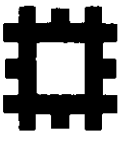
An Investigation and Earthwork Survey at Hartshill Hayes, Warwickshire



ENGLISH HERITAGE

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Summary

Archaeological field investigation and earthwork survey of the Country Park at Hartshill, near Nuneaton in Warwickshire, identified features related to landscape-use from prehistory to the 20th century. The report charts the development of this landscape and describes in greater detail the site of a motte and bailey castle and of industrial activity in the area, particularly manganese quarrying.

Introduction

Archaeological field investigation and analytical earthwork surveys were carried out in the Country Park at Hartshill (centred NGR SP 320 945), Warwickshire, by the Royal Commission on the Historical Monuments of England (RCHME: now part of English Heritage) at the request of the present owners, Warwickshire County Council. The work was undertaken in three short seasons each of two weeks duration, between 1997 and 1999, and was timed in order to obtain maximum visibility amongst the tree-cover while at the same time avoiding disturbance to nesting birds.

The Country Park consists of three distinct areas: Hartshill Hayes, or the Hayes, which is an area of mixed woodland covering some 46ha; a further wood of *c* 12ha known as Lawrence's Wood. These two woods are separated by an open stretch of grassland known as Hayes Common during the medieval period (Wager 1998, 59). The Country Park also straddles two parishes with Lawrence's Wood and Hayes Common lying in the civil parish of Oldbury, whilst the Hayes is in Hartshill. Although the Country Park as a whole is now referred to as Hartshill Hayes, this report will refer only to the woodland area as the Hayes and the term Country Park will be used to refer to the area covering the whole of the modern amenity area.

The Country Park is situated a little over 5km north-east of Nuneaton and 3.5km south of Atherstone. It is one of seven Country Parks and Nature Reserves administered by Warwickshire County Council and has long been regarded as an important habitat for wildlife, particularly birds, as well as being rich in flora. In order to improve the public's

awareness of the area a number of leaflets have been produced as well as sign-posted 'walks'; however, despite individual archaeological monuments being recorded in the past there has been no detailed analysis of the area as a whole. The aim of the RCHME investigation and subsequent survey was, therefore, to assess the archaeological potential of the Country Park and to provide detailed plans for management purposes and to further enhance the public's understanding of the heritage.

Within the Hayes two previously recorded archaeological features are present, a round barrow of Bronze Age date, and a motte attributed to the medieval period. To the side of the motte, and overlying its bailey, is the site of the former manor house known as Hartshill Castle. In Lawrence's Wood, below the escarpment, are the remains of an icehouse and a dammed pond. Just beyond the bounds of the Country Park, but nevertheless slightly impinging upon it, lies the Iron Age hillfort of Oldbury which, during the medieval period, was host to a cell of a Benedictine nunnery and later became the site of Oldbury House. The unusual geology, comprising a series of ribbons of different rocks which are exposed at the surface, has encouraged mineral extraction, and some of this can be documented by the extant archaeology.

Geology, Geography and Topography

The Country Park lies on the upper slopes of a north-west oriented ridge, a prominent feature within the local landscape that can been seen from, and provides views across, considerable distances, particularly to the north-east. Springs issue from the middle and lower north-eastern slopes of this ridge which ultimately feed the River Anker that flows from south-east to north-west at its base. The steep escarpment, together with this drainage pattern, appears to have channelled communications in a north-western direction. The main Roman thoroughfare - Watling Street, now the A5 road; the Coventry canal; and a railway all follow this course. Within the Country Park, the Hayes is considered to be ancient woodland which comprises mixed coniferous and deciduous trees and, until recently, lacked woodland management. Woodland rides and a series of smaller tracks and pathways divide the interior into manageable units aiding navigation and access.

A glance at earlier Ordnance Survey maps encourages the view that much of the ridge was common land until a relatively late date with settlements such as Atherstone, Mancetter,

Caldicote and Nuneaton, all situated at the foot of the ridge alongside the River Anker and its terraces. Other documentary sources suggest that much of the ridge was relatively well wooded until recent times, with the Hayes itself covering a more extensive area from Hartshill Green to the boundary with Oldbury, and south to Moor Wood (Wager 1998, 59).

The geology of the Hartshill area is particularly complex and the ridge and escarpment on which the Country Park is situated consists of a number of near vertical strata comprising, from south-west to north-east, the Lower and Middle Coal Measures, and the Outwood, Mancetter, Abbey and Purley Shales. Further downslope are the Hartshill Sandstones, which have been quarried since the last century in the area around Hartshill Green. Within the Outwood Shale lie a series of parallel sills, or dykes, of intrusive igneous diorite rocks most of which are quite narrow. The widest of these exposures forms the summit of Oldbury Hill but narrows towards the west side of Hartshill (Baldock 1991, 30; Geology map 1994, sheet 169). Also, and more significantly for the purposes of this survey, manganese is present within members of the Hartshill Sandstone and Purley Shale (Baldock 1991, 55).

Archaeological Background

The area features amongst the earliest archaeological research and boasts the first recorded Neolithic ground axehead in the country, a 'Seamer' axe, said to be of flint and found at Oldbury. This was recorded in 1656 by William Dugdale in his *History and Antiquities of Warwickshire* (1730, 1081), but unfortunately despite the survey carried out by Shotton (1937), this antiquarian interest with stone tools did not persist, and there has been little attempt to examine the early prehistory of the area. A round barrow, situated in the southern corner of the Hayes, was excavated in 1853 and found to contain a Bronze Age cremation burial as well as an intrusive Anglo-Saxon inhumation (Chatwin 1928, 207: SMR No. WA 246).

The major earthwork at Oldbury is an Iron Age hillfort about which little is known. It is situated on the ridge-top adjacent to Hayes Common and Lawrence's Wood. The site was adopted for use as a cell of a Benedictine nunnery during the medieval period but, following the Dissolution of the Monasteries in the mid-16th century, it became the site of a

mansion house and pleasure garden. More recently a reservoir has been constructed in the interior of the fort, and the northern extremity has been destroyed by quarrying.

Earthwork Investigation, Survey and Interpretation

The archaeological investigation comprised an initial comprehensive reconnaissance followed by a survey of the Country Park at a scale of 1:2500. Two areas were subsequently surveyed in greater detail: a motte and related earthworks; and a series of quarry earthworks thought to be the product of manganese extraction. These were surveyed at scales of 1:1000 and 1:500 respectively.

Survey of earthworks at 1:2500

Survey of earthworks within the Country Park revealed a number of features of interest (fig 1).

1. Round Barrow (SP 39 SW 3; SAM 038).

The previously recorded round barrow is situated at SP 3176 9433 close to the Country Park office and public car-park. It measures *c* 2.1m in height and *c* 20m in diameter and has no apparent surrounding ditch. The car-park perimeter fence partly impinges on the base of the mound and is likely to cut across any buried ditch. A small backfilled trench, probably that of the 1835 excavation (*see below*), is visible on the top of the mound.

2. Boundary bank

The perimeter of the Hayes is bounded on the south and north-west sides by a bank with an external ditch. To the east, modern housing and a cemetery have encroached on the wood, whilst in the north the boundary is defined by a fence-line but may well have formerly extended as far as the road at The Green (fig 4).

In the south the bank is well preserved for much of its course and measures 510m in length, varying in height between 0.2 and 1m, whilst the corresponding ditch reaches a depth of up to 1.2m. The bank is present some 5m to the west of an entrance-gate in the south-east, but to the west has been infilled for a distance of *c*12m (1a). There are two smaller areas along the southern course of the ditch which has been infilled. At (b) a second bank and ditch lies parallel to the boundary bank; the outer one curves away from the boundary bank towards the road. Further north-west, at (c), there has been further infilling for a distance of 1.5m. The boundary bank continues along the side of an adventure playground where it lies alongside a modern track to (d).

The north-western line of the boundary bank, which also forms the boundary between Hartshill and Oldbury parishes, can be traced for 700m. The bank has been degraded in places either because of its use as a path, or by agricultural activity in the adjacent field that has impinged upon the ditch. The boundary bank varies in height from *c* 0.1m. to *c* 0.5m in height with the ditch having similar dimensions.

A woodbank (e) is located on the northern edge of the cemetery. Standing to *c* 0.3m in height with a ditch on its south side, it can be traced for a 100m, to a point just below the scarp edge where it is cut by Illing's Trenches (*see below*); however, it does not appear to extend beyond the trenches. At its southern end the bank abuts the cemetery fence but aerial photographs (AP nos. 7176213 and 4) show a bank projecting in a north-easterly direction from this point, which may be the same feature.

3. The Terrace

A terrace up to 13m wide and *c* 2m in height can be traced for some 580m in a north-west to south-east direction along the southern side of the Hayes between (g) and (h). Whilst apparently conforming closely to the contour it is in fact almost imperceptibly angled downhill. At (h) the boundary bank appears to be cut by the terrace and is evident on an aerial photograph extending for a further 100m on the south side of the road (543 RAF 1698. 0206 dated 15 Mar 62). To the north of (h) is a large bank measuring *c* 1.5m high and 8m wide which continues as far as a track. Spoil from the diorite pits lay across the terrace, and in one place a pit has been cut into the terrace. The course of the terrace can be

traced as a ploughed-out scarp continuing beyond the Hayes in the north-west towards a field boundary (j).

The terrace is well preserved and it is clear from early OS map editions that it is associated with a quarry which lay on the southern side of the Oldbury road. This was in operation in 1903, but was disused by 1914 (OS map Warwickshire X.7, 1903, 1914).

4. Diorite Pits and Mounds (SP 39 SW 26, centred at SP 318 942).

In the southern part of the Hayes several test pits were dug for diorite at some time before 1923. The stone, which is used for road construction, was found to be badly weathered and rotten (Antrill *et al* 1923, 37) and consequently quarrying was not continued. Details of these pits are recorded in appendix 1.

5. Manganese Quarries (SP 39 SW 25).

Three areas of quarrying were investigated:

(a). The largest extraction area covers *c* 2 hectares and is situated on a band of red shale located above a stream (k). The quarrying, evident as a linear excavation with a series of depressions and mounds at the base, appears to have taken place on either side of this exposure thus leaving a raised central berm. The earthworks are of the order of *c* 1m in depth, with spoil heaps to the side of the extraction hollows. In the south there are at least three narrow cuttings leading towards the valley floor. These may have formed an integral part of the industrial process, initially perhaps prospecting for manganese, but perhaps later leading to areas for separating the rock and washing the ore on the valley floor. A series of pond bays lie upstream and may have controlled water supply (*see below*).

(b). A second area of quarrying was recorded at SP 3245 9433 (f). Here a trackway 8m wide leads downhill to the valley floor where a small quarry measuring *c* 10m long by 3m has been cut into the hill-slope.

(c). The third area of quarrying is centred on SP 3215 9485 and comprises a small number of diggings, cuttings and pits (m).

6. Oldbury Camp (SP 39 SW 4; SAM 037).

Oldbury Camp (SP 3135 9470) lies outside the survey area; nevertheless, the opportunity was taken to investigate it. The interior of the site has largely been destroyed by the construction of a reservoir. The ramparts appear as depicted on the OS map; however, a further bank (l) little more than 0.5m in height, can be traced curving around the south-east side for a distance of some 70m. This may be a counterscarp, but in view of its ephemeral nature and its distance from the hillfort ditch, it could equally represent the course of an earlier enclosure.

7. Icehouse (SP 39 SW 24).

An icehouse is located on the north-facing slope in St Lawrence Wood at SP 3157 9471. It measures *c* 1.7 m in diameter and is of brick construction with an arched roof. The building is hollowed into the hillside and in a rather dilapidated condition. There is no path leading to it but it is assumed to be associated with the former Oldbury Hall which was situated within the hillfort. Approximately 50 metres to the north-west, and on higher ground, is a prominent pond and retaining bank, or dam. This dam measures 1m high and 1.5m wide at the top, with brick revetting on the eastern side containing an overflow pipe. The purpose of this pond is unclear; however, it is possible that it was either associated with Oldbury Hall, or with the terrace and quarry on the southern side of the Oldbury road.

8. Illing's Trenches (SP 324 943).

Illing's Trenches are named after the excavator of trenches dug here before 1913 (Illing 1913, 498) in order to observe the underlying geology. The site focuses on a narrow valley with back-filled trenches on either side. It is listed as a Site of Special Scientific Interest as a result of the detailed geological researches carried out here (NCC. letter W/S/20 dated 13 Feb 1986).

On the western side of the valley are two trenches *c* 7m. long and 0.3m. deep. A spoil heap lies adjacent to these and measures 1m. high. On the eastern side the trench is more extensive and sinuous; it is cut along the contour of the slope and measures *c* 40m long whilst the depth varies from 0.1m to 0.3m. At the bottom of the slope is a large spoil heap *c* 1m high and 8m long containing a large quantity of stone rubble.

9. The Motte (SP 39 SW 6)

A motte is situated at the north-eastern corner of the Hayes at SP 3250 9438. It is *c* 9m in height and some 50m in diameter and encircled by a ditch *c* 8m wide. The eastern side of the ditch has been largely infilled and is used as a track along the edge of the Hayes. On the northern side, modern garden landscaping has encroached upon the ditch while on the southern and western sides a counterscarp bank is present. A bailey, evidently coeval with the motte, together with the masonry of a later house, lies within the bounds of Hartshill Castle which is in private ownership.

10. Miscellaneous Features

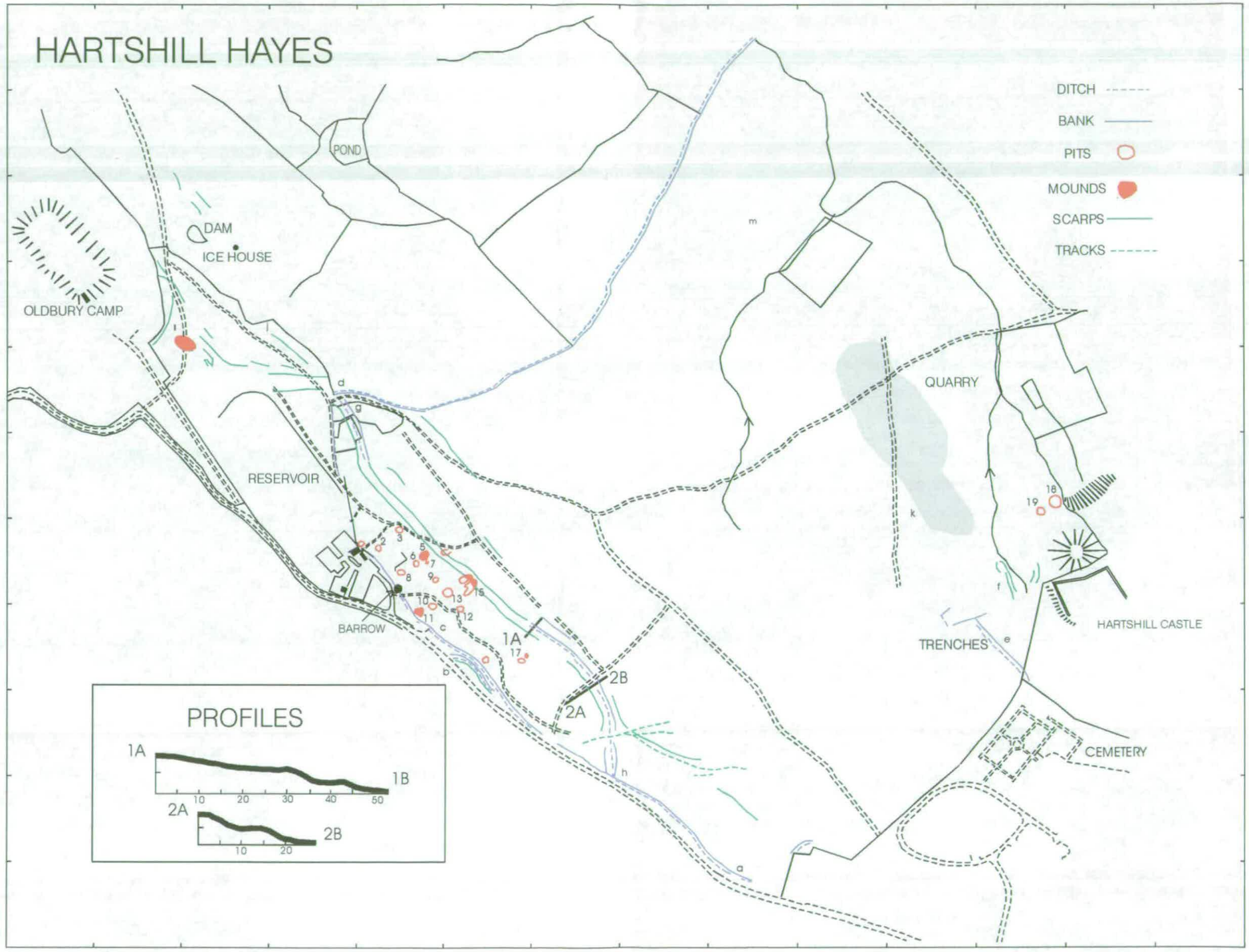
Throughout the area are slight scarps which generally follow the contours, particularly on the steeper, north-eastern escarpment. Some, such as those to the north of the dam in Lawrence's Wood, are depicted on the plan and follow the contours. Superficially they resemble plough lynchets; however, they are almost certainly geological features related to extruding rock beds.

Twenty metres to the south of (l), within Hayes Common, is a very spread and degraded mound with slight amorphous scarps to the east; it is unclear what this mound represents. Although the area is now grassed, it has been ploughed within the past sixty years (*see* for example, AP 106G/UK/636. 3309 dated 10 Aug 45).

Aerial photographs also show that a large number of former tracks and pathways are present in the wood, many meandering in a north-east direction from the high ground near the main road (543 RAF 1698. 0206 dated 15 Mar 62). Sections of some of these tracks

were identified on the ground - they are generally *c* 8 metres wide and were probably used during forestry work.

HARTSHILL HAYES



Earthwork surveys of the motte and bailey, and manganese quarry

Two earthwork sites, each of which lie on the east side of the Hayes, were surveyed in greater detail. The first, surveyed at a scale of 1:1000, comprises a motte and bailey castle associated with the remains of a crenellated manor house that lay just beyond the bounds of the Country Park. The second was a transect across a manganese quarry which was chosen as being reasonably representative of the quarry as a whole. This was surveyed at a scale of 1:500.

The Motte and Bailey (Fig 2)

The motte and bailey castle is located on a relatively broad north-west/south-east ridge which falls away steeply on the southern side to a pond and stream that flows northwards. Prior to land infilling the land was similarly deeply incised on the northern side with a pond at the upper reaches of a stream (OS 1st edn map - 1885).

The mound is not quite circular, measuring some 50m by 45m at the base, and tapering to 10m diameter at the top. It reaches a height of *c* 9m and is surrounded by a ditch with a partial counterscarp bank. The ditch, at its maximum, measures 5m wide and 1.5m deep. The top of the mound is relatively flat with two small trenches, one cut into the centre and the other on the northern side. This latter trench is 0.2m deep. Slight scarring is evident mid-way down the slope in the west. On the southern side, opposite the manor house, is a linear depression (a), up to 0.1m deep, extending from the top of the mound and fading out towards the bottom. This feature marks the probable line of former steps. Deciduous trees and holly cover the whole of the motte, the latter being particularly dense along the west and south sides; along the north-eastern side modern garden infill and landscaping partially overlies the ditch and counterscarp bank.

The counterscarp bank is degraded in places and appears to have been re-modelled on at least one occasion. On the southern side the bank has been breached by a modern footpath that leads along the perimeter of the Hayes. A deep cutting is evident on the inner face of the bank in the west (b). This cutting, together with two almost parallel trenches extending from the outer face of the bank towards the valley, are possibly diorite or manganese test pits. The south-western side of the bank is relatively straight and appears constrained by

the edge of the deep valley; nevertheless, another slight bank along the top of the bank indicates that it was re-modelled, possibly with walling or a quickset hedge, at some time.

A scarp defining the position of the bailey extends to the south of the motte and for much of its course is overlain by a curtain wall. The survey suggests that there may have been two baileys. An inner, smaller enclosure covers an area of *c* 40m by 60m and extends from the motte ditch in the south before curving north-east at (c) where it is overlain by a wall that is probably associated with the later manor house. In the north-east its course is again evident as a steep-sided scarp and narrow ditch leading back to the motte ditch. The posited outer bailey is less certain, and is less evident as an earthwork. It continues the line of the first bailey for some 50m and then cuts dramatically across the spur to the north-eastern side where there is a prominent scarp along its course.

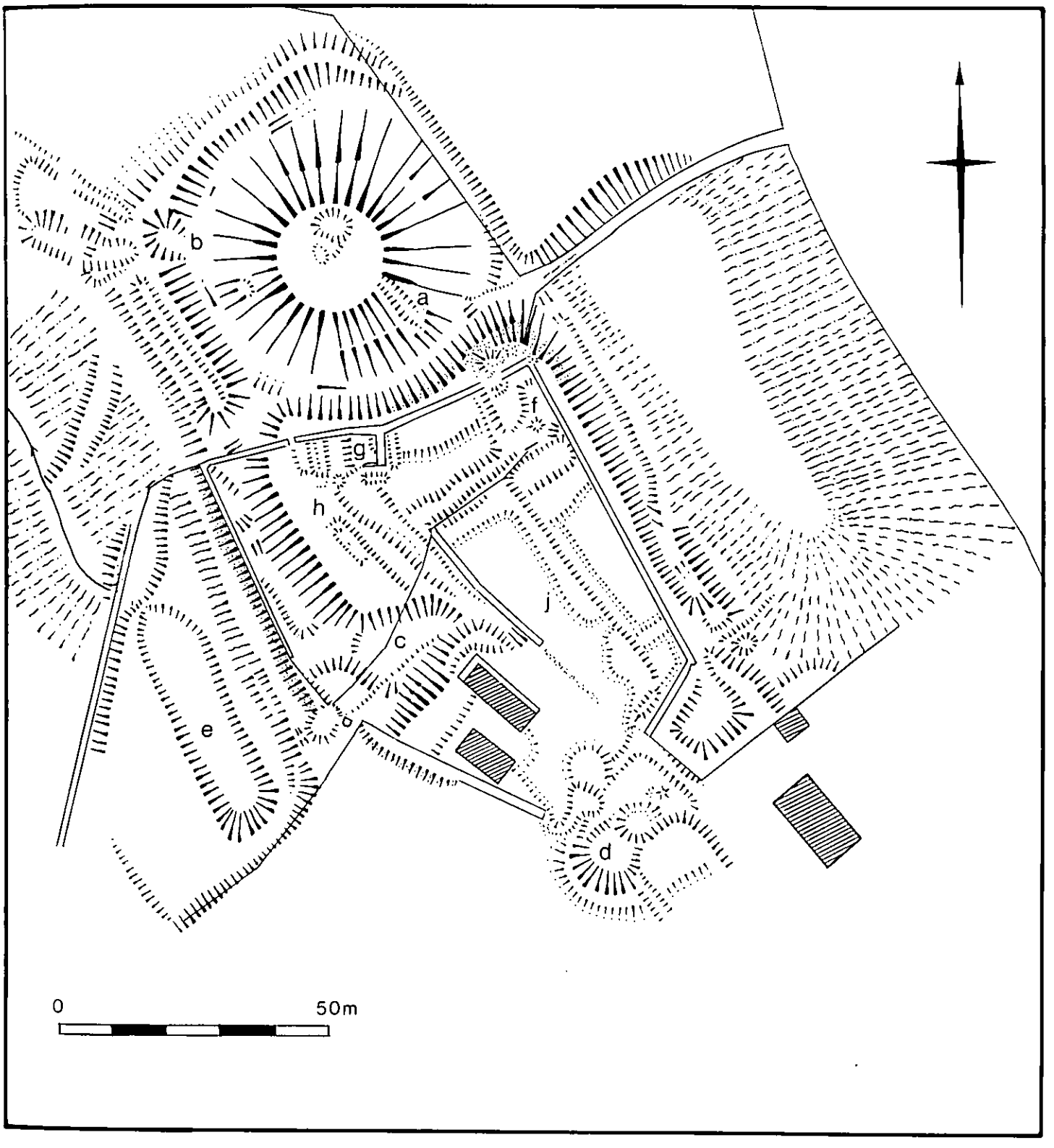
The Curtain Wall and Manor House.

Overlying the bailey is a polygonal curtain wall which is constructed of a local rubble quartzite stone with sandstone quoins and thought to date to the 14th century (Chatwin 1928, 209). Much of the wall, some 1.2m thick, appears quite unstable and has collapsed in a number of places; however, at its maximum height, in the west, it measures 3m. Both internally and externally, stone rubble is present along much of the course of the north and east walls. A number of apertures, or cross-shaped loopholes, are intermittently placed in the wall. To the south of the curtain wall, at (d), is a pond with the main entrance to the site situated just to the north. Extending from the entrance is an embanked track which, further south-east, survives as a hollow way for *c* 25m. Terracing along the south-western side of the curtain wall, which descends to another pond (e), may be the remains of a garden. The pond is dammed at the north-western end, but water permeates to a small stream that flows through the woodland.

Two modern buildings lie within the curtain wall; these are sited in the south and consist of a stable together with a pigsty, and a wooden barn beside the curtain wall. Elsewhere within the curtain wall are earthworks and stone walling of a number of probable structures, although it is unclear whether these are contemporary with the curtain wall construction. The manor house was a much later structure and lay in the north-western corner (f). All that remains of the house is part of a brick chimney-breast that is heavily impregnated with

tree roots. A large amount of fallen masonry makes any interpretation of the internal features of the house impossible. Twenty metres to the west of the manor house, and set against the curtain wall, the remains of a chapel (g) are outlined by stone foundations and fallen walls. Measuring 12m by 5m, part of its eastern wall survives to a height of 1.5m. To the west of the chapel is a door in the curtain wall and a slight bank (h) marks the line of yet another wall. Between the manor house and chapel is a very spread platform, 5m wide, which was possibly another building.

Extending from the southern side of the manor house in a south-westerly direction are two scarps, the upper scarp measures 15m and turns through ninety degrees where the outline of a stone wall survives. Further south, this stone wall survives as a low, linear mound. The scarp and stone wall thus form an enclosure *c.*55 by 35m. Within this enclosure are further slight rectilinear earthworks which probably represent former gardens (j).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The Manganese Quarry (fig 3)

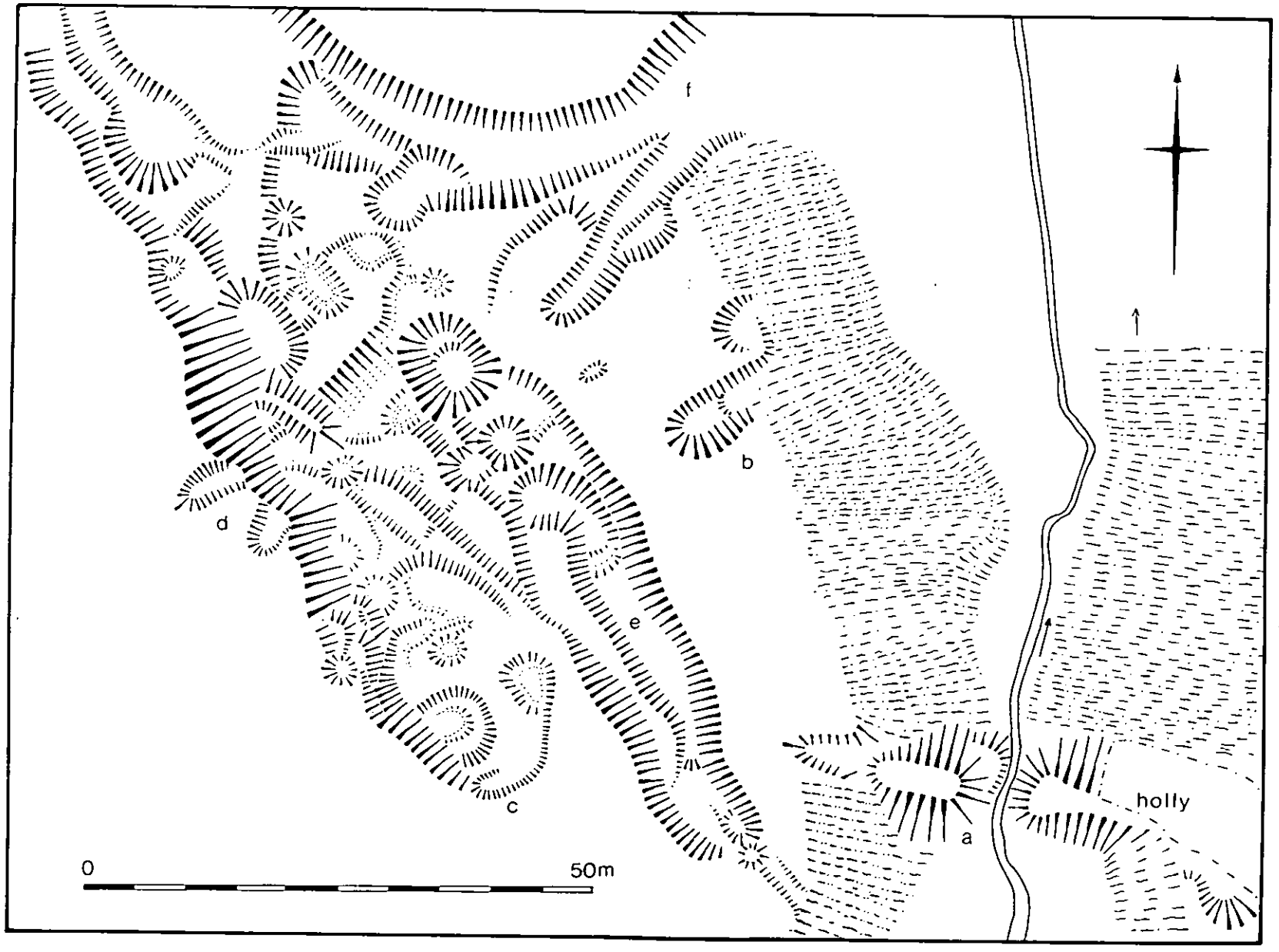
The manganese quarries lie along a relatively narrow band in the northern part of the Hayes. Three areas of quarrying had been identified during the initial field investigation (*see above*), the largest of which covers an area of *c* 2ha, and a transect measuring 90 by 80m across the quarry to the adjacent valley was surveyed as an example of the area as a whole.

The surveyed area can be divided into two distinct parts: the valley, and the quarry itself which is situated along the broad terrace on the western side of the valley. At this point the narrow valley is steeply downcut for some 9m by a small stream. The most notable feature in the valley is a massive dam (a) situated slightly upstream of the quarried area and surviving to 3m in height. Towards the base of the western side of the dam is a slight terrace, with a further, broader terrace at the top of the dam. On the southern, upstream side of the dam, the valley bottom is *c* 20m wide whilst on the northern side it narrows to *c* 8m, but further down-stream opens up to *c* 25m suggesting that this area was probably used as a pond bay. Two cuttings are evident along the western slope of the valley; the southern cutting (b), extends for *c* 11 by 5m with a small platform on the northern side. Twenty metres beyond a further cutting extends from the valley floor to the top where it diverges (*see below*).

The quarry extends in a north-west direction from a point opposite the motte and follows the seam of manganese through the wood. There are three 'quarried bands' along the terrace, each measuring up to 10m in width, with a number of other minor diggings along each. The southern band (c) is the most prominent and is cut along the full length of the quarry. A scarp, which has been created by the excavation of this terrace, measures up to 2.3m in depth. Two trenches above the scarp (d) may have been dug in order to ascertain whether the band continued further south-west. Within this band there are further trenches and spoil heaps; some appear quite amorphous whilst others have a semblance of form to them and probably represent smaller, minor cuttings.

The second quarried band (e), which measures 62 by 10m and is up to 0.5m deep, lies just beyond the northern side of (c), and has been dug at a lower level. Within this band, along the southern side, is a slight terrace, 30 by 2m, with further extraction pits and spoil heaps to the west.

The third quarried band (f), extends from the valley floor to the top of the terrace where it diverges. The southern 'arm' continues for a further 20m and has a platform along the eastern side. On the western side is a spread platform which is probably a spoil heap. The other arm curves broadly to the north-west to rejoin the first band (c) through the remainder of the quarry.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Hartshill and its Landscape

Early Prehistoric Lithic Extraction

The earliest evidence of activity within the landscape comes from the Neolithic flint axehead mentioned above. This at one time formed part of the collection of Elias Ashmole, founder of the Ashmolean Museum, but according to Thomas (Case 1974, 31) the artefact itself may have been lost in a fire at his rooms in London. It is evidently of flint rather than local stone and if so has been imported from a considerable distance. It was found *'on the North Part of this (Oldbury) Fort'* where *'... have been found by plowing divers FlintStones'* (Dugdale 1730, 1081). Dugdale implies that others were also recovered from the site and these, together with a further example recovered during the 1930s, are likely to represent more than mere casual losses. The example illustrated by Dugdale was complete and presumably not simply discarded as no longer functional, but in any event such 'Seamer' axes are too slender to have been used for everyday purposes and are usually considered to serve a ceremonial function. Whether the other examples were of flint is not clear but the local diorite is certainly suitable for axe manufacture. Flakes were noted during the field investigation at several points throughout the woodland, including the slopes of the motte, but it is by no means clear whether these were ancient or a result of knapping for local building stone.

A developed battle-axe of the Stage V Snowshill Group, discovered under a tumulus on Hartshill Common in 1770 was said to be of the *'hard blue stone of the country'* (Bartlett 1791, 17 pl II, 3, quoted in Shotton 1937, 46; Evans 1872, 166; Clinch 1904, 216: Roe 1966, no 214: Clough & Cummins 1988, 206) which presumably meant the diorite seam quarried from the pits at Hartshill and elsewhere. This may be similar to the developed battle-axe from a barrow at Codford St Peter in Wiltshire (Wilts 80) which is of Camptonite from the Nuneaton area (Roe 1966). The lithic source group known as Group XIV appears to be a relatively late quarry and used for battle-axes and axe-hammers from the end of the early Bronze Age through to the Middle Bronze Age. Most (and there are not great numbers) are local to this part of Warwickshire; for example, a fragment of an unfinished battle-axe diorite similar to Group XIV located at NGR SP 326 968 which was recovered from the same field as a Romano-British kiln site at Mancetter (Thomas 1974, 30).

Group XIV is described as a *'moderately coarse igneous rock, speckled greenish black and pink'*, a camptonite with a source thought by Shotton to lie in the sills around Nuneaton. The deposits around Oldbury are a likely source although Griff Hollow, situated to the south of Nuneaton, also provided good matches. Although expressing caution, Shotton thought that Griff Hollow (around NGR SP 362 888) was the likelier locality (Shotton 1959, 136-7) and if this was indeed the site, it had been destroyed by recent quarrying (Shotton 1988, 49). However, there still remains the possibility that Oldbury was the source.

There is some evidence that the stone from Hartshill was exploited earlier than the Neolithic. Analysis of the material from Mesolithic Sites V and VII at Oakhanger in Hampshire revealed that an anvil stone of quartzite was thought to derive from Hartshill. The Geology Survey report considered it *'similar to a specimen in our collections from Hartshill Quarry, north-east of Nuneaton'*. Two further pebble rubbers were also said to be similar to Hartshill quartzite (Rankine 1961, 64).

Little further evidence exists of Neolithic activity in the Hartshill area apart from a leaf-shaped arrowhead of flint found to the south-east of the Hayes at NGR SP 3360 9375 (Gunstone 1967, 95), and an axe of Group VI stone, from Great Langdale in the Lake District, found at Mancetter (NGR SP 3207 9684 -Thomas 1974, 30).

Later Prehistory

The round barrow recorded by the Country Park car park (*see p 4 above*) was excavated in 1835 (Thomas 1974, 31) and it is probably this excavation that left the depression in the summit. A cist, with inverted urn over a cremation and small accessory vessel (evidently food vessel - *see* illus in Thomas 1974, 22), was recorded from the base of the mound. Above this cist and within the fabric of the mound was a further cist within which lay two inverted urns and two small accessory vessels (one of which was a collared urn), a bronze knife, and two flint flakes (ibid, 31). Clinch (1904, 219-220) illustrates an inverted collared urn, a food vessel and ?beaker with applied cordon around the neck from this barrow. These were in the collection of M H Bloxam at Rugby School.

The base of the small mound on Hartshill Common in which the battle-axe was discovered was evidently *'paved with brick, which by the heat of the fire had been nearly vitrified'.* This was either a misidentification of a cremation surface, or, more likely, an example of incorporation of a prehistoric artefact in later deposits.

The ridge and its slopes were evidently an attractive location for the builders of early Bronze Age burial mounds which could be viewed from the lower ground to the north. This low ground provides rich agricultural land but evidence of occupation is not now present on the surface.

Gardiner (1904, 376-7) depicts a simple univallate earthwork forming three sides of what is evidently a rectangular enclosure at Oldbury with rounded corners but with the south-east side missing. The two long sides lie parallel but the southernmost is slightly bowed. The bank is noted as being 20' (6m) wide and 6' (1.8m) high but it was said to have been higher in Dugdale's day. The present survey indicates that part of the possible counterscarp bank can be traced into the Country Park where it has been almost levelled. As Dugdale commented, the interior was under plough during the 17th century and it may be that continued cultivation led to denudation of the earthworks. Early 20th-century mapping shows three entrances: one at the centre of the north-west side and one in each of the west corners, but it is not clear whether any of these were original. Water is also shown in the ditch opposite Oldbury Hall on early OS maps (OS 25in - 1914).

The Medieval Landscape

Hartshill is first documented in the Domesday Survey when it was known as *Ardreshille* (Gover *et al* 1939, 84) and, together with neighbouring Ansley, was one of six holdings in Warwickshire of the Countess Godiva (Morris 1976). Hartshill and Ansley were jointly assessed at two hides, with a total of seven ploughs and 6a (2.4ha) of meadow; the population at this time was some thirteen householders (ibid, 15.3). No woodland is recorded although the neighbouring vill of Atherstone, which was also one of Godiva's holdings, had a substantial amount (ibid, 15.1) which may have included woodland at Hartshill (Wager 1998, 58). Hartshill, a township of Mancetter, lay on the edge of the Forest of Arden and, in common with other forest regions, the settlement pattern was probably one of dispersed hamlets and farmsteads. Although it is unclear where any

settlement lay at this time, it may have included the area now known as The Green which lay some 500m north-east of the Hayes, with perhaps other isolated farmsteads at the foot of the hill.

The Hayes

The Hayes is contained within a boundary bank on the north, west and south sides. In the north this coincides with the parish boundary between Oldbury and Hartshill and has also been used as a routeway since at least the medieval period when it was known as *Merestrete* (Wager 1998, 59).

At the east side of the wood the boundary formerly extended further east but has been encroached upon by a 19th century cemetery and a post-1940s housing estate thus destroying any earthwork evidence in this area; however, its course is evident on earlier mapping as a field boundary extending in a curved line along the southern side of the Castle curtain wall (WRO: CR 491; 1st edn OS map). It is likely that the boundary also lay alongside the re-modelled motte counterscarp (fig 4). Thus the motte does not appear to have been included within the circuit. The Hayes was probably an area of wood pasture in the 12th and 13th centuries (Wager 1998, 60) comprising open land for grazing animals as well as trees (Rackham 1986, 64).

Three areas of demesne woodland in Hartshill are recorded in the 13th century: *suthhaye*, *le Hokehaie*, and *le Neuhaye* (Wager 1998, 60). Although it is unclear exactly where these woods lay, a South Hay is recorded in the mid-16th century (Allen 1994, 87) which was probably near Hartshill Castle and may be the 13th-century *suthhaye*. It is likely that the other woods were located on the ridge in the southern part of the parish and included the area of the Hayes. Additional woodland, at The Riding and Moor Wood, lay on the southern side of the ridge (ibid, 59). The place-name Hayes itself is significant. It derives from *haeg* (Gover *et al* 1939, 84) and implies a fence or enclosure (Cameron 1961, 218) where game could be caught (Hooke 1985, 159 quoting Gilbert 1979, 53-4). Hooke suggests that *hay* is a derivative of *haga* meaning 'to enclose or fence in by a hedge'(1989, 123) and it is conceivable that at the Hayes we are seeing the remains of an Anglo-Saxon hunting enclosure.

A park is first documented at the Hayes in the mid-16th century, although the likelihood of it being emparked much earlier should not be ignored given the possible Anglo-Saxon precursor. In the mid-16th century the estate included *'castellated manor house ... with park and other lands amounting to 300a [121ha]...'* and *'... two launds 42a [17ha], Hartshill Park 142a [57ha] ...'* as well as other holdings in the parish (Allen 1994, 87). This 57ha park is not dissimilar to the area of the modern Hayes which, together with the curving extension to the east, amounted to some 53ha.

It is likely that there was another deer park in Hartshill centred in the area of Park Farm in the valley (SP 341 949) and, although the place-name alone does not necessarily imply the existence of a former medieval park, it is significant that the present farmstead is situated on a moated site (NMR No: SP 39 SW 7) which may have been a hunting lodge.

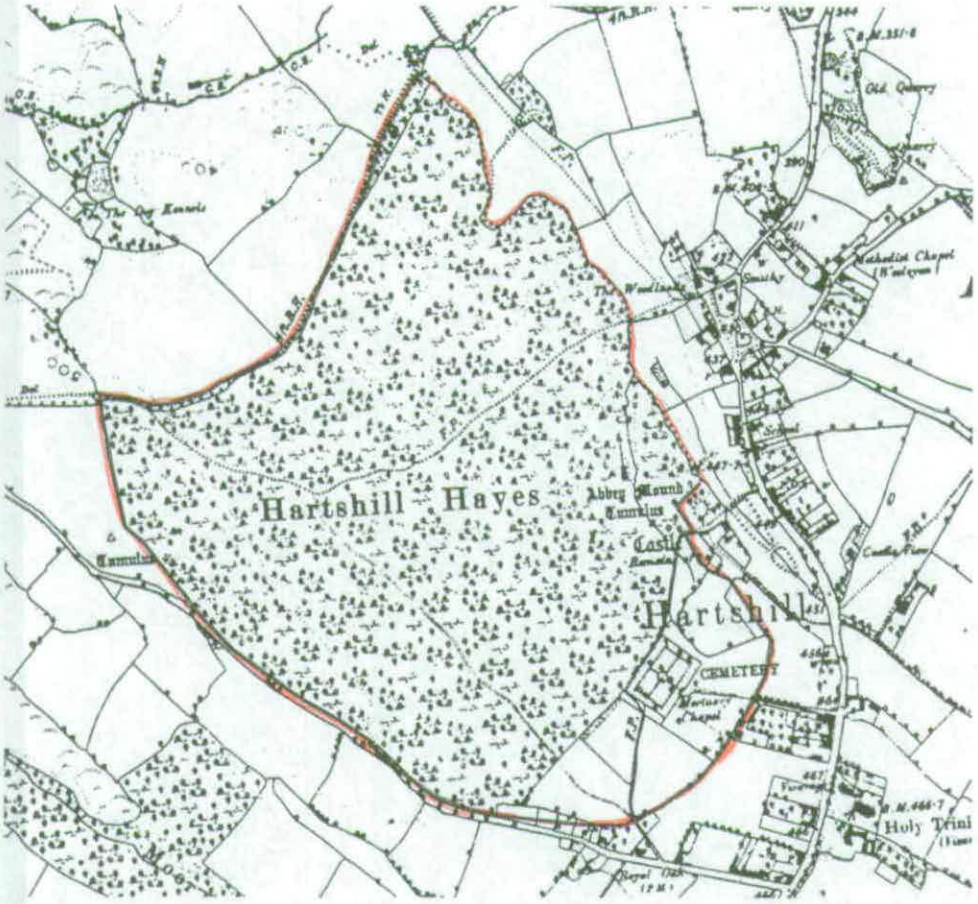

Fig. 4. The bounds of Hartshill Hayes (from OS 1st edn map – 1889)

The Motte at Hartshill

There is no evidence of a structure on the top of the motte although it is likely that there was a palisade in a similar manner to mottes elsewhere (for example, Abinger in Surrey (Turner 1987, 226)). At a height of some 9m (or nearly 2 perches), the motte at Hartshill can be grouped into Müller-Wille's class 2 (Cathcart King, 1970, 101). This group has a height range of between 5-10m and constitutes some 24 per cent of the known mottes in the country.

The earthwork survey shows that the bailey lay to the south-east of the motte and indicates that it was composed of two distinct elements, a smaller, or inner bailey, and a less certain outer bailey. The smaller bailey lay *within* the later curtain wall on the south-western side but the curtain wall probably mirrored the line of the bailey on the north-eastern side. A large depression near the existing barn may have been the southern extremity. The remaining curtain wall possibly reflects the line of the outer bailey. This wall, according to Bartlett, was built at the same time as the motte (Bartlett 1791, 49); however Chatwin suggests a more realistic date in the early 14th century (Chatwin 1928, 209). The curtain wall purposely excludes the motte from its bounds, which, in military terms would have been inconceivable since the motte would have provided a vantage point for any aggressor. The area contained within the curtain wall should therefore not be regarded as a castle fulfilling a military function, but rather, as an early example of a 'sham' castle (Cathcart King 1983, 482).

The motte at Hartshill formed one of a number in the region dating to the 12th century (Stenton 1932, 197). A treaty between the earls of Leicester and Chester in 1148-53 specifically mentions the castle at Hartshill when it was agreed that, amongst other things, no castle was to be built between Hartshill and Hinkley (ibid, 252). According to Bartlett (1791, 49), Hartshill was in the ownership of Hugh Fitzrandulf de Hardreshulle, brother of the Earl of Chester, by 1125, and it was probably at about this time that the motte was constructed (Chatwin 1928, 207). The siting of the motte is of interest since it is located on a ridge in a commanding position overlooking the Anker valley. It hardly seems necessary to build such a large motte but it may be that the height was more to do with a statement of ownership and an imposition of a lord's will, particularly in a region where there were disputes between two barons.

The Monastic Cell at Oldbury

The nunnery at Polesworthy, which was one of the wealthier pre-Conquest Benedictine houses in the country (Gilchrist 1995, 118), held land at Oldbury where they established a cell. This cell may have been in existence by the late Anglo-Saxon period since the nuns were expelled to Oldbury soon after the Norman Conquest (Dugdale 1730, 1107). What form the monastic buildings took is unclear but they probably comprised little more than a chapel, dedicated to St Lawrence (ibid, 1082), and other buildings commensurate with the small community that would have lived here. The chapel was still standing in the 17th century and according to Dugdale it was situated on the southern side of the hillfort (ibid). Apart from the chapel it is unlikely that the buildings took on any form of permanence since the nuns were reinstated back to Polesworth after only a short period (one year according to Cox (1965, 62) or 50 years according to Knowles (Knowles & Hadcock 1971, 263)).

There is no field evidence of any earthworks or buildings that might be associated with the cell. Early maps of the area (WRO: CR 604; Ordnance Survey 6" 1889; 25" 1903, 1914, 1924), show a rectangular piece of land partly overlapping the southern corner of the hillfort and bordered in the south by the road from Hartshill. This small enclosure fits Dugdale's description and was probably the site of the cell; its position on the escarpment, within an enclosure, fulfils the desire for isolation and protection sought by a monastic community (Gilchrist 1995, 106-56).

Communications

The routes leading towards the hill fort are of interest and are clearly of considerable antiquity. The road from Hartshill, which was known as *Holly Coppice Lane* in 1728, (WRO: CR 604) carefully avoids the posited monastic enclosure before turning west towards Ansley. If the course of this road is projected further north-west from the point where it detours around the enclosure, it coincides with the south-western side of the hill fort and beyond the line is reflected in a hedgerow (see for example, OS 25"map 1903). The east/west route is the township boundary between Hartshill and Oldbury and also lies along the southern side of the enclosure. This route, which lies between the Hayes and Hayes

Common in Oldbury (Wager 1998, 59), was known as *Merestrete* or boundary street, in the early-12th century (ibid; Dugdale 1730, 1082) and further north, as *Wood Lane*. During the early and later medieval periods these may well have been used as transhumance routes between a manor and a more distant holding or pasture. The convergence of the routes at the hill fort is also intriguing and may point to an even earlier origin. Elsewhere, it has been noted how prehistoric linear ditches converge on hill forts, for example at Quarley in Hampshire and Sidbury Hill on Salisbury Plain (Palmer 1984, 65; McOmish *et al, in prep*), and also how some were later used as trackways or boundaries, and it is tempting to see these routes converging at Oldbury in a similar manner.

The Post Medieval Landscape

Hartshill Castle

By the mid-18th century the 'castle' was little more than a farm - Hartshill Hall Farm (WRO: CR 463/1; fig 5), but sufficient evidence remains to indicate that there was once a more prestigious Elizabethan house and garden here. The house was built into the north-east angle of the curtain wall and was approached from two directions: The main entrance was from the south-east along a lane known as Wood Lane, through the Little Park and then along the side of the walled gardens to a courtyard. The second approach was along a narrow path to the north-east of the house which led towards the motte (the present footpath from the main road to the wood mirrors this route). The door on the northern side of the curtain wall provided access to a courtyard and the chapel.

An illustration dating to 1785 (Templeman & Salzman 1947, plate facing 131) shows the late-16th century manor house with three mullion windows and a door in the curtain wall on the eastern side. Its positioning on the north-western corner is significant since, from this elevated position, it would have provided impressive panoramic views across the Anker valley.

An early estate map shows that the gardens within the curtain wall were quite unpretentious by the mid-18th century and comprised an enclosed walled garden to the south of the house (WRO: CR 463/1). They appear to have been divided into three compartments by a

cruciform walk. In front of the house, within the courtyard and facing the chapel, was an approach with a circular drive in the centre. This approach was probably bordered by grass.

Beyond the curtain wall there were further gardens that included ponds on the north-eastern side which possibly dated to the 16th century (Chatwin 1928, 120). The motte, later known as Abbey Mound (OS 1st edn map), undoubtedly formed a central feature in this garden design and should be viewed more as a garden 'mount' – a feature that became increasingly popular from the 16th century when it was considered that gardens were better observed from above (Thacker 1979, 85, 140; Jackson-Stops 1991, 12). The mount would have formed part of a perambulation around the garden, or pleasure ground. Although some mounts had spiral walks to their summit that provided pleasing and ever-changing views across the landscape, access to the summit of the mount at Hartshill was by way of the slight linear depression on the southern side, opposite the house, which was probably the course of steps. The earthwork survey also shows that the motte counterscarp was re-modelled along the south-western and northern sides at some time; this may be yet a further embellishment to the garden design in order to improve the visual setting. Some of the holly may also have been deliberately planted as a garden shrub.

Features shown on the 1748 estate map (WRO: CR 463/1) indicate surviving elements of the 18th-century garden landscape. To the east and north-east of the manor house areas of tree planting and an orchard are shown, as well as two ponds along the north-east side. The field name, Little Park, may also suggest a garden landscape here.

Oldbury

Little evidence remains of post-Dissolution buildings at Oldbury. The construction of a reservoir within the hillfort in 1977 has destroyed the remains of any internal features, although it is quite possible that traces of earlier buildings survive within the fabric and garden of the present house located to the south of the reservoir. Certainly a house was constructed at Oldbury by the new owner following the Dissolution, but whether this utilised any of the monastic buildings, or re-used masonry from them, is unknown.

The estate map of 1728 (WRO: CR604) shows a mansion house sited centrally within the ramparts on the southern side of the hillfort. To the west was an enclosed formal garden

with service buildings beyond; on the east side there was another walled enclosure. The northern half of the hillfort was known as Hall Cross but there is no indication of the use of the open area. A dovecote and small lake was situated in the south-west, close to the Oldbury road. On the lower slopes, in the north-east, was a large fishpond. The planting of trees along the ramparts of the hillfort further enhanced the aspect of the gardens. The principal approach to the house at this time appears to have been from the south – from the direction of Hartshill.

In 1775 a new house, known as Oldbury Hall, was in existence when John Bartlett visited the area and illustrated the mansion in his *Antiquities of Mancetter* (Bartlett 1791). The earlier house had been superseded by one that was sited almost centrally within the hillfort with the front to the south-west. By the late-19th century the formality of the gardens in the interior of the hillfort had been swept away to be replaced by trees (OS 1st edn map), emulating the more 'natural' pleasure parks which were favoured by the gentry at this time. The main approach to the house had also shifted further west along the Oldbury road. Access was now via a crescent-shaped avenue bordered with trees to the north-western side of the hillfort. What became of the former house is unclear although part of it may have been retained in an outbuilding shown in 1885 (ibid).

In order to provide ice for the house and the storage of produce, an icehouse was constructed on the lower slopes of the ridge to the north-east of the hillfort. It is not known when this building was constructed but it was probably by the mid-19th century when the potential for using these structures for the storage of food was fully appreciated (Buxbaum 1992, 5).

The Later Industrial Land-use

The mineral potential of the Hartshill region has long been recognised (*see - Early Prehistoric Lithic Extraction*). This continued into the Romano-British period when coal is thought to have been mined or quarried nearby; in addition pottery and glass manufacture flourished (Grant 1982, 326). An ample supply of wood, coupled with the appropriate raw materials and a nearby source of water, were pre-requisites for a successful pottery industry which implies that the Hartshill and Mancetter region was heavily wooded at this time.

Despite the lack of evidence within the Country Park itself, a number of kilns have been recorded elsewhere in Hartshill and Mancetter where they represent the largest centres of pottery production in the West Midlands (Webster 1974, 53). At Hartshill eighteen kilns, dating from the early-2nd century to the early-4th century, were located and excavated on the quartzite ridge to the south of the Country Park (SP 337 936). There was a marked emphasis in the production of *mortaria*, particularly in the later kilns (Anon 1961, 173) and these wares had a wide distribution throughout the north of England and at Wroxeter (Webster 1974, 54). Further industrial activity, including a glass furnace and probable workshops and stores, were also found at Mancetter (Anon 1970, 286).

The exposed coal measures in Warwickshire lie in a relatively narrow seam along the southern edge of Hartshill, extending in a north-west/south-east direction (Geological map 169, 1994). The documented evidence of an interest in this mineral, however, dates to the late-13th century when a grant of land in the common specifically mentions coal rights (Wager 1999, 60).

In the early-19th century manganese was also being quarried at Hartshill. The extant manganese quarries in the Hayes are all located on the lower slopes, near the northern boundary of the woodland. The earthwork survey, which represents only a small part of the total area of the quarry, suggests that the mining was carried out along a series of 'bands' in the manganese seam, starting at the upper level and progressively moving downslope. Extraction took place longitudinally along the bands to a depth of up to 2.5m; additional, smaller cuttings are also evident near, or within the bands, indicating perhaps test pits to establish the line of further manganese.

In the valley three dams are visible, the most substantial of which is sited downstream of the other two. The deep cutting through this dam suggests that there was once a sluice gate in the centre which would have been used to control the flow of water to the northern side - the area of the main quarry. This sluice was probably part of a washing and separating operation of the ore prior to it being transported from the site.

Manganese extraction at Hartshill is first recorded on a sketch plan dating to *c*1809 that shows the mining allotments contained between the canal and the Hartshill to Nuneaton road (WRO: Z400(L)). The quarrying in the Hayes was known as Oakover Wood Mine (named after the owner at this time) and an impression of the amount of manganese

extracted can be gleaned from a note on the side of the plan which suggests that *'about forty - fifty tons of manganese to be had from the stuff that comes from the making the canal and now remains by the bank of the canal'* (ibid). Quarrying is also documented at Hartshill in 1820 when the ore was found as detached pieces distributed through the red clay soil at a depth of between 0.3m and 2.5m (Eastwood *et al* 1923, 123). North of the castle, quarrying deepened the streambed and water from the stream and ponds was dammed. Sluices were used to provide water to wash the ore (Allen 1994, 89). The manganese quarries in the Hayes therefore represent a small survival of what was once a much larger industrial enterprise.

Manganese ore has been used in a number of industrial processes including the production of iron and steel. It was also used in the manufacture of glass, batteries, as a drier for varnishes and paints, and disinfectants (Down 1980, 9). The ore from Hartshill, however, is thought to have been transported to Lancashire and used in the manufacture of bleach (Eastwood *et al* 1923, 23).

The workings at Hartshill have been listed as the only site outside Devon and Cornwall worthy of inclusion in English Heritage's Monuments Protection Programme (Hedley *et al* 1995, 7) and are therefore considered to be of national importance.

Methodology and acknowledgements

Survey of the south-western part of the park at 1:2,500 involved three linked traverses of fifty-one stations. Two profiles were also taken across the terrace. Features, such as the archaeological detail, the appropriate paths, and other topographical details were recorded digitally with a total station instrument. The survey of the motte and bailey, the manor house, and manganese quarries utilised part of this framework to establish position, but additional traverses were undertaken. Survey of the motte was instrument-based involving a closed traverse of seven stations with additional detail being recorded by use of taped offsets from the survey framework. The manganese quarry was initially undertaken from a base-line survey with archaeological detail being recorded by means of taped offsets; however, this was supplemented by a linked traverse of five stations in order to include the valley features. Survey was carried out in three seasons of ten days each by G Brown, D Field, M Bowden and D McOmish. The report was researched and written jointly by G Brown and D Field, whilst M Bowden commented on the final text. The illustrations were drawn by G Brown and D Cunliffe. In addition, limited archival research over a period of two days was undertaken at Warwick Record Office.

The staff of the Country Park assisted by clearing trees prior to the survey of the manganese quarry. Mrs Joan Allen kindly discussed the results of her historical research in the area and Helen Maclagan, the County Archaeologist, was instrumental in the arranging the survey.

Bibliography

Anon, 1961 'Roman Britain in 1960' *J Roman Stud* 51, 157-98

Anon, 1970 'Roman Britain in 1969' *Britannia* 1, 269-315

Allen, J 1994 *Heardred's Hill, a history of Hartshill and Oldbury (North Warwickshire)*, Nuneaton: Bethany Enterprises, 3 edn

Baldock, J W 1991 'Geology of the Hartshill and Stockingford District' *British Geological Survey Technical Report WA/91/60.* Nottingham: BGS

Bartlett, B 1791 *Manduessedum Romanorum, being the History and Antiquities of the Parish of Mancetter*

Buxbaum, T 1992 *Icehouses.* Risborough: Shire Publications

Cameron, K 1961 *English Place-Names.* London: Batsford

Cathcart King, D J 1970 'The field archaeology of mottes in England and Wales: Eine kurze übersicht' *Chateau-Gaillard* V, 101-12

Cathcart King, D J 1983 *Castellarium Anglicanium* London: Kraus International Publications, Vol 2

Chatwin, P B 1928 'Hartshill Castle and Neighbourhood' *Trans Birmingham Archaeol Soc* 53, 206-10

Clinch, G 1904 'Early Man' in Doubleday, A & Page, W (eds) *Victoria County History Warwick* 1, 1965 edn, 213-22. London: University of London

Clough, T H McK & Cummins, W A (eds) 1988 *Stone axe studies 2*, CBA Res Rep No 67

Dugdale, W, 1730 *History and antiquities of Warwickshire* Vol 2

Evans, J 1872 *The ancient stone implements, weapons, and ornaments of Great Britain* London: Longmans

Gardiner, W 1904 'Ancient defensive earthworks' in Doubleday, A & Page, W (eds) *Victoria County History Warwicks* 1, 1965 edn, 345-406. London: Univ of London

Gilbert, J M 1979 *Hunting and Hunting Reserves in Medieval Scotland*, Edinburgh: Donald

Gilchrist, R 1995 *Contemplation and Action. The Other Monasticism* London: Leicester University Press

Gover, J E B, Mawer, A, Stenton, F M 1936 *The Place-names of Warwickshire,* Cambridge: Cambridge University Press

Grant, E G 1982 'Changing perspectives in the Warwickshire coalfield' in Slater, T R & Jarvis, P J (eds) *Field and Forest. An historical geography of Warwickshire and Worcestershire,* Norwich: Geo Books 323-45

Gunstone, A J H 1967 'Archaeological notes' *Trans Birmingham Archaeol Soc* 82, 92-6

Hedley, I & Cranstone, D 1995 *Monuments Protection Programme: Minor Metals and Vein Minerals. Introduction to Step 3 Site Assessments.* English Heritage

Hooke, D 1985 *The Anglo-Saxon landscape. The kingdom of the Hwicce.* Manchester: Manchester University Press

Hooke, D 1989 'Pre-Conquest Woodland: its Distribution and Usage' *Agric Hist Rev* 37, 113-29

Jackson-Stops, G 1991 *An English Arcadia 1600-1990.* Washington: AIAP

McOmish, D, Field, D, Brown, G in prep *The Field Archaeology of Salisbury Plain Training Area*

Morris, J 1976 *Domesday Book: Warwickshire.* Chichester: Phillimore

Palmer, R 1984 *Danebury, an Iron Age Hillfort in Hampshire: An aerial photographic interpretation of its environs* RCHME Supplementary Series: 6

Parkes, S 1821 'Notice on the Black Oxide of Manganese of Warwickshire' *Transactions of the Geological Society* Second Series, 1, 168-9

Rackham, O 1986 *The History of the Countryside* London: Dent

Rankine, W F 1961 'Mesolithic folk movements in southern England: further evidence from Oakhanger, Hants. Phase II' *Archaeol Newsletter* 7, 3, 63-5

Roe, F E S 1966 'The Battle-Axe series in Britain' *Proc Prehist Soc* 32, 199-245

Shotton, F W 1937 'Stone implements of Warwickshire' *Trans Birmingham Archaeol Soc* 58, 37-52

Shotton, F W 1959 'New petrological groups based on axes from the west Midlands' *Proc Prehist Soc* 25, 135-143

Shotton, F W 1988 'The petrological identification of stone implements from the West Midlands: third report' in Clough, T H McK & Cummins, W A (eds) *Stone axe studies 2,* CBA Res Rep No 67, 49-51

Stenton, F M 1932 *The First Century of English Feudalism 1066-1166.* Oxford: Clarendon Press

Thacker, C 1979 *The History of Gardens.* London: Croom Helm

Thomas, N 1974 'An archaeological gazetteer for Warwickshire: Neolithic to Iron Age' *Trans Birmingham Archaeol Soc* 86, 16-48

Turner, D J 1987 'Archaeology of Surrey 1066 to 1540' in Bird, J & Bird, D G (eds) *The Archaeology of Surrey to 1540* Guildford: Surrey Archaeological Society, 223-61

Wager, S J 1998 *Woods, Wolds and Groves. The woodland of medieval Warwickshire* BAR British Series 269

Webster, G 1974 'The West Midlands in the Roman Period' *Trans Birmingham Archaeol Soc* 86, 49-58

Maps

British Geological Survey 1994, 1:50,000 series. Sheet No. 169 Coventry Solid and Drift Geology.

British Geological Survey 1925 edn

OS 1st edition map – Warwickshire sheet X. NE, Leicestershire sheet XL1. NE

Warwickshire Record Office (WRO)

CR463/1. Survey of Hartshill Hall Farm 1748.

CR604. Plan of Rowland Okeover's estate, Oldbury - 1728.

Z400(L). A rough diagrammatic plan showing ownership of manganese mines *c*1809.

Appendix 1

Diorite Extraction Pits and Spoil Mounds

Apart from where specifically mentioned there are no obvious ramps into the pits. Mounds are treated separately where they occur away from a pit. The mounds are made up of small pieces of diorite.

Pit 1 - Pit measures *c* 7m diameter and is 1.6m deep with spoil on the west side. 2m to the north is an elongated spoil heap measuring 12.7m long x 6m. wide x 0.6m high. Whether this is the spoil from the pit is unclear, although it seems likely.

Pit 2 - Pit measures *c* 7m diameter and is 1.8m deep with spoil piled principally on the north side.

Pit 3 - Pit measures *c* 7m diameter and is 2m deep with slight spoil mound on east and west sides, but predominantly on the north side beyond track. Spoil mound is 3m long and is about 0.2m high, spilling over terrace scarp.

Pit 4 - Pit is cut into lower terrace in an elongated fashion and measures up to 1.3m deep. Entrance is on the downhill (i.e. north) side. Area on either side is heavily overgrown but spoil appears to lie principally on the east side.

Mound 5 - Mound 11m. long x 5.6m wide and 1.3m high.

Pit 6 - This pit has almost vertical sides and measures 2m deep and 8m diameter. Spoil mounds lie on both the east and west sides which measures 2m diameter and 0.3m high.

Pit 7 - Small pit measuring 2m diameter and 0.2m deep.

Pit 8 - This pit is located on the east side of a round barrow, and measures *c* 6m diameter and is 2.5m deep with the south side almost vertical with exposed rock. Spoil heap is positioned 1.5m to north and measures 5.5m long x 3.5m wide x 0.5m high.

Pit 9 - Pit measures *c* 5m diameter and is 1.3m deep with spoil on the east and west edge (*c* 1m wide x 0.2m high).

Pit 10 - Pit measures *c* 8m diameter and is 2m deep with spoil mounds at all four cardinal points although they do not meet. The spoil mounds are *c* 0.5m high and up to 3m long x 1m wide.

Mound 11 - This mound measures 0.7m high with a slight bank leads from pit 10 to the mound.

Pit 12 - Pit measures *c* 6m diameter and is 1.5m deep with elongated spoil heap on north side.

Pit 13 - This is the largest pit in the group and measures 12m diameter and 3.5m deep. Exposed rock on the southern side. Spoil heap measures *c* 0.6m high and is spread over the north side. The mound has been robbed and a wall created. On the east side of mound rock extends in a dog-leg fashion.

Pit 14/15 - These two pits are cut into the upper scarp (they therefore have an entrance on the north side). They measure *c* 1.3m deep and have spoil spilling out onto the lower terrace. The east pit is more elongated.

Pit 16 - Pit 8m diameter x 1.0m deep. Spoil *c* 0.5m high on east, west and north sides.

Pit 17 - Pit is 6m diameter x 1.2m deep with spoil on the north side.

Pit 18 - Pit is *c* 12m diameter and is 0.6m deep with an entrance ramp on south side. Spoil on east and west sides of pit.

Pit 19 - Pit is *c* 8m diameter and is *c* 1m deep with entrance on north side. Spoil is on circumference of pit on the east and west sides.