

Archaeological Field Survey Report

CARROCK FELL, CUMBRIA

by Trevor Pearson

Carrock fell.

CARROCK FELL,
CALDBECK AND MUNGRISDALE
CUMBRIA

NMR NUMBERS NY 33 SW 1 AND 3

NEOLITHIC INDUSTRY AND ENCLOSURE

JUNE 1996



RCHME (CAMBRIDGE)
Brooklands
24 Brooklands Avenue,
CAMBRIDGE, CB2 2BU

CONTENTS

1. Introduction	1
2. Site history	2
3. Archaeological Description	6
4. Discussion	10
5. Survey and Research methods	12
6. Bibliography	13

LIST OF FIGURES

1. Site location	1
2. The site and its environs	2
3. RCHME earthwork plan surveyed at 1:1000 scale	5
4. The site showing the principal components of the monument	7

1. INTRODUCTION

During the first two weeks of June 1996 a combined team from the Cambridge, Newcastle and Swindon Offices of the RCHME surveyed a stone-built enclosure on the summit of Carrock Fell, Cumbria (NGR NY 3425 3364). The site is recorded in the NMR (NY 33 SW 1) as a likely Iron Age hillfort but the possibility that it might be a Neolithic enclosure led to it being surveyed as part of the Neolithic Industries and Enclosures project of the RCHME. In addition to the enclosure, the survey also recorded the remains of a cairn at the eastern end of the site (NY 33 SW 3) and a ruined structure on the south-east slope of the hill, adjacent to the enclosure wall.

Carrock Fell is an isolated hilltop on the eastern escarpment of the Caldbeck Fells. The site straddles the summit of the hill, between 640m and 665m above OD, enclosing an area of 1.94 ha. The rock forming Carrock Fell is part of a plutonic complex of late Silurian or early Devonian Age comprising various types of intrusive igneous rocks of the gabbro family (British Regional Geology 1971, 32). These rocks outcrop in crags around the sides and on the summit of the hill and have weathered to give extensive spreads of scree particularly around the western and south-western sides of the hilltop.

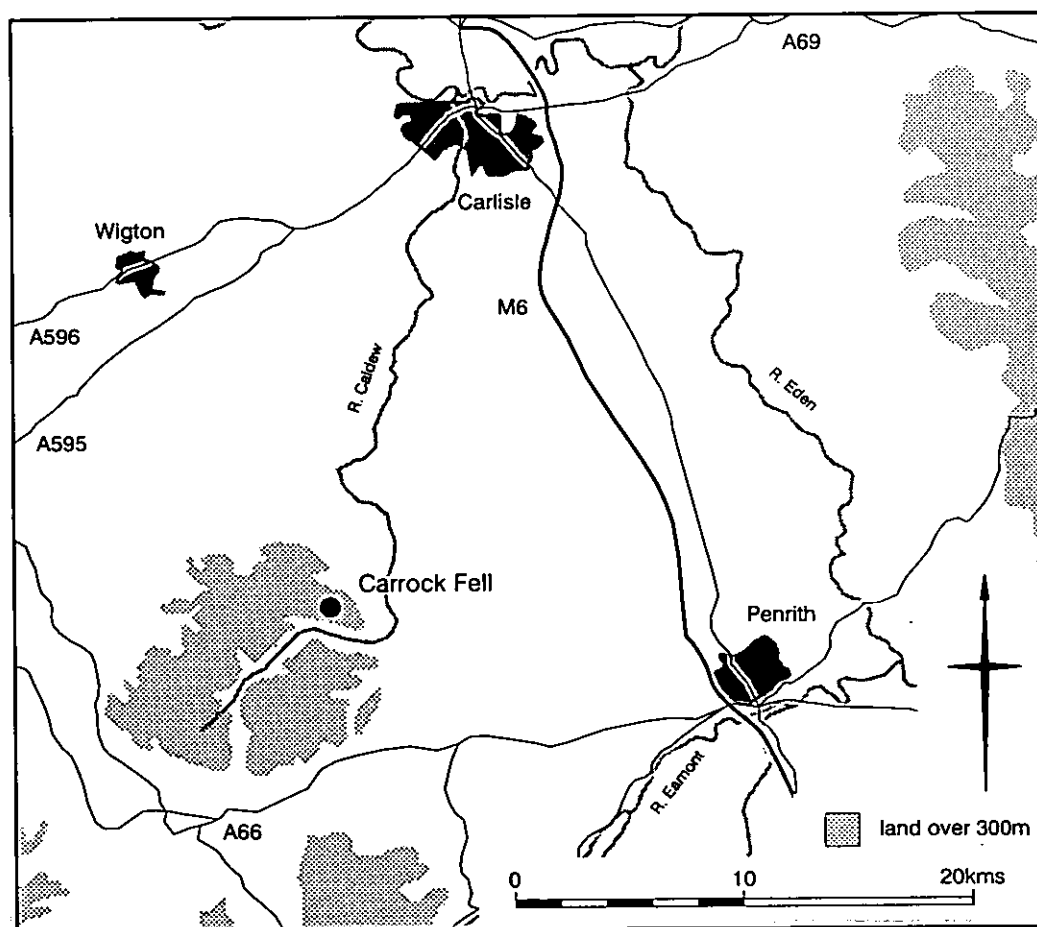


Figure 1:
Site location

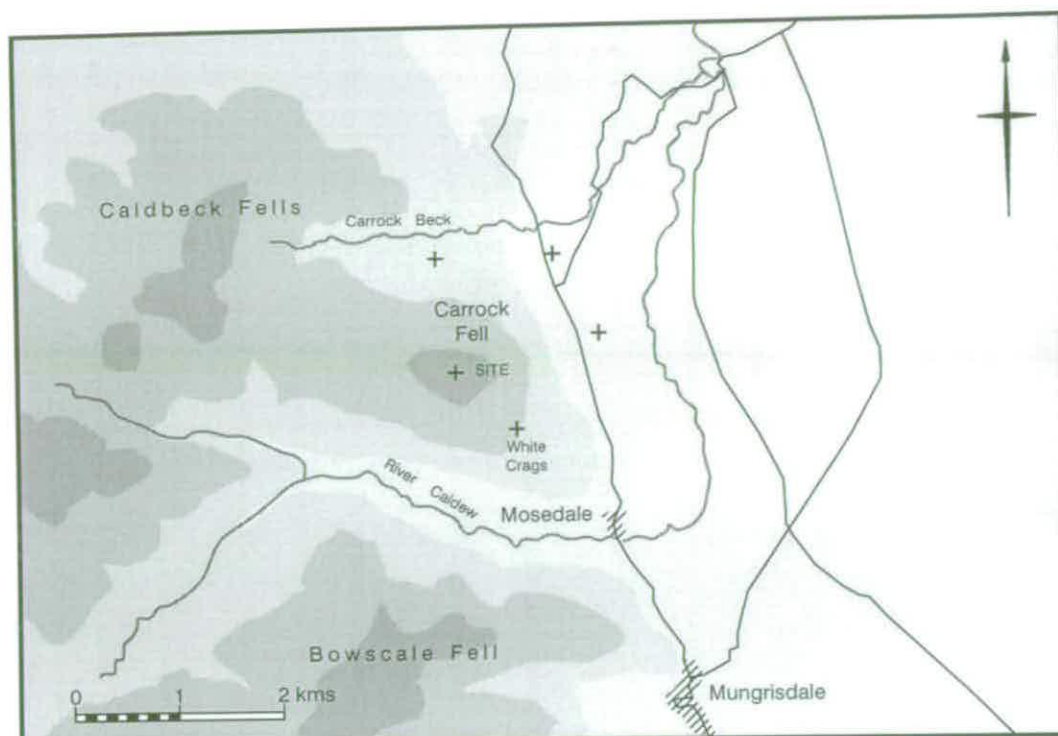


Figure 2:
The site and
its environs

The hilltop commands extensive views north to the Solway Plain and east to the foothills of the Pennines whilst to the south, Bowscale Fell forms the backdrop, 3km away on the opposite side of the Caldew Valley. The southern and eastern flanks of Carrock Fell rise for over 400m from the valley of the River Caldew and on the north from the lesser valley of the Carrock Beck. The natural approach to the site is from the west where the ground falls away less steeply and a saddle connects the summit to the main range of the Caldbeck Fells. The crest of the hill is an east-west ridge which rises to a rocky peak at the west end, 665m above sea level. The hilltop supports a thin cover of vegetation, leaving the stone walls of the enclosure clearly visible. The vegetation has been worn away in places by a footpath which runs east-west along the summit of the hill and across the enclosure.

2. SITE HISTORY

The site was first described and illustrated by Hutchinson whose account appeared in the second volume of his *History of the County of Cumberland*, published in 1794 (381-7). Hutchinson recorded the basic components of the site in some detail, noting that the enclosure bank was between three and six feet high (0.9-1.8m) and consisted of heaped stones and that the circuit was interrupted by several gaps. He also suggested that the breaks at the cardinal points of the enclosure were original entrances, each four yards wide (3.6m), with the remaining gaps due to subsequent stone robbing or to people rolling boulders down the hillside for entertainment! Furthermore, he thought that stone robbing had widened the eastern entrance from four (3.6m) to six yards (5.4m) and the northern to eight yards (7.2m), though in the latter some basal stones had been left in-situ. Hutchinson also turned his attention to the interior, noting the existence of a cairn at the east end, eleven yards in diameter (10m), and at the west end, a spread of rocks around two sides of the rock peak at the highest part of the hilltop. The eastern cairn had apparently been dug into as he describes a conical hole in the mound, measuring five yards in diameter (4.5m) and penetrating two feet (0.6m) into the ground. The engraving which accompanies Hutchinson's account does not closely match the description as it shows only one gap on the south side of the enclosure.

Since Hutchinson's time the site has been surveyed on a number of occasions though there is no record of any excavation having taken place. The first edition Ordnance Survey map at a scale of six inches to the mile (1:10,560), surveyed in 1861 and published in 1867 (Ordnance Survey 1867), shows the enclosure with two breaks on the north and south and the structure adjacent to the south-east side which is labelled as a sheepfold. As the latter is not mentioned by Hutchinson in 1794 or shown on his accompanying map, it is possible it dates to the first half of the 19th century. In 1876 Clifton Ward published a brief description of the site accompanied by a sketch plan at six inches to the mile (1:10,560). His account is rather perfunctory but he does question how many of the gaps in the enclosure were original entrances (Clifton Ward 1876, 246).

Sixty years later the enclosure was surveyed by Collingwood during the course of an afternoon visit to the site on July 17th 1937. Using a plane table to triangulate fifty points around the enclosure, the resulting plan, published at approximately 1:1600 scale, is reasonably accurate though lacking in detail. Collingwood identified several significant points concerning the structure of the monument (Collingwood 1938, 32-41), notably a belt of grass-grown stones in a break at the south-east corner of the enclosure which he interpreted as the robbed out footings of the bank. He also identified several stretches of the original wall face on the north-west and south sides of the enclosure and considered that only two of the gaps, on the west and the south, were entrances and that the others were either due to stone robbing adjacent to the ruined building or evidence that the enclosure had been slighted. Collingwood concluded that the enclosure was an Early Iron Age hillfort slighted by the Romans.

In more recent years several commentators have speculated on the function of the site without bringing any new information to bear. Hogg included Carrock Fell in his book on hillforts (Hogg 1975, 164-166) agreeing with Collingwood over the date of the site and the theory that it had been slighted by the Romans, further speculating that this may have been done during military training. However there are no Roman camps surviving in the vicinity which might point to manoeuvres having taken place on Carrock Fell. Challis and Harding included Carrock Fell in their study of later prehistory between the rivers Trent and Tyne but stated that its prehistoric testimony was not unequivocal (Challis and Harding 1975, 122). Higham concluded from the remote location of the site and the lack of internal features that it was never permanently occupied (Higham 1986, 129), whilst Bewley considers the lack of Iron Age sites in the area could point to a Bronze Age origin for the enclosure (Bewley 1992, 8-9). Bronze Age axes have been found near to Mosedale village, two kilometres to the south-east of the enclosure in 1924 and 1978 (McKlough 1969 and Burgess and Richardson 1985).

In 1986 the Cumbria and Lancashire Archaeological Unit undertook a survey of the Carrock Fell area as part of the Lake District National Park Survey (Turner 1987, 23-25). As well as identifying a range of monuments related to the past settlement of the Mosedale valley at the foot of Carrock Fell, the enclosure was surveyed at 1:1000 scale. The report concluded from the shape of the site that it was of two phases: the earliest part of the site lay to the west and enclosed an area of 80 x 60-70m, with the ground to the east added later, perhaps to allow cattle to be brought in. However, the report does not explain in any detail the evidence for two phases of construction and by dismissing the east cairn as built recently by walkers, the survey misses the fact that it was described by Hutchinson in 1794.

A new perspective on the site has come from the discovery that the leucogabbroic rock which outcrops on the south side of Carrock Fell at White Crag is the source for Group XXXIV Neolithic stone axes (Fell and Davis 1988, 74). Since the date of the enclosure has never been fully resolved, its proximity to a source used for the production of stone axes raises the possibility that the enclosure might be Neolithic in date.

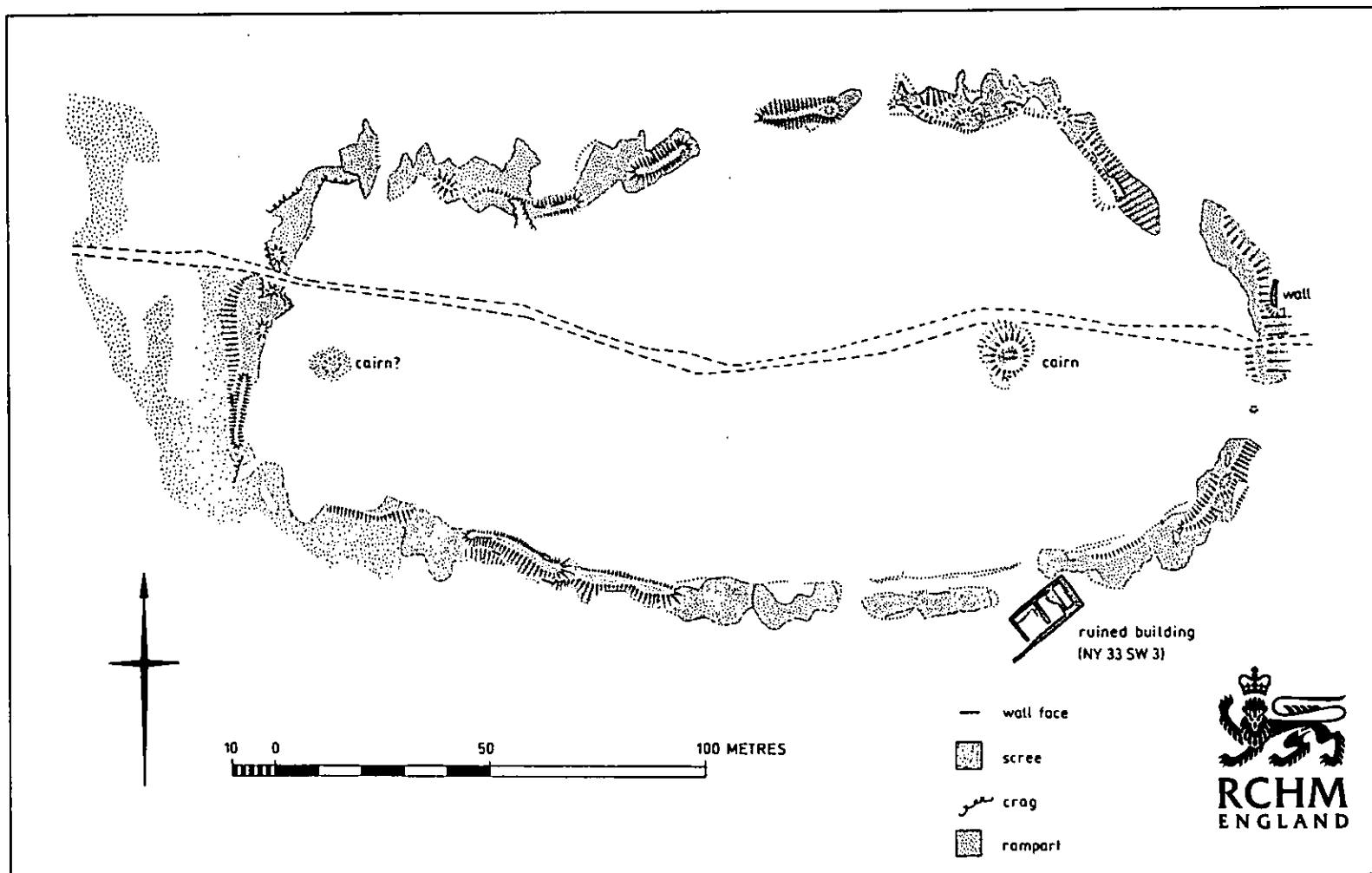


Figure 3: RCHME earthwork plan surveyed at 1:1000 scale

3. ARCHAEOLOGICAL DESCRIPTION

THE ENCLOSURE

The monument is defined by a discontinuous stone rubble bank surviving to a maximum height of 1.6m, roughly pear-shaped in plan and orientated with its long axis east-west. Internally, it is 220m in length and a maximum of 100m wide on the east narrowing to 70m at its west end where the bank encloses the western flank of the rock peak forming the high point of the ridge.

There are ten separate lengths of bank (figure 4, Banks A-J) formed from loosely-piled angular rocks on average between 0.3-0.5m across. There is no evidence for an external ditch although one is indicated on Clifton Ward's plan but this was correctly discounted by Collingwood. In places the bank is spread flat but a total of 160m of the enclosure still survives to a height of between 1.0m and 1.6m. The best preserved section is on the south where the bank (Bank H), 1.6m high, includes five stretches of original wall facing; four on the exterior of the bank and one on the interior. The walls are roughly coursed and survive up to 1.2m high whilst the distance between the inner and outer faces varies from 2.0m to 6.0m, suggesting the bank had a stepped profile. Other stretches of wall face survive elsewhere on the perimeter of the enclosure (Banks A and I) including the north-east (Bank C) where the bank is spread virtually flat, no more than 0.7m high. No evidence was noted for the internal structure of the bank such as stone compartments like the Iron Age hillfort at Ingleborough. On the exterior of Bank D on the east of the monument there is a free-standing stone wall 1.0m high. This is not an original feature and has probably been constructed as a windbreak or shooting butt with stones robbed from the adjacent bank.

The character of the enclosure changes from west to east. On the west, north-west and south-west sides, the enclosure follows a natural break of slope which would have accentuated its height when viewed from the outside in the direction of the natural line of approach. There are substantial scree slopes below this part of the enclosure and on the south-west and west sides it is particularly difficult to distinguish the eroded bank from the naturally weathered rock and scree. On the south-west and north-west the bank is poorly formed possibly because the enclosure made use of natural rock outcrops to define its perimeter. Other rock outcrops are incorporated in the enclosure on the west, particularly adjacent to where a footpath enters the site through a 2.5m wide gap in the bank (between Banks I and J). This is the only certain break in the perimeter on this side of the monument: Collingwood thought it was an original entrance and the vertical rock faces either side of the gap do afford it an imposing air.

To the east, south-east and north-east the enclosure crosses more gentle terrain: there are fewer naturally occurring boulders or rock outcrops and therefore the layout of the enclosure is much clearer than on the west. In several places to the rear of Banks C and H, there is trace of a rock-cut scarp indicating that the ground behind and below the bank has been cut back to carve a level foundation for the rampart out of a sloping hillside. Also

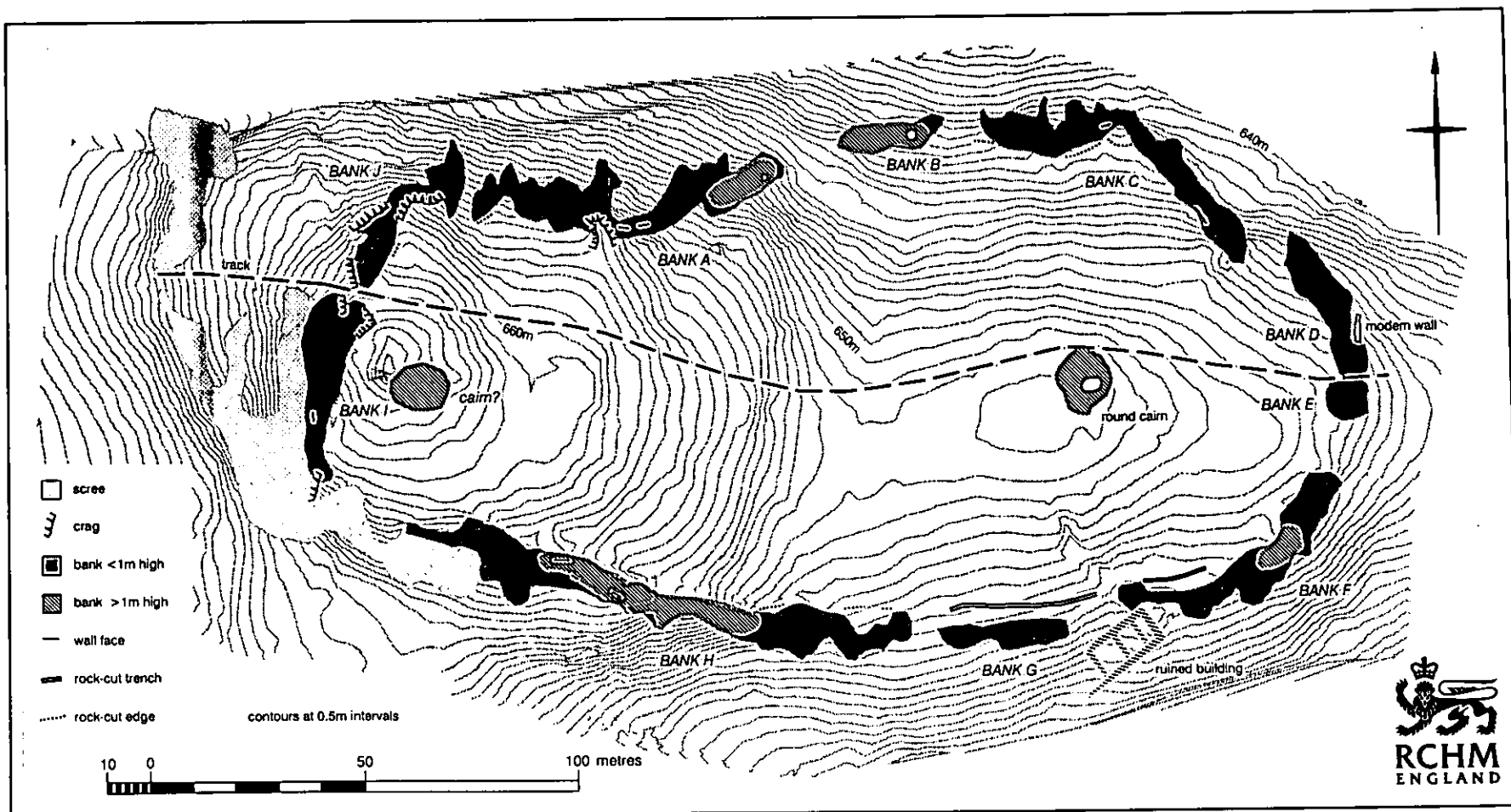


Figure 4: The site showing the principal components of the monument

surviving on the south-east side is a shallow rock-cut trench, 0.3m deep and up to 0.8m wide, running at the rear of Banks F-G for a distance of 75m. Its function in relation to the bank is not clear.

Both Collingwood and Hutchinson describe foundations of the bank as being visible in the western of two gaps on the north side (between Banks A and B) but although there are some stones in this area they probably occur naturally. The east end of Bank A and both ends of Bank B have rounded terminals (though not faced) and the flattened Banks C and D increase in thickness on each side of the gap between them, suggesting perhaps that more stone was originally employed in the construction of the terminals, either because they were built higher or wider than the rest of the bank. The gaps in the enclosure on the north and east, therefore, may be integral elements of the original plan and not the result of later depredations. In contrast, the very narrow gap between Banks D and E may have been eroded by the long-established east-west track which crosses the enclosure.

The tops of Banks A and B are each cut by neat circular depressions towards their east ends. These are unlikely to be of great antiquity since they would have filled with loose stones fallen from the bank over the passage of time. That at the east end of Bank B is large enough to form a one-person shelter but that on Bank A seems too small to give adequate protection from the elements. They are both visible on 1946 aerial photographs (106g/UK/1209/4108-9) but they were not noted by Collingwood which implies he either discounted them as unimportant or they were constructed during the period between 1937 and 1946, perhaps to shoot from. A third circular hollow was noted in the gap between Banks E and F. It was cut into the rock to a maximum depth of 0.3m and could be the setting for a wooden post.

THE INTERIOR

The interior of the enclosure is devoid of surface occupation evidence such as house platforms or the outlines of hut circles. Traces of quarrying have been referred to in the past but none were identified during the present survey and it is difficult to see what would have been the purpose of quarries when there are extensive areas of scree available for use. A mutilated cairn survives towards the east end, situated on the crest of the east-west ridge. The cairn is composed of loosely piled irregular rocks and boulders to a maximum height of 1.2m and a diameter of 12.0m. At the centre of the cairn is a hollow, aligned north-east to south-west, measuring 5.0m x 2.0m and with a maximum depth of 0.7m. This is a much smaller feature than recorded by Hutchinson at the end of the eighteenth century, possibly because the hole has been refashioned to provide shelter. The height of the cairn has been raised around the perimeter of the hollow by heaping up stones to a maximum height of 0.4m, presumably by walkers to form a windbreak. There is no record of the cairn having been excavated apart from the physical testimony of the hole at its centre, noted also by Hutchinson. Its prehistoric date is not conclusively established. A second cairn occupies the rocky crag at the west end of the interior at the highest point of the site. It is poorly defined, the stones from it widely spread over a distance of 11.0m, although stones have been heaped

up on the flanks of the cairn to form a windbreak. As with the eastern cairn, it is not certainly prehistoric in date.

THE BUILDING

Outside the enclosure, there is no evidence of a ditch or any other associated man-made feature. There is, however, a three-roomed ruined stone building adjacent to the south-east corner (NMR no. NY 33 SW 3) consisting of a single range 16m x 9.5m with an entrance in the south-west corner protected by a 5.0m long flanking wall. Internally the building is divided into three rooms though now partially filled by wall tumble. Its walls are of drystone rubble construction presumably using stones taken from the enclosure bank given that it is less well-preserved in the vicinity of the building. The walls stand to a maximum height of 1.2m and have suffered some collapse although the plan of the building is still clearly visible. It has been interpreted as a medieval shieling, though, as was noted above, it is not mentioned in Hutchinson's 1794 description and could date to the first half of the 19th century. It is a Scheduled Ancient Monument (RSM no 22545).

4. DISCUSSION

The present survey has resulted in the first detailed plan of the enclosure and associated remains on the summit of Carrock Fell and has mapped their relationship to the natural topography of the hilltop in more detail than has hitherto been achieved. The structure of the enclosure is broadly as described by Collingwood in 1937 though with some amendments and additions. He counted eight breaks in the rampart including two he suggested as original entrances on the west and east whilst the present survey puts the number of breaks at ten. The difference has arisen because Collingwood did not number the gap on the south-east adjacent to the ruined structure which he attributed to stone robbing for the construction of the building and he overlooked a 4.0m wide gap on the north-west between Banks A and J where there is no stone debris. On the south-west corner of the enclosure the widespread scatter of stones which Collingwood interpreted as a tumbled rampart is more probably natural scree whilst no convincing evidence was found of the bank foundations he identified in the gap between Banks A and B nor of the quarrying he mentions in the interior. The survey confirmed the existence of upstanding stretches of wall face mentioned by Collingwood though not the paved walk he described at the top of Bank H. No evidence was found to substantiate Turner's theory that the enclosure was built in two phases with the area on the west predating an expansion to the east (Turner 1987, 25). Differences in the shape of the enclosure from east to west are more readily explained by the varied topography of the site.

The RCHME survey has brought to light several new pieces of evidence concerning the construction of the enclosure. The existence of a shallow trench at the rear of Banks F and G was not noted by Collingwood but it is an important constructional detail, though its purpose remains obscure. It may have delineated the line of the bank prior to its construction although this would have involved considerably more effort than was necessary simply to mark out a line. From the dimensions of the trench it could possibly have supported the base of a wooden palisade and the extent to which timber was employed at Carrock Fell is a question Collingwood did not consider. Turner states that no pollen analysis has been undertaken in the Carrock Fell area (Turner 1987, 24) so it is difficult to gauge the extent of natural forest around the hilltop at any period. Recent palaeobotanic work around the Langdale Axe factories has indicated a Neolithic tree line at about 500m (Claris and Quartermaine 1989, 6) which at Carrock Fell would mean timber would have been available within 350m of the hilltop, sufficiently close to have been exploited.

The evidence for a rock-cut platform underlying Bank C was not mentioned by Collingwood but again is a significant constructional detail. The date and purpose of the enclosure are still unresolved questions and this is likely to remain the case until the site is tested by excavation. The most widely held view is that the site is an Iron Age hillfort. Its altitude at 665m invites comparison with the northern Iron Age hillforts at Ingleborough in the Pennines with an elevation of 723m and Mam Tor in the Peak District at a height of 516m. Like these two, Carrock Fell occupies a position of natural strength and the construction of

the enclosure bank is reminiscent of the structure of revetted hillfort ramparts. For example, the 1965-69 excavations at Mam Tor found that the 6.0m wide rampart rested on an artificial platform cut into the hillslope with dry-stone revetment walls to the front and rear (Coombs 1976, 147-52 and 416, fig 3), all of which are features evident in parts of the Carrock Fell enclosure. However there are difficulties with the identification of Carrock Fell as a hillfort, such as the lack of an external ditch, the absence of occupation traces in the interior and most importantly, the discontinuous nature of the bank. The absence of a ditch is not a serious difficulty as the intractable character of the volcanic bedrock and the natural security of the site could both explain why a ditch was not dug. The lack of occupation evidence from the interior could be because the site was not permanently occupied or because all surface traces have been destroyed by natural and human erosion but the gaps in the enclosure bank obviously compromise the defensive capabilities of the site and raise the biggest objection to classifying the site as a hillfort. It is reasonable to assume that at least one or two of the breaks could be entrances, particularly that on the west which faces the direction of easiest approach and perhaps a second on the north-east where the two banks are slightly offset. Precipitous rock outcrops may have obviated the need for a rampart on parts of the western circuit, but this still leaves the breaks on the eastern half of the site to be explained. The suggestion that the breaks are due to slighting (Collingwood 1937, 41 and Hogg 1975, 166) is not convincing as one would expect substantial traces of the rampart foundation to survive in the resulting gaps, nor is robbing of stone likely to have taken place at such a remote location apart from during the construction of the building south-east of the site as there are no adjacent field walls. Another possible explanation for the gaps in the bank is that construction work was abandoned before the perimeter was fully completed. This does not explain the finished appearance of some of the upstanding stretches of rampart particularly where the terminals have been rounded off in Bank B which suggests that the breaks are an integral part of the layout and not simply the points at which work stopped. The identification of Carrock Fell as an unfinished or slighted hillfort is therefore debatable. As was mentioned in the introduction, the recent discovery that the southern flank of Carrock Fell was the source of Group XXXIV stone axes has focussed attention on it being Neolithic in date. Edmonds has pointed out that Neolithic enclosures are frequently situated on or near to major sources of raw material (Edmonds 1993, 117) and although far from conclusive, the manner in which the site incorporates natural rock outcrops and the multiple entrances bears comparison with sites of Neolithic date in the south-west such as Carn Brea (NMR no. SW 64 SE 5) and Carn Galver (NMR no. SW 43 NW 121) and Gardom's Edge in Derbyshire (NMR no. SK 27 SE 98). However, the construction technique used at Carrock Fell bears little resemblance to that of known Neolithic enclosures which usually employ orthostats in the facing walls (Mercer 1981, 190-1) and have much narrower entrances than at Carrock Fell. It is an inescapable fact that excavation evidence is needed to resolve the date and purpose of the enclosure.

5. SURVEY AND RESEARCH METHODS

The survey was carried out by Trevor Pearson and Amy Lax with assistance from Moraig Brown and Keith Blood, all RCHME staff. Control points and some archaeological detail were surveyed using a Wild TC1610 Electronic Theodolite with integral EDM and the surface contours and site location were resolved using a Wild Global Positioning System (GPS). Remaining archaeological detail was surveyed at 1:1000 scale with tapes using conventional graphical methods. The report was researched and written by Trevor Pearson with information supplied by Martyn Barber, incorporating comments from Peter Topping and Alastair Oswald, and was edited by Paul Pattison. The illustrations were prepared using AutoCad and CorelDraw software and Corel Ventura was used for assembling the final version of the report. The site archive (NMR Number NY 33 SW 1) and a copy of this report have been deposited in the archive of the RCHME at the National Monuments Record Centre, Kemble Drive, Swindon SN2 21GZ, to where further enquiries should be directed. Crown Copyright: Royal Commission on the Historical Monuments of England.

6. BIBLIOGRAPHY

- Bewley R 1992 Prehistoric times in Weaver J (ed) *Exploring England's Heritage: Cumbria to Northumberland* (London HMSO)
- Burgess C and Richardson C 1985 Unpublished bronze axes in Carlisle Museum and a recent find from Carrock Fell, Cumbria *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society* 85, 43-52
- Challis AJ and Harding DW 1975 Later Prehistory from the Trent to the Tyne Oxford, British Archaeological Reports (British Series) 20i
- Claris P and Quartermaine J 1989 The Neolithic quarries and axe-factory sites of Great Langdale and Scafell Pike: a new field survey *Proceedings of the Prehistoric Society* 55, 1-26
- Clifton Ward J 1876-7 Notes on archaeological remains in the Lake District *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society* (Old Series) 3, 241-265
- Collingwood RG 1938 The Hillfort on Carrock Fell *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society* 38, 32-41.
- Coombs DG Excavations at Mam Tor, Derbyshire in Harding DW (ed) *Hillforts: Later prehistoric earthworks in Britain and Ireland* (London, Academic Press) 147-52
- Edmonds M 1993 Interpreting causewayed enclosures in the past and present in Tilley C (ed) *Interpretative Archaeology* Oxford, Berg 99-142
- Forde-Johnston J *Hillforts of the Iron Age in England and Wales* (Liverpool University Press)
- Higham N 1986 *The Northern Counties to AD 1000* (London, Longman)
- Hogg AHA 1975 *Hillforts of Britain* (London, Granada Publishing)
- Hutchinson W 1794 *History and Antiquities of Cumberland* ii, 381-7
- Institute of Geological Sciences 1971 *British Regional Geology: Northern England* (London HMSO)
- McK Clough TH Bronze Age metalwork from Cumbria *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society* 69 1-39
- Mercer R 1981 Excavations at Carn Brea, Illogan, Cornwall, 1970-73 *Cornish Archaeology* 1-204
- Ordnance Survey 1867 1st Edition 6" Cumberland map sheet XLVIII
- Savory HN 1976 Welsh Hillforts: A Reappraisal of Recent Research in Harding DW (ed) *Hillforts: Later Prehistoric Earthworks in Britain and Ireland* (London, Academic Press) 237-291
- Turner V Survey work in the Caldbeck Fells, Cumbria *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society* 87 23-25
- NMR APs**
- 106/UK/1209/4108-9 (7/03/46)