Ancient Monuments Laboratory
Report 195/87

INSECT REMAINS FROM BRIDGE STREET, IPSWICH.

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Summary

Three samples from the Bridge Street, Ipswich, site were submitted for examination, and insects were extracted using standard methods.

Species associated with rotting matter made up a substantial part of the fauna of the first sample, from a 13th century organic refuse deposit. The two most commonly occurring species are associated with strand-line litter and probably bred in the layer as it formed. Other taxa were those commonly found in insect assemblages from 9th- 13th century occupation sites. Three species were of note, being associated with heathland. A considerable number of scale insects (Coccoidea) were represented.

The second sample, from a layer identified as a late Saxon refuse deposit, dumped on the banks of the River Orwell, produced a fairly small number of insects. Aquatic species were fairly abundant, but the assemblage had no strong character and may have been mostly 'background fauna' or deposited by floodwater.

Few insects were recovered from the third sample, from a Middle Saxon deposit on a former foreshore of the River Orwell. Species from freshwater and other semi-natural habitats formed a substantial part of the assemblage.

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Introduction

Three samples from Bridge Street, Ipswich (IAS 6202) were submitted for examination (Table 1). Two of these gave modest assemblages of insects, but sample 3 contained only small numbers of fossils. A list of the insect species recorded is given in Table 2.

Methods

Insects were extracted using standard methods (Kenward et al. 1980). The data from the insect assemblages have been computer-recorded and processed using a system (written in PASCAL by HK) which produces ordered lists and statistics of value in interpretation. These are stored in hard copy in archive at the Environmental Archaeology Unit, University of York (EAU), at the Ancient Monuments Laboratory of the Historic Buildings and Monuments Commission, and a copy has also been submitted to the excavators. Original lists are retained in computer hard disc store and can be reprocessed at any time. Species lists and main statistics are also stored in the EAU database system. The insect material is currently stored at the EAU.

Sample 1

This sample, from a thirteenth century organic refuse deposit, included uncharred fragments of rye. It did not, however, yield any insects associated especially with stored cereals.

The 1 kg sample for which insects were counted in detail gave a minimum number of individuals of Coleoptera and Hemiptera of 123; 55 species were recorded. Many remains were highly fragmented - hence the large number of identifications to taxa above species level. Species associated with decaying matter made up a substantial part (67%) of the fauna. Much the most abundant species was *Cercyon littoralis* (29 individuals, 24% of the assemblage). This species is found in decaying seaweed along the strandline but doubtless it would invade rubbish deposited by human beings in the same situation. The second most abundant species, *Ptenidium punctatum*, occurs in similar habitats. The low diversity of the decomposer component implies a breeding community and these two species probably bred in the layer as it formed. The remaining species were mainly among those which are of frequent occurrence in insect assemblages from 9th - 13th century occupation sites (for example Durham (Kenward 1979a), York (Kenward 1984-5 and Hall et al. 1983), and Oslo (Kenward 1979b and forthcoming)). Their numbers, singly or as a group, were too small for any firm conclusions as to their origins, but they may have been a mixture of colonisers of the rotting matter exploited by the most abundant species (many of the species are recorded from wrack by Backlund (1945)), and "background" fauna of mixed origin. Three records are of note: *Apion fuscirostre* develops in the pods of broom (*Sarothamnus* (= *Cytisus*) *scoparius*), while *Bradycellus ruficollis* and *Ulopa ?reticulata* are both associated with heathland, especially with heath (*Calluna vulgaris*). The sample also included a considerable

number (over 20) of scale insects (Coccoidea). Many of those which were in reasonably good condition appeared to be adult females of ?Lepidosaphes pomorum by reference to figures in Newstead (1900). According to the same source this scale has a variety of hosts, incidentally including Calluna and Sarothamnus.

Sample 2

This material was collected from a layer identified by the excavators as a Late Saxon refuse deposit, dumped on the bank of the River Orwell. A 0.4kg subsample has been examined in detail. A minimum of 79 individuals including 52 species were recorded. Many taxa were represented only by single sclerites, or small fragments of sclerite, and so could not be closely identified. No insects were particularly numerous; there were six individuals of Anotylus nitidulus, the species at Rank 1. Phloeophthorus rhododactylus, at Rank 2 (4 individuals), bores under the bark of broom (Sarothamnus) and its relatives.

Corixidae sp. ("water boatmen"), also at Rank 2, are aquatic. Aquatics were rather abundant in this assemblage, making up 10% of species and individuals. Apart from this and the strong representation of taxa from other "natural" habitats, the assemblage had no strong character and may have been mostly background fauna, or deposited by floodwater. A second subsample of this material was processed and sorted, but not recorded in detail. It gave an assemblage of very similar character to the present one, with a few additional species, including Daphnia (water flea) ephippia.

Sample 3

This Middle Saxon deposit from a former foreshore on the River Orwell consisted primarily of river gravel, but included an organic component. A total of 1.95 kg of material was processed, but rather few insects were recovered. Twenty four beetle and bug taxa were noted, none certainly represented by more than one individual. Species from freshwater and other semi-natural habitats formed a substantial part of the assemblage. One species, Oulimnius tuberculatus, lives in clear flowing water, but of course the single specimen may have been carried over some distance.

Acknowledgements

I am grateful to Lesley Morgan for preparing the material, and to Enid Allison for assistance in producing this report.

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Table 1

Sample no.	Material examined and treatment		Description of sample material
1	Sub-sample /1 : 1.0kg	(C)	Richly organic, peaty; compressed monocotyledon stems small twigs; a few sand grains.
	Sub-sample /2 : 1.05kg	(E)	Similar to above.
2	Sub-sample /1 : 0.5kg	(C)	Richly organic silt.
	Sub-sample /2 : 0.4kg	(E)	Similar.
3	Sub-sample /1 : 1.0kg	(E)	Stony sand with some organic matter.
	Sub-sample /2 : 1.95kg	(C)	Similar.

C = insects counted and computer processed

E = insects examined only

Table 2. List of insects from Bridge Street, Ipswich. Nomenclature follows Kloet and Hincks (1964 and 1977).

Hemiptera:
- Scolopostethus sp.
- Lygaeidae spp.
- ?Salda littoralis (Linnaeus)
- Saldula sp.
- Corixidae sp.
- Ulopa ?reticulata (Fabricius)
- ?Lepidosaphes pomorum (Bouche)

Coleoptera:
- ?Pterostichus sp.
- Agonum sp.
- Bradycellus ruficollis (Stephens)
- Carabidae spp.
- Helophorus sp.
- Cercyon analis (Paykull)
- Cercyon haemorrhoidalis (Fabricius)
- Cercyon littoralis (Gyllenhal)
- Cercyon lugubris (Olivier)
- Cercyon sp.
- Megasternum obscurum (Marsham)
- Cryptopleurum minutum (Fabricius)
- Hydrophilinae sp.
- Acritus nigricornis (Hoffman)
- Histerinae sp.
- Ochthebius sp.
- Hydraena sp.
- Ptenidium punctatum (Gyllenhal)
- Ptenidium sp.
- Acrotrichis sp.
- Micropeplus fulvus Erichson
- Dropephylla sp.
- Omalium sp.
- Xylodromus ?concinnus (Marsham)
- Omaliinae sp.
- Carpelimus ?bilineatus Stephens
- Carpelimus sp.
- Platystethus ?nitens (Sahlberg)
- Platystethus arenarius (Fourcroy)
- Platystethus cornutus group
- Platystethus nitens (Sahlberg)
- Anotylus complanatus (Erichson)
- Anotylus nitidulus (Gravenhorst)
- Anotylus sculpturatus group
- Oxytelus sculptus Gravenhorst
- Stenus spp.
- Gyrohypnus fracticornis (Muller)
- ?Philonthus sp.
- Staphylininae sp.
- Cordalia obscura (Gravenhorst)
- Falagria caesa Erichson or sulcatula (Gravenhorst)
- Falagria sp.
- Aleocharinae spp.
- Trox scaber

Aphodius granarius (Linnaeus)
Aphodius spp.
Oxyomus sylvestris (Scopoli)
Melolonthinae sp.
?Phyllopertha horticola (Linnaeus)
Clambus sp.
Oulimnius tuberculatus (Muller)
Elateridae sp.
Anobium punctatum (Degeer)
Ptilinus pectinicornis (Linnaeus)
Ptinus sp.
Omosita colon (Linnaeus)
Cryptophagus ?scutellatus Newman
Cryptophagus sp.
Atomaria ?nigripennis (Kugelann)
Atomaria sp.
Mycetaea hirta (Marsham)
Lathridius minutus group
Corticaria spp.
Corticarina or Cortinicara sp.
Anthicus sp.
?Gracilia minuta (Fabricius)
Cerambycidae sp.
Bruchinae sp.
Phyllotreta sp.
?Longitarsus sp.
Chaetocnema sp.
Halticinae spp.
Cassida sp.
Apion fuscirostre (Fabricius)
Apion sp.
Ceutorhynchus sp.
Ceuthorhynchinae sp.
Curculionidae sp.
Phloeophthorus rhododactylus (Marsham)