

INSECTS FROM A LATE 13TH/EARLY 14TH CENTURY HEARTH

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(The cross-references denoted 'CQ' in this paper relate to *Charter Quay, The Spirit of Change*, Wessex Archaeology 2003)

A small assemblage of beetle remains had been recovered from a sample of a late 13th/early 14th century hearth processed for recovery of charred plant material (see CQ p. 28). Paraffin flotation was not carried out. None of the beetle remains were charred. All fragments were preserved by waterlogging and must have a different origin to the charred material in the layer.

The assemblage is unusual. It is dominated by beetles infesting timber. The most numerous of these, represented by a minimum of 26 individuals, is *Caulotrupodes aeneopiceus*. This wood-boring weevil is found in rotting timber, casks, etc. (Joy 1932, 215), as is *Pentarthrum huttoni*, represented by three individuals. *P. huttoni* is typically found in wood which is partially fungally decayed, for example in wooden flooring laid in a damp environment. The associated fungus is almost always the cellar fungus *Coniophora cerebella* which causes a wet rot (Hickin 1964, 82). At least two deathwatch beetles *Xestobium rufovillosum* are present. Deathwatch beetle is always found close to the wood it infests. In buildings it usually attacks oak where fungal decay has taken or is taking place. The rest of the assemblage consists of three golden spider beetles *Niptus holoeucus*, two grain weevils *Sitophilus granarius*, a rotted ground beetle head, a mandible of a large beetle and unidentifiable leg fragments. *S. granarius* feeds on grain of all kinds, especially wheat and rye. Golden spider beetles eat a wide range of cereals, cereal products, spices and drugs. They are usually found amongst vegetable and animal debris in warehouses, poorly kept storerooms and old houses. The presence of this species may suggest that the assemblage is of later date than the late 13th/early 14th century and therefore intrusive. They are generally regarded as having been introduced into England in 1838 from southern Russia. It is not impossible, however, that small numbers were introduced occasionally before that date although obvious populations didn't become established until the 19th century.

The beetle remains may represent debris which built up either inside a building with a rotting, infested wooden floor or other structural timber, at least some of which was probably oak, or which accumulated under the floorboards of such a building. The grain weevils and spider beetles indicate that cereals or other foodstuffs were kept in the building. It is also possible that rotten flooring itself, or even a rotten barrel which had contained foodstuffs, had been disposed of directly into the pit. An alternative explanation is post-depositional invasion of rotting wood etc, dumped in the pit. The presence of golden spider beetles and the fact that the insects were differently preserved to the plant remains recovered from the same sample lends support to this. There is no evidence from the insect assemblage for stabling (other than the building itself). The suite of beetles typical of the conditions produced in a stable is completely lacking.

References

Hickin, N. E. 1964. *Household insect pests*, London.

Joy, N. H. 1932. *A practical handbook of British beetles*, London.