

THE ARTHROPOD FAUNA OF THE QUAKER'S BURIAL GROUND, STAINES

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Arthropods, mainly insect remains, were present in four phases of the Quaker's Burial Ground samples, the Roman pond, the 220 - 250 AD silt deposit and the 250 - 410 AD and Middle Medieval pit deposits. The similarity between the productive samples indicates that the local environment changed little between Roman and Medieval times.

Roman pond (Y14, samples SL - S8).

Faunal differences appearing between the pond samples are probably the result of selective preservation as the overall assemblage from the samples indicate similar environmental conditions but numbers vary, and insect remains were absent from four of them. Open water is required by a number of beetles recovered from the pond, notably Copelatus haemorrhoidalis and Noterus clavicornis. The record of the latter species was of an individual whose fused elytra indicated that it was flightless, a common state in Noterus populations (Jackson 1950). Although not a water-beetle, Tanysphyrus lemnae is strongly indicative of pools or slow moving streams as the species lives semi-aquatically on the floating leaves of duck-weed. The most commonly represented faunal element however, is that of the wet mud and damp/rotting vegetation suite of beetles which typically occur at pond edges. These include all the Hydrophilidae, numerically, the commonest family, and the related habitats would be suitable for number of Staphylinidae. The pond, therefore, was surrounded by damp, marshy areas. The comparative high proportion of dung beetles in the fauna may suggest that the pond was situated near a grazing area.

Phase XIa, Silt deposit (220 - 250 AD).

The sole arthropod remains from this phase were of a millipede body segments preserved by partial replacement by CaCO<sub>3</sub> (Girling 1979).

Phase XII (250 - 410AD).

Although the numbers of arthropods from these samples are low, there is a marked absence of aquatic or pond-side species, suggesting that the pit was largely dry. The fish remains identified by Mrs A. Locker as eel and probably chub or dace are presumably food debris. The only beetle in the samples with a probable pond-side origin is Notaris acridulus, a weevil whose host plants, Cyperaceae, were perhaps used for flooring. There is no indication from the fauna of the pit usage.

Phase XVI (Middle Medieval 1300 - 1500 AD)

There are indications from the ~~ROM~~ fauna that pits S1 and S2 at some time contained water, but unlike the Roman pond samples, the pond-side suite is not represented, those species which live in rotting vegetation probably finding suitable habitats in rotting rubbish in the pit. Seven individuals of Anobium punctatum, the wood-worm may have been living in the pit lid or lining, or in discarded wood. Mycetaea hirta and Lathridius minutus are typically found in dwellings, outhouses and hayrick and are often encountered in urban insect assemblages. The pit may have acted as a trap for the numbers of Carabidae, beetles which run across the ground and which are liable to fall into holes. Dung may have been one component of the final pit infill as several dung-beetles were recovered from the samples. The woodlice, Porcellio scaber, present as CaCO<sub>3</sub> replaced fossils, are general scavengers common in any accumulation of organic material. There is no indication from the fauna of the pit usage, the contained arthropods probably related to a final stage when the pit was filled with rubbish.

References

- Girling, M.A. (1979) Calcium carbonate-replaced arthropods from archaeological deposits. Journal of Archaeological Science (in press)
- Jackson, D. (1950) Noterus clavicornis Deg. and N. capricornis Hbst. (Col. Dytiscidae) in Fife. Entomologists' Mon. Mag. 84, 39 - 43.

Note

In the faunal list, the column headings are;

- 1 = Roman pond
- 2 Phase XIa
- 3 Phase XII
- 4 Phase XVI

QUAKERS' BURIAL GROUND, STAINES

<u>FAUNAL LIST</u>	1	2	3	4
ISOPODA				
<u>Porcellio scaber</u> Lat.	-	-	-	6
DIPLOPODA				
Gen. et spp. <u>indet.</u>	-	1	-	-
INSECTA				
DERMAPTERA				
<u>Forficula auricularia</u> L.	2	-	1	7
HEMIPTERA				
Heteroptera-Homoptera <u>indet.</u>	-	-	-	6
COLEOPTERA				
Carabidae				
<u>Carabus</u> sp.	-	-	-	1
<u>Nebria brevicollis</u> (F.)	-	-	1	-
<u>Dyschirius</u> sp.	-	-	-	1
<u>Clivina collaris</u> (Herbst) or <u>fossor</u> (L.)	1	-	-	-
<u>Trechus obtusus</u> Er. or <u>quadristriatus</u> (Schrank)	2	-	-	1
<u>Bembidion</u> spp.	2	-	-	1
<u>Pterostichus</u> sp.	1	-	-	-
<u>Amara</u> spp.	2	-	-	5
<u>Harpalus rufipes</u> (Deg.)	-	-	-	1
<u>Harpalus</u> spp.	1	-	2	1
<u>Dromius</u> sp.	-	-	-	1
Haliplidae				
<u>Haliplus</u> sp.	-	-	-	1
Noteridae				
<u>Noterus clavicornis</u> (Deg.)	1	-	-	-
Dytiscidae				
<u>Copelatus haemorrhoidalis</u> (F.)	1	-	-	1
<u>Agabus bipustulatus</u> (L.)	-	-	-	2
Hydrophilidae				
<u>Helophorus brevipalpis</u> Bed.	-	-	-	1
<u>H. grandis</u> Ill.	-	-	-	1
<u>Sphaeridium lunatum</u> F.	2	-	-	1
<u>Cercyon</u> spp.	9	-	-	4
<u>Megasternum obscurum</u> (Marsh)	3	-	-	-
<u>Cryptopleurum minutum</u> (F.)	1	-	-	-

<u>Hydrobius fuscipes</u> (L.)	4	-	-	-
<u>Anacaena globulus</u> (Payk.)	1	-	-	2
<u>Enochrus</u> spp.	2	-	-	1
Histeridae				
<u>Onthophilus striatus</u> (Forst.)	1	-	-	-
<u>Hister</u> sp.	-	-	1	-
Hydraenidae				
<u>Ochthebius minimus</u> (F.)	3	-	-	1
Silphidae				
<u>Silpha</u> sp.	-	-	1	-
Staphylinidae				
<u>Lesteva longoelytrata</u> (Goeze)	-	-	-	3
<u>Omalium</u> sp.	-	-	-	1
<u>Platystethus arenarius</u> (Fourc.)	-	-	1	-
<u>Platystethus</u> sp.	-	-	-	1
<u>Anotylus</u> spp.	-	-	-	7
<u>Stenus</u> sp.	1	-	-	-
<u>Rugilus geniculatus</u> (Er.) or <u>similis</u> (Er.)	1	-	-	-
<u>Xantholinus</u> spp.	2	-	1	-
<u>Philonthus</u> sp.	2	-	-	-
<u>Staphylinus</u> sp.	-	-	-	1
<u>Tachinus</u> sp.	1	-	1	1
Tachyporinae <u>indet.</u>	-	-	-	1
<u>Aleochara</u> sp.	-	-	-	1
Aleocharinae <u>indet.</u>	-	-	-	2
Geotrupidae				
<u>Geotrupes</u> sp.	-	-	1	-
Scarabaeidae				
<u>Aphodius rufipes</u> (L.)	-	-	1	-
<u>Aphodius</u> spp.	17	-	2	6
<u>Rhyssemus germanicus</u> (L.)	10	-	-	2
Elateridae				
<u>Hypnoidus riparius</u> (F.)	-	-	-	2
Dryopidae				
<u>Dryops</u> sp.	1	-	-	-
Cantharidae				
<u>Cantharis fusca</u> L.	-	-	-	1
Anobiidae				
<u>Anobium punctatum</u> (Deg.)	-	-	1	7
Ptinidae				
<u>Ptinus</u> sp.	-	-	-	1
Rhizophagidae				
<u>Rhizophagus</u> sp.	-	-	1	-

Cryptophagidae				
<u>Cryptophagus</u> sp.	-	-	-	2
Phalacridae				
<u>Stilbus</u> sp.	1	-	-	-
Coccinellidae				
<u>Coccidula rufa</u> (Herbst)	-	-	-	1
Endomychidae				
<u>Mycetaea hirta</u> (Marsh.)	-	-	-	1
Lathridiidae				
<u>Lathridius minutus</u> (L.)	-	-	-	1
Chrysomelidae				
<u>Phaedon</u> sp.	-	-	1	-
<u>Phyllotreta</u> spp.	-	-	-	9
<u>Chaetocnema concinna</u> (Marsh.)	1	-	1	2
<u>Chaetocnema</u> sp.	-	-	-	1
Apionidae				
<u>Apion aeneum</u> (F.)	3	-	-	1
<u>Apion</u> spp.	2	-	-	3
Curculionidae				
<u>Sitona lepidus</u> Gyll.	-	-	-	1
<u>Sitona</u> sp.	-	-	-	1
<u>Tanysphyrus lemnae</u> (Payk.)	1	-	-	-
<u>Notaris acridulus</u> (L.)	-	-	1	-
<u>Ceutorhynchus</u> sp.	3	-	-	5
<u>Rhynchaenus</u> sp.	-	-	-	1
HYMENOPTERA				
Formicidae	-	-	-	5
Parasitica	-	-	-	5
DIPTERA				
Tipulidae	1	-	-	1
Gen. et spp. <u>indet.</u>	6	-	3	25
ARANAEA	-	-	-	1