



Book Reviews

CLIFTON QUARRY, WORCESTERSHIRE – PITS, POTS AND CEREALS: ARCHAEOLOGICAL INVESTIGATIONS 2006–2009 BY ANDREW MANN AND ROBIN JACKSON

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Clifton Quarry is a riverside gravel quarry located on the left (eastern) bank of the River Severn in the parish of Severn Stoke 8 km south of Worcester. As such it is also 7 km east of Great Malvern, 6km north of Upton upon Severn, and 4km north-east of Croome Park, Worcestershire (National Trust). This monograph reports on excavations at the quarry undertaken by the Worcestershire Archive and Archaeology Service contract archaeology unit. The two authors are, respectively, Project Officer and Senior Project Manager at the unit, and they are here supported by 25 specialists and illustrators, seven of whom are (or in two cases were), employed in-house by that service.

The key points of prehistoric studies interest are a series of Late Neolithic pits (dated broadly 2900–2600 cal BC), and a Middle Bronze Age burnt mound complex (c. 1350–1300 cal BC), both located close to the river; and, on slightly higher ground to the east, an estimated 103 four-post structures (from 678 post-holes) and 130 pits dated to the Early to Middle Iron Age. One of the Neolithic pits and its contents (context 2024) is of exceptional interest in a national context, as are the closely-associated large groups of Iron Age post-hole-defined structures and pits, and these phenomena are the main focus of attention in this review. A palaeo-channel sampled in 2005 and 2008 enabled inferences concerning likely local environmental and vegetation change in prehistory.

As is often the case with long-term projects linked to gravel extraction, there were several stages to the archaeological work reported in this monograph. The volume reports in detail upon 'Area 10' (located to the west of Ashmoor Common). This Area at Clifton Quarry was the focus of a field evaluation in 2005, and was then subject to a watching brief in 2006 (western sector of Area 10) and finally a strip-and-record excavation in 2008/9 (eastern sector). The details of operations are set out clearly but succinctly in the volume, and are well-supported by clear, coherent and consistent maps

and plans. As such they are an excellent exemplar of contemporary best-practice in such presentation, and are highly commended by this reviewer. The close integration of different chronological, palaeo-environmental, artefactual and stratigraphic data throughout the publication is especially helpful to comprehension of the nature and significance of the discoveries.

A group of four pits of likely Late Neolithic (hereafter 'LN') date, two of which contained sherds of Grooved Ware pottery, were found during the watching brief phase of the investigation, near the northern edge of Area 10. Pit 2024 and its associated post-hole were not located in this area, but instead were found over 150m to the south, close to the palaeo-channel sampled in 2005. This pit contained 306 sherds of Grooved Ware (hereafter 'GW'), which, as Emily Edwards notes in her study of the Late Neolithic and Beaker pottery from the project, represented 61% of the GW component of the assemblage. A further isolated pit in the northern part of the 2008 excavation area (Pit 10767) was thought by its form (including bag-shaped profile) to be a possible LN pit, and this was proven to be the case through the radiocarbon dating of samples retrieved from it (for preliminary discussion of the regional significance of these Neolithic pit finds at Clifton, see Jackson & Ray, 2012, 155–7). The Grooved Ware assemblage overall comprised 379 sherds in a mix of Durrington Walls and Clacton styles. Two Early Bronze Age pits were also found, one with comb-decorated Beaker sherds being located close to the northern group of LN/GW pits, the other (dated by radiocarbon to 2210-2020 cal BC) not far from the large GW pit (2024) near the western edge of Area 10.

Pit 2024 was a remarkable discovery. Along with the GW sherds, there were fired clay fragments, flint tools and debitage, as well as two complete but fire-damaged polished stone axe-heads, three fragmentary stone axes, and an entirely-shattered flint axe. These items were located in a dark soil matrix that contained charcoal flecks and 'a substantial cleaned grain assemblage dominated by barley and a large quantity of charred apple fragments dated to *c.* 2900–2600 cal BC' p.26). A number of large GW sherds had been placed flat in the base of the pit, showing a degree of deliberation in the depositional event that, given the lack of erosion of the pit sides, took place as a rapid dig-and-fill episode. The subsequent cutting of a post-hole (itself containing GW sherds) into the pit probably represents a marking of the spot as the location of a

significant event (or at least deposit), but it is not possible to be sure whether this marking was contemporary with it, or represented a later commemoration.

The placing of axe fragments in a pit in this quantity and manner is, as far as present evidence across Britain allows, unusual. But the combination of axes in different materials from different sources (augite granophyre *aka* Gp VII from Graig Lwyd in North Wales, uralitised gabbro *aka* Cornish greenstone *aka* Gp I from West Penwith in Cornwall, flint, and amphibolite – latter source unknown, but possibly from outcrops in the Malvern Hills nearby) having undergone this level of deliberate destruction is, the authors suggest, so far unique (see Ray & Thomas, 2018, 309–12, reviewing the evidence for, and discussion of, the so far few similar instances of deliberate destruction of Neolithic axes in Britain by fire).

Two useful tabulations included with the descriptive account of the axes attempt to better contextualise the find. One (Table 4.11) lists 85 contexts across Britain in which flint and other stones axes have been found in association with GW (including the nine examples from Pit 2024 and one from Pit 4013 at Clifton); while the other (Table 4.12) summarises the 12 different rock types of complete or fragmentary axes from GW contexts and compares them with flint axe finds. Various other aspects mark the pit out as unusual, of which the quantity of burnt grain and crab-apples, and the mix of burnt axes and fragments are but two elements. The presence of porcine fats alongside ruminant dairy fat noted in the absorbed residue analysis of the GW pottery from Pit 2024 (pp82–7) is quite possibly indicative of feasting, and the broad selection of flint tools and debitage, unburnt as well as burnt, may also be significant in this context.

The absence of hazelnuts in any of the GW pits at a time when *Corylus* pollen was increasing locally (suggesting regeneration and possibly coppicing nearby) correlates in a potentially significant way with the one dated occurrence of numbers of burnt hazelnuts in a pit (10767, some 300 m to the east in the 2008 excavation area) which contained no artefacts but returned a date of 2570–2410 cal BC (see p.196). This suggests deliberate contrasts in depositional practice in the LN here and likely also reflects chronological differences. The careful teasing out of these contrasts in the record in this monograph serves again to emphasise both the complexity of the material manifestation of such practices, and the need for such sites to be examined systematically and with an informed awareness of how much information can be

extracted. Meanwhile, the 7000 fruit fragments from Pit 2024 (mostly crab-apple including three complete specimens 709 pips and 59 stalks) hint also at the deliberate local management of (presumably) wild fruit species.

One of the two pits dated to the Early Bronze Age and located close to the palaeo-channel contained burnt stone, and this appears to have heralded the short-lived Middle Bronze Age activity recorded in the extreme south-west of Area 10, and also located close to that channel. This activity was represented by a largely-levelled or spread burnt mound (2124) and an underlying pit (2125) with an associated sub-rectangular shallow trough and ten other pits filled or partially filled with burnt stone. The importance of this complex resides in the fact that before this project there had been an apparent near-absence of such sites in this part of the region. And it reflects the likely near-ubiquitous character of the cultural practices that led to such remains in both 'highland' and 'lowland' contexts across Britain.

Several alternative explanations have been proposed over the past 50 years or so for these mounds of burnt stones discarded after being shattered by being placed into cold-water troughs to heat the water. Chief among these have been as either cooking sites or sweat-lodges (see, for example, papers in Hodder & Barfield 1991). Two recent regional reviews of the evidence from north-west Wales and Ireland, respectively, indicate that the vast majority of such sites (radiocarbon determinations $n=98$, north-west Wales, around 1000 from Ireland) had been created at some point during the span *c.* 2200–900 cal BC (Kenney 2012, not cited in the Clifton volume; Hawkes 2018). The brief span of activity estimated from Bayesian analysis of the 20 radiocarbon determinations on charcoal from the Clifton burnt mound and associated pits was 1410–1255 cal BC places it squarely within this tradition. The Jane Kenney and the Alan Hawkes studies also concluded that the best interpretive fit for the evidence from burnt mounds, at least in north-west Wales and Ireland, is still that their use was most likely primarily for cooking. Kenney, however, has usefully highlighted two further aspects (*ibid.*, 268–9). Firstly, the effort involved in their construction meant that they were very probably gathering and feasting places, the absence of artefacts at most sites suggesting also that they were located at some distance from settlements; and secondly, the presence of grain at *some* sites may mean that the troughs had also been used for brewing ale during such events.

One immediate significance of the Iron Age activity represented by both the post-hole-defined structures and the pits in the excavated eastern part of Area 10 at Clifton Quarry is that it is 'the first confirmed Early to Middle Iron Age site to have been excavated within the central Severn Valley' (p.200). The four-post structures are interpreted by the authors as having been timber-framed, wattle and daub panelled, short- to medium-term elevated grain-stores; while the pits are seen potentially as having been longer-term below-ground grain storage bins.

The principal spread of around 70 (of 89 identified) four-post structures was set in a shallow arc (between 30–50 m broad) within a north-south band extending 300 m along the eastern part of the eastern, excavated part of Area 10 (Fig. 3.28). The former presence of two possible roundhouses within this zone was deduced from arrangements of post-holes. The 100 Iron Age pits that were excavated were all located to the east of the main concentration of four-post structures, with 54 of them occurring as two large clusters towards the southern part of (excavated) Area 10. These were defined as three Pit Groups (5–7) by the excavators, and most of the pits concerned were sub-circular with vertical sides and flat bases.

John Meadows' (and colleagues') baseline dating model for the Iron Age features at Clifton Quarry, from dates obtained on multiple samples of wheat and barley grain from pits and post-holes, indicates the likelihood of an activity-span of between 150 and 260 years from c. 620–530 cal BC to 380–330 cal BC (at 68% probability; p.64). However, it is acknowledged that the span could be very much shorter if a (late) outlier is excluded (p.202–3). The dating evidence cautions against seeing a definite sequence in the construction and use of the four-posters and pits, although the excavators suggest that the pits were likely to have been in use only towards the end of the time-span concerned.

As for the ceramic material from the site, the presence of large storage vessels in the four-post structure zone is seen to reinforce the idea that grain-storage was the primary use for these structures. As Laura Griffin points out in her analysis of the pottery, the Clifton Quarry assemblage is 'the first group of pottery of Early Iron Age date to have been excavated and analysed in Worcestershire', and importantly therefore bridges a gap in the ceramic record for the lower Severn valley between the Late Bronze Age and Middle-Late Iron Age (p.123).

Occasional finds of loom-weights and quern-stone fragments across the site, and some scatters of iron-smithing debris and crucible fragments, can be taken to infer that there was a domestic settlement nearby that was complementary to the storage facilities. The conclusion in the report that the amount of grain from this excavated area indicates that the builders and users of these structures 'undertook large-scale cultivation *rather than* practicing mixed farming' (p.206, my emphasis) is not really capable of demonstration given the lack of survival of bone on site, and against the alternative possibility that animal husbandry may also have been segregated spatially. Still less certain, surely, is the speculation (*ibid.*) that this part of the Severn valley was a specialised 'production zone for the cultivation of cereals.'

Which leaves open the key question of why the grain was stored in the way it was at this site, and for what purposes? Firstly, it can hardly be in doubt that this reflects careful organisation and control of key agricultural products, with potentially a mix of stored seed grain side by side with that for imminent consumption. Notwithstanding this manifest planned pattern, the nature of social stratification or politics potentially producing such control remains opaque. The fact that we now have unequivocal evidence for large-scale storage close to the Severn both in the Early–Middle Iron Age at Clifton and, in the later Iron Age at Ryall Quarry (six kilometres down-river opposite Upton-on-Severn; Barber & Watts 2008) clearly does nonetheless call for explanation historically. The authors address this issue, albeit fleetingly, in their conclusions: mainly in reference to the existence of parallel large-scale storage represented by four-post structures and pits in presumed near-contemporary hillforts.

There is a potential sequential dimension to this issue, however, since the sites at Clifton and Ryall could be seen, rather, as 'bracketing' (before and after) that part of the Middle Iron Age period that we so far understand to have encompassed the most complex phases of development of hillforts both locally and more widely. Nonetheless, this second discovery of significant Iron Age grain storage facilities on the left bank of the Severn between Worcester and Gloucester does raise questions about the possibly deliberate production of surpluses and the involvement of a variety of goods (for instance iron, pottery, salt, and querns) in inferentially complex networks of exchange potentially co-ordinated by culturally-differentiated elites (cf Moore, 2006). This has

extra-regional historical implications that we shall need to take close note of in the future.

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