

ART. II. – *Archaeological Survey of Crosby Ravensworth Fell: Occupational Evidence.*
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THIS is the report of a survey carried out on Crosby Ravensworth Fell in the area bounded by the M6 Motorway to the west, Harberwain Rigg to the north, and the edge of the limestone to the south along the line of the Roman road above the village of Orton.

The terrain consists of limestone pavements interspersed with well drained areas of sheep-cropped grasses growing in shallow light brown loam and stretches of wetter peaty ground where rough grasses are longer and unattractive as food for the sheep.

A considerable number of Neolithic and Bronze Age artefacts of struck flint, chert and volcanic tuff was picked up from erosion scars, rabbit scrapes and molehills; the last were to be found in abundance on almost all of the drier ground. In addition to the lithic material we found several fragments of pottery of Romano-British type and earlier grit-tempered varieties. Where the herbage had been particularly well cropped by the sheep, artefacts and potsherds were found lying on the grass, presumably thrown up by mole activity in the past, but where the molehills have long since been eroded away.

The artefacts were often concentrated in small areas of less than fifty square metres, although occasionally the scatters were more diffuse and the extent of the spread of material was harder to define. The difficulty in determining the likely extent of any particular group of artefacts is hardly surprising since we were almost wholly dependent on the random activities of moles and rabbits. Nevertheless, we are likely to have obtained a useful sample of sites, since the drier ground which provides a suitable environment for these burrowing animals would also be favoured by prehistoric man.

A map of the sites is given in Figure 1, and a selection of artefacts is illustrated in Figure 2. A note on the ceramic evidence is in Appendix 1, and that for volcanic tuffs is in Appendix 2.

IRON HILL/HARBERWAIN RIGG

The ground to the south of the summit of Iron Hill has been considerably disturbed by quarrying for limestone so that our search of the area was somewhat restricted and we found habitation evidence in only six places. We searched a wide area between Harberwain Rigg, Oddendale and Hardendale Quarry, but found nothing of significance. At the northern edge of the area searched is a tumulus kerbed with small boulders across the top of which is built a field wall, and a short distance to the south of this is a small stone circle.¹

Site 1 Map reference: 3597 5147 NY51 Height OD: 360 metres

Above the quarried scarp, ninety metres to the south of the stone circle we picked up twenty artefacts including three flint blades, the largest of which has signs of utilization along one edge; several of the flakes also have damaged edges, apparently from use. Sixteen of the flints are white in colour, two are grey-brown and there are two fragments of chert.

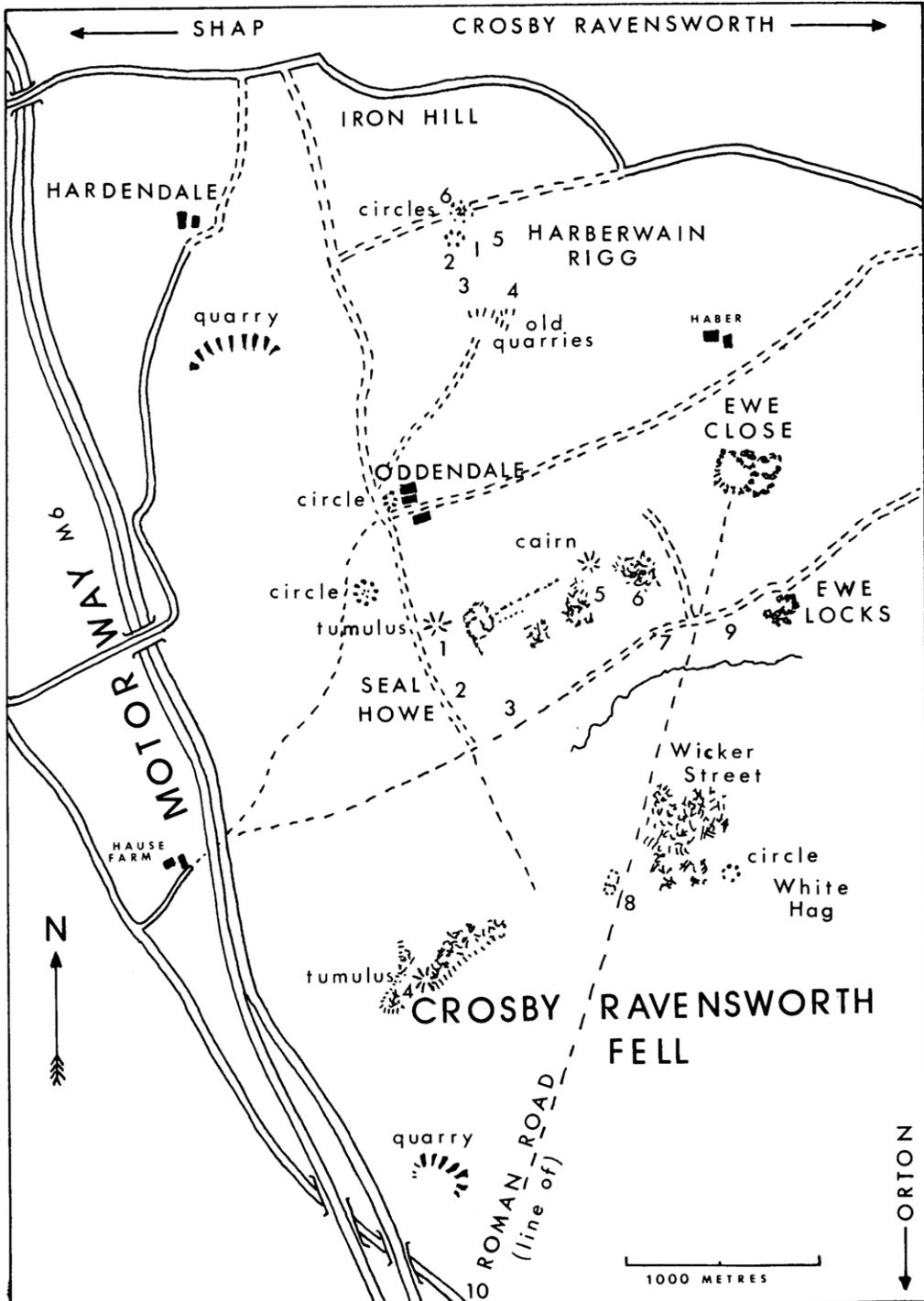


FIG. 1. - Map of Crosby Ravensworth Fell showing relative positions of the sites, tumuli and stone circles.

Site 2 Map reference: 3596 5146 NY51 Height OD: 350 metres

In the molehills below the quarried scarp were three flints, including a core trimming flake, none of which show any marked degree of patination.

Site 3 Map reference: 3597 5144 NY51 Height OD: 358 metres

About one hundred and eighty metres south of Site 1 on slightly lower ground we found three flakes of lightly patinated flint, including one honey-coloured flake with a brown pebble cortex.

Site 4 Map reference: 3599 5144 NY51 Height OD: 338 metres

South-east of Site 1 and north-east of ground disturbed by shallow quarrying we found two slightly patinated fragments of dark grey flint.

Site 5 Map reference: 3598 5147 NY51 Height OD: 348 metres

About one hundred metres to the east of the small stone circle we picked up seven flakes of flint and three struck pieces of chert together with two small fragments of heavily grit-tempered pot, the smaller of which is buff coloured and the larger is brown on one side and black on the other, with very large grits. The collection also includes two fragments of broad blades in creamy white flint, each with secondary retouch or utilization along one edge. Lying on the grass about twenty metres to the north of this small concentration was a knife made from a flake of grey flint with black and white inclusions.

Site 6 Map reference: 3596 5149 NY51 Height OD: 355 metres

In the field to the north of the kerbed tumulus and lying in molehills close to the kerbstones, was a sherd of heavily grit-tempered pot, a flake of volcanic tuff and a broken flint pebble. There were only a few molehills near to the tumulus, with a much greater number lower down the field, and although we have searched these on more than one occasion, nothing has been found.

SEAL HOWE

Site 1 Map reference: 3596 5126 NY51 Height OD: 354 metres

Sixty-four artefacts of flint and chert were found in a scatter about one hundred metres south-east of the tumulus which lies at the northern end of Seal Howe overlooking the farm at Oddendale. Six hundred metres to the north-west on somewhat lower ground are the concentric stone circles of Oddendale. The tumulus on Seal Howe was excavated by the Rev. Canon Simpson towards the end of the nineteenth century. In his report² he makes no mention of cultural remains of any kind, although the Rev. Canon Greenwell³ in his description of the cairn, writes of "burnt remains of the bodies of an adult woman and an infant – in all probability a mother and child – enclosed in an urn, which was too much decayed to admit of any description being given of it". He also reported that the mound covered the inhumation burial of an adult male.

The flints are generally only lightly patinated except for a blade 4.5 centimetres long, damaged around most of its edge so that the patina has been penetrated exposing a narrow grey band beneath. Since the edge seems to have been systematically blunted it seems likely that this piece has been reworked and, in its original form, predates the other material from this site.

Two of the four scrapers found are unusual. One has been made on a blade by

retouching the bulbar end, Fig. 2, 14. The other is a small core which has been retouched across the flake scars on the edge of the striking platform, Fig. 2, 18. Scrapers of this sort are not common and are usually indicative of a scarcity of flint; they are occasionally found in the poverty pebble industries on the coast of West Cumbria. One of the remaining scrapers is made from a fragment of dark grey flint and the other is a side-scraper made from grey chert, Fig. 2, 5 and 16.

Towards the centre of the scatter and about six metres apart were two *petit tranchet* derivative arrowheads, type G and H respectively in J. G. D. Clark's classification,⁴ Fig. 2, 1 and 2. Within the same small area were two fragments of grit-tempered pottery in a buff beaker-like fabric, one of which is from a rim, with traces of fingernail decoration. A *petit tranchet* derivative arrowhead type E was reported⁵ in 1981 as an isolated find about eight hundred metres south-east of Site 1.

Site 2 Map reference: 3597 5104 NY51 Height OD: 355 metres

Three hundred metres south of Site 1 and about the same distance to the north-east of Potrigg we found twenty lightly patinated flints, including three damaged scrapers, Fig. 2, 17 and 19, and a retouched flake, in a small area of molehills. The ground here has been disturbed, probably by the removal of surface limestone, to form a long narrow depression about half a metre deep. The flints lay just outside the southern end of the depression and almost within its entrance we picked up a small thick fragment of heavily grit-tempered pot. The lithic assemblage also contains a few nondescript flakes of chert and a flake of volcanic tuff. It is worth noting that three of the flint flakes were of translucent brown flint, which we have rarely found in our search of the limestone highlands, also the range of colours in the small amount of material at this site would indicate that we have only obtained a very small sample of the flints which must be buried here.

Site 3 Map reference: 3598 5122 NY51 Height OD: 285 metres

On the south facing slope below Site 2 was a scatter of eight artefacts, with no particular centre of concentration, which included a core rejuvenation flake and a blade in grey flint 5.4 centimetres long with secondary retouch along one edge; a fragment of heat-damaged flint and two fragments of chert. Most of the flints were grey with white inclusions.

Site 4 Map reference: 3593 5109 NY51 Height OD: 400 metres

Ten small flint and chert flakes were found in a small area of erosion on Long Scar Pike below the summit cairn. A few more flakes of the same materials were found, to the east, in molehills at the bottom of the limestone scarp.

Site 5 Map reference: 3602 5129 NY61 Height OD: 290 metres

Although we made isolated finds of flints, Romano-British type potsherds and one small fragment of heavily grit-tempered pot down the slope to the east of Site 1, the first significant concentration of artefacts was found about eight hundred metres to the east-north-east on a grassy slope below an old sheep field. The upper end of the flint scatter is defined by two large granite boulders which are about fifteen metres apart. Below the flint bearing area is a small well-defined cairn.

On the slope below the boulders we picked up ninety-eight flint and chert artefacts; among the flints are four unworked blades, Fig. 2, 9; five retouched or utilized blades,

Fig. 2, 7, 8 and 12; and two serrated blades in white flint, Fig. 2, 6 and 11; two steeply worked flakes, Fig. 2, 13; two utilized flakes; an awl; three scrapers, one of which is a side scraper in dark caramel flint, Fig. 2, 10; and five fragments removed from the bulbar ends of blades by direct snapping. The assemblage from here contains grey, white and brown flint, and three nondescript fragments of volcanic tuff (Appendix 2, 75, 76, 77). Just beyond the eastern edge of the flint scatter were three sherds of wheel-turned Romano-British type pot.

About fifteen metres above the boulders and to the west we picked up sixty small fragments of heavily grit-tempered pot in a reddish buff fabric, none of which had any trace of decoration. Most of these were confined in an area of about twenty-five square metres, and here we also found three struck flakes of volcanic tuff with traces of polished surfaces (Appendix 2, 89, 90, 91). Between this area and the boulders we picked up a small leaf arrowhead in grey flint, Fig. 2, 4.

Site 6 Map reference: 3605 5129 NY61 Height OD: 305 metres

About 200 metres east of Site 5 is a level area of grass and limestone pavement and on the western and southern sides of this we found twenty artefacts of flint and chert, including a notched fragment from the distal end of a blade, a trimmed flake of reddish brown flint with orange and cream inclusions, a scraper in patinated grey flint, Fig. 2, 20, and a number of flint flakes, one of which is fire-damaged. As at Site 5 we found a number of flakes of volcanic tuff, several of which were submitted for petrological examination (Appendix 2, 81 to 88), and more have been found since. From the curvature of the polished surfaces it seems certain that the flakes have arisen from the reworking of one or more polished stone axes.

The spread of artefacts on this site was rather diffuse, so that there was no clearly defined area of occupation.

Site 7 Map reference: 3605 5127 NY61 Height OD: 300 metres

About 50 metres from the southern edge of Site 6 was a rectangular area of ground covering about 300 square metres from which the turf had been removed. On the surface of this we found three struck fragments of chert together with a blade of yellow opaque flint and a triangular flake of patinated flint retouched on all three edges and with a little flaking on both surfaces; it is steeply blunted along the shortest edge and we feel that this is a *petit tranchet* derivative arrowhead, type C, Fig. 2, 21. A *petit tranchet* derivative arrowhead with fine blunting along its primary flake edge was reported from Eskmeals in 1963.⁶

Down the slope to the south we picked up a few artefacts of white and grey flint and a small fragment of heavily grit-tempered pot. One of the flints was a dual purpose tool in the form of a scraper worked on the end of a broad blade, both edges of which showed edge-damage from use, and there was some slight retouch on the ventral surface at the bulbar end, Fig. 2, 15. A side scraper of creamy yellow close textured flint and a small patinated blade were picked up four hundred metres to the east at Ewe Locks.

Site 8 Map reference: 3608 5117 NY61 Height OD: 355 metres

A few artefacts were found on high ground to the south-west of the limestone pavement at Wicker Street, including a thin bifacially worked flake in creamy white flint which is broken at its bulbar end, possibly during the attempted manufacture of a leaf arrowhead, Fig. 2, 3. Also picked up were a notched flake and five struck flakes of chert.

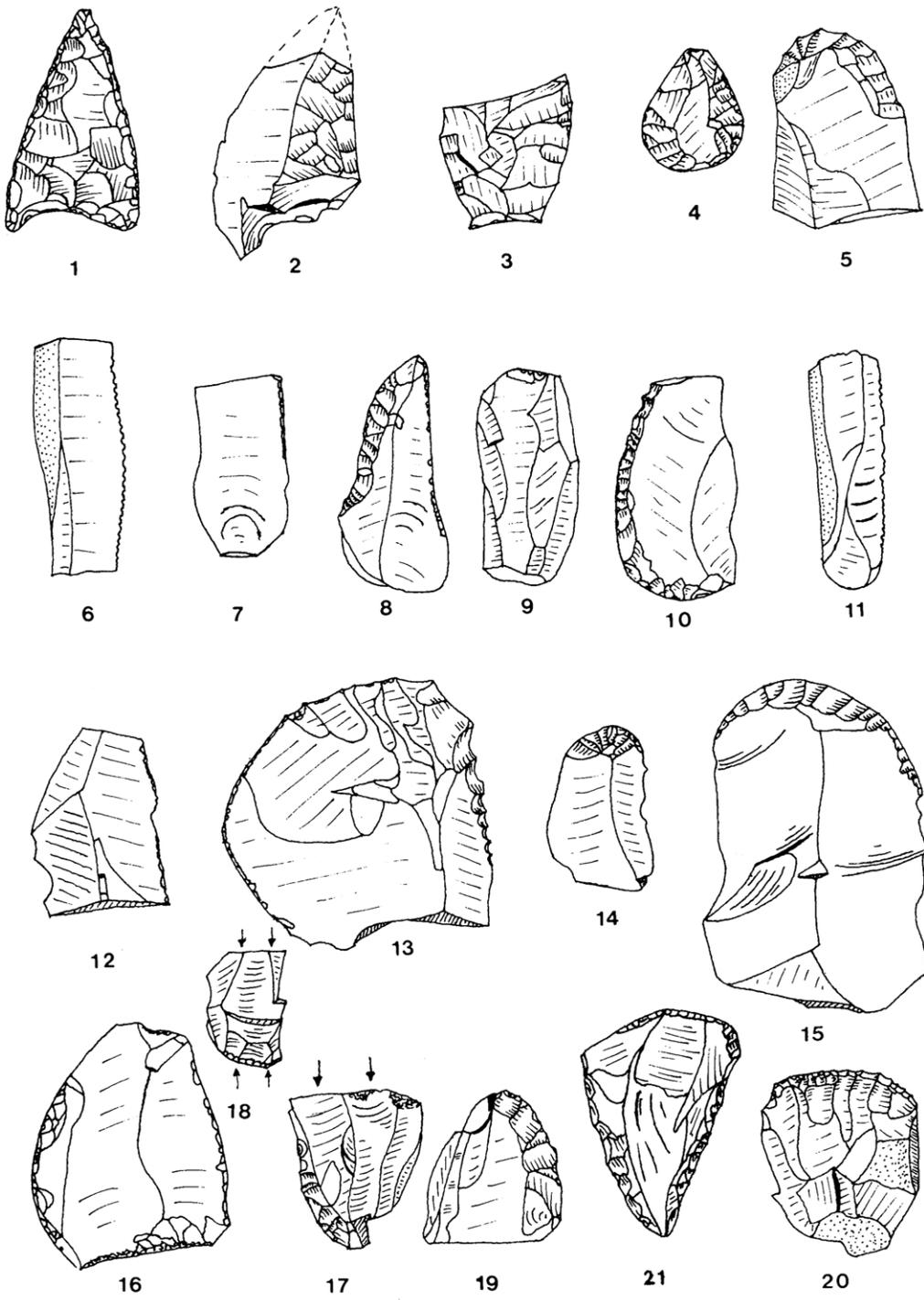


FIG. 2. - A selection of flint artefacts from Crosby Ravensworth Fell.

Site 9 Map reference: 3609 5126 NY61 Height OD: 285 metres

Two hundred and fifty metres east of Site 7 and about one hundred and fifty metres from Ewe Locks we found a blade and a few flakes of grey flint. One of the flakes had slight secondary working on two edges. In addition we found two fragments of heavily grit-tempered pot, one of which is a decorated rim fragment of Mortlake style Peterborough Ware. Although this area contains a large number of molehills and we have made several searches, nothing further has come to light.

Site 10 Map reference: 3598 5092 NY60 Height OD: 340 metres

To the west of Bousefield Howe above an old quarry we found fifteen flakes of grey and white flint, only one of which showed signs of utilization. Also found were two flakes of chert and a banded chert scraper.

Miscellaneous finds

Map reference: 3585 5117 NY51

A small blade of black chert, retouched along one edge, was found one and a half kilometres south-west of Pottrigg, near Hause Farm.

Map reference: 3599 5123 NY51

Sixty metres north-east of Seal Howe, Site 3, we picked up two large flakes of grey flint, with white inclusions, both of which had edge damage from use. Neither had any marked degree of patination, but one exhibited the fine cortex of chalk flint.

Map reference: 3594 5132 NY51

By the edge of the wood south of Oddendale farm we found a blade and a flake of white flint, a flake of lightly patinated grey flint and a small fragment of heavily corroded bronze.

Map reference: 3595 5132 NY51

About 80 metres from the corner of the wood by Oddendale farm we picked up a rim fragment of heavily grit-tempered pot with a red/orange fabric.

Discussion

The attraction of the limestone uplands of Cumbria for prehistoric man is clearly demonstrated by the cairns and stone circles which have been erected there as funerary monuments. According to Canon Greenwell³ most of the cairns are round with diameters ranging from 4.5 metres to 17 metres, but a small proportion are oval, and many of them yielded evidence of mixed cremation/inhumation burials. This blend of round and oval mounds is paralleled at Elton in the Peak District,⁷ where the practice of multiple mixed cremation/inhumation burials also occurs. The cultural remains from there suggest a continuity of use over a lengthy period, from the late Neolithic into the Bronze Age. In Yorkshire the evidence, so far, indicates that Neolithic occupation was largely concentrated on the chalk areas⁸ where material remains are almost entirely derived from small pits.

On Crosby Ravensworth Fell there is no visible structural evidence associated with the surface finds to indicate settlement sites, although there is evidence of later use of

the area in the form of the stone built settlements of Ewe Locks and Ewe Close; the latter was excavated in 1907 and 1908 by W. G. Collingwood⁹ who dated it by artefactual evidence to the Romano-British period.

The greatest concentration of Neolithic remains in the north-west of England occurs in the limestone area of the Peak District which seems to have provided an attractive environment for Neolithic habitation, but even in this area structural evidence of settlement is lacking.

The quantity and types of lithic artefacts, confined to comparatively small areas on Crosby Ravensworth Fell and Iron Hill, suggest that each scatter represents the living site of a single family or small group, and since the finds represent only a small proportion of the total that might be expected to be yielded by excavation it would seem that the sites are likely to have been occupied for a sufficient period of time to require the building of some form of shelter. The idea that the sites were occupied on more than a very temporary basis is supported by the finding of pot fragments on several of the sites. The lack of evidence for any form of structure can be explained by the fact that the materials of construction were less durable than those used to build the Romano-British farmsteads lower down the hillside. There is evidence from pollen analysis in the Central Pennines that the ecological effects of Neolithic cultures were negligible until at least 2400 b.c. and that the Pennines were still forested up to about 1,200 feet, indicating that herding rather than land cultivation was the main method of farming. It is likely therefore that there would be no shortage of wood at Crosby Ravensworth for constructional purposes.

It is likely that land cultivation at Crosby Ravensworth was also minimal and that the settlers followed a more pastoral existence, supplementing their food supply by hunting. T. G. Manby¹⁰ has suggested that Neolithic herdsmen travelled across the Pennines from the east and were an essential link with the Lake District in the trading of stone axes; both the Tyne Gap and Stainmore would be likely routes to these uplands. The polished axe fragments found on Seal Howe Sites 5 and 6 show a connection with the axe factories, although they offer us no proof of trading.

Although grey, black, bluish pink and white cherts are readily available at Crosby Ravensworth, only the grey and black forms seem to produce a conchoidal fracture and little use has been made of the cherts by the people who settled these uplands and who preferred to use the flint which they must have carried here. Most of the flint is grey in colour and often contains small white inclusions with a number of pieces exhibiting a weathered chalk flint cortex, indicating that they had been brought to the area in the form of surface nodules. Although artefacts of white flint are not so numerous, they do form a significant proportion of the assemblages from most of the sites, while brown flint is comparatively rare, although it too occurs on most sites.

Dr I. T. Williamson of the Institute of Geological Sciences writes as follows:

“The flints you describe (mainly grey \pm inclusions, and white varieties) are fairly characteristic of those found within the Northern Province Chalk from North Yorkshire, through Lincolnshire to north Norfolk. These flints differ from those of other source areas such as Northern Ireland, Denmark or the Southern Province (Kent, Suffolk etc.) in that they are much paler. On balance, therefore, it appears likely that the source of your flints is in Yorkshire or Lincolnshire.

Within this area, the flints that are most suitable sources are those found close to the stratigraphic boundary between the Welton and Burnham Chalk Formations. This boundary is characterized by large (15-25 cm thick) tabular grey and white flints and can be traced in surface

exposures from Flamborough to Louth. Southwards, there are only inconspicuous nodular flints within the Chalk sequence but the big tabulars reappear in north Norfolk. From the base of the Burnham Chalk Formation upwards to the level of the Ulceby Marl, the large flints all tend to carry some light coloured inclusions. Brown flints are not known within this sequence but those flints in the very highest parts of the sequence, in the Flamborough area, have a distinctive yellow colour when freshly broken. Pale colours and greys are original characteristics of the Northern Province flints, but all flints may weather or stain to lighter hues. Coloured and brown flints may derive from the North Sea and various glacial deposits, in which case, their provenance is more enigmatic.”

The most comprehensive lithic assemblage was found on Seal Howe Site 5 and represents an occupation site which has strong parallels with the late Neolithic sites excavated by T. G. Manby⁸ on the Yorkshire Wolds where leaf arrowheads and serrated blades are associated with polished axe flakes of Borrowdale Series volcanic tuff. The group of sites excavated by Manby is within fairly easy reach of the sea shore and the flint industries are based largely on the speckled brown flint which can be found as beach pebbles along the Yorkshire coast, although Wolds flint is also used. It would be expected that greater use would be made of Wolds flint by peoples living further inland.

The connection between the Crosby Ravensworth sites and the Lake District axe factories has been clearly demonstrated and it is significant that the area between Flamborough and Louth, which is the area from which surface nodules of white and grey flints can be obtained, also roughly corresponds to the area of highest concentration of finds of Borrowdale Group VI axes (Fig. 3).

None of the flints found during our survey originated from West Coast beach pebble sites as far as we were able to judge, so that we can at least say that there is no evidence to suggest migration of the prehistoric communities from that area to these uplands, although there is some reason to suppose that movement occurred in the opposite direction.¹¹

Although it has not been possible to classify most of the pottery fragments, the evidence for late Neolithic and Early Bronze Age occupation provided by the lithic remains is supported by the discovery of the Mortlake style Peterborough Ware from Seal Howe Site 9, and the fragments of beaker-like ware from Seal Howe Site 1. However, possible later occupation is suggested by the remainder of the heavily grit-tempered sherds, although precise identification of these could not be made.

The Yorkshire sites also produced a range of pottery types including Grimston Ware, Towthorpe Ware and Peterborough Ware. At Beacon Hill, Flamborough, Beaker pottery was found in an occupation layer overlying a Neolithic occupation floor.

The discovery of the later 2nd Century A.D. potsherds is hardly surprising in view of the known farming activities represented by the Romano-British settlements of Ewe Close and Ewe Locks. It is possible that some, or all, of the unidentifiable heavily grit-tempered pottery could also be associated with this phase of activity.

The evidence that we have accumulated, so far, indicates that Crosby Ravensworth Fell was inhabited in prehistory over an extended period of time from the late Neolithic into the early part of the Bronze Age and that by analogy with other limestone uplands its economy was largely based on pastoral activities supplemented by hunting. It is also probable that the inhabitants originated from, or at least had strong connections with the people who occupied the Yorkshire and Lincolnshire Wolds.

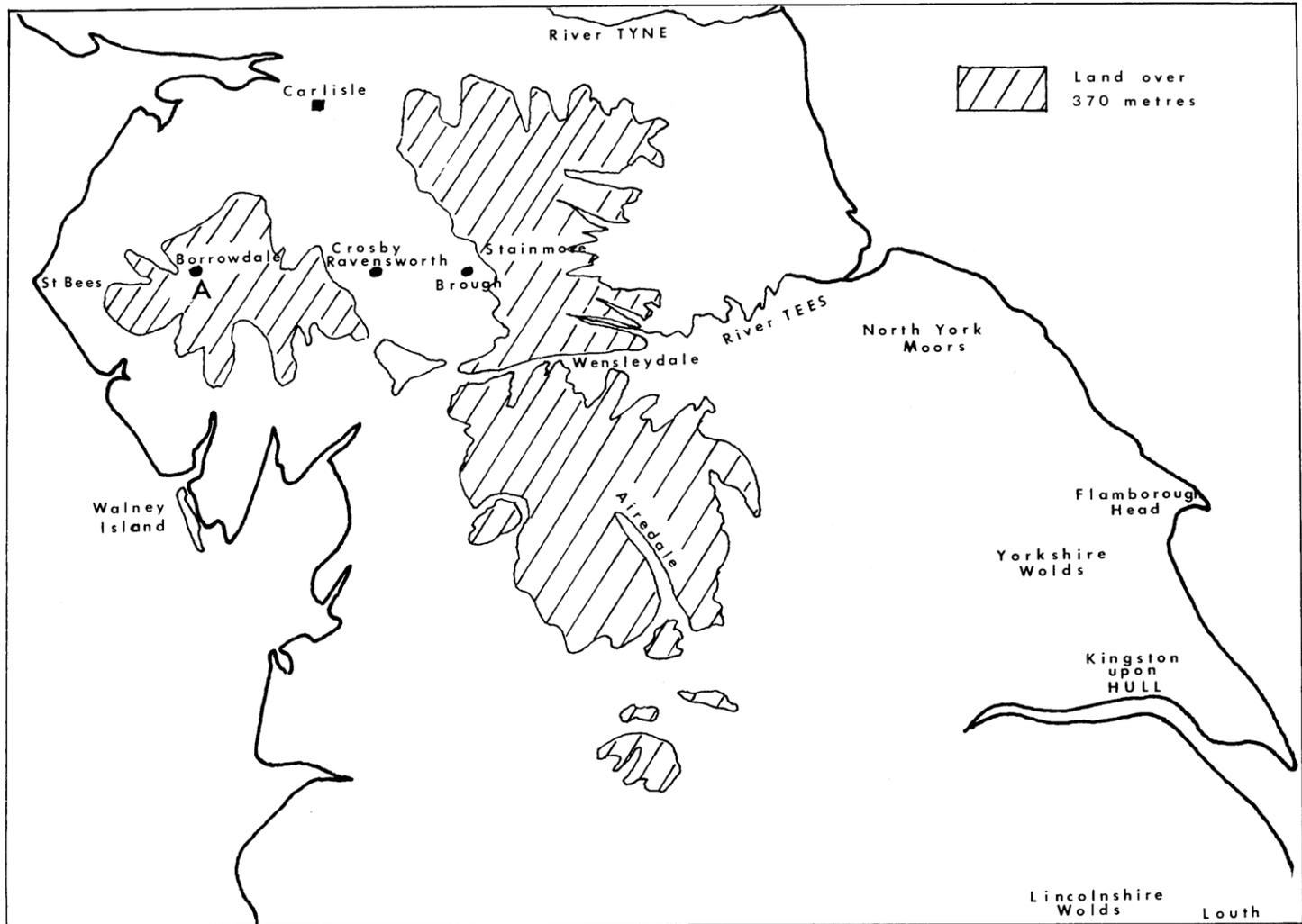


FIG. 3. - Map showing relationship between Crosby Ravensworth, the Lake District Axe Factories (A) and the Yorkshire and Lincolnshire Wolds.

Appendix I

The pottery recovered was examined by Dr I. H. Longworth and Miss V. Rigby of the Department of Prehistoric and Romano-British Antiquities in the British Museum.

The following can be identified with certainty in the collection:

1. A decorated rim sherd and weathered wall sherd of Mortlake style Peterborough Ware from Seal Howe (Site 9).
2. Eight sherds of Romano-British pottery probably 2nd century A.D. from Seal Howe.

Less precise identifications can be made on the following:

1. A sherd of Early Bronze Age fabric and a rim of beaker-like fabric from Seal Howe (Site 1).
2. The heavily grit-tempered sherds from Iron Hill/Harberwain Rigg (Sites 5 and 6), and Seal Howe (Sites 2, 5 and 7) are all likely to fall within the first millenium BC but this type of native ware can continue through the Roman period and even beyond. On the basis of these fragments no closer assessment is possible.

Appendix II

A brief petrological note about a small collection of flakes collected from the unenclosed pasture land on Crosby Ravensworth Fell.

By R. V. DAVIS, M.Sc., F.G.S.

A total of eleven flakes were submitted for examination. Following a microscopic examination of the surface of each specimen, and comparison with other material of known provenance, it is anticipated that subsequent optical microscopy will confirm rather than contradict these brief notes.

The following general remarks apply to all specimens:

- 1.1 All display similar fracture patterns, ranging from conchoidal to sub-conchoidal.
- 1.2 All have been struck from a fine grained homogeneous rock.

The following remarks refer to specific individual or sub-groups of specimens:

- 2.1 Nos. 81, 82 and 83 are flakes which have been struck from a polished implement(s).
 - (a) No. 81 shows the same depth of weathering on both polished and unpolished surfaces, implying that the equal rate of weathering has taken place over all of the flake since discard.
 - (b) No. 82 shows subsidiary flaking most characteristic of blade wear in use.
 - (c) No. 83 shows traces of random striations, later polished, and finally marked by fresher parallel striations characteristic of sand-grinding.
 - (d) Nos. 82 and 83 contain small ferruginous patches in addition to several cavities – a few are visible to the unaided eye, the others are microscopic. These cavities have probably resulted from the removal of soluble minerals from the rock; typically zeolite and calcite.
- 2.2 Nos. 87 and 77 show two distinct types of patination, each having affinity with specimens found in Central Lakeland.
 - (a) No. 87 shows a superficial chalky white patina covering a pronounced iron oxide layer, formed by the weathering of a grey-green rock.
 - (b) No. 77 shows patination occurring as a discolouration of the rock. It is not a distinctly superficial deposit as seen in No. 87.

- 2.3 Nos. 89, 90, 91. All three specimens appear to have been struck from a previously polished rock. All specimens display similar semi-conchoidal fracture patterns.
- (a) No. 89 is made from a grey-green fine grained banded rock with patches of iron staining occurring randomly throughout the rock.
- (b) No. 91 is a coarser variety of No. 89, having a less oxidized surface, and a less well defined conchoidal fracture.
- (c) No. 90 shows a fine grained andesitic texture with epidotization occurring along minute fractures in the rock.
- All three specimens resemble extrusive igneous rocks which outcrop in Central Lakeland, and Nos. 89 and 91 appear to be Group VI.
- 2.4 The remaining specimens: Nos. 75, 76, 84, 85, 86 and 88 all display the usual combination of fracture patterns indicative of percussive action on a fine grained volcanic tuff.
- (a) None of the specimens are patinated, although Nos. 76, 84 and 88 show a greater degree of superficial iron staining.
- (b) Nos. 85 and 86 show a tendency towards irregular flinty fracture, similar to some struck flakes from Central Lakeland.

Following work (unpublished) on the petrology of extrusive igneous rocks which outcrop adjacent to the working floors in Central Lakeland, it may now be possible to state the origin of these rocks with greater accuracy. *All eleven specimens are tentatively described as belonging to Group VI.*

References

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