

Assessment of the Stone Artefacts from East Leake Quarry, Nottinghamshire (OLQ02)

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A small collection of stone artefacts from East Leake Quarry, Nottinghamshire, was submitted to the authors for identification and assessment. The finds consist mostly of broken fragments of pebbles, ultimately derived from the Triassic sandstones of Nottinghamshire but probably redeposited in a Quaternary gravel. Other finds consist of an unusual fragment of flooring material which is probably either of recent date or re-used from a high status structure of Roman date and a putative pendant or amulet.

Description

Stone

Unworked pebbles

A single fragment of a Millstone Grit cobble appears to be completely unworked and does not seem to have been fire-cracked.

Fired-cracked pebbles

Fragments of nine well-rounded pebbles were recovered. All had been cracked and in some cases the surface darkening and the presence of black material in cracks made it clear that the pebbles had been cracked by fire. The use of heated stones thrown into water is well attested in the Bronze Age and often occur as extensive mounds of burnt, cracked stones. Three interpretations have been put forward to explain these finds:

- a) That the stones were used to boil water for cooking.
- b) That the stones were used to boil water for bathing.
- c) That the stones were used to provide steam for a sauna.

Both options (b) and (c) might be motivated either by religious rituals or health/relaxation. The fact that these mounds seem to disappear from the archaeological record with the Bronze Age and that they are often located either at a distance from settlements or on the edge of the settlement probably favours a ritual interpretation.

Pendant or Amulet

A small roughly oval pebble of micaceous sandstone 25mm by 20mm and 5mm thick was recovered. It has a roughly circular hole 4mm in diameter at one end. The object was examined at x20 magnification and there is no evidence for working, although one of the

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surfaces has clearly spalled off, perhaps after discard. The hole shows neither the signs of drilling nor boring from one or both sides. The likelihood, therefore, is that this is a natural pebble which by chance resembles a pendant or amulet.

Paving slab

A flat slab of a coarse-grained rock, 40-45mm thick, composed of feldspar and quartz, was recovered. One straight vertical side appears to be worked whilst the others are probably accidentally broken edges (although the overall shape of the surviving slab is hexagonal). One flat surface is worn smooth, but with neither the grinding marks nor slightly concave surface one might expect from either a rotary or a saddle quern. Furthermore, the rock does not seem consistent with a feldspathic sandstone, such as occur within the Millstone Grit and are occasionally used for quern and mill stones. It is therefore possible that this is a fragment of ornamental paving slab made from an igneous rock. If so, then either a high status Roman origin or perhaps a very recent date would be possible. Alternatively, it may be that this is simply an unusual fragment from a feldspathic Millstone Grit quern.

Assessment

Retention

The fire-cracked pebbles could be dated by thermo-luminescence and should therefore be retained for potential future analysis. TL dating requires a determination of the background radiation to which the objects were subjected after heating, during burial, but probably it would be possible to distinguish Bronze Age from early Anglo-Saxon objects even without this.

Further work

The possible paving slab requires a second opinion from a trained petrologist.

Appendix 1

Context	Cname	Subfabric	Description	Form	Part	Nosh	NoV	Weight	Condition	REFNO
209	STONE	MICACEOUS SST	RED COATING	PEBBLE	CHIP	1	1	47	FIRE CRACKED	
301	STONE	IGNEOUS ROCK		PEBBLE	CHIP	1	1	101	FIRE CRACKED	
309	STONE	FINE WHITE SST	RED COATING	PEBBLES	PART	4	2	243	FIRE CRACKED	
319	STONE	WHITE SST		PEBBLE	PART	1	1	402	FIRE CRACKED	
319	STONE	FINE SST	RED COATING	PEBBLE	PART	1	1	131	FIRE CRACKED	
345	STONE	BLUE/GREY CALCITE MUDSTONE		PEBBLE	CHIPS	19	1	94	FIRE/FROST SHATTERED	
388	GEO	MILLSTONE GRIT		PEBBLE	PART	1	1	1020		73A
388	STONE	IGNEOUS ROCK	WORN FLAT SURFACE WITH ONE STRAIGHT EDGE	PAVING SLAB	PART	1	1	2152		73B
408	STONE	FINE SST		PEBBLE	PART	1	1	62	CRACKED	
408	STONE	FINE WHITE SST	DEEP RED STAINING	PEBBLE	PART	1	1	217	FIRE CRACKED	
849	STONE	MICACEOUS SST	IRREGULAR OVAL WITH IRREGULAR HOLE 4 DIA	AMULET? GEO?	WHOLE	1	1	3		29

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