

I.—THE EXCAVATION OF THE THREE KINGS STONE CIRCLE, NORTHUMBERLAND

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Between 16-26 July, 1971, a party from Kingston-upon-Hull College of Education totally excavated this 4-Poster stone circle whose affinities were discussed recently.¹ The first version of the name was "The Three Kings of Denmark" because, during the eighteenth century, it was thought to contain Danish Viking burials.

The circle is situated at 820' O.D., NT 774009, in Troughend parish, at the eastern edge of a broad terrace overlooking the R. Rede, (Fig. 1). Although it is so placed that it offers broad views to N, S and E the circle itself cannot easily be seen from the valley below, suggesting that its position was determined not by a desire to build a conspicuous monument but to construct one both near the source of suitable stone and where much of the surrounding countryside and horizon could be seen. It was erected on a wide patch of sandstone that lies within a general area of coal-bearing measures with characteristic mixtures of shales, sandstones and clays. To the west and east rise the rounded tops of sandstone hills culminating in the heights of Carter Bar, 1370' O.D., 6 miles to the NW. Running through these hills from NW to SE is the alluvial dale of the R. Rede with its borders of good grazing land $\frac{1}{4}$ mile downhill from the circle and which eventually flows into the R. North Tyne and the Tyne Gap between western and eastern England.

Much of the surrounding land is owned by the Forestry Commission whose extensive coniferous plantations extend for miles to the west. The immediate area around the Three

¹ *Burl. Arch. Ael.* *XLIX*, (1971), 37-51.

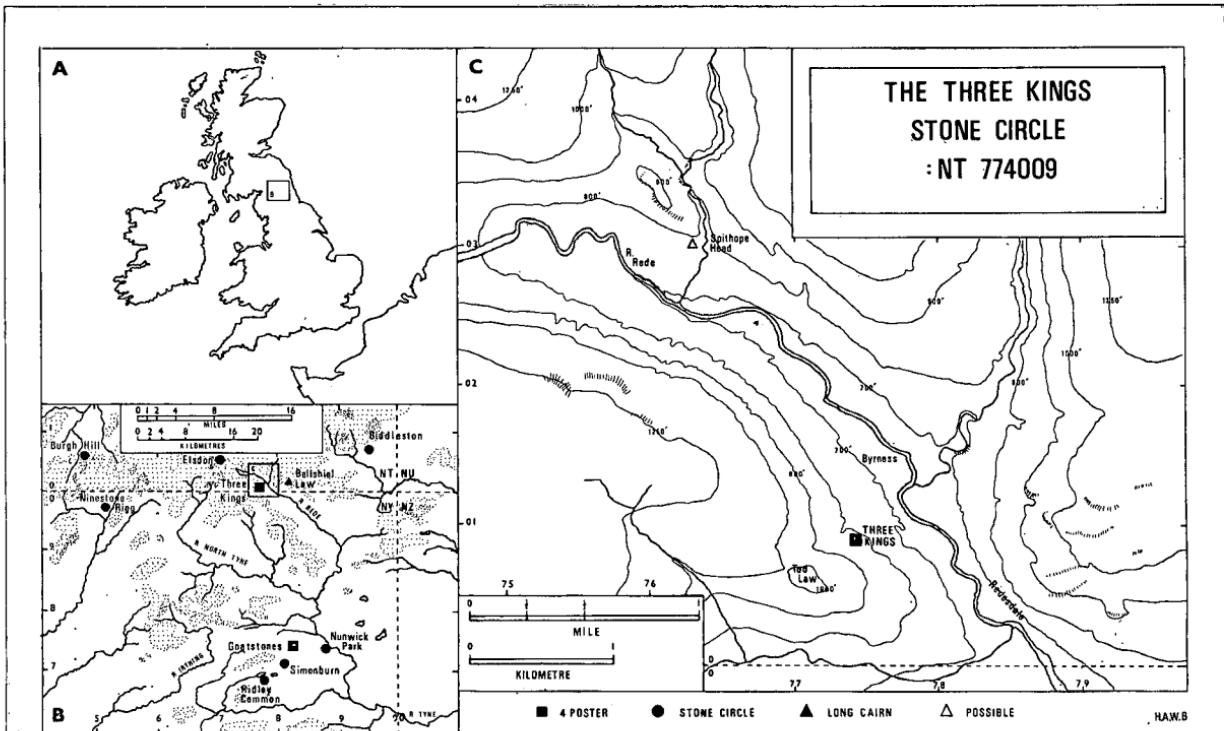


FIG. 1

Kings, however, has not been planted recently so that the circle now stands in an untidy scrubland of thin grass, bracken and lopped branches. It can be reached only after a stiffish climb from a minor forestry road to the east. It is pleasing to know that future afforestation will not come closer than 15' to the site so that no damage will be caused by encroaching roots and so that visitors may easily inspect the circle.

Before excavation the Three Kings consisted of three tall standing stones with a fourth prostrate at the SE corner of an approximate 12' rectangle. This form of megalithic setting is frequently to be seen in NE Scotland and is known as a 4-Poster, a sepulchral stone circle dating perhaps from the middle of the 2nd millennium B.C. They are very rare in England and Wales and are unknown in Ireland. The Three Kings showed signs of comparatively recent interference with a large, untidy pit at its centre and it seemed advisable to determine what might be left of archaeological value. The site has been described previously^{2, 3} and it was Spain, writing about 1910, who remarked that, "recent treasure-hunters have dug a hole in the centre of the remains, this hole being about a foot deep and two feet in diameter". The *NCH XV* records that the site had an "outer periphery of small stones" extending around some two-thirds of the circumference but, as will be seen, this was a mistaken interpretation and the site never did have any form of outer circle.

The Standing Stones

Petrological examination showed that all the monoliths were of sandstone, outcrops of which can still be seen in the vicinity of the circle. By the kindness of the Forestry Commission who provided labour and a tractor for the purpose the prostrate SE stone was moved a few yards

² Spain. *P.S.A.N. V*, 3rd Series, (1911-12), 234-7.

³ *N.C.H. XV*, 60.

to the south, (Plate I, 1) and turned over. It was subsequently inspected for cupmarks as it is normally on the eastern stone of 4-Posters that these occur⁴ but there were none on this stone. The stone-hole ((a) on plan) was discovered abutting on to cairn-material. It measured 4' x 2' at its broadest but was only 2' deep except for a deeper extension (b) at its N where it had been cut another 12" into the underlying sandstone. Several smallish packing-stones had been pushed out of position towards the S when the stone, having been erected on its thinner, pointed end, fell and swivelled outwards probably in antiquity. The deliberate erection of top-heavy stones has been noticed in several modern excavations of stone circles^{5, 6, 7} though whether this was done to facilitate erection⁸; to achieve a predetermined height for the stone⁹; or with the intention of displaying a broad, flat-topped stone opposite a pointed one like the pairs in the West Kennet Avenue, Wilts., with its "male" and "female" stones¹⁰ cannot now be determined. The shallow depth of the SE stone-hole was paralleled by the hole in which the SW stone still stood. No packing stones were visible in the outer section but many small pebbles were found underneath the stone only 18" below the modern land-surface.

The SE stone may have been roughly shaped with a "keel" to make its erection simpler. This crude, incurved beak commenced 17" from its tip and it would have been this that was toppled into the deeper end of the pit (b). As a result, the stone which measured just over 7' 6" in length would have stood no more than about 4' 6" above ground level (7' 6" minus 2' + 1'), a height commensurate with the other stones:

⁴ *Burl. Arch. Ael. XLIX*, (1971), 38.

⁵ Stewart. *T.P. Perth S.N.H. XI*, (1966), 7-23.

⁶ Fahy. *J.C.H.A.S. LXIV*, (1959), 1-27.

⁷ Kilbride-Jones. *P.S.A.S. LXIX*, (1934-5), 168-222.

⁸ Kilbride-Jones. *P.S.A.S. LXVIII*, (1933-4), 81-96.

⁹ Radford. *P.P.S. I*, (1935), 134.

¹⁰ Smith. *Windmill Hill and Avebury*. Oxford, 1965, 197.

NE = 4' 6" high.

NW = 4' 7" high.

SW = 4' 8" high.

Although their heights did not differ greatly the SW stone was clearly the most massive as is often the case in 4-Posters, and weighed about $2\frac{1}{2}$ tons against the $1\frac{1}{2}$ tons of the SE stone which appeared to be the next largest.

The four stones had once stood at the corners of a quadrilateral whose outer edges had measured from the NW stone clockwise: 11' 2" \times 12' 7" \times 12' 4" \times 13' 3". It may be that this indicates an inaccurate attempt to lay out a square. It is noticeable that the centres of the stone-holes all stood on the circumference of a circle with a radius of just over 7', and it is permissible to assume that a marking-out circle was scribed from a chosen centre and that the stone-holes were dug on this perimeter with the intention, however unrefined, of being placed equidistant from each other. This circumferential siting is a characteristic of the stones in 4-Posters and it is this that justifies the otherwise paradoxical use of "circle" for what appears to be a square. An additional observation is that neither the side-lengths nor the radius of the circle had any obvious relationship to a megalithic yard of 2.72'.¹¹ To the writers this seems an important criticism of Thom's theoretical national unit of length. While variations in measurement might be inevitable in circles of large diameters it could surely be expected that precise lengths should appear in diminutive sites like the Three Kings where a mere 3 M.Y. would actually exceed the radius.

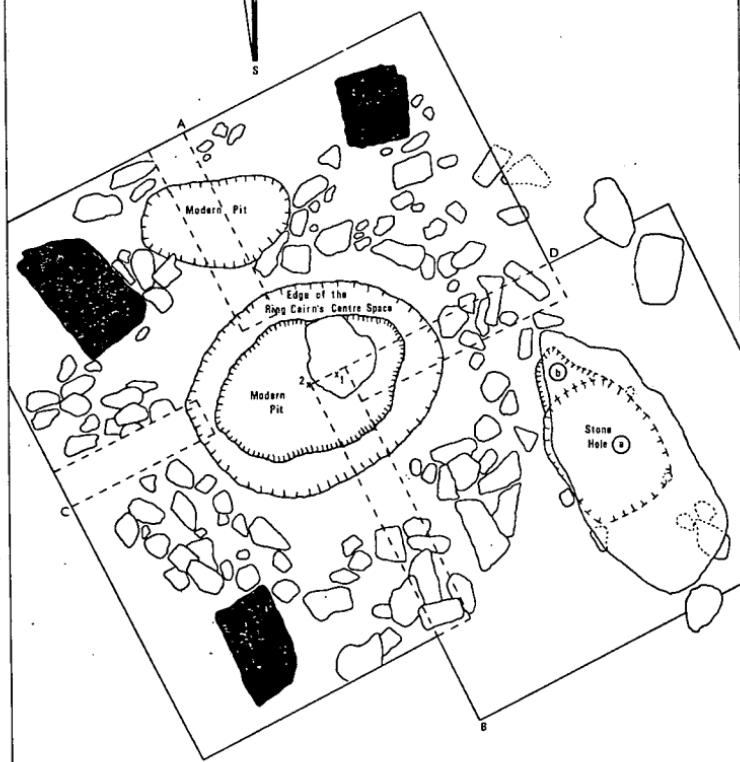
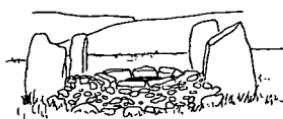
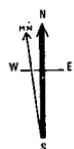
The Cairn

The interior of the site was investigated by laying out a rectangle 14' square which was sub-divided into four quadrants with 1' baulks between, (Fig. 2). Later exten-

¹¹ Thom. *Megalithic Sites in Britain*. Oxford, 1967.

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- 1 Centre of 4 Poster
2 Centre of Ring Cairn's Inner Space

H.A.W.B.

FIG. 2

sions were made to this. The quadrants were excavated simultaneously. Directly beneath the turf it was discovered that largish stones had been heaped in an irregular curve between the standing stones and the central cavity. These proved to be the remains of a small cairn whose outer circumference ran up to the base-centres of the monoliths. Although the cairn was incomplete it was apparent that many stones might have been taken for a nearby sheep-pen¹² and others thrown aside by earlier diggers. Many of these stones weighed up to 60 lbs and were over 1' long. There were perhaps 30 in each quadrant as well as many smaller stones. There was no trace of a kerb and only in the SE quadrant was there any surviving sign of an attempt to make a tidy, outer face. Beneath the stones there was a thin layer of light-yellow sand with greyish patches and containing small pebbles and this may be all that remained of a buried land-surface. Beneath this layer and only 12" below the modern surface sterile, rotted sandstone was reached, (Fig. 3).

The earlier suspicion of recent interference was confirmed when a modern hole about 2' wide and 2' deep was found between the NE and NW stones, filled with bright, yellow sand directly below the turf-line. Lying in the sand were two stones like those from the cairn just where they might have fallen had a pit been dug through the cairn-material. Five much larger stones were noticed lying in the turf outside the circle in haphazard positions. These must be the "outer periphery" already mentioned and their true explanation is discussed below.

Initially it was believed that the 4-Poster contained the remains of a simple cairn whose core had been dug out by treasure-seekers earlier in the century leaving a cavity 3' 9" x 5' 5" x 1' deep at the centre. It was noticed, however, that an irregularly shaped stone lay half-covered with turf on the eastern slope of this pit. It measured 2' 3" at its widest and was 9" thick, much larger than the stones of the

¹² Spain. *ibid.*

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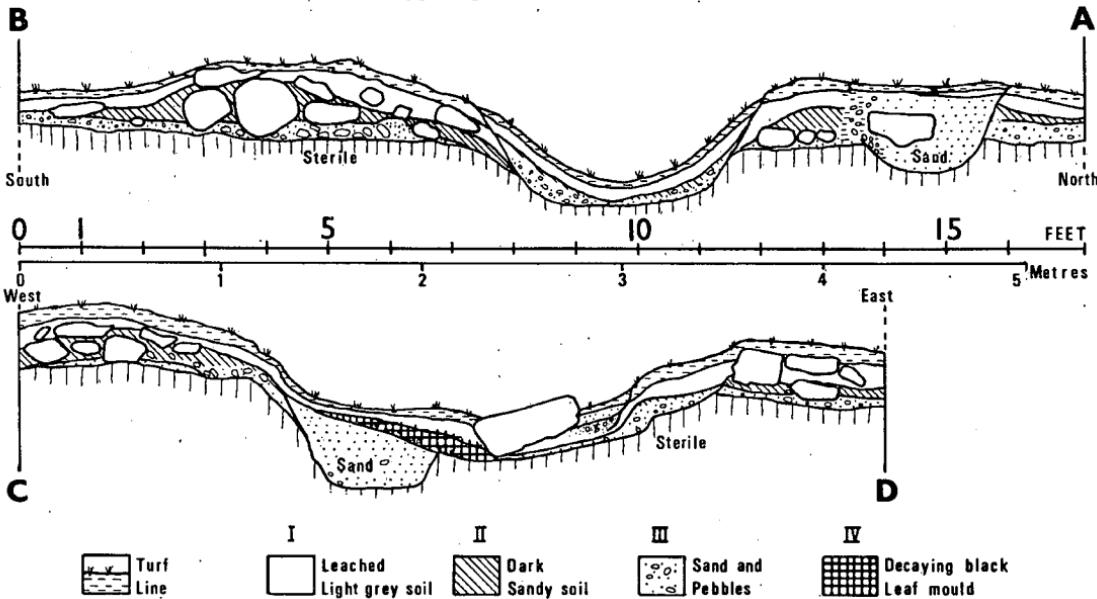


FIG. 3

H.A.W.B.



Fig. 1. The Three Kings: Moving the south-east stone.



Fig. 2. The Three Kings: View of the excavation from the north-east.

cairn. Significantly, its lower edge, near the pit-bottom, was surrounded on the west by black, decaying leaf-mould whereas behind the stone on the east was a layer of sand and pebbles like that beneath the cairn. This suggested that the stone might not have been moved far from its original position and that the present pit could be the much-damaged remains of the central space in a ring-cairn. Such a space would almost certainly have been lined with large, vertical stones of which only one remained almost *in situ*, the others having perhaps been thrown out by the plunderers.

This hypothesis permitted a reinterpretation of the larger stones lying in random positions outside the cairn. Two lay on the east of the site; one outside the NE quadrant; two by the NW stone; and one on top of the cairn-material by the inner face of the NE stone. Although some were almost turf-covered all lay flat and none was embedded more than 2"-3" in the sandy soil. They were all roughly sub-rectangular but displayed no signs of shaping. Their measurements were:

No:	Stone	Length	Breadth	Thickness
1.	East, 1.	23"	14"	6"
2.	East, 2.	25"	18"	7"
3.	NE quadrant.	23"	22"	8"
4.	NW Stone, 1.	25"	24"	9"
5.	NW Stone, 2.	34"	18"	9"
6.	NE Stone.	29"	22"	9"
7.	Central space.	27"	22"	9"

It is worth noting that it is the smallest of these stones, nos. 1-3, that were moved farthest from their presumed, original positions. With the central space so badly damaged it was difficult to establish its former dimensions but it is not unlikely to have been ovoid in shape, about 6' 6" (E-W) × 5' 6" (N-S), with a circumference of approximately 19'. The cumulative length of the seven stones was about 15' 6"

which, allowing for their ill-fitting edges and the speculative proportions of the central space accords well with a ring-cairn reconstruction.

One may imagine, therefore, a rectangular setting of four standing stones impinging on the circumference of a low cairn, (Plate I, 2). At its centre was a stone-lined elliptical space almost certainly used for the deposition of cremated bones, probably in an urn. Unfortunately, the whole of this area had been so ruinously dug into that although flecks of charcoal were discovered they were so few and roots so plentiful that there was no possibility of using them for dating material.

Finds were restricted to a hollow-based flint scraper of thumb-nail size close to the SW stone in Layer III of sandy soil and pebbles beneath the cairn material. No pottery could be expected to survive in the podsolized soil with its PH content of 4.7. Regrettably, continued appalling weather over several days towards the end of the excavation which produced an unworkable morass in the central area prevented properly controlled pollen samples being taken and it can only be reported that Layer III had an abundance of hazel intermixed with a little oak.

Discussion

The distribution of 4-Posters and their affinities with the recumbent stone circles of Aberdeenshire has already been described¹³ and it is interesting to find at the Three Kings yet another feature in the form of the ring-cairn to associate these small circles with their larger, northern predecessors. Ring-cairns have not been recorded at other 4-Posters. Of those excavated in Perthshire, Lundin Farm¹⁴ and Carse Farm¹⁵ had central pits. At Clach na Tiompan¹⁶ the cairn-material noticeably thinned out towards the centre but in

¹³ Burl. *ibid.*

¹⁴ Stewart. *P.S.A.S. XCVIII*, (1966), 126-49.

¹⁵ Stewart. *D. & E. Scotland*, (1964), 39-40.

¹⁶ Henshall and Stewart. *P.S.A.S. LXXXVIII*, (1954-6), 122-4.

no sense would it be correct to claim the result as a ring-cairn. Conversely, ring-cairns and central burials are well-known in recumbent stone circles. They have been described, *inter alia*, in Aberdeenshire at Castle Frazer¹⁷; Hatton of Ardoine¹⁸; Old Keig¹⁹; Old Rayne²⁰; and in Kincardineshire at Garrol Wood.²¹ It seems that builders of Perthshire 4-Posters sometimes deliberately chose extant barrows upon which to erect their standing stones,²² depositing their urned cremations in freshly-dug central pits, an effect akin to that of a ring-cairn. It would not be contradictory to find in other areas 4-Posters with contemporary ring-cairns and this appears to be the case at the Three Kings.

There is increasing evidence of contacts between SE Scotland and Northumberland in the 2nd millennium B.C. so that the building of a 4-Poster fits comfortably into this pattern. It is of some interest in this context that the long cairn at Bellshiel Law (NT 813014) only 2½ miles east of the Three Kings but on the uplands on the opposite side of Redesdale was considered²³ to have affinities with Scottish horned megalithic long cairns like Head of Work and Na Tri Shean in northern Scotland. Certainly there are several sites in Scotland such as Knapperty Hillock, Aberdeen²⁴ and Dalladies, Kincardine²⁵ where the lack of a megalithic chamber may imply analogies with the Northumbrian long mound and its neighbours in the southern Cheviots.^{26, 27}

The area, otherwise, is not rich in prehistoric antiquities. Apart from the reputed stone circle at Elsdon²⁸ there is an irregular line of low stones just south of Old Byrness, one of

¹⁷ Coles. *P.S.A.S. XXXV*, (1900-1), no. 4.

¹⁸ Coles. *ibid.* no. 21.

¹⁹ Childe. *P.S.A.S. LXVII*, (1932-3), 37-53.

²⁰ Stuart. *The Sculptured Stones of Scotland*, I. Aberdeen, 1856, xxi.

²¹ Coles. *P.S.A.S. XXXIX*, (1904-5), 190-205.

²² Burl. *ibid.* 43.

²³ Newbiggin. *Arch. Ael. XIII*, (1936), 293-309.

²⁴ Henshall. *The Chambered Tombs of Scotland*, I. Edinburgh, 1963,

395.

²⁵ *Current Archaeology*, 28, (1971), 131.

²⁶ Manby. *Scottish Arch. Forum*, (1970), 5.

²⁷ Ashbee. *The Earthen Long Barrow in Britain*. London, 1970, 46.

²⁸ *N.C.H. XV*, 60.

which is cupmarked,²⁹ and another possible long cairn at Spithope Head (NT 76.03.)³⁰ which may be like Bellshiel Law. There are some low, round mounds near Bellshiel Law itself. To the south one must travel 15 miles towards Bellingham and beyond before any concentration of sites is discovered. There the W-E line of stone circles at Ridley Common (NY 778698)³¹; Simonburn (NY 802712)³²; the Goatstones (NY 829748)³³; and Nunwick Park (NY 885741)³⁴; groups of barrows; and the finds of N3 and N1/D beakers³⁵; all affirm the movements of people in the 2nd millennium B.C. along the important Tyne lateral pass across England. In contrast, Redesdale appears quiet. One would expect conservatism rather than innovation from its inhabitants.

Because of suggestions that some stone circles may have been used for astronomical observations it was necessary to take meticulous alignments from the circle-centre across the tops of the standing stones and along their sides but nothing of moment was discerned. The azimuth for the NE stone produced a declination of + 35·58, perhaps applicable to the rising of Capella c. 1180 B.C.; and for the NW stone an orientation perhaps related to the setting of the sun in early Autumn or late Spring, but the distance between centre and stone is so short that an error of only a few inches in the position of the observer would completely alter the alignment. It is proper to add that Thom has found nothing in the few 4-Posters he has analysed³⁶ in Table 12.1 where the relevant sites are: H7/9; P1/4; P1/6; P1/7; P1/9; P1/18; P2/4; P2/5; W8/3. Not one of these is listed in Table 8.1 of observed astronomical lines and, indeed, it is only a doubtful site, Lundin Links, Fife, P4/1, that is believed to be a lunar

²⁹ *ibid.* 62.

³⁰ *ibid.* 38.

³¹ O.S. Southampton, NY 76 NE 44.

³² *ibid.* NY 87 SW 18.

³³ Honeyman. *P.S.A.N. V.*, (1931-2), 304-6.

³⁴ Mackenzie. *Views of Northumberland, II.* 1825, 241.

³⁵ Clarke. *Beaker Pottery of G.B. & Ireland*. Cambridge, 1970.

³⁶ Thom. *ibid.* 136.

site in a later work.³⁷ In view of this lack of orientations the absence of celestial lines at the Three Kings is not surprising.

When one regards the plan of this monument with care it is clear that the circle was not at all precisely planned. It has been seen that the four stones stand on the circumference of a circle with a radius of about 7' 1". But its centre is not in the middle of the inner setting whose own centre lies about 1' to the west. It is probable that after the considerable effort of raising the stones and the consequent trampling and disturbance of the ground around them the builders scribed out another circle for the central space whose focus was only approximately located on the original centre whose position had been obliterated.

The Three Kings is not a mighty monument. It is a family-sized stone circle built long after the times when Neolithic people banded together in communal efforts to raise vast earthworks or to haul gigantic stones to Avebury and Stonehenge. The largest stone at the Three Kings weighs about 2½ tons. There are several suitable sandstone outcrops nearby so that it is most likely that the stones had to be dragged only a few hundred yards over fairly level ground. Such a weight would require the strength of no more than 10-12 people³⁸ and it is a small group such as this that may have raised this stone circle on the terraced slopes of Redesdale at some time in the later 2nd millennium B.C.

ACKNOWLEDGEMENTS

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³⁷ Thom. *Megalithic Lunar Observatories*. Oxford, 1971, 56.

³⁸ Atkinson. *Ant. XXXV*, (1961), 292-9.

to move the SE stone; Mr. and Mrs. C. W. Spencer of Whitley Bay for offering their valuable services; and Mr. G. Ivison of Byrness for a very great amount of help, particularly when the weather was at its worst.