More on the WHS 1974 excavations at Barn Elms, Surrey

Fig. 1. *Barn Elms Playing Fields 1974: left in foreground, BEV I B, the circular concrete North Thames Gas Pipeline shaft, and by the line of trees along the tow path, BEV I A, the GLC River Defence Wall*
Photo Pamela Greenwood

Rescue excavations and a watching brief were carried out by Wandsworth Historical Society (WHS) in 1974 at two separate sites on Barn Elms Playing Fields, Barnes (London Borough of Richmond), Surrey: Site BEV I A, the construction trench for the former Greater London Council's River Defence Wall and, further downstream, Site BEV I B, a shaft down to the North Thames Gas Pipeline under the Thames. Both sites lie in an area of extensive alluvium close to the current course of the Beverley Brook where it flows into the Thames.

Two rotary querns and a probable quern fragment from Site BEV I A were retrieved during salvage archaeology. All are significant finds of regional, even national, importance, giving a fascinating insight into Iron Age practices and commercial links. River finds show that our area is active and important in the Iron Age though few dry land sites are known.

BEV I B North Thames Gas Pipeline shaft

The main feature was a large pit lined with clay/brickearth containing a small amount of Middle Iron Age pottery. A copper alloy terret (harness fitting) from the bottom fills might be earlier in date, possibly even Late Bronze Age, perhaps deliberately deposited. Recent excavations nearby by Museum of London Archaeology in advance of the Thames Water Tideway Tunnel now reveal more evidence of the local later Iron Age – round houses, pits, large enclosure ditches, pottery and potin coins.

Fig. 2. *BEV I B: Excavating the surviving part of the large Middle Iron Age pit cut by the Gas Pipeline shaft, with some small pits and other features behind*
Photo Nicholas Farrant/Fuentes

Barn Elms River Defence Works, BEV I Site A

Archaeological work by WHS on the River Defence Wall cut-and-fill trench was a watching brief and salvage operation.

We were able to retrieve some querns and other finds from a large blackish deposit at *c*.2.5 –2.7 m/ *c.* 8–9 ft OD, perhaps a large pit or ditch.

Unfortunately, there was little opportunity for a full investigation. The lower part of the contractor's trench was generally 0.45 m/18 inches wide, cut by machine, lined with paper and then filled in with concrete shortly afterwards.

Fig. 3. *BEV I A River Defence Wall trench looking upstream*
Photo Pamela Greenwood

Thanks to determined efforts by members the School of Geology, University of Leicester and the British Geological Survey, we now know the rock sources for the quernstones, including the previously unknown location of an East Keal outcrop for our Spilsby quernstone.

Further information, results of the analyses and discussion are published in a recent report, together with images of the thin-sections (Greenwood 2023b).

Other 'stones' were present but it was not possible to retrieve them. Some were burnt, others partially or not at all, perhaps from localized burning. There was an obvious cluster of stones, querns, pottery, burnt daub, worked flint, burnt flint, an iron object, some ferruginous material and bone. Similar pottery was found in the nearby contractor's spoil heap. All finds from this pit or ditch appear to be prehistoric and earlier Iron Age in date. We did not find any Roman objects.

Fig. 4. *BEV I A, rotary quernstone 1* in situ *in the side of the cut-and-fill trench*
Photo Pamela Greenwood

The quernstones (hand-mills)

Quernstone 1: Upper stone BEV I A

This upper rotary quernstone of Lodsworth sandstone from Sussex is moderately high-sided with very slightly sloping sides, a hybrid of Curwen's 'Sussex type'. No matching lower stone was found. The handle slot is neat and well-cut.

Fig.5. *BEV I A, Quern 1, a Lodsworth sandstone upper stone neatly split in half*
Photo Pamela Greenwood

Faint traces of a score mark are visible along the diameter where it was deliberately split in half. Only two small patches of its original upper surfaces survive. These show that the sides and upper surface were originally finished by 'pecking'.

Further examination, however, shows that the quernstone had also been very deliberately damaged, namely 'slighted', before being buried. The upper surface was almost completely removed and chunks about 40 mm/1.5 inches wide systematically detached along the edge of the grinding surface. Such damage requires great skill and appropriate iron tools. It was also burnt.

Fig. 6. *BEV I A, Quern 1 with signs of regular 'detaching' along the lower edge*
Photo Pamela Greenwood

Quernstone 2: Lower stone, BEV I A

The lower rotary stone of Spilsby sandstone compares very well to a specimen from an outcrop at East Keal, near Spilsby, Lincolnshire in the collections of the University of Leicester School of Geology. An important discovery, it is the first good evidence of the location of an Iron Age Spilsby quern quarry, the site of which has yet to be more precisely identified. In Curwen's classification this is a 'Hunsbury' type rotary quern.

Before being deposited the rotary quern lower stone was split and a further section detached, leaving just under two-thirds with part of the hole for the spindle. Whitish, powdery upper parts and perforation, likely caused by severe burning, contrast with the harder, darker, irregular underside. East Keal is a considerable distance from Barn Elms. By land, sea and river, it is some 380 km/236 miles.

Details of analyses by Leicester University School of Geography: [*Ars molendi | Padova University Press*]

Fig. 5. *BEV I A, Quern 2, fragment of a lower rotary quernstone of Spilsby sandstone Photo Pamela Greenwood*

Quernstone 3: BEV I A

This small piece of iron-rich sandstone, burnt to a deep red-brown colour, is too fragmentary to be allocated to a quern type, though almost certainly from East Wear Bay, Folkestone, Kent. Initially saddle querns and later on rotary querns were produced there, production flourishing during the Iron Age.

Like the other quernstones this specimen had been broken and burnt, the iron content giving it its rust colour. *Details of analyses by Leicester University School of Geology*: Ars molendi | Padova University Press

Fig.6. *BEV I A, Folkestone sandstone fragment after being sliced for further analysis*
Photo Pamela Greenwood

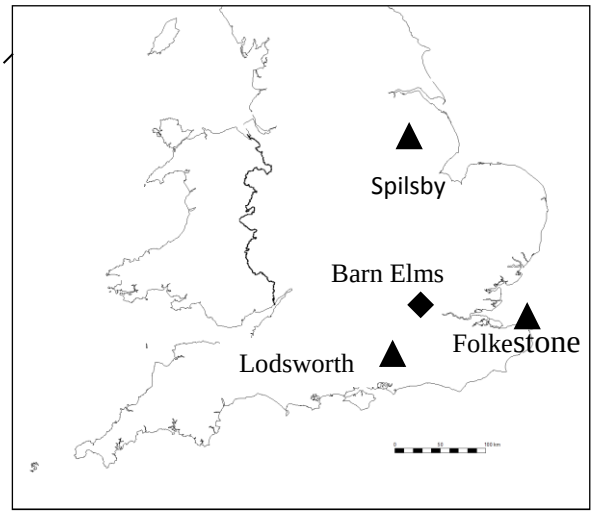

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Fig. 7. *Location of Barn Elms and the quern sources: Lodsworth, Sussex; East Keal, Spilsby, Lincolnshire; and East Wear Bay, Folkestone, England*
Scale represents 100 km

The three stones recovered from the trench come from widely separate areas in England involving considerable distances and effectively considerable expense. They would have been very heavy items when complete sets of stones (Fig.7). This part of the Thames Valley is without suitable grinding stone.

Transport by river and sea was most probably the main method. It is likely that the fragment of a salt container, a briquetage trough from the same deposit, was originally from one of the related coastal areas. Judging by its shape, it was most probably from Essex coastal saltworks, possibly part of piggy-back trade. These three quernstones would have had quite different shapes – the illustration (Fig. 8) shows the main forms of rotary querns from Iron Age in England with

classifications after Curwen, Ingle, Keller and others (see Greenwood 2023b). It is very likely that terminology will be refined and change with further studies.

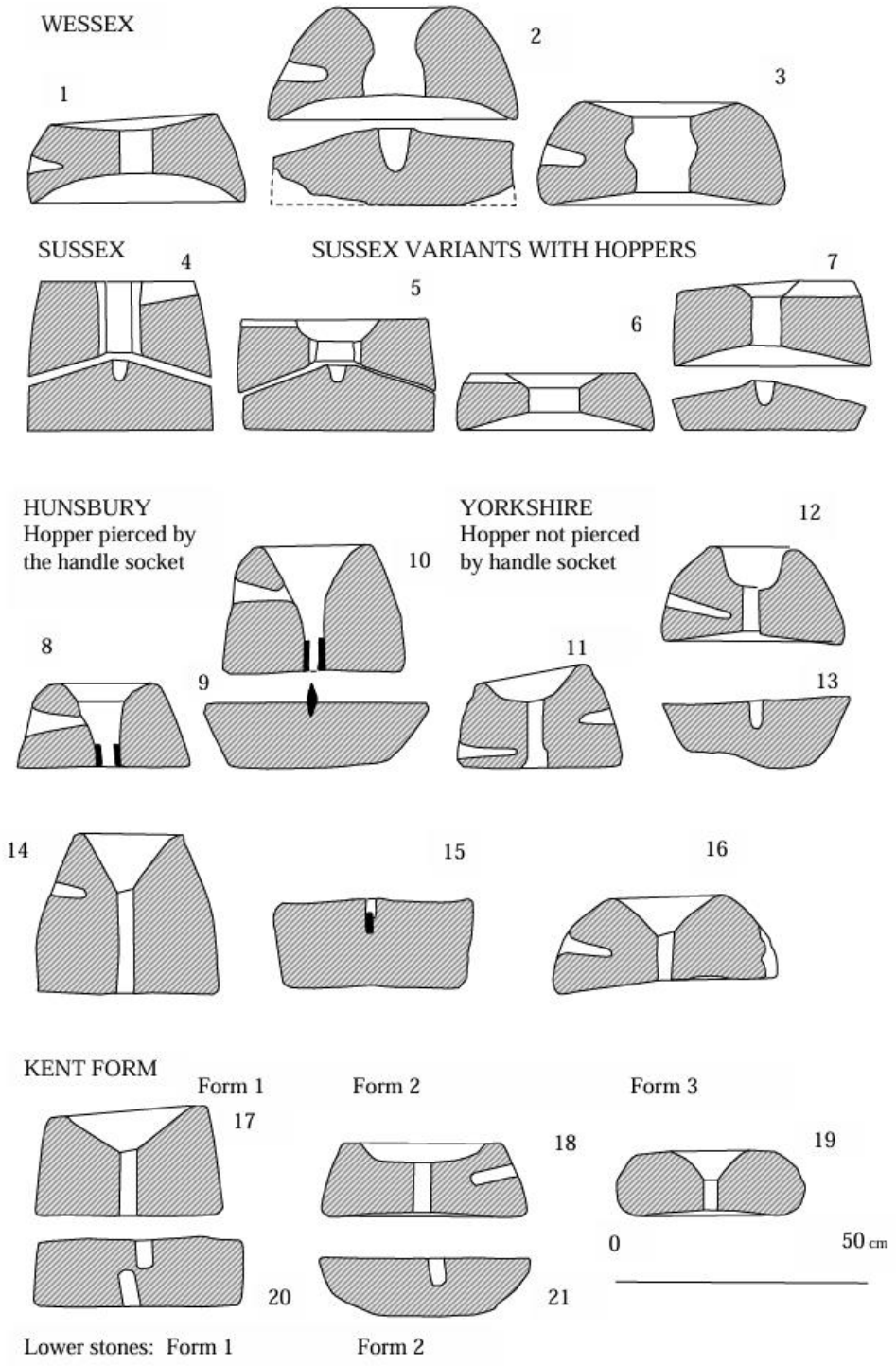

FIG. 2. Profiles of the main types of Iron Age rotary querns from England.

Black shading = remains of iron spindles. Some querns have more than one handle socket, sometimes added later.
WESSEX type: 1-2. Maiden Castle 3. Glastonbury (after CURWEN1937, figs 4, 5, 1). SUSSEX type: 4. The Trundle (after CURWEN 1937, fig. 14).
SUSSEX type with hoppers: 5. Burpham, Guildford; 6. Holmbury Camp; 7. Danebury hillfort type R1, (5-6 after PEACOCK 1987, figs 3.4, 3.5; 7. after CUNLIFFE 1984, fig. 8.24).
HUNSBURY type: 8-10, Northamptonshire, all Spilsby stone (after INGLE 1993-1994, fig.3.22-24).
YORKSHIRE type: 11-13. Moss Carr, Methley; 14. Bowes Museum Collect.; 15. Thorpe Thewles, Stockton; 16. Stanwick Tofts (11-13 after ROBERTS, RICHARDSON 2002, figs 22.4, 23.16, 22.11; 14-16. after HESLOP 2008, figs 37.1140, 40.1150, 44.801).
KENT/FOLKESTONE type: 17-21. Folkestone (after KELLER 1989: fig. 3 nos 7-11).

Fig. 8. *Profiles of the main Iron Age rotary quern types from England (from Greenwood 2023b)*

Some discussion

We have two types of rotary quernstone and a third indeterminate quernstone together with pottery probably dating to the late Early Iron Age or early Middle Iron Age (end 5th – 4th century BC), representing three different types of sandstone, in three different colours when burnt (white, rust-red and greenish grey), and possibly three forms of quern, from very widely separate rock sources, buried together with other stones that were not possible to retrieve.

With them was a very coarse ceramic salt container-cum-mould (briquetage) similar to those from Essex coastal sites. Salt, a basic necessity for many aspects of ancient food, its production and preservation, was produced at a number of coastal sites, including in Lincolnshire, Sussex and Essex, and transported as blocks in its containers during the Iron Age and Roman periods. This is an intriguing and thought-provoking group of finds.

Such querns are very heavy objects that have been transported a long way, the Spilsby stone the furthest, most probably by river and sea. All three types and stone sources are outside their usual known or published distribution. Significantly, we have two Iron Age rotary querns at least, a type so far relatively rare in much of the Thames Valley. The identification of an East Keal outcrop for the Spilsby rotary quern is a major discovery, though the actual quarry and millstone production site are still to be pinpointed.

The Barn Elms querns were perhaps valued, important, and expensive items not reused or recycled, but deliberately damaged and deposited together. Throughout history querns have had symbolic and votive aspects, as well as being used for grinding quite a variety of materials, as well as grain. Grinding equipment is often associated with Iron Age metalworking sites. We might also have a significant location, by the Thames and the Beverley Brook, potentially a flood zone.

Considering the prestige Iron Age objects found in the Thames or its foreshore, perhaps this area, sometimes identified by John Kent as a ‘pre-Caesarian focus of great importance’ in west London, is not just an important settlement but possibly, as Ralph Merrifield suggested some 40 years ago, a major sanctuary, shrine or place for regular ritual gatherings or pilgrimage, without being an

important centre of power. Comparison with Iron Age sanctuary sites on the Continent could be worthwhile. The Thames, a major river flowing east into the English Channel, is ideal for trading connections, influences and innovations. As few sites of this period have been found in the region, a greater understanding of how unusual this site and its finds are, or not, is still to come. The recent excavations at Barn Elms by Museum of London Archaeology already add considerably to the picture, and will add more.

Acknowledgments

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For Further Details and Discussion, Full References and Notes

Greenwood P. 2023b with geochemical analysis by Sarah Lee, Nick Marsh, Colin Cunningham and Rob Kelly, 'More than just a millstone – the Iron Age querns from Barn Elms, Surrey', in P. Greenwood (ed.) 2023a*, Ars molendi. Macine e macinazione una antica tradizione,* also available to download as an Open Access PDF: Ars molendi | Padova University Press

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