# COPT HILL ROUND BARROW, HOUGHTON-LE-SPRING



# INTERIM REPORT ON EXCAVATIONS CONDUCTED IN JUNE 2003

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# EXCAVATIONS AT COPT HILL, JUNE 2003

Excavations were conducted at the site on the Seven Sisters round barrow at Copt Hill, Houghton-le-Spring (NGR NZ 35344921) during June 2003 by staff and students of the Department of Archaeology, University of Durham, and volunteers from the local community. This was a project initiated by the Friends of Copt Hill, a local interest group formed in 2001 with the aim of safeguarding the site and its environs, and of promoting an understanding of its history and importance.

## Background

The Seven Sisters barrow at Copt Hill (so-called because of the six, formerly seven, trees on the site) is a well-known local landmark on the Magnesian Limestone escarpment that runs between Durham and the sea through the northern half of County Durham. It is one of a number of round barrows that lie on these hills, and nowadays is the most prominent of them. Others nearby are at Warden Law, Batter Law and Murton Moor, while other groups lie to the north around Sunderland and the east at Cold Hesledon (Young 1980).

## Excavation history

The barrow was excavated by Canon William Greenwell of Durham and a Mr T.W.U. Robinson in September 1877, the work being published subsequently by C.T. Trechmann (1914, 123-32).<sup>1</sup> A more comprehensible version of the excavation, along with a discussion in the light of modern knowledge, has been published by Robert Young (1985).

The barrow consisted mainly of limestone and sandstone blocks, some of them burnt. The primary burial, described by Greenwell as the "mesial deposit", consisted of a rectangular charcoal deposit on the old land surface, along with the "primary interment" of several cremated, disarticulated bodies. Surrounding this was a "structure" of whinstone and sandstone boulders, affected by burning on their inner edges; what were interpreted as "flues" (for the passage of air) ran upwards from the charcoal layer. Although there were no associated finds, this aspect of the site has until recently been regarded as an example of a Neolithic "flue cremation", though Young (1985) interprets it as a collapsed axial mortuary structure, such as was present in the north-east of England at Street House (Vyner 1984). Certainly the first phase of the site seems to be Neolithic, a rare example in the north-eastern counties.

Subsequently the barrow was used for further burials in the Bronze Age. A small cist lay to the south of the mesial deposit, and inhumations and cremations were inserted into the body of the mound; in two cases, pots were present and a small number of preserved flint objects include a scraper and knife that are probably Bronze Age in date.

<sup>&</sup>lt;sup>1</sup> Manuscript notes on the excavation also survive (Greenwell n.d.): these have been consulted by Dr Robert Young, and form the basis of his 1985 paper.





#### Recent history

The site has been a Scheduled Ancient Monument for many years. In 1998, the scheduled area was extended (Fig. 1), so that a circular area approximately 120 m in diameter was included (flattened on the north-east side, where disturbance from an ash pit is present). The barrow itself is about 25 m in diameter, which means that a "halo" extending about 50 m from the edge of the barrow is also scheduled. The site is currently under permanent grass and not under any threat.

In the late 1990s, the site and the field in which it lies were acquired by the City of Sunderland with a view to developing the site as a public open space within the Great North Forest project. In 2000, a geophysical survey was commissioned from GeoQuest Associates; this took place in two phases, the second of which resulted in a final report (GeoQuest Associates 2001). Following this, a group of interested local people formed themselves into the "Friends of Copt Hill", with a view to developing the knowledge and interest of local people in the archaeology and environment of the site, and developing the amenity in association with the City Council. As part of this initiative, an approach was made to Professor A.F. Harding of the Department of Archaeology, University of Durham, to explore the possibility of archaeological work taking place on or around the barrow site.

The geophysical survey plan in its unenhanced form (Fig. 2) shows a series of parallel lines running roughly east-west and north-south across the field; these relate primarily to ridge-and-furrow cultivation traces. At various points other anomalies are visible, though it is unclear what they represent. An interpretative plan was produced by GeoQuest Associates (Fig. 3), which purports to show a number of features of potential interest: a double pit alignment (f14); concentric ditch rings round the barrow (f5); a penannular enclosure (f18); a U-shaped feature (f25); and other linear features.

#### Aims and objectives

The aims of the work in 2003 were as follows:-

1. To set the Copt Hill round barrow properly within its local constructional and chronological context, thus enhancing knowledge of Neolithic and Bronze Age monuments in north-east England;

2. To assess the accuracy of the interpretative plan produced by GeoQuest;

3. To provide a sense of continuity and identity for local people;

4. Through the above, to maintain and enhance the appreciation of residents, the interested public, and the academic world of the place that archaeological monuments occupy within our modern daily lives.

5. To provide on-site training in a range of archaeological skills for students and others.





100 m 0

These aims were to be accomplished by setting the following objectives:-

1. To investigate through two carefully placed excavation trenches of modest size within the Scheduled Area (and three outside it) the main anomalies identified in the geophysical survey (concentric ditches and pit alignment);

2. To recover artefactual material that could assist with the dating of the surrounding features;

3. To recover ecofactual material that could assist with the interpretation of the economy and environment of the site;

4. To provide local people with the opportunity to excavate at their local monument under strictly supervised conditions;

5. To provide an opportunity for local people and academic archaeologists to exchange ideas and enhance each other's understanding of the Copt Hill site;

6. To provide training in specific excavation skills for students, and to introduce local people with no background to the processes of excavation.

#### Methodology

Since a geophysical survey plan of the site already existed, the excavation strategy adopted aimed to investigate those spots that appeared to represent features of archaeological interest. Thus two  $10 \times 10$  m trenches (1 and 3) were opened over the line of the supposed pit alignment south-west of the barrow (f14 on the GeoQuest interpretative plan); one  $20 \times 5$  m trench to the east of the barrow (2) where a series of concentric lines appeared to indicate the presence of ditch-like features (f5); and two trenches (4 and 6, approx.  $10 \times 5$  m and  $11 \times 11$  m) over an area which appeared to possess an enclosure ditch with two opposed entrances (f18). A further trench (5) was cut by machine in the southern part of the field where an irregular dark mark appeared on the geophysical survey (f25), but this was only investigated by a machine cut (see below).

The approximate position of the intended trenches is shown in Fig. 4 (trench 6 was added during the excavation to ensure that enough work would be available for the team). Fig. 5 shows a detailed version of the trench location as laid out on the ground and surveyed in.

Topsoil on the trenches within the Scheduled Area (1 and 2) was removed by hand, though the eastern half of Trench 2 was machined. Topsoil in the other trenches was removed by machine.

## Trench 1 (Figs. 6-7)

Trench 1 (10 x 10 m) lay within the Scheduled area south-west of the barrow. It was positioned to investigate the supposed pits running southwards. On removal of the







North Facing Section of Feature 102





South Facing Section of Feature 102

# North Facing Section of Feature 102



North Facing Section of Features 104 & 110



North Facing Section of Feature 106



South Facing Section of Feature 108



North Facing Section of Feature 108



East Facing Section of Feature 112

50,cm



topsoil a number of features were visible cutting the limestone bedrock, which was clearly visible over most of the trench. In particular, two linear features (102 and 104/105/108) ran diagonally across the trench, following a north-south alignment. While 102 was very shallow and contained no finds, 104/105/108 was of considerable depth and its upper levels (the only parts investigated) were full of disturbed material and modern rubbish. These were clearly natural fissures in the limestone, and the larger one had been open in recent times. Part of another fissure lay at the north-east balk.

A small pit (112), 47 x 26 cm and 14 cm deep, lay west of 105. It may represent a posthole. Other possible features investigated in this trench were deemed to be natural.

Two small chips of flint were found in the topsoil.

Trench 2 (Figs 8-11)

Trench 2 was designed to be 20 m long and 5 m wide, and to cut the apparent concentric rings running round the east side of the barrow (f5). In the event, the western half of the trench was opened by hand and the eastern half by machine.

At the eastern end of the trench natural bedrock lay very close to the surface. It appeared at some places elsewhere in the trench, though not in the western half. Instead, a considerable depth of mixed material was present, consisting of disordered limestone blocks and pebbles and a variety of other lithic materials, in a clay matrix. This material was investigated in the north-west corner but proved to be sterile archaeologically. As with Trench 3 (below), it must be interpreted as glacially derived material which has been redeposited over parts of the site, and into which any archaeological features were cut. In other words, it serves as the natural subsoil of the site where bedrock is not present.

Plough furrows were evident on removal of the topsoil, reflecting the fact that the field was used for agricultural purposes until some ten years ago. Variegated patches of material were evident across the trench (Fig. 8). On excavation a series of pits or postholes were discovered, mainly in the eastern half (Fig. 9). Some of these were deep and appeared to lie in a line. They are as follows (sections on Figs. 10-11):

214: 51 x 55 cm, 27 cm deep; filled by 215

216: 35 x 30 cm, 10 cm deep; filled by 217

204: 60 x 75 cm, 85 cm deep; filled by 205 and 224. This was a silty clay with abundant charcoal, which was sampled for dating purposes (Fig. 10); the resultant date of  $6810 \pm 40$  BP is discussed below. On removal of this fill, a deeper shaft (which could not be bottomed) continued downwards for at least 80 cm (225). 218: 30 x 35 cm, 30 cm deep, filled by 219 210: 37 x 60 cm, 20 cm deep, filled by 211

A small group of pits lay clustered just northwards of 204

235: Irregular oval hollow

Copt Hill 2003 Trench 2 Plan on removal of topsoll





## Copt Hill 2003 Trench 2, pit sections

East Facing Section of Feature 204



Northeast Facing Section of Feature 210



South Facing Section of Feature 214







1st North Facing Section of Feature 218



0 50 cm







Copt Hill 2003 Trench 2, sections of postholes and pits

North Facing Section of Feature 231



South Facing Section of Sondage 2



231: 25 x 30 cm, 20 cm deep, filled by 232 228: 30 x 35 cm, 15 cm deep, filled by 229 233: 40 x 29 cm, 20 cm deep, filled by 234

Two further pits lay close to the north balk:

222: 35 x 20 cm, 10 cm deep, filled by 223 206: 23 x 31 cm, 17 cm deep, filled by 207.

#### Finds

A single sherd of pottery was found at the topsoil/subsoil interface close to pit 210 (SF 1 on Fig. 8). Dr Steven Willis has reported on this (below); it comes from a later prehistoric tradition though cannot be closely dated.

Seven small flint chips or flakes were found in this trench, all from the topsoil.

#### Interpretation

Most of these pits appeared to be postholes; in some cases a post-pipe was evident (most clearly 218; possibly 204, 210 and 228). They are mostly quite shallow, but in view of the proximity of the bedrock to the surface in this area it is highly likely that they have been truncated. The question arises as to what function they may have served. Five of them (first group above) are more or less in a line, and between 214 and 216 was a shallow hollow with two large stones (Fig. 9), possibly the remains of a further pit.

The situation is complicated by the fact that the radiocarbon date obtained from Pit 204 gave a date of  $6810 \pm 40$  BP (GrN-28092), which calibrates to 5780-5620 cal BC at 2 sigma (95% probability), in other words the later Mesolithic (Fig. 12).



Fig. 12. Calibration diagram for the C14 date from Pit 204

Whether the other pits also belong to a phase preceding the erection of the barrow is unknown as no artefactual material of any kind was found in them. A Mesolithic presence on Neolithic sites is far from unusual however; to name one example, the Hazleton North long barrow in Gloucestershire had a pre-barrow Mesolithic phase represented by flintwork (Saville 1990, 13-14).

Apart from this, the layout of the features in Trench 2 suggests that a line of posts led in the direction of the barrow from the east, a feature that recalls the situation at some other Neolithic sites, e.g. Street Houses, Cleveland, where a double post row led to the façade of the long barrow (Vyner 1984, 156, 190), and Kilham, East Yorkshire, where a comparable double alignment ran between the long barrow façade and an outlying ring ditch (Manby 1976, 116 fig. 3, 126). Post alignments may well be associated with barrows at other sites.

The function of the remaining postholes is quite uncertain, as they form no recognisable pattern.

In summary, although the geophysical survey plan can in the light of excavation be seen to be highly optimistic, the concentric lines merely reflecting differences in the subsoil, a number of features were found that appear to represent genuine archaeological activity. The later prehistoric sherd presumably emanates from activity associated with an as yet undiscovered settlement in the vicinity, and does not appear to be relevant to an understanding of the barrow or the Trench 2 pits.

#### Trench 3 (Figs. 13-14)

Trench 3 measured 10 x 10 m, and like Trench 1 was designed to investigate the supposed line of large pits running south-west from the barrow. Since it lay outside the Scheduled Area topsoil was removed by machine. This revealed plough furrows, limestone bedrock (in the south-west corner), and variegated material with a number of large stones. As with Trench 2, this material was investigated by means of cuts or soundings, but again it proved to be sterile and can be interpreted as glacially redeposited material that formed the natural subsoil in later prehistory.

The only features of clear archaeological interest were a group of postholes in the south-west corner, and isolated pits or postholes elsewhere, as follows (sections in Fig. 14):

#### In the south-west corner:

319: 40 x 30 cm, 20 cm deep, filled by 320 301: 41 x 30 cm, 68 cm deep (but extending deeper), filled by 302 303: 20 x 15 cm, 23 cm deep, filled by 304, and adjoining 305 305: 19 x 13 cm, 18 cm deep, filled by 306, and adjoining 303 307: 26 x 13 cm, 27 cm deep, filled by 308

These pits appear to form a group, and 319, 303/305 and 307 are in a line, though irregularly spaced. There were no finds in them, nor is their function evident from their positioning.



## Copt Hill 2003 Trench 3 sections

Southwest Facing Section of Feature 301



Southwest Facing Section of Features 303 & 305











 West Facing Section of Features 313, 321 & 322

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#### In the eastern part of the trench:

328: 47 x 39 cm, 29 cm deep (but going deeper), filled by 329 and 330 323: oval hollow 1.60 x 1.00 m in extent and 0.27 m deep. Probably a natural feature.

## In the western part of the trench:

315: 29 x 40 cm, 16 cm deep, filled by 316

331: 40 cm across and 13 cm deep, filled by 332. If a posthole, it must be very truncated.

A slight groove (326) appeared near the north balk, running north-west - south-east. Its depth, where sectioned, was 14 cm. Its function is unknown though it did not look like a natural fissure.

There were no finds of any description in Trench 3.

#### Trenches 4 and 6 (Figs 15-17)

Trenches 4 (designed to be  $10 \times 5 \text{ m}$ ) and 6 ( $10 \times 10 \text{ m}$ ) were placed to investigate the enclosure-like feature in the southern part of the site (f18 on the geophysical plan). Both were opened by machine, and in both the limestone bedrock was immediately apparent 20-30 cm below the surface. In both a straight narrow ditch-like feature was found, though the orientation of the features was not the same. The features were sectioned, which proved that the sides were straight and sheer and the deposits they contained sterile and non-archaeological. The features are, in fact, natural fissures, and have infilled with sterile sand or earth over long, possibly geological, timespans.

#### **Trench 5**

Trench 5 was placed to investigate the dark swirling mark on the geophysical plan (f25) in the south-eastern part of the site. Removal of the top 30 cm revealed that dark humic material continued down; there was no sign of any bedrock in this area. A machine-cut slot was excavated into this material, to a depth of a further 0.90 m. This showed that the dark upper material shaded into a buff sandy material containing very large stones. The feature is evidently entirely natural, representing downwash of topsoil onto an ancient watercourse or pond. No further work was conducted in this area.

#### The 2003 season: conclusions

The results of the 2003 season have been illuminating on a number of points, while somewhat disappointing in others. First, it is evident that the interpretative plan produced by GeoQuest Associates is highly optimistic in the way it has "seen" archaeological features in a rather faint and confusing set of original readings. As a consequence, none of the features interpreted as ditches or pits turned out to be such, though reference to the unfiltered plots shows that the geophysical prospection did in fact locate some of the nature fissures. On the other hand, Trench 2 in particular located a number of pits and/or postholes that are of considerable interest, in



Fig. 15



# Copt Hill 2003 Trenches 4 and 6, sections of fissures



Southwest Facing Section of Feature 401







Fig. 17

particular as far as the line of postholes running east-west away from (or towards, depending on your point of view) the barrow. The sample from Pit 204 is particularly interesting, though enigmatic, as apart from one flint recovered during fieldwalking by the Friends of Copt Hill in 2002 there is no other certain indication of a Mesolithic presence at the site.

The Seven Sisters barrow thus remains the only prominent archaeological feature in the landscape at this point, and so far it has not proved possible to enlarge the landscape context in which it is located. On the other hand, much more is now known about the nature of the soils on which it sits, and the natural features that are present on the magnesian limestone hills of this part of County Durham. Future work may be able to answer some of the questions left unresolved in 2003.

## The future

While there would be little point in extending the existing excavation trenches in the future (with the possible exception of Trench 2), there is more work that should be done on and around the Seven Sisters barrow for a fuller picture to emerge. First and foremost, a new survey is needed, both topographic and geophysical. It is hoped that this will be carried out in the coming months as an exercise within the MA in Archaeological Survey in the Department of Archaeology. This should enable a more objective view of the likelihood of there being significant archaeological features in the vicinity of the barrow.

Secondly, some limited excavation on the north side of the barrow, where a replacement tree or trees might be placed, would be necessary. There was no sampling of the deposits on this side of the barrow, where downwash can be expected to have been minimal and the deposits therefore better preserved.

A third possible piece of work that would repay dividends might be a re-opening of the Greenwell trenches on the barrow itself. The accounts left by Greenwell are so vague, and the potential importance of the barrow so great for an understanding of Neolithic burial in round barrows, that limited work in the formerly excavated area could be highly informative. While it is unlikely that much in the way of artefacts would turn up, investigation of the "mesial deposit" and "primary interment" would be extremely useful. This would have the additional benefit that members of the local community, who were understandably disappointed at the somewhat negative results of the 2003 season, could return to the project with renewed enthusiasm.

#### Acknowledgements

The 2003 season could not have taken place without the help and cooperation of many people and organisations. The initial impetus came from the Friends of Copt Hill, whose secretary, Mary Buston, was an unfailing source of help and support. Peter Riddell, Fay Judson, Andrew Fletcher and Bob Heron all provided invaluable help at various times. 50% of the financial support for the excavation came from the Friends, who had raised the cash through a variety of initiatives in 2001-2. Volunteers from the Friends provided invaluable assistance with the excavation at weekends. Thanks are due to all members of the local community who assisted with the project.

Bobbie Kerr kindly allowed the placing of a vandal-proof tool box in the car park of the Copt Hill Inn.

Kate Wilson for English Heritage was extremely helpful in facilitating the granting of Scheduled Monument Consent, and providing advice and support. Jennifer Morrison of Tyne and Wear County Archaeology also gave invaluable help at various stages, in particular in the preparation of the SMC documents and the application to the City of Sunderland for a licence. Brian Gibbs of Sunderland City Council gave much help in kind and provided other support and advice.

During the excavation itself, supervisors Imogen Wood and Jacqui Hutton were unfailingly cheerful and professional, and Andy Platell and other staff of Archaeological Services University of Durham were also extremely helpful. Phil Howard tied the excavation in to the published maps and assisted with the training of students in basic survey techniques. The remaining 50% of the costs were provided by the Department of Archaeology through its fieldwork training budget.

Post-excavation work was expertly carried out by Jacqui Hutton. Specialist reports have either already been received from Dr Steven Willis and Dr Robert Young or are in the process of being produced.

#### Appendix 1.

# Pottery sherds of Later Prehistoric Tradition by Steven Willis

Two conjoining sherds of later prehistoric tradition pottery recovered during the excavation [of Trench 2] were submitted to the author for reporting. The two sherds, which have broken apart recently, weigh 14 g and measure (together) 49 mm in longest dimension. They derive from the body of a handmade vessel, most probably of jar shape, with a wall thickness of 7-8 mm. No evidence of decoration occurs. The edges of the sherds are abraded and some inclusions have been weathered out, otherwise this item is in a comparatively good state of preservation. The fabric is characteristic of vessels of this tradition from the County Durham and Tyneside area. The exterior and margin are reddish brown while the interior margin and interior surface are dark grey. The fabric is moderately hard and fractures a slightly irregular. Both the interior and exterior surfaces have been smoothed. The fabric is rather 'open' and contains fine sparkling quartz grains in moderate frequency; these inclusions, which may, in this case, have been added to the clay during manufacture, are often present in pottery of this tradition from the region. Also present are rhomboid voids, c. 1-2 mm in dimension, occurring with sparse frequency; these indicate the former presence of calcareous inclusions which have been leached away (or which were burnt in firing). Occurring too are rare clay pellets (possibly fine grog), an angular flint fragment (c. 3 mm) and fine ferrous pellets probably indigenous to the clay. Calcareous inclusions are not commonly encountered in pottery of this tradition in the North-East, as is apparent with the assemblage from Thorpe Thewles (Swain 1987); this inclusion is much more common in Yorkshire, particularly East Yorkshire (Evans 1995). Nonetheless a small percentage of items of the tradition from the North-East display this temper.

Overall the typology of this item confirms it to be an example of a long-lived conservative tradition of pottery making current in the North-East of England during the first millennium BC and continuing into the Roman era (Vyner 1988). Generally, the number of sites examined dating to the early and middle first millennium BC in the region is meagre and the sample of pottery associated with deposits of this date is modest. We have better knowledge though of the later Iron Age. There are, in particular, few records of this pottery tradition from eastern County Durham or Tyne and Wear south of the Tyne, in large degree reflecting the limited amount of archaeological work undertaken in this part of the North-East. Considering the chronology of this item, it may date to any time period from the Late Bronze Age to the mid Roman era: there is no precise guide as to the form of this vessel which might otherwise have been helpful, while the nature of the fabric 'recipe' in this case is not chronologically diagnostic. Sherds of this tradition in characteristically similar fabrics are present in contexts of the earliest phase at Stanwick, North Yorkshire, dated to around 100 BC, and on present evidence it would seem that whilst pottery was in wide use during the whole of the first millennium BC in the region it becomes a more frequent find in deposits of late Iron Age date. These pointers, however, do not rule out a Late Bronze Age or Early/Mid Iron Age date for this item. This case highlights the need to maximise chronological information when groups of this tradition of pottery are encountered.

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