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**Evaluation of plant and invertebrate remains  
from a deposit at Gillibrand Hall, Chorley,  
Lancashire (site code: B3423A)**

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**Evaluation of plant and invertebrate remains from a deposit at  
Gillibrand Hall, Chorley, Lancashire (site code: B3423A)**

by

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**Summary**

*A single sediment sample recovered during excavations at Gillibrand Hall, Chorley, Lancashire, was submitted for an evaluation of its bioarchaeological potential. Most of the deposits encountered were of medieval and post-medieval date.*

*The sample, from a fill of a linear feature containing 16<sup>th</sup> century pottery, gave plant and invertebrate assemblages which were highly characteristic of a deposit formed in a pond, moat or ditch overhung by trees.*

*Although the flora and fauna are worth recording for future synthesis further, detailed, investigation would be of fairly limited value at the site level unless carried out in relation to a specific archaeological or palaeoecological question.*

**KEYWORDS:** GILLIBRAND HALL; CHORLEY; LANCASHIRE; EVALUATION; 16<sup>TH</sup> CENTURY; MEDIEVAL; POST-MEDIEVAL; PLANT REMAINS; CHARRED PLANT REMAINS; INVERTEBRATE REMAINS

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## Evaluation of plant and invertebrate remains from a deposit at Gillibrand Hall, Chorley, Lancashire (site code: B3423A)

### Introduction

An evaluation excavation was undertaken by Gifford and Partners Ltd at Gillibrand Hall, Chorley, Lancashire (NGR SD 574 167), between the 17<sup>th</sup> and the 25<sup>th</sup> of July 2003.

The area of the evaluation was the possible location of Gillibrand Old Hall and its surrounding moat, of which the eastern, northern and western arms survive and are water filled. Five trenches were excavated and encountered deposits which were mostly of medieval and post-medieval date.

A single sediment sample ('GBA'/'BS' *sensu* Dobney *et al.* 1992) was submitted to PRS for an evaluation of its bioarchaeological potential.

### Methods

The sediment sample was inspected and its lithology recorded using a standard *pro forma* prior to processing, following the procedures of Kenward *et al.* (1980; 1986), for the recovery of plant and invertebrate macrofossils.

The flot resulting from processing was examined for plant and invertebrate macrofossils. The residue was examined for larger plant macrofossils and other biological (and artefactual) remains. Insect preservation was recorded using the scheme of Kenward and Large (1998).

### Results

Archaeological information, provided by the excavator, is given in square brackets. A brief summary of the processing method and an estimate of the remaining volume of

unprocessed sediment follows (in round brackets) after the sample number.

**Context 24** [fill of linear feature 22 in Trench 3 containing 16<sup>th</sup> century pottery]  
Sample 1/T (2 kg processed to 300 microns with paraffin flotation; approximately 12 litres of unprocessed sediment remain)

Moist, mid grey-brown (to light grey-brown in places), sticky and layered to crumbly (working soft), clay silt, with twigs and other plant detritus present.

This subsample yielded a moderate-sized to large residue of about 525 cm<sup>3</sup> of woody and herbaceous detritus with a rather 'flaky' appearance. On closer inspection, this was revealed to result from the presence of abundant small fragments of tree leaf. Amongst these were moderate amounts of twigs (to about 35 mm), including willow (*Salix*), and willow buds and fruits were also noted, as well as oak (*Quercus*) bud-scales. Overall the plant remains were typical of deposition in a pond, moat or ditch overhung by trees. There were also some fine rootlets and root material of pteridophyte, probably fern, perhaps from a stage of terrestrialisation. Other identifiable plant remains were sparse, presumably diluted by the matrix of leaf and twig fragments. As is often the case for material of this kind, invertebrate remains, including beetles, fly puparia and rather frequent water flea resting-eggs (*Daphnia ephippia*), remained in the residue, having failed to be removed by paraffin flotation. There were traces of charcoal (to 5 mm). Mineral sediment was confined to a very little sand and a few tiny clasts of undisaggregated grey silt.

The flot was quite large, consisting of assorted herbaceous plant debris including numerous small fragments of robust leaves (from deciduous trees). Insect remains were present in fairly small quantities, and were often moderately well decayed and fragmented (E 2.0-3.5, mode 3.5 distinct; F 2.5-4.5, mode 3.5 weak). Most were, however, identifiable. There were numerous *Daphnia ephippia* (water flea resting eggs) and ostracod valves, and various aquatic insects, so there can be little doubt that the deposit formed in water. However, the range of aquatic insects was limited, all those seen were represented only by single individuals, and there were no indicators of well-developed submerged or emergent vegetation, so some factor seems to have inhibited plant development. Either the water was only temporary or, more likely in view of the tree leaf fragments, there was heavy shade.

Terrestrial insects were present in limited numbers, and most could have found habitat in herbaceous or scrub vegetation by water. There was little to indicate decomposing matter beyond a few taxa perhaps originating in dung, and no indicators of trees or dead wood. Some of the species are often found in occupation deposits, but there was no indication of typical occupation-site fauna (e.g. 'house fauna' *sensu* Kenward and Hall 1995; Carrott and Kenward 2001).

A record of the leaf beetle *Galeruca tanacetii* (Linnaeus) is unusual; it lives on composites such as knapweeds (*Centaurea*).

## Discussion and statement of potential

The plant and invertebrate assemblages were highly characteristic of a deposit formed in a pond, moat or ditch overhung by trees

A larger subsample of this deposit would probably provide sufficient insect remains for a more precise reconstruction of conditions at and around the point of deposition; information from the plant remains would be an essential adjunct. Processing would need to be very gentle to avoid fragmenting the somewhat brittle insect remains.

Although the flora and fauna are worth recording for future synthesis further, detailed, investigation would be of fairly limited value at the site level unless carried out in relation to a specific archaeological or palaeoecological question.

## Recommendations

No further work is recommended for the current material unless a specific question to be addressed is identified.

## Retention and disposal

All of the remaining sediment, together with the fossils extracted from the processed subsample, should be retained for the present.

## Archive

All material is currently stored by Palaeoecology Research Services (Unit 8, Dabble Duck Industrial Estate, Shildon, County Durham), along with paper and electronic records pertaining to the work described here.

## Acknowledgements

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