Assessment of the Stone from North Killingholme, Lincolnshire (NKE05)

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A small collection of stone objects was submitted for identification and assessment. Two large stones, thought initially to be querns, are probably unworked boulders and a collection of smaller stones are mostly fired-cracked pebbles, used in cooking, heating water or producing steam. A third large stone is probably an artefact and is tentatively identified as an weight.

Description

Stone

Geology

The stones are mostly originally rounded boulders or pebbles, of the kind which could be obtained from local glacial or post-glacial deposits. They include fine-grained sandstones, fine-grained and porphyritic basic igneous rocks and medium-grained acid igneous rocks. All are of the same character as those to be found at the present time along the north Lincolnshire shore.

The exception is a large fragment of Spilsby Sandstone (Context 500 SF23). This rock does not outcrop on the east side of the Wolds, nor are there outcrops further north or northwest which could have been the source of the fragment if brought to the site as a glacial erratic. It is likely therefore, despite the lack of clear evidence on the stone itself, that this is part of a beehive quern. The fragment which survives has the appearance of a cracked rounded boulder, with two small depressions on the flat, cracked surface.

Function

The Spilsby Sandstone object is clearly an artefact, since this rock could not have got to the North Killingholme area by natural means. The object is clearly not a beehive quern, one of the most common types found in this stone. A possible parallel is provided by a smaller, spherical object, also made from Spilsby Sandstone, from the Roman fort of Caister on Sea (Darling 1993, Fig 128 and p.140) This object has a flattened globe shape and a deep circular hole in the centre of one of the flattened surfaces was filled with a lead plug in which was set a large iron staple, attached to which was an oval iron loop. Having considered and then dismissed the object as a possible weight on grounds of size, Darling suggests that it might have been used as an anchor for a small vessel. The Killingholme example is probably about twice the diameter of the Caister on Sea example and would therefore have been

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considerably heavier than the 5.3Kg of that piece. However, a second parallel comes from the Rudston Roman Villa (Stead 1980, Fig 81 No.131). This is described as a weight, 12.2 inches high, and has a bun shape, again with a lead plug set in the top to hold an iron loop. This example, however, is made from a fine-grained grey-green sandstone. It is not clear from the report if the stone was examined by Dr F W Anderson, who certainly looked at the querns. The size of this piece is closer to the North Killingholme example, although the latte was probably larger.

Several of the smaller fragments are broken fragments of rounded cobbles. Many have a reddening of the outer surface, but this may be due to iron-staining of the cobbles within their original boulder clay matrix. It is likely that most of these stones are fire-cracked.

Mounds of fire-cracked pebbles are a feature of Bronze Age archaeology in the British Isles and there is a considerable amount of discussion about their possible function, ranging from their use to boil water for cooking, to their use for producing steam, as in a sauna, or heating water for bathing. The situation of these mounds tends to be at some distance from settlement or funerary sites, along the banks of streams or other sources of water (such as an oxbow lake in the Trent valley at Collingham). However, if these stones were found in domestic contexts it is likely that the cooking interpretation is most likely.

Assessment

Although undatable (except by thermoluminesence), the burnt stones and Spilsby sandstone fragment are likely to be of Iron Age or early Roman date. If the parallels for the Spilsby Sandstone object are a guide then it is probably of Roman date and a weight, presumably for use with a steelyard to weigh bulky objects (such as wool or grain).

Retention

The unworked boulders should be discarded and there is probably little to be gained from retaining the fire-cracked stones (except to demonstrate scientifically that they have been subjected to heating). The Spilsby Sandstone fragment should be retained for future study.

Further work

The Spilsby Sandstone object should be illustrated, or a scale photograph taken, and an estimate of its current and original weight made.

Acknowledgements

I am grateful to M J Darling for pointing out the possible parallels for the Spilsby Sandstone object.

Appendix 1

Context	REFNO	class	Use	Cname	Subfabric	Weight	Form	Description

303	STONE	CRACKED	STONE		197	PEBBLE	
303	STONE	CRACKED	STONE		2154	PEBBLE	
303	STONE	CRACKED	STONE		125	PEBBLE	
306	STONE	CRACKED	STONE		343	PEBBLE	
314	STONE	CRACKED	STONE		76	PEBBLE	
315	STONE	CRACKED	STONE		4	PEBBLE	
340	STONE	CRACKED	STONE		315	PEBBLE	
340	STONE	SPALLED	STONE		251	PEBBLE	
425	STONE	REDDENED	STONE		954	PEBBLE	
426	STONE	CRACKED	STONE		100	PEBBLE	
500	STONE		STONE	SPILSBY SANDSTONE	0	ANCHOR?/BEEHIVE QUERN?	TOO HEAVY TO WEIGH
507	STONE	CRACKED	STONE		590	PEBBLE	
700	STONE	CRACKED	STONE		225	PEBBLE	
700	STONE	CRACKED	STONE		175	PEBBLE	
703	STONE	CRACKED	STONE		61	PEBBLE	
703	STONE	CRACKED	STONE		100	PEBBLE	
708	STONE	CRACKED	STONE		218	PEBBLE	
708	STONE		STONE		0	GEO	TOO HEAVY TO WEIGH
711	STONE	CRACKED	STONE		386	PEBBLE	
711	STONE	REDDENED	STONE		193	PEBBLE	
712	STONE		STONE		0	GEO	TOO HEAVY TO WEIGH
712	STONE		STONE		396	PEBBLE	UNUSED?

Bibliography

Darling, Margaret J with Gurney David (1993) *Caister-on-Sea: Excavations by Charles Green 1951-55*. E Anglian Archaeol Rep 60 Dereham, Field Archaeol Division Norfolk Mus Service.