-w	<i>Xantholinus linearis</i> or <i>longiventris</i>	rt-sf
Dytiscidae sp. indet.	oa-w	Xantholininae sp.	u
? <i>Georissus crenulatus</i> (Rossi)	oa-w	<i>Neobisnius</i> sp.	u
<i>Helophorus</i> spp.	oa-w	<i>Philonthus ?politus</i> (Linnaeus)	u
<i>Helophorus</i> sp. (terrestrial)	oa	<i>Philonthus</i> spp.	u
<i>Sphaeridium ?bipustulatum</i> Fabricius	rf	<i>Gabrius</i> sp.	rt
<i>Cercyon analis</i> (Paykull)	rt-sf	<i>Creophilus maxillosus</i> (Linnaeus)	rt
<i>Cercyon atricapillus</i> (Marsham)	rf-st	Staphylininae sp.	u
<i>Cercyon haemorrhoidalis</i> (Fabricius)	rf-sf	<i>Mycetoporus</i> sp.	u
<i>Cercyon terminatus</i> (Marsham)	rf-st	? <i>Bobitobius</i> sp.	u
<i>Cercyon convexiusculus</i> group	oa-d	<i>Tachyporus</i> spp.	u
<i>Cercyon ?ustulatus</i> (Preyssler)	oa-d	<i>Tachinus</i> sp.	u
<i>Cercyon</i> spp. indet.	u	<i>Cordalia obscura</i> (Gravenhorst)	rt-sf
<i>Megasternum obscurum</i> (Marsham)	rt	<i>Falagria</i> sp.	rt-sf
<i>Hydrobius fuscipes</i> (Linnaeus)	oa-w	<i>Aleochara</i> sp.	u
<i>Anacaena</i> sp.	oa-w	Aleocharinae spp.	u
? <i>Laccobius</i> sp.	oa-w	Staphylinidae sp.	u
Hydrophilinae spp. and spp. indet.	oa-w	Pselaphidae sp.	u
<i>Acritus nigricornis</i> (Hoffmann)	rt-st	<i>Trox scaber</i> (Linnaeus)	rt-sf
Histerinae sp.	rt	<i>Aphodius granarius</i> (Linnaeus)	ob-rf
Histeridae sp.	u	<i>Aphodius ?prodromus</i> (Brahm)	ob-rf
<i>Ochthebius</i> sp.	oa-w	<i>Aphodius</i> spp.	ob-rf
<i>Hydraena</i> sp.	oa-w	<i>Oxyomus sylvestris</i> (Scopoli)	rt-sf
<i>Limnebius</i> sp.	oa-w	Melolonthinae/Rutelinae/Cetoninae sp.	oa-p
<i>Ptenidium</i> sp.	rt	<i>Clambus</i> sp.	rt-sf
Ptiliidae sp.	u	<i>Cyphon</i> sp.	oa-d
<i>Catops</i> sp.	u	<i>Dryops</i> sp.	oa-d
<i>Micropeplus fulvus</i> Erichson	rt	<i>Oulimnius</i> sp.	oa-w
<i>Acidota crenata</i> (Fabricius)	oa	Elmidae sp.	oa-w
<i>Lesteva longoelytrata</i> (Goeze)	oa-d	Elateridae sp.	ob
<i>Lesteva</i> sp.	oa-d	<i>Anobium punctatum</i> (Degeer)	l-sf
<i>Omalium caesum</i> or <i>italicum</i>	rt-sf	<i>Tipnus unicolor</i> (P. & M.)	rd-st
<i>Omalium rivulare</i> (Paykull)	rt-sf	<i>Ptinus fur</i> (Linnaeus)	rd-sf
<i>Omalium</i> sp.	rt	<i>Ptinus</i> sp.	rd-sf
<i>Xylodromus concinnus</i> (Marsham)	rt-st	<i>Lyctus linearis</i> (Goeze)	l-sf
Omalinae sp.	rt	<i>Brachypterus</i> sp.	oa-p
<i>Coprophilus striatulus</i> (Fabricius)	rt-st	<i>Meligethes</i> sp.	oa-p
<i>Carpelimus bilineatus</i> Stephens	rt-sf	<i>Omosita discoidea</i> (Fabricius)	rt-sf
<i>Carpelimus fuliginosus</i> (Gravenhorst)	st	<i>Rhizophagus</i> sp.	u
<i>Carpelimus ?rivularis</i> (Motschulsky)	ob-d	<i>Monotoma</i> spp.	rt-sf
<i>Carpelimus</i> sp.	u	<i>Oryzaephilus surinamensis</i> (Linnaeus)	g-ss
<i>Aploderus caelatus</i> (Gravenhorst)	rt	? <i>Telmatophilus</i> sp.	oa-d
<i>Platystethus arenarius</i> (Fourcroy)	rf	<i>Cryptophagus ?scutellatus</i> Newman	rd-st
<i>Platystethus cornutus</i> group	oa-d	<i>Cryptophagus</i> sp.	rd-sf
<i>Platystethus nitens</i> (Sahlberg)	oa-d	<i>Atomaria</i> spp.	rd
<i>Anotylus nitidulus</i> (Gravenhorst)	rt-d	<i>Orthoperus</i> sp.	rt
<i>Anotylus rugosus</i> (Fabricius)	rt	Coccinellidae sp.	oa-p
<i>Anotylus sculpturatus</i> group	rt	<i>Mycetaea hirta</i> (Marsham)	rd-ss
<i>Anotylus tetracariniatus</i> (Block)	rt	<i>Lathridius minutus</i> group	rd-st
<i>Oxytelus sculptus</i> Gravenhorst	rt-st	? <i>Enicmus</i> sp.	rt-sf
<i>Stenus</i> spp.	u	<i>Corticaria</i> spp.	rt-sf
<i>Lathrobium</i> sp.	u	<i>Corticarina fuscula</i> (Gyllenhal)	rt
<i>Lithocharis</i> sp.	rt	<i>Corticarina</i> sp.	rt
<i>Leptacinus</i> sp.	rt-st	<i>Aglenus brunneus</i> (Gyllenhal)	rt-ss
<i>Gyrophypnus fracticornis</i> (Muller)	rt-st	? <i>Tenebrio obscurus</i> Fabricius	rt-ss
<i>Gyrophypnus punctulatus</i> (Paykull)	rt-st	<i>Anthicus formicarius</i> (Goeze)	rt-st

<i>Anthicus</i> sp.	rt	MOLLUSCA	
Bruchinae sp.	u	<i>Valvata piscinalis</i> (Müller)	
? <i>Macrolepa</i> sp.	oa-w	<i>Bithynia tentaculata</i> (Linnaeus)	
Donaciinae spp.	oa-w-p	<i>Planorbis</i> sp. (<i>sensu lato</i>)	
<i>Gastrophysa viridula</i> (Degeer)	oa-p	<i>Succinea putris</i> (Linnaeus)	
<i>Phaedon</i> sp.	oa-p	<i>Succinea</i> sp. indet.	
<i>Phyllodecta</i> sp.	oa-p		
Chrysomelinae spp.	oa-p	PISCES	
<i>Phyllotreta nemorum</i> group	oa-p	<i>Clupea harengus</i> L.	herring
<i>Longitarsus</i> sp.	oa-p	<i>Anguilla anguilla</i> (L.)	eel
<i>Chaetocnema concinna</i> (Marshall)	oa-p		
? <i>Psylliodes</i> sp.	oa-p	AMPHIBIA	
Halticinae sp.	oa-p	Amphibia indet.	
<i>Apion</i> spp.	oa-p		
<i>Sitona</i> spp.	oa-p	AVES	
<i>Tanyssphyrus lemnae</i> (Paykull)	oa-w-p	<i>Anser</i> sp.	goose
<i>Bagous</i> sp.	oa-w	<i>Gallus f. domestic</i>	chicken
? <i>Notaris acridulus</i> (Linnaeus)	oa-d-p		
<i>Notaris</i> sp. indet.	oa-d-p	MAMMALIA	
<i>Ceutorhynchus ?contractus</i> (Marshall)	oa-p	<i>Oryctolagus cuniculus</i> (L.)	rabbit
<i>Ceutorhynchus</i> spp.	oa-p	<i>Canis f. domestic</i>	dog
Ceuthorhynchinae sp.	oa-p	<i>Felis f. domestic</i>	cat
Curculionidae sp.	oa	<i>Equus f. domestic</i>	horse
Scolytidae sp.	l	<i>Sus f. domestic</i>	pig
Coleoptera sp.	u	<i>Cervus elaphus</i> L.	red deer
*Coleoptera sp. (larva)	u	<i>Dama dama</i> (L.)	fallow deer
		<i>Bos f. domestic</i>	cattle
*Formicidae sp.	u	Caprovid	sheep/goat
*Apoidea sp.	u	<i>Capra f. domestic</i>	goat
		<i>Homo sapiens</i>	human
*Insecta sp. (larva)	u		
*Insecta sp. pupa	u		
ARACHNIDA			
*Aranae sp.	u		
*Opiliones sp.	u		
*Acarina sp.	u		

Table 8. Lists of plant remains and other components of samples examined for plant macrofossils from the Layerthorpe Bridge site, York. Lists are presented in order of context and sample (except for Sample 271 which is listed at the end). The numbers following the names are abundance scores on a four-point scale (/T and /SPT samples) or a three-point scale (/BS samples) from 1 (one or a very few remains, or a very small component) to 3 or 4 (abundant remains, or a large component).

Abbreviations: *af*—achene fragment(s); *b*—bud(s); *bs*—bud-scales; *caps*—capsule(s); *ch*—charred; *dec.*—decayed; *endo*—endocarp; *ff*—fruit fragment(s); *fgts*—fragments; *fls*—flower(s); *fr*—fruit(s); *inc*—including; *inv br*—involucral bract(s); *cot*—cotyledon(s); *lvs*—leaves; *max.*—maximum; *meso*—mesocarp; *min*—mineral-replaced ('mineralised'); *per*—perianth(s); *pet*—petal(s); *rt*—root; *s*—seed(s); *sht*—shoot; *spklt*—spikelet(s); *sf*—seed fragment(s); *tw*—twig; *v*—very.

Context 4		grit	1	
Sample 6/SPT		mammal bone	1	max. size 80 mm
		mussel shell fgts	1	
'coils'	1	oyster shell fgts	2	
Agrostemma githago (sf)	1	pottery	1	max. size 20 mm
Atriplex sp(p).	1	Context 14		
beetles	1	Sample 48/T		
Bidens sp(p).	1			
Bilderdykia convolvulus (ff)	1	Aethusa cynapium	1	
bone fgts	1	Atriplex sp(p).	1	
Carduus/Cirsium sp(p).	1	bark fgts	3	max. size 15 mm
Carex sp(p).	1	bast fgts	1	
charcoal	1	beetles	1	
Chenopodiaceae	1	bone fgts	1	
Chenopodium album	1	burnt bone fgts	1	max. size 10 mm
Chenopodium Section Pseudoblitum	1	caddis larva cases	1	
coal	1	Carex sp(p).	1	
Ficus carica	1	cf. Avena sp(p).	1	
gravel	1	cf. Avena sp(p). (chaff)	1	
herbaceous detritus	2	cf. Calluna vulgaris (ch rt-tw fgts)	1	
Leguminosae (fls/pet)	1	cf. Calluna vulgaris (rt-tw fgts)	1	
Plantago major	1	cf. Cerealia indet.	1	fragment(s) only
Polygonum aviculare agg.	1	charcoal	1	max. size 15 mm
Polygonum persicaria	1	Chenopodium album	1	
Ranunculus flammula	1	Chrysanthemum segetum	1	max. size 10 mm
Ranunculus sceleratus	1	cinders	1	max. size 15 mm
Ranunculus Section Ranunculus	1	coal	1	max. size 10 mm
Raphanus raphanistrum (pod segs/fgts)	1	Conium maculatum (mf)	1	
Reseda luteola	1	Coronopus squamatus (fr)	1	fragment(s) only
Rumex sp(p). (inc per)	1	Corylus avellana	1	max. size 5 mm
Salix sp(p). (b)	1	Corylus avellana (ch)	1	max. size 10 mm
Sambucus nigra	1	Daphnia (ephippia)	1	
sand	1	gravel	2	max. size 30 mm
Stellaria media	1	Juncus sp(p).	1	
Urtica dioica	1	Polygonum aviculare agg.	1	
		Potentilla anserina	2	
		Ranunculus Section Ranunculus	1	v. dec.
Context10		Raphanus raphanistrum (pod segs/fgts)	1	
Sample 101010/BS		root/rootlet fgts	1	
		Rumex sp(p).	1	
brick/tile	2	Sambucus nigra	2	including fgts
clay pipe fgts	1	sand	2	
cobbles	1	sclereids (from bark)	2	
glass fgts	1	Urtica dioica	2	
gravel	1	Urtica urens	1	

wood fgts	1	v. dec., max. size 15 mm	Urtica urens	1	
			wood chips	1	max. size 10 mm
			wood fgts	3	max. size 70 mm
Context 15 Sample 49/T			Context 18 Sample 41/T1		
bone fgts	1	max. size 35 mm	Alisma sp(p).	1	
brick/tile	1	max. size 30 mm	Apium nodiflorum	2	
gravel	2	max. size 30 mm	Atriplex sp(p).	1	
Juncus sp(p).	1		Bithynia opercula	1	
root/rootlet fgts	1		brick/tile	1	max. size 10 mm
Rumex acetosella agg.	1		caddis larva cases	1	
Sambucus nigra	1		Carduus/Cirsium sp(p).	1	
sand	2		Carex sp(p).	1	
sclereids (from bark)	1		charcoal	1	max. size 5 mm
Veronica beccabunga-type	1		Conium maculatum (mf)	1	
			Daphnia (ephippia)	2	
Context 16 Sample 52/T			dicot stem fgts	1	
?arthropod frass	1		freshwater snails	1	
Anthemis cotula	1		Heracleum sphondylium	1	
Anthemis cotula (ch)	1		herbaceous detritus	3	
Atriplex sp(p).	1		Linum usitatissimum	1	
Avena sp(p).	1		Linum usitatissimum (caps fgts)	1	
bark fgts		max. size 15 mm	Lophopus crystallinus	1	
beetles	1		Myosotis sp(p).	1	
bone fgts	1	max. size 30 mm	Nuphar lutea	2	including fgts
Brassica sp./Sinapis arvensis	1		Oenanthe aquatica	2	
brick/tile	1	max. size 5 mm	Polygonum hydropiper	1	
burnt bone fgts	1	max. size 10 mm	Ranunculus sceleratus	3	
Carex sp(p).	2		Ranunculus Section Ranunculus	1	
cf. Calluna vulgaris (ch rt-tw fgts)	1		root/rootlet fgts	2	
cf. Calluna vulgaris (rt-tw fgts)	1		Rorippa amphibia	2	
charcoal	1	max. size 10 mm	Rumex acetosella agg.	1	
Chenopodium album	2		Rumex sp(p). (inc per)	1	
Corylus avellana	1	max. size 10 mm	Salix sp(p). (b)	1	
Cratoneuron filicinum	1		sand	1	
Drepanocladus sp(p).	1		Scirpus lacustris sl	1	
earthworm egg caps	1		Sparganium sp(p).	1	
fish bone	1	max. size 15 mm	Sphagnum sp(p). (lvs)	1	
fly puparia	1		Umbelliferae	1	
Galeopsis Subgenus Galeopsis	1		Urtica urens	1	
gravel	1	max. size 25 mm	wood fgts	1	max. size 20 mm
Hypnum cf. cupressiforme	1				
Melophagus ovinus (sheep keds)	1		Context 19 Sample 45/T		
Menyanthes trifoliata	1		'coils'	1	
moss	1		?bryozoa	1	
Polygonum persicaria	1		Agrostemma githago (sf)	1	
Potentilla cf. erecta	1		Alisma sp(p).	1	
Potentilla cf. reptans	1		Anthemis cotula	1	
Potentilla sp(p).	1		Arctium sp(p).	1	
Raphanus raphanistrum (pod segs/fgts)	1		Bithynia opercula	1	
root/rootlet fgts	1		bone fgts	1	max. size 10 mm
Sambucus nigra	1		Brassica cf. rapa	1	
Sambucus nigra (ch)	1		Brassica sp(p).	1	
sand	2		Calluna vulgaris (tw fgts)	1	
sclereids (from bark)	1		Carex sp(p).	1	
Sonchus asper	1		Centaurea sp(p).	1	
Stellaria media	1		Ceratophyllum sp(p).	1	
Urtica dioica	2				

charcoal	1	max. size 5 mm	Context 20	
Chrysanthemum segetum	1		Sample 38/T	
Conium maculatum	1			
Cristatella (statoblasts)	1		cinders	2 max. size 15 mm
Daphnia (ephippia)	1		Conium maculatum (mf)	1
earthworm egg caps	1		Coronopus squamatus (fr)	1
Erica tetralix (lvs)	1		Ranunculus sceleratus	2
fibres	2		Sambucus nigra	1
Ficus carica	1		sand	1
fish bone	1		tile fgts	1 max. size 45 mm
fish scale	1		unwashed sediment	3
fly puparia	1		Urtica dioica	2
Fumaria sp(p).	1			
Galeopsis Subgenus Galeopsis	1			
gravel	1	max. size 25 mm	Context 38	
grit	1		Sample 17/T	
Hyoscyamus niger	1			
Hypnum cf. cupressiforme	1		Aethusa cynapium	1
Lamium Section Lamiopsis	1		Agrostemma githago (ch)	1
Lapsana communis	1		Atriplex sp(p).	1
Lemna sp(p).	1		bark fgts	3 v. dec., max. size
Leucobryum glaucum	1		beetles	1
Linum usitatissimum (caps fgts)	2		bone fgts	1 max. size 40 mm
Linum usitatissimum (sf)	1		brick/tile	1 max. size 20 mm
Lophopus crystallinus	1		Calluna vulgaris (ch fls)	1
Malva sp(p).	1		Carex sp(p).	1
Marrubium vulgare	2		cf. Calluna vulgaris (rt-tw fgts)	1
Myriophyllum verticillatum/ spicatum	1		charcoal	1 max. size 5 mm
Nuphar lutea	1		Chenopodium album	2
Odontites verna	1		fish scale	1
Oenanthe lachenalii	1		Gramineae	1
Pastinaca sativa/ Heracleum sphondylium	1	fragment(s) only	gravel	1 max. size 20 mm
			grit	1
Polygonum aviculare agg.	2		Knautia arvensis	1
Polygonum lapathifolium	1		Potentilla cf. erecta	2
Polygonum persicaria	1		Ranunculus Section Ranunculus	1
Potamogeton sp(p).	1		Raphanus raphanistrum (pod segs/fgts)	1
Ranunculus sceleratus	2		Sambucus nigra	1
Ranunculus Section Ranunculus	1		sand	2
Reseda luteola	2		sclereids (from bark)	1
Rumex sp(p). (inc per)	1		Triticum sp(p).	1
Sagittaria sagittifolia	1		Urtica urens	1
Salix sp(p). (b)	1		Viola sp(p).	1
Salix sp(p). (fr)	1		wood fgts	1 v. dec., max. size
Sambucus nigra	1			10 mm
sand	1		Sample 3838/BS	
Scirpus lacustris sl	1			
Sonchus asper	1		brick/tile	1 max. size 35 mm
Sonchus oleraceus	1		mammal bone	1 max. dimension 120 mm
Sparganium sp(p).	2			
Stellaria media	1		oyster shell fgts	1
Ulota sp(p).	1		pebbles	1 max. size 60 mm
Urtica dioica	1		wood fgts	1
Urtica urens	1			
wood chips	1	max. size 5 mm		
wood fgts	1	max. size 5 mm	Context 40	
			Sample 19/T	
			?daub	1 max. size 30 mm
			Agrimonia eupatoria	1
			Agrostemma githago (sf)	1

Antitrichia curtispindula	1		Sample 4040/BS	
Atriplex sp(p).	1			
bark fgts	2	v. dec., max. size 10 mm	bark fgts	1 v. dec., max. size 10 mm
beetles	1		brick/tile	1 max. size 20 mm
bone fgts	1	max. size 20 mm	burnt bone fgts	1 max. size 15 mm
Brassica rapa	1		Corylus avellana	1 max. size 10 mm
brick/tile	1	max. size 5 mm	gravel	1 max. size 20 mm
burnt bone fgts	1	max. size 15 mm	mammal bone	1 max. size 50 mm
Calluna vulgaris (ch fls)	1		oyster shell fgts	1 max. size 20 mm
Calluna vulgaris (ch sht fgts)	1			
Carduus/Cirsium sp(p).	1			
Centaurea sp(p). (af)	1		Context 41	
cf. Calluna vulgaris (ch rt-tw fgts)	1		Sample 27/T	
cf. Calluna vulgaris (rt-tw fgts)	1			
cf. Secale cereale	1		?arthropod frass	2
cf. Senecio sp(p).	1		Atriplex sp(p).	1
charcoal	2	max. size 10 mm	bark fgts	3 v. dec., max. size 25 mm
Chenopodium album	1			
Chenopodium Section Pseudoblitum	2		beetles	1
Chrysanthemum segetum (af)	1		bone fgts	1 max. size 30 mm
Coronopus squamatus (fr)	1		burnt bone fgts	1 max. size 15 mm
Corylus avellana	1	max. size 10 mm	Calluna vulgaris (ch fls)	1
Corylus avellana (ch)	1	max. size 10 mm	Calluna vulgaris (fls)	1
Cristatella (statoblasts)	1		Calluna vulgaris (sht fgts)	1
Eleocharis palustris sl	1		Carex sp(p).	1
fish bone	1		cf. Calluna vulgaris (ch rt-tw fgts)	1
fly puparia	1		cf. Secale cereale	1
Gramineae	1		charcoal	1 max. size 20 mm
Gramineae/Cerealia (ch)	1		charred herbaceous detritus	1
gravel	1	max. size 10 mm	charred rhizome/root fgts	1
Hyoscyamus niger	1		Chenopodium album	2
Isoethecium myosuroides	1		Coronopus squamatus (fr)	1
Lamium Section Lamiopsis	1		Corylus avellana	1 max. size 15 mm
leather fgts	1	max. size 30 mm	fish bone	1 max. size 5 mm
Linum usitatissimum	1		Juncus inflexus/effusus/conglomeratus	1
Linum usitatissimum (caps fgts)	1		root/rootlet fgts	1
Malva sp(p).	1		Sambucus nigra	1
Marrubium vulgare	1		sand	2
Neckera complanata	1		sclereids (from bark)	2
ostracods	1		Silene vulgaris	1
Polygonum hydropiper	1		Triticum sp(p). (hexaploid)	1
Polygonum lapathifolium	1		Vicia sp(p).	1
Potamogeton sp(p).	1		wood fgts	2 v. dec., max. size 10 mm
Potentilla sp(p).	1			
Prunella vulgaris	1		Sample 4141/BS	
Ranunculus Subgenus Batrachium	1			
root bark/epidermis fgts	1		bark fgts	1 v. dec., max. size 10 mm
root/rhizome fgts (ch)	1		gravel	1 max. size 40 mm
Rubus/Rosa sp(p). (prickles)	1		mammal bone	1 max. dimension 130 mm
Rumex sp(p).	1			
Rumex sp(p). (per/secs)	1		oyster shell fgts	1 max. size 30 mm
Sambucus nigra	2		wood fgts	1 v. dec., max. size 10 mm
sand	2			
sclereids (from bark)	1			
snails	1			
Sphagnum sp(p). (lvs)	1			
Stellaria media	1		Context 1003	
Triticum/Secale ('bran' fgts)	1		Sample 1003/BS	
Urtica dioica	2			
Urtica urens	2		Alisma sp(p).	1 'embryos' only
			Anthemis cotula	1

Atriplex sp(p).	1		Linum usitatissimum	1	
brick/tile	1	max. size 40 mm	Linum usitatissimum (caps fgts)	1	
Ceratophyllum demersum	1		Lophopus crystallinus	1	
Ceratophyllum sp(p).	1		mammal bone	1	max. size 40 mm
Chrysanthemum segetum	1		Nuphar lutea	1	
cobbles	1	max. dimension 110 mm	Oenanthe lachenalii	1	
fish scale	1		ostracods	2	
fly puparia	1		Pisidium sp(p). (valves)	1	
freshwater mussel shell fgts	1		planorbid snails	2	
freshwater snails	1		Polygonum aviculare agg.	1	
Gramineae	1		Polygonum hydropiper	1	
herbaceous detritus	1		Potamogeton sp(p).	1	
Linum usitatissimum (caps fgts)	1		Ranunculus Section Ranunculus	1	
Nuphar lutea	1		Reseda luteola	1	
Oenanthe aquatica	1		Rubus caesius	2	
percid scale	1		Rumex sp(p). (inc per)	1	
Polygonum aviculare agg.	1		Sambucus nigra	1	including fgts
Polygonum lapathifolium	1		sand	1	
Potamogeton sp(p).	1		Scirpus lacustris sl	1	
Ranunculus Section Ranunculus	1		Sonchus asper	1	
Ranunculus Subgenus Batrachium	1		twig fgts	1	max. size 20 mm
Rumex sp(p). (inc per)	1		unwashed clay sediment	2	
Sagittaria sagittifolia	1		Urtica dioica	2	
Scirpus maritimus/lacustris	1		Urtica urens	1	
Scleranthus annuus	1		wood fgts	1	max. size 5 mm
Sonchus asper	1				
Stellaria media	1		Context 1027		
twig fgts	1	max. length 30 x width 10 mm	Sample 75/T		
Urtica urens	1		?wood chips	1	
wood chips	1	max. size 5 mm	Agrostemma githago (sf)	1	
			Anthemis cotula	1	
Context 1024			Antitrichia curtispindula	1	
Sample 73/T			bark fgts	2	v. dec., max. size 10 mm
Agrostemma githago (sf)	1		bone fgts	1	max. size 20 mm
Atriplex sp(p).	1		Brassica rapa (sf)	1	
beetles	1		brick/tile	1	max. size 25 mm
Bithynia opercula	3		caddis larva cases	1	
Brassica sp(p).	1		Calluna vulgaris (fls)	1	
brick/tile	1	max. size 10 mm	Carduus/Cirsium sp(p).	1	
burnt bone fgts	1	max. size 5 mm	Carex sp(p).	1	
caddis larva cases	1		cf. Calluna vulgaris (rt-tw fgts)	1	
Carduus/Cirsium sp(p).	1		charcoal	1	max. size 5 mm
Carex sp(p).	1		Cladium mariscus	1	
Ceratophyllum demersum	1		Coronopus squamatus (fr)	1	
Ceratophyllum sp(p).	1		Corylus avellana	1	max. size 5 mm
cf. Acer campestre	1		Cristatella (statoblasts)	1	
cf. Glyceria sp(p).	1		dicot lf fgts	1	
coal	1	max. size 10 mm	dicot stem fgts	1	
Conium maculatum	1		fish bone	1	max. size 10 mm
Coronopus squamatus (fr)	1		freshwater mussel shell fgts	1	max. size 30 mm
Ficus carica	1	a single specimen	freshwater snails	1	
fish scale	1	max. size 2 mm	gravel	1	max. size 25 mm
fly puparia	1		Homalothecium sericeum/lutescens	1	
freshwater mussel shell fgts	2	max. size 45 mm	Hyoscyamus niger	1	
freshwater snails	2		Hypochoeris sp(p).	1	
Gramineae/Cerealia (ch)	1		Juncus bufonius	1	
gravel	1	max. size 25 mm	Lapsana communis	1	
Lemna sp(p).	2		Leguminosae (fls/pet)	1	
			Linum usitatissimum	1	including fgts
			Linum usitatissimum (caps fgts)	1	

Malus sylvestris	1		Corylus avellana	1	max. size 10 mm
Malva cf. sylvestris	1		fish bone	1	max. size 5 mm
Marrubium vulgare	1		Gramineae	1	
Menyanthes trifoliata	1		gravel	1	max. size 10 mm
Myriophyllum verticillatum/spicatum	1	1	grit	2	
Nepeta cataria	1		Hydrocotyle vulgaris	1	
Nuphar lutea	1		Lamium Section Lamiopsis	1	
ostracods	1		oyster shell fgts	1	max. size 60 mm
Pisidium sp(p). (valves)	1		Plantago major	1	
Plantago major	1		Polygonum aviculare agg.	3	
Polygonum amphibium	1	specimen(s) picked out and tubed	Polygonum persicaria	1	
			Potentilla anserina	1	
			Potentilla sp(p).	1	
Polygonum aviculare agg.	2		Raphanus raphanistrum (pod segs/fgts)	1	
Polygonum hydropiper	2		Rubus fruticosus agg.	1	
Polygonum lapathifolium	1		Rumex sp(p). (inc per)	1	
Potamogeton sp(p).	1		Sambucus nigra	1	
Potentilla cf. erecta	1		sand	2	
pottery	1	max. size 10 mm	sclereids (from bark)	1	
Prunella vulgaris	1		Silene cf. vulgaris	1	
Ranunculus flammula	1		Solanum nigrum	1	
Ranunculus sardous	1		Stellaria media	2	
Ranunculus Section Ranunculus	1		Urtica dioica	2	
Ranunculus Subgenus Batrachium	1		Urtica urens	1	
Rorippa islandica	1		Veronica beccabunga-type	1	
Rumex acetosella agg.	1		wood fgts	2	v. dec., max. size 10 mm
Rumex sp(p). (inc per)	1				
Sagittaria sagittifolia	1				
Salix sp(p). (b)	1				
Sambucus nigra	1		Context 1031		
sand	2		Sample 84/T		
Scorpidium scorpioides	1				
Solanum nigrum	1		?arthropod frass	1	
Sonchus sp(p). (non asper)	1		?daub	1	max. size 30 mm
Stellaria media	1		Aethusa cynapium	1	
Urtica dioica	2		amphibian bone	1	
Urtica urens	2		Atriplex sp(p).	1	
wood fgts	2	v. dec., max. size 10 mm	Avena sp(p).	1	
			bark fgts	2	v. dec., max. size 20 mm
			bone fgts	1	max. size 20 mm
Context 1029			brick/tile	1	max. size 10 mm
Sample 79/T			burnt bone fgts	1	max. size 10 mm
			Calluna vulgaris (ch fls)	1	
Anthemis cotula	2		Calluna vulgaris (sht fgts)	1	
Atriplex sp(p).	1		Carex sp(p).	1	
Avena sp(p).	1		Cenococcum (sclerotia)	1	
beetles	1		cf. Calluna vulgaris (ch rt-tw fgts)	1	
bone fgts	1	max. size 60 mm	cf. Secale cereale	1	
Brassica sp./Sinapis arvensis	1		charcoal	1	max. size 15 mm
burnt bone fgts	1	max. size 10 mm	Chenopodium album	1	
Calluna vulgaris (ch fls)	1		Corylus avellana	1	v. dec., max. size 10 mm
Calluna vulgaris (ch sht fgts)	1				
Capsella bursa-pastoris	1		Eleocharis palustris sl	1	
Carex sp(p).	1		Erica tetralix (ch lvs)	1	
Carex sp(p). (ch)	1		fish bone	1	max. size 5 mm
Cerealialia indet. (chaff)	1		fly puparia	1	
cf. Calluna vulgaris (ch rt-tw fgts)	2		Galeopsis Subgenus Galeopsis	1	
charcoal	2	max. size 10 mm	gravel	1	
charred moss	1		grit	1	
Chenopodium album	1		Juncus cf. gerardi	1	
Chenopodium polyspermum	1		Lophopus crystallinus	1	
Coronopus squamatus (fr)	1		Polygonum aviculare agg.	2	

Potentilla anserina	1		bird bone	1	
Potentilla cf. erecta	1		charcoal	1	max. size 35 mm
Ranunculus cf. sardous	1		gravel	1	max. size 80 mm
Raphanus raphanistrum (pod segs/fgts)	1		mammal bone	1	max. dimension 120 mm
Rumex sp(p).	1		pottery	1	max. size 50 mm
Rumex sp(p). (ch)	1				
Sambucus cf. ebulus	1				
Sambucus nigra	2		Context 1039		
sand	2		Sample 90/T		
sclereids (from bark)	2				
Umbelliferae	1		Agrostemma githago (sf)	1	
Urtica dioica	2		Anthemis cotula	1	
Urtica urens	2		Atriplex sp(p).	1	
wood fgts	1	max. size 5 mm	bark fgts	3	v. dec., max. size 20 mm
			beetles	1	
Sample 1031/BS			bone fgts	1	max. size 20 mm
bark fgts	1	v. dec., max. size 10 mm	Brassica sp./Sinapis arvensis	1	
brick/tile	1	max. size 5 mm	burnt bone fgts	1	max. size 40 mm
burnt bone fgts	1	max. size 15 mm	Carex sp(p).	1	
charcoal	1	max. size 10 mm	charcoal	1	max. size 10 mm
gravel	1	max. size 30 mm	fish bone	1	max. size 5 mm
mammal bone	1	max. size 60 mm	fly puparia	1	
			gravel	1	max. size 10 mm
Context 1033			Linum usitatissimum (caps fgts)	2	
Sample 68/T			Potentilla anserina	1	
Aethusa cynapium	1		Ranunculus Section Ranunculus	1	
Atriplex sp(p).	1		Raphanus raphanistrum (pod segs/fgts)	1	
bark fgts	2	v. dec., max. size 25 mm	Rubus fruticosus agg.	1	
beetles	1		Rumex sp(p).	1	
bone fgts	1	max. size 15 mm	Sambucus nigra	1	
Brassica sp./Sinapis arvensis	1		sand	1	
brick/tile	1	max. size 10 mm	Urtica dioica	1	
Carex sp(p).	1		Urtica urens	1	
cf. Calluna vulgaris (ch rt-tw fgts)	1		wood fgts	1	v. dec., max. size 10 mm
cf. Calluna vulgaris (rt-tw fgts)	1				
charcoal	2	max. size 40 mm	Sample 1039/BS		
Chenopodium album	1		bark fgts	2	
Corylus avellana	1	v. dec., max. size 10 mm	gravel	1	max. size 30 mm
fish bone	1	max. size 5 mm	mammal bone	1	max. size 60 mm
gravel	2	max. size 25 mm	wood fgts	1	
grit	2				
oyster shell fgts	1	max. size 15 mm	Context 1047		
Ranunculus sardous	1		Sample 95/T		
Rumex sp(p).	1		Agrostemma githago (sf)	1	
Sambucus nigra	1		Anthemis cotula	1	
sand	3		Atriplex sp(p).	1	
sclereids (from bark)	2		Avena cf. sativa (spk/fgts)	1	
Stachys sp(p).	1		bark fgts	1	v. dec., max. size 5 mm
Urtica dioica	2		Bilderdykia convolvulus (ff)	1	
wood fgts	1	v. dec., max. size 10 mm	Brassica rapa (sf)	1	
			Brassica sp./Sinapis arvensis (sf)	1	
Sample 1033/BS			Carduus/Cirsium sp(p).	1	
bark fgts	1	max. size 10 mm	Centaurea sp(p). (af)	1	
			Cerealina indet.	1	a single specimen
			cf. Calluna vulgaris (ch rt-tw fgts)	1	

charcoal	1	max. size 5 mm	pottery	1	max. size 30 mm
Chenopodium album	1		root/rootlet fgts	1	
Chenopodium Section Pseudoblitum	1		sand	1	
coal	1		sclereids (from bark)	2	
Coronopus squamatus (fr)	1		Urtica dioica	2	
Corylus avellana	1	max. size 5 mm			
Eleocharis palustris sl	1				
gravel	1	max. size 60 mm	Sample 1052/BS		
Heterodera (cysts)	1				
Hyoscyamus niger	1		bark fgts	1	v. dec.
Polygonum aviculare agg.	1		brick/tile	1	max. size 5 mm
Polygonum hydropiper	1		gravel	1	max. size 20 mm
Polygonum persicaria	1		mammal bone	1	max. size 80 mm
Potentilla sp(p).	1				
Ranunculus sceleratus	1				
Rumex sp(p).	1		Context 2003		
Sambucus nigra (sf)	1		Sample 147/SPT		
sand	2				
Silene vulgaris	1		Agrostemma githago (sf)	1	
Sphagnum sp(p). (lvs)	1		Arctium sp(p).	1	
Stellaria media	1		bone fgts	1	max. size 5 mm
teeth	1		burnt bone fgts	1	max. size 5 mm
Urtica dioica	1		cf. Calluna vulgaris (ch rt-tw fgts)	1	
vivianite	1		gravel	1	max. size 5 mm
			Homalothecium sericeum/lutescens	1	
Sample 1047/BS			Leucodon sciuroides	1	
			Linum usitatissimum	1	
brick/tile	1	max. size 25 mm	Linum usitatissimum (caps fgts)	1	
cobbles	1	max. dimension 150 mm	Linum usitatissimum (sf)	1	
			Linum usitatissimum (stem/epid fgts)	2	
gravel	1		Marrubium vulgare	1	
mammal bone	1	max. size 40 mm	Polygonum hydropiper	1	
			Polygonum lapathifolium	1	
Context 1052			Ranunculus flammula	1	
Sample 117/T			Rumex sp(p). (inc per)	1	
			Sambucus nigra	1	
'ash beads'	1		sand	2	
?burnt peat fgts	1		Spargula arvensis	1	
Atriplex sp(p).	1		Stellaria media	1	
Atropa bella-donna	1		Triticum sp(p).	1	
bark fgts	3	v. dec., max., size 55 mm	Triticum/Secale ('bran' fgts)	1	
			Urtica dioica	1	
Brassica rapa (sf)	1		Urtica urens	1	
Brassica sp./Sinapis arvensis	1		wood fgts	1	max. size 10 mm
brick/tile	1	max. size 5 mm			
Calluna vulgaris (caps)	1		Context 2004		
Calluna vulgaris (ch sht fgts)	1		Sample 132/SPT		
Calluna vulgaris (sht tips)	1				
Carex sp(p).	1		Linum usitatissimum (stem/epid fgts)	3	
cf. Avena sp(p). (chaff)	1				
cf. Calluna vulgaris (ch rt-tw fgts)	1				
charcoal	1	max. size 15 mm	Context 2005		
charred rhizome/root fgts	1		Sample 136/SPT		
Chenopodium album	1				
Conium maculatum (mf)	1		Linum usitatissimum (caps fgts)	1	
Corylus avellana	1	max. size 10 mm	Linum usitatissimum (stem/epid fgts)	3	
Corylus avellana (ch)	1	max. size 10 mm	Linum usitatissimum (stem/epid fgts)	3	
fish bone	1				
gravel	1	max. size 15 mm	Sample 137/SPT		
Polygonum aviculare agg.	1				
Potentilla cf. erecta	1		Linum usitatissimum (stem/epid fgts)	3	

Context 2006			Polygonum hydropiper	1	
Sample 2006/BS			Polygonum persicaria	1	
			Potamogeton sp(p).	1	
Agrimonia eupatoria	1		Potentilla anserina	1	
Agrostemma githago (sf)	1		Potentilla cf. erecta	1	
Alisma sp(p).	1		pottery	1	max. size 40 mm
Anthemis cotula	1		Prunus domestica ssp. insititia	1	
Antitrichia curtipendula	1		Prunus spinosa	1	
Apium nodiflorum	1		Prunus spinosa (ch)	1	
Arctium sp(p).	1		Ranunculus flammula	1	
Arctium sp(p). (inv br/hooks)	1		Ranunculus sceleratus	1	
Bilderdykia convolvulus	1		Ranunculus Section Ranunculus	1	
bivalve periostracum	1		Ranunculus Subgenus Batrachium	1	
Brassica sp(p).	1		root/rhizome fgts (ch)	1	
brick/tile	1	max. size 35 mm	Rumex acetosella agg.	1	
			Rumex cf. maritimus	1	
Calluna vulgaris (caps)	1		Rumex sp(p).	1	
Calluna vulgaris (sht fgts)	1		Rumex sp(p). (inc per)	1	
Carduus/Cirsium sp(p).	1		Sagittaria sagittifolia	1	
Carex sp(p).	1		Sambucus nigra	1	
cf. Calluna vulgaris (ch rt-tw fgts)	1		Scandix pecten-veneris	1	
charcoal	1	max. size 30 mm	snails	1	fragment(s) only
Chenopodium album	1		Spergula arvensis	1	
Chenopodium murale	1		Stellaria media	1	
Chrysanthemum segetum (af)	1		Triticum/Secale ('bran' fgts)	1	
cobbles	1	max. size 100 mm	Urtica dioica	2	
			Urtica urens	1	
Conium maculatum	1		wood chips	1	max. size 10 mm
Coronopus squamatus (fr)	1		wood fgts	1	max. size 30 mm
Corylus avellana	1	max. size 10 mm			
Cristatella (statoblasts)	1		Context 2013		
Daphnia (ephippia)	1		Sample 2013/BS		
dicot lf fgts	1		brick/tile	1	max. size 35 mm
dicot stem fgts	1		charcoal	1	max. size 5 mm
Dicranum sp(p).	1		freshwater mussel shell fgts	1	
Dipsacus sativus/fullonum	1	fragment(s) only	gravel	1	max. size 30 mm
Eleocharis palustris sl	1		mammal bone	1	max. size 200 mm
Eurhynchium sp(p).	1				
fish scale	1		oyster shell fgts	1	
Gramineae	1		pottery	1	max. size 60 mm
Hylocomium splendens	1		wood fgts	1	v. dec., max. size 10 mm
Hyoscyamus niger	1				
Hypnum cf. cupressiforme	1		Context 2023		
Juncus bufonius	1		Sample 206/T		
Juncus sp(p).	1		?burnt peat fgts	1	max. size 2 mm
Lamium Section Lamiopsis	1		Anthemis cotula	1	
Leguminosae (fls/pet)	1		Atriplex sp(p).	1	
Leucobryum glaucum	1		bark fgts	3	max. size 20 mm
Linum usitatissimum	2		beetles	1	
Linum usitatissimum (caps fgts)	2		Bilderdykia convolvulus	1	
Malus sylvestris (endo)	1		bone fgts	1	max. size 20 mm
Malva cf. sylvestris	1	fragment(s) only	brick/tile	1	max. size 2 mm
mammal bone	1	max. size 70 mm	Calluna vulgaris (fls)	1	
Marrubium vulgare	1		Carex sp(p).	1	
Neckera complanata	1		cf. Calluna vulgaris (ch rt-tw fgts)	2	
Nepeta cataria	1		cf. Calluna vulgaris (rt-tw fgts)	1	
Nuphar lutea	1		cf. Pteridium aquilinum (stalk fgts)	1	
Nymphaea alba	1		charcoal	2	max. size 15 mm
Oenanthe fluviatilis	1		charred herbaceous detritus	1	
Onopordum acanthium	1				
oyster shell fgts	1				
Plantago major	1				
Polygonum aviculare agg.	1				

charred moss	1		fly puparia	1	
Chenopodium album	1		Gramineae	2	
Corylus avellana	1	max. size 5 mm	gravel	1	max. size 15 mm
Daphnia (ephippia)	1		Hyoscyamus niger	1	
Diphasium complanatum	1	v. dec.	Juncus sp(p).	1	
Erica tetralix (ch lvs)	1		Lapsana communis	1	
fish bone	1	max. size 15 mm	Linum usitatissimum (caps fgts)	1	
fly puparia	1		Neckera complanata	1	
gravel	1	max. size 10 mm	Polygonum aviculare agg.	1	
grit	2		Polygonum hydropiper	1	
Juncus sp(p).	1		Quercus sp(p). (b/bs)	1	
Linum usitatissimum	1		Ranunculus sardous	1	
Linum usitatissimum (caps fgts)	1		Ranunculus sceleratus	1	
Plantago major	1		Ranunculus Section Ranunculus	1	
Polygonum aviculare agg.	1		Rumex sp(p).	1	
Potentilla anserina	1		Sambucus nigra (ch)	1	
Quercus sp(p). (b/bs)	1		sand	1	
Ranunculus sardous	2		Scirpus maritimus/lacustris	1	
Ranunculus Section Ranunculus	1		Scorpidium scorpioides	1	
Raphanus raphanistrum			snails	1	
(pod segs/fgts)	1		Solanum nigrum	1	
root/rootlet fgts	2		Sonchus oleraceus	1	
Rumex sp(p).	1		twig fgts	1	
Sambucus nigra	1		Urtica dioica	1	
sand	2		Urtica urens	1	
Scirpus cf. maritimus	1		Veronica beccabunga-type	1	
Scleranthus annuus	1		Context 2037		
sclereids (from bark)	1		Sample 2037/BS		
Sonchus asper	1				
Urtica dioica	1		brick/tile	1	max. size 30 mm
Urtica urens	1		charcoal	1	max. size 15 mm
wood fgts	2	max. size 30 mm	cobbles	2	max. dimension 130 mm
			gravel	2	
Context 2030			mammal bone	1	
Sample 286/SPT					
Calluna vulgaris (rt-tw fgts)	2	max. length 40 mm x width 10 mm	Context 2038		
Calluna vulgaris (sht fgts)	2		Sample 2038/BS		
vivianite	1		Agrostemma githago (sf)	1	
			Atriplex sp(p).	1	
Sample 286/T			beetles	1	
Anthemis cotula	1		bone fgts	1	max. size 40 mm
bast fgts	1		brick/tile	1	max. size 35 mm
brick/tile	1	max. size 5 mm	burnt bone fgts	1	max. size 10 mm
Calluna vulgaris (fls)	1		Calluna vulgaris (b)	1	
Calluna vulgaris (lvs)	1		Carduus/Cirsium sp(p).	1	
Calluna vulgaris (rt-tw fgts)	2		cf. Calluna vulgaris (rt-tw fgts)	1	
Calluna vulgaris (sht fgts)	2		Chenopodium album	1	
Carex sp(p).	1		Chenopodium murale	1	
Cerastium sp(p).	1		Corylus avellana	1	max. size 5 mm
cf. Campylium sp(p).	1		Erica tetralix (lvs)	1	
cf. Diphasium sp(p).	1		fly puparia	1	
cf. Pseudoscleropodium purum	1		Galeopsis Subgenus Galeopsis	1	
Chenopodium album	1		gravel	1	max. size 55 mm
concretions	1	max. size 5 mm	herbaceous detritus	1	
Coronopus squamatus (fr)	1		Hypochoeris sp(p).	1	
dicot lf fgts	1		Neckera complanata	1	
earthworm egg caps	1		Polygonum hydropiper	2	
			Polygonum lapathifolium	1	
			Polygonum persicaria	2	
			Potentilla anserina	1	

Prunus Section Cerasus	1		Coronopus squamatus (fr)	1	
Ranunculus sardous	1		Corylus avellana	1	max. size 15 mm
Ranunculus sceleratus	2		Crataegus sp./Prunus spinosa (thorns)	1	
Ranunculus Section Ranunculus	1		Daucus carota	1	
Rumex sp(p).	1		dicot lf fgts	1	
Salix sp(p). (b)	2		dicot stem fgts	1	
Sambucus nigra	1		Diphysium complanatum	2	v. dec.
Stellaria media	2		Erica tetralix (lvs)	1	
twig fgts	1		Eurhynchium praelongum	1	
Urtica dioica	2		Eurhynchium striatum	1	
Urtica urens	2		gravel	1	max. size 15 mm
Viola sp(p).	1		grit	2	
wood chips	1		Homalothecium sericeum/lutescens	1	
wood fgts	1	max. size 10 mm	Hordeum sp(p).	1	a single specimen
			Hylocomium splendens	1	
Context 2065			Hypnum cf. cupressiforme	1	
Sample 2065/BS			Isothecium myosuroides	1	
			Isothecium myurum	1	
bird bone	1	max. size 40 mm	Juncus sp(p).	1	
brick/tile	1	max. size 15 mm	Lamium Section Lamiopsis	1	
charcoal	1	max. size 15 mm	Lapsana communis	1	
gravel	1	max. size 50 mm	leather fgts	1	max. size 2 mm
mammal bone	1	max. dimension 130 mm	Leguminosae (fls/pet)	1	
			Leucobryum glaucum	1	
oyster shell fgts	1	max. size 30 mm	Linum usitatissimum (caps fgts)	1	
wood fgts	1	max. size 50 mm	Linum usitatissimum (sf)	1	
			Malus sylvestris (endo)	1	
Context 2087			Neckera complanata	1	
Sample 2087/BS			Neckera crispa	1	
			Polygonum aviculare agg.	1	
bone fgts	1	max. size 30 mm	Polygonum hydropiper	1	
brick/tile	1	max. size 60 mm	Polygonum lapathifolium	1	
burnt bone fgts	1	max. size 15 mm	Polygonum persicaria	1	
herbaceous detritus	1		Potentilla anserina	1	
oyster shell fgts	1	max. size 15 mm	Ranunculus sardous	2	
pebbles	1	max. size 80 mm	Rubus fruticosus agg.	1	
pottery	1	max. size 20 mm	Rumex sp(p). (inc per)	1	
			Salix sp(p). (b)	1	
			Sambucus nigra	1	
			sand	1	
Context 2131			Scandix pecten-veneris	1	
Sample 280/T			sclereids (from bark)	3	
Aethusa cynapium	1		Scorpidium scorpioides	1	
Agrostemma githago (sf)	1		Sonchus asper	1	
Anthemis cotula	1		Sphagnum sp(p).	1	
Atriplex sp(p).	1		Stellaria media	1	
Aulacomnium palustre	1		Triticum/Secale ('bran' fgts)	1	
bark fgts	4	max. size 20 mm	Ulotia sp(p).	1	
beetles	1		Urtica dioica	2	
Betula sp(p).	1		Urtica urens	2	
bone fgts	1	max. size 20 mm	wood chips	1	max. size 10 mm
Brassica sp./Sinapis arvensis	1		wood fgts	1	max. size 10 mm
Calluna vulgaris (b)	1				
Calluna vulgaris (caps)	1		Context 2160		
Calluna vulgaris (fls)	2		Sample 287/T		
Calluna vulgaris (sht fgts)	1				
Carduus/Cirsium sp(p).	1		Agrimonia eupatoria (ch)	1	
Carex sp(p).	1		Agrostemma githago (ch sf)	1	
cf. Calluna vulgaris (ch rt-tw fgts)	1		Anthemis cotula (ch)	1	
charcoal	1	max. size 10 mm	Atriplex sp(p).	1	
Chenopodium album	1		Aulacomnium palustre	1	
Chenopodium murale	1				

bark fgts	1	max. size 10 mm	cf. Glyceria sp(p).	1	
bone fgts	1	max. size 10 mm	charcoal	3	max. size 20 mm
brick/tile	1	max. size 10 mm	charred herbaceous detritus	1	
burnt bone fgts	1	max. size 10 mm	charred moss	1	
Carex sp(p).	1		charred rhizome/root fgts	1	
Carex sp(p). (ch)	1		Coronopus squamatus	1	
cf. Calluna vulgaris (ch rt-tw fgts)	1		Corylus avellana	1	v. dec., max. size 5 mm
charcoal	3	max. size 30 mm			
charred herbaceous detritus	1		Descurainia sophia	1	
Chenopodium album	2		dicot stem fgts	1	
Chenopodium murale	1		Dicranum sp(p).	1	
Cladium mariscus (ch lf fgts)	2		Diphasium complanatum	1	v. dec.
Cladium mariscus (ch)	1		Erica tetralix (lvs)	1	
Coronopus squamatus (fr)	1		Eurhynchium sp(p).	1	
Corylus avellana	1	max. size 10 mm	Eurhynchium striatum	1	
Eurhynchium cf. striatum	1		fly puparia	1	
fish bone	1	max. size 4 mm	Galeopsis Subgenus Galeopsis	1	
Gramineae/Cerealia (ch c/n)	1		Gramineae/Cerealia (ch c/n)	1	
Gramineae/Cerealia (ch culm fgts)	1		gravel	1	max. size 15 mm
gravel	2	max. size 15 mm	Homalothecium sericeum/lutescens	1	
Homalothecium sericeum/lutescens	1		Hylocomium splendens	1	
Hypnum cf. cupressiforme	1		Hypnum cf. cupressiforme	1	
Neckera complanata	1		Isothecium myurum	1	
Polygonum hydropiper	1		Juncus cf. bufonius	1	
Polygonum persicaria	1		Lapsana communis	1	
Potentilla cf. erecta	1		Leguminosae (pods/fgts)	1	
Raphanus raphanistrum (pod segs/fgts)	1		Linum usitatissimum	1	
Sambucus nigra	1		Linum usitatissimum (caps fgts)	1	
sand	2		Neckera complanata	1	
Silene vulgaris (ch)	1		Pleurozium schreberi	1	
Sonchus asper	1				
Sonchus oleraceus	1		Polygonum aviculare agg.	1	
Thuidium cf. tamariscinum	1		Polygonum hydropiper	1	
Urtica dioica	2		Polygonum lapathifolium	1	
Urtica urens	2		Potentilla cf. reptans	1	
			Pseudoscleropodium purum	1	
Context 2178			Quercus (charcoal)	1	
Sample 292/T			Quercus sp(p). (b/bs)	1	
			Ranunculus sardous	1	
Aethusa cynapium	1		Raphanus raphanistrum (pod segs/fgts)	1	
Agrostemma githago	1		root bark/epidermis fgts	1	
Agrostemma githago (sf)	1		Rubus fruticosus agg.	1	
Anthemis cotula	1		Rumex sp(p). (inc per)	1	
Antitrichia curtipendula	1		Sambucus nigra	1	
Atriplex sp(p).	2		sand	1	
Aulacomnium palustre	1		Scandix pecten-veneris	1	
bark fgts	2	v. dec., max. size 15 mm	sclereids (from bark)	2	
beetles	1		Scorpidium scorpioides	1	
bone fgts	1	max. size 25 mm	Sonchus asper	1	
Brassica rapa	1		Sonchus oleraceus	1	
Brassica sp(p).	1		Thuidium cf. tamariscinum	1	
brick/tile	1	max. size 2 mm	Triglochin maritima	1	
Calliargon cuspidatum	1		Triticum/Secale ('bran' fgts)	1	
Calluna vulgaris (fls)	1		Ulota sp(p).	1	
Calluna vulgaris (rt-tw fgts)	1		Urtica dioica	2	
Calluna vulgaris (sht fgts)	1		Urtica urens	2	
Campylium stellatum	1		wood chips	1	
Carex sp(p).	1		wood fgts	2	v. dec., max. size 20 mm
Carex sp(p). (ch stem fgts)	1				
cf. Calluna vulgaris (ch rt-tw fgts)	1				
cf. Cladium mariscus (ch lf fgts)	1				

Context 2189			Raphanus raphanistrum (pod segs/fgts)	1	
Sample 296/T			Rubus fruticosus agg.	1	
Agrostemma githago (sf)	1		Rumex sp(p).	1	
Anagallis arvensis	1		Sambucus nigra	1	
Atriplex sp(p).	1		Sambucus nigra (ch)	1	
bark fgts	3	v. dec., max. size 25 mm	sand	2	
beetles	1		sclereids (from bark)	1	
bone fgts	1	max. size 30 mm	Scorpidium scorpioides	1	
brick/tile	1	max. size 15 mm	snails	1	
Calluna vulgaris (b)	1		Sonchus asper	1	
Calluna vulgaris (caps)	1		Sonchus oleraceus	1	
Calluna vulgaris (fls)	1		Sphagnum sp(p). (lvs)	1	
Calluna vulgaris (s)	1		Stellaria media	1	
Calluna vulgaris (sht fgts)	1		Thuidium cf. tamariscinum	1	
Carduus/Cirsium sp(p).	1		Urtica dioica	2	
Carex sp(p).	1		Urtica urens	2	
cf. Anagallis arvensis	1		Veronica beccabunga-type	2	
cf. Calluna vulgaris (rt-tw fgts)	1		Viola sp(p).	1	
charcoal	1	max. size 15 mm	wood chips	1	max. size 3 mm
Chenopodium album	1		wood fgts	1	max. size 5 mm
Chenopodium murale	1				
Conium maculatum (mf)	1		Context 2191		
Coronopus squamatus	1		Sample 311/T		
Coronopus squamatus (fr)	1		bark fgts	2	v. dec., max. size 20 mm
Corylus avellana	1	max. size 10 mm	beetles	1	
dicot lf fgts	1		brick/tile	1	max. size 10 mm
dicot stem fgts	1		burnt bone fgts	1	max. size 5 mm
Diphysium complanatum	1	v. dec.	Carduus/Cirsium sp(p).	1	
eggshell fgts	1	max. size 5 mm	Carex sp(p).	1	
Eleocharis palustris sl	1		cf. Calluna vulgaris (rt-tw fgts)	1	
Erica cinerea (lvs)	1		cf. Rorippa islandica	1	
Eurhynchium striatum	1		charcoal	1	max. size 5 mm
fish bone	1	max. size 10 mm	Coronopus squamatus (fr)	1	
Gramineae	2		Corylus avellana	1	max. size 10 mm
gravel	1	max. size 15 mm	eggshell membrane fgts	1	
grit	1		fish bone	1	max. size 10 mm
Homalothecium sericeum/lutescens	1		freshwater snails	1	
Hylocomium splendens	1		Galeopsis Subgenus Galeopsis	1	
Isothecium myosuroides	1		gravel	1	max. size 20 mm
Isothecium myurum	1		grit	1	
Juncus sp(p).	2		Isothecium myurum	1	
leaf ab pads	1		leather fgts	1	max. size 5 mm
leather fgts	1	max. size 10 mm	Neckera complanata	1	
Leontodon sp(p).	1		oyster shell fgts	1	
Linum usitatissimum (caps fgts)	1		Polygonum hydropiper	1	
Linum usitatissimum (sf)	1		Polygonum lapathifolium	2	
Neckera complanata	1		Polygonum persicaria	2	
Plantago major	1		Ranunculus sceleratus	1	
Polygonum aviculare agg.	2		Raphanus raphanistrum (pod segs/fgts)	1	
Polygonum hydropiper	2		Rubus fruticosus agg.	1	
Polygonum lapathifolium	1		Rumex sp(p).	1	
Polygonum persicaria	2		Sambucus nigra	1	
Polytrichum sp(p).	1		sand	2	
Potentilla anserina	1		sclereids (from bark)	1	
Potentilla cf. erecta	1		Scorpidium scorpioides	1	
Prunella vulgaris	1		snails	1	a single specimen
Prunus spinosa (thorns)	1		Sonchus asper	1	
Quercus sp(p). (b/bs)	1		Sonchus oleraceus	1	
Ranunculus sardous	1		Stellaria media	1	
Ranunculus sceleratus	1				
Ranunculus Section Ranunculus	1				

Thuidium cf. tamariscinum	1	
Urtica dioica	2	
Urtica urens	3	
Veronica beccabunga-type	1	
wood chips	1	max. size 10 mm
wood fgts	1	v. dec., max. size 10 mm

Context 3005
Sample 3005/BS

bone fgts	1	max. size 70 mm
brick/tile	2	max. size 70 mm
charcoal	1	max. size 5 mm
gravel	1	max. size 50 mm
pottery	1	max. size 50 mm

Context 3006
Sample 3006/BS

bone fgts	1	max. size 25 mm
brick/tile	1	max. size 35 mm
burnt bone fgts	1	max. size 30 mm
cf. Calluna vulgaris (ch rt-tw fgts)	1	max. size 15 mm
gravel	1	max. size 45 mm
Sambucus nigra	1	

Context 3007
Sample 3007/BS

brick/tile	1	max. size 80 mm
charcoal	1	max. size 15 mm
gravel	1	max. size 50 mm
mammal bone	1	max. size 100

pottery	1	max. size 30 mm
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Context 3067
Sample 3067/BS

brick/tile	1	max. size 70 mm
burnt bone fgts	1	max. size 10 mm
charcoal	1	max. size 5 mm
cinders	1	max. size 20 mm
coal	1	max. size 25 mm
gravel	1	max. size 25 mm
mammal bone	1	max. size 30 mm
pottery	1	max. size 80 mm

Context 3069
Sample 160/T

Alisma sp(p).	1	'embryos' only
brick/tile	2	max. size 40 mm
charcoal	2	max. size 15 mm
cinders	1	max. size 5 mm
coal	1	max. size 5 mm

fish bone	1	
fish scale	1	
Juncus sp(p).	1	
Lemna sp(p). (fronds)	1	
pottery	1	max. size 15 mm
sand	2	

Sample 3069/BS

bone fgts	1	
brick/tile	1	max. size 100 mm
charcoal	1	max. size 10 mm
cobbles	1	max. size 80 mm
gravel	1	max. size 30 mm
otoliths	1	
oyster shell fgts	1	
pottery	1	max. size 40 mm

Context 3077
Sample 156/T

'char'	1	max. size 1 mm
Agrostemma githago (min casts/moulds)	1	
Bilderdykia convolvulus (min)	1	
bone fgts	1	
Brassica sp./Sinapis arvensis (min cot)	1	
brick/tile	1	max. size 50 mm
Cerealia indet. (min)	1	
cf. Cannabis sativa (min)	1	a single specimen
cf. Prunus sp(p). (min s)	1	
charcoal	1	max. size 5 mm
faecal concretions	3	max. size 30 mm
fish bone	1	m
fly puparia (min)	1	m
Heterodera (cysts)	1	
Malus sylvestris (min)	1	
Prunus sp(p). (min meso+endo)	1	
rat-tailed maggot (min fgts)	2	
sand	1	

Sample 3077/BS

amphibian bone	1	
brick/tile	1	max. size 65 mm
faecal concretions	2	max. size 30 mm

Context 3078
Sample 3078/BS

amphibian bone	1	
brick/tile	1	max. size 40 mm
charcoal	1	max. size 5 mm
fish bone	1	
gravel	1	max. size 50 mm
mammal bone	1	
pottery	1	max. size 25 mm

Context 3082
Sample 3082/BS

bone fgts	1	max. size 80 mm
brick/tile	2	max. dimension 130 mm
charcoal	1	max. size 5 mm
gravel	1	max. size 70 mm
pottery	1	max. size 60 mm

Context 3100
Sample 3100/BS

bone fgts	1	max. size 80 mm
brick/tile	1	max. size 40 mm
burnt bone fgts	1	max. size 25 mm
charcoal	1	max. size 10 mm
gravel	1	max. size 50 mm
pottery	1	max. size 60 mm

Context 3169
Sample 183/T

bird bone	1	
brick/tile	1	
charcoal	1	max. size 5 mm
fish bone	1	
gravel	1	max. size 50 mm
mammal bone	1	max. size 50 mm
pottery	1	max. size 40 mm

Sample 184/T

bone fgts	1	max. size 15 mm
brick/tile	2	max. size 25 mm
charcoal	2	max. size 15 mm
concreted sediment	2	
gravel	2	max. size 40 mm
pottery	1	max. size 15 mm
Sambucus nigra	1	
sand	2	

Context 3178
Sample 185/T

Alisma sp(p).	1	'embryos' only
bone fgts	1	max. size 50 mm
brick/tile	3	max. size 30 mm
burnt bone fgts	1	max. size 10 mm
charcoal	2	max. size 30 mm
coal	1	max. size 10 mm
Coniferae (charcoal)	1	max. size 10 mm
Fe object(s)	1	
gravel	2	max. size 30 mm
Lemna sp(p). (fronds)	1	
pottery	1	max. size 25 mm
sand	2	

Sample 3178/BS

?burnt peat fgts	1	max. size 10 mm
bird bone	1	max. size 50 mm
brick/tile	1	
burnt bone fgts	1	max. size 15 mm
burnt oyster shell fgts	1	max. size 15 mm
charcoal	1	max. size 10 mm
gravel	1	
mammal bone	1	
pottery	1	max. size 60 mm

Context 1032/1033
Sample 85/T

'ash beads'	1	
bark fgts	3	max. size 25 mm
bast fgts	1	
bone fgts	1	max. size 30 mm
brick/tile	1	max. size 15 mm
burnt bone fgts	1	max. size 10 mm
Carex sp(p).	1	
cf. Calluna vulgaris (ch rt-tw fgts)	1	
charcoal	1	max. size 20 mm
Chenopodium cf. polyspermum	1	
grit	1	
sand	1	

Context 999
Sample 271/T

Anthemis cotula	1	
Anthemis cotula (ch)	1	
bark fgts	4	max. size 60 mm
bast fgts	3	max. size 5 mm
buds	1	
Calluna vulgaris (caps)	1	fragment(s) only
cf. Calluna vulgaris (ch rt-tw fgts)	1	
charcoal	1	max. size 10 mm
Eleocharis palustris sl	1	
Gramineae/Cerealia (ch culm fgts)	1	
grit	1	
Isothecium myosuroides	1	
Isothecium myurum	1	
monocot lf/stem fgts	1	
Neckera crispa	1	
root/rootlet fgts	1	
Rumex sp(p).	1	
sclereids (from bark)	1	
Urtica dioica	2	
Urtica urens	1	
wood fgts	1	max. size 30 mm

Table 9. Lists of macroinvertebrates recovered from deposits at Layerthorpe Bridge, York. ReM—recording method (N = non-quantitative; R = rapid-scan, sensu Kenward 1992). The data columns are, firstly number of individuals, secondly a code for quantification (- = count, s = several, m = many, sensu Kenward et al. 1986). Ecological codes are those listed in Table 11. In each list adult Coleoptera and Hemiptera are listed in rank order, followed by other invertebrate groups.

Context: 6 Sample: 4/SPT CA: ? ReM: N Weight: 0.00 E: 0.00 F: 0.00		Xylodromus concinnus	1	-	rt-st
		Platystethus arenarius	1	-	rf
		Anotylus nitidulus	1	-	rt-d
Agonum sp.	1	-	oa		
		Anotylus sculpturatus group	1	-	rt
		Anotylus tetracarinus	1	-	rt
		Oxytelus sculptus	1	-	rt-st
Context: 14 Sample: 48/T ReM: R Weight: 2.00 E: 0.00 F: 0.00		Lathrobium sp.	1	-	u
		Neobisnius sp.	1	-	u
		Philonthus sp. A	1	-	u
		Philonthus sp. B	1	-	u
Trox scaber	6	s	rt-sf		
Pterostichus sp.	1	-	ob		
Cercyon sp.	1	-	u		
Elateridae sp.	1	-	ob		
Anobium punctatum	1	-	l-sf		
Chrysomelinae sp.	1	-	oa-p		
Curculionidae sp.	1	-	oa		
*Daphnia sp. (ephippium)	1	-	oa-w		
*Diptera sp. (puparium)	1	-	u		
		Cordalia obscura	1	-	rt-sf
		Aleocharinae sp.	1	-	u
		Aphodius ?prodromus	1	-	ob-rf
		Oxyomus sylvestris	1	-	rt-sf
		?Elateridae sp.	1	-	ob
		Elateridae sp.	1	-	ob
		Anobium punctatum	1	-	l-sf
		Cryptophagus sp.	1	-	rd-sf
		Atomaria sp.	1	-	rd
		Corticarina sp.	1	-	rt
		Apion sp.	1	-	oa-p
		Curculionidae sp.	1	-	oa
		*Coleoptera sp. (larva)	15	m	u
		*Acarina sp.	6	s	u
		*Daphnia sp. (ephippium)	6	s	oa-w
		*Insecta sp. pupa	6	s	u
		*Insecta sp. (larva)	3	-	u
		*Sepsidae sp. (puparium)	1	-	u
		*Sphaeroceridae sp. (puparium)	1	-	rt
		*Diptera sp. (puparium)	1	-	u
Context: 15 Sample: 49/T ReM: R Weight: 1.00 E: 0.00 F: 0.00					
Aphodius sp.	2	-	ob-rf		
Helophorus sp.	1	-	oa-w		
Cercyon sp.	1	-	u		
Aleocharinae sp.	1	-	u		
*?Heterodera sp. (cyst)	2	-	u		
*Coleoptera sp. (larva)	1	-	u		
*Acarina sp.	1	-	u		
Context: 16 Sample: 52/T ReM: R Weight: 1.00 E: 0.00 F: 0.00					
Trox scaber	6	s	rt-sf		
Lathridius minutus group	3	-	rd-st		
Cercyon analis	2	-	rt-sf		
Cercyon haemorrhoidalis	2	-	rf-sf		
Acritus nigricornis	2	-	rt-st		
Coprophilus striatulus	2	-	rt-st		
Gyrophypnus ?fracticornis	2	-	rt-st		
Aphodius sp.	2	-	ob-rf		
Heteroptera sp.	1	-	u		
Hemiptera sp.	1	-	u		
Trechus obtusus or quadristriatus	1	-	oa		
Trechus micros	1	-	u		
Bembidion sp.	1	-	oa		
Agonum sp.	1	-	oa		
Carabidae sp.	1	-	ob		
Sphaeridium ?bipustulatum	1	-	rf		
Cercyon atricapillus	1	-	rf-st		
Megasternum obscurum	1	-	rt		
Context: 18 Sample: 41/T ReM: R Weight: 2.00 E: 0.00 F: 0.00					
		Ochthebius sp.	15	m	oa-w
		Aleocharinae sp.	15	m	u
		Hydroporinae sp.	6	s	oa-w
		Cercyon haemorrhoidalis	6	s	rf-sf
		Cercyon sp. C	6	s	u
		Megasternum obscurum	6	s	rt
		Phaedon sp.	6	s	oa-p
		Helophorus sp. A	2	-	oa-w
		Helophorus sp. B	2	-	oa-w
		Hydrobius fuscipes	2	-	oa-w
		Limnebius sp.	2	-	oa-w
		Ptiliidae sp.	2	-	u
		Anotylus nitidulus	2	-	rt-d
		Anotylus rugosus	2	-	rt
		Atomaria sp. B	2	-	rd
		Drymus sp.	1	-	oa-p
		Anthocoris sp.	1	-	oa-p
		Saldidae sp.	1	-	oa-d

?Loricera pilicornis	1	-	oa	*Acarina sp.	15	m	u
Clivina fossor	1	-	oa	*Daphnia sp. (ephippium)	15	m	oa-w
Bembidion (Philochthus) sp.	1	-	oa	*Oligochaeta sp. (egg capsule)	15	m	u
Bembidion sp. A	1	-	oa	*Diptera sp. (larva)	15	m	u
Bembidion sp. B	1	-	oa	*Diptera sp. (puparium)	15	m	u
Pterostichus sp.	1	-	ob	*Insecta sp. pupa	15	m	u
Amara sp. A	1	-	oa	*Araneae sp.	6	s	u
Amara sp. B	1	-	oa	*Ostracoda sp.	6	s	u
?Bradycellus sp.	1	-	oa	*Aphidoidea sp.	1	-	u
Chlaenius sp.	1	-	u	*Formicidae sp.	1	-	u
Colymbetes fuscus	1	-	oa-w				
Dytiscidae sp.	1	-	oa-w				
Cercyon ?terminatus	1	-	rf-st	Context: 19 Sample: 45/T ReM: R			
Cercyon sp. A	1	-	u	Weight: 2.00 E: 0.00 F: 0.00			
Cercyon sp. B	1	-	u				
Anacaena sp.	1	-	oa-w	Aleocharinae sp.	15	m	u
Hydrophilinae sp.	1	-	oa-w	Hemiptera sp.	6	s	u
Acidota crenata	1	-	oa	Helophorus sp. A	6	s	oa-w
Carpelimus ?rivarialis	1	-	ob-d	Helophorus sp. B	6	s	oa-w
Carpelimus sp.	1	-	u	Staphylininae sp.	6	s	u
Platystethus cornutus group	1	-	oa-d	Ochthebius sp.	2	-	oa-w
Platystethus nitens	1	-	oa-d	Carpelimus sp.	2	-	u
Anotylus sculpturatus group	1	-	rt	Lathridius minutus group	2	-	rd-st
Stenus sp. A	1	-	u	Saldidae sp.	1	-	oa-d
Stenus sp. B	1	-	u	Clivina sp.	1	-	oa
Gyrophypnus fracticornis	1	-	rt-st	Trechus obtusus or quadristriatus	1	-	oa
Gyrophypnus punctulatus	1	-	rt-st	Bembidion (Philochthus) sp.	1	-	oa
Xantholinus linearis or longiventris	1	-	rt-sf	Bembidion sp.	1	-	oa
Philonthus sp. A	1	-	u	Bembidion sp. B	1	-	oa
Philonthus sp. B	1	-	u	Pterostichus melanarius	1	-	ob
Philonthus sp. C	1	-	u	Agonum sp.	1	-	oa
Gabrius sp.	1	-	rt	Amara sp.	1	-	oa
Tachyporus sp. A	1	-	u	?Harpalus sp.	1	-	oa
Tachyporus sp. B	1	-	u	Metabletus sp.	1	-	oa
Pselaphidae sp.	1	-	u	Haliplidae sp.	1	-	oa-w
Aphodius ?prodromus	1	-	ob-rf	Agabus or Ilybius sp.	1	-	oa-w
Aphodius sp.	1	-	ob-rf	Helophorus sp. C	1	-	oa-w
Anobium punctatum	1	-	l-sf	Cercyon analis	1	-	rt-sf
Meligethes sp.	1	-	oa-p	Cercyon atricapillus	1	-	rf-st
Cryptophagus ?scutellatus	1	-	rd-st	Cercyon sp.	1	-	u
Cryptophagus sp.	1	-	rd-sf	Hydrobius fuscipes	1	-	oa-w
Atomaria sp. A	1	-	rd	Lesteva sp.	1	-	oa-d
Orthoperus sp.	1	-	rt	Omalium sp.	1	-	rt
Coccinellidae sp.	1	-	oa-p	Xylodromus concinnus	1	-	rt-st
Lathridius minutus group	1	-	rd-st	Aploderus caelatus	1	-	rt
Corticaria sp.	1	-	rt-sf	Platystethus nitens	1	-	oa-d
Corticarina sp.	1	-	rt	Anotylus nitidulus	1	-	rt-d
Bruchinae sp.	1	-	u	Anotylus rugosus	1	-	rt
Donaciinae sp.	1	-	oa-w-	Anotylus sculpturatus group	1	-	rt
p				Anotylus tetracarinated	1	-	rt
Chrysomelinae sp.	1	-	oa-p	Stenus sp.	1	-	u
Phyllotreta nemorum group	1	-	oa-p	Gyrophypnus fracticornis	1	-	rt-st
Halticinae sp.	1	-	oa-p	Philonthus sp.	1	-	u
Apion sp.	1	-	oa-p	Tachyporus sp.	1	-	u
Tanysphyrus lemnae	1	-	oa-w-	Tachyporus sp. B	1	-	u
p				Tachyporus sp. C	1	-	u
Bagous sp.	1	-	oa-w	Tachinus sp.	1	-	u
?Notaris acridulus	1	-	oa-d-	Aleochara sp.	1	-	u
p				Aphodius ?granarius	1	-	ob-rf
Ceutorhynchus ?contractus	1	-	oa-p	Aphodius sp. A	1	-	ob-rf
Scolytidae sp.	1	-	l	Aphodius sp. B	1	-	ob-rf
*Opiliones sp.	15	m	u	Cyphon sp.	1	-	oa-d
*Coleoptera sp. (larva)	15	m	u	Anobium punctatum	1	-	l-sf

Tipnus unicolor	1	-	rd-st
Ptinus fur	1	-	rd-sf
Meligethes sp.	1	-	oa-p
Oryzaephilus surinamensis	1	-	g-ss
Atomaria sp.	1	-	rd
Corticaria sp.	1	-	rt-sf
Corticarina fuscata	1	-	rt
Donaciinae sp.	1	-	oa-w-
p			
Phaedon sp.	1	-	oa-p
Chaetocnema concinna	1	-	oa-p
?Psylliodes sp.	1	-	oa-p
Apion sp.	1	-	oa-p
Sitona sp.	1	-	oa-p
Ceuthorhynchinae sp.	1	-	oa-p
*Coleoptera sp. (larva)	15	m	u
*Acarina sp.	15	m	u
*Daphnia sp. (ephippium)	15	m	oa-w
*Diptera sp. (larva)	15	m	u
*Insecta sp. pupa	15	m	u
*Diptera sp. (adult)	6	s	u
*Insecta sp. (larva)	6	s	u
*Diptera sp. (puparium)	6	s	u
*Opiliones sp.	2	-	u

Context: 20 Sample: 38/T ReM: R
Weight: 2.00 E: 0.00 F: 0.00

Aleocharinae sp.	6	s	u
Platystethus cornutus group	2	-	oa-d
Oxytelus sculptus	2	-	rt-st
Cercyon haemorrhoidalis	1	-	rf-sf
Cercyon sp.	1	-	u
Megasternum obscurum	1	-	rt
Hydrobius fuscipes	1	-	oa-w
Lesteva sp.	1	-	oa-d
Platystethus nitens	1	-	oa-d
Anotylus rugosus	1	-	rt
Gyrophypnus sp.	1	-	rt
Philonthus sp. A	1	-	u
Philonthus sp. B	1	-	u
Philonthus sp. C	1	-	u
Aphodius sp.	1	-	ob-rf
Ptinus sp.	1	-	rd-sf
Atomaria sp.	1	-	rd
?Chrysomelinae sp.	1	-	oa-p
Ceutorhynchus sp.	1	-	oa-p
*Coleoptera sp. (larva)	6	s	u
*Insecta sp. pupa	6	s	u
*Daphnia sp. (ephippium)	1	-	oa-w
*Diptera sp. (puparium)	1	-	u

Context: 38 Sample: 17/T ReM: R
Weight: 1.00 E: 0.00 F: 0.00

Dytiscidae sp.	1	-	oa-w
Catops sp.	1	-	u
Trox sp.	1	-	rt
Melolonthinae/Rutelinae/Cetoniae sp.	1	-	oa-p
Anobium punctatum	1	-	l-sf
Lathridius minutus group	1	-	rd-st

Coleoptera sp.	1	-	u
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Context: 40 Sample: 19/T ReM: R
Weight: 1.00 E: 0.00 F: 0.00

Hemiptera sp.	6	s	u
Hydroporinae sp.	6	s	oa-w
Aleocharinae sp.	6	s	u
Colymbetinae sp. A	1	-	oa-w
Colymbetinae sp. B	1	-	oa-w
Helophorus sp.	1	-	oa-w
Cercyon sp.	1	-	u
Hydrobius fuscipes	1	-	oa-w
?Laccobius sp.	1	-	oa-w
Stenus sp.	1	-	u
Xantholinus linearis or longiventris	1	-	rt-sf
Trox scaber	1	-	rt-sf
Aphodius sp.	1	-	ob-rf
Elmidae sp.	1	-	oa-w
Anobium punctatum	1	-	l-sf
Ptinus sp.	1	-	rd-sf
Atomaria sp.	1	-	rd
Lathridius minutus group	1	-	rd-st
Donaciinae sp.	1	-	oa-w-
p			
Halticinae sp.	1	-	oa-p
Apion sp.	1	-	oa-p
*Diptera sp. (larva)	15	m	u
*Acarina sp.	6	s	u
*Diptera sp. (puparium)	6	s	u
*Apoidea sp.	1	-	u
*Araneae sp.	1	-	u
*Ostracoda sp.	1	-	u
*Insecta sp. pupa	1	-	u

Context: 41 Sample: 27/T ReM: R
Weight: 1.00 E: 0.00 F: 0.00

Hemiptera sp.	1	-	u
Dyschirius sp.	1	-	oa
Xantholinus linearis or longiventris	1	-	rt-sf
Trox scaber	1	-	rt-sf
Aphodius sp.	1	-	ob-rf
Cryptophagus sp.	1	-	rd-sf
Phyllotreta nemorum group	1	-	oa-p
*Insecta sp. (larva)	1	-	u

Context: 1003 Sample: 36/BS ReM: N
Weight: 0.00 E: 0.00 F: 0.00

Hydrobius fuscipes	1	-	oa-w
Donaciinae sp.	1	-	oa-w-
p			
Chrysomelinae sp.	1	-	oa-p
*Diptera sp. (puparium)	2	-	u
*Sphaeroceridae sp. (puparium)	1	-	rt
*Insecta sp. pupa	1	-	u

Context: 1024 Sample: 73/T ReM: R
Weight: 1.00 E: 0.00 F: 0.00

Hydroporinae sp.	6	s	oa-w
Aleocharinae sp.	6	s	u
Hemiptera sp.	3	-	u
Helophorus sp.	2	-	oa-w
Helophorus sp. B	2	-	oa-w
Corixidae sp.	1	-	oa-w
Bembidion sp.	1	-	oa
Carabidae sp.	1	-	ob
Haliplidae sp.	1	-	oa-w
Dytiscidae sp.	1	-	oa-w
Cercyon terminatus	1	-	rf-st
Cercyon ?ustulatus	1	-	oa-d
Ochthebius sp.	1	-	oa-w
Omalium rivulare	1	-	rt-sf
Carpelimus sp.	1	-	u
Platystethus arenarius	1	-	rf
Anotylus rugosus	1	-	rt
Anotylus sculpturatus group	1	-	rt
Anotylus tetracarinatus	1	-	rt
Stenus sp.	1	-	u
Lathrobium sp.	1	-	u
Gabrius sp.	1	-	rt
Mycetoporus sp.	1	-	u
Aphodius granarius	1	-	ob-rf
Aphodius sp.	1	-	ob-rf
Dryops sp.	1	-	oa-d
Elmidae sp.	1	-	oa-w
Elateridae sp.	1	-	ob
Meligethes sp.	1	-	oa-p
Atomaria sp.	1	-	rd
Coccinellidae sp.	1	-	oa-p
Corticaria sp.	1	-	rt-sf
Corticarina sp.	1	-	rt
Donaciinae sp. A	1	-	oa-w-
p			
Donaciinae sp. B	1	-	oa-w-
p			
Halticinae sp.	1	-	oa-p
Sitona sp.	1	-	oa-p
Coleoptera sp.	1	-	u
*Coleoptera sp. (larva)	15	m	u
*Acarina sp.	15	m	u
*Daphnia sp. (ephippium)	15	m	oa-w
*Diptera sp. (adult)	15	m	u
*Oligochaeta sp. (egg capsule)	15	m	u
*Ostracoda sp.	15	m	u
*Diptera sp. (larva)	15	m	u
*Insecta sp. pupa	15	m	u
*Opiliones sp.	6	s	u
*Diptera sp. (puparium)	6	s	u
*Aranae sp.	1	-	u
*Trichoptera sp. (case)	1	-	oa-w

Context: 1027 Sample: 75/T CA: ? ReM: R
Weight: 2.00 E: 0.00 F: 0.00

Aleocharinae sp.	6	s	u
Helophorus sp.	2	-	oa-w
Anobium punctatum	2	-	l-sf

Cryptophagus sp.	2	-	rd-sf
Lathridius minutus group	2	-	rd-st
Aglenus brunneus	2	-	rt-ss
Apion sp. C	2	-	oa-p
Nebria sp.	1	-	oa
Trechus obtusus or quadristriatus	1	-	oa
Bembidion sp.	1	-	oa
Harpalus sp.	1	-	oa
Carabidae sp. A	1	-	ob
Carabidae sp. B	1	-	ob
Hydroporinae sp. A	1	-	oa-w
Hydroporinae sp. B	1	-	oa-w
Cercyon convexiusculus group	1	-	oa-d
Megasternum obscurum	1	-	rt
Hydrobius fuscipes	1	-	oa-w
Hydrophilinae sp. A	1	-	oa-w
Hydrophilinae sp. B	1	-	oa-w
Hydrophilinae sp. C	1	-	oa-w
Hydrophilinae sp. D	1	-	oa-w
Acritus nigricornis	1	-	rt-st
Ochthebius sp.	1	-	oa-w
Ptenidium sp.	1	-	rt
Omaliinae sp.	1	-	rt
Carpelimus ?fuliginosus	1	-	st
Platystethus arenarius	1	-	rf
Anotylus nitidulus	1	-	rt-d
Stenus sp.	1	-	u
Gyrophypnus sp.	1	-	rt
Gabrius sp.	1	-	rt
?Bobitobius sp.	1	-	u
Tachinus sp.	1	-	u
Aphodius sp. A	1	-	ob-rf
Aphodius sp. B	1	-	ob-rf
Elateridae sp.	1	-	ob
Brachypterus sp.	1	-	oa-p
?Telmatophilus sp.	1	-	oa-d
Corticaria sp.	1	-	rt-sf
Anthicus sp.	1	-	rt
?Macrolea sp.	1	-	oa-w
Donaciinae sp.	1	-	oa-w-
p			
Apion sp.	1	-	oa-p
Apion sp. B	1	-	oa-p
Notaris sp.	1	-	oa-d-
p			
Ceutorhynchus sp. A	1	-	oa-p
Ceutorhynchus sp. B	1	-	oa-p
Scolytidae sp.	1	-	l
*Coleoptera sp. (larva)	15	m	u
*Diptera sp. (adult)	15	m	u
*Diptera sp. (larva)	15	m	u
*Acarina sp.	6	s	u
*Oligochaeta sp. (egg capsule)	6	s	u
*Ostracoda sp.	6	s	u
*Insecta sp. pupa	6	s	u
*Diptera sp. (puparium)	3	-	u
*Formicidae sp.	1	-	u
*Trichoptera sp. (case)	1	-	oa-w

Context: 1029 Sample: 79/T ReM: R
Weight: 2.00 E: 0.00 F: 0.00

Trox scaber	6	s	rt-sf
Hemiptera sp.	1	-	u
Cercyon sp.	1	-	u
Staphylinidae sp.	1	-	u
Aphodius sp.	1	-	ob-rf
Cyphon sp.	1	-	oa-d
Anobium punctatum	1	-	l-sf
Lathridius minutus group	1	-	rd-st
Chrysomelinae sp. A	1	-	oa-p
Chrysomelinae sp. B	1	-	oa-p
*Diptera sp. (puparium)	3	-	u
*Coleoptera sp. (larva)	1	-	u
*?Heterodera sp. (cyst)	1	-	u

Context: 1031 Sample: 84/T ReM: R
Weight: 2.00 E: 0.00 F: 0.00

Trox scaber	3	-	rt-sf
Hemiptera sp.	1	-	u
Cercyon sp.	1	-	u
Anotylus rugosus	1	-	rt
Anobium punctatum	1	-	l-sf
*Coleoptera sp. (larva)	1	-	u
*?Heterodera sp. (cyst)	1	-	u

Context: 1033 Sample: 68/T ReM: R
Weight: 2.00 E: 0.00 F: 0.00

Trox scaber	2	-	rt-sf
Cercyon sp.	1	-	u
Gyrophypnus sp.	1	-	rt
Aleocharinae sp.	1	-	u
Staphylinidae sp.	1	-	u
Lathridius minutus group	1	-	rd-st
Chrysomelinae sp.	1	-	oa-p
Halticinae sp.	1	-	oa-p
*Oligochaeta sp. (egg capsule)	6	s	u
*Diptera sp. (puparium)	2	-	u
*Acarina sp.	1	-	u

Context: 1039 Sample: 90/T ReM: R
Weight: 1.00 E: 0.00 F: 0.00

Cercyon analis	6	s	rt-sf
Cercyon ?terminatus	6	s	rf-st
Oxytelus sculptus	6	s	rt-st
Aleocharinae sp.	6	s	u
Trox scaber	6	s	rt-sf
Histeridae sp.	3	-	u
Trechus sp.	1	-	ob
Bembidion sp.	1	-	oa
Helophorus sp.	1	-	oa-w
Ptenidium sp.	1	-	rt
Anotylus nitidulus	1	-	rt-d
Anotylus rugosus	1	-	rt
Xantholininae sp.	1	-	u
Philonthus sp.	1	-	u

Aleochara sp.	1	-	u
Cyphon sp.	1	-	oa-d
Anobium punctatum	1	-	l-sf
Lyctus linearis	1	-	l-sf
Atomaria sp.	1	-	rd
Lathridius minutus group	1	-	rd-st
Anthicus sp.	1	-	rt
Bruchinae sp.	1	-	u
Chrysomelinae sp.	1	-	oa-p
Apion sp.	1	-	oa-p
Coleoptera sp.	1	-	u
*Diptera sp. (larva)	15	m	u
*Diptera sp. (puparium)	15	m	u
*Muscidae sp. (puparium)	6	s	u
*Sphaeroceridae sp. (puparium)	6	s	rt
*Insecta sp. pupa	6	s	u
*Coleoptera sp. (larva)	1	-	u
*?Scatopse notata	1	-	rt
*Daphnia sp. (ephippium)	1	-	oa-w
*Sepsidae sp. (puparium)	1	-	u

Context: 1047 Sample: 95/T ReM: R
Weight: 3.00 E: 0.00 F: 0.00

Anotylus rugosus	1	-	rt
Staphylinidae sp.	1	-	u
Anobium punctatum	1	-	l-sf
Rhizophagus sp.	1	-	u
Atomaria sp.	1	-	rd
Lathridius minutus group	1	-	rd-st
?Gastrophysa viridula	1	-	oa-p
Sitona sp.	1	-	oa-p
Curculionidae sp.	1	-	oa
*Insecta sp. (larva)	3	-	u
*Diptera sp. (adult)	1	-	u
*Oligochaeta sp. (egg capsule)	1	-	u
*Sepsidae sp. (puparium)	1	-	u
*Syrphidae sp. (larva)	1	-	u
*Diptera sp. (puparium)	1	-	u

Context: 1052 Sample: 117/T ReM: R
Weight: 1.00 E: 0.00 F: 0.00

Trox scaber	15	m	rt-sf
Cercyon sp.	1	-	u
Histerinae sp.	1	-	rt
Omalius sp.	1	-	rt
Cyphon sp.	1	-	oa-d
Chrysomelinae sp.	1	-	oa-p
Curculionidae sp.	1	-	oa
*Diptera sp. (puparium)	2	-	u
*Daphnia sp. (ephippium)	1	-	oa-w

Context: 2023 Sample: 206/T ReM: R
Weight: 1.00 E: 0.00 F: 0.00

Cercyon analis	6	s	rt-sf
Anobium punctatum	3	-	l-sf
Trox scaber	2	-	rt-sf
Helophorus sp.	1	-	oa-w

Histerinae sp.	1	-	rt
Xylodromus concinnus	1	-	rt-st
Carpelimus sp.	1	-	u
Anotylus nitidulus	1	-	rt-d
Anotylus tetracarlinatus	1	-	rt
Gyrohypnus ?fracticornis	1	-	rt-st
Aleocharinae sp.	1	-	u
Staphylinidae sp.	1	-	u
Aphodius sp.	1	-	ob-rf
Cryptophagus sp.	1	-	rd-sf
Atomaria sp.	1	-	rd
Lathridius minutus group	1	-	rd-st
Corticaria sp.	1	-	rt-sf
*Acarina sp.	15	m	u
*Diptera sp. (puparium)	15	m	u
*Coleoptera sp. (larva)	6	s	u
*Diptera sp. (larva)	6	s	u
*Insecta sp. pupa	6	s	u
*Daphnia sp. (ephippium)	1	-	oa-w

Context: 2030 Sample: 286/T ReM: R
Weight: 1.00 E: 0.00 F: 0.00

Aleocharinae sp.	6	s	u
Platystethus cornutus group	3	-	oa-d
Lyctus linearis	3	-	l-sf
Lathridius minutus group	3	-	rd-st
Ochthebius sp.	2	-	oa-w
Hydraena sp.	2	-	oa-w
Anotylus nitidulus	2	-	rt-d
Trechus micros	1	-	u
Bembidion sp. C	1	-	oa
Bembidion (Peryphus) sp.	1	-	oa
Bembidion sp. A	1	-	oa
Bembidion sp. B	1	-	oa
?Amara sp.	1	-	oa
Carabidae sp.	1	-	ob
Dytiscidae sp.	1	-	oa-w
Helophorus sp. A	1	-	oa-w
Helophorus sp. B	1	-	oa-w
Cercyon analis	1	-	rt-sf
Cercyon sp. A	1	-	u
Cercyon sp. B	1	-	u
Hydrobius fuscipes	1	-	oa-w
Limnebius sp.	1	-	oa-w
Micropeplus fulvus	1	-	rt
Omalium sp.	1	-	rt
Xylodromus concinnus	1	-	rt-st
Carpelimus bilineatus	1	-	rt-sf
Anotylus rugosus	1	-	rt
Xantholinus linearis or longiventris	1	-	rt-sf
Philonthus ?politus	1	-	u
?Gabrius sp.	1	-	rt
Trox sp.	1	-	rt
Aphodius sp.	1	-	ob-rf
Anobium punctatum	1	-	l-sf
Corticaria sp.	1	-	rt-sf
Corticarina sp.	1	-	rt
Halticinae sp.	1	-	oa-p
Coleoptera sp.	1	-	u
*Acarina sp.	15	m	u
*Coccoidea sp.	6	s	u

*Coleoptera sp. (larva)	6	s	u
*Diptera sp. (larva)	6	s	u
*Bibionidae sp.	1	-	u
*Dermaptera sp.	1	-	u
*Diptera sp. (adult)	1	-	u
*Oligochaeta sp. (egg capsule)	1	-	u

Context: 2131 Sample: 280/T ReM: R
Weight: 1.00 E: 0.00 F: 0.00

Platystethus arenarius	6	s	rf
Platystethus cornutus group	6	s	oa-d
Anotylus nitidulus	6	s	rt-d
Aleocharinae sp.	6	s	u
Trox scaber	6	s	rt-sf
Anotylus rugosus	2	-	rt
Anobium punctatum	2	-	l-sf
Carabus sp.	1	-	oa
Bembidion sp.	1	-	oa
?Bradycellus sp.	1	-	oa
Helophorus sp.	1	-	oa-w
Cercyon analis	1	-	rt-sf
Cercyon ?haemorrhoidalis	1	-	rf-sf
Acritus nigricornis	1	-	rt-st
Carpelimus sp.	1	-	u
Platystethus sp.	1	-	oa-d
Oxytelus sculptus	1	-	rt-st
Stenus sp.	1	-	u
Leptacinus sp.	1	-	rt-st
Philonthus sp.	1	-	u
Aphodius sp.	1	-	ob-rf
Oxyomus sylvestris	1	-	rt-sf
Cyphon sp.	1	-	oa-d
Ptinus fur	1	-	rd-sf
?Rhizophagus sp.	1	-	u
Monotoma sp. A	1	-	rt-sf
Monotoma sp. B	1	-	rt-sf
Atomaria sp.	1	-	rd
Mycetaea hirta	1	-	rd-ss
Lathridius minutus group	1	-	rd-st
?Enicmus sp.	1	-	rt-sf
Corticaria sp. A	1	-	rt-sf
Corticaria sp. B	1	-	rt-sf
Aglenus brunneus	1	-	rt-ss
Chaetocnema concinna	1	-	oa-p
Halticinae sp.	1	-	oa-p
Curculionidae sp.	1	-	oa
*Acarina sp.	15	m	u
*Coleoptera sp. (larva)	6	s	u
*Diptera sp. (adult)	6	s	u
*Diptera sp. (puparium)	6	s	u
*Insecta sp. pupa	6	s	u
*Coccoidea sp.	1	-	u
*Opiliones sp.	1	-	u
*Apoidea sp.	1	-	u

Context: 2160 Sample: 287/T ReM: R
Weight: 1.00 E: 0.00 F: 0.00

Anotylus rugosus	6	s	rt
Aleocharinae sp.	6	s	u

Clivina sp.	1	-	oa
Trechus sp.	1	-	ob
Carabidae sp.	1	-	ob
Dytiscidae sp.	1	-	oa-w
Helophorus sp. A	1	-	oa-w
Helophorus sp. B	1	-	oa-w
Cercyon analis	1	-	rt-sf
Cercyon sp.	1	-	u
Ptiliidae sp.	1	-	u
Omalium caesum or italicum	1	-	rt-sf
Xylodromus concinnus	1	-	rt-st
Carpelimus fuliginosus	1	-	st
Platystethus arenarius	1	-	rf
Stenus sp.	1	-	u
Xantholinus linearis or longiventris	1	-	rt-sf
Philonthus sp.	1	-	u
Gabrius sp.	1	-	rt
Creophilus maxillosus	1	-	rt
Falagria sp.	1	-	rt-sf
Trox scaber	1	-	rt-sf
Aphodius sp.	1	-	ob-rf
Anobium punctatum	1	-	l-sf
Rhizophagus sp.	1	-	u
Atomaria sp.	1	-	rd
Corticaria sp.	1	-	rt-sf
Gastrophysa viridula	1	-	oa-p
Halticinae sp.	1	-	oa-p
Apion sp.	1	-	oa-p
Ceutorhynchus sp.	1	-	oa-p
*Coleoptera sp. (larva)	6	s	u
*Diptera sp. (puparium)	6	s	u
*Diptera sp. (adult)	2	-	u
*Aranae sp.	1	-	u

Context: 2178 Sample: 292/T ReM: R
Weight: 1.00 E: 0.00 F: 0.00

Aleocharinae sp.	6	s	u
Lathridius minutus group	6	s	rd-st
Xylodromus concinnus	2	-	rt-st
Platystethus arenarius	2	-	rf
Trox scaber	2	-	rt-sf
Cimicidae sp.	1	-	oa-p
Hemiptera sp. A	1	-	u
Hemiptera sp. B	1	-	u
Hydroporinae sp.	1	-	oa-w
Dytiscidae sp.	1	-	oa-w
Helophorus sp. A	1	-	oa-w
Helophorus sp. B	1	-	oa-w
Cercyon analis	1	-	rt-sf
Ochthebius sp.	1	-	oa-w
Limnebius sp.	1	-	oa-w
Lesteva longoelytrata	1	-	oa-d
Platystethus nitens	1	-	oa-d
Anotylus nitidulus	1	-	rt-d
Anotylus sculpturatus group	1	-	rt
Stenus sp. A	1	-	u
Stenus sp. B	1	-	u
Xantholinus linearis or longiventris	1	-	rt-sf
Neobisnius sp.	1	-	u
Staphylinidae sp.	1	-	u
Aphodius sp.	1	-	ob-rf

Clambus sp.	1	-	rt-sf
Anobium punctatum	1	-	l-sf
Rhizophagus sp.	1	-	u
Cryptophagus sp.	1	-	rd-sf
Atomaria sp.	1	-	rd
Orthoperus sp.	1	-	rt
Corticaria sp.	1	-	rt-sf
?Tenebrio obscurus	1	-	rt-ss
Anthicus formicarius	1	-	rt-st
Chrysomelinae sp. A	1	-	oa-p
Chrysomelinae sp. B	1	-	oa-p
Halticinae sp.	1	-	oa-p
Curculionidae sp.	1	-	oa
*Acarina sp.	15	m	u
*Diptera sp. (puparium)	15	m	u
*Diptera sp. (adult)	6	s	u
*Insecta sp. (larva)	6	s	u
*Insecta sp. pupa	6	s	u

Context: 2189 Sample: 296/T ReM: R
Weight: 2.00 E: 0.00 F: 0.00

Aleocharinae sp.	15	m	u
Hemiptera sp.	6	s	u
Helophorus sp.	6	s	oa-w
Cercyon analis	6	s	rt-sf
Lathridius minutus group	6	s	rd-st
Anotylus nitidulus	2	-	rt-d
Aphodius sp.	2	-	ob-rf
Anobium punctatum	2	-	l-sf
Cryptophagus sp.	2	-	rd-sf
Corticarina sp.	2	-	rt
Trechus micros	1	-	u
Bembidion sp.	1	-	oa
?Agonum sp.	1	-	oa
Hydroporinae sp.	1	-	oa-w
Dytiscidae sp.	1	-	oa-w
?Georissus crenulatus	1	-	oa-w
Helophorus sp. B	1	-	oa-w
Megasternum obscurum	1	-	rt
Acritus nigricornis	1	-	rt-st
Ochthebius sp.	1	-	oa-w
Omalium sp.	1	-	rt
Platystethus cornutus group	1	-	oa-d
Anotylus rugosus	1	-	rt
Anotylus sculpturatus group	1	-	rt
Oxytelus sculptus	1	-	rt-st
Lithocharis sp.	1	-	rt
Leptacinus sp.	1	-	rt-st
Philonthus sp.	1	-	u
?Gabrius sp.	1	-	rt
Tachyporus sp.	1	-	u
Falagria sp.	1	-	rt-sf
Trox scaber	1	-	rt-sf
Oxyomus sylvestris	1	-	rt-sf
Oulimnius sp.	1	-	oa-w
Elateridae sp.	1	-	ob
Atomaria sp.	1	-	rd
Corticaria sp.	1	-	rt-sf
Apion sp.	1	-	oa-p
Ceuthorhynchinae sp.	1	-	oa-p
*Acarina sp.	15	m	u

*Diptera sp. (larva) 15 m u
 *?Heterodera sp. (cyst) 6 s u
 *Diptera sp. (puparium) 6 s u
 *Coccoidea sp. 1 - u
 *Coleoptera sp. (larva) 1 - u
 *Aranae sp. 1 - u

Context: 2191 Sample: 311/T ReM: R
 Weight: 1.00 E: 0.00 F: 0.00

Anotylus nitidulus 6 s rt-d
 Aleocharinae sp. 6 s u
 Corticaria sp. 2 - rt-sf
 Hemiptera sp. 1 - u
 Dyschirius sp. 1 - oa
 Bembidion sp. C 1 - oa
 Bembidion sp. A 1 - oa
 Bembidion sp. B 1 - oa
 Carabidae sp. A 1 - ob
 Carabidae sp. B 1 - ob
 Carabidae sp. C 1 - ob
 Carabidae sp. D 1 - ob
 Hydroporinae sp. 1 - oa-w
 Dytiscidae sp. 1 - oa-w
 Helophorus sp. A 1 - oa-w
 Helophorus sp. B 1 - oa-w
 Helophorus sp. R 1 - oa
 Cercyon sp. 1 - u
 Megasternum obscurum 1 - rt
 Ochthebius sp. 1 - oa-w
 Omalium sp. 1 - rt
 Xylodromus concinnus 1 - rt-st
 Carpelimus sp. 1 - u
 Platystethus arenarius 1 - rf
 Platystethus cornutus group 1 - oa-d
 Anotylus rugosus 1 - rt
 Anotylus tetracarinatus 1 - rt
 Stenus sp. A 1 - u
 Stenus sp. B 1 - u
 ?Leptacinus sp. 1 - rt-st
 Gyrohypnus sp. 1 - rt
 Xantholinus linearis or longiventris 1 - rt-sf
 Tachyporus sp. 1 - u
 Falagria sp. 1 - rt-sf
 Staphylinidae sp. 1 - u
 Trox scaber 1 - rt-sf
 Aphodius granarius 1 - ob-rf
 Aphodius sp. 1 - ob-rf
 Oulimnius sp. 1 - oa-w
 Anobium punctatum 1 - l-sf
 Ptinus sp. 1 - rd-sf
 Atomaria sp. 1 - rd
 Lathridius minutus group 1 - rd-st
 Anthicus formicarius 1 - rt-st
 Phyllodecta sp. 1 - oa-p
 Chaetocnema concinna 1 - oa-p
 Halticinae sp. 1 - oa-p
 Apion sp. 1 - oa-p
 Sitona sp. A 1 - oa-p
 Sitona sp. B 1 - oa-p
 Curculionidae sp. 1 - oa
 Coleoptera sp. 1 - u

*Acarina sp. 15 m u
 *Diptera sp. (puparium) 6 s u
 *Opiliones sp. 1 - u
 *Siphonaptera sp. 1 - u

Context: 3069 Sample: 160/T ReM: R
 Weight: 2.00 E: 0.00 F: 0.00

null 0 - u

Context: 3077 Sample: 156/T ReM: R
 Weight: 1.00 E: 0.00 F: 0.00

*Oligochaeta sp. (egg capsule) 6 s u
 *Eristalini sp. (larva) 6 s w

Context: 3169 Sample: 184/T ReM: R
 Weight: 2.00 E: 0.00 F: 0.00

*Oligochaeta sp. (egg capsule) 1 - u
 *Trichoptera sp. (case) 1 - oa-w
 *Melophagus ovinus (puparium) 1 - u

Context: 999 Sample: 271/T CA: ? ReM: R
 Weight: 1.00 E: 0.00 F: 0.00

Neobisnius sp. 6 s u
 Aleocharinae sp. 6 s u
 Trox scaber 4 - rt-sf
 Lathridius minutus group 3 - rd-st
 Clivina sp. 1 - oa
 ?Carabidae sp. 1 - ob
 Helophorus sp. 1 - oa-w
 Omalium rivulare 1 - rt-sf
 ?Xylodromus sp. 1 - rt-st
 Carpelimus sp. 1 - u
 Anotylus rugosus 1 - rt
 Gyrohypnus sp. 1 - rt
 Falagria sp. 1 - rt-sf
 Aphodius sp. A 1 - ob-rf
 Aphodius sp. B 1 - ob-rf
 Omosita discoidea 1 - rt-sf
 Cryptophagus sp. 1 - rd-sf
 Longitarsus sp. 1 - oa-p
 Halticinae sp. 1 - oa-p
 Ceutorhynchus sp. 1 - oa-p
 *Acarina sp. 15 m u
 *Diptera sp. (larva) 15 m u
 *Diptera sp. (puparium) 6 s u
 *Pulex irritans 2 - ss
 *?Louse s.l. sp. 2 - u
 *Diptera sp. (adult) 2 - u
 *Coleoptera sp. (larva) 1 - u
 *Muscidae sp. (puparium) 1 - u
 *Aranae sp. 1 - u

Table 10. Main statistics for the assemblages of adult Coleoptera and Hemiptera from Layerthorpe Bridge, York. Abbreviations—Table 11.

Context	6	14	15	16	18	19	20	38	40
Sample	4	48	49	52	41	45	38	17	19
Ext	/SPT	/T	/T	/T	/T	/T	/T	/T	/T
ConalphaN	?								
S	1	6	4	39	69	57	18	7	18
N	1	6	5	47	77	60	20	7	18
ALPHA	0	0	0	106	316	541	82	0	0
SEALPHA	0	0	0	40	116	306	57	0	0
SOB	1	4	2	10	37	30	7	2	10
PSOB	100	67	50	26	54	53	39	29	56
NOB	1	4	3	11	41	31	8	2	10
PNOB	100	67	60	23	53	52	40	29	56
ALPHAOB	0	0	0	0	178	416	0	0	0
SEALPHAOB	0	0	0	0	90	370	0	0	0
SW	0	0	1	0	11	6	1	1	7
PSW	0	0	25	0	16	11	6	14	39
NW	0	0	1	0	15	7	1	1	7
PNW	0	0	20	0	19	12	5	14	39
ALPHAW	0	0	0	0	0	0	0	0	0
SEALPHAW	0	0	0	0	0	0	0	0	0
SD	0	0	0	1	6	5	3	0	0
PSD	0	0	0	3	9	9	17	0	0
ND	0	0	0	1	7	5	4	0	0
PND	0	0	0	2	9	8	20	0	0
ALPHAD	0	0	0	0	0	0	0	0	0
SEALPHAD	0	0	0	0	0	0	0	0	0
SP	0	1	0	1	12	8	2	1	3
PSP	0	17	0	3	17	14	11	14	17
NP	0	1	0	1	12	8	2	1	3
PNP	0	17	0	2	16	13	10	14	17
ALPHAP	0	0	0	0	0	0	0	0	0
SEALPHAP	0	0	0	0	0	0	0	0	0
SM	0	0	0	0	0	0	0	0	0
PSM	0	0	0	0	0	0	0	0	0
NM	0	0	0	0	0	0	0	0	0
PNM	0	0	0	0	0	0	0	0	0
ALPHAM	0	0	0	0	0	0	0	0	0
SEALPHAM	0	0	0	0	0	0	0	0	0
SL	0	1	0	1	2	1	0	1	1
PSL	0	17	0	3	3	2	0	14	6
NL	0	1	0	1	2	1	0	1	1
PNL	0	17	0	2	3	2	0	14	6
ALPHAL	0	0	0	0	0	0	0	0	0
SEALPHAL	0	0	0	0	0	0	0	0	0
SRT	0	0	1	22	18	19	8	2	6
PSRT	0	0	25	56	26	33	44	29	33
NRT	0	0	2	30	21	20	9	2	6
PNRT	0	0	40	64	27	33	45	29	33
ALPHART	0	0	0	38	58	169	0	0	0
SEALPHART	0	0	0	15	34	151	0	0	0
SRD	0	0	0	3	5	4	2	1	3
PSRD	0	0	0	8	7	7	11	14	17
NRD	0	0	0	5	6	5	2	1	3
PNRD	0	0	0	11	8	8	10	14	17
ALPHARD	0	0	0	0	0	0	0	0	0

SEALPHARD	0	0	0	0	0	0	0	0	0
SRF	0	0	1	6	3	4	2	0	1
PSRF	0	0	25	15	4	7	11	0	6
NRF	0	0	2	8	3	4	2	0	1
PNRF	0	0	40	17	4	7	10	0	6
ALPHARF	0	0	0	0	0	0	0	0	0
SEALPHARF	0	0	0	0	0	0	0	0	0
SSA	0	1	0	13	9	10	3	2	5
PSSA	0	17	0	33	13	18	17	29	28
NSA	0	1	0	20	9	11	4	2	5
PNSA	0	17	0	43	12	18	20	29	28
ALPHASA	0	0	0	17	0	0	0	0	0
SEALPHASA	0	0	0	7	0	0	0	0	0
SSF	0	1	0	6	4	4	2	1	4
PSSF	0	17	0	15	6	7	11	14	22
NSF	0	1	0	8	4	4	2	1	4
PNSF	0	17	0	17	5	7	10	14	22
ALPHASF	0	0	0	0	0	0	0	0	0
SEALPHASF	0	0	0	0	0	0	0	0	0
SST	0	0	0	7	5	5	1	1	1
PSST	0	0	0	18	7	9	6	14	6
NST	0	0	0	12	5	6	2	1	1
PNST	0	0	0	26	6	10	10	14	6
ALPHAST	0	0	0	0	0	0	0	0	0
SEALPHAST	0	0	0	0	0	0	0	0	0
SSS	0	0	0	0	0	1	0	0	0
PSSS	0	0	0	0	0	2	0	0	0
NSS	0	0	0	0	0	1	0	0	0
PNSS	0	0	0	0	0	2	0	0	0
ALPHASS	0	0	0	0	0	0	0	0	0
SEALPHASS	0	0	0	0	0	0	0	0	0
SG	0	0	0	0	0	1	0	0	0
PSG	0	0	0	0	0	2	0	0	0
NG	0	0	0	0	0	1	0	0	0
PNG	0	0	0	0	0	2	0	0	0
ALPHAG	0	0	0	0	0	0	0	0	0
SEALPHAG	0	0	0	0	0	0	0	0	0

Context	41	1003	1024	1027	1029	1031	1032	1033	1039
Sample	27	36	73	75	79	84	85	68	90
Ext	/T	/BS	/T	/T	/T	/T	/T	/T	/T
ConalphaN				?			/1033		
S	7	3	36	48	9	5	5	8	20
N	7	3	40	54	9	7	5	9	22
ALPHA	0	0	169	204	0	0	0	0	101
SEALPHA	0	0	86	86	0	0	0	0	70
SOB	3	3	20	29	4	0	2	2	6
PSOB	43	100	56	60	44	0	40	25	30
NOB	3	3	22	31	4	0	2	2	6
PNOB	43	100	55	57	44	0	40	22	27
ALPHAOB	0	0	101	208	0	0	0	0	0
SEALPHAOB	0	0	70	142	0	0	0	0	0
SW	0	2	9	11	0	0	0	0	1
PSW	0	67	25	23	0	0	0	0	5
NW	0	2	11	12	0	0	0	0	1
PNW	0	67	28	22	0	0	0	0	5
ALPHAW	0	0	0	0	0	0	0	0	0
SEALPHAW	0	0	0	0	0	0	0	0	0
SD	0	0	2	4	1	0	0	0	2
PSD	0	0	6	8	11	0	0	0	10
ND	0	0	2	4	1	0	0	0	2
PND	0	0	5	7	11	0	0	0	9
ALPHAD	0	0	0	0	0	0	0	0	0
SEALPHAD	0	0	0	0	0	0	0	0	0
SP	1	2	6	8	2	0	1	2	2
PSP	14	67	17	17	22	0	20	25	10
NP	1	2	6	9	2	0	1	2	2
PNP	14	67	15	17	22	0	20	22	9
ALPHAP	0	0	0	0	0	0	0	0	0
SEALPHAP	0	0	0	0	0	0	0	0	0
SM	0	0	0	0	0	0	0	0	0
PSM	0	0	0	0	0	0	0	0	0
NM	0	0	0	0	0	0	0	0	0
PNM	0	0	0	0	0	0	0	0	0
ALPHAM	0	0	0	0	0	0	0	0	0
SEALPHAM	0	0	0	0	0	0	0	0	0
SL	0	0	0	2	1	1	1	0	2
PSL	0	0	0	4	11	20	20	0	10
NL	0	0	0	3	1	1	1	0	2
PNL	0	0	0	6	11	14	20	0	9
ALPHAL	0	0	0	0	0	0	0	0	0
SEALPHAL	0	0	0	0	0	0	0	0	0
SRT	4	0	12	15	2	2	2	3	6
PSRT	57	0	33	31	22	40	40	38	30
NRT	4	0	12	18	2	4	2	4	6
PNRT	57	0	30	33	22	57	40	44	27
ALPHART	0	0	0	0	0	0	0	0	0
SEALPHART	0	0	0	0	0	0	0	0	0
SRD	1	0	1	2	1	0	0	1	2
PSRD	14	0	3	4	11	0	0	13	10
NRD	1	0	1	4	1	0	0	1	2
PNRD	14	0	3	7	11	0	0	11	9
ALPHARD	0	0	0	0	0	0	0	0	0
SEALPHARD	0	0	0	0	0	0	0	0	0
SRF	1	0	4	3	1	0	1	0	0
PSRF	14	0	11	6	11	0	20	0	0
NRF	1	0	4	3	1	0	1	0	0

PNRF	14	0	10	6	11	0	20	0	0
ALPHARF	0	0	0	0	0	0	0	0	0
SEALPHARF	0	0	0	0	0	0	0	0	0
SSA	3	0	3	7	2	2	0	2	3
PSSA	43	0	8	15	22	40	0	25	15
NSA	3	0	3	11	2	4	0	3	3
PNSA	43	0	8	20	22	57	0	33	14
ALPHASA	0	0	0	0	0	0	0	0	0
SEALPHASA	0	0	0	0	0	0	0	0	0
SSF	3	0	2	3	1	2	0	1	2
PSSF	43	0	6	6	11	40	0	13	10
NSF	3	0	2	5	1	4	0	2	2
PNSF	43	0	5	9	11	57	0	22	9
ALPHASF	0	0	0	0	0	0	0	0	0
SEALPHASF	0	0	0	0	0	0	0	0	0
SST	0	0	1	3	1	0	0	1	1
PSST	0	0	3	6	11	0	0	13	5
NST	0	0	1	4	1	0	0	1	1
PNST	0	0	3	7	11	0	0	11	5
ALPHAST	0	0	0	0	0	0	0	0	0
SEALPHAST	0	0	0	0	0	0	0	0	0
SSS	0	0	0	1	0	0	0	0	0
PSSS	0	0	0	2	0	0	0	0	0
NSS	0	0	0	2	0	0	0	0	0
PNSS	0	0	0	4	0	0	0	0	0
ALPHASS	0	0	0	0	0	0	0	0	0
SEALPHASS	0	0	0	0	0	0	0	0	0
SG	0	0	0	0	0	0	0	0	0
PSG	0	0	0	0	0	0	0	0	0
NG	0	0	0	0	0	0	0	0	0
PNG	0	0	0	0	0	0	0	0	0
ALPHAG	0	0	0	0	0	0	0	0	0
SEALPHAG	0	0	0	0	0	0	0	0	0

Context	1047	1052	2023	2030	2131	2160	2178	2189	2191
Sample	95	117	206	286	280	287	292	296	311
Ext	/T	/T	/T	/T	/T	/T	/T	/T	/T
ConalphaN									
S	9	6	16	36	32	29	36	34	50
N	9	6	19	45	34	29	39	39	51
ALPHA	0	0	0	82	253	0	220	124	1148
SEALPHA	0	0	0	30	172	0	126	57	1015
SOB	3	3	2	16	10	11	14	13	25
PSOB	33	50	13	44	31	38	39	38	50
NOB	3	3	2	20	10	11	14	14	25
PNOB	33	50	11	44	29	38	36	36	49
ALPHAOB	0	0	0	38	0	0	0	0	0
SEALPHAOB	0	0	0	22	0	0	0	0	0
SW	0	0	1	7	1	3	6	6	6
PSW	0	0	6	19	3	10	17	18	12
NW	0	0	1	9	1	3	6	6	6
PNW	0	0	5	20	3	10	15	15	12
ALPHAW	0	0	0	0	0	0	0	0	0
SEALPHAW	0	0	0	0	0	0	0	0	0
SD	0	1	1	2	2	0	3	2	1
PSD	0	17	6	6	6	0	8	6	2
ND	0	1	1	5	2	0	3	3	1
PND	0	17	5	11	6	0	8	8	2
ALPHAD	0	0	0	0	0	0	0	0	0
SEALPHAD	0	0	0	0	0	0	0	0	0
SP	2	1	0	1	2	4	4	2	6
PSP	22	17	0	3	6	14	11	6	12
NP	2	1	0	1	2	4	4	2	6
PNP	22	17	0	2	6	14	10	5	12
ALPHAP	0	0	0	0	0	0	0	0	0
SEALPHAP	0	0	0	0	0	0	0	0	0
SM	0	0	0	0	0	0	0	0	0
PSM	0	0	0	0	0	0	0	0	0
NM	0	0	0	0	0	0	0	0	0
PNM	0	0	0	0	0	0	0	0	0
ALPHAM	0	0	0	0	0	0	0	0	0
SEALPHAM	0	0	0	0	0	0	0	0	0
SL	1	0	1	2	1	1	1	1	1
PSL	11	0	6	6	3	3	3	3	2
NL	1	0	3	4	2	1	1	2	1
PNL	11	0	16	9	6	3	3	5	2
ALPHAL	0	0	0	0	0	0	0	0	0
SEALPHAL	0	0	0	0	0	0	0	0	0
SRT	3	2	11	14	18	12	15	18	18
PSRT	33	33	69	39	56	41	42	53	36
NRT	3	2	12	17	19	12	18	22	19
PNRT	33	33	63	38	56	41	46	56	37
ALPHART	0	0	0	0	0	0	0	48	0
SEALPHART	0	0	0	0	0	0	0	27	0
SRD	2	0	3	1	4	1	2	2	3
PSRD	22	0	19	3	13	3	6	6	6
NRD	2	0	3	3	4	1	2	3	3
PNRD	22	0	16	7	12	3	5	8	6
ALPHARD	0	0	0	0	0	0	0	0	0
SEALPHARD	0	0	0	0	0	0	0	0	0
SRF	0	0	1	1	2	2	2	1	3
PSRF	0	0	6	3	6	7	6	3	6
NRF	0	0	1	1	2	2	3	2	3

PNRF	0	0	5	2	6	7	8	5	6
ALPHARF	0	0	0	0	0	0	0	0	0
SEALPHARF	0	0	0	0	0	0	0	0	0
SSA	2	0	7	8	16	9	10	9	10
PSSA	22	0	44	22	50	31	28	26	20
NSA	2	0	10	12	17	9	12	11	11
PNSA	22	0	53	27	50	31	31	28	22
ALPHASA	0	0	0	0	0	0	0	0	0
SEALPHASA	0	0	0	0	0	0	0	0	0
SSF	1	0	4	6	10	7	7	6	6
PSSF	11	0	25	17	31	24	19	18	12
NSF	1	0	7	8	11	7	8	8	7
PNSF	11	0	37	18	32	24	21	21	14
ALPHASF	0	0	0	0	0	0	0	0	0
SEALPHASF	0	0	0	0	0	0	0	0	0
SST	1	0	3	2	4	2	2	3	4
PSST	11	0	19	6	13	7	6	9	8
NST	1	0	3	4	4	2	3	3	4
PNST	11	0	16	9	12	7	8	8	8
ALPHAST	0	0	0	0	0	0	0	0	0
SEALPHAST	0	0	0	0	0	0	0	0	0
SSS	0	0	0	0	2	0	1	0	0
PSSS	0	0	0	0	6	0	3	0	0
NSS	0	0	0	0	2	0	1	0	0
PNSS	0	0	0	0	6	0	3	0	0
ALPHASS	0	0	0	0	0	0	0	0	0
SEALPHASS	0	0	0	0	0	0	0	0	0
SG	0	0	0	0	0	0	0	0	0
PSG	0	0	0	0	0	0	0	0	0
NG	0	0	0	0	0	0	0	0	0
PNG	0	0	0	0	0	0	0	0	0
ALPHAG	0	0	0	0	0	0	0	0	0
SEALPHAG	0	0	0	0	0	0	0	0	0

Context	3069	999	Totals					
Sample	160	271						
Ext	/T	/T						
ConalphaN		?						
S	0	18	238					
N	0	23	691					
ALPHA	0	39	128					
SEALPHA	0	20	8					
SOB	0	8	123					
PSOB	0	44	52					
NOB	0	8	294					
PNOB	0	35	43					
ALPHAOB	0	0	79					
SEALPHAOB	0	0	8					
SW	0	1	34					
PSW	0	6	14					
NW	0	1	91					
PNW	0	4	13					
ALPHAW	0	0	20					
SEALPHAW	0	0	3					
SD	0	0	15					
PSD	0	0	6					
ND	0	0	42					
PND	0	0	6					
ALPHAD	0	0	9					
SEALPHAD	0	0	2					
SP	0	3	37					
PSP	0	17	16					
NP	0	3	78					
PNP	0	13	11					
ALPHAP	0	0	28					
SEALPHAP	0	0	5					
SM	0	0	0					
PSM	0	0	0					
NM	0	0	0					
PNM	0	0	0					
ALPHAM	0	0	0					
SEALPHAM	0	0	0					
SL	0	0	4					
PSL	0	0	2					
NL	0	0	30					
PNL	0	0	4					
ALPHAL	0	0	1					
SEALPHAL	0	0	0					
SRT	0	11	217					
PSRT	0	61	91					
NRT	0	16	282					
PNRT	0	70	41					
ALPHART	0	0	431					
SEALPHART	0	0	59					
SRD	0	2	46					
PSRD	0	11	19					
NRD	0	4	57					
PNRD	0	17	8					
ALPHARD	0	0	110					
SEALPHARD	0	0	36					
SRF	0	2	41					
PSRF	0	11	17					
NRF	0	2	46					

PNRF	0	9	7						
ALPHARF	0	0	177						
SEALPHARF	0	0	81						
SSA	0	7	47						
PSSA	0	39	20						
NSA	0	12	177						
PNSA	0	52	26						
ALPHASA	0	0	21						
SEALPHASA	0	0	3						
SSF	0	5	24						
PSSF	0	28	10						
NSF	0	8	108						
PNSF	0	35	16						
ALPHASF	0	0	10						
SEALPHASF	0	0	2						
SST	0	2	19						
PSST	0	11	8						
NST	0	4	63						
PNST	0	17	9						
ALPHAST	0	0	9						
SEALPHAST	0	0	2						
SSS	0	0	4						
PSSS	0	0	2						
NSS	0	0	6						
PNSS	0	0	1						
ALPHASS	0	0	0						
SEALPHASS	0	0	0						
SG	0	0	1						
PSG	0	0	0						
NG	0	0	1						
PNG	0	0	0						
ALPHAG	0	0	0						
SEALPHAG	0	0	0						

Table 11. Abbreviations for ecological codes and statistics used for interpretation of insect remains in text and tables. Lower case codes in parentheses are those assigned to taxa and used to calculate the group values (the codes in capitals). See Table 7 for codes assigned to individual taxa from this site. Indivs - individuals (based on MNI); No - number.

No taxa	S	Percentage of indivs of grain pests	PNG
Estimated number of indivs (MNI)	N	No decomposer taxa (rt + rd + rf)	SRT
Index of diversity (∇)	alpha	Percentage of RT taxa	PSRT
Standard error of alpha	SE alpha	No RT indivs	NRT
No 'certain' outdoor taxa (oa)	SOA	Percentage of RT indivs	PNRT
Percentage of 'certain' outdoor taxa	PSOA	Index of diversity of RT component	alpha RT
No 'certain' outdoor indivs	NOA	Standard error	SEalphaRT
Percentage of 'certain' outdoor indivs	PNOA	No 'dry' decomposer taxa (rd)	SRD
No OA and probable outdoor taxa (oa+ob)	SOB	Percentage of RD taxa	PSRD
Percentage of OB taxa	PSOB	No RD indivs	NRD
No OB indivs	NOB	Percentage of RD indivs	PNRD
Percentage OB indivs	PNOB	Index of diversity of the RD component	alphaRD
Index of diversity of the OB component	alphaOB	Standard error	SEalphaRD
Standard error	SEalphaOB	No 'foul' decomposer taxa (rf)	SRF
No aquatic taxa (w)	SW	Percentage of RF taxa	PSRF
Percentage of aquatic taxa	PSW	No RF indivs	NRF
No aquatic indivs	NW	Percentage of RF indivs	PNRF
Percentage of W indivs	PNW	Index of diversity of the RF component	alphaRF
Index of diversity of the W component	alphaW	Standard error	SEalphaRF
Standard error	SEalphaW	No synanthropic taxa (sf+st+ss)	SSA
No damp ground/waterside taxa (d)	SD	Percentage of synanthropic taxa	PSSA
Percentage D taxa	PSD	No synanthropic indivs	NSA
No damp D indivs	ND	Percentage of SA indivs	PNSA
Percentage of D indivs	PND	Index of diversity of SA component	ALPHASA
Index of diversity of the D component	alphaD	Standard error	SEALPHASA
Standard error	SEalphaD	No facultatively synanthropic indivs	SSF
No strongly plant-associated taxa (p)	SP	Percentage of SF taxa	PSSF
Percentage of P taxa	PSP	No SF indivs	NSF
No strongly P indivs	NP	Percentage of SF indivs	PNSF
Percentage of P indivs	PNP	Index of diversity of SF component	ALPHASF
Index of diversity of the P component	alphaP	Standard error	SEALPHASF
Standard error	SEalphaP	No typical synanthropic indivs	SST
No heathland/moorland taxa (m)	SM	Percentage of ST taxa	PSST
Percentage of M taxa	PSM	No ST indivs	NST
No M indivs	NM	Percentage of ST indivs	PNST
Percentage of M indivs	PNM	Index of diversity of ST component	ALPHAST
Index of diversity of the M component	alphaM	Standard error	SEALPHAST
Standard error	SEalphaM	No strongly synanthropic taxa	SSS
No wood-associated taxa (l)	SL	Percentage of SS taxa	PSSS
Percentage of L taxa	PSL	No SS indivs	NSS
No L indivs	NL	Percentage of SS indivs	PNSS
Percentage of L indivs	PNL	Index of diversity of SS component	ALPHASS
Index of diversity of the L component	alphaL	Standard error	SEALPHASS
Standard error	SEalphaL	No uncoded taxa (u)	SU
No indivs of grain pests (g)	NG	Percentage of uncoded indivs	PNU

Wood identification samples

Context 23

Sample 5: very decayed oak (*Quercus*); squarish section about 30 mm maximum width, with soft pale outer wood and a fibrous, tough core

Context 27

Sample 8: very decayed soft oak.

Context 41

Sample 29: a 65 mm diameter stem with bark (now mostly loose) of birch (*Betula*)

Sample 30: a 70 mm diameter stem with intact bark of willow (*Salix*)