Report on a sample of peat from excavations at Saltshouse Road, Hull, 1991

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A sample of peat recovered during excavations at Saltshouse Road, Hull, by Humberside Archaeological Unit in September 1991, was submitted for an evaluation of plant and animal remains. A layer 0.43 m thick, it was the earliest deposit encountered at the site and lay at a depth of 1.53 m (0.11 m above OD) below the present soil surface. The overburden comprised 1.38 m of alluvial clay and a 0.15 m thick topsoil. The peat, which did not appear to be extensive, was encountered in one of four trenches cut at this site and in only one of a series of test pits (to the east of the trench).

A 1 kg subsample of the dark brown woody detritus peat was processed by routine methods involving disaggregation, sieving to 300 μm and paraffin flotation. Both the resulting flot and residue were examined for plant macrofossils, the flot for invertebrate remains, mainly insects.

A large proportion of the residue comprised woody and herbaceous detritus, especially in the <2 mm fractions. Wood and twig fragments were abundant in the >4 mm fraction, the largest being about 3 cm in maximum dimension; the wood included oak, alder and some other material that was only tentatively identified as Pomoideae (a group including apple, rowan and hawthorn). Amongst the other remains recorded, buds and bud-scales of oak (Quercus) were especially common and there were smaller numbers of female cone axes and fruits of alder (Alnus glutinosa) and very small numbers of seeds of other woody taxa-holly (Ilex aquifolium), rowan (Sorbus aucuparia) and a Rubus sp. (raspberry/blackberry etc.). Strawberry (Fragaria vesca) was present as a single achene in both flot and residue, but this tally of edible fruits seems as likely to have originated in bird droppings as in human refuse, for no indicators of human activity were recorded. Indeed, the remaining plant taxa were all certainly or probably aquatic or waterside, with the exception of a single self-heal (Prunella vulgaris) nutlet. Most abundant were mericarps of the umbellifer Oenanthe aquatica (fine-leaved water dropwort), a species which often occurs in wet places that become dry in summer.

There were numerous ephippia (resting eggs) of Daphnia (water fleas) in the flot, together with an assortment of water beetles, amongst which Ochthebius sp. was the most abundant. Still or sluggish water with submerged and/or emergent vegetation is probably indicated. There were also numerous specimens of one of the Cercyon spp. associated with waterside situations, and various other waterside beetles were noted. There were few definitely terrestrial forms: these included a click beetle, an Aphodius dung beetle, and a small elytral fragment which was probably of Grynobius planus. More material would need to be processed, preferably using a technique designed to limit fragmentation, for the full range of terrestrial habitats to be investigated.

To summarise, the plant and invertebrate remains suggest a natural peat forming in a woodland pond or in fen carr, where the only input was plant debris, autochthonous invertebrates and a small component of insects transported from further away.

This deposit offers a rare opportunity to study vegetational and environmental history in the southern reaches of Holderness and as such should be submitted to a more detailed biological investigation. It is recommended that a larger sample is carefully disaggregated and examined for its content of plant and animal remains; the insects include many taxa whose identification would be time consuming. Such a study would therefore require a day or two of technician time (current cost would be of the order of £100) and a total of three weeks of Research Fellow time in the EAU.