

BURNT OFFERINGS: INVESTIGATING THE BURROUGH HILL HOARD

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In July 2013 a substantial hoard of Iron Age base metal objects was found during archaeological excavations carried out by the University of Leicester at Burrough Hill hillfort, near Melton Mowbray, Leicestershire. The hoard comprised chariot-fittings, horse-harness fittings and a collection of iron tools, and was found near the bottom of a large pit, located within the hillfort interior. The pit was one of a series of similar features associated with a roundhouse, close to the south-west corner of the hillfort.

INTRODUCTION

The Burrough Hill Project, led by the University of Leicester and ULAS, was a research and training excavation undertaken at the hillfort over five seasons, between 2010 and 2014. Over the course of the project, excavation areas focused on a range of locations, both inside and outside the ramparts, in order to address a series of research questions aimed at forming a better understanding of the hillfort.

In the final two seasons, two area excavations (Trenches 8 and 11) focused on the south-west corner of the hillfort to examine a possible second entrance through the ramparts, and the local setting of a roundhouse that had been revealed through geophysical survey (Figs 1 and 2). The roundhouse consisted of a circular wall slot, enclosed by an eavesdrip gully, with an east-facing entrance, and was some 11m in diameter. Unusually, the roundhouse entrance had been sealed by two short gullies, both of which were rich in finds, contrasting with the main roundhouse features which were relatively finds free. A number of large pits and a possible midden were all located around the perimeter of the roundhouse. Each contained distinctive finds assemblages. One pit contained a substantial amount of domestic material, comprising broken quernstones, loom weights, pottery, animal bone and fired clay oven fragments, which may have related to occupation of the roundhouse and was dubbed 'the house-clearance pit'. The midden contained a similar domestic-related assemblage, while another pit held a large group of animal bones. The most spectacular discovery, however, came from a deep oval pit behind the roundhouse, which had been the setting for the deliberate burial of a spectacular hoard of Iron Age metalwork, including decorative bronze and iron chariot fittings, horse-harness fittings and a number of iron tools.

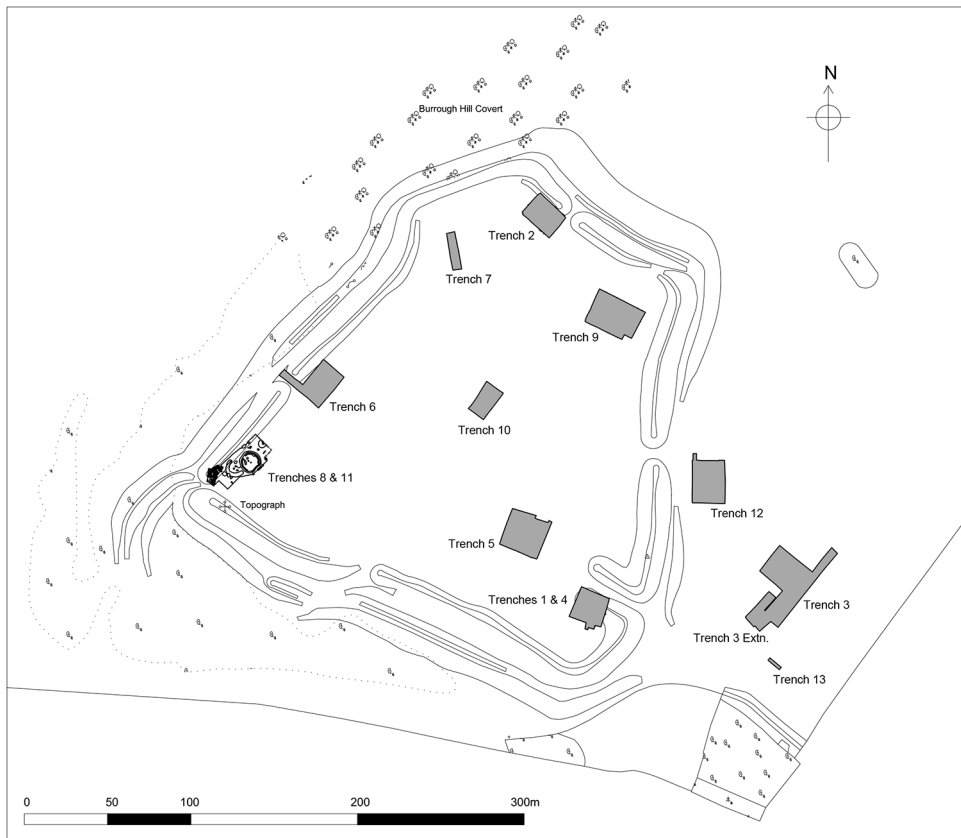


Fig. 1. Overview of the Burrough Hill excavations, showing the location of Trenches 8 and 11 in the south-west corner of the hillfort. © University of Leicester.

THE CONTEXT OF THE HOARD

Pit [8018] was ovoid in plan, measuring $c.1.53\text{m} \times 0.70\text{m} \times 1.30\text{m}$ deep, and had been backfilled with a complex sequence of deposits – with the hoard found carefully arranged near its base (Fig. 3). The majority of the assemblage can be divided into chariot-gear and strap-fittings (the latter probably associated with horse harness) that appears to form a composite, though incomplete, set (see below). The chariot-fittings comprise two linch-pins (Sf1006, Sf1009) and three terrets (rein-rings) (Sf856, Sf1008, Sf1021). The strap-fittings include two ‘miniature terrets’ (Sf873, Sf1005), three toggles (Sf857, Sf1010, Sf1011) and a figure-of-eight strap-union (Sf1007). Two small copper-alloy rings (Sf877, Sf878) may have been strap-fittings, or they could have been part of a container or bag. The chariot-fittings were laid out in a regular, square arrangement, and may have been contained within a box or some other form of organic container that was subsequently burnt *in situ* (Fig. 4).

Three iron tools were found above the chariot-fittings: a handled scraper (Sf871); a hooked blade (Sf1004); and a knife (Sf874). The positioning of these

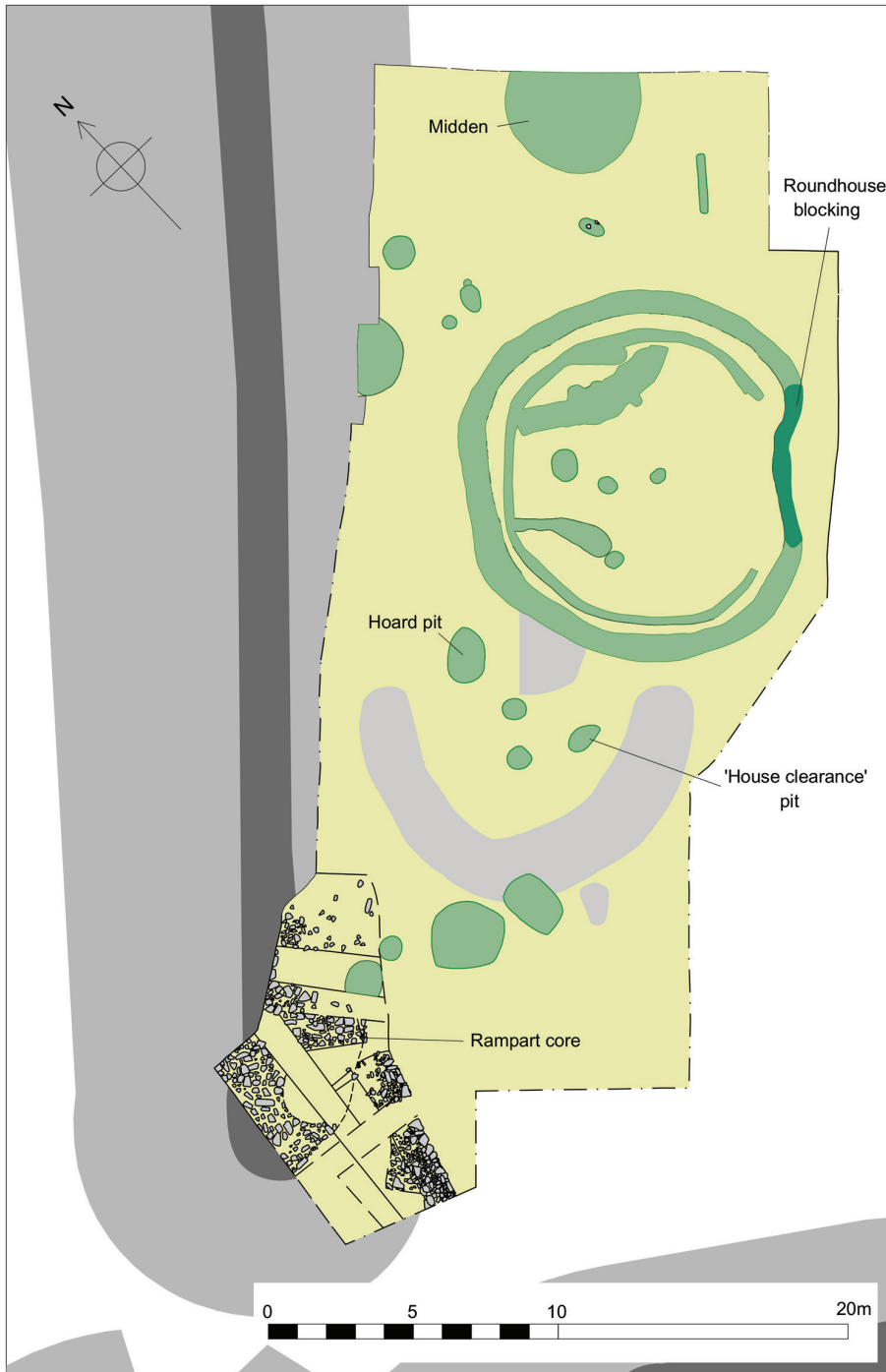


Fig. 2. Detailed plan of Trenches 8 and 11 showing the local context of the hoard pit (earlier prehistoric remains in grey tone). © University of Leicester.



Fig. 3. The hoard under excavation. © University of Leicester.



Fig. 4. Detailed view of part of the hoard *in situ*, illustrating the broadly square arrangement of the linch-pins and the curved blade, situated in an upright position on the left-hand side of the picture. © University of Leicester.

objects strengthen the argument that the chariot-fittings were buried in a box. The hooked blade sat upright in the soil, as if lying propped against something. The other iron tools were slightly above the main deposit, but tipping downwards; this could suggest that they originally rested on the top of the box, but slipped down when it eventually collapsed on itself. Three small copper-alloy and iron rivets (Sf872, Sf1001, Sf1002) and an iron nail (Sf875) may be box fittings, and a more substantial iron split-pin (Sf1020) could also be related to such a container. Alternatively, they could also be associated with the chariot-gear or harness fittings.

The hoard context also produced a single small, annular bead of jet or shale (Sf1000), and a triangular clay loom-weight (Sf1003), although the specific relationship of these finds to the hoard is unclear. They could have been included deliberately as part of the deposit, which perhaps seems most likely, or possibly as coincidental additions during subsequent backfilling of the pit.

The pit stratigraphy allows us to reconstruct the basic sequence of events (Fig. 5). A *c.*0.2m deep layer of silt (8129), below the hoard context, suggests that the pit had been open for some time before the hoard was deposited. The hoard was then placed in a rich organic layer (8117), containing lenses of charcoal and ash, as well as a widespread friable deposit, identified as burnt and largely mineralised

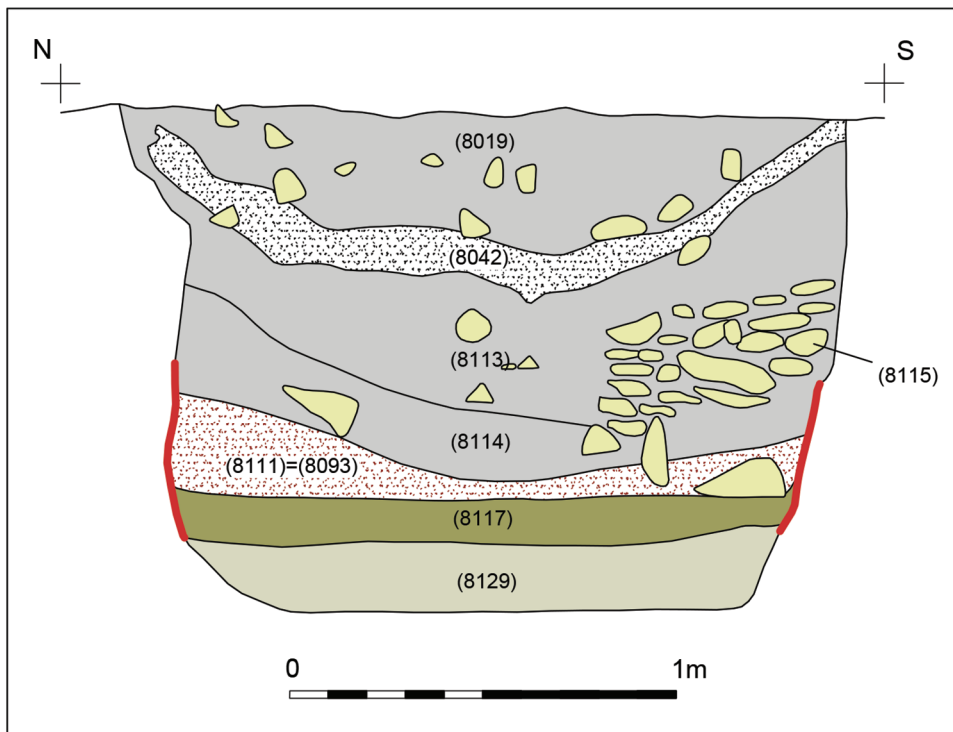


Fig. 5. Cross-section of the hoard pit [8018] showing the sequence of its infilling. The extent of scorching on the pit sides is illustrated by the thicker orange lines on either side of the drawing. © University of Leicester.

cereal chaff. This was probably placed directly onto the silted base of the pit to act as a 'bed' for the deposit. Then, the box containing the chariot-gear and strap-fittings was placed into the pit. The tools were placed on top, and it is possible that the loom-weight and jet bead were also added to the pit at the same time. The hoard was then covered with twigs and kindling, and set on fire. The sides of the pit are scorched, and the three iron implements show clear evidence of burning. The kindling was not fully consumed by the fire, creating a burnt layer (8111=8093), rich in fuel-ash and burnt chaff, which ultimately helped to preserve the artefacts. A small copper-alloy ring (Sf848) showing evidence of burning was also found in the fuel-ash-rich layer, and may have been associated with the hoard. There followed a series of soil and stone deposits (8114), (8115), (8113), (8042) and (8019), which eventually filled the pit, the relative complexity of these layers perhaps suggesting that this was a gradual process rather than an immediate infilling.

Other finds from these later layers, which may be indirectly related to the hoard, include an iron terret (Sf805), a copper-alloy ferrule or handle-fitting (Sf808), a bone pin (Sf814) and an antler terminal (perhaps from a comb or cheek-piece) (Sf849). These finds came from a shallow charcoal-rich fill near the top of the pit (8042), which also produced 48 sherds of pottery, as well as unworked animal bone, flint and slag. It is uncertain how much time had elapsed between the different phases of backfilling, but it is interesting that the iron terret is one of the only other pieces of chariot-gear from the site (the only other find is a figure-of-eight strap junction from a pit in Trench 5, which has different decoration to the example from the hoard but is otherwise similar). At around 50mm wide, the iron terret is very close in size to the two smaller copper-alloy terrets from the hoard deposit. Given the presence of this material and the unusually 'rich' nature of the pit, it is possible that this later deposit was a deliberate reference to the earlier burial of the hoard in the same pit. The final upper fill of the pit (8019) contained no metalwork, although 28 sherds of East Midlands Scored ware were recovered.

THE DATE OF DEPOSITION

Samples of charred glume wheat and barley grains from the layer below the hoard deposit (8129), and the deposit itself (8117), respectively were submitted for radiocarbon dating.

The results are shown in Table 1, and are quoted in accordance with the international standard known as the Trondheim convention (Stuiver and Kra 1986). They are conventional radiocarbon ages following Stuiver and Polach (1977). All have been calculated using the calibration curve of Reimer *et al.* (2013) and the computer program OxCal (v4.3.2) (Bronk Ramsey 1995, 1998, 2001, 2009). They are quoted in the form recommended by Mook (1986), with the end points rounded outward to ten years on the basis of the error terms. The ranges quoted in italics are posterior density estimates derived from mathematical modelling of archaeological problems (see below). The ranges in plain type in Table 1 have been calculated according to the maximum intercept method (Stuiver and Reimer 1986). All other ranges are derived from the probability method (Stuiver and Reimer 1993).

The stratigraphic evidence has been incorporated into the model as follows. The two layers from which material was submitted for dating were completely different

Lab. no.	Context	Material	$\delta^{13}\text{C}$ (%)	Radiocarbon age (BP)	Calibrated date 95% confidence	Posterior density estimates	
						95%	68%
SUERC-67858	(8117)	Burnt grain (barley)	-24.2	2126 ± 30	350-50 cal BC	350-50 cal BC	200-100 cal BC
SUERC-61354	(8117)	Burnt grain (barley)	-24.1	2157 ± 30	360-90 cal BC	360-100 cal BC	360-160 cal BC
SUERC-67859	(8129)	Burnt grain (glume wheat)	-25.4	2145 ± 30	360-50 cal BC	360-50 cal BC	350-170 cal BC
SUERC-61355	(8129)	Burnt grain (glume wheat)	-22.6	2215 ± 30	380-200 cal BC	380-200 cal BC	360-190 cal BC
R_Combine SUERC-67858 and 61354	(8117)			2142 ± 22	350-90 cal BC	350-90 cal BC	210-120 cal BC

Table 1. The results of the radiocarbon dating for the hoard pit deposits.

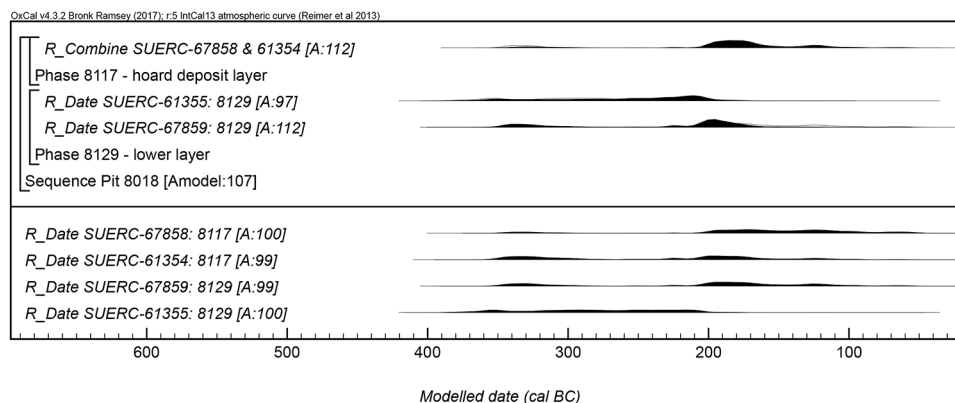


Fig. 6. Radiocarbon determinations and modelled dates. © University of Leicester.

in character. The lower layer (8129) was a silting deposit that predated the hoard deposition and had accumulated over an unknown period of time, although this was probably not of long duration. The two determinations from this layer were included in the model as separate radiocarbon ages. The layer onto which the hoard was laid (8117) was rich in burnt and mineralised organic material, and is interpreted as part of the hoard deposition event. The two determinations from (8117) (SUERC-61354; SUERC-67858) are statistically equivalent ($T'=0.5$; $n = 1$; $T'(5\%) = 3.8$) and could represent material of the same age. These two determinations were therefore combined in the model as a single weighted mean (R_Combine SUERC-67858 and 61354, 2142BP \pm 22).

The three dates were modelled in a simple sequence reflecting the stratigraphy of the pit fills, and the results are shown in Fig. 6. The model shows good overall agreement ($A=107$). Posterior density estimates for the hoard deposition indicate a deposition date between 350-90 cal BC (95 per cent) and probably between 210-120 cal BC (68 per cent).

This fits well with the dating suggested by stylistic comparison of the hoard components to other objects from dated contexts. Lipped terrets generally date to the third and second centuries BC (Lewis 2015, 76). Close parallels for the hoard fittings come from chariot burials in East Yorkshire, which Bayesian statistical analysis suggests probably date to the period 225–185 cal BC (Hamilton *et al.* 2015, 181; Jay *et al.* 2012). Deposition of the similar hoard at Bury Hill, Hampshire has been radiocarbon dated to the second century BC (Lewis 2015, 31).

THE CHARIOT-GEAR AND STRAP-FITTINGS

The major pieces of chariot-gear and strap-fittings from the Burrough Hill hoard are:

- **Three copper-alloy terrets:** These D-shaped rings were fixed at intervals along the yoke of a chariot. The reins were passed through the terrets as part of the harnessing system (Palk 1992; Lewis 2015).

- **Two iron linch-pins with decorative copper-alloy terminals:** These were used to fix each wheel to the axle. The iron pin ran through the axle, and the terminals held it in place. A hole through the upper terminal allowed a thong to be threaded through (Stead 1991, 46–7).
- **Two copper-alloy ‘miniature terrets’:** These rings were probably used as strap-tighteners for attaching the linch-pins (Stead 1991, 46–7).
- **Three copper-alloy toggles:** Probably used as strap fastenings. Two are a matching pair; the third is of a different, simpler design.
- **One copper-alloy figure-of-eight strap-union:** These are thought to have been used on either side of the yoke-pole to adjust the girth or chest-strap by which the horses were harnessed to the chariot (Stead 1991, 49).

The most likely places where these pieces were located on the chariot is shown in Fig. 7. Most of these fittings are decorated. There are two styles of decoration present, perhaps suggesting two sets of material: one group of chariot-fittings (linch-pins, terrets and miniature terrets), very closely paralleled at Kirkburn, East Yorkshire (K5) (Stead 1991), and a separate set of strap-fittings (figure-of-eight strap union and matching pair of toggles) with ‘Mill Plain style’ moulded decoration (Spratling 1979, 134; Lewis 2015, 88–9).

The chariot-gear

The three terrets have disc-shaped stops where the terret ring meets the flat strap bar, and ‘lipped’ decoration around their circumference (Fig. 8). There are six sets of raised, lipped mouldings around the circumference of each of the two smaller rings (which are very similar in size), and seven on the larger ring which would have been used at the centre of the yoke. This larger terret is the only one which shows any evidence of wear, with clear erosion visible on the inside of both stops.

The ‘miniature terrets’, although largely plain and flat on the reverse, have disc-shaped terminals on either side of the short strap-bar which match those on the full-size terrets. The width of the strap-bars suggests that these fittings would have taken straps around 5mm in width, and each strap-bar shows evidence of wear in the centre, probably relating to thongs threaded through the heads of the linch-pins (Stead 1991, 44–7).

The linch-pins are the most elaborately decorated objects from the hoard (Fig. 9). They are vase-headed, hoof-terminal types (Palk 1992, 141–8), decorated on the outside of each vase-head, and also in the circles at the top of the vase-head and at the base of the ‘hoof’. The top of the vase has a triskele design, while the base of the loop has a lyre-loop pattern. Each motif consists of raised crescent and lobe mouldings, terminating in stylised bird-heads; key elements such as the ‘eyes’ of the bird-heads and base of the lyre loop are picked out using ‘berried rosettes’ of raised dots. The flat areas between the mouldings form complementary negative motifs, including ‘fins’ and ‘trumpet-voids’. On the sides of the vase-heads, these motifs are picked out with stippling. Only one side of each vase-head is decorated, no doubt the outer side as used, showing that there was a preferred left and right arrangement on the chariot. The resemblance of one terminal to a hoof may not be coincidence.

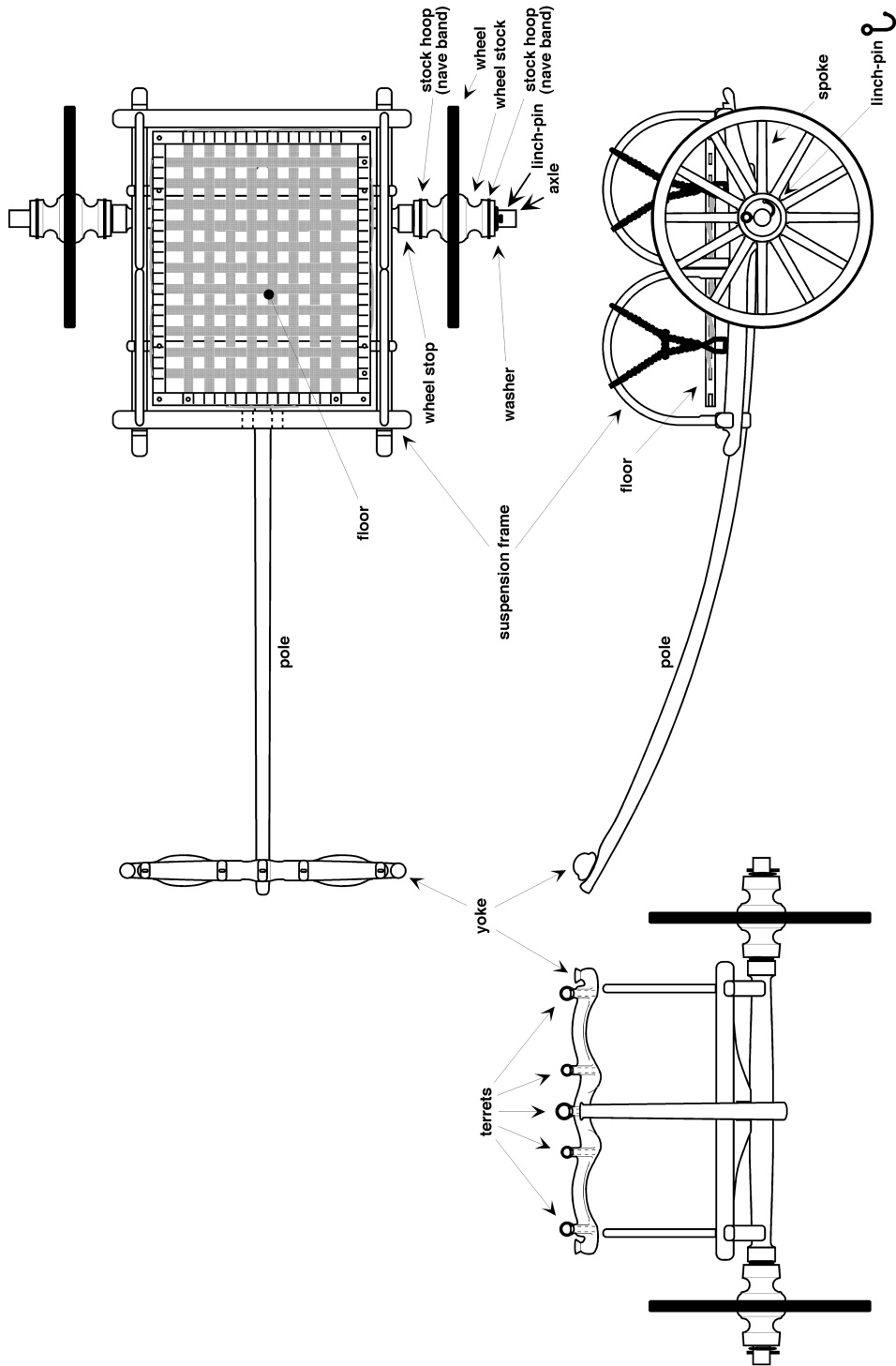


Fig. 7. Reconstruction drawing of an Iron Age chariot showing the locations of the key metal fittings. Drawing by Stephen Crummy. © Trustees of the British Museum.



Fig. 8. Montage showing the large terret (left), one of the matching smaller terrets (centre) and a 'miniature terret' (right), which would have served as a strap-tightener for the linch-pins. Photo by Carl Vivian, © University of Leicester.

Spratling (1972, 58) and Lewis (2015, 145–8) have each pointed out the close resemblance of the 'hoof' terminal to 'the upturned hoof and fetlock of a horse', and a linch-pin from Llyn Cerrig Bach (MacDonald 2007, 219) is naturalistically modelled as such. As the axles turned, the rotation of the linch-pins on either side could have given the impression of galloping hooves.

The Burrough Hill chariot-gear finds are most closely paralleled by parts from dismantled vehicles in East Yorkshire graves (Stead 1965, 1979, 1991; Dent 1985), in particular the very similar assemblage of linch-pins, terrets and 'miniature terrets' from Burial K5 at Kirkburn (Stead 1991, 44–7). However, they fit into a wider picture of types of chariot-gear widely distributed across central and southern England. Lipped terrets are found across southern England, particularly in East Anglia, as well as in Yorkshire (Palk 1992, 656; Garrow and Gosden 2015, 218; Lewis 2015, 90, 159, 177), although the Burrough Hill finds are the only examples of lipped terrets from the East Midlands. Vase-headed, hoof-terminal linch-pins and 'miniature terrets' are also found across southern and central Britain (Palk 1992, 666, 678).

Despite the existence of an almost identical assemblage from Kirkburn, local manufacture is probably more likely than these objects being brought into the East Midlands from outside. Although the decoration on the Kirkburn fittings is almost identical, the method of manufacture of the terrets is not. The Burrough Hill terrets are solid, cast copper-alloy, whereas the Kirkburn examples have been cast in



Fig. 9. Montage of three different views of one of the linch-pins, illustrating the exquisite decoration. Photo by Carl Vivian, © University of Leicester.

copper-alloy over an iron strap-bar. Stead (1991, 47) notes that while the Yorkshire examples have iron bars, lipped terrets from southern England always have copper-alloy strap-bars. The chariot-gear set from Burrough Hill therefore seems to combine the decorative style of the set from Kirkburn with southern traditions of manufacture.

Both southern and northern parallels can also be found for the decoration of the linch-pins, the most richly ornamented objects from Burrough Hill. The key designs from the linch-pin terminals, triskeles and lyre-loops, are common motifs in southern and central British Iron Age art (Macdonald 2007, 123–6; Joy 2010, 28–34). The triskeles on the Burrough Hill linch-pins are paralleled closely on the near-identical pair from Kirkburn (Stead 1991, 47–52), but also on one from Owslebury (Collis 1968, pl. xii) and the shield boss from Llyn Cerrig Bach (Macdonald 2007, no. 47). Berried rosettes and moulded lobe decoration appear on the linch-pins from

Kirkburn, and terrets from Garton Station, East Yorkshire (Stead 1991, 47–52), but also on ‘Mill-Plain’ style terrets from Bury Hill, Hampshire (Cunliffe and Poole 2000, fig. 2.29), and bridle bits from Ulceby, Lincolnshire, and Ringstead, Norfolk (Clarke, 1951; Palk 1984, no. DJ32, 33 and 37).

The strap-fittings

The strap-union, of Taylor and Brailsford’s (1985) Type I, has a central figure-of-eight section, flanked by two parallel strap-bars on either side of the ‘8’, which would have taken straps around 20mm wide (Fig. 10). It is plain on the reverse, while the upper surface is decorated with raised lobe- or leaf-shaped mouldings, slanted and meeting point-to-point to form zig-zag lines. These bands of decoration run across the centre of the ‘8’, along the top and bottom of each bar, and a single pair of opposed leaf-shapes decorate the centre of the top and bottom of the ‘8’.

The three toggles are the pieces for which it is hardest to be sure of their function. Two form a matching pair (Fig. 11). These have hammer- or dumbbell-shaped bodies with a swollen centre and disc-shaped terminals at each end. The central section is hollowed out beneath a strap-bar to take a strap approximately 10mm in width. The third toggle is a simpler design, formed of a circular loop and triangular loop joined together by a shank. Similar toggles are known from sites across central and southern Britain, and have often been interpreted as clothing-related (Wild, 1970; Stead 1991, 56) or multi-purpose fasteners (Jackson 1970, 40). However, they have been found alongside chariot-gear in several instances – for example, Ringstead (Clarke 1951) and Kirkburn burial K5 (where two were found at one end of the yoke pole: Stead 1991, 56). In the case of Burrough Hill, the zig-zag lines of opposed leaf-shaped mouldings on the two matching toggles are



Fig. 10. The ‘figure-of-eight’ strap-union.
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Fig. 11. One of the barrel-shaped toggles.
Photo by Carl Vivian, © University of
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precisely echoed on the strap-union, suggesting that these three objects were part of a harness-fitting set.

This proposed leaf-pair-decorated harness-fitting set is decorated in a slightly different style to the Burrough Hill chariot-gear. The paired, angled leaf-shaped mouldings, seen on the toggles and strap-union, are typical of Spratling's (1979) 'Mill Plain' style. Fittings with these kind of leaf-shaped mouldings (rather than the berried-rosettes and tendril-like lobed decoration, which are more widespread) are generally southern in their distribution. The motif is closely paralleled on a strap-union from Arundel in West Sussex (Taylor and Brailsford 1985, no. 1), terrets from Mill Plain, Christchurch and north-west Suffolk (Palk 1992, nos 57–8), and a decorative stud from Bury Hill, Hampshire (Cunliffe and Poole 2000, 51, fig. 2.29). The type was also made at Gussage-All-Saints, Dorset (Foster 1980, 11). None of the Burrough Hill chariot-fittings (linch-pins or terrets) show this motif. Lewis (2015, 143) has argued that the moulded leaf-pairs on the Burrough Hill strap-fittings echo the lip-pairs on the terrets, and that these were indeed intended as a set. However, lipped terrets and fittings with paired leaf-mouldings are not generally found together, and in fact there are terrets from southern Britain with identical ridges of zig-zag leaf-pairs which would seem a closer counterpart if a precise stylistic match was desired. There are certainly no matching leaf-pair or lip mouldings on the linch-pins. It seems most likely that the whole group was not originally intended as a matching set.

Interpretation of the sets

The stylistic and technological character of the finds leaves us with the suggestion of two separate, but complementary, sets of material in the Burrough Hill hoard: the chariot fittings which are most closely paralleled as a set in Yorkshire, but also show southern connections in their decoration and manufacture; and a separate set of strap fittings that are more comfortably southern in their style of decoration. The two sets are complementary, rather than overlapping, and could certainly have been used together. It is interesting to note that, based on the assemblage from Kirkburn, the figure-of-eight strap-fitting from elsewhere at Burrough Hill (found in a pit in Trench 5) is a closer match for the chariot-gear set than the strap-union from the hoard itself. The Trench 5 strap-union is ornamented with lobed curvilinear motifs similar to the hoard linch-pins, as well as a ring of pellets which echoes the linch-pins' berried-rosettes. Similar rings of pellets are also seen on the linch-pins and strap-unions from Kirkburn K5.

The Middle Iron Age chariots represented in the East Yorkshire burials were two-wheeled vehicles, each pulled by two small horses. Assuming that the fittings from the East Yorkshire graves represent complete sets, the assemblage from Burrough Hill appears to be incomplete. This can be seen from Table 2, which compares the numbers of each find type to the quantity in the almost identical assemblage from Kirkburn (Burial K5), and the sets from Garton Station (Burial GS6), Wetwang Village (Stead 1991, 219–26; BM records) and the primary pit deposits at Bury Hill (see below: Cunliffe and Poole 2000, 79–80; Garrow and Gosden 2012, 283).

Object type	Find type	Garton Station	Wetwang Village	Kirkburn	Primary pits at Bury Hill	Burrough Hill hoard
Chariot-fitting	Linch-pin 'miniature terret' (or strap-tightener for linch-pin attachment)	2	2	2	2	2
	Terret	–	2	2	–	2
	Terret	5	5	5	5	3
	Nave hoop	4	4	4	4	–
	Tyre	2	2	2	–	–
Harness-fitting	Bridle-bit	2	2	2	2	–
	Figure-of-eight strap-union	–	2	2	2	1
	Toggle	–	–	3	–	2

Table 2. Numbers of metalwork find types from comparable assemblages.

In terms of the chariot itself, clearly the wheels were not included at Burrough Hill, explaining the absence of tyres and nave hoops, but both of the linch-pins and their associated 'miniature terrets' were found. Unusually, at Burrough Hill only three terrets were recovered. The normal provision on Iron Age chariots appears to be five terrets – a large central one, with two smaller ones flanking on each side. The precise harnessing arrangement is unknown, but frequently (as at Burrough Hill) the large, central terret is the only one which shows considerable wear. It is entirely possible that an alternative harnessing system could have used only three terrets, but perhaps more likely is that the final two from the Burrough Hill set were omitted from the hoard. The harness-fittings from Burrough Hill may also be a partial group: no bridle-bits were included, and only one figure-of-eight strap union. If these are correctly interpreted as being used to adjust the girth or chest-strap by which the horses were harnessed to the chariot, then a single example would have been insufficient to perform its function alone, and it is likely that a matching piece was excluded from the deposit.

Whilst unusual in Middle Iron Age deposits the selection of only a partial representative group from a set is common in later Iron Age hoards. Leeds (1933, 121–2) suggested that similar sets of terrets (a large central one and four smaller) can be inferred in the hoards from Stanwick, Westhall and Polden Hills (see also Brailsford 1975), but the majority of these apparent sets are incomplete. It has also been noted that complete Middle Iron Age sets (such as those at Kirkburn and Bury Hill) are sometimes made up of components that 'could certainly have been *more* uniform' (Garrow and Gosden 2012, 217–18, 283), suggesting that components could have circulated separately, with elements from different sets being combined. The Burrough Hill find is unusual in that it seems to constitute two complementary sets from which particular pieces have been excluded, rather than a mixture of objects from several sets forming either a large group of overlapping material (more common in Late Iron Age hoards;

e.g. Stanwick, Westhall and Polden Hills) or a single composite, but functionally complete, set (more common in Middle Iron Age deposits; e.g. Kirkburn, Bury Hill).

THE IRON TOOLS

Three iron tools were found above the chariot gear:

- **A handled scraper** (Fig. 12).
- **A hooked blade**, possibly a reaping hook (Fig. 13).
- **A knife**, with square-sectioned tang and long blade (Fig. 14).

The scraper is the most unusual of the objects. It has a long handle, terminating in a circular loop, perhaps for suspension. At the other end, in the same plane as the loop, the handle flares into a flat, triangular plate. The end of this plate is bent perpendicular to the handle, giving the object an L-shaped profile. The short, perpendicular end of the triangular plate ends in a line of serrated notches, or short triangular teeth, along a convex edge. The object resembles a handled scraper or toothed comb. No direct ancient parallel could be found. Although it bears some similarity to surgical implements thought to have been used as retractors (Künzl 1991), Ralph Jackson (*pers. comm.*) has suggested that the object is too crude to have been used as a surgical implement. The closest parallels amongst modern tools are handled ‘hog scrapers’ (sometimes with similar filed teeth), used for scraping hides to remove hair from the exterior or soft tissue from the reverse, as part of the process of preparing rawhide or leather (Browne 1884, 194). It is also possible that the object could have been used as a ‘curry comb’ for grooming horses, but the teeth are perhaps too short and sharp for this purpose.

The hooked blade has its sharpened edge on the interior of the curve, suggesting that it could have been a reaping hook (Manning 1985, Type 3). Such finds are relatively common on Iron Age and Roman sites (Manning 1985). Other uses, such as in hurdle-making (Cunliffe 2005, 489), are also possible. Today, curved blades with a similar profile are also used in leatherworking.

The knife has a square-sectioned tang and a long blade with the edge parallel to the back (Manning 1985, Type 17; compare Rudston grave 45, Stead 1991, 80, fig. 58). It could have been used for a number of purposes. When viewed from the top, the blade is curved along the spine. This may have been part of the tool’s design, or the knife may have been deliberately bent before deposition. Cunliffe (2005, 489) has suggested that bone objects with a similar curved profile (‘rib knives’) were used for scraping fatty deposits away during the preparation of hides.

The three tools could represent different aspects of everyday agricultural work, including harvesting. However, if the three pieces are a set, then use in skinning and scraping hides for use in rawhide or leatherworking seems the most likely interpretation. Whilst impossible to be certain, it is possible that tools such as knives might have had a male gender association: in the East Yorkshire burials excavated by Stead (1991, 141), the four knives recovered were all found laid on the right side of male skeletons.



Fig. 12. The iron scraper. Photo by Carl Vivian, © University of Leicester.



Fig. 13. The hooked blade. Photo by Carl Vivian, © University of Leicester.



Fig. 14. The long-bladed knife. Photo by Carl Vivian, © University of Leicester.

THE WIDER CONTEXT OF THE HOARD

Whilst deposits of horse- and chariot-gear are relatively common in the Late Iron Age, they are far more unusual in Middle Iron Age Britain. Nevertheless, there are parallels from other hillfort sites, most notably Bury Hill (Cunliffe and Poole 2000 79–80; Garrow and Gosden 2012, 280–7) and Ham Hill (Appleby 2013). In fact, ‘special deposits’ of various kinds are common on hillforts, and this is the settlement type which consistently produces the most decorated ‘Celtic art’ objects, with 44 per cent being horse-gear (Garrow and Gosden 2012, 280–2).

Often, as at Burrough Hill, these deposits are found in re-used storage pits, probably originally used for storing grain over the winter months. The choice of such a feature for the deposition of the Burrough Hill hoard may just reflect that it was a convenient hole that needed backfilling. However, other unusual deposits from the hillfort were often associated with similarly sized former storage pits, implying a clear connection between offerings and particular types of feature.

The meaning of pit deposits can be difficult to unravel. Cunliffe (1992) and Giles (2015) interpret them as thanksgiving or propitiatory offerings. Giles in particular emphasises the juxtaposition of the fruits of the harvest with the tools of production at Garton Slack, where burnt grain and iron tools were buried together (Giles 2012, 233; and see below). Hill (1995, 116) suggested that distinctive types of ‘special deposit’ might have emphasised the differences between sites, and helped to construct the communal identities of their inhabitants. Giles also suggests that, given the rarity of this type of deposit, the Garton Slack hoard may have been buried as an offering to address a particular crisis (*ibid* 402–3). The latter idea may be particularly relevant to the Burrough Hill hoard, given its potential relationship with the blocked roundhouse and the ‘house-clearance’ pit – could the hoard have been prompted by the abandonment of the building, or a traumatic event associated with those who lived there?

The closest parallel for the Burrough Hill hoard is from Bury Hill, where a complete set of chariot equipment (see Table 2) was recovered from the bases of two pits, around 35m apart (P24 and P45). Large burnt timbers in each pit prompted both Cunliffe and Poole (Section 2: B7), and Garrow and Gosden (2015, 284), to argue that these primary deposits represent the remains of a burnt chariot. As at Burrough Hill, the fittings included matching pairs, but overall seemed to be a composite assemblage rather than a single matching set. Other material was also found in the Bury Hill pits, including pottery sherds and animal bone. P24 also contained three iron artefacts – a knife, a spearhead and an adze, perhaps referencing a similar range of activities to the iron tools from Burrough Hill. After the primary pits had been backfilled, further pits were dug which intercut P24 and P45, and in each of these secondary pits, chariot-gear was also deposited (a terret and strap-union in one, and a linch-pin in the other). This return to the same location to deposit similar material is perhaps echoed by the presence of an iron terret in the upper fill of the pit, which contained the Burrough Hill hoard.

However, whilst the Bury Hill pit deposits have many similarities to Burrough Hill, there are also differences. Firstly, at Burrough Hill, the fittings had been carefully dismantled from their vehicle(s) and laid out in a box or other container. The possible existence of two sets, and the fact that some components seem to have

been excluded, raises the question of whether the contents of the box represent parts from a single vehicle, or parts of several which had circulated separately and been brought together for deposition. Secondly, the Burrough Hill hoard consists, as far as we know, of incomplete sets of items in a single pit. It remains a possibility, however, given the context of deposition at Bury Hill, that another pit exists at Burrough Hill beyond the excavated area, which contains the other halves of both the chariot- and harness-fittings.

Finally, once assembled, the Burrough Hill hoard was placed into the pit on a bed of chaff, and then burnt *in situ*. Although perhaps not quite as spectacular as the burning of an entire chariot at Bury Hill, this would none-the-less have been an impressive sight for those attending and certainly would have emphasised that this material was being deliberately taken out of circulation. The burning of a hoard deposit *in situ* is unusual, although at Danebury, Hampshire there is evidence for timbers and grain being burnt at the base of pits, and carbonised grain was sometimes included in tips of debris higher up in the pit fills (Cunliffe 1995, 260–1). Cunliffe suggests that the act of burning might have been intended either as the deliberate destruction of the offering (equivalent to breakage), or a kind of ritual purification.

One potential parallel comes from Garton Slack Iron Age settlement in East Yorkshire, where a hoard of blacksmith's tools was carefully wrapped in straw before being deposited at the base of a large storage pit, accompanied by a large quantity of burnt barley grain (Giles 2012, 395). Although the specific details of this event are not the same as the Burrough Hill example, there are interesting similarities between these two unusual deposits. Both consisted of mixed/contrasting materials as the focus for deposition, and both made use of former storage pits. Giles suggests that the juxtaposition of ironworking tools and agricultural produce at Garton Slack was a deliberate choice, and may have been intended to establish meaningful relationships between ironworking and grain production (*ibid* 396). The contrasting elements of the Burrough Hill hoard may likewise have been deliberately combined to reference agricultural production, affluence and craft-working, and the interrelationships between them, perhaps symbolising important aspects of life at the hillfort.

In the case of Bury Hill, Garrow and Gosden (2015, 287) take this one step further, suggesting that the burning and burial of a complete chariot served to 'impress and even intimidate' onlookers, while reinforcing both their wealth and their social identity as a hillfort community seemingly engaged in rearing and training horses (horse bones comprised an incredibly high 48.2 per cent of the animal bones recovered from Bury Hill). A similar suggestion is possible in the case of Burrough Hill, where the juxtaposition of iron tools (potentially associated with leatherworking) and finished chariot components could reference the local importance of chariot construction, harnessing, and maintenance. Deposition of chariot-gear is a rare occurrence in the East Midlands. Although the fittings are all of types widespread across central and southern Britain, and there is no reason why they could not have been locally manufactured, their selection for special treatment at this site is notable, and locally unusual. The *in situ* burning of the deposit must have created a sense of spectacle and perhaps cemented the particular significance of this area of the hillfort, or the site itself and its role in the wider community. The later deposition of an iron terret in the upper fill of the same pit may have been a reference to the original hoard, suggesting that the act was marked and remembered.

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