2352

Ancient Monuments Laboratory
Report 56/93

MEDIEVAL AND POST-MEDIEVAL PLANT AND INVERTEBRATE REMAINS FROM AREA X, THE BEDERN (SOUTH-WEST), YORK

A Hall, H Kenward & A Robertson

Ancient Monuments Laboratory Report 56/93

MEDIEVAL AND POST-MEDIEVAL PLANT AND INVERTEBRATE REMAINS FROM AREA X, THE BEDERN (SOUTH-WEST), YORK

A Hall, H Kenward & A Robertson

Summary

Results of analyses of plant macrofossils, insects and parasite eggs from deposits of 13th century to early modern date from Area X, The Bedern (south-west), York, are reported. A large proportion of the deposits investigated were associated with the College of the Vicars Choral, attached to York Minster. A total of 135 contexts and 223 samples were examined, of which 65 contexts and 73 samples were analysed for insects and 53 contexts and 80 samples for plants. A large proportion of the contents were examined for parasite eggs. Although some deposits were quite rich in 'waterlogged' remains (particularly those from pit fills), the concentrations of plant and invertebrate fossils were generally low. An overall impression is given of a quite high standard of cleanliness and of well-organised waste disposal. The nature of most of the pit fills as containing human faeces and/or stable manure has been established by these analyses. Pits and latrine pits containing foul matter appear to have been quickly backfilled or located within structures, respectively. Several of the pit fills gave good evidence for plant foods, notably fruits and flavourings.

Author's address :-

A Hall, H Kenward & A Robertson

Environmental Archaeology Unit
University of York
Heslington
York
YO1 5DD

Investigation of medieval and post-medieval plant and invertebrate remains from Area X of the excavations in The Bedern (south-west), York (YAT/Yorkshire Museum sitecode 1973-81.13 X): Technical Report

Allan Hall, Harry Kenward and Alan Robertson

Prepared for York Archaeological Trust, 11.12.92

Introduction and methods

Deposits of Roman to early modern date were excavated from Area X at The Bedern (south-west) during 1976-9. The sampling strategy for biological remains, although good by the standards of the time, was much less thorough than that currently favoured within the Environmental Archaeology Unit (Dobney *et al.* 1992), where all layers are sampled by means of a 'general biological analysis' sample, at least, with 'bulk-sieving' employed wherever practicable, together with 'site-riddling' where the context is very large. Only very limited bulk-sieving and no site-riddling was undertaken in the present case. Samples for processing in the laboratory were prioritised by the post-excavation team and analyses undertaken sporadically through the period 1976-89.

Laboratory processing methods varied through the period of practical work. In the early stages, separate subsamples for insect and plant macrofossil analyses were taken; latterly, these remains were examined from the same subsamples. Initially, methods for extraction and recording of insect and plant remains followed those of Kenward *et al.* (1980). Latterly, the abbreviated 'test processing' method of Kenward *et al.* (1986) was employed for processing subsamples for both plant and insect analyses. The plant material from these subsamples was recorded semi-quantitatively; insects were fully quantitatively scan-recorded (Kenward 1992) unless otherwise stated. For each sample discussed below, the weight of the subsamples examined is given after the sample number. Invertebrates other than beetles and bugs (and worm eggs, see below) were not routinely recorded in a systematic when when the bulk of the analyses were carried out and, since it would be misleading to present the 'patchy' data obtained, this information is not included in this report. Recording of components of samples other than plant and invertebrate remains was likewise not wholly consistent, but lists of materials such as mortar, brick/tile, bone, shell and so on appear in Appendix 2 with the lists of plant remains.

Subsamples for analysis of the eggs of intestinal parasitic worms were treated following the 'modified Stoll method' summarised by Dainton (1992, 59-60); this work was supervised by Dr Andrew Jones. In addition, 'spot' samples were examined in various ways and some identifications of timbers were also made (included in Appendix 6).

The bulk-sieved samples, collected primarily for the recovery of bone, were dealt with in a somewhat haphazard way, essentially following the practical methods outlined by Kenward *et al.* (1980). In the end, only a few were sorted and plant and animal remains have not been recorded from them.

In addition to the main series of analyses, a student project was carried out by Alison Cameron (ASC), then an undergraduate at the University of Bradford, on some material from this site. Her results are incorporated in the text below.

This report is one of a series of three dealing with medieval and post-medieval plant and invertebrate analyses from excavations in The Bedern; Areas II and IV of the area to the north-east of The Bedern (site codes 1976-81.14 II and IV) are considered by Hall *et al.* (1992a; b). Other published information about plant and animal remains from this area of York is given by Kenward *et al.* (1986) who deal with Roman and early medieval material from The Bedern, south-west, Areas III-VI (1973-81.13 III-IV) and north-east, Area I (1976-81.14 I), and from a site adjacent to 1-5 Aldwark (1976-9.15). An unpublished report on post-Roman material from the last of these sites is given by Kenward and Robertson (1988). Bone from Area II at The Bedern, south-west, is considered by O'Connor (1989) and bone from various parts of this site by Scott (1985). Bone from Area X is considered further by Dobney (forthcoming). Further investigation of medieval deposits associated with standing

buildings in this general part of York is reported by Jones (1989), Nicholson *et al.* (1989), O'Connor (1989) and Robertson *et al.* (1989) dealing with material from a site in Coffee Yard (1987.1). Biological evidence from further sites, close to Coffee Yard, in Swinegate, will be investigated in the near future. The archaeological record pertinent to the deposits discussed in the present report is currently being drawn together by Dr Julian Richards, for York Archaeological Trust.

Results of the analyses

Species lists of plants and adult Coleoptera and Hemiptera, and other items recorded from the subsamples are given in Appendices 1-4. 'Main statistics' for the beetle and bug assemblages are given in Appendix 4. The presence of other groups of insects is noted in the text where relevant. Note that raw data for counts of parasite eggs are not presented in the appendices; the data have been drawn on in the text where they are presented semi-quantitatively on the following approximate scale: 'trace' — 1-3; 'few' — 4-7 *Trichuris* and 4-5 *Ascaris*; 'modest numbers' — 8-15 *Trichuris* and 6-10 *Ascaris*; 'significant numbers' — more than 15 *Trichuris* or 10 *Ascaris* ('large numbers' signifies several 10s of eggs counted). This scale has been adopted because (i) experience has shown that there is great heterogeneity in parasite egg concentrations in most deposits; (ii) it is inappropriate to use exact numbers where they lend spurious accuracy — they can only be converted to concentrations by multiplication, compounding inaccuracies inherent in the recording method; and (iii) in some cases the exact method used to extract and count eggs is not clear from the written archive. There were numerous records of structures provisionally identified as eggs of *Hymenolepis*, a nematode gut parasite of rodents. The determination is the subject of considerable uncertainty, however, and these records are referred to in the text as '*?Hymenolepis*'.

In the following account, the samples are considered by phase and context, with archaeological information in brackets after the context number. The sample number is, in some cases, followed by an indication of the number, size and kinds of subsample examined; thus, /1, /2 etc. refer to 'fully-processed' subsamples primarily investigated for insects; /T to 'test processed' subsamples (examined for insects and usually also for plant macrofossils); and /M to subsamples analysed exclusively for plant remains.

Phase 3 [mid-late C13th]

Context **6361** [gully fill]

Sample 604 (0.61 kg /T)

Dark grey-brown, moist, plastic to crumbly to brittle, humic, slightly clay silt with some brick/tile.

The tiny flot contained several predominantly small seeds, some fine, very pale, plant fragments, and a few assorted fly puparia and poorly preserved beetles. Only eleven individuals of eight beetle taxa were recorded. There were three *Cercyon analis*, and the remaining taxa might have lived with this species in decaying matter of some kind. All may, however, have had a 'background' origin or have been introduced in backfill.

Only four plant taxa were recorded from the flot; amongst them were modest numbers of toad-rush (*Juncus bufonius*) seeds, consistent with deposition in a place with impeded drainage and perhaps also some trampling or other disturbance. The residue was not examined.

Two subsamples were examined for parasite eggs. The first gave a single *Trichuris* egg and numerous tentatively identified *Hymenolepis*; the second gave only '*?Hymenolepis* eggs', in modest numbers.

Context **7514** [clay floor]

Sample 623

A single subsample was examined for parasite eggs; it was barren.

A separate subsample (of unknown size) was bulk-sieved to 1 mm; it yielded small amounts of fish and mammal bone and charcoal and traces of shellfish and eggshell, as well as a little brick/tile, stone and a fragment of cinder.

Context **7524** [ditch fill]

Sample 624

A single subsample was examined for parasite eggs; it was barren.

Context **7534** [floor]

Sample 625

A single subsample was examined for parasite eggs; it yielded only a single fragmentary *Trichuris* egg.

Context **7539** [pit fill]

Sample 626 (0.68 kg /T)

The flot was not examined but the residue yielded a modest list of plant remains including moderate numbers of *Potentilla anserina*, *Juncus bufonius* and *Scirpus setaceus* remains, which, together with traces of *Montia fontana* ssp. *chondrosperma*, *Hydrocotyle vulgaris*, *Ranunculus sceleratus* and *Alisma* sp(p)., point to the presence of vegetation from marginal wetland (marsh?) or wet meadow communities. A trace of *Sphagnum* (bog moss) leaves was also present. The few other plant remains present offered little interpretative information, though the trace of fig, *Ficus carica*, and the presence of fish bone, brick/tile, charcoal, eggshell and mortar indicate that some occupation material was clearly finding its way into the pit. It is difficult to assess the significance of the wetland plant remains though it seems unlikely that so many would have been growing together on an occupation site like this.

A single subsample was examined for parasite eggs; it yielded only a single *Trichuris* egg.

Phase 5 [early C14th]

Context **6296B** [floor level; ?straw]

Sample 566 (0.68 kg /T)

Mid grey-brown, dry to moist, crumbly, slightly clay silty sand with some limestone and a small amount of mortar.

The tiny flot contained charcoal, sand and two seeds. No insect remains were recorded. In the residue there were modest amounts of faecal concretions, fish bone, mortar and sand, with a range of other occupation debris (including crab, mussel and oyster shell, charcoal, and coal), suggesting that there had been dumping of rubbish, including faeces (although no parasite eggs were recorded, see below). The three plant taxa identified from the

residue were all essentially weeds. There was no evidence for '?straw'. Two subsamples were examined for parasite eggs; both were barren.

Context **6300** [floor levels]

Context **6300A**

Sample 570 (0.69 kg /T)

Dark grey-brown, moist, crumbly, humic sandy clay silt with small quantities of limestone, charcoal and brick/tile.

The tiny flot contained a few seeds, sand and charcoal, but no insect remains. Two rush (*Juncus*) species were recorded in trace amounts from the residue, along with moderate amounts of charcoal, fish bone and sand, and traces of other occupation debris, including mammal bone, eggshell and mortar.

Two subsamples were examined for parasite eggs; one was barren, the other contained only small numbers of '*?Hymenolepis* eggs'.

Context **6300B**

Sample 573 (0.83 kg /T)

Mid grey-brown, moist, crumbly sandy silt.

The tiny flot was barren of insects, there being only a few small seeds, some charcoal, sand, and a few plant fragments.

Two plant taxa (*Papaver argemone* and *Juncus bufonius*) were identified from the residue, together with moderate amounts of sand and occupation debris which included bone, brick/tile, eggshell and coal.

Two subsamples were examined for parasite eggs; they were both barren.

Context **6300C**

Sample 574 (0.8 kg /T)

Dark grey-brown, dry, crumbly, sandy silty with a few small stones.

Small charcoal fragments dominated the tiny flot, with some fine plant remains, a few seeds, sand and single fragments of two beetle taxa also represented. The same two taxa recorded from the residue of sample 573 were also recorded here but are of no interpretative value. The residue was not examined.

Two subsamples were examined for parasite eggs; one was barren, the other gave a single '*?Hymenolepis* eggs'.

Context **7224** [floor level]

Sample 612 (2 x 1 kg /T)

Mid to dark grey-brown, moist, crumbly, sandy silt with limestone, charcoal, bone fragments and mortar present in small quantities.

Two subsamples were processed and insect remains were entirely absent from the flots. Both proved to be substantially made up of charcoal with traces of plant fragments.

The combined flots from these subsamples yielded only a few plant remains in trace amounts, most of them weeds of waste ground and cultivated soils; coal was quite common, together with traces of charcoal and fish bone and scale.

A single subsample was examined for parasite eggs; it was barren.

The remaining 14 kg of this sample was bulk-sieved to 1 mm after the main period of work on this site. The residue was sorted and it yielded moderate amounts of mammal, fish and bird bone, traces of shellfish and eggshell, with quite large amounts of mortar/plaster and cinder, moderate amounts of brick/tile and coal, and traces of pottery.

Context **7511** [drain fill]

Sample 627

Two subsamples were examined for parasite eggs; each gave a single *Trichuris* egg.

Sample 628

A single subsample was examined for parasite eggs; it yielded two *Trichuris* eggs.

Phase 6 [mid-late C14th]

Context **5373** [natural clay]

Sample 491 (1 kg /T)

Mid red-brown, moist, stiff clay with some mortar. The tiny flot was barren of insects.

The residue yielded only a trace of elderberry (*Sambucus nigra*) seed, together with small amounts of various occupation debris (including brick/tile and charcoal), suggesting that this was *not* wholly natural clay.

A single subsample was examined for parasite eggs; it was barren.

Context **5306** [pit fill; series of four contemporary cess pits in a row — 5306, 5382, 5387, 5391]

A bulk-sieved sample was processed but there is no record of it having been examined subsequently.

Context **5382** [pit fills]

Context **5382B**

Sample 497 (0.5 kg /1)

Dark grey silty clay.

A small group of beetles was recorded (N = 27, S = 22). There were three woodworm beetles, *Anobium punctatum*, presumably from timber nearby, and various other taxa which may have originated within structures.

This group was typical of much material from occupation deposits, but was of little further interpretative value. It offers no direct evidence for conditions in the pit, and may represent strays and early colonisers, or fauna introduced in redeposited surface material.

There was a small assemblage of plant remains in the residue from this subsample, including fig, charred oat (*Avena* sp(p).) grain and several weed taxa. Clearly preservation was much poorer than in the other subsamples from samples from these pit fills (see below).

A single subsample was examined for parasite eggs; it gave small numbers of *Trichuris* eggs.

Context **5382C**

Sample 500 (1 kg /1, 1kg and 0.2 kg /M)

Very richly organic amorphous peat with lumps of peat and grey clay.

A moderately large beetle and bug assemblage was recovered, there being 100 individuals (counted!) of 54 taxa. Main statistics were not very informative, apart from the large proportion of 'rd'-coded taxa (% N RD = 24). These, together with 13 *Anobium punctatum* and seven grain weevils, *Sitophilus granarius*, suggest that this layer included material from within a structure. Phytophages included a few species offering a small hint that hay-like cut vegetation was incorporated, so that this may have been stable manure.

Two subsamples were examined by ASC for plant remains, both giving lists dominated by foodplants and weeds. Strawberry (*Fragaria* cf. *vesca*) and oats (*Avena* sp(p).) were common, with smaller amounts of fig, blackberry (*Rubus fruticosus* agg.), apple (*Malus sylvestris*), sloe (*Prunus spinosa*), grape (*Vitis vinifera*) and wheat (*Triticum* sp(p).). The cereals were charred, indicating that they probably arrived with ash; the 'waterlogged' food remains perhaps originated in faeces (cf. evidence for worm eggs, below). The presence of abundant corncockle (*Agrostemma githago*) seed fragments in both subsamples suggests that flour-based food contaminated with this arable weed was incorporated into the deposit, though cereal 'bran' was not recorded (it may have been overlooked). The weed taxa included other segetal (cornfield) forms such as *Chrysanthemum segetum* and *Raphanus raphanistrum*, but there was a variety of ruderals, including several *Polygonum* species, especially *P. lapathifolium*, likely to have been a weed of cultivated soil (but perhaps *not* cornfields) or waste places.

A subsample of concretion from this sample was investigated for parasite eggs; it gave no *Trichuris*, but modest numbers of *Ascaris*. Another concretion gave traces of *Ascaris*.

Context **5382D**

Sample 501 (0.1 kg /M)

The small subsample examined by ASC for plant remains yielded an abundance of charred oats, with a trace of charred barley (*Hordeum*) grains, and a modest range of weed taxa, notably stinging nettle, *Urtica dioica*.

A single subsample was examined for parasite eggs; it gave traces of *Trichuris*.

Context **5387** [pit fills]

Context **5387A**

Sample 507 (1 kg /T, 0.5 kg /1)

Mid to dark grey-brown, dry, crumbly, sandy silt with pinkish clay, mortar and brick/tile.

There were only single individuals of four beetle taxa in the tiny flot. The subsample examined by ASC for plant remains gave a small list of taxa, many not identifiable to species; they were effectively uninterpretable. Two subsamples were examined for parasite eggs; one was barren, the other giving modest numbers of *Trichuris*, probably reflecting the heterogeneous nature of the sample.

Context **5387B**

Sample 510 (0.1 kg /M)

Another small assemblage was obtained by ASC from the subsample examined for plant remains. Only chickweed, *Stellaria media*, was present in more than trace amounts. The other taxa were mostly weeds, too, and offer little towards an interpretation of this deposit. A single subsample was examined for parasite eggs; it gave traces of *Trichuris* eggs.

Context **5391** [pit fills]

Context **5391A**

Sample 511 (0.1 kg /M)

Only a trace of elderberry seed was recorded by ASC from the subsample examined. A single subsample was examined for parasite eggs; it was barren.

Sample 530 (40 g washed as SPOT)

Traces of fig and rush seeds were recorded, together with a trace of fish bone and moderate amounts of charcoal.

Context **5391B**

Sample 513 (0.5 kg /1)

Very dark grey, moist, humic soil in clay loam.

A fairly small group of beetles was recorded, 41 taxa represented by 67 individuals. Little unequivocal information could be drawn from it: a few 'house fauna' taxa were present (including 6 individuals of the eurytopic *Lathridius minutus* group), there were a few generalist decomposers, some grain pests, and some probable post-depositional invaders. Outdoor forms included the waterside ground beetle *Agonum albipes*. Some background fauna may have been present, but the greater part of this assemblage may have originated indoors, in a stable or a dirty human dwelling.

Traces of food remains (strawberry, fig, oats) were recorded by ASC from the subsample examined for plant remains; the remaining taxa were mostly weeds. Overall, it is not possible to point to the nature of the material filling the pit.

A single subsample was examined for parasite eggs; it gave small numbers of *Trichuris* eggs.

At least some of the fills of this series of pits contained food remains and probably faeces; whether the material entered in human rather than, for example, pig faeces is uncertain, however.

Context **5466** [pit fills; pit intercutting with **5468**]

Context **5466B**

Sample 584 (2 x 1 kg /T (sub. A); 1 kg /T (sub. B))

Subsample A: Dark grey, moist, slightly crumbly to brittle, silty amorphous organic sediment with traces of small stones and shellfish fragments.

The first of the two subsamples produced a small flot which included several seeds, much fragmented plant, some charcoal and slag, a few fly puparia and pale fragments of adult fly, a scale insect and a single human flea (*Pulex irritans*). Sixty individuals of 35 taxa of Coleoptera were estimated to be present (semi-quantitative scanning). The fauna had an underlying character like many from this site, with 'house fauna' taxa and some grain pests. There were also 'several' *Carpelimus bilineatus*, three *Neobisnius ?villosulus*, 2 *Omalium rivulare*, and a few other species likely to have invaded somewhat foul organic remains, either in the pit or prior to dumping of the fill.

A record of *Orthochaetes setiger* from this subsample is the first from archaeological deposits in York.

The second flot was slightly larger, though similar in character to the first. A slightly larger assemblage was recovered, about 84 individuals of 45 beetle and bug taxa; recording was, again, by semi-quantitative scanning. The fauna was essentially similar to that from the first subsample, although of somewhat better-developed character. There were 'several' individuals of *C. bilineatus*, *Anotylus rugosus*, *Anobium punctatum*, *Tipnus unicolor* and *Lathridius minutus* group. That the material originated within a building seems quite likely.

There was a large assemblage of plant remains from this subsample (54 taxa), including moderate amounts of nutlets of sheep's sorrel (*Rumex acetosella* agg.), seeds of 'turnip' (*Brassica rapa*), and leaves of *Sphagnum* moss. Fig and strawberry were again present in more than trace amounts and there were a few other probable foodplants — grape, oats (including cultivated oat, *Avena sativa*), barley, hazel nut, blackberry, and sloe. The presence of a few remains preserved by mineralisation rather than waterlogging or charring perhaps point to the presence of a high concentration of salts as in a cess pit. Two taxa perhaps pointing, with the *Sphagnum*, to exploitation of peatland were cotton-grass (*Eriophorum vaginatum*) and ?heather (cf. *Calluna vulgaris*). Most of the remaining taxa were weeds of cultivated or neglected land with a few plants of wetland habitats (but no more than commonly encountered in urban archaeological deposits). A range of occupation debris was also present in the subsample, notably coke, with some coal, charcoal, burnt and unburnt bone, metallic slag, eggshell and mortar. This may thus have been post-use infill incorporating a small amount of primary (?faecal) material.

Subsample B: Mid to dark brown, moist, crumbly, amorphous organic sediment with small clay 'mottles' and some brick/tile.

Plant remains and modest assemblage of beetles made up most of the tiny flot, which was recorded by semi-quantitative scanning, and a few seeds, charcoal, slag, and a fly were also present. There were about 33 individuals of 21 beetle taxa. While there were 'several' *Anobium punctatum* and *Oryzaephilus surinamensis* (saw-toothed grain beetle), there were only one or two individuals of the remaining taxa. It is possible that these originated in animal feed rather than directly from stored grain.

The plant remains recorded were a restricted sub-set of those in the first subsample, all 24 taxa being present in trace amounts.

Six subsamples of 584 were examined for parasite eggs, three from each of the two subsamples. They gave variable but always small numbers of *Trichuris* and *Ascaris* eggs.

Context **5466C**

Sample 591 (1 kg /T)

Another large assemblage of identifiable plants taxa (46) was recovered from the subsample examined. Most were present in very small amounts, but fig seeds, corncockle seed fragments, faecal concretions, and fly puparia were all present in some quantity. There was a small component of moss, too, including taxa typically (though not exclusively) associated with latrine pits. Probable food remains other than fig included opium poppy (*Papaver somniferum*), strawberry, apple, sloe, grape, ?fennel (cf. *Foeniculum vulgare*), and wheat/rye 'bran', but there was a large component of weed taxa and some evidence for peatland in the form of heather root/twig fragments and *Sphagnum* leaves/shoots, as well as a small number of wetland taxa, all indicating that the deposit was by no means wholly faecal in origin (indeed, the presence of brick/tile, charcoal, limestone fragments, mortar and modest quantities of sand point to the incorporation of other occupation debris, though some of this may have originated in the walls of the pit.

Two subsamples were examined for parasite eggs. Each gave small numbers of *Trichuris* and single *Ascaris* eggs.

Context **5468** [pit fills; pit intercutting with **5466**]

Context **5468A**

Sample 579 (1 kg /T)

Very dark grey-brown, moist, slightly plastic to crumbly, humic clay silt with small quantities of mortar and brick/tile.

The small flot contained some fine plant remains, seeds, a few pieces of charcoal, mites and abundant fly fragments. A modest group of beetles was recorded by semi-quantitative scanning — an estimated 73 individuals of 36 taxa. Diversity was rather low (the estimate was alpha = 28, SE = 6, although this cannot be very reliable in view of the recording method). 'Outdoor' forms were rare (% N OB = 8). Although coded decomposers only accounted for just over half of the individuals, there were numerous uncoded taxa which probably belonged in this group. The most abundant taxa, all 'several', were *Carpelimus bilineatus*, *C. pusillus* group, *Neobisnius ?villosulus*, and *Lathridius minutus* group. The first three probably indicate rather foul conditions, and a good number of the other beetles would have lived with them. *L. minutus* group perhaps had a separate origin, together with *Anobium punctatum*, the grain pests *Oryzaephilus surinamensis* and *Sitophilus granarius* (all 3), *Tipnus unicolor* (2) and some others, from within a building. The RD component was accordingly quite large (a fifth of the individuals).

Two subsamples were examined for parasite eggs; one gave a single *Trichuris* egg, the other a few eggs of this taxon.

Context **5468C**

Sample 585 (1 kg /T)

Dark brown, layered, herbaceous detritus.

The medium-sized flot included abundant fine plant remains, a few seeds, several fly fragments and many heads, an ant, a human flea and a sizeable assemblage of beetles (recorded by semi-quantitative scanning: 121 individuals of 47 taxa). Diversity was low (the estimate was alpha = 28, SE = 4, although nine taxa were recorded only as 'several' or 'many'). Decomposers were well represented (% N RT = 64, and there were some uncoded taxa probably belonging in this group). The RD component was substantial (% N RD = 31). Diversity of the decomposer group was very low (estimated as alpha = 10, SE = 2) and there can be little doubt that

breeding communities were incorporated into the deposit. As with the subsample from 579 (context 5468A), it appears that two main groups may have been present. The first were decomposers which perhaps lived in the layer *in situ* (*Carpelimus bilineatus*, with 'many' individuals, *Anotylus rugosus* and *Neobisnius ?villosulus* (both 'several') and a few others). The second group comprised probable 'house fauna', represented by *Lathridius minutus* group ('many'), *Xylodromus concinnus*, *Tipnus unicolor*, and two *Cryptophagus* species (all 'several'), *Anobium punctatum* and *Mycetaea hirta* (3 each) and some rarer taxa. There were grain pests ('several' *Oryzaephilus surinamensis* and 2 *Sitophilus granarius*).

A notable component was single individuals of four *Apion* species, *Hypera nigrirostris*, *Sitona* sp. and two unnamed weevils, all perhaps introduced in hay. Three Bruchinae sp. may have come with cut vegetation, although an origin via beans or peas used for food is possible.

Almost the whole of this assemblage may have originated in stable manure, even the first group of decomposers defined above having been recorded from archaeological floor deposits, at 16-22 Coppergate, York, for example.

A single subsample was examined for parasite eggs; it gave one '*?Hymenolepis* egg'.

Context **5497** [pit fill; pit associated with **5501**]

Sample 598 (2 x 1 kg /T)

Very dark brown, dry to moist, crumbly, slightly layered amorphous organic sediment with lenses of silt.

The large flot produced many plant remains, fragments of both adult and pupal flies,several larval beetle heads and a substantial beetle assemblage. There were an estimated 226 individuals of 61 beetle and bug taxa (note that recording was by semi-quantitative scanning and there were seven taxa recorded simply as 'many', and eleven as 'several', so the statistics need to be approached with caution). Whole-assemblage diversity was low (alpha = 28, SE = 3), outdoor forms rare (% N OB = 3) and decomposers important (% N RT = 63, with a substantial number of uncoded probable decomposers). Diversity of this decomposer group was estimated to be low (alpha RT = 13, SE = 5). As with the subsample from 585 (context **5468C**), a mixture of communities can perhaps be discerned, but most of the assemblage may have originated within a stable-like building. The 'house fauna' element was strongly represented, with 'many' individuals of *Xylodromus concinnus*, *Anobium punctatum*, *Tipnus unicolor*, *Mycetaea hirta* and *Lathridius minutus* group. Other members of this element included 'several' *Atomaria nigripennis* and 3 each of *Cryptophagus scutellatus* and *Ptinus fur*. The similarity between this group and material from dwellings or workshops of Anglo-Scandinavian date at 16-22 Coppergate is remarkable.

In addition to these beetles, there were 'many' *Omalium rivulare*, a rather eurytopic decomposer.

This can be seen as a particularly characteristic and largely pure 'house fauna' group, doubtless derived from a stable or byre.

With 49 identified taxa, the assemblage of plant remains from this subsample was one of the larger ones from this set of deposits. That the material was largely faecal in origin is attested by the abundance of faecal concretions recorded, supported by modest quantities of fig seeds, corncockle seed fragments, and 'bran', as well as mineralised cotyledons of a *Brassica* or *Sinapis* species — perhaps some kind of mustard? The range of foodplants present was similar to that from deposits in pits 5466/5468, with (in addition to fig and 'bran'), blackberry, strawberry, apple, sloe, fennel, but also summer savory (*Satureja hortensis*). Again, there was a wide spectrum of weeds and wetland taxa, but only *Sphagnum* to represent possible peatland exploitation.

Four subsamples were examined for parasite eggs, giving counts for *Trichuris* ranging from small to quite large; there were also traces of *Ascaris* eggs.

Context **5501** [pit fills; pit associated with **5497**]

Context **5501A**

Sample 601

Two subsamples were examined for parasite eggs but none were observed.

Context **5501B**

Sample 602 (1 kg /T; 0.5 kg /M)

Very dark brown, moist, crumbly amorphous organic sediment.

The small flot contained many plant fragments and seeds and a small assemblage of beetles and bugs (about 36 individuals of 23 taxa, recorded semi-quantitatively). The fauna largely resembled a random assortment from that of the subsample from 598 (context **5497**), although there were 'several' *Coprophilus striatulus* in the present case, suggesting that the small post-depositional invader group discernible in the subsample from 598 was a little stronger here. This group is discussed more fully under contexts **5406B** and **C**, below (Phase 7).

Two subsamples were examined for parasite eggs; one gave quite large numbers of *Trichuris* and a few *Ascaris*, the other gave appreciable numbers of *Trichuris* but even more *Ascaris* (14 and 20, respectively).

Context **5501C**

Sample 603 (0.69 kg /T)

Mid to dark grey, moist, plastic clay silt with modest quantities of limestone and brick/tile.

In addition to the beetle assemblage (N = 35, S = 32) produced by the small flot, several seeds, wood lumps, charcoal and plant remains, a few pale fly fragments, a wasp and a mite were also present. The beetles appeared to have been of very mixed origins, largely 'background' fauna, perhaps with a few early invaders of organic debris.

The flot from this subsample was also examined for plant remains and it gave a rather small assemblage, all present in trace amounts. Apart from fig, all the taxa were weeds or wetland plants regularly recorded from urban archaeological deposits, offering little of interpretative value.

Two subsamples were examined for parasite eggs; the first gave modest numbers of *Trichuris* and quite large numbers of *Ascaris*, with some '*?Hymenolepis*', while the second was barren.

Context **6372F** [gully fill]

Sample 618 (1 kg /1)

The rather small number of taxa plant recorded from this subsample included a very large number of stinging nettle (*Urtica dioica*) achenes with moderate numbers of sedge (*Carex* sp(p).) nutlets; all the remaining taxa, where identified sufficiently closely, pointed to weedy vegetation with perhaps some slight indication of wetland, though these might all be part of the 'background' flora. The abundant nettle fruits perhaps point to an area of neglect in the vicinity as the gully fill formed. Insect remains from this subsample were not recorded.

Context **7329** [pit fill]

Sample 621B

A single subsample was examined for parasite eggs; it was barren.

Sample 622B (1 kg /T)

Dark grey brown, moist, crumbly humic silt.

Some pale mites and fly puparia, plant fragments and a few seeds featured in the tiny flot which also gave a modest, poorly preserved, beetle assemblage. Only 22 beetle and bug taxa were recorded. Of these, only *Acrotrichis* sp. (3 individuals) was represented by more than one individual. This assemblage appears to have originated fairly randomly, but perhaps included colonisers of rotting matter.

It is possible that some faecal material or food waste was present in this deposit, to judge by the presence of traces of fig seeds and moderate amounts of corncockle seed fragments. There were also traces of hazel nutshell, sloe fruitstone fragments and elderberry seeds. Most of the taxa in this modest-sized assemblage were weeds,however, apart from the moderate numbers of toad-rush (*Juncus bufonius*) seeds — perhaps an indicator of wet, trampled places nearby (there was a small wetland component, but no more than is often recorded from apparently terrestrial urban archaeological deposits. Hemp, *Cannabis sativa*, was also present — one of only two records for this important oil/fibre crop in the medieval deposits examined from Area X at the Bedern.

A single subsample was examined for parasite eggs; it contained only a few '*?Hymenolepis* eggs'.

Context **7347** [floor level; sample recorded by excavator as containing feather and bones]

Sample 622A (SPOT of 0.26 kg, rich in fish bone)

There was no evidence of feathers in this sample, but quantities of fish bone were present; it is possible that fine parallel fin rays were mistaken in the field for feathers.

Phase 7 [late C14th-early C15th]

Context **5159** [clay spread]

Sample 409 (0.41 kg /T)

A dark brown, moist, crumbly humic silt with small quantities of charcoal, bone, shellfish and brick/tile.

The tiny flot included charcoal, a few seeds and plant fragments, some pale fly puparia, a mite, and a modest, poorly preserved beetle assemblage. There were only single individuals of eight taxa of Coleoptera, all probably able to live together in foul but open-textured organic debris such as stable manure. Perhaps these remains originated in an overlying layer.

Not surprisingly, perhaps, there was a rather small assemblage of plant remains in the subsample examined, with two taxa present in more than trace amounts: mineralised cotyledons of *Brassica/Sinapis* sp(p). (mentioned above as possible evidence for mustard, but by no means securely interpreted in this way), and nutlets of spike-rush, *Eleocharis palustris* (this last is regularly recorded from urban archaeological deposits and its presence is difficult to explain). The remaining taxa were for the most part weeds. It seems likely that only a small amount of organic material became incorporated into this spread, or that what has been recorded is the impoverished remains of a much richer assemblage. It is notable that three of the taxa present were preserved by mineralisation — this

form of preservation is normally rather rare in archaeological deposits in York, being perhaps most common in some former cess-pit fills where decay has been intense.

Amongst the other components of the residue were moderate quantities of oyster shell, together with a small range of other occupation debris.

A single subsample was examined for parasite eggs; it was barren.

Pit containing **5203, 5204, 5249, 5263**

Context **5203** [pit fill]

Sample 424 (0.81 kg /T)

A black, moist, crumbly charcoal matrix with some mineral sediment and some bone.

Largely charcoal and slag with a small amount of fragmented uncharred plant material, the medium-sized flot did not include any insect remains and only a trace of one identifiable plant taxon of no interpretative value.

A single subsample was examined for parasite eggs; it was barren.

Context **5204** [pit fill]

Sample 418 (1 kg /T)

Mid to dark grey-brown, moist, crumbly, humic clay silt with small quantities of charcoal, bone, shellfish and brick/tile.

The tiny flot included many assorted seeds, pale plant fragments, charcoal and a scale insect. Four beetle taxa were recorded, each as single individuals. Preservation was poor. A small assemblage of identifiable fruits and seeds was recovered from the flot, the majority weeds. There was no evidence for the nature of the pit fill; it may have been secondary backfill or a gradual accumulation after disuse.

A single subsample was examined for parasite eggs; it contained only a few '*?Hymenolepis* eggs'.

Context **5249** [pit fill]

Sample 421 (0.79 kg /T)

Mid to dark orange-brown, dry, crumbly, humic sandy silt with charcoal in some abundance and slag.

The small flot was almost exclusively made up of charcoal and slag, with very few plant remains and no insects.

The residue consisted largely of cinders and coal with traces of brick/tile, burnt bone, and charcoal, and no identifiable plant remains.

A single subsample was examined for parasite eggs; it was barren.

Context **5263** [pit fill]

Sample 426

A 1.5 kg subsample was bulk-sieved 1 mm after the main period of analysis; it yielded moderate amounts of mammal and fish bone and eggshell, and a little shellfish. There was also large amounts of stone and cinders, some brick/tile, coal and charcoal and a trace of wood fragments.

Context **5230** [pit fill]

Sample 416 (0.49 kg /T)

This was a dark grey-brown, dry, crumbly, humic silty sand.

The tiny flot contained mostly charcoal with vegetative plant fragments and a few seeds. No insect remains were present.

A single subsample was examined for parasite eggs; it was barren.

Context **5231** [pit fill]

Sample 417 (0.61 kg /T)

Very dark grey, moist, crumbly humic slightly sandy silt.

The small flot consisted mainly of charcoal and slag with pale plant and fly fragments and a few seeds and mites. Recording was by semi-quantitative scanning. Thirty-two beetle taxa were present, with an estimated MNI of 53. Main statistics were not very informative, but inspection of the species list suggested that *Acrotrichis* sp., *Carpelimus fuliginosus* and *Neobisnius ?villosulus* (all 'several') bred, these and some of the rarer taxa indicating moderately foul but open-textured rotting matter.

In the residue there was a modest assemblage of identifiable plant remains, all in trace amounts, together with a variety of occupation debris including coal, cinders, fish bone and scale, mortar and mussel shell. Two of the plant taxa were mineralised: linseed (*Linum usitatissimum*) and *Brassica/Sinapis*, both perhaps originating in food, but the only other possible foodplants present were fig, elderberry and charred bread/club wheat (*Triticum aestivo-compactum*). This was perhaps food waste rather than faecal material.

A single subsample was examined for parasite eggs; it gave a single *Trichuris* and a few '*?Hymenolepis* eggs'.

Context **5271** [pathway]

Sample 488 (1 kg /1)

The only identifiable plant remains from this subsample were hazel nutshell fragments in trace amounts.

Context **5273** [pit fill]

Sample 438 (0.65 kg /1; 1 kg /2, /T)

This fill was a dark purplish-brown silt with grey sandy clay silt lumps and a small quantity of wood.

The medium-sized flot included many plant, charcoal and slag fragments, several seeds, a few fly puparia, wasps

and mites, two fleas and a scale insect. Beetles were quite abundant (N estimated by semi-quantitative scanning as 105; S = 53). The most abundant taxon was *Lathridius minutus* group ('many'), with 'several' *Carpelimus bilineatus*, *C. fuliginosus*, and *Tipnus unicolor*. These, and most of the rest of the assemblage, seem likely to have originated within a structure, in material taken from a litter-covered floor.

There was a rather large assemblage of plant remains from this subsample though, with the exception of sheep's sorrel (*Rumex acetosella* agg.), all were present in small amounts. The taxa recorded represented a wide range of habitats, with weeds of waste and cultivated ground predominating. A trace of bracken (*Pteridium aquilinum*) stem material may indicate litter of some kind (though the plant can grow in neglected corners in urban York today, typical in and around abandoned buildings and may have done so in the past. The fill of this pit seems to have included a variety of occupation debris, to judge from the mixture of materials present: brick/tile, charcoal, coal, eggshell, limestone, mammal bone, mortar, and oyster shell.

Three subsamples were examined for parasite ova; one was barren, and the other two gave small numbers of '*?Hymenolepis* eggs'. One of the latter also gave a modest number of *Ascaris* eggs.

Context **5292** [loam spread]

Sample 490 (1 kg /1)

Only traces of two plants with tough seeds were recorded from this sample.

Context **5309** [pit fill; pit associated with pit containing **5311**]

Sample 443 (0.4 kg /1)

Dark red-brown, moist, layered, compressed organic sediment with small quantity of eggshell.

The large flot contained plant fragments and seeds in abundance, with a few fly puparia, adult fly fragments and an ant. Beetles were represented only by single individuals of 15 taxa. This group had a character much like many from the site (including that from sample 445), but may have been of local 'background' origin.

That faecal material was a major component of this deposit seems evident from the large amounts of cereal 'bran', corncockle seed fragments and faecal concretions recorded. Other food remains — all in trace amounts — included fig, blackberry, apple, field bean (*Vicia faba*, recorded as mineralised fragments of the seed coat of the bean), grape, coriander (*Coriandrum sativum*), fennel, ?leek (*Allium* cf. *porrum*, leaf epidermis fragments), eggshell membrane, and fish and mammal bone. Something of the nature of the fills is also provided by the record of respiratory processes of rat-tailed maggots (larvae of certain syrphid flies). The remainder of the plant assemblage comprised a range of weeds, some perhaps grain contaminants like the corncockle, others probably ruderals growing near the pit.

A single subsample was examined for parasite eggs; it gave small quantities of *Trichuris* and modest numbers of *Ascaris*.

Sample 445 (1 kg /T, 0.5 kg /M)

Black, moist, slightly layered, crumbly humic silt with a few wood and twig fragments.

The very large flot contained much fragmented plant, many fly puparia, a few fly fragments and an ant. Beetles were moderately abundant (N estimated as 69, S = 34, semi-quantitative scanning). An origin in litter within a building seems likely; the fauna had a strong resemblance to some from the fills of pit **5468**. The most abundant taxa were *Lathridius minutus* group ('many'), and *Tipnus unicolor* and *Cryptophagus* sp. (each 'several'). Almost half of the individuals were of taxa coded 'rd' (% N RD = 48), and diversity of the decomposer group was very

low (alpha RT = 10, SE = 2).

Two subsamples were examined for parasite eggs; both gave a few *Trichuris* eggs, while one gave several *Ascaris* and the other only one. There was a single '*?Hymenolepis* egg' in one subsample.

Context **5311** [pit fill; pit associated with pit containing **5309**]

Sample 446

Two subsamples were examined for parasite eggs; one was barren, the other gave single *Trichuris* and *Ascaris* eggs.

Context **5336** [loam spread]

Sample 517 (1 kg /T)

Dark grey, dry to moist, crumbly, sandy clay silt with coal in abundance and brick.

The flot included single individuals of only two beetle taxa. Only a trace of elderberry seed was recorded from the residue, along with an abundance of coal, and small amounts of a range of other durable occupation debris.

A single subsample was examined for parasite eggs; it was barren.

Associated (?contemporaneous) pits in 'garden' area

Context **5340F** [pit fill]

Sample 452 (0.55 kg /T)

Dark grey, moist, crumbly, humic sandy silt with yellow grey sandy clay lumps, and small quantities of charcoal, stone and mortar.

Pale 'fluffy' plant fragments, several charcoals, and a small number of poorly preserved beetles made up the tiny flot. A very small group of beetles was recorded (N = 6, S = 5); these may have been a small random extract from a 'house fauna' group of the kind seen repeatedly at this site.

Along with traces of charcoal and metallic slag, the only two identifiable plant taxa recorded were both forms commonly recorded in urban deposits and offering no useful interpretative information.

A single subsample was examined for parasite eggs; it was barren.

Context **5342B** [pit fill]

A subsample from this context (sample number not recorded) examined for parasite eggs gave small numbers of *Trichuris*.

Sample 455

A single subsample was examined for parasite eggs; it was barren.

Sample 470

A single subsample was examined for parasite eggs; it gave small numbers of *Trichuris*.

Context **5346** [pit fills]

Context **5346B**

Sample 460

A single subsample was examined for parasite eggs; it was barren.

Context **5346C**

Sample 471 (1 kg /1)

A modest assemblage of plant remains was recorded from this subsample, only fat-hen (*Chenopodium album*) being recorded in some quantity. Most of the taxa were, with fat-hen, weeds of waste and cultivated ground, with a record (one of only two) for hempseed (*Cannabis sativa*), perhaps a ruderal in this situation.

Two subsamples were examined for parasite eggs; one gave a single *Ascaris* egg, the other a trace of *Trichuris*.

Context **5347** [pit fills]

Context **5347A**

Sample 456 (1 kg /T)

Dark grey, moist, silty clay with stone, brick/tile, fish bones, charcoal and mortar flecks.

The tiny flot was barren of insect remains, whilst in the residue the only identifiable plant remains were elderberry seeds. There were modest amounts of brick/tile and of fish bone, with traces of a small range of other occupation debris, including eggshell, mussel and oyster shell and mammal bone.

Two subsamples were examined for parasite eggs; one was barren but the other gave single *Ascaris* and '*?Hymenolepis* eggs'.

Context **5347D**

Sample 461 (0.8 kg /T)

Dark grey-brown, dry to moist, humic sandy silt with clay flecks, mortar and brick/tile.

The tiny flot included fine plant fragments, some slag, a few seeds and one very badly preserved, unidentified beetle. Three plant taxa were recorded from the flot, all commonly recorded on urban archaeological site and of no interpretative value.

A single subsample was examined for parasite eggs; it was barren.

Context **5347E**

Sample 464 (0.35 kg /T)

Dark brown, moist, brittle, layered, compressed amorphous organic sediment with herbaceous detritus.

The medium-sized flot contained much plant detritus and a small, reasonably well preserved beetle assemblage (N = 21, S = 16). These latter may have included invaders of fairly foul material in the pit.

With 41 taxa, this was one of the larger plant macrofossil assemblages from these deposits. There was here a distinctive component of probable grassland plants, some from the wetter pastures or meadows, others from drier ground. The taxa recorded in more than trace amounts were marsh marigold (*Caltha palustris*), yellow-rattle (*Rhinanthus* sp(p).) and sedges (*Carex* sp(p).), which might all have originated in hay or other cut vegetation (or in dung from animals grazing on such vegetation), and there were records, too, for plants such as ragged robin (*Lychnis flos-cuculi*), red clover (*Trifolium pratense*), cow parsley (*Anthriscus sylvestris*), and some grasses and rushes, all perhaps from hay-like material. The presence of uncharred oat grains is further evidence that we may be dealing with stable manure. There was evidently other occupation material finding its way into this fill as it formed, however, including eggshell, coal, bone, slag, mortar and mussel shell.

A single subsample was examined for parasite eggs; it was barren.

Context **5347F**

Sample 466 (0.41 kg /T)

Mid to dark grey-brown, dry, crumbly, sandy silt with small quantities of wood fragments, bone, mortar and brick/tile.

Consisting mainly of fluffy plant fragments with some charcoal, slag and a few seeds, the tiny flot also included poorly preserved single individuals of three beetle taxa.

The plant macrofossil assemblage was much smaller than that from 464 and it is not possible to say whether it included similar cut grassland vegetation since the most diagnostic taxa were not recorded. Only toad-rush (*Juncus bufonius*) was present in more than very small amounts — this is most likely to have grown on wet tracks in the vicinity. There was one of only two records for charred field bean, *Vicia faba*, in this sample. Among the other components of the residue, sand, brick/tile and coal were the most abundant, with smaller amounts of a range of other materials including pot, shellfish, stone and bone.

A single subsample was examined for parasite eggs; it was barren.

Context **5347G**

Sample 468 (0.41 kg /M)

There was a small assemblage of plant taxa, all in small amounts, representing a variety of habitats but with no clear pattern; there was, again, no strong component of grassland plants. Faecal concretions were present in small amounts amongst the other components of the residue, along with modest quantities of wool textile fragments and cinders, and traces of a variety of other occupation debris, including bone, eggshell, shellfish and charcoal. Another record for field bean (cf. sample 466) was made.

A single subsample was examined for parasite eggs; it gave traces of both *Trichuris* and '*?Hymenolepis* eggs'.

Context **5348** [pit fills]

Context **5348B**

Sample 472

A single subsample was examined for parasite eggs; it was barren.

Context **5348C**

Sample 474

A single subsample was examined for parasite eggs; it was barren.

Context **5367** [pit fills]

Context **5367B**

Sample 483 (0.56 kg /T)

Dark grey-brown, dry, crumbly, humic, slightly sandy silt with some stone and ash.

The tiny flot consisted mainly of charcoal and cinder with some plant fragments and a mite. The very small beetle assemblage (N = S = 7) included one modern contaminant, *Euophryum* sp.

The two plant taxa recorded from the flot gave no useful information.

Context **5406** [pit fills]

Context **5406A**

Sample 526 (1 kg /T; 0.1 kg /M)

Mid grey, moist, crumbly, sandy clay silt, with small amounts of limestone, bone, shellfish and brick/tile; the uppermost pitfill.

The tiny flot contained single individuals of *Cercyon* sp. and *Carpelimus* sp., whilst the subsample examined for plant remains yielded only a trace of elderberry seeds.

Two subsamples were examined for parasite eggs; they were both barren.

Context **5406B**

Sample 524 (1 kg /1, /T; 0.1 kg /M)

Mid to dark grey-brown, moist, crumbly, silty clay with wood fragments, brick/tile, limestone and eggshell; below 5406B.

The large flot included much fragmented plant material and a modest assemblage of well preserved beetles (S = 28, N estimated as 68, semi-quantitative scan recording). There were only three 'outdoor' forms. The greater part (three-quarters) of the assemblage consisted of decomposers, including 'house fauna'. There were 'many' *Coprophilus striatulus*, a species not often recorded in more than very small numbers in archaeological

assemblages. It is suspected to belong to a subterranean or post-depositional invader group (Hall and Kenward 1990, 367), and in the present case this is supported by the records of 'several' *Rhizophagus parallelocollis*, three *Trechus micros* and one *Trichonyx sulcicollis*. These taxa have been repeatedly found together, and there can be no doubt as to their burrowing ability.

Neither subsample examined for plant remains gave more than a trace of identifiable taxa, though fig was present in both (its seeds are very resistant to decay). The other taxa present were all annual weeds of disturbed and cultivated soils.

Three subsamples were examined for parasite eggs; two gave small numbers of *Trichuris* and '*?Hymenolepis* eggs', but while there were a few *Ascaris* in one of these, none were recorded from the other. The third subsample gave traces of *Trichuris*.

Context **5406C**

Sample 525 (1 kg /T; 0.3 kg /M)

Dark brownish-grey, moist, slightly crumbly to brittle, humic, slightly sandy clay silt or amorphous organic matrix with some brick/tile; the lowest fill.

The large flot was essentially similar to that from the previous sample. An assemblage of 21 beetle taxa, with an estimated 86 individuals, was recorded by semi-quantitative scanning. The character of this group was very similar to that of the assemblage from the subsample from sample 524, context **5406B**, and indeed the subterranean component was even more strongly developed. There were 'many' *C. striatulus* and 'several' *T. micros*, *T. sulcicollis* and *R. parallelocollis*; there were also 'several' Euplectini sp., often found in such groups. The other main component represented was some oxyteline staphilinids ('many' *Anotylus rugosus*; 'several' *Carpelimus bilineatus*) and their frequent associate *Neobisnius ?villosulus*. These, and some of the less abundant taxa, may have lived in the pit when the fills were still exposed.

A small amount of food waste was evidently present in this fill to judge from the records abundant fig seeds and frequent strawberry 'seeds' and corncockle seed fragments. Most of the other taxa were weeds, though there were traces of sloe fruitstones and raspberry (*Rubus idaeus*).

Three subsamples were examined for parasite eggs; all gave quite substantial numbers of *Trichuris* eggs, and one gave traces of *Ascaris* and '*?Hymenolepis*'.

Context **5406D**

Sample 560 (0.1 kg /M)

Fig seeds were present in quite large numbers in the subsample of this deposit examined, too, along with a very small assemblage of probable weeds. A single subsample was examined for parasite eggs; it gave small numbers of *Trichuris*.

Context **5408** [clay spread]

Sample 527 (1 kg /T)

Mid to dark grey, dry, crumbly, sandy clay silt with stone, limestone, charcoal, shellfish and coal.

The tiny flot was barren of insect remains and the residue was, not surprisingly, almost devoid of identifiable plant remains (only a trace of elderberry seeds was recorded). There were large amounts of coal, however, and traces of a variety of other components, including shellfish, eggshell, fish bone and scale, charcoal and

clinker/coke.

A single subsample was examined for parasite eggs; it was barren.

Context **5433** [pit fill]

Sample 543 (0.73 kg /T)

Mid to dark grey-brown, dry to moist, crumbly, sandy silt with abundant bone and small quantities of limestone and brick/tile.

The tiny flot consisted mainly of sand with some plant fragments, a few seeds and charcoal; there were a few poorly preserved insects. An ecologically mixed assemblage of about 14 individuals of nine beetle taxa was recorded. There were 'several' *Oryzaephilus surinamensis*, perhaps derived from spoiling grain nearby, but other species were recorded as single individuals.

The small assemblage of plant remains is of little interpretative value, all the seven taxa being present in trace amounts. There were large amounts of unburnt mammal bone with modest quantities of burnt mammal bone, charcoal, eggshell, and fish bone amongst the other components, suggesting the presence of domestic waste, much of it from fire ash.

Two subsamples were examined for parasite eggs; one gave a trace of *Trichuris* and the other a trace of '*?Hymenolepis*'.

Context **5437** [clay packing]

Sample 551 (1 kg /T)

Mottled, yellow, moist, plastic clay with tiny lenses of grey clay.

The tiny flot was barren of insects. A single subsample was examined for parasite eggs; it was barren.

Context **5462B** [pit fill]

Sample 575 (0.61 kg /T)

Dark brown, moist, crumbly, layered, slightly sandy amorphous organic matrix with a few small stones.

While spongy plant fragments, charcoal, slag, and seeds were present in modest quantities, the insect remains accounted for the greater part of the tiny flot. There were many fly fragments, several mites, a few fly puparia, one scale insect, a human flea (*Pulex irritans*) and an assemblage of 31 beetle taxa (about 59 individuals; semi-quantitative recording).

Although the proportion of coded decomposers was low (about a third of the assemblage), the higher ranks included species likely to have lived together in a mud-like pit-fill, with the uncoded *Carpelimus pusillus* group at rank 1 ('many'). There were also 'several' *Anotylus rugosus*. Probable 'house fauna' taxa were present, but in small numbers, and 'outdoor' forms were proportionally well represented, probably being background fauna.

Although faecal concretions made up a large proportion of the residue of this subsample, food remains were rather sparse (there were traces only of fig and cereal 'bran'), and the most abundant 'seeds' present were of a variety of annual weeds — perhaps weeds growing in and around a midden or dung-heap. Other weeds, such as corn marigold (*Chrysanthemum segetum*) and shepherd's needle (*Scandix pecten-veneris*), are more likely to be grain contaminants, along with the corncockle (which was present as seed fragments). Amongst the other

components of the residue, the record of ostracods represents the only one for Area X deposits of medieval date at The Bedern (there were single records from both Areas II and IV). These freshwater invertebrates are perhaps most likely to have arrived with water discarded into the pit rather than living in a pit fill rich in waste matter such as faeces.

Two subsamples were examined for parasite eggs; they were both barren.

Context **6183** [pit fills with pot]

Context **6183A, C, D**

Samples 520 (0.5 kg /1 from **A**; subsamples for parasites only from **C** and **D**)

Plant and insect remains from the subsample of **6183A** were not recorded. Three subsamples (one from each of the subcontexts) were examined for parasite eggs; all were barren.

Context **6263** [pit fill]

Sample 557 (1 kg /T)

Mid to dark grey-brown, moist, crumbly, sandy clay silt with small amounts of limestone, charcoal and brick/tile.

The medium-sized flot contained many plant fragments and four reasonably well preserved beetle taxa, all represented by single individuals.

The small assemblage of plant remains was of little interpretative value, all the eleven taxa being recorded in trace amounts. The residue consisted largely of cinders and sand, with modest amounts of brick/tile, charcoal and mortar and it seems the input of organic matter was low, or that preservation was poor. Other occupation material included bone, chalk, coal, eggshell, pot and shellfish.

A single subsample was examined for parasite eggs; it was barren.

Context **6305** [garden loam]

Sample 583 (SPOT)

A small sample containing glass, returned to York Archaeological Trust.

Context **6324** [slag-filled feature]

Sample 582 (SPOT)

A small sample containing glass, returned to York Archaeological Trust.

Context **7020C** [pit fill]

Sample 552

A single subsample was examined for parasite eggs; it gave traces of *Trichuris*.

A subsample of 5 buckets (about 50 l) of sediment from this sample was bulk-sieved to 1 mm. The residue

yielded pottery, metal, a bead, brick/tile, mortar/plaster, wood, charcoal, mammal, bird and fish bone and shellfish and eggshell.

Context **7069** [clay spread]

Sample 561 (1 kg /T)

Mid grey-brown, moist, crumbly, sandy silty clay with abundant limestone and mortar and a modest quantity of bone.

The tiny flot produced a few small seeds (of two taxa, with no particular interpretative use), charcoal and one poorly preserved *Tipnus unicolor*.

A single subsample was examined for parasite eggs; it was barren.

A 2.5 kg subsample from this material was bulk-sieved to 1 mm after the main period of analysis. The residue gave small amounts of mammal, bird and fish bone and of shellfish, with traces of eggshell. There were also large amounts of brick/tile and mortar/plaster, small amounts of coal and cinder, and a trace of pottery.

Context **7081** [clay spread]

Sample 610

A single subsample was examined for parasite eggs; it gave two '*?Hymenolepis* eggs'.

Context **7239** [ash]

Sample 615

A single subsample was examined for parasite eggs; it was barren.

Context **7300** [pit fills]

Context **7300C**

Sample 620 (1 kg /1, /T, 0.5 kg /M)

Mid brown, dry to moist, crumbly, sandy silt with dark blue-grey pellets and some small stones.

The tiny flot included a few seeds, plant fragments, charcoal, pale fly fragments, a mite and a small, very badly preserved, assemblage of beetles (N about 33, S = 12; semi-quantitative recording).

Small though it was, there can be no doubt that this group was predominantly 'house fauna'; there were 'many' *Tipnus unicolor*, 'several' *Anobium punctatum*, and one or two individuals of some other taxa likely to have originated with these.

The two subsamples examined for plant remains both yielded large amounts of faecal concretions, with modest numbers of fig seeds in 620/T. There was a trace of coriander, some tentatively identified mineralised fennel seeds and elderberry seeds, but otherwise food remains were limited to bone (mammal and fish) and a trace of charred cereal grain (unidentified). The presence of *Daphnia* ephippia and water-crowfoot (*Ranunculus* Subgenus *Batrachium*) achenes perhaps points to the incorporation of fresh water from a pond or river edge into the pit fills.

A single subsample was examined for parasite eggs; it gave traces of *Trichuris* and '*?Hymenolepis* eggs'.

Context **7300D**

Sample 621 (1 kg /T)

Mid grey, moist, plastic, slightly sandy silty clay.

For the few beetles produced by the tiny flot preservation was generally very poor. Plant fragments, seeds and some moss were also present. The beetle assemblage (N about 14, S = 9; semi-quantitative recording) was smaller than that for the subsample from **7300C**, but clearly represented identical conditions, with *T. unicolor* ('several') again the most abundant species.

Faecal concretions were again abundant in this subsample, along with modest numbers of fig seeds and quantities of coal and sand, but preservation of organic remains by 'waterlogging' was evidently much poorer and mineralisation perhaps stronger. Other components included bone, charcoal, stone, mortar and pottery.

There were traces of *Trichuris* and '*?Hymenolepis* eggs' in the single subsample examined for parasite eggs.

Phase 8 [mid C15th-early C17th]

Context **5221** [pit fill]

Sample 436 (0.2 kg /1)

Light yellow-brown, dry, concreted silty clay.

A modest group of beetles was recorded (N = 58, S = 34). There were eight *Tipnus unicolor* and four *Anobium punctatum*, presumably from a structure. The remainder of the assemblage was of rather mixed character, but all may have originated in a building with litter on its floor. The concentration of insects (estimated at nearly 300 per kilogramme) was remarkably high bearing in mind the sediment type.

There were abundant fig seeds in the subsample examined, but traces only of four other taxa of limited interpretative value.

Three subsamples were examined for parasite eggs; two gave traces of *Trichuris* eggs and the third somewhat larger numbers of this taxon.

Sample 437 (0.1 kg /1)

Dark moist structured peat.

This small subsample also gave a modest beetle assemblage (N = 55, S = 18). Although rather different from that from the subsample of sample 436 (above) in species composition, this group had similar implications. There were more decomposers likely to have originated in litter (or invaded material in the pit): 11 *Cercyon analis*, 10 individuals of an aleocharine, 5 *Anotylus rugosus* and 4 *Carpelimus bilineatus*, for example). There were 6 *T. unicolor*, but the 'house fauna' component, although present, was not strongly developed.

Figs were again abundant and with them also very large numbers of strawberry 'seeds'. Other foodplants were limited to 'plum' (*Prunus domestica* sl), the other plant taxa being mainly weeds, all in trace amounts.

Two subsamples were examined for parasite eggs; one gave a trace of *Trichuris*, the other a modest count for

this taxon.

Sample 439 (0.2 kg /1)

Yellow-brown to yellowish grey dry concreted silty clay with small quantities of charcoal and brick/tile.

Single individuals of four beetle taxa were recorded and traces of only three identifiable plant taxa, one of them fig.

Four subsamples were examined for parasite eggs; one gave a trace of *Trichuris*, the other three modest numbers.

It appears from the results of the plant macrofossil and parasite egg analyses, at least, that this was a rather heterogeneous deposit, with sample 437 representing rather richer material than the other two, at least for the plant remains.

Context **5222** [peaty clay spread]

Sample 422 (0.79 kg /T)

Dark brown, dry, crumbly, sandy silt with small quantities of limestone, charcoal, mortar and brick/tile.

The medium-sized flot contained many seeds, much charcoal and plant, several pale fly puparia, and a few fly fragments and mites, an ant head and a dog flea, *Ctenocephalides canis*. The beetles were recorded semi-quantitatively: there were about 50 individuals of 27 taxa. This group consisted predominantly of decomposers likely to have lived together in fairly foul organic matter, which was perhaps open-textured (such as stable manure trampled into a clay floor).

There were five identifiable plant taxa in the flot, only ?hedge woundwort (*Stachys* cf. *sylvatica*) being present in more than trace amounts. They do not, together, offer useful interpretative information.

A single subsample was examined for parasite eggs; it gave traces of both *Trichuris* and '*?Hymenolepis* eggs'.

Context **5265** [pit fill]

Sample 427 (0.5 kg /1)

Light grey, dry, crumbly, concreted, slightly clay silt with some brick/tile, mortar and shellfish.

Only a single beetle was recorded from the flot, whilst the residue gave six identifiable plant taxa of no particular interpretative character.

A single subsample was examined for parasite eggs; it was barren.

Sample 428 (0.2 kg /1)

Light grey, dry, concreted, sandy clay silt with small stones, charcoal, bone, mortar and brick/tile.

The flot included three beetles represented by single individuals.
There was a small assemblage of identifiable plant remains from the subsample examined, which were all (with the exception of stinging nettle) present in trace amounts. Almost all the taxa were certainly or probably weeds, though there was a very small wetland component of no particular sigificance.

Three subsamples were examined for parasite eggs; one was barren, a second gave traces of *Trichuris* and

'*?Hymenolepis* eggs' and the third traces of *Trichuris*.

Sample 430 (0.2 kg /1)

Mid grey, dry, brittle, clay silt with small stones and some bone.

No insect remains were seen.

The plant remains recorded were a subset of those seen in the subsample of 428 from the same context, all six taxa being present in trace amounts, and most of them weeds.

Three subsamples were examined for parasite eggs; two were barren, whilst the third gave a trace of *Trichuris* eggs.

Context **5268** [garden loam, *c.* 500 sherds C16th pot, and 5 C18th; residuality]

Sample 458 (1 kg /T)

There was only a trace of elderberry seeds in the residue from this sample, the residue comprising modest amounts of sand with traces of a range of occupation materials, including bone, chalk, charcoal, eggshell and shellfish.

Context **5269** [pit fill]

Sample 441 (0.2 kg /1)

Grey, dry, concreted, slightly sandy silty clay with small amounts of limestone, brick/tile and pot.

This small subsample produced 23 individuals of 21 beetle taxa. The assemblage was of no interpretative value; the list resembled a random extract from an 'averaged' fauna for the present site.

Traces of fig and grape were recorded amongst the modest assemblage of plants identified, the only taxa not likely to have been part of the local flora (which may have included some grassy waste ground as well as more disturbed habitats). Only buttercups (*Ranunculus* Section *Ranunculus*) and sedges (*Carex* sp(p).) were present in moderate amounts.

A single subsample was examined for parasite eggs; it gave small numbers of *Trichuris* eggs.

[Sample 442 (0.2 kg /1) came from an unnumbered context below 5269; only traces of fig seeds and sedge nutlets were recorded from the 0.2 kg subsample and the separate subsample examined for parasite eggs was barren.]

Context **5314** [demolition deposit]

Sample 444 (0.63 kg /T)

Mid-dark grey-brown, moist, crumbly, slightly clay sandy silt with limestone, mortar and brick/tile.

Two unidentified seeds, a few small fragment of charcoal and plant tissue made up the tiny flot; no insect remains were recorded.

The residue gave traces of elderberry seed and charred wheat, but otherwise there were no identifiable plant

remains. Brick/tile and charcoal were quite well represented, and there were traces of bone, mortar, shellfish, coal and stone, though perhaps not the quantities expected from a demolition deposit.

A single subsample was examined for parasite eggs; it was barren.

Context **5337** [loam spread; *c.* 40 C16th sherds and 1 C18th; residuality]

Sample 475 (1 kg /T)

Light to mid grey, dry, crumbly, sandy silt with limestone, charcoal and brick/tile.

Only two beetles were recorded; preservation was good. These may have been contaminants in barren material. There were traces of three plant taxa commonly encountered in urban archaeological deposits in the residue, along with an abundance of mammal bone and moderate amounts of brick/tile, coal, fish bone and sand.

A single subsample was examined for parasite eggs; it was barren.

Sample 516 (1 kg /T)

Mid to dark grey, moist, crumbly, sandy clay silt with small quantities of bone, shellfish, mortar, brick/tile and coal.

There were only a few insect remains in the tiny flot. Single individuals of three beetle taxa were recorded.

The subsample of this sample, like that from 475, gave a residue with considerable amounts of brick/tile, mammal bone and sand, but with only traces of identifiable plant remains, viz. fig, elderberry and *Chara* (the last a freshwater aquatic species perhaps most likely to have arrived with water or aquatic vegetation).

A single subsample was examined for parasite eggs; it was barren.

Context **5338** [pit fills; clay]

Context **5338C**

Sample 447 (0.2 kg /M)

Although small, the assemblage of plant remains included an abundance of fig seeds. The remaining four taxa included strawberry and elderberry, and the unidentified *Brassica* sp(p). might have been from something like mustard (though it was probably not *Brassica nigra* used for black mustard).

Three subsamples were examined for parasite eggs; two had traces of *Trichuris* with one also giving a single '*?Hymenolepis* egg', whilst the third gave modest numbers of *Trichuris*.

Context **5338D**

Sample 449 (0.2 kg /M)

Fig seeds again occurred in large numbers in this subsample, together with abundant strawberry 'seeds'. Other foodplants comprised apple, coriander, and fennel and there was a trace of charred cereal grain (not identified further).

Three subsamples were examined for parasite eggs; each had large numbers of *Trichuris*.

Context **5338E**

Sample 451 (0.2 kg /M)

Fig was frequent, but not so abundant in the subsample examined and, with the possible exception of *Brassica* sp(p). and elderberry seed, no other foodplants were recorded.

A single subsample was examined for parasite eggs; it gave small numbers of *Trichuris*.

Sample 453 (0.2 kg /M)

With moderate numbers of fig and abundant elderberry seeds were abundant stinging nettle achenes and a small assemblage of other plant remains including hazel nutshell and grape and a little charred oat and ?wheat grain.

A single subsample was examined for parasite eggs; it was barren.

Context **5338H**

Sample 467 (0.65 kg /T)

Mid grey-brown, moist, plastic to crumbly to brittle, humic clay sandy silt with some stone and shellfish.

The medium-sized flot contained many plant fragments and mites with several seeds, fly heads and fragments, beetle larval heads, fly puparia, and a wasp and an ant, *?Myrmica* sp.

Beetles were recorded semi-quantitatively and there were about 196 individuals of 64 taxa. A large part of the assemblage clearly originated in a building. The following were most characteristic: *Anobium punctatum* and *Tipnus unicolor* (both 'many'), *Oryzaephilus surinamensis* and *Mycetaea hirta* ('several'), *Ptinus fur*, *Cryptophagus scutellatus*, and *Atomaria nigripennis* (all 3), and *Attagenus pellio* (2). Almost all of the remaining fauna might have originated in a foul floor, but may equally have invaded after organic waste from a floor was dumped into the pit. The most abundant of these species were *Ptenidium* sp., *Philonthus cephalotes* and *Lathridius minutus* group (all 'many'). This material seems most likely to have been stable manure.

Fig was again moderately well represented in the subsample of this sample, the modest assemblage also containing hazel nutshell, corncockle seed fragments and elderberry, but no great component of foodplants.

A single subsample was examined for parasite eggs; it gave traces of *Trichuris* and '*?Hymenolepis* eggs'.

Context **5362** [pit fill]

Sample 481 (0.97 kg /T; bag numbered 5370!)

Mid brown, moist, crumbly, humic sandy silt with small amounts of brick/tile and limestone.

The tiny flot contained a few fine plant fragments, some small seeds and a single, poorly preserved beetle.

The only identifiable plant remains in the residue from the subsample examined were seeds of elderberry in trace amounts. Most of the residue consisted of sand, with rather large amounts of ?cinders, brick/tile and coal and traces of slag, charcoal, limestone and bone.

A single subsample was examined for parasite eggs; it was barren.

Context **5370** [pit fills; clays and organics]

Context **5370E**

Sample 487 (0.58 kg /T)

Dark red-brown, dry to moist, crumbly, slightly sandy amorphous organic with a little limestone and brick/tile.

The medium-sized flot consisted mainly of plant fragments with a few seeds and fly puparia, mites and pale fly fragments. Insects were very poorly preserved. There were 24 individuals of 19 beetle taxa. No species was represented by more than 2 individuals and the species present were rather typical of the present site.

The modest list of identifiable plant taxa from the residue consisted mostly of weeds of cultivated and neglected soils, with moderate amounts of only two taxa: toad-rush (*Juncus bufonius*) and sheep's sorrel (*Rumex acetosella* agg.). However, there were traces of cereal 'bran' and faecal concretions were quite common in the residue, suggesting that faeces formed a major part of this deposit. Other evidence for plant foods was lacking, however.

Two subsamples were examined for parasite eggs; one was barren, the other gave a single *Trichuris* egg.

Context **5370F**

Sample 489 (1 kg /1)

Light to mid grey-brown, moist, plastic to brittle, silty clay.

The small flot contained plant tissues, several seeds, charcoal, sand, a few mites, pale fly fragments and pupal remains. While preservation was better than in the flot from the subsample of 487, only five beetle taxa were recorded, all typical of the present site.

There were only five identifiable plant taxa recorded from the residue, but two were of some interest. *Montia fontana* ssp. *chondrosperma* was present in rather large amounts, and *Reseda lutea* was also recorded. The first of these is typical of short wet turf and shallow ditches, whilst the second favours dry, typically calcareous habitats. It is difficult to make an informative interpretation on the basis of these and the other three taxa recorded, however. Amongst the other components of the residue, there was a considerable amount of sand and traces of a variety of occupation debris.

Context **5386** [drain fill]

Sample 506 (1 kg /1)

A single subsample was examined for parasite eggs; it was barren.

Sample 508 (1 kg /1)

Two subsamples were examined for parasite eggs; they were both barren.

Sample 509 (1 kg /T; 1 kg /1)

Mid yellowish grey-brown, dry, crumbly, sandy silt some brick/tile and mortar.

The tiny flot was barren apart from two contaminant *Euophrym confine*, a recent import from Australasia. There was only a trace of elderberry seeds in the residue, which consisted mainly of brick/tile with some bones, coal and charcoal, although the subsample was recorded as having been poorly disaggregated.

A single subsample was examined for parasite eggs; it was barren.

Context **6019** [pit fill]

Sample 463

Two subsamples were examined for parasite eggs; they were both barren.

Context **6036B** [gully fill]

Sample 473

Three subsamples were examined for parasite eggs; one was barren, one gave a trace of *Trichuris* and the third a few *Ascaris* eggs.

Context **6049** [ash spread]

Sample 486

Two subsamples were examined for parasite eggs; they were both barren.

Context **6143** rubbish deposit]

Sample 514 (1 kg /T)

Dark grey-brown, moist, crumbly, sandy silt with limestone, charcoal, bone, brick/tile and pot.

Small charcoal fragments, black wood slivers, a very few plant fragments, sand, a pale fly head and single individuals of four beetle taxa made up the tiny flot.

A trace of charred barley grain was all the identifiable plant material recorded from this subsample. Most of the residue consisted of sand, with considerable amounts of cinders, and traces of a range of other occupation debris, including bone (burnt and unburnt), eggshell and shellfish.

Two subsamples were examined for parasite eggs; a single '*?Hymenolepis* egg' was recorded from one of them.

Context **6166** [pit fill]

Sample 512

Two subsamples were examined for parasite eggs; they were both barren.

Context **6178** [?sand floor, upper part]

Sample 518 (1 kg /T of sub 1)

A single subsample of subsample 1 was examined for parasite eggs; it was barren.

Yellowish-grey, moist, crumbly, sandy clay sand with some limestone and brick/tile.

Insects were absent from the minute flot, which included only traces of sand, charcoal and fragmented plant remains. Neither flot nor residue was not examined for plant macrofossils.

Context **6181** [?sand floor; lower part]

Sample 519 (1 kg /T)

Mid grey, moist, crumbly, brittle silty sand with small amounts of brick/tile and eggshell.

This sample produced a minute flot which consisted mainly of sand, with some plant fragments, a few seeds and four poorly preserved beetles. Neither flot nor residue was not examined for plant macrofossils.

A single subsample was examined for parasite eggs; it was barren.

Context **6184** [sand floor]

Sample 521

Two subsamples were examined for parasite eggs; they were both barren.

Context **7003F** [pit fill]

Sample 549 (0.84 kg /T)

Mid to dark grey-brown, moist, crumbly, humic sandy clay silt with a little limestone and charcoal.

No insect remains were present in the minute flot, which consisted mostly of charcoal and sand with some small seeds.

The residue yielded four identifiable plant taxa of no particular interpretative value, all in trace amounts; there was a modest amount of charcoal in the residue, too, with traces of bone, snail shell, brick/tile and mortar. No evidence for the nature of the fill was obtained and it may well have been a deliberate backfill, secondary dumping or natural accumulation after abandonment.

Two subsamples were examined for parasite eggs; they were both barren.

Context **7027C** [drain fill]

Sample 553

A single subsample was examined for parasite eggs; it gave small numbers of *Trichuris*.

Context **7039B** [fill in brick-lined pit]

Sample 554

A single subsample was examined for parasite eggs; it gave traces of *Trichuris*.

Context **7054** [pit fills]

Context **7054H**

Sample 556 (1 kg /T)

Mid to dark grey-brown, moist, crumbly, sandy clay silt with modest quantities of charcoal, small bone fragments, shellfish, eggshell, brick/tile, mortar and flecks of clay.

Insect remains were absent from the tiny flot, which contained only black wood fragments, charcoal, slag and a few seeds (some, at least, toad-rush, *Juncus bufonius*).

A single subsample was examined for parasite eggs; it was barren.

Context **7054K**

Sample 559 (1 kg /T)

Black moist crumbly sandy silt, mainly charcoal and ash with very little soil and a small amount of bone.

Insect remains were absent from the tiny flot which consisted primarily of charcoal and slag with a few wood and plant fragments. No identifiable plant remains were observed.

A single subsample was examined for parasite eggs; it was barren.

Context **7193C** [pit fill]

Sample 611

A single subsample was examined for parasite eggs; there were traces of both *Trichuris* and *Ascaris* eggs.

Phase 9 [mid C17th onwards]

Context **6201** [pit fill]

Sample 534 (0.4 kg /T)

Mid to dark grey-brown, moist, crumbly, slightly humic sandy silt.

The large flot contained many plant fragments and seeds and a small, though very well preserved, insect assemblage. Only single individuals of 7 beetle and bug taxa were recorded. These included a probable golden spider beetle, *?Niptus hololeucus*, likely to be a late introduction to the British Isles, and a bedbug *Cimex lectularius*. This was probably *C. l. lectularius*, the form associated with humans, but it appears that fossil material cannot be distinguished from *C. l. columbarius*, associated with pigeons.

There was a small assemblage of identifiable plant remains in the residue, though the greater part of it consisted of cinders, with smaller amounts of coal. Another moderately common component was leaf fragments, probably from broad-leaved trees, but not identified further. The list of plants offered little useful information, being a mixture of taxa representing a variety of habitats or sources. Fig and blackberry may have been foodplants, but all the taxa were present in trace amounts.

A single subsample was examined for parasite eggs; it was barren.

Sample 538 (1 kg /T; 1 kg /1)

Mid to dark grey-brown, moist, brittle, slightly sandy silt with orange flecks and including small stones, bone, eggshell, brick/tile and coal.

The flot from the /T subsample was small, with a few plant fragments and pieces of charcoal. There were several fly fragments, a scale insect, a mite, a flea and a cockroach. Two *Cimex ?lectularius* were recorded, together with 2 *Niptus hololeucus* (these two species are discussed under sample 534, above). In total, there were 19 individuals of 16 beetle and bug taxa, probably of diverse origins.

Only six plant taxa were identified from this subsample, with blackberry present in moderate numbers. Of the rest, there was an unusual (for this site) record for linseed (one of only two); this was perhaps a foodplant, though there was no other evidence for food remains.

A single subsample was examined for parasite eggs; it was barren.

In addition, a 6 kg subsample was bulk-sieved to 1 mm after the main period of analysis; the residue is recorded as containing pottery, metal, glass, brick/tile, stone, coal, concretions, wood, nutshell, small mammal and fish bone, shellfish and eggshell.

Discussion

A full synthesis of these results is inappropriate in this report since it represents only part of the record for The Bedern; some comments may, however, usefully be made. It should be remembered, though, that this work was begun before the methods currently adopted in the EAU were fully developed and that it was carried out over a very long period of time and, necessarily, without full archaeological information.

The samples discussed here represents some of the first post-Conquest to post-medieval material examined extensively for waterlogged biological remains in York. Their significance lies at least as much in their contribution to a broader synthesis as in their value in enhancing the archaeological reconstruction and interpretation of the deposits.

As has frequently been observed for urban deposits of 13th century and later date in York (and elsewhere), many of the layers gave poor preservation of delicate organic materials or included only small numbers of fossils, often of the more durable kinds. This doubtless reflects standards of cleanliness and building construction considerably better than for earlier medieval material, such as the Anglo-Scandinavian deposits at 16-22 Coppergate (Hall and Kenward, forthcoming; Kenward and Hall, forthcoming). In some cases there were reasonably large assemblages of invertebrate and plant remains indicating diverse ecological origins; these have proved to be of limited interpretative value, except inasmuch as they suggest the presence of small quantities of heterogeneous plant matter and invertebrates of 'background' origin. Deposits of this kind may often have incorporated redeposited earlier material, thrown up by building or horticultural activities, for example.

By contrast, some largely 'primary' deposits, mainly fills of pits, gave good preservation of large quantities of plant and invertebrate remains. Much of this material was clearly faecal in origin (with a diversity of wild and cultivated fruits represented) and, to judge from the worm eggs recorded, probably human, though the presence of faeces from pigs cannot be ruled out and in some instances there appeared to be something like stable manure. Insect communities associated with these deposits included 'house fauna' of a kind quite likely to have occurred in stables, although a large proportion of the samples gave at least a few insects which would not be out of place in a relatively clean domestic building of the last few hundred years, and some assemblages consisted mainly of such species. Grain beetles were frequently recorded and may have originated in animal feed rather than from significant stores of grain for human consumption at or near the site. In general, the decomposer insects seem likely to have entered the material dumped into pits at source rather than invading *in situ*, and it is probable that certain of the pits were dug, filled and back-filled in a short space of time. Others were probably long-lived latrines, placed within the buildings so that invasion by insects other than 'domestics' was limited.

Records of ectoparasites from these deposits are few; for the fleas, this probably reflects rarity, but lice may not have been recognised when the material was examined. Similarly, cereal 'bran' will have been overlooked, at least in the early stages of the work. The presence in so many of the samples of large quantities of seed fragments of corncockle (*Agrostemma githago*) is consistent with deposition of residues from flour-based food, almost certainly via faeces, but 'bran' was only recorded from a few samples and in quantity from only two. Milled remains of grain beetles were not recorded (they may well have been overlooked if present, too), and these insects, when found, seem to have had an origin separate from grain-based food for human consumption.

The presence of huge numbers of fig seeds, and of considerable quantities of grape pips and strawberry seeds contrast with the evidence from earlier medieval deposits from York where these taxa are, to all intents and purposes, absent. There are some differences, too, in the range and quantity of remains of plants used as flavourings. Thus, fennel seed is often present in the faecal deposits, sometimes in large numbers, but this taxon is almost certainly absent from Anglo-Scandinavian deposits of similar type at 16-22 Coppergate. Coriander is recorded at both sites, whilst dill is common at Coppergate and absent from this area at The Bedern. This pattern is more obvious in the faecal deposits from Area II of the site north-east of The Bedern (Hall *et al.* 1992a).

Eggs of the two gut parasites commonly encountered in urban archaeological deposits, *Trichuris* and *Ascaris*, were frequently present in small numbers at this site, but only occasionally abundant. *Trichuris* was, as is almost always the case, the more abundant of the two. Even in deposits identified on other evidence as including faeces, however, parasite eggs were by no means as abundant as recorded from some other sites (compare some of the Anglo-Scandinavian pit fills at 16-22 Coppergate, Hall and Kenward, forthcoming; Kenward and Hall, forthcoming). For the time being, we can do no more than speculate that this reflects smaller worm burdens at this later date, perhaps in turn reflecting improved sanitation and the relatively high status of the inhabitants of the present site.

Patterns of change in the urban insect fauna through time are illuminated by the data from these analyses. The abundance of grain pests and of *Tipnus unicolor* is emerging as characteristic of later medieval towns. This is a subject requiring a synthetic approach, which it is hoped can be presented elsewhere.

Acknowledgements

The authors are grateful to the many people who have carried out practical work on samples from this site over many years. Most of the parasite analyses were undertaken by Brian Douglas, under the supervision of Dr A. K. G. Jones. The assistance of Amanda Clarke, Martin Stockwell and, latterly, Dr Julian Richards, in providing archaeological information, is gratefully acknowledged.

References

Dainton, M. (1992). A quick, semi-quantitative method for recording nematode gut parasite eggs from archaeological deposits. *Circaea* **9**, 58-63.

Dobney, K. (forthcoming) [Bones from excavations in The Bedern]

Dobney, K., Hall, A., Kenward, H. and Milles, A. (1992). A working classification of sample types for environmental archaeology. *Circaea* **9**, 24-6.

Hall, A. R. and Kenward, H. K. (forthcoming). Biological evidence from Anglo-Scandinavian deposits at 16-22 Coppergate: technical report. To accompany *The Archaeology of York* **14** (7).

Hall, A. R. and Kenward, H. K. (1990). Environmental evidence from the Colonia: General Accident and Rougier Street. *The Archaeology of York* **14**(6), 289-434 + pls + fiche. London: CBA.

Hall, A. R., Kenward, H. K. and Robertson, A. (1992a). *Investigation of plant and invertebrate remains from Area II of the excavations in The Bedern (north-east), York (YAT/Yorkshire Museum sitecode 1976-81.14 II).*

Technical Report. Submitted to Ancient Monuments Laboratory.

Hall, A. R., Kenward, H. K. and Robertson, A. (1992b). *Investigation of plant and invertebrate remains from Area IV of the excavations in The Bedern (north-east), York (YAT/Yorkshire Museum sitecode 1976-81.14 IV). Technical Report.* Submitted to Ancient Monuments Laboratory.

Jones, A. K. G. (1989). *Fish remains from Coffee Yard (YAT code 1986.1).* Prepared for York Archaeological Trust

Kenward, H. K. (1992). Rapid recording of archaeological insect remains — a reconsideration. *Circaea* **9**, 81-8.

Kenward, H. K. and Hall, A. R. (forthcoming). Biological evidence from Anglo-Scandinavian deposits at 16-22 Coppergate. *The Archaeology of York* **14** (7).

Kenward H. K., Engleman C., Robertson A. and Large F. (1986). Rapid scanning of urban archaeological deposits for insect remains, *Circaea* **3**, 163-72.

Kenward H. K., Hall A. R. and Jones A. K. G. (1980). A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits. *Science and Archaeology* **22**, 3-15.

Kenward, H. K., Hall, A. R. and Jones, A. K. G. (1986). Environmental evidence from a Roman well and Anglian pits in the legionary fortress. *The Archaeology of York* **14** (5), 241-88 + Fiche 2.

Kenward, H. K. and Robertson, A. (1988). *A supplement to the survey of insect remains from post-Roman deposits at 1-5 Aldwark, York.* Archive in EAU, YAT, AML

Kloet, G. S. and Hincks, W. D. (1964-77). *A check list of British insects.* 2nd ed. London: Royal Entomological Society.

Nicholson, C., Douglas, B. and Jones, A. K. G. (1989). Parasitological investigations on soil samples and coprolites from Coffee Yard, York. *Ancient Monuments Laboratory Report* **41/89**.

O'Connor, T. P. (1989). *A survey of bones from the Bedern Foundry site, York (1973-6.13 II).* Prepared for York Archaeological Trust.

O'Connor, T. P. (1989). *Bones from the Coffee Yard site, York (1987.1).* Prepared for York Archaeological Trust.

Robertson, A., Tomlinson, P. and Kenward, H. K. (1989). *Plant and insect remains from Coffee Yard, York.* Prepared for York Archaeological Trust.

Scott, S. (1985). Bones from The Bedern, York. *Ancient Monuments Laboratory Report* **4821**.

Smith, A. J. E. (1978). *The moss flora of Britain and Ireland.* Cambridge: University Press.

Tutin, T. G. *et al.* (1964-80). *Flora Europaea* **1-5**. Cambridge: University Press.

Appendices to:

Investigation of medieval and post-medieval plant and invertebrate remains from Area X of the excavations in The Bedern (south-west), York (YAT/Yorkshire Museum sitecode 1973-81.13 X): Technical Report

N.B. Please note that in the interests of economy, the use of italics for Latin names has been eschewed in these appendices.

Appendix 1. Complete list of plant taxa recorded from excavations of Area X at The Bedern, south-west (1973-81.13 X), in taxonomic order (following Tutin *et al.* (1964-80) for vascular plants and Smith (1978) for mosses). The parts recorded are given and this list may be used to interpret abbreviations against plant names in Appendix 2. All remains were preserved by waterlogging, unless mineralisation or charring is indicated explicitly or, in cases where more than one kind of preservation was recorded, by means of a + (mineralisation) or a * (charring). For cereals charring is assumed unless otherwise shown. Where securely identified taxa were recorded, tentative identifications of the same taxa are not listed separately.

Vascular Plants

Pteridium aquilinum (L.) Kuhn	stalk fragment(s)
Salix sp(p).	bud(s)
Populus sp(p).	bud(s) and/or bud-scale(s)
Betula sp(p).	fruit(s)
Corylus avellana L.	nut(s) and/or nutshell fragment(s)*
Quercus sp(p).	bud(s) and/or bud-scale(s)
Ficus carica L.	seed(s)
Cannabis sativa L.	achene(s)
Urtica dioica L.	achene(s)
Urtica urens L.	achene(s)
Polygonum aviculare agg.	fruit(s)
Polygonum hydropiper L.	fruit(s)
Polygonum persicaria L.	fruit(s)
Polygonum lapathifolium L.	fruit(s)
Bilderdykia convolvulus (L.) Dumort.	fruit(s)+, fruit fragment(s)
Rumex sp(p).	fruit(s)
Rumex acetosella agg.	fruit(s), fruit fragment(s)
Beta vulgaris L.	fruit fragment(s)
Chenopodium Section Pseudoblitum	seed(s)
Chenopodium polyspermum L.	seed(s)
Chenopodium album L.	seed(s)
Atriplex sp(p).	seed(s)
Montia fontana ssp. chondrosperma (Fenzl) Walters	seed(s)
Stellaria media(L.) Vill.	seed(s)
Cerastium sp(p).	seed(s)
Spergula arvensis L.	seed(s)
Lychnis flos-cuculi L.	seed(s)
Agrostemma githago L.	seed(s)+, seed fragment(s) mineralised casts/moulds of seed fragment(s)
Silene sp(p).	seed(s)
Silene vulgaris (Moench) Garcke	seed(s)
Silene alba (Miller) Krause in Sturm	seed(s)
Caltha palustris L.	seed(s)
Ranunculus Section Ranunculus	achene(s)
Ranunculus sardous Crantz	achene(s)
Ranunculus sceleratus L.	achene(s)
Ranunculus flammula L.	achene(s)
Ranunculus Subgenus Batrachium	achene(s)
Papaver sp(p).	seed(s)
Papaver somniferum L.	seed(s)
Papaver dubium L.	seed(s)
Papaver argemone L.	seed(s)
Fumaria sp(p).	seed(s)

Cruciferae	seed(s)
Lepidium campestre (L.) R. Br. in Aiton	seed(s)
Brassica sp(p).	seed(s), mineralised cotyledon(s)
Brassica rapa L.	seed(s)
Brassica sp./Sinapis arvensis	seed(s), mineralised seed(s), mineralised cotyledon(s)
Raphanus raphanistrum L.	seed(s), pod segments and/or fragment(s)
Reseda luteola L.	seed(s)
Reseda lutea L.	seed(s)
Filipendula ulmaria (L.) Maxim.	achene(s)
Rubus sp(p).	prickle(s)
Rubus idaeus L.	seed(s)
Rubus fruticosus agg.	seed(s)
Potentilla sp(p).	achene(s)
Potentilla anserina L.	achene(s)
Potentilla cf. erecta (L.) Räuschel	achene(s)*
Potentilla cf. reptans L.	achene(s)
Fragaria cf. vesca L.	achene(s)
Aphanes microcarpa (Boiss. & Reuter) Rothm.	achene(s)
Malus sylvestris Miller	endocarp, seed(s)
Prunus sp(p).	fruitstone(s)
Prunus spinosa L.	fruitstone(s), fruitstone fragment(s)
Prunus domestica *sensu lato*	fruitstone(s)
Leguminosae	charred and mineralised seed(s)
Vicia sp(p).	charred seed(s)
Vicia faba L.	mineralised testa fragment(s), charred seed(s)
Trifolium sp(p).	calyx/calyces
Trifolium pratense L.	pod(s) and/or pod lid(s)
Linum usitatissimum L.	mineralised seed(s), seed(s)
Euphorbia helioscopia L.	charred seed(s)
cf. Ilex aquifolium L.	leaf epidermis fragment(s), seed fragment(s)
Vitis vinifera L.	seed(s), seed fragment(s)
Viola sp(p).	seed(s)
cf. Epilobium sp(p).	seed(s)
Umbelliferae	mericarp(s)
Hydrocotyle vulgaris L.	mericarp(s)
Anthriscus sylvestris (L.) Hoffm.	mericarp(s)
Scandix pecten-veneris L.	mericarp(s)
Coriandrum sativum L.	mericarp(s)
Aegopodium podagraria/Conium maculatum	mericarp(s)
Oenanthe cf. lachenalii C. G. Gmelin	mericarp(s)
Aethusa cynapium L.	mericarp(s)
Foeniculum vulgare Miller	mericarp(s), mineralised mericarp(s)
Conium maculatum L.	mericarp(s)
Calluna vulgaris (L.) Hull	root and/or twig fragment(s)
Anagallis arvensis L.	seed(s)
Galium aparine L.	fruit(s)
Boraginaceae	nutlet(s)
Myosotis sp(p).	nutlet(s)
Labiatae	nutlet(s)
Galeopsis Subgenus Galeopsis	nutlet(s)
Lamium Section Lamiopsis	nutlet(s)
Stachys sp(p).	nutlet(s)

Stachys cf. sylvatica L.	nutlet(s)
Prunella vulgaris L.	nutlet(s)
Satureja hortensis L.	nutlet(s)
Mentha sp(p).	nutlet(s)
Hyoscyamus niger L.	seed(s)*
Rhinanthus sp(p).	seed(s)
cf. Rhinanthus sp(p).	mineralised seed(s)
Plantago major L.	seed(s)
Sambucus cf. ebulus L.	seed(s)
Sambucus nigra L.	seed(s)*, seed fragment(s)
Valerianella dentata (L.) Pollich	fruit(s)+
Anthemis cotula L.	achene(s)*
Chrysanthemum segetum L.	achene(s), achene fragment(s)
Arctium sp(p).	achene(s)
Carduus/Cirsium sp(p).	achene(s)+
Centaurea sp(p).	achene(s)*
Hypochoeris sp(p).	achene(s)
Sonchus sp(p).	achene(s)
Sonchus asper (L.) Hill	achene(s)
Sonchus oleraceus L.	achene(s)
Lapsana communis L.	achene(s)
Alisma sp(p).	carpel(s) and/or seed(s)
Allium cf. porrum L.	leaf epidermis fragment(s)
Juncus sp(p).	seed(s)
Juncus inflexus/effusus/conglomeratus	seed(s)
Juncus cf. gerardi Loisel.	seed(s)
Juncus bufonius L.	seed(s)
Juncus acutiflorus Ehrh. ex Hoffm.	seed(s)
Juncus cf. articulatus L.	seed(s)
Gramineae	caryopsis/es+
Cerealia indet.	mineralised spikelet(s)/spikelet fragment(s)
Cerealia indet.	charred caryopsis/es
Poa sp(p). (non annua)	caryopsis/es
Glyceria sp(p).	caryopsis/es
Bromus sp(p).	waterlogged caryopsis/es
Triticum sp(p).	charred caryopsis/es
Triticum aestivo-compactum	charred caryopsis/es
Triticum/Secale	waterlogged periderm fragments
Hordeum sp(p).	charred caryopsis/es
Avena sp(p).	waterlogged caryopsis/es
Avena sp(p).	charred caryopsis/es
Avena sativa L.	charred spikelet(s)/spikelet fragment(s)
Agrostis sp(p).	waterlogged caryopsis/es
Cyperaceae	nutlet(s)
Scirpus maritimus/lacustris	nutlet(s)
Scirpus setaceus L.	nutlet(s)
Eriophorum vaginatum L.	sclerenchyma spindles (from leaf sheaths)*
Eleocharis palustris *sensu lato*	nutlet(s)
Carex sp(p).	nutlet(s)

Mosses (all remains were leaves and/or shoot fragments)

Sphagnum sp(p).
Polytrichum commune Hedw.
Leucobryum glaucum (Hedw.) Ångstr.
Bryum sp(p).
Antitrichia curtipendula (Hedw.) Brid.
Calliergon cf. giganteum (Schimp.) Kindb.
Calliergon cuspidatum (Hedw.) Kindb.
Eurhynchium sp(p).
Hypnum cupressiforme Hedw.
Hylocomium splendens (Hedw.) Br. Eur.

Algae

Characeae (oogonium/ia)

Appendix 2. Lists of plant remains from excavations at The Bedern (South-West) 1973-81.13 Area X in context and sample number order. Taxonomic order follows Tutin *et al.* (1964-80) for vascular plants and Smith (1978) for mosses. Abbreviations for parts recorded can be found in Appendix 1. For some samples, other components of the residues left after processing are listed but recording of this was not systematic throughout.

The semi-quantitative scale adopted has three points: 1 — one or a few individuals or fragments; 2 — modest numbers of individuals or fragments; 3 — abundant individuals or fragments.

Context 5159	Sample 409/T*
Polygonum lapathifolium	1
Bilderdykia convolvulus (min)	1
Rumex sp(p).	1
Atriplex sp(p).	1
Papaver argemone	1
Brassica/Sinapis sp(p). (min cot)	2
Aphanes microcarpa	1
Sambucus nigra	1
Alisma sp(p).	1
Juncus bufonius	1
Gramineae (min)	1
Eleocharis palustris sl	2
brick/tile	1
charcoal	1
clinker	1
coal	1
fish bone	1
mortar	1
oyster shell fgts	2

Context 5203	Sample 424/TF*
Eleocharis palustris sl	1
charcoal/cinder	1

Context 5204	Sample 418/TF
Urtica urens	1
Rumex sp(p).	1
Rumex acetosella agg.	2
Chenopodium album	1
Papaver sp(p).	1
Papaver dubium	1
Papaver argemone	1
Brassica sp./Sinapis arvensis	1
Potentilla cf. reptans	1
Anthemis cotula	1
Juncus inflexus/effusus/conglomeratus	1
Juncus bufonius	1
Sphagnum sp(p). (lvs)	1

Context 5221	Sample 436/M*
Ficus carica	3
Urtica dioica	1
Lamium Section Lamiopsis	1
Sambucus nigra	1
Carex sp(p).	1

Context 5221	Sample 437/M*
Ficus carica	3
Polygonum aviculare agg.	1
Rumex acetosella agg. (ff)	1
Chenopodium Section Pseudoblitum	1
Chenopodium album	1
Agrostemma githago (sf)	1
Fragaria cf. vesca	3
Prunus domestica sl	1
Chrysanthemum segetum	1
Carex sp(p).	1

Context 5221	Sample 439/M*
Ficus carica	1
Urtica dioica	1
Sambucus nigra	1

Context 5222	Sample 422/TF*
Rumex acetosella agg.	1
Ranunculus Section Ranunculus	1
Stachys cf. sylvatica	2
Juncus bufonius	1
Carex sp(p).	1

Context 5230	Sample 416/TF*
charcoal	1

Context 5231	Sample 417/T*
Ficus carica	1
Rumex sp(p).	1
Rumex acetosella agg.	1
Stellaria media	1
Silene sp(p).	1
Ranunculus sardous	1
Ranunculus Subgenus Batrachium	1
Brassica rapa	1
Brassica/Sinapis sp(p). (min cot)	1
Raphanus raphanistrum (pod segs/fgts)	1
Linum usitatissimum (min)	1
Sambucus nigra	1
Juncus sp(p).	1
Triticum aestivo-compactum	1
Avena sp(p).	1
Eleocharis palustris sl	1
Carex sp(p).	1
brick/tile	1
burnt mammal bone	1
cinders	3
coal	1
eggshell fgts	1
fish bone	1
fish scale	1
mammal bone	1
mortar	1
mussel shell fgts	1

Context 5249	Sample 421/T*
brick/tile	1
burnt mammal bone	1
charcoal	1
cinders	3
coal	3

continued...

Context 5265	Sample 427/M
Urtica dioica	1
Aethusa cynapium	1
Lamium Section Lamiopsis	1
Sambucus nigra	1
Cyperaceae	1
Carex sp(p).	1

Context 5625	Sample 428/M*
Urtica dioica	2
Polygonum aviculare agg.	1
Rumex sp(p).	1
Rumex acetosella agg.	1
Chenopodium Section Pseudoblitum	1
Chenopodium album	1
Ranunculus flammula	1
Rubus fruticosus agg.	1
Viola sp(p).	1
Aethusa cynapium	1
Conium maculatum	1
Sambucus nigra	1
Carduus/Cirsium sp(p).	1
Scirpus maritimus/lacustris	1

Context 5265	Sample 430/M*
Urtica dioica	1
Chenopodium Section Pseudoblitum	1
Chenopodium album	1
Montia fontana ssp. chondrosperma	1
Sambucus nigra	1
Anthemis cotula (ch)	1

Context 5268	Sample 458/T
Sambucus nigra	1
brick/tile	1
burnt mammal bone	1
chalk	1
charcoal	1
eggshell fgts	1
fish bone	1
limestone	1
mammal bone	1
mortar	1
mussel shell fgts	1
oyster shell fgts	1
sand	2

Context 5269	Sample 441/M*
Corylus avellana	1
Ficus carica	1
Urtica dioica	1
Polygonum aviculare agg.	1
Bilderdykia convolvulus	1
Rumex sp(p).	1
Rumex acetosella agg.	1
Chenopodium album	1
Atriplex sp(p).	1
Stellaria media	1
Ranunculus Section Ranunculus	2
Ranunculus sceleratus	1
Potentilla sp(p).	1
Vitis vinifera	1
Conium maculatum	1
Lamium Section Lamiopsis	1
Prunella vulgaris	1
Sambucus nigra	1
Anthemis cotula	1
Arctium sp(p).	1
Sonchus sp(p).	1
Sonchus asper	1
Eleocharis palustris sl	1
Carex sp(p).	2

Context under 5269	Sample 442/M*
Ficus carica	1
Carex sp(p).	1

Context 5271	Sample 488/1
Corylus avellana	1

Context 5273	Sample 438/T
Pteridium aquilinum (stem fgts)	1
Populus sp(p). (b/bs)	1
Ficus carica	1
Polygonum persicaria	1
Polygonum lapathifolium	1
Bilderdykia convolvulus	1
Rumex acetosella agg.	2
Chenopodium album	1
Atriplex sp(p).	1
Agrostemma githago (sf)	1
Silene cf. alba	1
Ranunculus Section Ranunculus	1
Brassica rapa	1
Raphanus raphanistrum (pod segs/fgts)	1
Reseda luteola	1
Boraginaceae	1
Lamium Section Lamiopsis	1
Prunella vulgaris	1
Sambucus cf. ebulus	1
Sambucus nigra	1
Anthemis cotula	1
Chrysanthemum segetum	1
Sonchus asper	1
Lapsana communis	1
Juncus cf. gerardi	1
Juncus bufonius	1
Eleocharis palustris sl	1
Carex sp(p).	1
brick/tile	1
burnt shale	1
charcoal	1
coal	1
eggshell fgts	1
fly puparia	1
magnesian limestone	1
mammal bone	1
mortar	1
oyster shell fgts	1
stones	1

Context 5292	Sample 490/1
Fumaria sp(p).	1
Sambucus nigra	1

Context 5309	Sample 443/1*
Ficus carica	1
Urtica dioica	1
Polygonum lapathifolium	1
Bilderdykia convolvulus	1
Rumex acetosella agg.	1
Chenopodium album	1
Atriplex sp(p).	1
Stellaria media	1
Agrostemma githago (sf)	3
Brassica rapa	1
Raphanus raphanistrum (pod segs/fgts)	1
Rubus fruticosus agg.	1
Malus sylvestris (endo)	1
Prunus cf. spinosa (fgts)	1

continued...

Vicia faba (min testa fgts)	1
Vitis vinifera	1
Coriandrum sativum	1
Foeniculum vulgare	1
Foeniculum vulgare (min)	1
Stachys sp(p).	1
Chrysanthemum segetum	1
Centaurea sp(p).	1
Lapsana communis	1
Allium cf. porrum (lef)	1
Gramineae	1
Poa sp(p). (non annua)	1
Bromus sp(p). (w/l)	1
Triticum/Secale ('bran' fgts)	3
Carex sp(p).	1
Hylocomium splendens	1
eggshell membrane fgts	1
faecal concretions	3
feather fgts	1
fish bone	1
fly puparia	1
magnesian limestone	1
mammal bone	1
rat-tailed maggot (min fgts)	1

Context 5314 Sample 444/T*

Sambucus nigra	1
Triticum sp(p).	1
?cinders	1
bird bone	1
brick/tile	2
charcoal	2
coal	1
fish bone	1
magnesian limestone	1
mammal bone	1
mortar	1
mussel shell fgts	1

Context 5336 Sample 517/T

Sambucus nigra	1
brick/tile	1
burnt mammal bone	1
charcoal	1
charred plant debris	1
coal	3
mammal bone	1
mortar	1
oyster shell fgts	1
sand	1

Context 5337 Sample 475/T

Urtica dioica	1
Rumex acetosella agg.	1
Sambucus nigra	1
brick/tile	2
charcoal	1
coal	2
fish bone	2
glass	1
mammal bone	3
mortar	1
sand	2

Context 5337 Sample 516/T

Ficus carica	1
Sambucus nigra	1
Characeae sp(p).	1
brick/tile	2
charcoal	1
coal	1
fish bone	1
fish scale	1
magnesian limestone	1
mammal bone	2
mortar	1
sand	2

Context 5338C Sample 447/M2*

Ficus carica	3
Brassica sp(p).	1
Fragaria cf. vesca	1
Sambucus nigra	1
Gramineae	1

Context 5338D Sample 449/M*

Ficus carica	3
Urtica dioica	1
Rumex acetosella agg.	1
Brassica sp(p).	1
Fragaria cf. vesca	3
Malus sylvestris	1
Coriandrum sativum	1
Foeniculum vulgare	1
Cerealia indet.	1
Eleocharis palustris sl	1
Carex sp(p).	1

Context 5338E Sample 451/M2*

Ficus carica	2
Polygonum persicaria	1
Rumex sp(p).	1
Rumex acetosella agg.	1
Ranunculus Section Ranunculus	1
Brassica sp(p).	1
Reseda luteola	1
Prunella vulgaris	1
Sambucus nigra	1

Context 5338E Sample 453/M2*

Corylus avellana	1
Ficus carica	2
Urtica dioica	3
Rumex acetosella agg.	1
Atriplex sp(p).	1
Stellaria media	1
Vitis vinifera (sf)	1
Sambucus nigra	3
Chrysanthemum segetum	1
Carduus/Cirsium sp(p).	1
cf. Triticum sp(p).	1
Avena sp(p).	1
Carex sp(p).	1

Context 5338H Sample 467/T*

Corylus avellana	1
Ficus carica	2
Urtica dioica	1
Rumex sp(p).	1
Montia fontana ssp. chondrosperma	1
Agrostemma githago (sf)	1
Ranunculus Section Ranunculus	1
Filipendula ulmaria	1
Potentilla cf. reptans	1
Stachys cf. sylvatica	1
Sambucus nigra	1
Cerealia indet.	1
Carex sp(p).	1
Sphagnum sp(p). (lvs)	1
?ant heads	2

continued...

brick/tile	1
charcoal	1
cinders	1
coal	1
coarse sand	2
fly puparia	1
mammal bone	1
mortar	1

Context 5340F — Sample 452/TF*

Reseda luteola	1
Juncus bufonius	1
charcoal	1
metallic slag	1

Context 5346C — Sample 471/1

Corylus avellana	1
Cannabis sativa	1
Urtica urens	1
Polygonum aviculare agg.	1
Polygonum lapathifolium	1
Chenopodium polyspermum	1
Chenopodium album	2
Atriplex sp(p).	1
Ranunculus Section Ranunculus	1
Reseda luteola	1
Leguminosae	1
Anagallis arvensis	1
Myosotis sp(p).	1
Prunella vulgaris	1
Centaurea sp(p).	1
Carex sp(p).	1
Calliergon cf. giganteum	1

Context 5347A — Sample 456/T

Sambucus nigra	1
brick/tile	2
charcoal	1
coal	1
eggshell fgts	1
fish bone	2
fish scale	1
mammal bone	1
mortar	1
mussel shell fgts	1
oyster shell fgts	1
sand	1

Context 5347D — Sample 461/TF*

Lamium Section Lamiopsis	1
Sambucus nigra	1
Juncus bufonius	1

Context 5347E — Sample 464/1*

Betula sp(p).	1
Corylus avellana	1
Ficus carica	1
Polygonum aviculare agg.	1
Rumex sp(p).	1
Rumex acetosella agg.	1
Stellaria media	1
Cerastium sp(p).	1
Lychnis flos-cuculi	1
Agrostemma githago (sf)	1
Caltha palustris	2
Ranunculus Section Ranunculus	1
Brassica rapa	1
Raphanus raphanistrum (pod segs/fgts)	1
Reseda luteola	1
Potentilla cf. erecta	1
cf. Vicia sp(p).	1
cf. Vicia faba	1
Trifolium sp(p). (cal)	1
Trifolium pratense (pods/lids)	1
cf. Ilex aquifolium (sf)	1
Anthriscus sylvestris	1
Aethusa cynapium	1
Prunella vulgaris	1
Rhinanthus sp(p).	2
Anthemis cotula	1
Carduus/Cirsium sp(p). (min)	1
Juncus cf. gerardi	1
Juncus bufonius	1
Juncus acutiflorus	1
Juncus articulatus	1
Gramineae	1
Glyceria sp(p).	1
Avena sp(p). (w/l)	1
Avena sp(p).	1
Agrostis sp(p).	1
Eleocharis palustris sl	1
Carex sp(p).	2
Sphagnum sp(p).	1
Calliergon cuspidatum	1
Eurhynchium sp(p).	1
?peat fgts	1
bark fgts	1
brick/tile	1
charcoal	2
coal	1
eggshell fgts	1
eggshell membrane fgts	1
fly puparia	1
mammal bone	1
metallic slag	1
mortar	1
mussel shell fgts	1
stem fgts	1
wood fgts	1

Context 5347F — Sample 466/T*

Corylus avellana	1
Atriplex sp(p).	1
Ranunculus Section Ranunculus	1
Ranunculus flammula	1
Fumaria sp(p).	1
Reseda luteola	1
Vicia faba	1
Juncus bufonius	2
Gramineae	1
Cerealia indet.	1
Triticum sp(p). (hexaploid)	1
Hordeum sp(p).	1
Eleocharis palustris sl	1
Carex sp(p).	1
Sphagnum sp(p). (lvs)	1
?cinders	1
barnacle shell fgts	1
brick/tile	2
charcoal	1
coal	2
eggshell fgts	1
fish bone	1
green-glazed pottery	1
magnesian limestone	1
mammal bone	1
mussel shell fgts	1
oyster shell fgts	1
sand	2
tooth fgts	1

Context 5347G — Sample 468/M*

Salix sp(p). (b)	1
Montia fontana ssp. chondrosperma	1
Silene vulgaris/alba	1
Fumaria sp(p).	1
Brassica sp./Sinapis arvensis	1

continued...

Reseda luteola	2
Vicia faba	1
Sambucus nigra	1
Valerianella dentata	1
Juncus sp(p).	1
Juncus inflexus/effusus/conglomeratus	1
Juncus bufonius	1
Carex sp(p).	1
brick/tile	1
burnt fish bone	1
burnt mammal bone	1
charcoal	1
cinders	2
coal	1
eggshell fgts	1
faecal concretions	1
fish bone	1
mammal bone	1
mortar	1
mussel shell fgts	1
oyster shell fgts	1
unwashed sediment	3
wool textile fgts	2

Context 5362 Sample 481/T

Sambucus nigra	1
?cinders	2
brick/tile	2
charcoal	1
coal	2
glassy slag	1
magnesian limestone	1
mammal bone	1
sand	3

Context 5367B Sample 483/TF*

Juncus bufonius	1
Carex sp(p).	1
charcoal	1
cinders	1

Context 5370E Sample 487/T*

Polygonum persicaria	1
Polygonum lapathifolium	1
Bilderdykia convolvulus (ff)	1
Rumex acetosella agg.	2
Chenopodium album	1
Atriplex sp(p).	1
Atriplex sp(p).	1
Stellaria media	1
Cerastium sp(p).	1
Agrostemma githago (sf)	1
Silene vulgaris/alba	1
Ranunculus Section Ranunculus	1
Brassica sp(p).	1
Brassica rapa	1
Raphanus raphanistrum (pod segs/fgts)	1
Viola sp(p).	1
Juncus bufonius	2
Triticum/Secale ('bran' fgts)	1
Carex sp(p).	1
brick/tile	1
charcoal	1
coal	1
faecal concretions	2
fish bone	1
fly puparia	1
mortar	1
oolitic limestone	1

Context 5370F Sample 489/T

Polygonum lapathifolium	1
Montia fontana ssp. chondrosperma	2
Silene sp(p).	1
Reseda lutea	1
Juncus bufonius	1
brick/tile	1
burnt mammal bone	1
chalk	1
charcoal	1
coal	1
earthworm egg caps	1
mortar	1
sand	2

Context 5373 Sample 491/T

Sambucus nigra	1
?root casts	1
brick/tile	1
charcoal	1
iron-rich concretions	1
mammal bone	1
sand	1

Context 5382B Sample 497/M*

Ficus carica	1
Urtica dioica	1
Rumex acetosella agg.	1
Lamium Section Lamiopsis	1
Sambucus nigra	1
Cerealia indet.	1
Avena sp(p).	2
Carex sp(p).	1

Context 5382C Sample 500/M1+

Ficus carica	1
Urtica dioica	1
Polygonum aviculare agg.	1
Polygonum hydropiper	1
Polygonum persicaria	1
Polygonum lapathifolium	2
Bilderdykia convolvulus	1
Rumex sp(p).	1
Rumex acetosella agg.	1
Chenopodium album	1
Atriplex sp(p).	1
Montia fontana ssp. chondrosperma	1
Stellaria media	1
Cerastium sp(p).	1
Lychnis flos-cuculi	1
Agrostemma githago (sf)	2
Ranunculus Section Ranunculus	1
Papaver sp(p).	1
Lepidium campestre	1
Brassica sp(p).	1
Raphanus raphanistrum (pod segs/fgts)	1
Reseda luteola	1
Rubus fruticosus agg.	1
Potentilla sp(p).	1
Fragaria cf. vesca	2
Malus sylvestris	1
Prunus spinosa	1
Vitis vinifera (sf)	1
Galeopsis Subgenus Galeopsis	1
Prunella vulgaris	1
Sambucus nigra	1
Anthemis cotula	1
Chrysanthemum segetum	1
Carduus/Cirsium sp(p).	1
Centaurea sp(p).	1
Sonchus sp(p).	1
Lapsana communis	1
Cerealia indet.	1

continued...

Avena sp(p).	2
Scirpus setaceus	1
Eleocharis palustris sl	1
Carex sp(p).	1

Context 5382C Sample 500/M5*

Ficus carica	1
Polygonum aviculare agg.	1
Polygonum persicaria	1
Polygonum lapathifolium	1
Bilderdykia convolvulus	1
Rumex acetosella agg.	1
Atriplex sp(p).	1
Stellaria media	1
Agrostemma githago (sf)	2
Ranunculus Section Ranunculus	1
Papaver sp(p).	1
Brassica sp(p).	1
Raphanus raphanistrum (pod segs/fgts)	1
Fragaria cf. vesca	2
Prunus spinosa	1
Viola sp(p).	1
Umbelliferae	1
Centaurea sp(p).	1
Cerealia indet.	1
Triticum sp(p).	1
Avena sp(p).	1

Context 5382D Sample 501/M*

Urtica dioica	2
Atriplex sp(p).	1
Brassica sp(p).	1
Reseda luteola	1
Conium maculatum	1
Sambucus nigra	1
Hordeum sp(p).	1
Avena sp(p).	3
Eleocharis palustris sl	1
Carex sp(p).	1

Context 5386 Sample 509/T

Sambucus nigra	1
bird bone	1
brick/tile	2
burnt mammal bone	1
charcoal	1
coal	1
fish bone	1
mammal bone	1
unwashed sediment	2

Context 5387A Sample 507/M

Ficus carica	1
Rumex sp(p).	1
Ranunculus sceleratus	1
Ranunculus Subgenus Batrachium	1
Papaver sp(p).	1
Cruciferae	1
Brassica sp(p).	1
Leguminosae	1
Sambucus nigra	1

Context 5387B Sample 510/M*

Ficus carica	1
Urtica dioica	1
Rumex acetosella agg.	1
Atriplex sp(p).	1
Stellaria media	2
Agrostemma githago (sf)	1
Ranunculus Section Ranunculus	1
Aethusa cynapium	1
Sambucus nigra	1
Chrysanthemum segetum	1
Eleocharis palustris sl	1
Carex sp(p).	1

Context 5391A Sample 511/M*

Sambucus nigra	1

Context 5391A Sample 530/1*

Ficus carica	1
Juncus sp(p).	1
charcoal	2
fish bone	1

Context 5391B Sample 513/M

Ficus carica	1
Urtica dioica	1
Urtica urens	1
Rumex acetosella agg.	1
Chenopodium album	1
Atriplex sp(p).	1
Stellaria media	1
Silene alba	1
Ranunculus Section Ranunculus	1
Papaver sp(p).	1
Brassica sp(p).	1
Reseda luteola	1
Fragaria cf. vesca	1
Galeopsis Subgenus Galeopsis	1
Lamium Section Lamiopsis	1
Avena sp(p).	1
Carex sp(p).	1

Context 5406A Sample 526/M2*

Sambucus nigra	1

Context 5406B Sample 524/1

Ficus carica	1
Chenopodium album	1

Context 5406B Sample 524/M2*

Ficus carica	1
Atriplex sp(p).	1
Stellaria media	1

Context 5406C Sample 525/M2*

Corylus avellana	1
Ficus carica	3
Urtica dioica	1
Polygonum aviculare agg.	1
Polygonum persicaria	1
Polygonum lapathifolium	1
Rumex sp(p).	1
Rumex acetosella agg.	1
Atriplex sp(p).	1
Stellaria media	2
Agrostemma githago (sf)	2
Ranunculus Section Ranunculus	1
Brassica sp(p).	1
Reseda luteola	1
Rubus idaeus	1
Fragaria cf. vesca	2
Prunus sp(p).	1

continued...

Prunus spinosa	1
Prunella vulgaris	1
Sambucus nigra	1
Chrysanthemum segetum	1
Cerealia indet.	1
Eleocharis palustris sl	1

Context 5406D — Sample 560/M2*

Ficus carica	2
Polygonum lapathifolium	1
Stellaria media	1
Ranunculus Section Ranunculus	1
Aethusa cynapium	1
Sambucus nigra	1

Context 5408 — Sample 527/T

Sambucus nigra	1
brick/tile	1
burnt oyster shell fgts	1
charcoal	1
clinker/coke	1
coal	3
eggshell fgts	1
fish bone	1
fish scale	1
mortar	1
oolitic limestone	1
oyster shell fgts	1

Context 5433 — Sample 543/T*

Urtica dioica	1
Brassica sp./Sinapis arvensis (min)	1
Lamium Section Lamiopsis	1
Sambucus nigra	1
Juncus bufonius	1
Triticum aestivo-compactum	1
Characeae sp(p).	1
brick/tile	1
burnt mammal bone	2
charcoal	2
clinker	1
coal	1
earthworm egg caps	1
eggshell fgts	2
eggshell membrane fgts	1
fish bone	2
fish scale	1
fly puparia	1
glassy slag	1
mammal bone	3
mortar	1

Context 5462B — Sample 575/T*

Corylus avellana	1
Ficus carica	1
Polygonum aviculare agg.	1
Polygonum hydropiper	1
Polygonum persicaria	1
Polygonum lapathifolium	2
Bilderdykia convolvulus	2
Rumex sp(p).	1
Rumex acetosella agg.	1
Beta vulgaris (fr fgts)	1
Chenopodium album	2
Atriplex sp(p).	1
Stellaria media	2
Agrostemma githago (sf)	1
Silene cf. vulgaris	1
Ranunculus sardous	1
Fumaria sp(p).	1
Brassica rapa	1
Raphanus raphanistrum (s)	1
Raphanus raphanistrum (pod segs/fgts)	1
Scandix pecten-veneris	1
Galeopsis Subgenus Galeopsis	1
Stachys sp(p).	1
Chrysanthemum segetum	1
Centaurea sp(p).	1
Hypochoeris sp(p).	1
Lapsana communis	1
Triticum/Secale ('bran' fgts)	1
Eleocharis palustris sl	1
Sphagnum sp(p). (lvs)	1
brick/tile	1
charcoal	1
coal	1
faecal concretions	3
fish bone	1
fly puparia	1
magnesian limestone	1
mortar	1
ostracods	1
teeth	1
wood fgts	1

Context 5466 — Sample 584/AT1

Corylus avellana	1
Quercus sp(p). (b/bs)	1
Ficus carica	1
Urtica dioica	1
Urtica urens	1
Polygonum aviculare agg.	1
Polygonum persicaria	1
Polygonum lapathifolium	1
Bilderdykia convolvulus	1
Rumex sp(p).	1
Rumex acetosella agg.	2
Chenopodium album	1
Atriplex sp(p).	1
Stellaria media	1
Spergula arvensis	1
Agrostemma githago (min)	1
Silene vulgaris	1
Ranunculus Section Ranunculus	1
Ranunculus sceleratus	1
Ranunculus flammula	1
Ranunculus Subgenus Batrachium	1
Brassica sp(p).	1
Brassica rapa	2
Raphanus raphanistrum (pod segs/fgts)	1
Reseda luteola	1
Rubus fruticosus agg.	1
Potentilla cf. erecta	1
Potentilla cf. reptans	1
Fragaria cf. vesca	1
Prunus spinosa	1
Euphorbia helioscopia (ch)	1
Vitis vinifera	1
Viola sp(p).	1
Umbelliferae	1
Aethusa cynapium	1
cf. Calluna vulgaris (ch rt-tw fgts)	1
Anagallis arvensis	1
Galeopsis Subgenus Galeopsis	1
Lamium Section Lamiopsis	1
Stachys cf. sylvatica	1
Plantago major	1
Sambucus nigra	1
Valerianella dentata	1
Chrysanthemum segetum (af)	1
Lapsana communis	1
Juncus bufonius	1
Cerealia indet. (min spklts/fgts)	1
Hordeum sp(p).	1
Avena sp(p).	1
Avena sativa (spklts/fgts)	1
Eriophorum vaginatum (ch scl sp)	1
Eleocharis palustris sl	1
Carex sp(p).	1
Sphagnum sp(p). (lvs/shts)	2
burnt mammal bone	1
charcoal	1
coal	1

continued...

coke	2
earthworm egg caps	1
eggshell fgts	1
fish bone	1
glassy slag	1
magnesian limestone	1
mammal bone	1
metallic slag	1
mortar	1
oolitic limestone	1
sandstone	1
wood fgts	1

Context 5466B Sample 584/BT

Corylus avellana (ch)	1
Ficus carica	1
Urtica dioica	1
Rumex acetosella agg.	1
Chenopodium album	1
Atriplex sp(p).	1
Agrostemma githago (sf)	1
Silene vulgaris	1
Ranunculus Section Ranunculus	1
Ranunculus Subgenus Batrachium	1
Brassica rapa	1
Reseda luteola	1
Rubus fruticosus agg.	1
cf. Fragaria vesca	1
Vitis vinifera	1
Aethusa cynapium	1
Conium maculatum	1
Lamium Section Lamiopsis	1
Hyoscyamus niger	1
Plantago major	1
Sambucus nigra	1
Valerianella dentata	1
Juncus inflexus/effusus/conglomeratus	1
Carex sp(p).	1
brick/tile	1
charcoal	1
coal	1
fish bone	1
mammal bone	1
mortar	1
oyster shell fgts	1

Context 5466C Sample 591/T

Ficus carica	2
Urtica dioica	1
Urtica urens	1
Polygonum lapathifolium	1
Bilderdykia convolvulus	1
Rumex sp(p).	1
Rumex acetosella agg.	1
Chenopodium album	1
Stellaria media	1
Cerastium sp(p).	1
Spergula arvensis	1
Agrostemma githago (sf)	2
Silene vulgaris	1
Ranunculus flammula	1
Papaver somniferum	1
Fumaria sp(p).	1
Brassica rapa	1
Raphanus raphanistrum (pod segs/fgts)	1
Potentilla cf. erecta (ch)	1
Fragaria cf. vesca	1
Malus sylvestris	1
Prunus spinosa	1
Vitis vinifera	1
Viola sp(p).	1
Aegopodium podagraria/Conium maculatum	1
Oenanthe cf. lachenalii	1
cf. Foeniculum vulgare	1
Calluna vulgaris (rt-tw fgts)	1
Galium aparine	1
Lamium Section Lamiopsis	1
Hyoscyamus niger	1
Sambucus nigra	1
Chrysanthemum segetum	1
Centaurea sp(p).	1
Juncus bufonius	1
Juncus acutiflorus	1
Cerealia indet.	1
Triticum/Secale ('bran' fgts)	1
Eleocharis palustris sl	1
Carex sp(p).	1
Sphagnum sp(p). (lvs/shts)	1
Polytrichum commune	1
Leucobryum glaucum	1
Antitrichia curtipendula	1
Hypnum cupressiforme	1
Hylocomium splendens	1
bark fgts	1
brick/tile	1
charcoal	1
faecal concretions	2
fish bone	1
fish scale	1
fly puparia	2
magnesian limestone	1
mammal bone	1
mites	1
mortar	1
oyster shell fgts	1
rat-tailed maggot (resp proc)	1
sand	2
stem epid fgts	1

Context 5497 Sample 598/T1

Quercus sp(p). (b/bs)	1
Ficus carica	2
Urtica dioica	1
Polygonum aviculare agg.	1
Polygonum persicaria	1
Bilderdykia convolvulus	1
Rumex sp(p).	1
Rumex acetosella agg.	1
Chenopodium album	1
Atriplex sp(p).	1
Stellaria media	1
Agrostemma githago (sf)	2
Silene vulgaris	1
Silene alba	1
Ranunculus Section Ranunculus	1
Ranunculus sceleratus	1
Ranunculus flammula	1
Ranunculus Subgenus Batrachium	1
Papaver argemone	1
Brassica sp(p).	1
Brassica/Sinapis sp(p). (min cot)	2
Brassica rapa	1
Raphanus raphanistrum (pod segs/fgts)	1
Reseda luteola	1
Rubus sp(p). (prickles)	1
Rubus fruticosus agg.	1
Potentilla cf. reptans	1
Fragaria cf. vesca	1
Malus sylvestris	1
Prunus spinosa	1
Leguminosae (min)	1
Foeniculum vulgare	1
Galeopsis Subgenus Galeopsis	1
Prunella vulgaris	1
Satureja hortensis	1
Sambucus nigra	1
Valerianella dentata	1
Anthemis cotula (ch)	1
Chrysanthemum segetum	1
Carduus/Cirsium sp(p).	1
Centaurea sp(p).	1
Lapsana communis	1
Juncus inflexus/effusus/conglomeratus	1
Juncus bufonius	1
Triticum/Secale ('bran' fgts)	2
Avena sativa (spklts/fgts)	1
Eleocharis palustris sl	1
Carex sp(p).	1
Sphagnum sp(p). (lvs)	1
Cenococcum (sclerotia)	1

continued...

Sitophilus	1
Trichuris (ova)	1
bark fgts	1
brick/tile	1
burnt mammal bone	1
charcoal	1
coal	1
faecal concretions	3
fish bone	1
fly puparia	2
mammal bone	1
mortar	1
wood fgts	1

Context 5501C — Sample 603/TF*

Ficus carica	1
Urtica dioica	1
Polygonum aviculare agg.	1
Rumex sp(p).	1
Rumex acetosella agg.	1
Chenopodium album	1
Atriplex sp(p).	1
Stellaria media	1
Ranunculus Section Ranunculus	1
Ranunculus sceleratus	1
Brassica rapa	1
Reseda luteola	1
Lamium Section Lamiopsis	1
Stachys cf. sylvatica	1
Prunella vulgaris	1
Sambucus nigra	1
Anthemis cotula	1
Sonchus asper	1
Juncus inflexus/effusus/conglomeratus	1
Eleocharis palustris sl	1
Carex sp(p).	1
earthworm egg caps	1

Context 6143 — Sample 514/T

Hordeum sp(p).	1
brick/tile	1
burnt mammal bone	1
charcoal	1
cinders	2
coal	1
eggshell fgts	1
fish bone	1
magnesian limestone	1
mammal bone	1
mussel shell fgts	1
oyster shell fgts	1
sand	3

Context 6201 — Sample 534/T*

Ficus carica	1
Stellaria media	1
Papaver cf. argemone	1
Brassica sp./Sinapis arvensis	1
Rubus fruticosus agg.	1
cf. Ilex aquifolium (lef)	1
Gramineae	1
cinders	3
coal	2
dicot lf fgts	2
eggshell fgts	1
fish bone	1
fly puparia	1
glass	1
snails	1

Context 6201 — Sample 538/1

Chenopodium album	1
Ranunculus Section Ranunculus	1
Brassica sp./Sinapis arvensis	1
Rubus fruticosus agg.	2
Linum usitatissimum	1
Valerianella dentata	1

Context 6263 — Sample 557/T

Corylus avellana (ch)	1
Urtica dioica	1
Urtica urens	1
Polygonum lapathifolium	1
Rumex acetosella agg.	1
Lamium Section Lamiopsis	1
Hyoscyamus niger	1
Hyoscyamus niger (ch)	1
Sambucus nigra	1
Carex sp(p).	1
Sphagnum sp(p). (lvs)	1
brick/tile	2
burnt mammal bone	1
chalk	1
charcoal	2
cinders	3
coal	1
eggshell fgts	1
fish bone	1
fly puparia	1
glassy slag	1
green-glazed pottery	1
magnesian limestone	1
mammal bone	1
mortar	2
mussel shell fgts	1
sand	3

Context 6296 — Sample 566/T*

Papaver argemone	1
Conium maculatum	1
Valerianella dentata (min)	1
barnacle shell fgts	1
brick/tile	1
charcoal	1
coal	1
crab shell fgts	1
eggshell fgts	1
faecal concretions	2
fish bone	2
mammal bone	1
mortar	2
mussel shell fgts	1
oyster shell fgts	1
sand	2

Context 6300A — Sample 570/T*

Juncus inflexus/effusus/conglomeratus	1
Juncus bufonius	1
brick/tile	1
burnt mammal bone	1
charcoal	2
coal	1
eggshell fgts	1
fish bone	2
glassy slag	1
mammal bone	1
mortar	1
oyster shell fgts	1
sand	2

continued...

Context 6300B	Sample 573/T*
Papaver argemone	1
Juncus bufonius	1
bird bone	1
brick/tile	1
charcoal	1
coal	1
eggshell fgts	1
fish bone	1
mammal bone	1
sand	2

Context 6300C	Sample 574/TF*
Papaver argemone	1
Juncus bufonius	1

Context 6361	Sample 604/TF*
Urtica dioica	1
Papaver argemone	1
Labiatae	1
Juncus bufonius	2

Context 6372	Sample 681/1$
Urtica dioica	3
Polygonum persicaria	1
Bilderdykia convolvulus	1
Rumex sp(p).	1
Rumex acetosella agg.	1
Atriplex sp(p).	1
Ranunculus Section Ranunculus	1
Brassica sp(p).	1
Aethusa cynapium	1
cf. Rhinanthus sp(p). (min)	1
Gramineae	1
Eleocharis palustris sl	1
Carex sp(p).	2
earthworm egg caps	1
fly puparia	1

Context 7003F	Sample 549/T*
Sambucus nigra	1
Alisma sp(p).	1
Juncus bufonius	1
Avena sp(p).	1
brick/tile	1
charcoal	2
coal	1
fish bone	1
mammal bone	1
mortar	1
snails	1

Context 7054H	Sample 556/TF
Juncus bufonius	1
charcoal	1

Context 7054K	Sample 559/TF
charcoal	1
charred plant debris	1

Context 7069	Sample 561/TF
Papaver argemone	1
Juncus bufonius	1

Context 7224	Sample 612/TF+
Raphanus raphanistrum (pod segs/fgts)	1
cf. Epilobium sp(p).	1
Sambucus nigra	1
Sonchus asper	1
Sonchus oleraceus	1
Eleocharis palustris sl	1
charcoal	1
coal	2
fish bone	1
fish scale	1

Context 7300C	Sample 620/M
Ficus carica	1
Ranunculus Subgenus Batrachium	1
Coriandrum sativum	1
Sambucus nigra	1
faecal concretions	3
fish bone	1
mammal bone	2

Context 7300C	Sample 620/T
Ficus carica	2
Agrostemma githago (min casts/moulds)	1
cf. Foeniculum vulgare (min)	1
Conium maculatum	1
Labiatae	1
Sambucus nigra	1
Sonchus asper	1
Juncus bufonius	1
Cerealia indet.	1
Eriophorum vaginatum (scl sp)	1
Daphnia (ephippia)	1
brick/tile	1
burnt mammal bone	1
charcoal	1
coal	1
eggshell fgts	1
faecal concretions	3
fish bone	1
mammal bone	1
mortar	1
oolitic limestone	1
pottery	1
stones	1

Context 7300D	Sample 621/AT
Ficus carica	2
Agrostemma githago (min casts/moulds)	1
Sambucus nigra	1
brick/tile	1
burnt mammal bone	1
charcoal	1
coal	2
faecal concretions	3
fish bone	1
mammal bone	1
micaceous sandstone	1
min woodlouse fgts	1
mortar	1
oolitic limestone	1
pottery	1
sand	2

continued...

Context 7329	Sample 622/BT
Corylus avellana	1
Ficus carica	1
Cannabis sativa	1
Polygonum lapathifolium	1
Bilderdykia convolvulus (ff)	1
Rumex sp(p).	2
Chenopodium album	1
Agrostemma githago (sf)	2
Silene vulgaris	1
Ranunculus Section Ranunculus	2
Prunus spinosa (fgts)	1
Vicia sp(p).	1
Anthriscus sylvestris	1
Stachys sp(p).	1
Mentha sp(p).	1
Rhinanthus sp(p).	1
Sambucus nigra	1
Carduus/Cirsium sp(p).	1
Alisma sp(p).	1
Juncus bufonius	2
Juncus cf. articulatus	1
Eleocharis palustris sl	1
Carex sp(p).	1
Sphagnum sp(p). (lvs)	1
Bryum sp(p).	1
brick/tile	1
charcoal	1
fly puparia	1
glassy slag	1
magnesian limestone	1
mammal bone	1
wood fgts	1

Context 7539	Sample 626/T*
Ficus carica	1
Montia fontana ssp. chondrosperma	1
Ranunculus sceleratus	1
Raphanus raphanistrum (pod segs/fgts)	1
Potentilla anserina	2
Viola sp(p).	1
Hydrocotyle vulgaris	1
Alisma sp(p).	1
Juncus bufonius	2
Scirpus setaceus	2
Carex sp(p).	1
Sphagnum sp(p). (lvs)	1
brick/tile	1
charcoal	1
earthworm egg caps	1
eggshell fgts	1
fish bone	1
fly puparia	1
mammal bone	1
mortar	1
moss	1

Appendix 3. List of Coleoptera and Hemiptera from The Bedern, south-west, Area X (1973-81.14 X). Nomenclature and order follow Kloet and Hincks 1964-77. Invertebrates other than Coleoptera, Hemiptera and parasite eggs were not recorded systematically from this site so no list is presented.

Hemiptera

Pachybrachius ?fracticollis (Schilling)
Lygaeidae sp.
Cymus sp.
Temnostethus sp.
Lyctocoris campestris (Fabricius)
Cimex lectularius Linnaeus
Heteroptera sp. indet.
Auchenorhyncha spp.

Coleoptera

Notiophilus sp.
Clivina ?fossor (Linnaeus)
Patrobus atrorufus (Strom)
Trechus quadristriatus (Schrank)
Trechus obtusus or quadristriatus
Trechus micros (Herbst)
Trechus sp. indet.
Bembidion ?lampros (Herbst)
Bembidion sp.
Pterostichus ?melanarius (Illiger)
?Pterostichus sp.
Laemostenus terricola (Herbst)
Agonum albipes (Fabricius)
Agonum sp.
?Dromius sp.
Carabidae spp.
Hydroporinae sp.
Helophorus spp.
Cercyon analis (Paykull)
Cercyon atricapillus (Marsham)
Cercyon haemorrhoidalis (Fabricius)
Cercyon terminatus (Marsham)
Cercyon spp.
Megasternum obscurum (Marsham)
Cryptopleurum minutum (Fabricius)
Hydrophilinae sp.
Acritus nigricornis (Hoffmann)
Hister ?merdarius Hoffman
Paralister ?carbonarius (Hoffman)
Histerinae sp. indet.
Ochthebius sp.
Ptenidium sp.
Acrotrichis sp.
Ptiliidae sp.
Catops sp.
Scydmaenidae sp.
Megarthrus sp.
Anthobium sp.
Lesteva ?longoelytrata (Goeze)
Lesteva sp. indet.
Phyllodrepa floralis (Paykull)
Phyllodrepa floralis group
?Dropephylla sp.
Omalium rivulare (Paykull)
Omalium sp.
Xylodromus concinnus (Marsham)
Xylodromus ?depressus (Gravenhorst)
Xylodromus sp. indet.
Omaliinae sp.
Coprophilus striatulus (Fabricius)
Carpelimus bilineatus Stephens
Carpelimus elongatulus (Erichson)
Carpelimus fuliginosus (Gravenhorst)
Carpelimus pusillus group
Carpelimus ?rivularis (Motschulsky)
Carpelimus sp.
Platystethus arenarius (Fourcroy)
Anotylus complanatus (Erichson)
Anotylus nitidulus (Gravenhorst)
Anotylus rugosus (Fabricius)
Anotylus sculpturatus group
Anotylus tetracarinatus (Block)
Anotylus sp.
Oxytelus sculptus Gravenhorst
Oxytelinae sp. indet.
Stenus sp.
Lathrobium sp.
Rugilus ?rufipes Germar
Leptacinus sp.
Gyrohypnus angustatus Stephens
Gyrohypnus fracticornis (Muller)
Gyrohypnus sp. indet.
Xantholinus sp.
Neobisnius villosulus (Stephens)
Erichsonius sp.
Philonthus cephalotes (Gravenhorst)
Philonthus ?politus (Linnaeus)
Philonthus spp.
Creophilus maxillosus (Linnaeus)
Quedius sp.
Staphylininae spp. indet.
Tachyporus sp.
Tachinus ?signatus Gravenhorst
Tachinus subterraneus (Linnaeus)
Tachinus sp. indet.
Cilea silphoides (Linnaeus)
Cordalia obscura (Gravenhorst)
Falagria caesa or sulcatula

?Falagria sp. indet.
Aleocharinae spp.
Trichonyx sulcicollis (Reichenbach)
Euplectini sp.
Pselaphidae sp.
Trox scaber (Linnaeus)
Aphodius ?rufipes (Linnaeus)
Aphodius spp.
Aphodius or Colobopterus sp. indet.
Cyphon sp.
Byrrhidae sp.
Elateridae spp.
Dermestes sp.
Attagenus pellio (Linnaeus)
Anthrenus sp.
Dermestidae sp. indet.
Grynobius planus (Fabricius)
Anobium punctatum (Degeer)
Niptus hololeucus (Falderman)
Tipnus unicolor (Piller & Mitterpacher)
Ptinus fur (Linnaeus)
Ptinus sp. indet.
Ptinidae sp. indet.
Lyctus linearis (Goeze)
Meligethes spp.
Epuraea sp.
Omosita discoidea (Fabricius)
Omosita sp. indet.
Nitidulidae sp.
Rhizophagus parallelocollis Gyllenhal
Rhizophagus sp. indet.
Monotoma sp.
Oryzaephilus surinamensis (Linnaeus)
Cryptophagus scutellatus Newman
Cryptophagus spp.
Atomaria nigripennis (Kugelann)
Atomaria spp.
Orthoperus sp.
Coccinellidae sp.
Mycetaea hirta (Marsham)
Lathridius minutus group
Enicmus sp.
Dienerella ?filum (Aube)
Dienerella sp. indet.
Corticaria ?punctulata Marsham
Corticaria spp.
Corticarina sp.
Cortinicara gibbosa (Herbst)
Corticarina or Cortinicara sp. indet.
Typhaea stercorea (Linnaeus)
Aglenus brunneus (Gyllenhal)
Blaps sp.
Tenebrio molitor Linnaeus
Tenebrio obscurus Fabricius
Anthicus floralis or formicarius
Anthicus sp. indet.
Bruchinae sp.
Donaciinae sp.
Chrysomelinae sp.
Phyllotreta nemorum group
?Chaetocnema concinna (Marsham)
Halticinae sp.
Apion spp.
Sitona sp.
Hypera nigrirostris (Fabricius)
Hypera sp.
Leiosoma sp.
Sitophilus granarius (Linnaeus)
Orthochaetes setiger (Beck)
Cidnorhinus quadrimaculatus (Linnaeus)
Ceutorhynchus sp.
Ceuthorhynchinae sp.
?Gymnetron sp.
Curculionidae spp.
Scolytus sp.
Leperisinus varius (Fabricius)
Phloeophthorus rhododactylus (Marsham)
Coleoptera sp.

Appendix 4. Data concerning remains of Coleoptera and Hemiptera from excavations at The Bedern, south-west, Area X (1973-81.13 X). For each sample from which more than a 'minimum number' of nine individuals were recorded, 'main statistics' for the assemblage are followed by a complete species list in rank order. For assemblages of less than ten individuals only N and S and the species list are given.

Context: 4228 Sample: 390/T - beetle/bug main statistics

Erosion = 2 Fragmentation = 2; Weight = 0.460kg

Number of individuals estimated as	N =	240
Number of taxa	S =	55
Index of diversity (alpha)	alpha =	22
Standard error of alpha	SE alpha =	2
Number of 'certain' outdoor taxa	SOA =	3
Percentage of 'certain' outdoor taxa	%SOA =	5
Number of 'certain' outdoor individuals	NOA =	9
Percentage of 'certain' outdoor individuals	%NOA =	4
Number of 'certain' and probable outdoor taxa	SOB =	3
Percentage of 'certain' and probable outdoor taxa	%SOB =	5
Number of 'certain' and probable outdoor individuals	NOB =	9
Percentage 'certain' and probable outdoor individuals	%NOB =	4
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	1
Percentage of aquatic taxa	%SW =	2
Number of aquatic individuals	NW =	6
Percentage of aquatic individuals	%NW =	3
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	2
Percentage of strongly plant-associated taxa	%SP =	4
Number of strongly plant-associated individuals	NP =	3
Percentage of strongly plant-associated individuals	%NP =	1
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	2
Number of wood-associated individuals	NL =	16
Percentage of wood-associated individuals	%NL =	7
Number of decomposer taxa	SRT =	28
Percentage of decomposer taxa	%SRT =	51
Number of decomposer individuals	NRT =	175
Percentage of decomposer individuals	%NRT =	73
Number of 'dry' decomposer taxa	SRD =	12
Percentage of 'dry'decomposer taxa	%SRD =	22
Number of 'dry' decomposer individuals	NRD =	145
Percentage of 'dry'decomposer individuals	%NRD =	60
Number of 'foul' decomposer taxa	SRF =	1
Percentage of 'foul' decomposer taxa	%SRF =	2
Number of 'foul' decomposer individuals	NRF =	1
Percentage of 'foul' decomposer individuals	%NRF =	0
Index of diversity of decomposer component	alpha RT =	10
Standard error	SE alpha RT =	1
Number of individuals of grain pests	NG =	12
Percentage of individuals of grain pests	%NG =	5
Number of individuals of grain pests	NG =	12
Number of uncoded taxa	SU =	20
Percentage of uncoded individuals	PNU =	12

continued...

Context: 4228 Sample: 390/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Anobium punctatum (Degeer)*	15	6	1	l
Tipnus unicolor (Piller & Mitterpacher)*	15	6	1	rd
Ptinus fur (Linnaeus)*	15	6	1	rd
Cryptophagus scutellatus Newman*	15	6	1	rd
Cryptophagus sp. A *	15	6	1	rd
Cryptophagus sp. B *	15	6	1	rd
Atomaria nigripennis (Kugelann)*	15	6	1	rd
Mycetaea hirta (Marsham)*	15	6	1	rd
Lathridius minutus group *	15	6	1	rd
Dienerella ?filum (Aube)*	15	6	1	rd
Hydroporinae sp. *	6	3	11	oa w
Catops sp. *	6	3	11	u
Xylodromus concinnus (Marsham)*	6	3	11	rt
Oryzaephilus surinamensis (Linnaeus)*	6	3	11	g
Cryptophagus sp. X *	6	3	11	rd
Aglenus brunneus (Gyllenhal)*	6	3	11	rt
Sitophilus granarius (Linnaeus)*	6	3	11	g
Corticaria sp. A	3	1	18	rt
Typhaea stercorea (Linnaeus)	3	1	18	rd
Trechus micros (Herbst)	2	1	20	u
Coprophilus striatulus (Fabricius)	2	1	20	rt
Quedius sp.	2	1	20	u
Aleocharinae sp. D	2	1	20	u
Tenebrio molitor Linnaeus	2	1	20	rt
Halticinae sp.	2	1	20	oa p
Pachybrachius ?fracticollis (Schilling)	1	0	26	oa p
Laemostenus terricola (Herbst)	1	0	26	u
Cercyon terminatus (Marsham)	1	0	26	rf
Anotylus complanatus (Erichson)	1	0	26	rt
Anotylus rugosus (Fabricius)	1	0	26	rt
Oxytelus sculptus Gravenhorst	1	0	26	rt
Stenus sp.	1	0	26	u
Erichsonius sp.	1	0	26	u
Philonthus sp.	1	0	26	u
Staphylininae sp. A	1	0	26	u
Staphylininae sp. B	1	0	26	u
Staphylininae sp. C	1	0	26	u
Aleocharinae sp. A	1	0	26	u
Aleocharinae sp. B	1	0	26	u
Aleocharinae sp. C	1	0	26	u
Aleocharinae sp. E	1	0	26	u
Aleocharinae sp. F	1	0	26	u
Aleocharinae sp. G	1	0	26	u
Aleocharinae sp. H	1	0	26	u
Aleocharinae sp. I	1	0	26	u
Dermestidae sp.	1	0	26	u
Ptinus sp.	1	0	26	rd
Omosita discoidea (Fabricius)	1	0	26	rt
Rhizophagus parallelocollis Gyllenhal	1	0	26	rt
Orthoperus sp.	1	0	26	rt
Enicmus sp.	1	0	26	rt
Corticaria sp. B	1	0	26	rt
Corticarina or Cortinicara sp.	1	0	26	rt
Tenebrio obscurus Fabricius	1	0	26	rt
Phloeophthorus rhododactylus (Marsham)	1	0	26	l

continued...

Context: 2989 Sample: 394/T

NO RECORDS OF BEETLES OR BUGS

Context: 5159 Sample: 409/T - beetle/bug main statistics

Erosion = 4 Fragmentation = 2; Weight = 0.410kg

Number of individuals estimated as	N =	8
Number of taxa	S =	8

Context: 5159 Sample: 409/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Cercyon atricapillus (Marsham)	1	13	1	rf
Xylodromus concinnus (Marsham)	1	13	1	rt
Platystethus arenarius (Fourcroy)	1	13	1	rf
Anotylus rugosus (Fabricius)	1	13	1	rt
Staphylininae sp.	1	13	1	u
Aleocharinae sp. A	1	13	1	u
Aleocharinae sp. B	1	13	1	u
Monotoma sp.	1	13	1	rt

Context: 5230 Sample: 416/T

NO RECORDS OF BEETLES OR BUGS

Context: 5231 Sample: 417/T - beetle/bug main statistics

Erosion = 5 Fragmentation = 3; Weight = 0.610kg

Number of individuals estimated as	N =	53
Number of taxa	S =	32
Index of diversity (alpha)	alpha =	35
Standard error of alpha	SE alpha =	9
Number of 'certain' outdoor taxa	SOA =	3
Percentage of 'certain' outdoor taxa	%SOA =	9
Number of 'certain' outdoor individuals	NOA =	3
Percentage of 'certain' outdoor individuals	%NOA =	6
Number of 'certain' and probable outdoor taxa	SOB =	3
Percentage of 'certain' and probable outdoor taxa	%SOB =	9
Number of 'certain' and probable outdoor individuals	NOB =	3
Percentage 'certain' and probable outdoor individuals	%NOB =	6
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	1
Percentage of aquatic taxa	%SW =	3
Number of aquatic individuals	NW =	1
Percentage of aquatic individuals	%NW =	2
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	2
Percentage of strongly plant-associated taxa	%SP =	6
Number of strongly plant-associated individuals	NP =	2
Percentage of strongly plant-associated individuals	%NP =	4
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0

continued...

Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	2
Percentage of wood-associated individuals	%NL =	4
Number of decomposer taxa	SRT =	18
Percentage of decomposer taxa	%SRT =	56
Number of decomposer individuals	NRT =	27
Percentage of decomposer individuals	%NRT =	51
Number of 'dry' decomposer taxa	SRD =	3
Percentage of 'dry'decomposer taxa	%SRD =	9
Number of 'dry' decomposer individuals	NRD =	5
Percentage of 'dry'decomposer individuals	%NRD =	9
Number of 'foul' decomposer taxa	SRF =	1
Percentage of 'foul' decomposer taxa	%SRF =	3
Number of 'foul' decomposer individuals	NRF =	1
Percentage of 'foul' decomposer individuals	%NRF =	2
Index of diversity of decomposer component	alpha RT =	24
Standard error	SE alpha RT =	9
Number of individuals of grain pests	NG =	0
Percentage of individuals of grain pests	%NG =	0
Number of individuals of grain pests	NG =	0
Number of uncoded taxa	SU =	10
Percentage of uncoded individuals	PNU =	40

Context: 5231 Sample: 417/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Acrotrichis sp. *	6	11	1	rt
Carpelimus fuliginosus (Gravenhorst)*	6	11	1	u
Neobisnius ?villosulus (Stephens)*	6	11	1	u
Cercyon analis (Paykull)	2	4	4	rt
Cercyon sp.	2	4	4	u
Anotylus rugosus (Fabricius)	2	4	4	rt
Anobium punctatum (Degeer)	2	4	4	l
Tipnus unicolor (Piller & Mitterpacher)	2	4	4	rd
Cryptophagus sp.	2	4	4	rd
Hydroporinae sp.	1	2	10	oa w
?Megasternum obscurum (Marsham)	1	2	10	rt
Ptenidium sp.	1	2	10	rt
Xylodromus concinnus (Marsham)	1	2	10	rt
Carpelimus bilineatus Stephens	1	2	10	rt
Carpelimus pusillus group	1	2	10	u
Platystethus arenarius (Fourcroy)	1	2	10	rf
Anotylus tetracarinatus (Block)	1	2	10	rt
Oxytelus sculptus Gravenhorst	1	2	10	rt
Stenus sp.	1	2	10	u
Gyrohypnus fracticornis (Muller)	1	2	10	rt
Staphylininae sp.	1	2	10	u
Cordalia obscura (Gravenhorst)	1	2	10	rt
Falagria caesa or sulcatula	1	2	10	rt
Aleocharinae sp. A	1	2	10	u
Aleocharinae sp. B	1	2	10	u
Aleocharinae sp. C	1	2	10	u
Euplectini sp.	1	2	10	u
Ptinus fur (Linnaeus)	1	2	10	rd
Rhizophagus parallelocollis Gyllenhal	1	2	10	rt
Aglenus brunneus (Gyllenhal)	1	2	10	rt
Apion sp.	1	2	10	oa p
Ceutorhynchus sp.	1	2	10	oa p

continued...

Context: 5204 Sample: 418/T - beetle/bug main statistics

Erosion = 4 Fragmentation = 4; Weight = 1.000kg

Number of individuals estimated as	N =	4
Number of taxa	S =	4

Context: 5204 Sample: 418/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Staphylininae sp.	1	25	1	u
Anobium punctatum (Degeer)	1	25	1	l
Tipnus unicolor (Piller & Mitterpacher)	1	25	1	rd
Ceutorhynchus sp.	1	25	1	oa p

Context: 5249 Sample: 421/T

NO RECORDS OF BEETLES OR BUGS

Context: 5222 Sample: 422/T - beetle/bug main statistics

Erosion = 5 Fragmentation = 2; Weight = 0.790kg

Number of individuals estimated as	N =	50
Number of taxa	S =	27
Index of diversity (alpha)	alpha =	24
Standard error of alpha	SE alpha =	6
Number of 'certain' outdoor taxa	SOA =	2
Percentage of 'certain' outdoor taxa	%SOA =	7
Number of 'certain' outdoor individuals	NOA =	2
Percentage of 'certain' outdoor individuals	%NOA =	4
Number of 'certain' and probable outdoor taxa	SOB =	4
Percentage of 'certain' and probable outdoor taxa	%SOB =	15
Number of 'certain' and probable outdoor individuals	NOB =	4
Percentage 'certain' and probable outdoor individuals	%NOB =	8
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	1
Percentage of damp ground/waterside taxa	%SD =	4
Number of damp ground/waterside individuals	ND =	1
Percentage of damp ground/waterside individuals	%ND =	2
Number of strongly plant-associated taxa	SP =	1
Percentage of strongly plant-associated taxa	%SP =	4
Number of strongly plant-associated individuals	NP =	1
Percentage of strongly plant-associated individuals	%NP =	2
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	1
Percentage of wood-associated individuals	%NL =	2
Number of decomposer taxa	SRT =	15
Percentage of decomposer taxa	%SRT =	56
Number of decomposer individuals	NRT =	30
Percentage of decomposer individuals	%NRT =	60
Number of 'dry' decomposer taxa	SRD =	4
Percentage of 'dry'decomposer taxa	%SRD =	15

continued...

Number of 'dry' decomposer individuals	NRD =	5
Percentage of 'dry'decomposer individuals	%NRD =	10
Number of 'foul' decomposer taxa	SRF =	3
Percentage of 'foul' decomposer taxa	%SRF =	11
Number of 'foul' decomposer individuals	NRF =	5
Percentage of 'foul' decomposer individuals	%NRF =	10
Index of diversity of decomposer component	alpha RT =	12
Standard error	SE alpha RT =	4
Number of individuals of grain pests	NG =	0
Percentage of individuals of grain pests	%NG =	0
Number of individuals of grain pests	NG =	0
Number of uncoded taxa	SU =	8
Percentage of uncoded individuals	PNU =	32

Context: 5222 Sample: 422/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Acrotrichis sp. *	6	12	1	rt
Carpelimus bilineatus Stephens*	6	12	1	rt
Carpelimus fuliginosus (Gravenhorst)*	6	12	1	u
Cercyon atricapillus (Marsham)	3	6	4	rf
Aleocharinae sp. B	3	6	4	u
Anotylus rugosus (Fabricius)	2	4	6	rt
Stenus sp.	2	4	6	u
Cordalia obscura (Gravenhorst)	2	4	6	rt
Cryptophagus sp. R	2	4	6	rd
Carabidae sp.	1	2	10	ob
Cercyon sp. A	1	2	10	u
Cercyon sp. B	1	2	10	u
Carpelimus pusillus group	1	2	10	u
Platystethus arenarius (Fourcroy)	1	2	10	rf
Anotylus nitidulus (Gravenhorst)	1	2	10	rt d
Anotylus sculpturatus group	1	2	10	rt
Neobisnius ?villosulus (Stephens)	1	2	10	u
Aleocharinae sp. A	1	2	10	u
Aphodius sp.	1	2	10	ob rf
Anobium punctatum (Degeer)	1	2	10	l
Tipnus unicolor (Piller & Mitterpacher)	1	2	10	rd
Cryptophagus sp.	1	2	10	rd
Lathridius minutus group	1	2	10	rd
Corticaria sp.	1	2	10	rt
Anthicus floralis or formicarius	1	2	10	rt
Apion sp.	1	2	10	oa p
Curculionidae sp.	1	2	10	oa

Context: 5203 Sample: 424/T

NO RECORDS OF BEETLES OR BUGS

Context: 5265 Sample: 427/1 - beetle/bug main statistics

Erosion = 0 Fragmentation = 0; Weight = 1.000kg

Number of individuals estimated as	N =	1
Number of taxa	S =	1

continued...

Context: 5265 Sample: 427/1 - species list in rank order

Taxon	Number	%	Rank	Ecodes
?Tipnus unicolor (Piller & Mitterpacher)	1	100	1	rd

Context: 5265 Sample: 428/1 - beetle/bug main statistics

Erosion = 0 Fragmentation = 0; Weight = 0.200kg

Number of individuals estimated as	N =	3
Number of taxa	S =	3

Context: 5265 Sample: 428/1 - species list in rank order

Taxon	Number	%	Rank	Ecodes
Cercyon analis (Paykull)	1	33	1	rt
Mycetaea hirta (Marsham)	1	33	1	rd
Phyllotreta nemorum group	1	33	1	oa p

Context: 5265 Sample: 430/1

NO RECORDS OF BEETLES OR BUGS

Context: 5221 Sample: 436/1 - beetle/bug main statistics

Erosion = 0 Fragmentation = 0; Weight = 0.200kg

Number of individuals estimated as	N =	58
Number of taxa	S =	34
Index of diversity (alpha)	alpha =	35
Standard error of alpha	SE alpha =	8
Number of 'certain' outdoor taxa	SOA =	2
Percentage of 'certain' outdoor taxa	%SOA =	6
Number of 'certain' outdoor individuals	NOA =	2
Percentage of 'certain' outdoor individuals	%NOA =	3
Number of 'certain' and probable outdoor taxa	SOB =	4
Percentage of 'certain' and probable outdoor taxa	%SOB =	12
Number of 'certain' and probable outdoor individuals	NOB =	4
Percentage 'certain' and probable outdoor individuals	%NOB =	7
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	2
Percentage of strongly plant-associated taxa	%SP =	6
Number of strongly plant-associated individuals	NP =	2
Percentage of strongly plant-associated individuals	%NP =	3
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	2
Number of wood-associated individuals	NL =	5
Percentage of wood-associated individuals	%NL =	9

continued...

Number of decomposer taxa	SRT =	19
Percentage of decomposer taxa	%SRT =	56
Number of decomposer individuals	NRT =	39
Percentage of decomposer individuals	%NRT =	67
Number of 'dry' decomposer taxa	SRD =	6
Percentage of 'dry'decomposer taxa	%SRD =	18
Number of 'dry' decomposer individuals	NRD =	15
Percentage of 'dry'decomposer individuals	%NRD =	26
Number of 'foul' decomposer taxa	SRF =	1
Percentage of 'foul' decomposer taxa	%SRF =	3
Number of 'foul' decomposer individuals	NRF =	1
Percentage of 'foul' decomposer individuals	%NRF =	2
Index of diversity of decomposer component	alpha RT =	15
Standard error	SE alpha RT =	4
Number of individuals of grain pests	NG =	1
Percentage of individuals of grain pests	%NG =	2
Number of individuals of grain pests	NG =	1
Number of uncoded taxa	SU =	9
Percentage of uncoded individuals	PNU =	17

Context: 5221 Sample: 436/1 - species list in rank order

Taxon	Number	%	Rank	Ecodes
Tipnus unicolor (Piller & Mitterpacher)	8	14	1	rd
Anobium punctatum (Degeer)	4	7	2	l
Ptenidium sp.	3	5	3	rt
Omalium sp.	3	5	3	rt
Anotylus complanatus (Erichson)	3	5	3	rt
Anotylus rugosus (Fabricius)	3	5	3	rt
Cercyon ?analis (Paykull)	2	3	7	rt
Xylodromus concinnus (Marsham)	2	3	7	rt
Carpelimus sp.	2	3	7	u
Ptinus ?fur (Linnaeus)	2	3	7	rd
Lathridius minutus group	2	3	7	rd
Enicmus sp.	2	3	7	rt
Carabidae sp.	1	2	13	ob
Histerinae sp.	1	2	13	u
?Catops sp.	1	2	13	u
Omalium ?rivulare (Paykull)	1	2	13	rt
Omaliinae sp.	1	2	13	u
Coprophilus striatulus (Fabricius)	1	2	13	rt
Philonthus sp.	1	2	13	u
Quedius sp.	1	2	13	u
Staphylininae sp.	1	2	13	u
Aleocharinae sp. A	1	2	13	u
Aleocharinae sp. B	1	2	13	u
Trox scaber (Linnaeus)	1	2	13	rt
Aphodius sp.	1	2	13	ob rf
?Attagenus pellio (Linnaeus)	1	2	13	rd
Anthrenus sp.	1	2	13	rt
?Lyctus sp.	1	2	13	l
Oryzaephilus surinamensis (Linnaeus)	1	2	13	g
Cryptophagus sp.	1	2	13	rd
?Mycetaea hirta (Marsham)	1	2	13	rd
Cortinicara gibbosa (Herbst)	1	2	13	rt
Phyllotreta nemorum group	1	2	13	oa p
Apion sp.	1	2	13	oa p

continued...

Context: 5221 Sample: 437/1 - beetle/bug main statistics

Erosion = 0 Fragmentation = 0; Weight = 0.100kg

Number of individuals estimated as	N =	55
Number of taxa	S =	18
Index of diversity (alpha)	alpha =	9
Standard error of alpha	SE alpha =	2
Number of 'certain' outdoor taxa	SOA =	0
Percentage of 'certain' outdoor taxa	%SOA =	0
Number of 'certain' outdoor individuals	NOA =	0
Percentage of 'certain' outdoor individuals	%NOA =	0
Number of 'certain' and probable outdoor taxa	SOB =	0
Percentage of 'certain' and probable outdoor taxa	%SOB =	0
Number of 'certain' and probable outdoor individuals	NOB =	0
Percentage 'certain' and probable outdoor individuals	%NOB =	0
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	0
Percentage of strongly plant-associated taxa	%SP =	0
Number of strongly plant-associated individuals	NP =	0
Percentage of strongly plant-associated individuals	%NP =	0
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	1
Percentage of wood-associated individuals	%NL =	2
Number of decomposer taxa	SRT =	11
Percentage of decomposer taxa	%SRT =	61
Number of decomposer individuals	NRT =	38
Percentage of decomposer individuals	%NRT =	69
Number of 'dry' decomposer taxa	SRD =	4
Percentage of 'dry'decomposer taxa	%SRD =	22
Number of 'dry' decomposer individuals	NRD =	12
Percentage of 'dry'decomposer individuals	%NRD =	22
Number of 'foul' decomposer taxa	SRF =	0
Percentage of 'foul' decomposer taxa	%SRF =	0
Number of 'foul' decomposer individuals	NRF =	0
Percentage of 'foul' decomposer individuals	%NRF =	0
Index of diversity of decomposer component	alpha RT =	5
Standard error	SE alpha RT =	1
Number of individuals of grain pests	NG =	1
Percentage of individuals of grain pests	%NG =	2
Number of individuals of grain pests	NG =	1
Number of uncoded taxa	SU =	5
Percentage of uncoded individuals	PNU =	27

Context: 5221 Sample: 437/1 - species list in rank order

Taxon	Number	%	Rank	Ecodes
Cercyon analis (Paykull)	11	20	1	rt
Aleocharinae sp. A	10	18	2	u
Tipnus unicolor (Piller & Mitterpacher)	6	11	3	rd
Anotylus rugosus (Fabricius)	5	9	4	rt

continued...

Carpelimus bilineatus Stephens	4	7	5	rt
Ptenidium sp.	3	5	6	rt
Ptinus ?fur (Linnaeus)	2	4	7	rd
Rhizophagus sp.	2	4	7	u
Atomaria sp.	2	4	7	rd
Mycetaea hirta (Marsham)	2	4	7	rd
Hister ?merdarius Hoffman	1	2	11	rt
Catops sp.	1	2	11	u
Omalium ?rivulare (Paykull)	1	2	11	rt
Anotylus complanatus (Erichson)	1	2	11	rt
Aleocharinae sp. B	1	2	11	u
Aleocharinae sp. C	1	2	11	u
Anobium punctatum (Degeer)	1	2	11	l
Sitophilus granarius (Linnaeus)	1	2	11	g

Context: 5273 Sample: 438/T - beetle/bug main statistics

Erosion = 0 Fragmentation = 0; Weight = 0.650kg

Number of individuals estimated as	N =	105
Number of taxa	S =	53
Index of diversity (alpha)	alpha =	43
Standard error of alpha	SE alpha =	7
Number of 'certain' outdoor taxa	SOA =	9
Percentage of 'certain' outdoor taxa	%SOA =	17
Number of 'certain' outdoor individuals	NOA =	11
Percentage of 'certain' outdoor individuals	%NOA =	10
Number of 'certain' and probable outdoor taxa	SOB =	10
Percentage of 'certain' and probable outdoor taxa	%SOB =	19
Number of 'certain' and probable outdoor individuals	NOB =	12
Percentage 'certain' and probable outdoor individuals	%NOB =	11
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	2
Percentage of aquatic taxa	%SW =	4
Number of aquatic individuals	NW =	3
Percentage of aquatic individuals	%NW =	3
Number of damp ground/waterside taxa	SD =	2
Percentage of damp ground/waterside taxa	%SD =	4
Number of damp ground/waterside individuals	ND =	2
Percentage of damp ground/waterside individuals	%ND =	2
Number of strongly plant-associated taxa	SP =	5
Percentage of strongly plant-associated taxa	%SP =	9
Number of strongly plant-associated individuals	NP =	6
Percentage of strongly plant-associated individuals	%NP =	6
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	3
Percentage of wood-associated individuals	%NL =	3
Number of decomposer taxa	SRT =	29
Percentage of decomposer taxa	%SRT =	55
Number of decomposer individuals	NRT =	64
Percentage of decomposer individuals	%NRT =	61
Number of 'dry' decomposer taxa	SRD =	9
Percentage of 'dry'decomposer taxa	%SRD =	17
Number of 'dry' decomposer individuals	NRD =	33
Percentage of 'dry'decomposer individuals	%NRD =	31
Number of 'foul' decomposer taxa	SRF =	3
Percentage of 'foul' decomposer taxa	%SRF =	6
Number of 'foul' decomposer individuals	NRF =	3
Percentage of 'foul' decomposer individuals	%NRF =	3
Index of diversity of decomposer component	alpha RT =	21

continued...

Standard error	SE alpha RT =	4
Number of individuals of grain pests	NG =	3
Percentage of individuals of grain pests	%NG =	3
Number of individuals of grain pests	NG =	3
Number of uncoded taxa	SU =	12
Percentage of uncoded individuals	PNU =	23

Context: 5273 Sample: 438/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Lathridius minutus group *	15	14	1	rd
Carpelimus bilineatus Stephens*	6	6	2	rt
Carpelimus fuliginosus (Gravenhorst)*	6	6	2	u
Tipnus unicolor (Piller & Mitterpacher)*	6	6	2	rd
Scydmaenidae sp.	3	3	5	u
Xylodromus concinnus (Marsham)	3	3	5	rt
Anobium punctatum (Degeer)	3	3	5	l
Cryptophagus sp. A	3	3	5	rd
Atomaria sp. A	3	3	5	rd
Helophorus sp. B	2	2	10	oa w
Acritus nigricornis (Hoffmann)	2	2	10	rt
Carpelimus pusillus group	2	2	10	u
Anotylus complanatus (Erichson)	2	2	10	rt
Anotylus rugosus (Fabricius)	2	2	10	rt
Oxytelus sculptus Gravenhorst	2	2	10	rt
Stenus sp.	2	2	10	u
Neobisnius ?villosulus (Stephens)	2	2	10	u
Neobisnius sp.	2	2	10	u
Aleocharinae sp. B	2	2	10	u
Meligethes sp.	2	2	10	oa p
Oryzaephilus surinamensis (Linnaeus)	2	2	10	g
Cryptophagus sp. B	2	2	10	rd
Trechus obtusus or quadristriatus	1	1	23	oa
Helophorus sp. A	1	1	23	oa w
Cercyon analis (Paykull)	1	1	23	rt
Cercyon atricapillus (Marsham)	1	1	23	rf
Acrotrichis sp.	1	1	23	rt
Phyllodrepa floralis group	1	1	23	rt
Omalium rivulare (Paykull)	1	1	23	rt
Xylodromus sp.	1	1	23	rt
Platystethus arenarius (Fourcroy)	1	1	23	rf
Anotylus nitidulus (Gravenhorst)	1	1	23	rt d
Anotylus sculpturatus group	1	1	23	rt
Philonthus sp.	1	1	23	u
Falagria caesa or sulcatula	1	1	23	rt
Aleocharinae sp. A	1	1	23	u
Aleocharinae sp. C	1	1	23	u
Aleocharinae sp. D	1	1	23	u
Euplectini sp.	1	1	23	u
Aphodius sp.	1	1	23	ob rf
Cyphon sp.	1	1	23	oa d
Dermestes sp.	1	1	23	rt
Ptinus fur (Linnaeus)	1	1	23	rd
Rhizophagus parallelocollis Gyllenhal	1	1	23	rt
Atomaria sp. B	1	1	23	rd
Mycetaea hirta (Marsham)	1	1	23	rd
Enicmus sp.	1	1	23	rt
Dienerella sp.	1	1	23	rd
Halticinae sp.	1	1	23	oa p

continued...

Apion sp.	1	1	23	oa p
Sitona sp.	1	1	23	oa p
Hypera sp.	1	1	23	oa p
Sitophilus granarius (Linnaeus)	1	1	23	g

Context: 5221 Sample: 439/1 - beetle/bug main statistics

Erosion = 0 Fragmentation = 0; Weight = 1.000kg

Number of individuals estimated as	N =	4
Number of taxa	S =	4

Context: 5221 Sample: 439/1 - species list in rank order

Taxon	Number	%	Rank	Ecodes
Carabidae sp.	1	25	1	ob
Anotylus sp.	1	25	1	rt
Dermestidae sp.	1	25	1	u
Leiosoma sp.	1	25	1	oa p

Context: 5269 Sample: 441/1 - beetle/bug main statistics

Erosion = 0 Fragmentation = 0; Weight = 0.200kg

Number of individuals estimated as	N =	23
Number of taxa	S =	21
Index of diversity (alpha)	alpha =	111
Standard error of alpha	SE alpha =	76
Number of 'certain' outdoor taxa	SOA =	4
Percentage of 'certain' outdoor taxa	%SOA =	19
Number of 'certain' outdoor individuals	NOA =	4
Percentage of 'certain' outdoor individuals	%NOA =	17
Number of 'certain' and probable outdoor taxa	SOB =	4
Percentage of 'certain' and probable outdoor taxa	%SOB =	19
Number of 'certain' and probable outdoor individuals	NOB =	4
Percentage 'certain' and probable outdoor individuals	%NOB =	17
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	2
Percentage of damp ground/waterside taxa	%SD =	10
Number of damp ground/waterside individuals	ND =	2
Percentage of damp ground/waterside individuals	%ND =	9
Number of strongly plant-associated taxa	SP =	1
Percentage of strongly plant-associated taxa	%SP =	5
Number of strongly plant-associated individuals	NP =	1
Percentage of strongly plant-associated individuals	%NP =	4
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	1
Percentage of wood-associated individuals	%NL =	4
Number of decomposer taxa	SRT =	11
Percentage of decomposer taxa	%SRT =	52
Number of decomposer individuals	NRT =	12
Percentage of decomposer individuals	%NRT =	52
Number of 'dry' decomposer taxa	SRD =	5

continued...

Percentage of 'dry'decomposer taxa	%SRD =	24
Number of 'dry' decomposer individuals	NRD =	6
Percentage of 'dry'decomposer individuals	%NRD =	26
Number of 'foul' decomposer taxa	SRF =	0
Percentage of 'foul' decomposer taxa	%SRF =	0
Number of 'foul' decomposer individuals	NRF =	0
Percentage of 'foul' decomposer individuals	%NRF =	0

Diversity index for RT not calculated, NRT = SRT or NRT < 20

Number of individuals of grain pests	NG =	2
Percentage of individuals of grain pests	%NG =	9
Number of individuals of grain pests	NG =	2
Number of uncoded taxa	SU =	3
Percentage of uncoded individuals	PNU =	17

Context: 5269 Sample: 441/1 - species list in rank order

Taxon	Number	%	Rank	Ecodes
Aleocharinae sp.	2	9	1	u
Lathridius minutus group	2	9	1	rd
Notiophilus sp.	1	4	3	oa
Clivina ?fossor (Linnaeus)	1	4	3	oa
Cercyon analis (Paykull)	1	4	3	rt
Carpelimus ?elongatulus (Erichson)	1	4	3	oa d
Carpelimus sp.	1	4	3	u
Anotylus complanatus (Erichson)	1	4	3	rt
Anotylus nitidulus (Gravenhorst)	1	4	3	rt d
Anotylus rugosus (Fabricius)	1	4	3	rt
Cordalia obscura (Gravenhorst)	1	4	3	rt
Anobium punctatum (Degeer)	1	4	3	l
Tipnus unicolor (Piller & Mitterpacher)	1	4	3	rd
Ptinus ?fur (Linnaeus)	1	4	3	rd
Nitidulidae sp.	1	4	3	u
Oryzaephilus surinamensis (Linnaeus)	1	4	3	g
Cryptophagus sp.	1	4	3	rd
Mycetaea hirta (Marsham)	1	4	3	rd
Anthicus sp.	1	4	3	rt
Sitophilus granarius (Linnaeus)	1	4	3	g
Ceutorhynchus sp.	1	4	3	oa p

Context: 5309 Sample: 443/1 - beetle/bug main statistics

Erosion = 2 Fragmentation = 2; Weight = 0.400kg

Number of individuals estimated as	N =	15
Number of taxa	S =	15

Index of diversity not calculated, n = s or n < 20

Number of 'certain' outdoor taxa	SOA =	1
Percentage of 'certain' outdoor taxa	%SOA =	7
Number of 'certain' outdoor individuals	NOA =	1
Percentage of 'certain' outdoor individuals	%NOA =	7
Number of 'certain' and probable outdoor taxa	SOB =	2
Percentage of 'certain' and probable outdoor taxa	%SOB =	13
Number of 'certain' and probable outdoor individuals	NOB =	2
Percentage 'certain' and probable outdoor individuals	%NOB =	13

Diversity index for OB not calculated, NOB = SOB or NOB < 20

Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0

continued...

Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	0
Percentage of strongly plant-associated taxa	%SP =	0
Number of strongly plant-associated individuals	NP =	0
Percentage of strongly plant-associated individuals	%NP =	0
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	1
Percentage of wood-associated individuals	%NL =	7
Number of decomposer taxa	SRT =	8
Percentage of decomposer taxa	%SRT =	53
Number of decomposer individuals	NRT =	8
Percentage of decomposer individuals	%NRT =	53
Number of 'dry' decomposer taxa	SRD =	6
Percentage of 'dry'decomposer taxa	%SRD =	40
Number of 'dry' decomposer individuals	NRD =	6
Percentage of 'dry'decomposer individuals	%NRD =	40
Number of 'foul' decomposer taxa	SRF =	0
Percentage of 'foul' decomposer taxa	%SRF =	0
Number of 'foul' decomposer individuals	NRF =	0
Percentage of 'foul' decomposer individuals	%NRF =	0
Diversity index for RT not calculated, NRT = SRT or NRT < 20		
Number of individuals of grain pests	NG =	1
Percentage of individuals of grain pests	%NG =	7
Number of individuals of grain pests	NG =	1
Number of uncoded taxa	SU =	3
Percentage of uncoded individuals	PNU =	20

Context: 5309 Sample: 443/1 - species list in rank order

Taxon	Number	%	Rank	Ecodes
Carabidae sp.	1	7	1	ob
Cercyon analis (Paykull)	1	7	1	rt
Philonthus sp.	1	7	1	u
Staphylininae sp.	1	7	1	u
Aleocharinae sp.	1	7	1	u
Dermestes sp.	1	7	1	rt
Anobium punctatum (Degeer)	1	7	1	l
Tipnus unicolor (Piller & Mitterpacher)	1	7	1	rd
Ptinus sp.	1	7	1	rd
Oryzaephilus surinamensis (Linnaeus)	1	7	1	g
Cryptophagus ?scutellatus Newman	1	7	1	rd
Cryptophagus sp.	1	7	1	rd
Atomaria sp.	1	7	1	rd
Lathridius minutus group	1	7	1	rd
Curculionidae sp.	1	7	1	oa

Context: 5314 Sample: 444/T

NO RECORDS OF BEETLES OR BUGS

Context: 5309 Sample: 445/T - beetle/bug main statistics

Erosion = 2 Fragmentation = 2; Weight = 1.000kg

Number of individuals estimated as	N =	69
Number of taxa	S =	34

continued...

Index of diversity (alpha)	alpha =	27
Standard error of alpha	SE alpha =	5
Number of 'certain' outdoor taxa	SOA =	5
Percentage of 'certain' outdoor taxa	%SOA =	15
Number of 'certain' outdoor individuals	NOA =	5
Percentage of 'certain' outdoor individuals	%NOA =	7
Number of 'certain' and probable outdoor taxa	SOB =	5
Percentage of 'certain' and probable outdoor taxa	%SOB =	15
Number of 'certain' and probable outdoor individuals	NOB =	5
Percentage 'certain' and probable outdoor individuals	%NOB =	7
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	5
Percentage of strongly plant-associated taxa	%SP =	15
Number of strongly plant-associated individuals	NP =	5
Percentage of strongly plant-associated individuals	%NP =	7
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	2
Number of wood-associated individuals	NL =	4
Percentage of wood-associated individuals	%NL =	6
Number of decomposer taxa	SRT =	17
Percentage of decomposer taxa	%SRT =	50
Number of decomposer individuals	NRT =	45
Percentage of decomposer individuals	%NRT =	65
Number of 'dry' decomposer taxa	SRD =	7
Percentage of 'dry'decomposer taxa	%SRD =	21
Number of 'dry' decomposer individuals	NRD =	33
Percentage of 'dry'decomposer individuals	%NRD =	48
Number of 'foul' decomposer taxa	SRF =	2
Percentage of 'foul' decomposer taxa	%SRF =	6
Number of 'foul' decomposer individuals	NRF =	2
Percentage of 'foul' decomposer individuals	%NRF =	3
Index of diversity of decomposer component	alpha RT =	10
Standard error	SE alpha RT =	2
Number of individuals of grain pests	NG =	2
Percentage of individuals of grain pests	%NG =	3
Number of individuals of grain pests	NG =	2
Number of uncoded taxa	SU =	9
Percentage of uncoded individuals	PNU =	19

Context: 5309 Sample: 445/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Lathridius minutus group *	15	22	1	rd
Tipnus unicolor (Piller & Mitterpacher)*	6	9	2	rd
Cryptophagus sp. A *	6	9	2	rd
Philonthus sp. A	3	4	4	u
Aleocharinae sp. A	3	4	4	u
Anobium punctatum (Degeer)	3	4	4	l
Mycetaea hirta (Marsham)	3	4	4	rd

continued...

Acritus nigricornis (Hoffmann)	2	3	8	rt
Xylodromus concinnus (Marsham)	2	3	8	rt
Sitophilus granarius (Linnaeus)	2	3	8	g
Trechus micros (Herbst)	1	1	11	u
Cercyon atricapillus (Marsham)	1	1	11	rf
Cercyon terminatus (Marsham)	1	1	11	rf
Histerinae sp.	1	1	11	u
Catops sp.	1	1	11	u
Omalium sp.	1	1	11	rt
Carpelimus ?bilineatus Stephens	1	1	11	rt
Leptacinus sp.	1	1	11	rt
Gyrohypnus angustatus Stephens	1	1	11	rt
Philonthus sp. B	1	1	11	u
Staphylininae sp.	1	1	11	u
Aleocharinae sp. B	1	1	11	u
Aleocharinae sp. C	1	1	11	u
Trox ?scaber (Linnaeus)	1	1	11	rt
Meligethes sp.	1	1	11	oa p
Cryptophagus sp. B	1	1	11	rd
Atomaria sp.	1	1	11	rd
Coccinellidae sp.	1	1	11	oa p
Enicmus sp.	1	1	11	rt
Dienerella sp.	1	1	11	rd
Sitona sp.	1	1	11	oa p
Hypera sp.	1	1	11	oa p
Leiosoma sp.	1	1	11	oa p
Leperisinus varius (Fabricius)	1	1	11	l

Context: 5340F Sample: 452/T - beetle/bug main statistics

Erosion = 4 Fragmentation = 3; Weight = 0.550kg

Number of individuals estimated as	N =	6
Number of taxa	S =	5

Context: 5340F Sample: 452/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Tipnus unicolor (Piller & Mitterpacher)	2	33	1	rd
Xylodromus concinnus (Marsham)	1	17	2	rt
Anotylus rugosus (Fabricius)	1	17	2	rt
Anobium punctatum (Degeer)	1	17	2	l
Sitophilus granarius (Linnaeus)	1	17	2	g

Context: 5347A Sample: 456/T

NO RECORDS OF BEETLES OR BUGS

Context: 5347D Sample: 461/T - beetle/bug main statistics

Erosion = 5 Fragmentation = 5; Weight = 0.800kg

Number of individuals estimated as	N =	1
Number of taxa	S =	1

continued...

Context: 5347D Sample: 461/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Coleoptera sp.	1	100	1	u

Context: 5347E Sample: 464/1 - beetle/bug main statistics

Erosion = 3 Fragmentation = 3; Weight = 0.350kg

Number of individuals estimated as	N =	21
Number of taxa	S =	16
Index of diversity (alpha)	alpha =	32
Standard error of alpha	SE alpha =	16
Number of 'certain' outdoor taxa	SOA =	1
Percentage of 'certain' outdoor taxa	%SOA =	6
Number of 'certain' outdoor individuals	NOA =	1
Percentage of 'certain' outdoor individuals	%NOA =	5
Number of 'certain' and probable outdoor taxa	SOB =	2
Percentage of 'certain' and probable outdoor taxa	%SOB =	13
Number of 'certain' and probable outdoor individuals	NOB =	2
Percentage 'certain' and probable outdoor individuals	%NOB =	10
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	0
Percentage of strongly plant-associated taxa	%SP =	0
Number of strongly plant-associated individuals	NP =	0
Percentage of strongly plant-associated individuals	%NP =	0
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	1
Percentage of wood-associated individuals	%NL =	5
Number of decomposer taxa	SRT =	10
Percentage of decomposer taxa	%SRT =	63
Number of decomposer individuals	NRT =	11
Percentage of decomposer individuals	%NRT =	52
Number of 'dry' decomposer taxa	SRD =	4
Percentage of 'dry'decomposer taxa	%SRD =	25
Number of 'dry' decomposer individuals	NRD =	4
Percentage of 'dry'decomposer individuals	%NRD =	19
Number of 'foul' decomposer taxa	SRF =	2
Percentage of 'foul' decomposer taxa	%SRF =	13
Number of 'foul' decomposer individuals	NRF =	2
Percentage of 'foul' decomposer individuals	%NRF =	10
Diversity index for RT not calculated, NRT = SRT or NRT < 20		
Number of individuals of grain pests	NG =	1
Percentage of individuals of grain pests	%NG =	5
Number of individuals of grain pests	NG =	1
Number of uncoded taxa	SU =	3
Percentage of uncoded individuals	PNU =	33

continued...

Context: 5347E Sample: 464/1 - species list in rank order

Taxon	Number	%	Rank	Ecodes
Carpelimus pusillus group	3	14	1	u
Neobisnius villosulus (Stephens)	3	14	1	u
Anotylus rugosus (Fabricius)	2	10	3	rt
Cercyon ?terminatus (Marsham)	1	5	4	rf
Scydmaenidae sp.	1	5	4	u
Carpelimus bilineatus Stephens	1	5	4	rt
Oxytelus sculptus Gravenhorst	1	5	4	rt
Aphodius sp.	1	5	4	ob rf
Anobium punctatum (Degeer)	1	5	4	l
Ptinidae sp.	1	5	4	rd
Cryptophagus sp.	1	5	4	rd
Cryptophagus sp. L	1	5	4	rd
Lathridius minutus group	1	5	4	rd
Corticaria ?punctulata Marsham	1	5	4	rt
Sitophilus granarius (Linnaeus)	1	5	4	g
Curculionidae sp.	1	5	4	oa

Context: 5347F Sample: 466/T - beetle/bug main statistics

Erosion = 4 Fragmentation = 3; Weight = 0.410kg

Number of individuals estimated as	N =	3
Number of taxa	S =	3

Context: 5347F Sample: 466/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Omalium rivulare (Paykull)	1	33	1	rt
Aleocharinae sp.	1	33	1	u
Tipnus unicolor (Piller & Mitterpacher)	1	33	1	rd

Context: 5338H Sample: 467/T - beetle/bug main statistics

Erosion = 2 Fragmentation = 2; Weight = 0.650kg

Number of individuals estimated as	N =	196
Number of taxa	S =	64
Index of diversity (alpha)	alpha =	33
Standard error of alpha	SE alpha =	4
Number of 'certain' outdoor taxa	SOA =	9
Percentage of 'certain' outdoor taxa	%SOA =	14
Number of 'certain' outdoor individuals	NOA =	9
Percentage of 'certain' outdoor individuals	%NOA =	5
Number of 'certain' and probable outdoor taxa	SOB =	13
Percentage of 'certain' and probable outdoor taxa	%SOB =	20
Number of 'certain' and probable outdoor individuals	NOB =	13
Percentage 'certain' and probable outdoor individuals	%NOB =	7
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	2
Percentage of aquatic taxa	%SW =	3
Number of aquatic individuals	NW =	2
Percentage of aquatic individuals	%NW =	1
Number of damp ground/waterside taxa	SD =	2
Percentage of damp ground/waterside taxa	%SD =	3
Number of damp ground/waterside individuals	ND =	2
Percentage of damp ground/waterside individuals	%ND =	1

continued...

Number of strongly plant-associated taxa	SP =	2
Percentage of strongly plant-associated taxa	%SP =	3
Number of strongly plant-associated individuals	NP =	2
Percentage of strongly plant-associated individuals	%NP =	1
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	2
Number of wood-associated individuals	NL =	17
Percentage of wood-associated individuals	%NL =	9
Number of decomposer taxa	SRT =	35
Percentage of decomposer taxa	%SRT =	55
Number of decomposer individuals	NRT =	128
Percentage of decomposer individuals	%NRT =	65
Number of 'dry' decomposer taxa	SRD =	10
Percentage of 'dry'decomposer taxa	%SRD =	16
Number of 'dry' decomposer individuals	NRD =	55
Percentage of 'dry'decomposer individuals	%NRD =	28
Number of 'foul' decomposer taxa	SRF =	1
Percentage of 'foul' decomposer taxa	%SRF =	2
Number of 'foul' decomposer individuals	NRF =	1
Percentage of 'foul' decomposer individuals	%NRF =	1
Index of diversity of decomposer component	alpha RT =	16
Standard error	SE alpha RT =	2
Number of individuals of grain pests	NG =	7
Percentage of individuals of grain pests	%NG =	4
Number of individuals of grain pests	NG =	7
Number of uncoded taxa	SU =	13
Percentage of uncoded individuals	PNU =	16

Context: 5338H Sample: 467/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Ptenidium sp. *	15	8	1	rt
Philonthus cephalotes (Gravenhorst)*	15	8	1	rt
Anobium punctatum (Degeer)*	15	8	1	l
Tipnus unicolor (Piller & Mitterpacher)*	15	8	1	rd
Lathridius minutus group *	15	8	1	rd
Paralister ?carbonarius (Hoffman)*	6	3	6	rt
Omalium ?rivulare (Paykull)*	6	3	6	rt
Coprophilus striatulus (Fabricius)*	6	3	6	rt
Aleocharinae sp. B *	6	3	6	u
Aleocharinae sp. D *	6	3	6	u
Oryzaephilus surinamensis (Linnaeus)*	6	3	6	g
Mycetaea hirta (Marsham)*	6	3	6	rd
Xylodromus concinnus (Marsham)	3	2	13	rt
Anotylus rugosus (Fabricius)	3	2	13	rt
Philonthus sp.	3	2	13	u
Quedius sp.	3	2	13	u
Ptinus fur (Linnaeus)	3	2	13	rd
Cryptophagus scutellatus Newman	3	2	13	rd
Cryptophagus sp. A	3	2	13	rd
Atomaria nigripennis (Kugelann)	3	2	13	rd
Atomaria sp.	3	2	13	rd
Cercyon analis (Paykull)	2	1	22	rt
Scydmaenidae sp.	2	1	22	u
Tachinus subterraneus (Linnaeus)	2	1	22	u
Aleocharinae sp. A	2	1	22	u
Euplectini sp.	2	1	22	u

continued...

Attagenus pellio (Linnaeus)	2	1	22	rd
Lyctus linearis (Goeze)	2	1	22	l
?Epuraea sp.	2	1	22	u
Cryptophagus sp. B	2	1	22	rd
Lygaeidae sp.	1	1	31	oa p
Patrobus atrorufus (Strom)	1	1	31	oa
Trechus obtusus or quadristriatus	1	1	31	oa
Bembidion sp.	1	1	31	oa
Pterostichus ?melanarius (Illiger)	1	1	31	ob
Carabidae sp.	1	1	31	ob
Helophorus sp.	1	1	31	oa w
Megasternum obscurum (Marsham)	1	1	31	rt
Ochthebius sp.	1	1	31	oa w
Catops sp.	1	1	31	u
Anthobium sp.	1	1	31	oa
Carpelimus bilineatus Stephens	1	1	31	rt
Carpelimus elongatulus (Erichson)	1	1	31	oa d
Anotylus complanatus (Erichson)	1	1	31	rt
Anotylus nitidulus (Gravenhorst)	1	1	31	rt d
Anotylus sculpturatus group	1	1	31	rt
Anotylus tetracarinatus (Block)	1	1	31	rt
Oxytelus sculptus Gravenhorst	1	1	31	rt
Rugilus ?rufipes Germar	1	1	31	rt
Gyrohypnus sp.	1	1	31	rt
Neobisnius ?villosulus (Stephens)	1	1	31	u
Philonthus ?politus (Linnaeus)	1	1	31	u
?Cordalia obscura (Gravenhorst)	1	1	31	rt
Aleocharinae sp. C	1	1	31	u
Aphodius sp.	1	1	31	ob rf
Elateridae sp.	1	1	31	ob
Anthrenus sp.	1	1	31	rt
Rhizophagus parallelocollis Gyllenhal	1	1	31	rt
Corticaria sp. A	1	1	31	rt
Corticaria sp. B	1	1	31	rt
Corticarina or Cortinicara sp.	1	1	31	rt
Tenebrio obscurus Fabricius	1	1	31	rt
Halticinae sp.	1	1	31	oa p
Sitophilus granarius (Linnaeus)	1	1	31	g

Context: 5337 Sample: 475/T - beetle/bug main statistics

Erosion = 2 Fragmentation = 2; Weight = 1.000kg

Number of individuals estimated as	N = 3
Number of taxa	S = 2

Context: 5337 Sample: 475/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Lathridius minutus group	2	67	1	rd
Corticaria sp.	1	33	2	rt

Context: 5362 Sample: 481/T - beetle/bug main statistics

Erosion = 4 Fragmentation = 4; Weight = 0.970kg

Number of individuals estimated as	N = 1
Number of taxa	S = 1

continued...

Context: 5362 Sample: 481/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
?Stenus sp.	1	100	1	u

Context: 5367B Sample: 483/T - beetle/bug main statistics

Erosion = 3 Fragmentation = 3; Weight = 0.560kg

Number of individuals estimated as	N =	7
Number of taxa	S =	7

Context: 5367B Sample: 483/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Anotylus rugosus (Fabricius)	1	14	1	rt
Neobisnius villosulus (Stephens)	1	14	1	u
Aphodius sp.	1	14	1	ob rf
Anobium punctatum (Degeer)	1	14	1	l
Ptinidae sp.	1	14	1	rd
Rhizophagus parallelocollis Gyllenhal	1	14	1	rt
Atomaria sp.	1	14	1	rd

Context: 5370E Sample: 487/T - beetle/bug main statistics

Erosion = 4 Fragmentation = 4; Weight = 0.580kg

Number of individuals estimated as	N =	24
Number of taxa	S =	19
Index of diversity (alpha)	alpha =	43
Standard error of alpha	SE alpha =	22
Number of 'certain' outdoor taxa	SOA =	1
Percentage of 'certain' outdoor taxa	%SOA =	5
Number of 'certain' outdoor individuals	NOA =	1
Percentage of 'certain' outdoor individuals	%NOA =	4
Number of 'certain' and probable outdoor taxa	SOB =	1
Percentage of 'certain' and probable outdoor taxa	%SOB =	5
Number of 'certain' and probable outdoor individuals	NOB =	1
Percentage 'certain' and probable outdoor individuals	%NOB =	4
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	1
Percentage of strongly plant-associated taxa	%SP =	5
Number of strongly plant-associated individuals	NP =	1
Percentage of strongly plant-associated individuals	%NP =	4
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	2
Percentage of wood-associated individuals	%NL =	8
Number of decomposer taxa	SRT =	10

continued...

Percentage of decomposer taxa	%SRT =	53
Number of decomposer individuals	NRT =	13
Percentage of decomposer individuals	%NRT =	54
Number of 'dry' decomposer taxa	SRD =	5
Percentage of 'dry'decomposer taxa	%SRD =	26
Number of 'dry' decomposer individuals	NRD =	7
Percentage of 'dry'decomposer individuals	%NRD =	29
Number of 'foul' decomposer taxa	SRF =	1
Percentage of 'foul' decomposer taxa	%SRF =	5
Number of 'foul' decomposer individuals	NRF =	1
Percentage of 'foul' decomposer individuals	%NRF =	4
Diversity index for RT not calculated, NRT = SRT or NRT < 20		
Number of individuals of grain pests	NG =	2
Percentage of individuals of grain pests	%NG =	8
Number of individuals of grain pests	NG =	2
Number of uncoded taxa	SU =	6
Percentage of uncoded individuals	PNU =	25

Context: 5370E Sample: 487/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Xylodromus concinnus (Marsham)	2	8	1	rt
Anobium punctatum (Degeer)	2	8	1	l
Oryzaephilus surinamensis (Linnaeus)	2	8	1	g
Cryptophagus sp.	2	8	1	rd
Lathridius minutus group	2	8	1	rd
Cercyon atricapillus (Marsham)	1	4	6	rf
Acrotrichis sp.	1	4	6	rt
Oxytelinae sp.	1	4	6	u
Philonthus sp.	1	4	6	u
Staphylininae sp. A	1	4	6	u
Staphylininae sp. B	1	4	6	u
Cilea silphoides (Linnaeus)	1	4	6	rt
Falagria caesa or sulcatula	1	4	6	rt
Aleocharinae sp. A	1	4	6	u
Aleocharinae sp. B	1	4	6	u
Tipnus unicolor (Piller & Mitterpacher)	1	4	6	rd
Atomaria sp. A	1	4	6	rd
Mycetaea hirta (Marsham)	1	4	6	rd
Hypera sp.	1	4	6	oa p

Context: 5370F Sample: 489/T - beetle/bug main statistics

Erosion = 3 Fragmentation = 3; Weight = 1.000kg

Number of individuals estimated as	N =	5
Number of taxa	S =	5

Context: 5370F Sample: 489/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Aleocharinae sp.	1	20	1	u
Anobium punctatum (Degeer)	1	20	1	l
Ptinus fur (Linnaeus)	1	20	1	rd
Oryzaephilus surinamensis (Linnaeus)	1	20	1	g
Lathridius minutus group	1	20	1	rd

continued...

Context: 5373 Sample: 491/T

NO RECORDS OF BEETLES OR BUGS

Context: 5382B Sample: 497/1 - beetle/bug main statistics

Erosion = 0 Fragmentation = 0; Weight = 0.500kg

Number of individuals estimated as	N =	27
Number of taxa	S =	22
Index of diversity (alpha)	alpha =	54
Standard error of alpha	SE alpha =	26
Number of 'certain' outdoor taxa	SOA =	1
Percentage of 'certain' outdoor taxa	%SOA =	5
Number of 'certain' outdoor individuals	NOA =	1
Percentage of 'certain' outdoor individuals	%NOA =	4
Number of 'certain' and probable outdoor taxa	SOB =	1
Percentage of 'certain' and probable outdoor taxa	%SOB =	5
Number of 'certain' and probable outdoor individuals	NOB =	1
Percentage 'certain' and probable outdoor individuals	%NOB =	4
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	1
Percentage of damp ground/waterside taxa	%SD =	5
Number of damp ground/waterside individuals	ND =	1
Percentage of damp ground/waterside individuals	%ND =	4
Number of strongly plant-associated taxa	SP =	0
Percentage of strongly plant-associated taxa	%SP =	0
Number of strongly plant-associated individuals	NP =	0
Percentage of strongly plant-associated individuals	%NP =	0
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	3
Percentage of wood-associated individuals	%NL =	11
Number of decomposer taxa	SRT =	12
Percentage of decomposer taxa	%SRT =	55
Number of decomposer individuals	NRT =	15
Percentage of decomposer individuals	%NRT =	56
Number of 'dry' decomposer taxa	SRD =	4
Percentage of 'dry'decomposer taxa	%SRD =	18
Number of 'dry' decomposer individuals	NRD =	5
Percentage of 'dry'decomposer individuals	%NRD =	19
Number of 'foul' decomposer taxa	SRF =	0
Percentage of 'foul' decomposer taxa	%SRF =	0
Number of 'foul' decomposer individuals	NRF =	0
Percentage of 'foul' decomposer individuals	%NRF =	0
Diversity index for RT not calculated, NRT = SRT or NRT < 20		
Number of individuals of grain pests	NG =	1
Percentage of individuals of grain pests	%NG =	4
Number of individuals of grain pests	NG =	1
Number of uncoded taxa	SU =	7
Percentage of uncoded individuals	PNU =	26

continued...

Context: 5382B Sample: 497/1 - species list in rank order

Taxon	Number	%	Rank	Ecodes
Anobium punctatum (Degeer)	3	11	1	l
Cercyon ?analis (Paykull)	2	7	2	rt
Anotylus rugosus (Fabricius)	2	7	2	rt
Ptinus ?fur (Linnaeus)	2	7	2	rd
Histerinae sp.	1	4	5	u
?Catops sp.	1	4	5	u
Lesteva ?longoelytrata (Goeze)	1	4	5	oa d
Xylodromus concinnus (Marsham)	1	4	5	rt
Coprophilus striatulus (Fabricius)	1	4	5	rt
Carpelimus ?bilineatus Stephens	1	4	5	rt
Oxytelus sculptus Gravenhorst	1	4	5	rt
Staphylininae sp.	1	4	5	u
Tachinus ?signatus Gravenhorst	1	4	5	u
Aleocharinae sp. A	1	4	5	u
Aleocharinae sp. B	1	4	5	u
Anthrenus sp.	1	4	5	rt
Oryzaephilus surinamensis (Linnaeus)	1	4	5	g
Cryptophagus sp.	1	4	5	rd
Atomaria sp.	1	4	5	rd
Lathridius minutus group	1	4	5	rd
?Enicmus sp.	1	4	5	rt
Coleoptera sp.	1	4	5	u

Context: 5382C Sample: 500/1 - beetle/bug main statistics

Erosion = 0 Fragmentation = 0; Weight = 1.000kg

Number of individuals estimated as	N =	100
Number of taxa	S =	54
Index of diversity (alpha)	alpha =	48
Standard error of alpha	SE alpha =	8
Number of 'certain' outdoor taxa	SOA =	6
Percentage of 'certain' outdoor taxa	%SOA =	11
Number of 'certain' outdoor individuals	NOA =	6
Percentage of 'certain' outdoor individuals	%NOA =	6
Number of 'certain' and probable outdoor taxa	SOB =	9
Percentage of 'certain' and probable outdoor taxa	%SOB =	17
Number of 'certain' and probable outdoor individuals	NOB =	10
Percentage 'certain' and probable outdoor individuals	%NOB =	10
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	1
Percentage of aquatic taxa	%SW =	2
Number of aquatic individuals	NW =	1
Percentage of aquatic individuals	%NW =	1
Number of damp ground/waterside taxa	SD =	1
Percentage of damp ground/waterside taxa	%SD =	2
Number of damp ground/waterside individuals	ND =	2
Percentage of damp ground/waterside individuals	%ND =	2
Number of strongly plant-associated taxa	SP =	5
Percentage of strongly plant-associated taxa	%SP =	9
Number of strongly plant-associated individuals	NP =	5
Percentage of strongly plant-associated individuals	%NP =	5
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	13
Percentage of wood-associated individuals	%NL =	13
Number of decomposer taxa	SRT =	29

continued...

Percentage of decomposer taxa	%SRT =	54
Number of decomposer individuals	NRT =	53
Percentage of decomposer individuals	%NRT =	53
Number of 'dry' decomposer taxa	SRD =	9
Percentage of 'dry'decomposer taxa	%SRD =	17
Number of 'dry' decomposer individuals	NRD =	24
Percentage of 'dry'decomposer individuals	%NRD =	24
Number of 'foul' decomposer taxa	SRF =	4
Percentage of 'foul' decomposer taxa	%SRF =	7
Number of 'foul' decomposer individuals	NRF =	5
Percentage of 'foul' decomposer individuals	%NRF =	5
Index of diversity of decomposer component	alpha RT =	27
Standard error	SE alpha RT =	6
Number of individuals of grain pests	NG =	8
Percentage of individuals of grain pests	%NG =	8
Number of individuals of grain pests	NG =	8
Number of uncoded taxa	SU =	15
Percentage of uncoded individuals	PNU =	19

Context: 5382C Sample: 500/1 - species list in rank order

Taxon	Number	%	Rank	Ecodes
Anobium punctatum (Degeer)	13	13	1	l
Lathridius minutus group	10	10	2	rd
Sitophilus granarius (Linnaeus)	7	7	3	g
Cercyon analis (Paykull)	6	6	4	rt
Anotylus rugosus (Fabricius)	3	3	5	rt
Aleocharinae sp. A	3	3	5	u
Cryptophagus ?scutellatus Newman	3	3	5	rd
Atomaria sp. A	3	3	5	rd
Cercyon sp.	2	2	9	u
Carpelimus sp. A	2	2	9	u
Anotylus nitidulus (Gravenhorst)	2	2	9	rt d
Aphodius sp. A	2	2	9	ob rf
Ptinus fur (Linnaeus)	2	2	9	rd
Mycetaea hirta (Marsham)	2	2	9	rd
Cymus sp.	1	1	15	oa p
Lyctocoris campestris (Fabricius)	1	1	15	rd
?Pterostichus sp.	1	1	15	ob
Agonum sp.	1	1	15	oa
Cercyon ?atricapillus (Marsham)	1	1	15	rf
Cercyon ?haemorrhoidalis (Fabricius)	1	1	15	rf
Ptenidium sp.	1	1	15	rt
Megarthrus sp.	1	1	15	rt
Phyllodrepa floralis (Paykull)	1	1	15	rt
Omalium sp. A	1	1	15	rt
Omalium sp. B	1	1	15	rt
Omaliinae sp.	1	1	15	u
Coprophilus striatulus (Fabricius)	1	1	15	rt
Carpelimus sp. B	1	1	15	u
Anotylus sculpturatus group	1	1	15	rt
Anotylus ?tetracarinatus (Block)	1	1	15	rt
Oxytelus sculptus Gravenhorst	1	1	15	rt
?Gyrohypnus sp.	1	1	15	rt
Neobisnius sp.	1	1	15	u
?Philonthus sp.	1	1	15	u
Creophilus maxillosus (Linnaeus)	1	1	15	rt
Staphylininae sp. A	1	1	15	u
Staphylininae sp. B	1	1	15	u
Tachinus ?signatus Gravenhorst	1	1	15	u
Tachinus sp.	1	1	15	u
Cordalia obscura (Gravenhorst)	1	1	15	rt

continued...

Aleocharinae sp. B	1	1	15	u
Aleocharinae sp. C	1	1	15	u
Aleocharinae sp. D	1	1	15	u
Aleocharinae sp. E	1	1	15	u
Aphodius sp. B	1	1	15	ob rf
Tipnus unicolor (Piller & Mitterpacher)	1	1	15	rd
Oryzaephilus surinamensis (Linnaeus)	1	1	15	g
Atomaria sp. B	1	1	15	rd
Atomaria sp. C	1	1	15	rd
Corticariinae sp.	1	1	15	rt
Donaciinae sp.	1	1	15	oa w p
Apion sp.	1	1	15	oa p
Ceutorhynchus sp.	1	1	15	oa p
?Gymnetron sp.	1	1	15	oa p

Context: 5387A Sample: 507/T - beetle/bug main statistics

Erosion = 3 Fragmentation = 2; Weight = 1.000kg

Number of individuals estimated as	N = 8
Number of taxa	S = 8

Context: 5387A Sample: 507/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Cercyon sp.	1	13	1	u
Anotylus nitidulus (Gravenhorst)	1	13	1	rt d
Aleocharinae sp.	1	13	1	u
Anobium punctatum (Degeer)	1	13	1	l
Tipnus unicolor (Piller & Mitterpacher)	1	13	1	rd
Cryptophagus sp.	1	13	1	rd
Atomaria sp.	1	13	1	rd
Sitophilus granarius (Linnaeus)	1	13	1	g

Context: 5387A Sample: 507/1 - beetle/bug main statistics

Erosion = 0 Fragmentation = 0; Weight = 1.000kg

Number of individuals estimated as	N = 4
Number of taxa	S = 4

Context: 5387A Sample: 507/1 - species list in rank order

Taxon	Number	%	Rank	Ecodes
Omalium ?rivulare (Paykull)	1	25	1	rt
?Carpelimus bilineatus Stephens	1	25	1	rt
Anobium punctatum (Degeer)	1	25	1	l
Coleoptera sp.	1	25	1	u

Context: 5386 Sample: 509/T

NO RECORDS OF BEETLES OR BUGS

continued...

Context: 5391B Sample: 513/1 - beetle/bug main statistics

Erosion = 0 Fragmentation = 0; Weight = 0.500kg

Number of individuals estimated as	N =	67
Number of taxa	S =	41
Index of diversity (alpha)	alpha =	45
Standard error of alpha	SE alpha =	10
Number of 'certain' outdoor taxa	SOA =	3
Percentage of 'certain' outdoor taxa	%SOA =	7
Number of 'certain' outdoor individuals	NOA =	3
Percentage of 'certain' outdoor individuals	%NOA =	4
Number of 'certain' and probable outdoor taxa	SOB =	6
Percentage of 'certain' and probable outdoor taxa	%SOB =	15
Number of 'certain' and probable outdoor individuals	NOB =	6
Percentage 'certain' and probable outdoor individuals	%NOB =	9
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	1
Percentage of aquatic taxa	%SW =	2
Number of aquatic individuals	NW =	1
Percentage of aquatic individuals	%NW =	1
Number of damp ground/waterside taxa	SD =	2
Percentage of damp ground/waterside taxa	%SD =	5
Number of damp ground/waterside individuals	ND =	4
Percentage of damp ground/waterside individuals	%ND =	6
Number of strongly plant-associated taxa	SP =	1
Percentage of strongly plant-associated taxa	%SP =	2
Number of strongly plant-associated individuals	NP =	1
Percentage of strongly plant-associated individuals	%NP =	1
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	1
Percentage of wood-associated individuals	%NL =	1
Number of decomposer taxa	SRT =	23
Percentage of decomposer taxa	%SRT =	56
Number of decomposer individuals	NRT =	39
Percentage of decomposer individuals	%NRT =	58
Number of 'dry' decomposer taxa	SRD =	7
Percentage of 'dry'decomposer taxa	%SRD =	17
Number of 'dry' decomposer individuals	NRD =	16
Percentage of 'dry'decomposer individuals	%NRD =	24
Number of 'foul' decomposer taxa	SRF =	2
Percentage of 'foul' decomposer taxa	%SRF =	5
Number of 'foul' decomposer individuals	NRF =	2
Percentage of 'foul' decomposer individuals	%NRF =	3
Index of diversity of decomposer component	alpha RT =	24
Standard error	SE alpha RT =	7
Number of individuals of grain pests	NG =	4
Percentage of individuals of grain pests	%NG =	6
Number of individuals of grain pests	NG =	4
Number of uncoded taxa	SU =	11
Percentage of uncoded individuals	PNU =	28

Context: 5391B Sample: 513/1 - species list in rank order

Taxon	Number	%	Rank	Ecodes
Lathridius minutus group	6	9	1	rd
Aleocharinae sp. A	5	7	2	u
Trechus micros (Herbst)	4	6	3	u
Carpelimus ?bilineatus Stephens	3	4	4	rt

continued...

Anotylus nitidulus (Gravenhorst)	3	4	4	rt d
Tipnus unicolor (Piller & Mitterpacher)	3	4	4	rd
Sitophilus granarius (Linnaeus)	3	4	4	g
Coprophilus striatulus (Fabricius)	2	3	8	rt
Gyrohypnus angustatus Stephens	2	3	8	rt
Cordalia obscura (Gravenhorst)	2	3	8	rt
Aleocharinae sp. B	2	3	8	u
Cryptophagus sp.	2	3	8	rd
Mycetaea hirta (Marsham)	2	3	8	rd
Pterostichus ?melanarius (Illiger)	1	1	14	ob
Agonum albipes (Fabricius)	1	1	14	oa d
Cercyon sp.	1	1	14	u
Megasternum obscurum (Marsham)	1	1	14	rt
Histerinae sp.	1	1	14	u
Ochthebius sp.	1	1	14	oa w
Ptenidium sp.	1	1	14	rt
Catops sp.	1	1	14	u
?Scydmaenidae sp.	1	1	14	u
Omalium rivulare (Paykull)	1	1	14	rt
Omalium sp.	1	1	14	rt
Anotylus rugosus (Fabricius)	1	1	14	rt
Philonthus sp.	1	1	14	u
Staphylininae sp.	1	1	14	u
Aleocharinae sp. C	1	1	14	u
?Trichonyx sulcicollis (Reichenbach)	1	1	14	u
Trox scaber (Linnaeus)	1	1	14	rt
Aphodius sp. A	1	1	14	ob rf
Aphodius sp. B	1	1	14	ob rf
Anobium punctatum (Degeer)	1	1	14	l
Ptinus ?fur (Linnaeus)	1	1	14	rd
Monotoma sp.	1	1	14	rt
Oryzaephilus surinamensis (Linnaeus)	1	1	14	g
Atomaria sp.	1	1	14	rd
Dienerella sp.	1	1	14	rd
Corticariinae sp.	1	1	14	rt
Aglenus brunneus (Gyllenhal)	1	1	14	rt
?Chaetocnema concinna (Marsham)	1	1	14	oa p

Context: 6143 Sample: 514/T - beetle/bug main statistics

Erosion = 0 Fragmentation = 0; Weight = 1.000kg

Number of individuals estimated as	N =	4
Number of taxa	S =	4

Context: 6143 Sample: 514/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Anobium punctatum (Degeer)	1	25	1	l
Oryzaephilus surinamensis (Linnaeus)	1	25	1	g
Cryptophagus sp.	1	25	1	rd
Sitophilus granarius (Linnaeus)	1	25	1	g

Context: 5337 Sample: 516/T - beetle/bug main statistics

Erosion = 3 Fragmentation = 3; Weight = 1.000kg

Number of individuals estimated as	N =	3
Number of taxa	S =	3

continued...

Context: 5337 Sample: 516/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
?Cercyon sp.	1	33	1	u
Coprophilus striatulus (Fabricius)	1	33	1	rt
Ptinidae sp.	1	33	1	rd

Context: 5336 Sample: 517/T - beetle/bug main statistics

Erosion = 2 Fragmentation = 3; Weight = 1.000kg

Number of individuals estimated as	N =	2
Number of taxa	S =	2

Context: 5336 Sample: 517/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Carpelimus sp.	1	50	1	u
Ptinidae sp.	1	50	1	rd

Context: 6178 Sample: 518/T

NO RECORDS OF BEETLES OR BUGS

Context: 6181 Sample: 519/T - beetle/bug main statistics

Erosion = 4 Fragmentation = 3; Weight = 1.000kg

Number of individuals estimated as	N =	4
Number of taxa	S =	3

Context: 6181 Sample: 519/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Dienerella sp.	2	50	1	rd
Anobium punctatum (Degeer)	1	25	2	l
Tipnus unicolor (Piller & Mitterpacher)	1	25	2	rd

Context: 5406B Sample: 524/T - beetle/bug main statistics

Erosion = 2 Fragmentation = 2; Weight = 1.000kg

Number of individuals estimated as	N =	68
Number of taxa	S =	28
Index of diversity (alpha)	alpha =	18
Standard error of alpha	SE alpha =	4
Number of 'certain' outdoor taxa	SOA =	3
Percentage of 'certain' outdoor taxa	%SOA =	11
Number of 'certain' outdoor individuals	NOA =	3
Percentage of 'certain' outdoor individuals	%NOA =	4
Number of 'certain' and probable outdoor taxa	SOB =	3
Percentage of 'certain' and probable outdoor taxa	%SOB =	11
Number of 'certain' and probable outdoor individuals	NOB =	3
Percentage 'certain' and probable outdoor individuals	%NOB =	4

Diversity index for OB not calculated, NOB = SOB or NOB < 20

continued...

Number of aquatic taxa	SW =	1
Percentage of aquatic taxa	%SW =	4
Number of aquatic individuals	NW =	1
Percentage of aquatic individuals	%NW =	1
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	1
Percentage of strongly plant-associated taxa	%SP =	4
Number of strongly plant-associated individuals	NP =	1
Percentage of strongly plant-associated individuals	%NP =	1
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	3
Percentage of wood-associated individuals	%NL =	4
Number of decomposer taxa	SRT =	15
Percentage of decomposer taxa	%SRT =	54
Number of decomposer individuals	NRT =	50
Percentage of decomposer individuals	%NRT =	74
Number of 'dry' decomposer taxa	SRD =	3
Percentage of 'dry'decomposer taxa	%SRD =	11
Number of 'dry' decomposer individuals	NRD =	9
Percentage of 'dry'decomposer individuals	%NRD =	13
Number of 'foul' decomposer taxa	SRF =	0
Percentage of 'foul' decomposer taxa	%SRF =	0
Number of 'foul' decomposer individuals	NRF =	0
Percentage of 'foul' decomposer individuals	%NRF =	0
Index of diversity of decomposer component	alpha RT =	7
Standard error	SE alpha RT =	2
Number of individuals of grain pests	NG =	3
Percentage of individuals of grain pests	%NG =	4
Number of individuals of grain pests	NG =	3
Number of uncoded taxa	SU =	7
Percentage of uncoded individuals	PNU =	13

Context: 5406B Sample: 524/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Coprophilus striatulus (Fabricius)*	15	22	1	rt
Carpelimus bilineatus Stephens*	6	9	2	rt
Anotylus rugosus (Fabricius)*	6	9	2	rt
Tipnus unicolor (Piller & Mitterpacher)*	6	9	2	rd
Rhizophagus parallelocollis Gyllenhal*	6	9	2	rt
Trechus micros (Herbst)	3	4	6	u
Anobium punctatum (Degeer)	3	4	6	l
Oryzaephilus surinamensis (Linnaeus)	2	3	8	g
Lathridius minutus group	2	3	8	rd
Trechus quadristriatus (Schrank)	1	1	10	oa
Cercyon ?analis (Paykull)	1	1	10	rt
Hydrophilinae sp.	1	1	10	oa w
Ptenidium sp.	1	1	10	rt
Omalium sp.	1	1	10	rt
Xylodromus concinnus (Marsham)	1	1	10	rt
Carpelimus sp.	1	1	10	u
Gyrohypnus fracticornis (Muller)	1	1	10	rt
Neobisnius sp.	1	1	10	u

continued...

Staphylininae sp.	1	1	10	u
?Cordalia obscura (Gravenhorst)	1	1	10	rt
?Falagria sp.	1	1	10	rt
Aleocharinae sp. A	1	1	10	u
Aleocharinae sp. B	1	1	10	u
Trichonyx sulcicollis (Reichenbach)	1	1	10	u
Omosita sp.	1	1	10	rt
Mycetaea hirta (Marsham)	1	1	10	rd
Halticinae sp.	1	1	10	oa p
Sitophilus granarius (Linnaeus)	1	1	10	g

Context: 5406C Sample: 525/T - beetle/bug main statistics

Erosion = 3 Fragmentation = 2; Weight = 1.000kg

Number of individuals estimated as	N =	86
Number of taxa	S =	21
Index of diversity (alpha)	alpha =	9
Standard error of alpha	SE alpha =	2
Number of 'certain' outdoor taxa	SOA =	0
Percentage of 'certain' outdoor taxa	%SOA =	0
Number of 'certain' outdoor individuals	NOA =	0
Percentage of 'certain' outdoor individuals	%NOA =	0
Number of 'certain' and probable outdoor taxa	SOB =	1
Percentage of 'certain' and probable outdoor taxa	%SOB =	5
Number of 'certain' and probable outdoor individuals	NOB =	1
Percentage 'certain' and probable outdoor individuals	%NOB =	1
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	0
Percentage of strongly plant-associated taxa	%SP =	0
Number of strongly plant-associated individuals	NP =	0
Percentage of strongly plant-associated individuals	%NP =	0
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	1
Percentage of wood-associated individuals	%NL =	1
Number of decomposer taxa	SRT =	10
Percentage of decomposer taxa	%SRT =	48
Number of decomposer individuals	NRT =	49
Percentage of decomposer individuals	%NRT =	57
Number of 'dry' decomposer taxa	SRD =	2
Percentage of 'dry'decomposer taxa	%SRD =	10
Number of 'dry' decomposer individuals	NRD =	3
Percentage of 'dry'decomposer individuals	%NRD =	3
Number of 'foul' decomposer taxa	SRF =	1
Percentage of 'foul' decomposer taxa	%SRF =	5
Number of 'foul' decomposer individuals	NRF =	1
Percentage of 'foul' decomposer individuals	%NRF =	1
Index of diversity of decomposer component	alpha RT =	4
Standard error	SE alpha RT =	1
Number of individuals of grain pests	NG =	3
Percentage of individuals of grain pests	%NG =	3
Number of individuals of grain pests	NG =	3

continued...

Number of uncoded taxa	SU =	8
Percentage of uncoded individuals	PNU =	38

Context: 5406C Sample: 525/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Coprophilus striatulus (Fabricius)*	15	17	1	rt
Anotylus rugosus (Fabricius)*	15	17	1	rt
Trechus micros (Herbst)*	6	7	3	u
Carpelimus bilineatus Stephens*	6	7	3	rt
Neobisnius ?villosulus (Stephens)*	6	7	3	u
Aleocharinae sp. A *	6	7	3	u
Trichonyx sulcicollis (Reichenbach)*	6	7	3	u
Euplectini sp. *	6	7	3	u
Rhizophagus parallelocollis Gyllenhal*	6	7	3	rt
Lathridius minutus group	2	2	10	rd
Sitophilus granarius (Linnaeus)	2	2	10	g
Ptenidium sp.	1	1	12	rt
Omalium sp.	1	1	12	rt
Xylodromus sp.	1	1	12	rt
Carpelimus pusillus group	1	1	12	u
Aleocharinae sp. B	1	1	12	u
Aphodius sp.	1	1	12	ob rf
Anobium punctatum (Degeer)	1	1	12	l
?Tipnus unicolor (Piller & Mitterpacher)	1	1	12	rd
Oryzaephilus surinamensis (Linnaeus)	1	1	12	g
Coleoptera sp.	1	1	12	u

Context: 5406A Sample: 526/T - beetle/bug main statistics

Erosion = 3 Fragmentation = 3; Weight = 1.000kg

Number of individuals estimated as	N =	2
Number of taxa	S =	2

Context: 5406A Sample: 526/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Cercyon sp.	1	50	1	u
Carpelimus sp.	1	50	1	u

Context: 5408 Sample: 527/T

NO RECORDS OF BEETLES OR BUGS

Context: 6201 Sample: 534/T - beetle/bug main statistics

Erosion = 2 Fragmentation = 2; Weight = 0.400kg

Number of individuals estimated as	N =	7
Number of taxa	S =	7

continued...

Context: 6201 Sample: 534/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Cimex lectularius Linnaeus	1	14	1	u
Carabidae sp.	1	14	1	ob
Staphylininae sp.	1	14	1	u
Anobium punctatum (Degeer)	1	14	1	1
?Niptus hololeucus (Falderman)	1	14	1	rd
Cryptophagus sp. A	1	14	1	rd
Cryptophagus sp. B	1	14	1	rd

Context: 6201 Sample: 538/T - beetle/bug main statistics

Erosion = 3 Fragmentation = 3; Weight = 1.000kg

Number of individuals estimated as	N =	19
Number of taxa	S =	16
Index of diversity not calculated, n = s or n < 20		
Number of 'certain' outdoor taxa	SOA =	1
Percentage of 'certain' outdoor taxa	%SOA =	6
Number of 'certain' outdoor individuals	NOA =	1
Percentage of 'certain' outdoor individuals	%NOA =	5
Number of 'certain' and probable outdoor taxa	SOB =	2
Percentage of 'certain' and probable outdoor taxa	%SOB =	13
Number of 'certain' and probable outdoor individuals	NOB =	2
Percentage 'certain' and probable outdoor individuals	%NOB =	11
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	1
Percentage of strongly plant-associated taxa	%SP =	6
Number of strongly plant-associated individuals	NP =	1
Percentage of strongly plant-associated individuals	%NP =	5
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	2
Percentage of wood-associated individuals	%NL =	11
Number of decomposer taxa	SRT =	6
Percentage of decomposer taxa	%SRT =	38
Number of decomposer individuals	NRT =	7
Percentage of decomposer individuals	%NRT =	37
Number of 'dry' decomposer taxa	SRD =	2
Percentage of 'dry'decomposer taxa	%SRD =	13
Number of 'dry' decomposer individuals	NRD =	3
Percentage of 'dry'decomposer individuals	%NRD =	16
Number of 'foul' decomposer taxa	SRF =	0
Percentage of 'foul' decomposer taxa	%SRF =	0
Number of 'foul' decomposer individuals	NRF =	0
Percentage of 'foul' decomposer individuals	%NRF =	0
Diversity index for RT not calculated, NRT = SRT or NRT < 20		
Number of individuals of grain pests	NG =	2
Percentage of individuals of grain pests	%NG =	11
Number of individuals of grain pests	NG =	2

continued...

Number of uncoded taxa	SU =	5
Percentage of uncoded individuals	PNU =	32

Context: 6201 Sample: 538/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Cimex ?lectularis Linnaeus	2	11	1	u
Anobium punctatum (Degeer)	2	11	1	l
Niptus hololeucus (Falderman)	2	11	1	rd
Carabidae sp.	1	5	4	ob
?Dropephylla sp.	1	5	4	u
Anotylus complanatus (Erichson)	1	5	4	rt
Anotylus sculpturatus group	1	5	4	rt
Anotylus tetracarinatus (Block)	1	5	4	rt
Staphylininae sp. A	1	5	4	u
Staphylininae sp. B	1	5	4	u
Aleocharinae sp.	1	5	4	u
Oryzaephilus surinamensis (Linnaeus)	1	5	4	g
Dienerella sp.	1	5	4	rd
Corticaria sp.	1	5	4	rt
Sitophilus granarius (Linnaeus)	1	5	4	g
Ceutorhynchus sp.	1	5	4	oa p

Context: 5433 Sample: 543/T - beetle/bug main statistics

Erosion = 4 Fragmentation = 3; Weight = 0.730kg

Number of individuals estimated as	N =	14
Number of taxa	S =	9
Index of diversity not calculated, n = s or n < 20		
Number of 'certain' outdoor taxa	SOA =	0
Percentage of 'certain' outdoor taxa	%SOA =	0
Number of 'certain' outdoor individuals	NOA =	0
Percentage of 'certain' outdoor individuals	%NOA =	0
Number of 'certain' and probable outdoor taxa	SOB =	0
Percentage of 'certain' and probable outdoor taxa	%SOB =	0
Number of 'certain' and probable outdoor individuals	NOB =	0
Percentage 'certain' and probable outdoor individuals	%NOB =	0
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	0
Percentage of strongly plant-associated taxa	%SP =	0
Number of strongly plant-associated individuals	NP =	0
Percentage of strongly plant-associated individuals	%NP =	0
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	0
Number of wood-associated individuals	NL =	0
Percentage of wood-associated individuals	%NL =	0
Number of decomposer taxa	SRT =	4
Percentage of decomposer taxa	%SRT =	44
Number of decomposer individuals	NRT =	4
Percentage of decomposer individuals	%NRT =	29

continued...

Number of 'dry' decomposer taxa	SRD =	0
Percentage of 'dry'decomposer taxa	%SRD =	0
Number of 'dry' decomposer individuals	NRD =	0
Percentage of 'dry'decomposer individuals	%NRD =	0
Number of 'foul' decomposer taxa	SRF =	1
Percentage of 'foul' decomposer taxa	%SRF =	11
Number of 'foul' decomposer individuals	NRF =	1
Percentage of 'foul' decomposer individuals	%NRF =	7

Diversity index for RT not calculated, NRT = SRT or NRT < 20

Number of individuals of grain pests	NG =	7
Percentage of individuals of grain pests	%NG =	50
Number of individuals of grain pests	NG =	7
Number of uncoded taxa	SU =	3
Percentage of uncoded individuals	PNU =	21

Context: 5433 Sample: 543/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Oryzaephilus surinamensis (Linnaeus)*	6	43	1	g
Cercyon atricapillus (Marsham)	1	7	2	rf
Carpelimus bilineatus Stephens	1	7	2	rt
Anotylus rugosus (Fabricius)	1	7	2	rt
Aleocharinae sp.	1	7	2	u
Trichonyx sulcicollis (Reichenbach)	1	7	2	u
Monotoma sp.	1	7	2	rt
Sitophilus granarius (Linnaeus)	1	7	2	g
Coleoptera sp.	1	7	2	u

Context: 7003F Sample: 549/T

NO RECORDS OF BEETLES OR BUGS

Context: 5437 Sample: 551/T

NO RECORDS OF BEETLES OR BUGS

Context: 7054H Sample: 556/T

NO RECORDS OF BEETLES OR BUGS

Context: 6263 Sample: 557/T - beetle/bug main statistics

Erosion = 3 Fragmentation = 3; Weight = 1.000kg

Number of individuals estimated as	N =	4
Number of taxa	S =	4

Context: 6263 Sample: 557/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Cryptopleurum minutum (Fabricius)	1	25	1	rf
Stenus sp.	1	25	1	u

continued...

Anobium punctatum (Degeer)	1	25	1	1
Ptinidae sp.	1	25	1	rd

Context: 7054K Sample: 559/T

NO RECORDS OF BEETLES OR BUGS

Context: 7069 Sample: 561/T - beetle/bug main statistics

Erosion = 4 Fragmentation = 0; Weight = 1.000kg

Number of individuals estimated as	N =	1
Number of taxa	S =	1

Context: 7069 Sample: 561/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Tipnus unicolor (Piller & Mitterpacher)	1	100	1	rd

Context: 6296B Sample: 566/T

NO RECORDS OF BEETLES OR BUGS

Context: 6300A Sample: 570/T

NO RECORDS OF BEETLES OR BUGS

Context: 6300B Sample: 573/T

NO RECORDS OF BEETLES OR BUGS

Context: 6300C Sample: 574/T - beetle/bug main statistics

Erosion = 4 Fragmentation = 0; Weight = 1.000kg

Number of individuals estimated as	N =	2
Number of taxa	S =	2

Context: 6300C Sample: 574/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Anotylus complanatus (Erichson)	1	50	1	rt
Anobium punctatum (Degeer)	1	50	1	1

Context: 5462B Sample: 575/T - beetle/bug main statistics

Erosion = 3 Fragmentation = 2; Weight = 0.610kg

Number of individuals estimated as	N =	59
Number of taxa	S =	31
Index of diversity (alpha)	alpha =	27
Standard error of alpha	SE alpha =	6
Number of 'certain' outdoor taxa	SOA =	5

continued...

Percentage of 'certain' outdoor taxa	%SOA =	16
Number of 'certain' outdoor individuals	NOA =	6
Percentage of 'certain' outdoor individuals	%NOA =	10
Number of 'certain' and probable outdoor taxa	SOB =	9
Percentage of 'certain' and probable outdoor taxa	%SOB =	29
Number of 'certain' and probable outdoor individuals	NOB =	10
Percentage 'certain' and probable outdoor individuals	%NOB =	17
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	1
Percentage of damp ground/waterside taxa	%SD =	3
Number of damp ground/waterside individuals	ND =	1
Percentage of damp ground/waterside individuals	%ND =	2
Number of strongly plant-associated taxa	SP =	3
Percentage of strongly plant-associated taxa	%SP =	10
Number of strongly plant-associated individuals	NP =	4
Percentage of strongly plant-associated individuals	%NP =	7
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	1
Percentage of wood-associated individuals	%NL =	2
Number of decomposer taxa	SRT =	12
Percentage of decomposer taxa	%SRT =	39
Number of decomposer individuals	NRT =	22
Percentage of decomposer individuals	%NRT =	37
Number of 'dry' decomposer taxa	SRD =	5
Percentage of 'dry'decomposer taxa	%SRD =	16
Number of 'dry' decomposer individuals	NRD =	8
Percentage of 'dry'decomposer individuals	%NRD =	14
Number of 'foul' decomposer taxa	SRF =	1
Percentage of 'foul' decomposer taxa	%SRF =	3
Number of 'foul' decomposer individuals	NRF =	1
Percentage of 'foul' decomposer individuals	%NRF =	2
Index of diversity of decomposer component	alpha RT =	11
Standard error	SE alpha RT =	4
Number of individuals of grain pests	NG =	1
Percentage of individuals of grain pests	%NG =	2
Number of individuals of grain pests	NG =	1
Number of uncoded taxa	SU =	9
Percentage of uncoded individuals	PNU =	44

Context: 5462B Sample: 575/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Carpelimus pusillus group *	15	25	1	u
Anotylus rugosus (Fabricius)*	6	10	2	rt
Omalium rivulare (Paykull)	3	5	3	rt
Aleocharinae sp. D	3	5	3	u
Aleocharinae sp. B	2	3	5	u
Tipnus unicolor (Piller & Mitterpacher)	2	3	5	rd
Meligethes sp. A	2	3	5	oa p
Cryptophagus sp. L	2	3	5	rd
Lathridius minutus group	2	3	5	rd
Auchenorhyncha sp.	1	2	10	oa p

continued...

Bembidion ?lampros (Herbst)	1	2	10	oa
Agonum sp.	1	2	10	oa
Carabidae sp. A	1	2	10	ob
Carabidae sp. B	1	2	10	ob
Acrotrichis sp.	1	2	10	rt
Ptiliidae sp.	1	2	10	u
Carpelimus ?rivularis (Motschulsky)	1	2	10	ob d
Anotylus complanatus (Erichson)	1	2	10	rt
Stenus sp.	1	2	10	u
Neobisnius villosulus (Stephens)	1	2	10	u
Cordalia obscura (Gravenhorst)	1	2	10	rt
Aleocharinae sp. A	1	2	10	u
Aleocharinae sp. C	1	2	10	u
Euplectini sp.	1	2	10	u
Aphodius sp.	1	2	10	ob rf
Anobium punctatum (Degeer)	1	2	10	l
Ptinus fur (Linnaeus)	1	2	10	rd
Meligethes sp. B	1	2	10	oa p
Cryptophagus ?scutellatus Newman	1	2	10	rd
Corticaria sp.	1	2	10	rt
Sitophilus granarius (Linnaeus)	1	2	10	g

Context: 5468A Sample: 579/T - beetle/bug main statistics

Erosion = 3 Fragmentation = 2; Weight = 1.000kg

Number of individuals estimated as	N =	73
Number of taxa	S =	36
Index of diversity (alpha)	alpha =	28
Standard error of alpha	SE alpha =	6
Number of 'certain' outdoor taxa	SOA =	6
Percentage of 'certain' outdoor taxa	%SOA =	17
Number of 'certain' outdoor individuals	NOA =	6
Percentage of 'certain' outdoor individuals	%NOA =	8
Number of 'certain' and probable outdoor taxa	SOB =	6
Percentage of 'certain' and probable outdoor taxa	%SOB =	17
Number of 'certain' and probable outdoor individuals	NOB =	6
Percentage 'certain' and probable outdoor individuals	%NOB =	8
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	1
Percentage of aquatic taxa	%SW =	3
Number of aquatic individuals	NW =	1
Percentage of aquatic individuals	%NW =	1
Number of damp ground/waterside taxa	SD =	2
Percentage of damp ground/waterside taxa	%SD =	6
Number of damp ground/waterside individuals	ND =	2
Percentage of damp ground/waterside individuals	%ND =	3
Number of strongly plant-associated taxa	SP =	2
Percentage of strongly plant-associated taxa	%SP =	6
Number of strongly plant-associated individuals	NP =	2
Percentage of strongly plant-associated individuals	%NP =	3
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	3
Percentage of wood-associated individuals	%NL =	4
Number of decomposer taxa	SRT =	17
Percentage of decomposer taxa	%SRT =	47
Number of decomposer individuals	NRT =	37
Percentage of decomposer individuals	%NRT =	51
Number of 'dry' decomposer taxa	SRD =	6
Percentage of 'dry'decomposer taxa	%SRD =	17

continued...

Number of 'dry' decomposer individuals	NRD =	15
Percentage of 'dry'decomposer individuals	%NRD =	21
Number of 'foul' decomposer taxa	SRF =	2
Percentage of 'foul' decomposer taxa	%SRF =	6
Number of 'foul' decomposer individuals	NRF =	3
Percentage of 'foul' decomposer individuals	%NRF =	4
Index of diversity of decomposer component	alpha RT =	12
Standard error	SE alpha RT =	3
Number of individuals of grain pests	NG =	6
Percentage of individuals of grain pests	%NG =	8
Number of individuals of grain pests	NG =	6
Number of uncoded taxa	SU =	10
Percentage of uncoded individuals	PNU =	29

Context: 5468A Sample: 579/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Carpelimus bilineatus Stephens*	6	8	1	rt
Carpelimus pusillus group *	6	8	1	u
Neobisnius ?villosulus (Stephens)*	6	8	1	u
Lathridius minutus group *	6	8	1	rd
Xylodromus concinnus (Marsham)	3	4	5	rt
Anotylus rugosus (Fabricius)	3	4	5	rt
Anobium punctatum (Degeer)	3	4	5	l
Oryzaephilus surinamensis (Linnaeus)	3	4	5	g
Cryptophagus sp. A	3	4	5	rd
Sitophilus granarius (Linnaeus)	3	4	5	g
Cercyon analis (Paykull)	2	3	11	rt
Cercyon terminatus (Marsham)	2	3	11	rf
Aleocharinae sp. C	2	3	11	u
Tipnus unicolor (Piller & Mitterpacher)	2	3	11	rd
Atomaria sp.	2	3	11	rd
Trechus micros (Herbst)	1	1	16	u
Bembidion sp.	1	1	16	oa
?Dromius sp.	1	1	16	oa
Helophorus sp.	1	1	16	oa w
Cercyon haemorrhoidalis (Fabricius)	1	1	16	rf
Cercyon sp.	1	1	16	u
Megasternum obscurum (Marsham)	1	1	16	rt
Lesteva sp.	1	1	16	oa d
Coprophilus striatulus (Fabricius)	1	1	16	rt
Anotylus nitidulus (Gravenhorst)	1	1	16	rt d
Anotylus tetracarinatus (Block)	1	1	16	rt
Aleocharinae sp. A	1	1	16	u
Aleocharinae sp. B	1	1	16	u
Euplectini sp.	1	1	16	u
Dermestidae sp.	1	1	16	u
Ptinus fur (Linnaeus)	1	1	16	rd
Cryptophagus sp. B	1	1	16	rd
Aglenus brunneus (Gyllenhal)	1	1	16	rt
Bruchinae sp.	1	1	16	u
Hypera nigrirostris (Fabricius)	1	1	16	oa p
Cidnorhinus quadrimaculatus (Linnaeus)	1	1	16	oa p

continued...

Context: 5466B Sample: 584A/T1 - beetle/bug main statistics

Erosion = 2 Fragmentation = 2; Weight = 1.000kg

Number of individuals estimated as	N =	60
Number of taxa	S =	35
Index of diversity (alpha)	alpha =	35
Standard error of alpha	SE alpha =	8
Number of 'certain' outdoor taxa	SOA =	5
Percentage of 'certain' outdoor taxa	%SOA =	14
Number of 'certain' outdoor individuals	NOA =	5
Percentage of 'certain' outdoor individuals	%NOA =	8
Number of 'certain' and probable outdoor taxa	SOB =	7
Percentage of 'certain' and probable outdoor taxa	%SOB =	20
Number of 'certain' and probable outdoor individuals	NOB =	7
Percentage 'certain' and probable outdoor individuals	%NOB =	12
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	1
Percentage of damp ground/waterside taxa	%SD =	3
Number of damp ground/waterside individuals	ND =	1
Percentage of damp ground/waterside individuals	%ND =	2
Number of strongly plant-associated taxa	SP =	5
Percentage of strongly plant-associated taxa	%SP =	14
Number of strongly plant-associated individuals	NP =	5
Percentage of strongly plant-associated individuals	%NP =	8
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	6
Percentage of wood-associated individuals	%NL =	10
Number of decomposer taxa	SRT =	16
Percentage of decomposer taxa	%SRT =	46
Number of decomposer individuals	NRT =	32
Percentage of decomposer individuals	%NRT =	53
Number of 'dry' decomposer taxa	SRD =	6
Percentage of 'dry'decomposer taxa	%SRD =	17
Number of 'dry' decomposer individuals	NRD =	15
Percentage of 'dry'decomposer individuals	%NRD =	25
Number of 'foul' decomposer taxa	SRF =	2
Percentage of 'foul' decomposer taxa	%SRF =	6
Number of 'foul' decomposer individuals	NRF =	2
Percentage of 'foul' decomposer individuals	%NRF =	3
Index of diversity of decomposer component	alpha RT =	13
Standard error	SE alpha RT =	4
Number of individuals of grain pests	NG =	4
Percentage of individuals of grain pests	%NG =	7
Number of individuals of grain pests	NG =	4
Number of uncoded taxa	SU =	10
Percentage of uncoded individuals	PNU =	20

Context: 5466B Sample: 584A/T1 - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Carpelimus bilineatus Stephens*	6	10	1	rt

continued...

Anobium punctatum (Degeer)*	6	10	1	l
Lathridius minutus group *	6	10	1	rd
Neobisnius ?villosulus (Stephens)	3	5	4	u
Tipnus unicolor (Piller & Mitterpacher)	3	5	4	rd
Oryzaephilus surinamensis (Linnaeus)	3	5	4	g
Omalium rivulare (Paykull)	2	3	7	rt
Xylodromus concinnus (Marsham)	2	3	7	rt
Cryptophagus sp.	2	3	7	rd
Mycetaea hirta (Marsham)	2	3	7	rd
Carabidae sp.	1	2	11	ob
Cercyon analis (Paykull)	1	2	11	rt
Cercyon haemorrhoidalis (Fabricius)	1	2	11	rf
Phyllodrepa ?floralis (Paykull)	1	2	11	rt
Omalium sp.	1	2	11	rt
Carpelimus fuliginosus (Gravenhorst)	1	2	11	u
Anotylus nitidulus (Gravenhorst)	1	2	11	rt d
Anotylus rugosus (Fabricius)	1	2	11	rt
Philonthus sp. A	1	2	11	u
Philonthus sp. B	1	2	11	u
Philonthus sp. C	1	2	11	u
Staphylininae sp.	1	2	11	u
Aleocharinae sp.	1	2	11	u
Trichonyx sulcicollis (Reichenbach)	1	2	11	u
Pselaphidae sp.	1	2	11	u
Aphodius or Colobopterus sp.	1	2	11	ob rf
Ptinus fur (Linnaeus)	1	2	11	rd
Rhizophagus sp.	1	2	11	u
Atomaria sp.	1	2	11	rd
Chrysomelinae sp.	1	2	11	oa p
Halticinae sp.	1	2	11	oa p
Apion sp.	1	2	11	oa p
Sitona sp.	1	2	11	oa p
Sitophilus granarius (Linnaeus)	1	2	11	g
Orthochaetes setiger (Beck)	1	2	11	oa p

Context: 5466B Sample: 584A/T2 - beetle/bug main statistics

Erosion = 4 Fragmentation = 3; Weight = 1.000kg

Number of individuals estimated as	N =	84
Number of taxa	S =	45
Index of diversity (alpha)	alpha =	40
Standard error of alpha	SE alpha =	8
Number of 'certain' outdoor taxa	SOA =	6
Percentage of 'certain' outdoor taxa	%SOA =	13
Number of 'certain' outdoor individuals	NOA =	6
Percentage of 'certain' outdoor individuals	%NOA =	7
Number of 'certain' and probable outdoor taxa	SOB =	8
Percentage of 'certain' and probable outdoor taxa	%SOB =	18
Number of 'certain' and probable outdoor individuals	NOB =	9
Percentage 'certain' and probable outdoor individuals	%NOB =	11
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	1
Percentage of aquatic taxa	%SW =	2
Number of aquatic individuals	NW =	1
Percentage of aquatic individuals	%NW =	1
Number of damp ground/waterside taxa	SD =	2
Percentage of damp ground/waterside taxa	%SD =	4
Number of damp ground/waterside individuals	ND =	2
Percentage of damp ground/waterside individuals	%ND =	2
Number of strongly plant-associated taxa	SP =	2
Percentage of strongly plant-associated taxa	%SP =	4
Number of strongly plant-associated individuals	NP =	2

continued...

Percentage of strongly plant-associated individuals	%NP =	2
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	6
Percentage of wood-associated individuals	%NL =	7
Number of decomposer taxa	SRT =	18
Percentage of decomposer taxa	%SRT =	40
Number of decomposer individuals	NRT =	43
Percentage of decomposer individuals	%NRT =	51
Number of 'dry' decomposer taxa	SRD =	7
Percentage of 'dry'decomposer taxa	%SRD =	16
Number of 'dry' decomposer individuals	NRD =	19
Percentage of 'dry'decomposer individuals	%NRD =	23
Number of 'foul' decomposer taxa	SRF =	1
Percentage of 'foul' decomposer taxa	%SRF =	2
Number of 'foul' decomposer individuals	NRF =	1
Percentage of 'foul' decomposer individuals	%NRF =	1
Index of diversity of decomposer component	alpha RT =	12
Standard error	SE alpha RT =	3
Number of individuals of grain pests	NG =	3
Percentage of individuals of grain pests	%NG =	4
Number of individuals of grain pests	NG =	3
Number of uncoded taxa	SU =	17
Percentage of uncoded individuals	PNU =	29

Context: 5466B Sample: 584A/T2 - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Carpelimus bilineatus Stephens*	6	7	1	rt
Anotylus rugosus (Fabricius)*	6	7	1	rt
Anobium punctatum (Degeer)*	6	7	1	l
Tipnus unicolor (Piller & Mitterpacher)*	6	7	1	rd
Lathridius minutus group *	6	7	1	rd
Xylodromus concinnus (Marsham)	3	4	6	rt
Aleocharinae sp. B	3	4	6	u
Aleocharinae sp. D	3	4	6	u
Carabidae sp. B	2	2	9	ob
Neobisnius ?villosulus (Stephens)	2	2	9	u
Cordalia obscura (Gravenhorst)	2	2	9	rt
Aleocharinae sp. C	2	2	9	u
Euplectini sp.	2	2	9	u
Ptinus fur (Linnaeus)	2	2	9	rd
Oryzaephilus surinamensis (Linnaeus)	2	2	9	g
Cryptophagus sp. A	2	2	9	rd
Temnostethus sp.	1	1	17	oa
Heteroptera sp.	1	1	17	u
Trechus micros (Herbst)	1	1	17	u
Carabidae sp. A	1	1	17	ob
Hydroporinae sp.	1	1	17	oa w
Ptiliidae sp.	1	1	17	u
Scydmaenidae sp.	1	1	17	u
Omalium sp.	1	1	17	rt
Coprophilus striatulus (Fabricius)	1	1	17	rt
Carpelimus pusillus group	1	1	17	u
Carpelimus sp.	1	1	17	u
Anotylus complanatus (Erichson)	1	1	17	rt
Anotylus nitidulus (Gravenhorst)	1	1	17	rt d

continued...

Xantholinus sp.	1	1	17	u
Staphylininae sp.	1	1	17	u
Aleocharinae sp. A	1	1	17	u
Aleocharinae sp. E	1	1	17	u
Aleocharinae sp. F	1	1	17	u
Aphodius ?rufipes (Linnaeus)	1	1	17	oa rf
?Cyphon sp.	1	1	17	oa d
Rhizophagus parallelocollis Gyllenhal	1	1	17	rt
Rhizophagus sp.	1	1	17	u
Cryptophagus sp. B	1	1	17	rd
Atomaria sp. A	1	1	17	rd
Atomaria sp. B	1	1	17	rd
Corticaria sp.	1	1	17	rt
Sitona sp.	1	1	17	oa p
Sitophilus granarius (Linnaeus)	1	1	17	g
Ceutorhynchus sp.	1	1	17	oa p

Context: 5466B Sample: 584B/T - beetle/bug main statistics

Erosion = 4 Fragmentation = 3; Weight = 1.000kg

Number of individuals estimated as	N =	33
Number of taxa	S =	21
Index of diversity (alpha)	alpha =	25
Standard error of alpha	SE alpha =	9
Number of 'certain' outdoor taxa	SOA =	1
Percentage of 'certain' outdoor taxa	%SOA =	5
Number of 'certain' outdoor individuals	NOA =	1
Percentage of 'certain' outdoor individuals	%NOA =	3
Number of 'certain' and probable outdoor taxa	SOB =	3
Percentage of 'certain' and probable outdoor taxa	%SOB =	14
Number of 'certain' and probable outdoor individuals	NOB =	3
Percentage 'certain' and probable outdoor individuals	%NOB =	9
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	1
Percentage of damp ground/waterside taxa	%SD =	5
Number of damp ground/waterside individuals	ND =	2
Percentage of damp ground/waterside individuals	%ND =	6
Number of strongly plant-associated taxa	SP =	1
Percentage of strongly plant-associated taxa	%SP =	5
Number of strongly plant-associated individuals	NP =	1
Percentage of strongly plant-associated individuals	%NP =	3
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	3
Number of wood-associated individuals	NL =	8
Percentage of wood-associated individuals	%NL =	24
Number of decomposer taxa	SRT =	8
Percentage of decomposer taxa	%SRT =	38
Number of decomposer individuals	NRT =	9
Percentage of decomposer individuals	%NRT =	27
Number of 'dry' decomposer taxa	SRD =	4
Percentage of 'dry'decomposer taxa	%SRD =	19
Number of 'dry' decomposer individuals	NRD =	4
Percentage of 'dry'decomposer individuals	%NRD =	12
Number of 'foul' decomposer taxa	SRF =	0
Percentage of 'foul' decomposer taxa	%SRF =	0
Number of 'foul' decomposer individuals	NRF =	0

continued...

Percentage of 'foul' decomposer individuals	%NRF =	0
Diversity index for RT not calculated, NRT = SRT or NRT < 20		
Number of individuals of grain pests	NG =	6
Percentage of individuals of grain pests	%NG =	18
Number of individuals of grain pests	NG =	6
Number of uncoded taxa	SU =	6
Percentage of uncoded individuals	PNU =	21

Context: 5466B Sample: 584B/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Anobium punctatum (Degeer)*	6	18	1	l
Oryzaephilus surinamensis (Linnaeus)*	6	18	1	g
Anotylus nitidulus (Gravenhorst)	2	6	3	rt d
Neobisnius ?villosulus (Stephens)	2	6	3	u
Scydmaenidae sp.	1	3	5	u
Omalium sp.	1	3	5	rt
Carpelimus bilineatus Stephens	1	3	5	rt
Carpelimus sp.	1	3	5	u
Anotylus rugosus (Fabricius)	1	3	5	rt
Staphylininae sp.	1	3	5	u
Trichonyx sulcicollis (Reichenbach)	1	3	5	u
Pselaphidae sp.	1	3	5	u
Elateridae sp. A	1	3	5	ob
Elateridae sp. B	1	3	5	ob
Grynobius planus (Fabricius)	1	3	5	l
Tipnus unicolor (Piller & Mitterpacher)	1	3	5	rd
Ptinus fur (Linnaeus)	1	3	5	rd
Cryptophagus sp.	1	3	5	rd
Lathridius minutus group	1	3	5	rd
Apion sp.	1	3	5	oa p
Scolytus sp.	1	3	5	l

Context: 5468C Sample: 585/T - beetle/bug main statistics

Erosion = 3 Fragmentation = 2; Weight = 1.000kg

Number of individuals estimated as	N =	121
Number of taxa	S =	47
Index of diversity (alpha)	alpha =	28
Standard error of alpha	SE alpha =	4
Number of 'certain' outdoor taxa	SOA =	10
Percentage of 'certain' outdoor taxa	%SOA =	21
Number of 'certain' outdoor individuals	NOA =	11
Percentage of 'certain' outdoor individuals	%NOA =	9
Number of 'certain' and probable outdoor taxa	SOB =	11
Percentage of 'certain' and probable outdoor taxa	%SOB =	23
Number of 'certain' and probable outdoor individuals	NOB =	12
Percentage 'certain' and probable outdoor individuals	%NOB =	10
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	1
Percentage of aquatic taxa	%SW =	2
Number of aquatic individuals	NW =	2
Percentage of aquatic individuals	%NW =	2
Number of damp ground/waterside taxa	SD =	1
Percentage of damp ground/waterside taxa	%SD =	2
Number of damp ground/waterside individuals	ND =	1
Percentage of damp ground/waterside individuals	%ND =	1

continued...

Number of strongly plant-associated taxa	SP =	6
Percentage of strongly plant-associated taxa	%SP =	13
Number of strongly plant-associated individuals	NP =	6
Percentage of strongly plant-associated individuals	%NP =	5
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	3
Percentage of wood-associated individuals	%NL =	2
Number of decomposer taxa	SRT =	22
Percentage of decomposer taxa	%SRT =	47
Number of decomposer individuals	NRT =	78
Percentage of decomposer individuals	%NRT =	64
Number of 'dry' decomposer taxa	SRD =	7
Percentage of 'dry'decomposer taxa	%SRD =	15
Number of 'dry' decomposer individuals	NRD =	38
Percentage of 'dry'decomposer individuals	%NRD =	31
Number of 'foul' decomposer taxa	SRF =	2
Percentage of 'foul' decomposer taxa	%SRF =	4
Number of 'foul' decomposer individuals	NRF =	2
Percentage of 'foul' decomposer individuals	%NRF =	2
Index of diversity of decomposer component	alpha RT =	10
Standard error	SE alpha RT =	2
Number of individuals of grain pests	NG =	8
Percentage of individuals of grain pests	%NG =	7
Number of individuals of grain pests	NG =	8
Number of uncoded taxa	SU =	12
Percentage of uncoded individuals	PNU =	17

Context: 5468C Sample: 585/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Carpelimus bilineatus Stephens*	15	12	1	rt
Lathridius minutus group *	15	12	1	rd
Xylodromus concinnus (Marsham)*	6	5	3	rt
Anotylus rugosus (Fabricius)*	6	5	3	rt
Neobisnius ?villosulus (Stephens)*	6	5	3	u
Tipnus unicolor (Piller & Mitterpacher)*	6	5	3	rd
Oryzaephilus surinamensis (Linnaeus)*	6	5	3	g
Cryptophagus sp. A *	6	5	3	rd
Cryptophagus sp. R *	6	5	3	rd
Anobium punctatum (Degeer)	3	2	10	l
Mycetaea hirta (Marsham)	3	2	10	rd
Bruchinae sp.	3	2	10	u
Helophorus sp.	2	2	13	oa w
Aleocharinae sp. B	2	2	13	u
Euplectini sp.	2	2	13	u
Cortinicara gibbosa (Herbst)	2	2	13	rt
Sitophilus granarius (Linnaeus)	2	2	13	g
Trechus micros (Herbst)	1	1	18	u
Bembidion sp.	1	1	18	oa
Cercyon terminatus (Marsham)	1	1	18	rf
Ptiliidae sp.	1	1	18	u
Xylodromus ?depressus (Gravenhorst)	1	1	18	rt
Coprophilus striatulus (Fabricius)	1	1	18	rt
Anotylus nitidulus (Gravenhorst)	1	1	18	rt d
Philonthus sp.	1	1	18	u
Staphylininae sp.	1	1	18	u

continued...

Tachyporus sp.	1	1	18	u
Aleocharinae sp. A	1	1	18	u
Aleocharinae sp. C	1	1	18	u
Aphodius sp.	1	1	18	ob rf
Rhizophagus parallelocollis Gyllenhal	1	1	18	rt
?Cryptophagus sp.	1	1	18	rd
Atomaria sp.	1	1	18	rd
Enicmus sp. A	1	1	18	rt
Enicmus sp. B	1	1	18	rt
Corticaria sp.	1	1	18	rt
Corticarina sp.	1	1	18	rt
Aglenus brunneus (Gyllenhal)	1	1	18	rt
Apion sp. A	1	1	18	oa p
Apion sp. B	1	1	18	oa p
Apion sp. C	1	1	18	oa p
Apion sp. D	1	1	18	oa p
Sitona sp.	1	1	18	oa p
Hypera nigrirostris (Fabricius)	1	1	18	oa p
Curculionidae sp. A	1	1	18	oa
Curculionidae sp. B	1	1	18	oa
Coleoptera sp.	1	1	18	u

Context: 5497 Sample: 598/T2 - beetle/bug main statistics

Erosion = 2 Fragmentation = 2; Weight = 1.000kg

Number of individuals estimated as	N =	226
Number of taxa	S =	61
Index of diversity (alpha)	alpha =	28
Standard error of alpha	SE alpha =	3
Number of 'certain' outdoor taxa	SOA =	5
Percentage of 'certain' outdoor taxa	%SOA =	8
Number of 'certain' outdoor individuals	NOA =	5
Percentage of 'certain' outdoor individuals	%NOA =	2
Number of 'certain' and probable outdoor taxa	SOB =	6
Percentage of 'certain' and probable outdoor taxa	%SOB =	10
Number of 'certain' and probable outdoor individuals	NOB =	6
Percentage 'certain' and probable outdoor individuals	%NOB =	3
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	1
Percentage of damp ground/waterside taxa	%SD =	2
Number of damp ground/waterside individuals	ND =	1
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	4
Percentage of strongly plant-associated taxa	%SP =	7
Number of strongly plant-associated individuals	NP =	4
Percentage of strongly plant-associated individuals	%NP =	2
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	2
Number of wood-associated individuals	NL =	16
Percentage of wood-associated individuals	%NL =	7
Number of decomposer taxa	SRT =	33
Percentage of decomposer taxa	%SRT =	54
Number of decomposer individuals	NRT =	142
Percentage of decomposer individuals	%NRT =	63
Number of 'dry' decomposer taxa	SRD =	11
Percentage of 'dry'decomposer taxa	%SRD =	18

continued...

Number of 'dry' decomposer individuals	NRD =	68
Percentage of 'dry'decomposer individuals	%NRD =	30
Number of 'foul' decomposer taxa	SRF =	2
Percentage of 'foul' decomposer taxa	%SRF =	3
Number of 'foul' decomposer individuals	NRF =	2
Percentage of 'foul' decomposer individuals	%NRF =	1
Index of diversity of decomposer component	alpha RT =	14
Standard error	SE alpha RT =	2
Number of individuals of grain pests	NG =	12
Percentage of individuals of grain pests	%NG =	5
Number of individuals of grain pests	NG =	12
Number of uncoded taxa	SU =	18
Percentage of uncoded individuals	PNU =	22

Context: 5497 Sample: 598/T2 - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Omalium rivulare (Paykull)*	15	7	1	rt
Xylodromus concinnus (Marsham)*	15	7	1	rt
Aleocharinae sp. F *	15	7	1	u
Anobium punctatum (Degeer)*	15	7	1	l
Tipnus unicolor (Piller & Mitterpacher)*	15	7	1	rd
Mycetaea hirta (Marsham)*	15	7	1	rd
Lathridius minutus group *	15	7	1	rd
Ptenidium sp. *	6	3	8	rt
Phyllodrepa ?floralis (Paykull)*	6	3	8	rt
Omalium sp. *	6	3	8	rt
Philonthus sp. A *	6	3	8	u
Philonthus sp. B *	6	3	8	u
Aleocharinae sp. A *	6	3	8	u
Oryzaephilus surinamensis (Linnaeus)*	6	3	8	g
Cryptophagus sp. A *	6	3	8	rd
Atomaria nigripennis (Kugelann)*	6	3	8	rd
Aglenus brunneus (Gyllenhal)*	6	3	8	rt
Sitophilus granarius (Linnaeus)*	6	3	8	g
Histerinae sp.	3	1	19	u
Creophilus maxillosus (Linnaeus)	3	1	19	rt
Ptinus fur (Linnaeus)	3	1	19	rd
Cryptophagus scutellatus Newman	3	1	19	rd
Laemostenus terricola (Herbst)	2	1	23	u
Cercyon analis (Paykull)	2	1	23	rt
Cryptophagus sp. B	2	1	23	rd
Enicmus sp.	2	1	23	rt
Auchenorhyncha sp.	1	0	27	oa p
Trechus micros (Herbst)	1	0	27	u
Carabidae sp.	1	0	27	ob
Helophorus sp. R	1	0	27	oa
Cercyon atricapillus (Marsham)	1	0	27	rf
Cercyon terminatus (Marsham)	1	0	27	rf
Cercyon sp.	1	0	27	u
Cercyon sp. A	1	0	27	u
Cercyon sp. B	1	0	27	u
Coprophilus striatulus (Fabricius)	1	0	27	rt
Carpelimus bilineatus Stephens	1	0	27	rt
Anotylus nitidulus (Gravenhorst)	1	0	27	rt d
Gyrohypnus fracticornis (Muller)	1	0	27	rt
Staphylininae sp.	1	0	27	u
Falagria caesa or sulcatula	1	0	27	rt
Aleocharinae sp. B	1	0	27	u

continued...

Aleocharinae sp. C	1	0	27	u
Aleocharinae sp. D	1	0	27	u
Aleocharinae sp. E	1	0	27	u
Attagenus pellio (Linnaeus)	1	0	27	rd
Anthrenus sp.	1	0	27	rt
Meligethes sp.	1	0	27	oa p
Epuraea sp.	1	0	27	u
Atomaria sp.	1	0	27	rd
Orthoperus sp.	1	0	27	rt
Dienerella sp.	1	0	27	rd
Corticaria sp. A	1	0	27	rt
Corticaria sp. B	1	0	27	rt
Blaps sp.	1	0	27	rt
Tenebrio obscurus Fabricius	1	0	27	rt
Bruchinae sp.	1	0	27	u
Halticinae sp.	1	0	27	oa p
Apion sp.	1	0	27	oa p
Scolytus sp.	1	0	27	l
Coleoptera sp.	1	0	27	u

Context: 5501 Sample: 602/T - beetle/bug main statistics

Erosion = 2 Fragmentation = 2; Weight = 1.000kg

Number of individuals estimated as	N =	36
Number of taxa	S =	23
Index of diversity (alpha)	alpha =	28
Standard error of alpha	SE alpha =	9
Number of 'certain' outdoor taxa	SOA =	1
Percentage of 'certain' outdoor taxa	%SOA =	4
Number of 'certain' outdoor individuals	NOA =	1
Percentage of 'certain' outdoor individuals	%NOA =	3
Number of 'certain' and probable outdoor taxa	SOB =	3
Percentage of 'certain' and probable outdoor taxa	%SOB =	13
Number of 'certain' and probable outdoor individuals	NOB =	3
Percentage 'certain' and probable outdoor individuals	%NOB =	8
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	1
Percentage of damp ground/waterside taxa	%SD =	4
Number of damp ground/waterside individuals	ND =	1
Percentage of damp ground/waterside individuals	%ND =	3
Number of strongly plant-associated taxa	SP =	1
Percentage of strongly plant-associated taxa	%SP =	4
Number of strongly plant-associated individuals	NP =	1
Percentage of strongly plant-associated individuals	%NP =	3
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	0
Number of wood-associated individuals	NL =	0
Percentage of wood-associated individuals	%NL =	0
Number of decomposer taxa	SRT =	15
Percentage of decomposer taxa	%SRT =	65
Number of decomposer individuals	NRT =	28
Percentage of decomposer individuals	%NRT =	78
Number of 'dry' decomposer taxa	SRD =	2
Percentage of 'dry'decomposer taxa	%SRD =	9
Number of 'dry' decomposer individuals	NRD =	4
Percentage of 'dry'decomposer individuals	%NRD =	11

continued...

Number of 'foul' decomposer taxa	SRF =	2
Percentage of 'foul' decomposer taxa	%SRF =	9
Number of 'foul' decomposer individuals	NRF =	2
Percentage of 'foul' decomposer individuals	%NRF =	6
Index of diversity of decomposer component	alpha RT =	13
Standard error	SE alpha RT =	5
Number of individuals of grain pests	NG =	2
Percentage of individuals of grain pests	%NG =	6
Number of individuals of grain pests	NG =	2
Number of uncoded taxa	SU =	4
Percentage of uncoded individuals	PNU =	11

Context: 5501 Sample: 602/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Coprophilus striatulus (Fabricius)*	6	17	1	rt
Anotylus rugosus (Fabricius)*	6	17	1	rt
Tipnus unicolor (Piller & Mitterpacher)	3	8	3	rd
Carpelimus bilineatus Stephens	2	6	4	rt
Auchenorhyncha sp.	1	3	5	oa p
Carabidae sp.	1	3	5	ob
Cryptopleurum minutum (Fabricius)	1	3	5	rf
Omalium ?rivulare (Paykull)	1	3	5	rt
Anotylus complanatus (Erichson)	1	3	5	rt
Anotylus nitidulus (Gravenhorst)	1	3	5	rt d
Anotylus sculpturatus group	1	3	5	rt
Oxytelus sculptus Gravenhorst	1	3	5	rt
Staphylininae sp. A	1	3	5	u
Staphylininae sp. B	1	3	5	u
Cordalia obscura (Gravenhorst)	1	3	5	rt
Aleocharinae sp.	1	3	5	u
Aphodius sp.	1	3	5	ob rf
Omosita discoidea (Fabricius)	1	3	5	rt
Rhizophagus parallelocollis Gyllenhal	1	3	5	rt
Oryzaephilus surinamensis (Linnaeus)	1	3	5	g
Lathridius minutus group	1	3	5	rd
Bruchinae sp.	1	3	5	u
Sitophilus granarius (Linnaeus)	1	3	5	g

Context: 5501C Sample: 603/T - beetle/bug main statistics

Erosion = 3 Fragmentation = 3; Weight = 0.690kg

Number of individuals estimated as	N =	35
Number of taxa	S =	32
Index of diversity (alpha)	alpha =	175
Standard error of alpha	SE alpha =	100
Number of 'certain' outdoor taxa	SOA =	2
Percentage of 'certain' outdoor taxa	%SOA =	6
Number of 'certain' outdoor individuals	NOA =	2
Percentage of 'certain' outdoor individuals	%NOA =	6
Number of 'certain' and probable outdoor taxa	SOB =	6
Percentage of 'certain' and probable outdoor taxa	%SOB =	19
Number of 'certain' and probable outdoor individuals	NOB =	6
Percentage 'certain' and probable outdoor individuals	%NOB =	17
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0

continued...

Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	1
Percentage of damp ground/waterside taxa	%SD =	3
Number of damp ground/waterside individuals	ND =	1
Percentage of damp ground/waterside individuals	%ND =	3
Number of strongly plant-associated taxa	SP =	1
Percentage of strongly plant-associated taxa	%SP =	3
Number of strongly plant-associated individuals	NP =	1
Percentage of strongly plant-associated individuals	%NP =	3
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	0
Number of wood-associated individuals	NL =	0
Percentage of wood-associated individuals	%NL =	0
Number of decomposer taxa	SRT =	16
Percentage of decomposer taxa	%SRT =	50
Number of decomposer individuals	NRT =	19
Percentage of decomposer individuals	%NRT =	54
Number of 'dry' decomposer taxa	SRD =	3
Percentage of 'dry'decomposer taxa	%SRD =	9
Number of 'dry' decomposer individuals	NRD =	5
Percentage of 'dry'decomposer individuals	%NRD =	14
Number of 'foul' decomposer taxa	SRF =	3
Percentage of 'foul' decomposer taxa	%SRF =	9
Number of 'foul' decomposer individuals	NRF =	3
Percentage of 'foul' decomposer individuals	%NRF =	9
Diversity index for RT not calculated, NRT = SRT or NRT < 20		
Number of individuals of grain pests	NG =	2
Percentage of individuals of grain pests	%NG =	6
Number of individuals of grain pests	NG =	2
Number of uncoded taxa	SU =	9
Percentage of uncoded individuals	PNU =	26

Context: 5501C Sample: 603/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Falagria or Cordalia sp.	2	6	1	rt
Cryptophagus sp. R	2	6	1	rd
Lathridius minutus group	2	6	1	rd
Trechus sp.	1	3	4	ob
Carabidae sp. A	1	3	4	ob
Carabidae sp. B	1	3	4	ob
Cercyon atricapillus (Marsham)	1	3	4	rf
Cercyon haemorrhoidalis (Fabricius)	1	3	4	rf
Cercyon sp.	1	3	4	u
Histerinae sp.	1	3	4	u
Acrotrichis sp.	1	3	4	rt
Omalium rivulare (Paykull)	1	3	4	rt
Omalium sp.	1	3	4	rt
Anotylus nitidulus (Gravenhorst)	1	3	4	rt d
Anotylus rugosus (Fabricius)	1	3	4	rt
Anotylus sculpturatus group	1	3	4	rt
Anotylus tetracarinatus (Block)	1	3	4	rt
Lathrobium sp.	1	3	4	u
Gyrohypnus sp.	1	3	4	rt
Aleocharinae sp. A	1	3	4	u
Aleocharinae sp. B	1	3	4	u
Aleocharinae sp. C	1	3	4	u
Aleocharinae sp. D	1	3	4	u
Aleocharinae sp. E	1	3	4	u

continued...

Aphodius sp.	1	3	4	ob rf
Oryzaephilus surinamensis (Linnaeus)	1	3	4	g
Atomaria sp.	1	3	4	rd
Enicmus sp.	1	3	4	rt
Phyllotreta nemorum group	1	3	4	oa p
Sitophilus granarius (Linnaeus)	1	3	4	g
Curculionidae sp.	1	3	4	oa
Coleoptera sp.	1	3	4	u

Context: 6361 Sample: 604/T - beetle/bug main statistics

Erosion = 5 Fragmentation = 3; Weight = 0.610kg

Number of individuals estimated as	N =	11
Number of taxa	S =	8
Index of diversity not calculated, n = s or n < 20		
Number of 'certain' outdoor taxa	SOA =	0
Percentage of 'certain' outdoor taxa	%SOA =	0
Number of 'certain' outdoor individuals	NOA =	0
Percentage of 'certain' outdoor individuals	%NOA =	0
Number of 'certain' and probable outdoor taxa	SOB =	0
Percentage of 'certain' and probable outdoor taxa	%SOB =	0
Number of 'certain' and probable outdoor individuals	NOB =	0
Percentage 'certain' and probable outdoor individuals	%NOB =	0
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	0
Percentage of strongly plant-associated taxa	%SP =	0
Number of strongly plant-associated individuals	NP =	0
Percentage of strongly plant-associated individuals	%NP =	0
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	0
Number of wood-associated individuals	NL =	0
Percentage of wood-associated individuals	%NL =	0
Number of decomposer taxa	SRT =	5
Percentage of decomposer taxa	%SRT =	63
Number of decomposer individuals	NRT =	7
Percentage of decomposer individuals	%NRT =	64
Number of 'dry' decomposer taxa	SRD =	1
Percentage of 'dry'decomposer taxa	%SRD =	13
Number of 'dry' decomposer individuals	NRD =	1
Percentage of 'dry'decomposer individuals	%NRD =	9
Number of 'foul' decomposer taxa	SRF =	0
Percentage of 'foul' decomposer taxa	%SRF =	0
Number of 'foul' decomposer individuals	NRF =	0
Percentage of 'foul' decomposer individuals	%NRF =	0
Diversity index for RT not calculated, NRT = SRT or NRT < 20		
Number of individuals of grain pests	NG =	0
Percentage of individuals of grain pests	%NG =	0
Number of individuals of grain pests	NG =	0
Number of uncoded taxa	SU =	3
Percentage of uncoded individuals	PNU =	36

continued...

Context: 6361 Sample: 604/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Cercyon analis (Paykull)	3	27	1	rt
Aleocharinae sp. B	2	18	2	u
Acrotrichis sp.	1	9	3	rt
Omalium rivulare (Paykull)	1	9	3	rt
Anotylus rugosus (Fabricius)	1	9	3	rt
Aleocharinae sp. A	1	9	3	u
Aleocharinae sp. C	1	9	3	u
Lathridius minutus group	1	9	3	rd

Context: 7224 Sample: 612/T

NO RECORDS OF BEETLES OR BUGS

Context: 7224 Sample: 612/T2

NO RECORDS OF BEETLES OR BUGS

Context: 7300C Sample: 620/T - beetle/bug main statistics

Erosion = 5 Fragmentation = 5; Weight = 1.000kg

Number of individuals estimated as	N =	33
Number of taxa	S =	12
Index of diversity (alpha)	alpha =	7
Standard error of alpha	SE alpha =	2
Number of 'certain' outdoor taxa	SOA =	1
Percentage of 'certain' outdoor taxa	%SOA =	8
Number of 'certain' outdoor individuals	NOA =	1
Percentage of 'certain' outdoor individuals	%NOA =	3
Number of 'certain' and probable outdoor taxa	SOB =	1
Percentage of 'certain' and probable outdoor taxa	%SOB =	8
Number of 'certain' and probable outdoor individuals	NOB =	1
Percentage 'certain' and probable outdoor individuals	%NOB =	3
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	0
Percentage of strongly plant-associated taxa	%SP =	0
Number of strongly plant-associated individuals	NP =	0
Percentage of strongly plant-associated individuals	%NP =	0
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	6
Percentage of wood-associated individuals	%NL =	18
Number of decomposer taxa	SRT =	8
Percentage of decomposer taxa	%SRT =	67
Number of decomposer individuals	NRT =	24
Percentage of decomposer individuals	%NRT =	73
Number of 'dry' decomposer taxa	SRD =	6

continued...

Percentage of 'dry'decomposer taxa	%SRD =	50
Number of 'dry' decomposer individuals	NRD =	22
Percentage of 'dry'decomposer individuals	%NRD =	67
Number of 'foul' decomposer taxa	SRF =	0
Percentage of 'foul' decomposer taxa	%SRF =	0
Number of 'foul' decomposer individuals	NRF =	0
Percentage of 'foul' decomposer individuals	%NRF =	0
Index of diversity of decomposer component	alpha RT =	4
Standard error	SE alpha RT =	1
Number of individuals of grain pests	NG =	1
Percentage of individuals of grain pests	%NG =	3
Number of individuals of grain pests	NG =	1
Number of uncoded taxa	SU =	1
Percentage of uncoded individuals	PNU =	3

Context: 7300C Sample: 620/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Tipnus unicolor (Piller & Mitterpacher)*	15	45	1	rd
Anobium punctatum (Degeer)*	6	18	2	l
Atomaria sp.	2	6	3	rd
Lathridius minutus group	2	6	3	rd
Megasternum obscurum (Marsham)	1	3	5	rt
Coprophilus striatulus (Fabricius)	1	3	5	rt
Staphylininae sp.	1	3	5	u
Oryzaephilus surinamensis (Linnaeus)	1	3	5	g
Cryptophagus ?scutellatus Newman	1	3	5	rd
Cryptophagus sp. A	1	3	5	rd
Cryptophagus sp. B	1	3	5	rd
Curculionidae sp.	1	3	5	oa

Context: 7300D Sample: 621/T - beetle/bug main statistics

Erosion = 5 Fragmentation = 5; Weight = 1.000kg

Number of individuals estimated as	N =	14
Number of taxa	S =	9
Index of diversity not calculated, n = s or n < 20		
Number of 'certain' outdoor taxa	SOA =	0
Percentage of 'certain' outdoor taxa	%SOA =	0
Number of 'certain' outdoor individuals	NOA =	0
Percentage of 'certain' outdoor individuals	%NOA =	0
Number of 'certain' and probable outdoor taxa	SOB =	0
Percentage of 'certain' and probable outdoor taxa	%SOB =	0
Number of 'certain' and probable outdoor individuals	NOB =	0
Percentage 'certain' and probable outdoor individuals	%NOB =	0
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	0
Percentage of strongly plant-associated taxa	%SP =	0
Number of strongly plant-associated individuals	NP =	0

continued...

Percentage of strongly plant-associated individuals	%NP =	0
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	1
Percentage of wood-associated individuals	%NL =	7
Number of decomposer taxa	SRT =	6
Percentage of decomposer taxa	%SRT =	67
Number of decomposer individuals	NRT =	11
Percentage of decomposer individuals	%NRT =	79
Number of 'dry' decomposer taxa	SRD =	3
Percentage of 'dry'decomposer taxa	%SRD =	33
Number of 'dry' decomposer individuals	NRD =	8
Percentage of 'dry'decomposer individuals	%NRD =	57
Number of 'foul' decomposer taxa	SRF =	0
Percentage of 'foul' decomposer taxa	%SRF =	0
Number of 'foul' decomposer individuals	NRF =	0
Percentage of 'foul' decomposer individuals	%NRF =	0
Diversity index for RT not calculated, NRT = SRT or NRT < 20		
Number of individuals of grain pests	NG =	1
Percentage of individuals of grain pests	%NG =	7
Number of individuals of grain pests	NG =	1
Number of uncoded taxa	SU =	1
Percentage of uncoded individuals	PNU =	7

Context: 7300D Sample: 621/T - species list in rank order

NOTE: this list includes 'semi-quantitative' records, marked by '*' in the first column of the comment following a record.

Taxon	Number	%	Rank	Ecodes
Tipnus unicolor (Piller & Mitterpacher)*	6	43	1	rd
Megasternum obscurum (Marsham)	1	7	2	rt
Anotylus sp.	1	7	2	rt
Stenus sp.	1	7	2	u
Anobium punctatum (Degeer)	1	7	2	l
Oryzaephilus surinamensis (Linnaeus)	1	7	2	g
Mycetaea hirta (Marsham)	1	7	2	rd
Lathridius minutus group	1	7	2	rd
Corticaria sp.	1	7	2	rt

Context: 7329 Sample: 622B/T - beetle/bug main statistics

Erosion = 4 Fragmentation = 4; Weight = 1.000kg

Number of individuals estimated as	N =	24
Number of taxa	S =	22
Index of diversity (alpha)	alpha =	121
Standard error of alpha	SE alpha =	83
Number of 'certain' outdoor taxa	SOA =	1
Percentage of 'certain' outdoor taxa	%SOA =	5
Number of 'certain' outdoor individuals	NOA =	1
Percentage of 'certain' outdoor individuals	%NOA =	4
Number of 'certain' and probable outdoor taxa	SOB =	1
Percentage of 'certain' and probable outdoor taxa	%SOB =	5
Number of 'certain' and probable outdoor individuals	NOB =	1
Percentage 'certain' and probable outdoor individuals	%NOB =	4
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0

continued...

Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	1
Percentage of strongly plant-associated taxa	%SP =	5
Number of strongly plant-associated individuals	NP =	1
Percentage of strongly plant-associated individuals	%NP =	4
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	1
Percentage of wood-associated individuals	%NL =	4
Number of decomposer taxa	SRT =	14
Percentage of decomposer taxa	%SRT =	64
Number of decomposer individuals	NRT =	16
Percentage of decomposer individuals	%NRT =	67
Number of 'dry' decomposer taxa	SRD =	5
Percentage of 'dry'decomposer taxa	%SRD =	23
Number of 'dry' decomposer individuals	NRD =	5
Percentage of 'dry'decomposer individuals	%NRD =	21
Number of 'foul' decomposer taxa	SRF =	2
Percentage of 'foul' decomposer taxa	%SRF =	9
Number of 'foul' decomposer individuals	NRF =	2
Percentage of 'foul' decomposer individuals	%NRF =	8
Diversity index for RT not calculated, NRT = SRT or NRT < 20		
Number of individuals of grain pests	NG =	1
Percentage of individuals of grain pests	%NG =	4
Number of individuals of grain pests	NG =	1
Number of uncoded taxa	SU =	5
Percentage of uncoded individuals	PNU =	21

Context: 7329 Sample: 622B/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Acrotrichis sp.	3	13	1	rt
Lyctocoris campestris (Fabricius)	1	4	2	rd
Trechus micros (Herbst)	1	4	2	u
Cercyon ?analis (Paykull)	1	4	2	rt
Cercyon atricapillus (Marsham)	1	4	2	rf
Cercyon ?terminatus (Marsham)	1	4	2	rf
Ptenidium sp.	1	4	2	rt
Omalium sp.	1	4	2	rt
Anotylus complanatus (Erichson)	1	4	2	rt
Oxytelus sculptus Gravenhorst	1	4	2	rt
Stenus sp.	1	4	2	u
Neobisnius ?villosulus (Stephens)	1	4	2	u
Staphylininae sp. A	1	4	2	u
Staphylininae sp. B	1	4	2	u
Anobium punctatum (Degeer)	1	4	2	l
Ptinus fur (Linnaeus)	1	4	2	rd
Oryzaephilus surinamensis (Linnaeus)	1	4	2	g
Cryptophagus sp.	1	4	2	rd
Atomaria sp.	1	4	2	rd
Lathridius minutus group	1	4	2	rd
Enicmus sp.	1	4	2	rt
Apion sp.	1	4	2	oa p

continued...

Context: 6339 Sample: 626/T - beetle/bug main statistics

Erosion = 4 Fragmentation = 5; Weight = 1.000kg

Number of individuals estimated as	N =	11
Number of taxa	S =	11
Index of diversity not calculated, n = s or n < 20		
Number of 'certain' outdoor taxa	SOA =	4
Percentage of 'certain' outdoor taxa	%SOA =	36
Number of 'certain' outdoor individuals	NOA =	4
Percentage of 'certain' outdoor individuals	%NOA =	36
Number of 'certain' and probable outdoor taxa	SOB =	5
Percentage of 'certain' and probable outdoor taxa	%SOB =	45
Number of 'certain' and probable outdoor individuals	NOB =	5
Percentage 'certain' and probable outdoor individuals	%NOB =	45
Diversity index for OB not calculated, NOB = SOB or NOB < 20		
Number of aquatic taxa	SW =	0
Percentage of aquatic taxa	%SW =	0
Number of aquatic individuals	NW =	0
Percentage of aquatic individuals	%NW =	0
Number of damp ground/waterside taxa	SD =	0
Percentage of damp ground/waterside taxa	%SD =	0
Number of damp ground/waterside individuals	ND =	0
Percentage of damp ground/waterside individuals	%ND =	0
Number of strongly plant-associated taxa	SP =	3
Percentage of strongly plant-associated taxa	%SP =	27
Number of strongly plant-associated individuals	NP =	3
Percentage of strongly plant-associated individuals	%NP =	27
Number of heathland/moorland taxa	SM =	0
Number of heathland/moorland individuals	NM =	0
Percentage of heathland/moorland individuals	%NM =	0
Number of wood-associated taxa	SL =	1
Number of wood-associated individuals	NL =	1
Percentage of wood-associated individuals	%NL =	9
Number of decomposer taxa	SRT =	3
Percentage of decomposer taxa	%SRT =	27
Number of decomposer individuals	NRT =	3
Percentage of decomposer individuals	%NRT =	27
Number of 'dry' decomposer taxa	SRD =	1
Percentage of 'dry'decomposer taxa	%SRD =	9
Number of 'dry' decomposer individuals	NRD =	1
Percentage of 'dry'decomposer individuals	%NRD =	9
Number of 'foul' decomposer taxa	SRF =	1
Percentage of 'foul' decomposer taxa	%SRF =	9
Number of 'foul' decomposer individuals	NRF =	1
Percentage of 'foul' decomposer individuals	%NRF =	9
Diversity index for RT not calculated, NRT = SRT or NRT < 20		
Number of individuals of grain pests	NG =	0
Percentage of individuals of grain pests	%NG =	0
Number of individuals of grain pests	NG =	0
Number of uncoded taxa	SU =	3
Percentage of uncoded individuals	PNU =	27

Context: 6339 Sample: 626/T - species list in rank order

Taxon	Number	%	Rank	Ecodes
Bembidion sp.	1	9	1	oa
Anotylus sculpturatus group	1	9	1	rt
?Neobisnius sp.	1	9	1	u
Aleocharinae sp.	1	9	1	u
Aphodius sp.	1	9	1	ob rf
Byrrhidae sp.	1	9	1	oa p

continued...

Anobium punctatum (Degeer)	1	9	1	l
Ptinidae sp.	1	9	1	rd
Halticinae sp.	1	9	1	oa p
Ceuthorhynchinae sp.	1	9	1	oa p
Coleoptera sp.	1	9	1	u

Appendix 5. Summary of main statistics for the scan-recorded assemblages from The Bedern, south-west Area X (1973-81.13 X) and north-east Areas II and IV (1976-81.14 II, IV). Key: N, S — means of sample values; PNOB etc. — percentages of main ecological categories (see Hall and Kenward 1990) calculated for the sum of records from all samples (rather than means of sample values); alpha, alpha OB, alpha RT — based on mean of sample values where the standard error is less than the value of alpha, the number of cases meeting this criterion being stated.

Statistic	All Areas	Area II (51	Area IV (18	Area X (75
N (concentration by NMI)	36.3	56.0	12.2	29.2
S number of taxa	19.0	30.4	8.3	14.0
alpha	45 (62 cases)	47 (33 cases)	46 (2 cases)	41 (27 cases)
PNOB	8.0	8.1	10.5	7.1
alpha OB	- (1 case)	- (1 case)	- (0 cases)	- (0 cases)
PNW	1.6	2.1	2.3	0.9
PND	1.8	2.3	1.4	1.2
PNP	2.7	2.6	1.8	2.9
PNM	0.0	0.0	0.0	0.0
PNL	5.6	4.2	18.2	6.4
PNG	2.9	1.3	1.8	5.1
PNRT	61.5	63.6	52.3	60.3
PNRD	23.8	20.2	27.3	28.4
PNRF	3.8	5.1	2.3	2.2
alpha RT	19 (55 cases)	22 (33 cases)	- (2 cases)	13 (20 cases)

Appendix 6. Identifications of timber samples from excavations at The Bedern, south-west, Area X (1973-81.13 X). Timbers from Areas II, IV, V, and XV of The Bedern excavations south-west of The Bedern road are also included since these areas have not been the subject of other reports and this is considered to be a convenient repository for the information.

This list contains all identifications of wood and timber specimens, whether artefacts, structural timbers or spot finds of wood from within deposits. * indicates identifications not made by ARH. Some samples were taken in anticipation of a date by dendrochronological means; an indication is given as to whether they were thought suitable or not.

Taxa recorded: *Alnus* = alder; *Corylus* = hazel; *Quercus* = oak; *?Populus* = ?aspen/poplar; *?Prunus* = ?cherry/plum/blackthorn; ?Rosaceae = ?rose family (probably ?Pomoideae = apple/pear/hawthorn/rowan, etc.); *Taxus* = yew.

Area	Context	Find no.	Timber no.	Identification	Notes
II	0	0	8050	*Quercus*	-
II	0	0	8106	*Quercus*	-
II	0	0	8111	*Quercus*	-
II	2169	0	8028	*Quercus*	too small for denrdo
II	2210	0	0	*Quercus*	Sample 161
II	2211	0	0	*Quercus*	Sample 162
II	2463	0	8030	*Quercus*	too small for dendro
II	2463	0	8032	*Quercus*	-
II	2463	0	8034	*Quercus*	-
II	2463	0	8036	*Quercus*	-
II	2463	0	8037	*Quercus*	-
II	2463	0	8039	*Quercus*	-
II	2463	0	8040	*Quercus*	-
II	2463	0	8042	*Quercus*	-
II	2463	0	8043	*Quercus*	-
II	2482	0	8115	*Quercus*	-
II	2482	0	0	*Fagus*	with *Anobium*; Sample 199
II	2571	0	8112	*Quercus*	= TN 8059
II	2573	0	8107	*Quercus*	-
II	2573	0	8108	*Quercus*	-
II	2573	0	8109	*Quercus*	-
II	2573	0	8110	*Quercus*	-
II	2755	0	0	*Quercus*	
II	2961	1522	0	*Taxus*	*spike
II	2971	0	0	*Quercus*	*plank
II	2971	8113	0	*Pinus*	*
II	2999A	0	8114	*Quercus*	= TN 8073 (part)
II	2999A	0	8113	*Quercus*	= TN 8073 (part)
II	4019	0	8116	*Quercus*	barrel stave
II	4019	0	8141	*Corylus*	2 half poles (barrel hoop)
II	4019	0	8141	*Alnus*	half pole (barrel hoop)
II	4019		8141	*Salix*	binding from barrel hoop
II	4077	1625	0	*Taxus*	*pin
II	4127	0	8102	*Quercus*	-
II	4208	1756	0	*?Prunus*	*
II	4208	1755	0	?Rosaceae	*pin
II	4227	1760	0	*Fraxinus*	*bowl fragments
II	4228	1709	0	Not identifiable	*
II	4228	1749	0	Not identifiable	*handle
II	4228	1766	0	*Fraxinus*	*bowl fragments
II	4228	1767	0	*Quercus*	*3 fragments
			8154	*Quercus*	
II	4228	0	8157	*Quercus*	*half barrel base
IV	1098	0	8025	*Quercus*	*
V	3005	1367	0	*Quercus*	*
X	5339	2039	0	*Quercus*	*
X	5342B	2086	0	*Quercus*	*
X	5406C	0	8185	*Quercus*	-
X	5466B	0	0	-	-
X	5466B	0	8186	*Quercus*	
X	5466B	0	8188	*?Populus*	
X	5493	0	8191	*Quercus*	-
X	5508	0	8190	*Quercus*	* lid
X	5534	0	8194	*Quercus*	sent for dendro
X	5535	0	8193	*Quercus*	?sent for dendro

X	6000	2093	0	*Quercus*	*
X	6372F	0	8195	*Quercus*	-
X	7001	2290	0	Not identifiable	*knife handle (too soft)
XV	0	0	8200	*Quercus*	from Bedern Hall; not sent for dendro
XV	0	0	8197	*Quercus*	from Bedern Hall; not sent for dendro
XV	0	0	8199	*Quercus*	from Bedern Hall; not sent for dendro
XV	0	0	8198	Not seen	timber from Bedern Hall