An Assessment of the Insect Remains from the Drigg Burnt Mound

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INTRODUCTION

Four samples of material from the late Neolithic/ Early Bronze age burnt mound at Drigg were assessed to determine their potential for insect analysis. A single sample (1017) came from layer [17] a peat which under laid the burnt mound. A further single sample (1014) came from the charcoal rich layer [16] associated with the burnt mound material. This layer has been radiocarbon dated to 2480-2280 cal BC. Two samples (1006 and 1005) came from layer [14] which was a peat which overlaid the mound material. This layer has been dated to 2310-2130 cal BC.

It was hoped that an assessment of the insect remains from these samples would provide information on the following:

1) Are there insect remains present and what is the extent of their preservation?
2) Are the faunas of interpretative value?
3) Do the insects offer any archaeological insights into the nature and use of the burnt mound?
4) Do the insect remains suggest the nature of the landscape that surrounded the mound?

METHODS

The samples were processed using the standard method of paraffin flotation as outlined in Kenward *et al.* (1980). During processing considerable amounts of modern root mat was encountered. This resulted in vary large flots being produced. As a result the flots have not been fully sorted. The system for "scanning" faunas as outlined by Kenward *et al.* (1985) was followed in this assessment.

When discussing the faunas recovered, the following considerations should be taken into account:

1) Identifications of the insects present are provisional. In addition, many of the taxa present could be identified down to species level during a full analysis, producing more detailed information.

2) The various proportions of insects suggested are very notional and subjective. As a result, these faunas should be regarded as incomplete and possibly biased.

RESULTS

The insect taxa recovered are listed in Table 1. The taxonomy follows that of Lucht (1987) for the Coleoptera (beetles) and Smith, K.G.V. (1989) for the Diptera (flies).

The numbers of individuals present for each taxa is estimated using the following scale: + = 1-2 individuals, ++ = 2-5 individuals, +++ = 5-10

individuals, ++++ = 10-20 individuals, ++++++ = 100s of individuals. The taxonomy used for the Coleoptera (beetles) follows that of Lucht (1987). The nature of the preservation and the potential for archaeological interpretation is outlined in Table 2.

DISCUSSION

Three samples (1017, 1014, 1006) produced moderately sized insect faunas mainly consisting of the remains of beetles (Coleoptera). Unfortunately, the majority of these remains were poorly preserved showing both erosion and fragmentation. This was often severe enough to suggest that finer and smaller insect remains may have been lost to erosion and decay. The fauna from sample 1005 was particularly eroded and produced only a minimal fauna.

The insect faunas from 1017, 1014, 1006 produced faunas that are dominated by beetles which are associated with slow flowing or stagnant water such as the *Agabus, Ochthebius, Hydraena*, *Enochrus* and *Cyphon* species. Unfortunately, even if these species were identified to species level, they do not have an interpretive potential beyond this. There are also very limited indications that reed sweet-grass (*Glyceria maxima (*Hartm.) Holmb.) may have grown in the area. This is suggested by the presence of the weevil *Notaris acridulus* which feeds on this plant.

There are very limited indications that wood, trees and timber may have been in the area. This is suggested by the presence of single individuals of *Grynobius planus, a type of 'woodworm'* and *Rhynchaenus* spp. which is a *'leaf miner'* in sample 1006). A single wing case from an *Aphodius* dung beetle) from the same sample might indicate pasture and grassland.

CONCLUSIONS AND RECOMMENDATIONS

This assessment of the insect faunas from the burnt mound at Drigg has indicated that though insect remains are present these are very eroded and, therefore, potentially biased.

Equally, the faunas recovered appear to have a very low potential in terms of interpreting the site.

It is recommended that no analysis beyond this assessment and report occurs. These results can be summarised in the final report.

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Table 1. Context, sample details and the insect taxa recovered from Drigg.

Layer	**17**	**16**	**14**	**14**
Context	1017	1014	1006	1005
weight (kg)	5	6	5.4	6
volume (l)	7	7.5	6	6
% of flot sorted	50%	50%	100%	50%
COLEOPTERA				
Carabidae				
Dyschirius spp.	-	+	+	-
Bembidion spp.	+	+++	+++	-
Trechus spp.	-	-	+	-
Pterostichus spp.	+	++	+++	
Agonum spp.	+	-	-	-
Hydrophilidae				
Hydroporus spp.	**-**	**-**	**+**	**+**
Agabus spp.	**+**	**-**	**+**	**-**
Hydreanidae				
Hydraena spp.	**++**	**++**	**+**	**-**
Octhebius spp.	**+**	**-**	**+**	**-**
Hydrophilidae				
Cercyon spp.	++	-	-	-
Enochrus spp.	+		+	+
Staphylinidae				
Micropeplus spp.	-	+	-	-
Olophrum spp.	++	+	-	-
Lesteva spp.	++	+	+	-
Stenus spp.	++	+	+	-
Lathrobium spp.	++	-	-	-
Pselaphidae				
Pselaphidae Gen. & spp. indet.	-	+	+	-
Elateridae				
Elateridae Gen. & spp. indet.	+	-	-	-
Helodidae				
Helodidae Gen. & spp. indet.	**+++**	**-**	**+**	**-**
Byrrhidae				
Byrrhus spp.	+	-	-	-
Anobiidae				
Grynobius planus(F.)	-	-	+	-
Scarabaeidae				
Aphodius spp.	+	-	+	-
Chyrsomelidae				
Donacia spp.	+	-	-	-
Curculionidae				
Apion spp.	-	+	-	-
Otiorhynchus spp.	-	-	++	+
Alophus triguttatus (F.)	-	+	-	-
Notaris acridulus (L.)	+	++	+	-
Rhynchaenus spp.	-	-	+	-

Table 2. Summery of the nature of the insect faunas from Drigg

Sample number	Degree of preservation	Comparative size of faunas	Water conditions	landscape / deposit	Overall potential of this sample
1017	poor	moderate	Slow flowing indicated by *Agabus, Ochthebius, Hydraena*, *Enochrus* and *Cyphon*	Indication of *Glyceria maxima* since this is the host of *Notaris acridulus* other waterside plants by *Donacia.* no indicators for the wider landscape	poor
1014	poor	moderate	slow flowing by limited numbers of Hydraena	Indication of *Glyceria maxima* since this is the host of *Notaris acridulus*. No indications of wider landscape	poor
1006	moderate/ poor	moderate	Slow flowing indicated by Agabus, Hydroporus, Ochthebius and Hydraena	Minimal indicators for trees (single *Grynobius planus*, single *Rhynchaenus*) and pasture (single *Aphodius* dung beetle) in wider landscape	poor
1004	Very poor	small	slow flowing	no information	poor