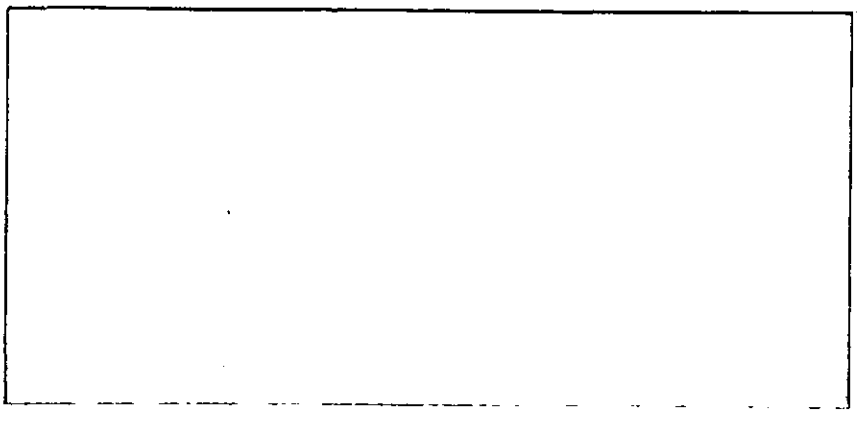
Library Copy

ROYAL COMMISSION ON THE HISTORICAL MONUMENTS OF ENGLAND



A Field Investigation
and Survey
at Hartshill Hayes
Warwickshire

An assessment of the archaeology at Hartshill Hayes - Warwickshire

Summary

An earthwork survey and field investigation of the extant archaeology in woodland at Hartshill Hayes, Warwickshire, was carried out in March 1997. The work highlights the diversity and survival of features here. Of particular significance is the industrial landscape consisting of diorite extraction pits and at least three areas of manganese quarrying, the latter perhaps of national importance.

1. Introduction

An earthwork survey and field investigation was undertaken by the Royal Commission on the Historical Monuments of England (RCHME) within amenity woodland at Hartshill Hayes in March 1997 at the request of Warwickshire County Council. The aim of the survey was to assess the extent and survival of archaeological features within the woodland and highlight potential areas for detailed survey.

The woodland at Hartshill Hayes (centred at SP 320945) is situated on a steep north-eastern slope of the Atherstone Ridge overlooking the river Anker, with Atherstone 3.5 km to the north and Nuneaton c. 5 km to the southeast. The geology at the site is complex (Geology map 1994, sheet 169), the whole area being underlain by Upper Cambrian rocks with dykes of diorite extending in a northwest/southeast direction. To the north is a band of manganese and red shale (Geology map 1925).

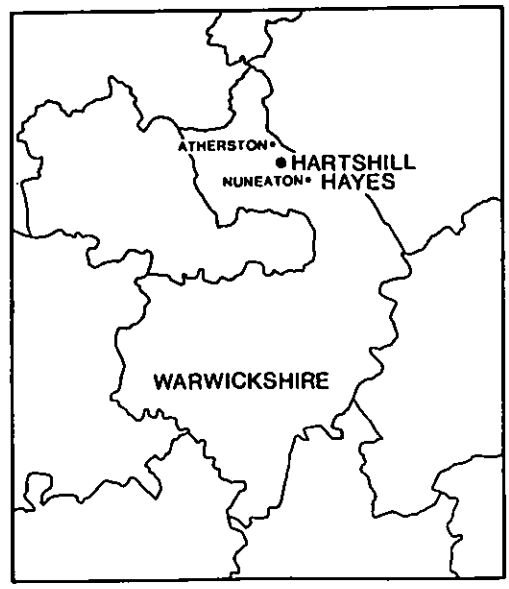


Fig.1 Location Diagram

2. The Earthworks

A number of archaeological features were recorded during the survey including woodland banks, terraces, and trackways. The area of manganese quarrying, together with a round barrow, and a motte and bailey were highlighted with the possible intention of completing a more detailed survey at an appropriate scale in the future.

i. The Woodbank

The perimeter of Hartshill Hayes wood is bounded on the southern and northwest sides by a bank and external ditch. In the east the boundary has been encroached upon by a modern housing development and a cemetery. To the north of the boundary lies between a motte and bailey and castle, while in the north a fence-line marks much of the boundary.

The woodbank in the south extends for a length of 510m. in length and varies in height from c. 0.2m. to 1.0m., whilst the ditch measures up to 1.2m. deep. The bank first appears to start c. 5m. to the west of the park entrance gate in the southeast. At (a) the ditch has been infilled for a distance of c.12m., however, this infilling does not spill over the woodbank. There are two further areas of infilling along the course of the ditch. At (b) there is a double bank and ditch, the outer bank and ditch curves towards the road, possibly a hollow way forming part of the former road. Further north-west, at (c), the woodbank has been infilled for a distance of 1.5m.

The north-western perimeter, which also forms the parish boundary between Hartshill and Mancetter, extends for 700 metres. The bank, with an external ditch is complete for most of its course, however, in places it has been degraded either because of its use as a path, or by agricultural activity which has impinged upon the ditch. The woodbank varies in height from a c. 0.1m. to c. 0.5m. high with the ditch having similar dimensions. At (d) the bank overlies the terrace and therefore post-dates it. The dating of this woodbank by field observation alone is uncertain, and although it has been suggested elsewhere that it may be medieval in origin, this claim cannot be substantiated.

A further woodbank (e) is located on the northern edge of the cemetery. The bank, with a ditch on the southern side, measures c. 100m. in length and c. 0.3m. high; it extends north-west to a point just below the scarp edge where it is cut by Illings trenches (see below), however, it does not appear to extend beyond the trenches. At the southern end the bank extends to the cemetery fence. An aerial photograph shows a bank projecting in a north-east direction from this point (AP nos. 7176213 and 4) and may be part of the same feature.

ii. Diorite Pits and Mounds (SP 39 SW 26, centred at SP 318942).

In the south part of the wood, not far from the road, are several test pits dug for diorite some time before 1923. The stone was, however, found to be badly weathered and rotten (Antrill *et al.* 1923, 37). Diorite stone is used for the road construction. Details of these pits is recorded at annex A.

iii. Manganese Quarries (SP 39 SW 25).

Manganese ore has been used in a number of industrial processes including the production of iron and steel which accounted for 90% of the world ore production. It was also used in the manufacture of glass; batteries; as a drier for varnishes and paints; and disinfectants (Down 1980, 9). At Hartshill the ore is thought to have been used in the manufacture of bleach in Lancashire (Eastwood *et al* 1923, 23)

In 1874 there was said to have been a manganese mine at Hartshill which produced a large quantity of ore (White 1874, 1291), however, the workings in Hartshill Hayes wood appear to have been on a much smaller scale and were in operation by 1818. The ore was found as detached pieces distributed through the red clay soil at a depth of between 0.3 metres and 2.5 metres (Eastwood *et.al.* 1923, 123). The workings here 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 of national importance.

No detailed survey was undertaken of the quarries since this area was considered worthy of more detailed investigation. The extent of the major workings were, nevertheless, outlined on the plan. Three areas of quarrying were investigated:

(a). The largest covers an area of c. 2 hectares and is situated on a band of red shale situated a little above a stream. The quarrying appears to have taken place on either side of this band thus leaving a raised central berm; the earthworks are generally c. 1 metre deep, with spoil heaps on the side of the workings. On the southern side there are at least three hollow ways leading towards to the valley terrace and stream. These hollow ways may have formed an integral part of the industrial process providing washing and sorting facilities on the valley floor and ultimately access to the Coventry canal or road network. In the valley there are flat terraced areas which may have been used as working floors for separating the rock and washing the ore. A dam measuring 2 metres high is situated up-stream from the quarry area although the date of this is uncertain.

(b). A second area of quarrying was recorded at SP 32459433 (f). Here a trackway 8m. wide leads down to the stream, where a small quarry measuring c. 10m. long and 3m. has been cut into the hill-slope. A stream flows in a northerly direction and is partially dammed just below the manganese working.

(c). The third area of quarrying is centred on SP 32159485 and comprises a number of diggings, cuttings and pits.

iv. Terrace

A double contour terrace (g) c. 580m. in length, extends along the contour in a north-west/south-east direction, it is up to 13m. wide and c. 2m. high. At the southern end the terrace is cut by a hollow way and to the south it appears as a large bank measuring c. 1.5m. high and 8m. wide. This bank extends towards the road and is overlain by the woodbank (h). AP evidence would suggest that this terrace feature extended beyond the woodbank for c. 100 metres (543 RAF 1698. 0206 dated 15 Mar 62).

Further north, at (j), the terrace is cut by a hollow way which extends to the east along a terrace. The lower terrace at the southern end is embanked for c. 200 with an internal ditch. Further north the diorite spoil spills onto the terrace, while c. 300 metres beyond a diorite pit has been cut into the lower terrace.

The northern end of the lower terrace is also banked and here, as in the south, the woodbank appears to overlie the terrace (d). It can be traced as a ploughed-out scarp continuing beyond the wood in the north-west towards the field boundary (j).

An interpretation of this feature is difficult. Chronologically the woodbank along the perimeter clearly post-dates it. Along its course slight cross-banks can be seen and in two places trackways cut through it. There has also been industrial activity in the form of diorite quarrying cutting into it and a spoil tip overlying it. Morphologically the terrace, which is well preserved, does not appear to be part of a defensive enclosure. A possible alternative interpretation is that it may be a trackway, or, less likely, a geological feature, particularly since the terrace is following the edge of a diorite dyke and at the southern end, on the other side of the road, it forms a 'shatter belt' (1925 Geological map).

v. Illings Trenches (SP 324943).

The Illings trenches (k) are named after the excavator of two trenches dug here before 1913 (Illing 1913, 498). The site is situated on either side of a valley and can be traced as two back-filled trenches. It is listed as a Site of Special Scientific Interest due to the detailed geological researches carried out here (NCC. letter W/S/20 dated 13 Feb 1986).

On the western side there are two trenches c. 7m. long and 0.3m. deep. A spoil heap lies adjacent to the trench and measures 1m. high. On the eastern side the trenches are more extensive and sinuous; they are cut along the contour of the slope and measure 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.

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

Oldbury Camp (SP 31359470) lies outside the survey area, nevertheless, the opportunity was taken to investigate the area. The interior of the site has been largely destroyed by the construction of a water reservoir. The ramparts of the hillfort appear as depicted on the OS map, however, a possible counter scarp, 70m. long and 0.5m. high, can be seen at (l).

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

This round barrow is situated at SP31769433 at the car-park entrance. The barrow measures c. 2.1m. high and c.20m. diameter, with no apparent ditch. A small backfilled trench, probably the 1835 excavation trench, is visible. The car-park perimeter fence partly impinges on the base of the barrow.

The barrow is considered worthy of detailed survey.

viii. Ice House (SP 39 SW 24).

An ice house is located on the north-facing slope in St Lawrence wood at SP 31579471; it measures c.1.7 metres diameter and is of brick construction with a brick arched roof. The building is hollowed into the hillside and in a rather dilapidated state. There is no path from Oldbury House to the ice house. Approximately 50 metres to the north-west, and on higher ground, is a prominent dam with a bank 1m. high and 1.5m. wide at the top with brick revetting on the eastern side. In the revetting is a overflow pipe which appears to be a water cistern.

ix. Motte and Bailey (SP 39 SW 6; SAM 21544).

The 12th century motte and bailey (SP 32509438), located on a ridge with a stream to the south, is worthy of detailed survey and analysis. Part of the bailey extends east and underlies the later 14th century castle.

3. Miscellaneous Features

Throughout the surveyed area there are slight scarps, particularly on the steeper, north-eastern slope. Some, such as those to the north of the dam, are depicted on the plan and can be seen following the contours. Superficially they resemble plough lynchets, however, on balance, they do not appear to be archaeological and are almost certainly geological features related to extruding rock beds.

Aerial photography shows a large number of tracks 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 these tracks were identified, they are generally c. 8 metres wide and were probably used during forestry work.

Twenty metres to the south of (l) 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, aerial photograph 106G/UK/636. 3309 dated 10 Aug 45).

4. Recommendations

Following the field survey and detailed investigation the following recommendations are made. An estimate of the time necessary to carry out the fieldwork is included:

a. Carry out detailed survey at 1:1000 of a transect (perhaps 30m wide and 100m long) through manganese quarry to the valley.

b. Carry out detailed survey at 1:1000 of motte and bailey. Access will be required in the area of the castle since features in this field probably relate to the bailey. The motte and ditch are heavily overgrown and will require limited clearance in advance of survey. Consideration should be given to the survey of the castle which is situated on private land just outside the wood.

c. Carry out detailed survey at 1:500 of the area around the round barrow.

d. As woodland is cleared further archaeological investigation should be carried out.

e. Check OS antiquity model for Oldbury Camp and amend where necessary.

Fieldwork would probably take approximately 15 days, with a similar amount of time for graphics and preparation of the report.

5. Methodology

The survey was carried out over a period of eight days by G Brown and D Field; it involved three linked traverses, two closed and one open, of 51 stations. Two profiles were also taken across the terrace. Features that were not surveyed included the modern drainage ditches which extend over much of the northern half of the site, and most of the slight scarps that have been interpreted as geological. A Total Station instrument was used for the archaeological survey and to survey local topographical detail in order to tie in to the national grid. The remainder of the wood was investigated but no further archaeological features were noted.

Since the survey was undertaken as an assessment of the extent of the archaeology within the woodland survey the

scale chosen was 1:2500. The plan, which was prepared by D Cunliffe, was prepared digitally using ACAD and CoralDraw software rather than using traditional hachures. The plan depicts the tops of a scarps, the centre of a banks, and the centre of a ditches and are represented by various line colours.

Air photographs of the area, held at the National Monuments Record Centre (NMRC), and taken between 1945 and 1974, were examined for any additional archaeological features (see Annex B for details). The site photographs (archive number 302/B), which were taken by the survey team, are deposited, together with the site archive, at the NMRC.

One day was also spent in the local reference library and museum in Nuneaton investigating earlier maps and the readily available documentary evidence. No attempt has been made to place Hartshill Hayes in its regional or national setting.

The report has been written by G Brown with comments from D Field and edited by D. McOmish.

Acknowledgements

RCHME would like to express their thanks to Peter Lynn and Kevin Musson, Rangers at the countryside park, for their assistance at Hartshill Hayes; also to Helen Maclagan for providing background information on the site.

Plate 1. Example of one of the diorite pits

Plate 2. Area of manganese quarrying

Plate 3. Double contour terrace

Plate 4. Round barrow

Bibliography

Antrill, T.C., Eastwood, T., & Whitehead, T.H., 1923. Geology of the Country around Coventry. (HMSO).

Burt, R., & Wilkie, I., 1984.'Manganese Mining in the South-West of England' in *The Journal of the Trevithick Society* No. 11. pp.18-40

Down, C.G., 1980. *The Manganese Mines of North Wales*, (Northern Mine Research Society)

Eastwood *et al* 1923, 'Geology of Coventry' in *Memoire of the Geolological Survey*

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

Illing, V.C., 1913 'Recent Discoveries in the Stockingford Shales near Nuneaton' in *Report on the British Association for the Advancement of Science*

Morfitt, D. 1990, Enclosure to letter to County Archaeologist 10 Feb 1995.

White, F., 1874 'Mancetter Parish' in *Historical Gazetteer and Directory of Warwickshire*, pp.1290-1

Maps

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

British geological Survey 1925 edition.

Annex A

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 c0.6m. 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.

Annex B

Aerial Photographs

A cover search for aerial photographs of the area around Hartshill Hayes was undertaken which resulted in 328 APs being checked. Of this number 24 were of relevance to the woodland. These ranged in date from 1945 until 1976. Details of the relevant APs are:

106G/UK/636, 3309 dated 10 Aug. 45.
106G/UK/636, 4309 dated 10 Aug. 45.
541/29/4093, dated 17 May 48
541/29/4094, dated 17 May 48
541/251: 4135 dated 20.4.49
541/251: 4136 dated 20.4.49
541/251: 3080 dated 20.4.49
541/251: 3081 dated 20.4.49
58/RAF/2947: 0085 dated 17 Jun 59
58/RAF/2947: 0086 dated 17 Jun 59
543 RAF 1 698. 0205 dated 15 Mar 62
543 RAF 1 698. 0206 dated 15 Mar 62
543 RAF 1 698. 0207 dated 15 Mar 62
69324 009 dated 3 July 1969
69324 010 dated 3 July 1969
69324 011 dated 3 July 1969
69324 012 dated 3 July 1969
01474012 dated 31.3.74
5976009 dated 7 Jul 76
5976010 dated 7 Jul 76
5976011 dated 7 Jul 76
5976012 dated 7 Jul
767176213 undated
767176214 undated

HARTSHILL HAYES