ANCIENT MONUMENTS LABORATORY

REPORT

3836

SERIES/No CONSULTANT

AUTHOR Peter Osborne Dec 1982

TITLE Fiskerton, Lincs. Preliminary report on insect remains from F75 and report on sample 160cms.

FISKERTON LINCS. PRELIMINARY REPORT ON INSECT REMAINS FROM F75

Peter Osborne

Insect fragments, mostly Coleoptera and Trichoptera were numerous, and examp. from the orders Hemiptera, Odonata, Diptera and Megaloptera were also noted. Preservation of these remains was very good.

The beetle remains fell into two groups, aquatic and terrestrial. The aquatic species were mostly Hydrophilidae and Hydraenidae, belonging to the genera Helophorus, Hydrochus and Ochthebius and the Dytiscid genera Colymbetes, Rhantus and Agabus. The whirligig beetle, Gyrinus, was present and also the weevil Tanysphyrus lemnae which lives on the duckweed, Lemna. This assemblage suggests still or very slowly flowing water, a suggestion supported by the aquatic members of the other orders, like the numerous Caddis larvae, the alder fly (Sialis)and a small dragonfly. As well as remains of aquatic insects, statoblasts of the bryozoan Cristatella mucedo were recovered, another inhabitant of quiet water. The presence of reed beds at the water's margin was indicated by a number of fragments of Donacia spp. and by Corylophus carsidioides, a species which is usually found amongst fallen reed stems.

The dry land beetles were chiefly species of open ground. The dung beetles Aphodius, Geotrupes and Onthophagus, and the staphylinid Anotylus rugosus which is most often found in dung , argue for the presence of pasture with grazing animals and the occurrence of the chafer Phyllopertha horticola whose larvae live in grass roots, supports this.

A number of other beetle species were recovered, amongst which were the following: Carabus sp., Bembidion fumigatum (Dufts.), Pterostichus aterrimus (Hbst.), Cercyon sp., Onthophilus striatus (Forst.), Hister sp., Acrotrichis sp., Silpha atrata L., Stenus sp., Lathrobium terminalis Gr., Xantholinus linearis (Ol.) or X. longiventris (Heer), Staphylinus olens (Mull.), Onthophagus ovatus (L.), Dryops sp., Agriotes sp., Anobium punctatum Deg., Chrysolina polita (L.), Chrysolina sp., Strophosomus sp., Sitona lepidus Gyll., Hypera punctata (F.), and Alophus triguttatus .

None of these is inconsistent with the theory that the site consisted of a riverside swamp near open grazing land. Some would suggest accumulations of vegetable debris. Anobium punctatum lives in dead wood but this is the only indication that trees or timbers might have been in the vicinity, apart from seeds of Almus (alder), and its

pollen record, along with those of some other trees. As the insects could have come from a single tree, this is not an indication of woodland.

Probably the most interesting species so far identified from this horizon is Pterostichus aterrimus, an insect which is very rare in Britain today. Its typical habitat is fenland, and it has not been recorded living further north than Norfolk.

As implied above, the list given is not the total of the beetle species from this sample. Further work would lengthen the list and produce more specific names against those entriesso far only named to genus. A subjective assessment of the total assemblage, however, suggests that the inferences to be drawn from this extended list would be the same as those given here. That is, a pond or slowly flowing river with reed beds along the banks and occasional alder trees, set in grazing land. The climate appears to be very much as today's, the slight southern withdrawal of Pterostichus aterrimus being due more probably to fenland drainage than climatic deterioration.

Report on the Coleoptera from Fiskerton, Lincs., sample 160 cms
by P.J.Osborne

This sample was examined in order to see what, if any, changes in the environment had taken place between the time of deposition of the material and the age of sample 75cm. (see other report)

Insect remains were much less abundant than in no. 75, possibly reflecting a less varied habitat at the earlier time. Orders other than Coleoptera were only represented by a few fragmentary Caddis larvae and pieces of adult Hymenoptera. The beetle fauna, too, was more sparse but the few species present were very consistent in their environmental implications.

Faunal list

Name	no. of indivs.
Carabidae	
Bembidion sp.	1
Odacantha melanura (L.)	1
Dromius longiceps Dej.	1
Hydrophilidae	
Megasternum obscurum (Marsh.)	1
Hydraenidae	
Ochthebius minimus (F.)	4
Staphylinidae	
Lesteva heeri Fauvel	5
Carpelimus sp.	2
Platystethus ?nitens (Sahlb.)	1
Stenus spp.	4
Gabrius sp.	1
Alaeocharinae indet.	3

Faunal list cont'd

Scarabaeidae	
Aphodius sp.	1
Corylophidae	
Corylophus cassidioides (Marsh.)	2
Coccinellidae	
Anisosticta 19-punctata (L.)	1
Chrysomelidae	
Plateumaris braccata (Scop.)	9

The most abundant species, by a considerable margin, was *Plateumaris braccata*, strangely unnaccompanied by any other members of the Donaciinae, all of which share more or less similar habits. Adults of *P. braccata* are found on the emergent leaves of reeds growing in water and the larvae live on the submerged roots. The usual host plant of *P. braccata* is *Phragmites communis*. Two carabids were specifically named, *Odacantha melanura* and *Dromius longiceps*, both of which are predators found exclusively in reed beds whilst *Corylophus cassidioides* usually lives amongst the fallen stems of dead reeds. The ladybird *Anisosticta 19-punctata* inhabits marshy places and it, too, is often found on reeds. *Ochthebius minimus* is an aquatic beetle which lives in still or slowly flowing water whilst the staphylinids *Carpelimus*, *Platystethus* and *Stenus* are usually found at the margins of water and *Lesteva heeri* lives in damp places, often in moss.

The environment implied by this assemblage, then, is a reed swamp or fen with standing water over a muddy bottom. All the species recorded have been taken in the Cambridgeshire fens. This summary supports the hypothesis put forward earlier that the habitat may have been much more monotonous at this time than at the time of deposition of sample 75. Only *Aphodius* sp., a dung beetle,

suggests a different environment and as these insects are strong fliers and only a solitary specimen was recorded, it may have come from some distance.

Although most members of this fauna are more or less restricted to southern and eastern England, this has probably more to do with the location of surviving fenland than with climate. There is nothing in the assemblage to suggest that it was either warmer or colder than the same area today.