A GROUP OF BRONZE AGE DECORATED LOOMWEIGHTS FROM MAGNA PARK, MILTON KEYNES

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with a contribution by Tora Hylton

During the excavation of a late Iron Age and Roman settlement, in advance of development at Magna Park, Milton Keynes, a single shallow pit produced evidence of Bronze Age domestic activity. Within the fill of the pit there was an untidy cluster of ten fired clay cylindrical loomweights with longitudinal perforations, with two largely complete and the others as large but partial fragments. The estimated original weights indicate that eight are closely similar, at just under a kilogram, 930-980g, while two are significantly heavier at around 1.5kg. The two largest weights are plain, while four were decorated with multiple lines of shallow comb impressions and the other four are decorated with deeply incised point decoration, perhaps a coarser comb. They may represent a set of weights from an upright warp-weighted loom. Use of cylindrical loomweights spans the middle Bronze Age to late Bronze Age/early Iron Age, although few recovered examples are well dated. While discoveries of single examples are not uncommon, the recovery of such a large group is unusual. Part of a middle Bronze Age copper alloy dagger was recovered as a residual find in a Roman ditch.

Introduction

Northamptonshire Archaeology was commissioned by CgMs Consulting, acting on behalf of their clients Fen Farm Developments Ltd, to carry out archaeological excavation on 4.48ha of proposed development land at Magna Park (formally Nova MK), on the south-eastern side of Milton Keynes close to the M1 motorway (NGR SP 914 386, Fig 1).

In 2006 to 2007 a programme of geophysical survey and trial trenching had located areas of enclosed settlement dating to the late Iron Age and Roman periods on the north-eastern and south-western parts of the Magna Park development site (Butler 2006, Burrow 2006 and Patenhall 2007).

Mitigation excavations were subsequently undertaken on both of these Iron Age and Roman sites from the end of 2006 into 2007, but only the site to the east produced limited evidence of Bronze Age activity. Analysis of the results of both excavations has been taken through assessment to updated project design (Mason 2008 and Taylor 2008), and full analysis is pending.

As the Bronze Age material is limited in scale and does not relate to the later development of the site, this single element can be published in advance of the rest in order to draw attention to this unusual group of material. Such finds most often disappear from sight at the back of finds reports, and get little attention in comparison to the more glamorous aspects of finds studies, even though they do derive from the major domestic activity of weaving that would, along with all the associated activities, such as spinning, have occupied a significant proportion of the daily routine.

Topography and Geology

The entire development site occupies an area of approximately 99ha. It is bounded to the south by the A421 Standing Way and to the west by the A5130. To the north and east are further arable fields, and beyond them the M1. By the time this account is published most of this area will have been subject to development.

The ground slopes down moderately to the east with an elevation of between 60-70m above

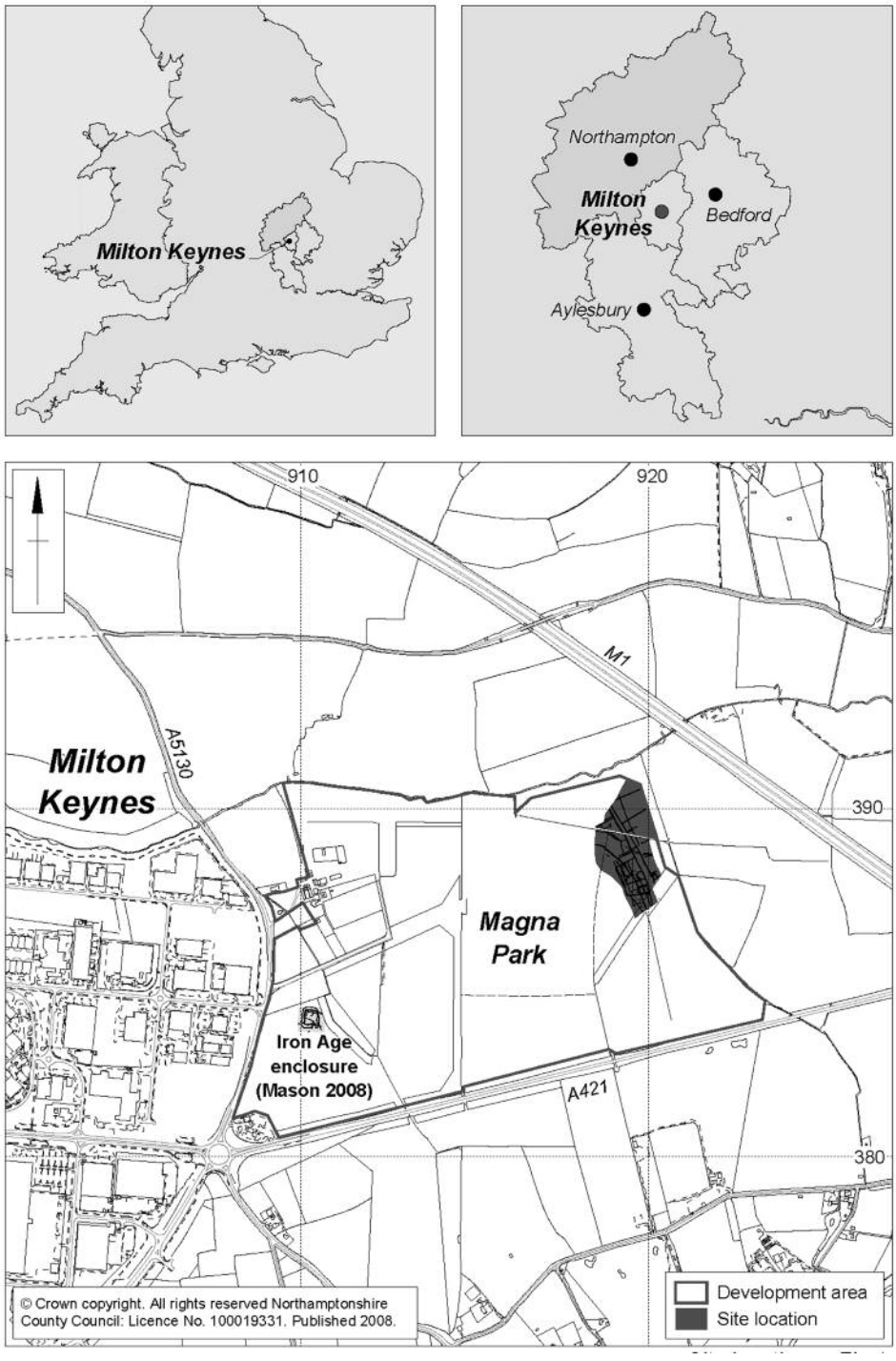

FIGURE 1 Site location

FIGURE 2 The excavated Roman settlement showing the Bronze Age pit

Ordnance Datum. The geology of the site comprises Glacial Till overlying Oxford Clay.

The Bronze Age Pit

Towards the southern end of the site (Fig 2), there was a small circular pit with a shallow bowl-shaped profile, 1.4m diameter by 0.35m deep (Fig 3). An untidy cluster of fragments of loomweights lay within the pit, giving the impression that they had been dumped as group in a single act of deposition, rather than being carefully placed (Fig 4). A single small sherd of pottery was found in association with the loomweights and a small quantity of animal bone, weighing 46g, was also present.

Figure 3 The Bronze Age pit after excavation

Figure 4 The stack of loomweights within the pit

The Loomweights

A total of 7.8kg of loomweights was recovered from the pit (Table 1). As the pit was fully excavated the damaged and partial weights would appear to have been incomplete when deposited, although at least one had disintegrated within the pit. Eight individual weights were recognised during excavation, while sorting of the fragments led to the identification of a further two weights. In addition, there is nearly a kilogram of smaller fragments. This may account for a proportion of the missing weight, but at least some appears to have come from further weights, suggesting that the full set may have comprised 12 weights, with two represented in the deposit by only token amounts.

Three weights are substantially complete (L1, L3 and L4), another two are damaged but survive to only a little short of their full lengths and might still have been usable as hanging weights (L5 and L6) (Fig 5). The others are all fragmentary and would not have been usable as weights. They vary between 80-100mm in diameter and stand 90-95mm high. The longitudinal perforation in the two larger undecorated weights is 23mm in diameter, and it is 20mm in diameter on the others.

There are three distinct styles of weight. The largest example (L1), which is nearly complete, is undecorated, 100mm in diameter and 95mm high with an estimated original weight of 1.45kg. There is around a half of another large undecorated weight (L2) that may also have weighed around 1.5kg. The other eight weights are all decorated, but the decoration falls into two distinct groups.

Four weights, each around 85mm in diameter by 95mm long, and weighing some 0.95-0.99kg when complete, are profusely decorated with multiple closely-spaced lines of fine oval points, executed with a comb, running along the body of the weight (L3-L5 and L10) (Fig 6). On the ends the decoration is either in radial lines or free-form lines (as in Fig 6). The individual impressions are elongated at right-angles to the lines, 1.5mm long by 0.5mm wide, and are only 2mm apart. The decoration is only shallowly impressed and some lines have been partially lost through erosion of the surfaces.

FIGURE 5 Five of the most complete loomweights (left to right: L4, L7, L1, L8 and L3)

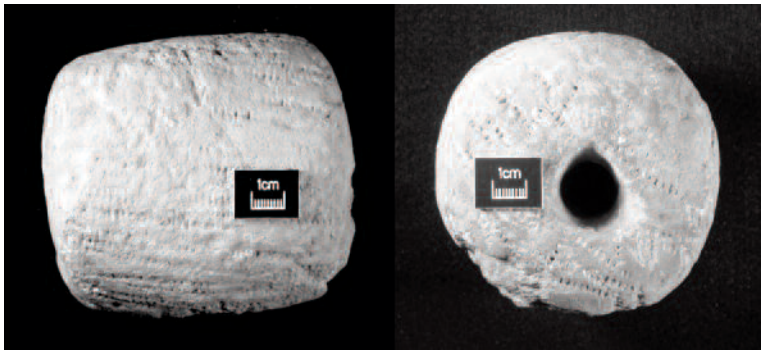

FIGURE 6 Side and end views of a loomweight (L3), showing the fine comb decoration

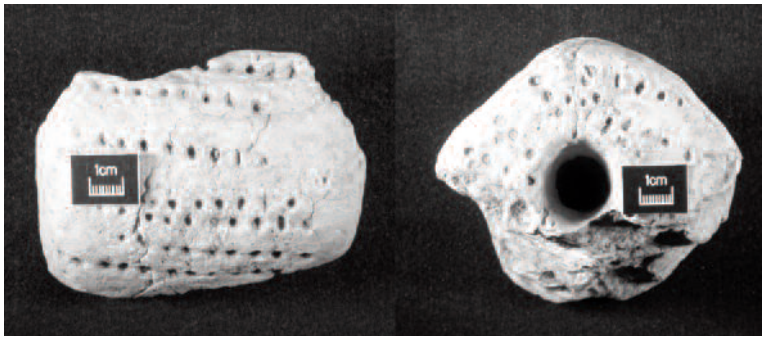

FIGURE 7 Side view and end views of loomweights (L7 and L6), showing deeply incised point decoration

TABLE 1 Quantification of loomweight fragments

Small find /loomweight	*Decoration*	*Dimensions*	*Weight (g)*	*% present*	*Estimated full weight (g)*
31 / L1	Plain	100mm diam 95mm high	1375	95	1450
37 / L2	Plain	97mm diam >85mm high	815	50	1630
36 / L3	Fine comb	82mm diam 95mm high	920	95	970
33 / L4	Fine comb	80mm diam 90mm high	770	80	970
35 / L5	Fine comb	85mm diam 90mm high	745	75	990
32 / L6	Large points	95mm diam 97mm high	685	70	980
34 / L7	Large points	95mm high	340	35	970
38 / L8	Large points	>90mm diam >87mm high	330	35	950
L9	Large points	—	660	70	940
L10	Fine comb	—	230	25	930
Fragments			925		
Totals			**7795**		**10780**

The other four weights are decorated more sparsely with bolder and more deeply impressed circular points, 3-4mm in diameter and set 6-8mm apart, centre to centre. These form irregularly-spaced lines along the body of the weights, suggesting that they too were executed with a comb, but one with much larger, more widely-spaced circular teeth. The decoration on the ends comprises short lines in free-form (Fig 7).

The plain weights and the four with fine comb decoration are all in a sandy fabric that contains sparse inclusions of angular pebbles up to 15mm long. They typically have dark red-brown surfaces, with grey patches. The weights with the coarser decoration are all in a very different silty fabric, containing very few small pebble inclusions. These are much lighter in colour, with cream to pale orange surfaces. All of the weights in this silty fabric are damaged and incomplete.

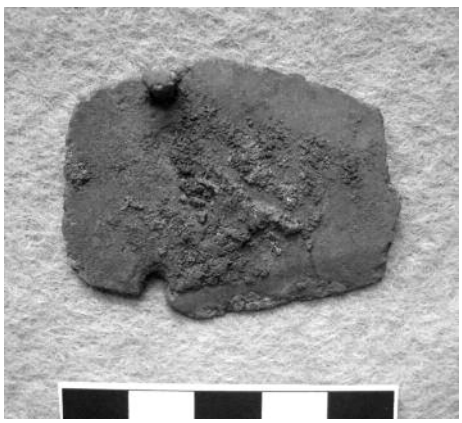

FIGURE 8 The Bronze Age dagger (Scale 50mm)

A MIDDLE BRONZE AGE DAGGER
by Tora Hylton

The butt end and part of the blade of a copper alloy dagger, in poor condition, was recovered as a residual find in a Roman ditch at the northern end of the site (Fig 8). At its widest point (just below the rivets) it measures 39mm wide. The butt-end is pierced by two holes and one still retains a rivet (slender peg type). The blade has as a lozenge-shaped cross-section but the thin edges are lost and the patina is flaking in places; only 30mm of the blade survives.

The Bronze Age Pottery

A single small sherd of pottery was found with the loomweights. This is a plain body sherd, 5mm thick, from a hand-built vessel. The fabric is oxidised to light brown throughout and contains moderate angular flint, measuring from less than 1mm to 3-4mm. It can be dated to the Middle Bronze Age to late Bronze Age/early Iron Age only on the basis of its association with the cylindrical weights.

Discussion

The Bronze Age cylindrical loomweights from Magna Park are not uncommon, but the group of ten weights containing several near complete examples is certainly unusual, as is the presence of so many decorated examples. As a group of ten, or perhaps twelve allowing for the presence of further fragments in the assemblage, they might have been a set of weights from a single warp-weighted loom. There is also an apparent symmetry in the group, with two larger, plain weights, at around 1.5kg, and eight weights all weighing slightly less than 1.0kg, which can be divided into two groups of four by differing styles of decoration. We may suggest that these differences probably reflect how they were set on the loom, with the heavier weights perhaps situated at either end.

Sets of loomweights were used to tension the vertically hanging warp threads on a vertical warp-weighted loom, and were used in Britain from the middle Bronze Age through to the Anglo-Saxon period. Subsequently, the horizontal loom was introduced and there was no further need for such weights. Throughout these 2500 years of use, weights in fired or baked clay were most commonly used in all periods.

The typology of prehistoric loomweights is quite well understood, even if precise dating is generally lacking. There is an example from South Fengate, near Peterborough (Third Drove Excavation: Site 0), of a more rounded bun-shaped clay weight, with a longitudinal perforation, found in a pit along with sherds from a Collared Urn, which might suggest an origin within the early Bronze Age (Pryor 2001, 31 and fig 2.11).

However, it is in the Middle Bronze Age and into the late Bronze Age that finds of cylindrical loomweights with a longitudinal perforation become common and widespread. There are a number of local examples. A fragment probably from a cylindrical loomweight came from one of the postholes of the large late Bronze Age/early Iron Age roundhouse at Bancroft, Milton Keynes (Williams 1994, 361–362 & fig 186; 396). From the south of the county there is a concentration of 19 loomweights from Taplow Court (Kidd 2007, 4) and there is another important collection from Yarnton (Site 4c) in the Thames valley in Oxfordshire (Hey and Bell 2000). To the north, there are examples from the lower Nene valley around Peterborough from Fengate (Pryor 1980, 125-6 and fig 75) and, more recently, from Maxey Quarry (Ian Meadows pers. comm.). Three of the four examples from Fengate are plain, but the fourth has deep puncture impressions very similar to the Magna Park examples. From further afield there are other examples of cylindrical loomweights placed within pits, including a complete example from Claypit Lane, Westhampnett, West Sussex that had been stood on the base of a pot (Chadwick 2006, 33 & 44, fig 25). Just over a half of a cylindrical loomweight from a late Bronze Age pit at Layham Quarry, Suffolk, is 110mm in diameter, stands 80mm high and has an estimated original weight of 1.5-1.6kg, making it closely comparable in size and weight to the larger examples from Magna Park (Chapman 2007, plate 2).

Pyramidal loomweights with a single transverse perforation at the top appear in the later Bronze Age/early Iron Age, but are the least common of the three types. There seem to be few recently illustrated examples, and the scarcity suggests a much shorter period of use. Another late Bronze Age pit at Layham Quarry in Suffolk produced part of a slightly tapering cylindrical weight with a transverse perforation near the narrower end (Chapman 2007, plate 2). This was 80mm long by 60mm diameter, with an estimated original weight of 0.5kg, significantly lighter than the Magna Park loomweights.

In the middle Iron Age, triangular fired clay loomweights with corner perforations are a very common find on settlement sites across the country. A stack of five large triangular loomweights, each weighing around 2.7kg, was recovered from a pit within a roundhouse at Coton Park, Rugby, Warwickshire (Chapman forthcoming) and loomweights also feature within structured pit deposits, with complete weights

being placed on the base of pits within an Iron Age enclosure at Kennel Farm, Basingstoke, Hampshire (Chapman 2006, 46-48 and fig 21).

The careful deposition of loomweights in pits in the Iron Age reflects the cultural significance of weaving, and the deposition of the set of weights at Magna Park may have had a similar ritualised origin. The presence of this group in a pit should not be considered to be merely the disposal of domestic waste in a convenient hole in the ground, particularly when that hole provides the sole evidence for this entire episode of activity.

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