CROMLECH FARM, LLANFECHELL, POSSIBLE CHAMBERED TOMB EVALUATION EXCAVATION 2008 PRELIMINARY REPORT

Project No. G1629 Report No. 793



Prepared for Cadw March 2009

By George Smith



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Cover picture: Cromlech Farm. Trench 1. Excavation in progress September 2008

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1 SUMMARY

Cromlech Farm chambered tomb consists at present of a group of large recumbent slabs at various angles, together with smaller stones. Records of visits in the early 19th century suggest that it was then a genuine cromlech but its real status is uncertain (Lynch 1969, 305). In 2008 an evaluation exercise was carried out consisting of a geophysical survey, soil depth test-pitting and trial trenching. The geophysical survey produced nothing indicative of a man-made structure but the soil pitting showed there was some depth of soil around the east end of the site. The excavation showed that all the visible larger stones are *in situ* bedrock apart from one large loose slab lying at an angle and there was no cairn present. However, an episode of stone breaking was identified, interpreted as 19th century demolition, in an area of buried soil in a space between two pieces of bedrock at the east end of the site. This sealed a thin, but animal disturbed buried soil that contained charcoal and several small pieces of struck chert in the topsoil. Two radiocarbon dates from young hazel charcoal in the buried soil produced dates centred on Cal AD 730 and Cal BC 2200.

2 INTRODUCTION AND BACKGROUND

At Cromlech Farm, Llanfechell, Anglesey, is a large low mound from which protrude a number of large slabs of stone with one loose stone lying at an angle propped across other stones. At present there are no features that clearly identify it as a genuine chambered tomb and it has therefore not been officially recognized as such. However, it was apparently a recognizable cromlech when visited and sketched by the Rev. John Skinner in 1802. (Fig. 2) and it was drawn again about 1830 (Fig. 3). There are no records of any finds from the site.

More recently the site has been re-assessed by Dr George Nash of SLR Consulting who discovered several cup-marks on the stones as well as a possible ring mark and another cup-mark on a ground rock about 350m to the south as part of a survey in 2005-6 (Nash 2005, 13). The site is valuable for its possible relation to other sites in the vicinity, notably the scheduled sites of the Llanfechell stone setting (PRN 3047, SAM A30) and Llanfechell standing stone (PRN 3048, SAM A80). The recent discovery of the cup-marks on the Cromlech Farm stones and another nearby indicates that there is more to the monument and the area than is presently accepted and it was suggested that the site deserved re-evaluation, which the present project was designed to do.

The monument consists of a low mound in a fairly flat field. The wandering shape of the mound tended to suggest that it consisted of an underlying rock outcrop. The topsoil is quite deep, produces good grass and has been well-ploughed in the past. The farmer remembers that part of the field between the mound and the farm house was once used for growing potatoes. There are some dumps of small clearance stone on the mound. At present the monument lies open in cattle-grazed field subject to trampling and has clearance stones dumped on it. It is vulnerable to further dumping and possibly machine clearance. No measured plan of the site existed until the present work.

The bedrock of the area around Cromlech Farm is of pre-Cambrian schists and gneisses, heavily glaciated leaving undulating hummocks with an overburden of fluvio-glacial clay and silt (Smith and George 1961, 8-11). The better-drained parts of this produce good pasture. There are two other standing stone sites nearby at Llanfechell and both are situated on the top of natural ridges. One is a single large standing stone and the other is an unusual setting of three standing stones (Fig. 1). The setting of the Cromlech Farm site is therefore different in that it lies in a declivity.

Acknowledgements. Thanks go to Cadw for funding and to Mr. John Griffiths and his wife of Cromlech Farm for allowing the work and the disruption to his cattle for excluding them from their favourite field. Thanks go also to Dr George Nash and Terry Williams for information and photographs. The work was carried out by the author and Dr Jane Kenney with the valuable voluntary help of C. 'Beaver' Hughes, Jeff Marples, Anne-Marie Oattes and John Rowlands.

3 OBJECTIVES AND METHODS

The main objective was to ascertain whether the site was or had been a prehistoric chambered tomb and whether it retained some potential as a visible monument or by the presence of buried archaeological horizons. The time and resources available for this were quite small so the initial plan was for a geophysical survey and gridded soil test-pitting to provide the basis for a single trial trench. The assistance of experienced volunteers eventually allowed three trenches to be excavated. The first trench looked at the south side of the rock exposure, to ascertain whether the slabs were indeed a collapsed tomb. The second trench was at the east end of the mound, where a 'forecourt' area might have provided a focus of activity since chambered tombs normally have an eastward orientation. The third trench was further to the west, away from the exposed stone slabs, to ascertain whether the low mound there was a natural or artificial feature.

A grid was laid out to encompass the mound and tied into the local field boundaries and buildings. The geophysical survey and soil pitting was carried out first, along with detailed planning of the mound and visible stones. The geophysical survey included six 20m squares and soil test pits were dug at each grid point intersection. The survey plan was drawn at 1:20 scale.

The three trenches were de-turfed, excavated, backfilled and re-turfed entirely by hand.

Single samples of charcoal were collected where available and bulk soil samples were taken for macrobotanical assessment.

Excavation plans were drawn at 1:20 scale and sections at 1:20 or 1:10 as suitable.

The excavation was carried out between 15^{th} to 20^{th} September 2008 by the author and Dr Jane Kenney, with the invaluable assistance of volunteer helpers – see acknowledgements.

4 GEOPHYSICAL SURVEY RESULTS

4.1 METHODOLOGY

The survey was carried out using a fluxgate gradiometer. This provides a relatively swift and non-invasive method of surveying large areas.

4.1.1 Instrumentation

The survey was carried out using a Bartington Grad601-2 dual Fluxgate Gradiometer. This uses a pair of Grad-01-100 sensors. These are high stability fluxgate gradient sensors with a 1.0m separation between the sensing elements, giving a strong response to deeper anomalies.

The instrument detects variations in the earth's magnetic field caused by the presence of iron in the soil. This is usually in the form of weakly magnetised iron oxides which tend to be concentrated in the topsoil. Features cut into the subsoil and backfilled or silted with topsoil therefore contain greater amounts of iron and can therefore be detected with the gradiometer. This is a simplified description as there are other processes and materials which can produce detectable anomalies. The most obvious is the presence of pieces of iron in the soil or immediate environs which usually produce very high readings and can mask the relatively weak readings produced by variations in the soil. Strong readings are also produced by archaeological features such as hearths or kilns because fired clay acquires a permanent thermo-remnant magnetic field upon cooling. This material can also get spread into the soil leading to a more generalised magnetic enhancement around settlement sites.

Not all surveys can produce good results as anomalies can be masked by large magnetic variations in the bedrock or soil or high levels of natural background "noise" (interference consisting of random signals produced by material within the soil). In some cases, there may be little variation between the topsoil and subsoil resulting in undetectable features. It must therefore be stressed that a lack of detectable anomalies cannot be taken to mean that that there is no extant archaeology.

The Bartington Grad601 is a hand held instrument and readings can be taken automatically as the operator walks at a constant speed along a series of fixed length traverses. The sensor consists of two vertically aligned fluxgates set 1.0m apart. Their Mumetal cores are driven in and out of magnetic saturation by an alternating current passing through two opposing driver coils. As the cores come out of saturation, the external magnetic field can enter them producing an electrical pulse proportional to the field strength in a sensor coil. The high frequency of the detection cycle produces what is in effect a continuous output.

The gradiometer can detect anomalies down to a depth of approximately one metre. The magnetic variations are measured in nanoTeslas (nT). The earth's magnetic field strength is about 48,000 nT, typical archaeological features produce readings of below 15nT although burnt features and iron objects can result in changes of several hundred nT. The instrument is capable of detecting changes as low as 0.1nT.

4.1.2 Data Collection

The gradiometer includes an on-board data-logger. Readings in the surveys were taken along parallel traverses of one axis of a 20m x 20m grid. Readings were taken with a traverse interval of 0.5m. Readings were logged at intervals of 0.25m along each traverse giving 3200 readings per grid.

4.1.3 Data presentation

The data was transferred from the data-logger to a computer where it was compiled and processed using ArchaeoSurveyor 2 software. The data is presented as a grey-scale plot (Fig. 7 where data values are represented by modulation of the intensity of a grey scale within a rectangular area corresponding to the data collection point within the grid. This produces a plan view of the survey and allows subtle changes in the data to be displayed. This is supplemented by an interpretation diagram (Fig. 8) showing the main features of the survey with reference numbers linking the anomalies to descriptions in the written report. It should be noted that the interpretation is based on the examination of the shape, scale and intensity of the anomalies and comparison to features found in previous surveys and excavations etc. In some cases the shape of

an anomaly is sufficient to allow a definite interpretation e.g. a Roman fort. In other cases all that can be provided is the most likely interpretation. The survey will often detect several overlying phases of archaeological remains and it is not usually possible to distinguish between them. Weak and poorly defined anomalies are most susceptible to misinterpretation due to the propensity for the human brain to define shapes and patterns in random background noise. An assessment of the confidence of the interpretation is given in the text.

4.1.4 Data Processing

The data is presented with a minimum of processing although corrections were made to compensate for instrument drift and other data collection inconsistencies. High readings caused by stray pieces of iron, fences, etc are usually modified on the grey scale plot as they have a tendency to compress the rest of the data. The data is however carefully examined before this procedure is carried out as kilns and other burnt features can produce similar readings. The data on some noisy or very complex sites can benefit from 'smoothing'. Grey-scale plots are always somewhat pixellated due to the resolution of the survey. This at times makes it difficult to see less obvious anomalies. The readings in the plots can therefore be interpolated thus producing more but smaller pixels. This reduces the perceived effects of background noise thus making anomalies easier to see. Any further processing is noted in relation to the individual plot.

4.2 RESULTS

A single area of 40m x 80m was surveyed. Conditions were generally good for survey. The traverse speed was decreased where the supposed cromlech stones were encountered in order to maintain accurate positioning of the readings.

A range of anomalies were detected and these can be divided into three groups. The most obvious are a group of eleven anomalies (1) that each consist of a strong positive and negative component with a range of about +- 20nT to +-150nT. These are typical magnetic dipoles produced by metallic iron. These are grouped around the stones on the top of the mound and are probably the result of ferrous rubbish being dumped in the area along with the field clearance. Most of the rest of the survey contains weaker diffuse anomalies (less than +-20nT) that are best interpreted as being a result of magnetic bedrock close to the surface. An arc on the western side (3) could indicate a slight change in the soil perhaps indicating the edge of an earthen mound but is most likely to be a result of bedrock. Features 3, 4 and 5 are typical geological anomalies. A clear linear anomaly (6) is best interpreted as a former field boundary or drain.

4.3 DISCUSSION

The survey produced little evidence for the existence of buried archaeology associated with a cromlech but suggests that bedrock is close to the surface where the mound occurs in the field and that stone and iron rubbish has been dumped, presumably where stone was already lying in the field.

5 SOIL PITTING RESULTS

The soil pitting was designed to complement the geophysical survey and provide additional information. Twelve soil pits were dug on the intersections of the geophysics grid (Fig. 7) excavated in the centre of each metre square to the south-west of the grid point. Each was 0.30m

square and excavated to the top of the subsoil or whatever layer was below the plough soil. The depth to sub-soil, and type of subsoil were recorded as were the presence of any other features (Table 1). The plough soil was a uniform dark brown silty loam over the whole area. The pits did show that there was considerable depth of soil around the mound, the deepest at the south-east end. The sub-soil in most of the pits was yellow-brown clayey silt with scattered sub-angular stones but pits 7, 10 and 12 lay over stony horizons suggesting bedrock was close to the surface. The depth of the sub-soil varied from 0.26m to 0.63m but recognizable sub-soil was not reached in the deepest pits, 2 and 6, at 0.58m and 0.63m, which possibly lay over buried features, whether natural or artificial.

Pit no.	Depth	Topsoil	Subsoil	Comment
1	33	Dark brown silty loam	Yellow-brown clayey	
		with scattered small	silt with scattered	
		sub-angular stones	small sub-angular	
			stones up to 50mm	
			long	
2	58	Ditto	Ditto	Possibly lowest 15cm
				a feature
3	39	Ditto	Ditto	
4	52	Ditto	Ditto	
5	45	Ditto	Ditto	
6	63	Ditto	As 1 but buff colour	Possibly lower part
				into a feature
7	30	Ditto	As topsoil but with	
			75% sub-ang and sub-	
			rounded stones	
8	46	Ditto	As 6	Stone-free turf to -
				12cm
9	47	Ditto	As 1	Ditto
10	34	Ditto	Yellow-brown clayey	Ditto
			silt with 95% sub-ang	
			stone	
11	46	Ditto	As 1	Ditto
12	26-32	Ditto	Irregular rock surface	Ditto

Table 1 Soil survey

6 EXCAVATION RESULTS

Prior to the excavation a detailed plan of the mound and all exposed stones was made, on which the trench lay-out could be designed (Fig. 9).

6.1 Trench 1 (Figs 10-13)

This trench was 6m by 2m in plan and designed to examine the south side of the mound and rock exposure. It would provide a cross section across the deposits and their relationship to the main rock exposure, suspected to be a fallen capstone.

The topsoil became shallower as it approached the rock exposure but it was apparent that

ploughing had taken place very close to the rock exposure. Beneath the plough soil was a stonier horizon (102) that in turn overlay a more discrete horizon of cobbles and small sub-angular boulders (106) (Fig. 11). These all lay between and over some very large slabs of rock that were clearly *in situ* bed rock. These protruded through a natural subsoil of orange-brown clayey silt (119).

Layer (106) was initially regarded as possibly the remains of a cairn mound but proved to be quite shallow and seemed more likely to be a field stone clearance dump. At the north end it overlay a dark soil layer (108). This was an old humic soil build-up around the rock exposure, whether as a result of earlier cultivation or just of natural accumulation in the area protected from ploughing close to the rock exposure. Two areas of animal disturbance, possibly rabbit animal burrows were found here. Beneath layer (108) at the north end of the trench was a distinctive layer (110) containing a scatter of charcoal fragments. This continued into a number of small irregular hollows in the top of the sub-soil (119) (Fig. 10). A bulk sample was taken from one of these features for possible radiocarbon dating (Fig. 12). These features are of uncertain provenance because of the presence of animal disturbance and the proximity to layers with finds of post-medieval date.

Excavation took place against and below the largest slab [118] of the rock exposure and this showed it to be a slightly detached natural piece of bed rock still lying *in situ* on outcropping rock (Fig. 13).

Artefacts from the trench comprised mainly a large quantity of 19th century items and a smaller number of 20th century items, including fragmentary pottery, kitchenware and tableware, glass bottles and jars and some iron objects. Those that were of earlier origin comprised a small manufactured stone disc from the modern top soil (101) and a struck flint flake from the lower plough soil (102).

6.2 Trench 2 (Figs 14-16)

This trench was 5m by 2m in plan and was laid out in order to provide a section through the deposits at the east end of the mound together with an east-west profile across the mound. This happened to coincide with a gap between two surface exposures of large rocks that proved to be *in situ* bed rock (Fig. 9). The uppermost edge of these had a series of grooves from repeated impact by ploughs (Fig. 14). Removal of the topsoil revealed a stony horizon (3) at the west end of the trench, forming a slight mound (Fig. 15). This layer contained numerous post-medieval items including 19th century potter, glass, coal, iron objects and a broken whetstone. It was interpreted as a dump of field clearance stones.

At the east end of the trench the lower plough soil (2) was lighter in colour and was evidently a partly *in situ* mix of plough soil and subsoil and this produced a scatter of chert fragments (Fig. 14), most of which showed signs of attempts to remove flakes. The subsoil (9) was a compact yellow-brown silty clay with about 10% sub-angular small stones.

At the west end of the trench Layer (3) overlay a thin buried turf line (4) indicating a period of inactivity, below which was another stony layer (5) which also contained 19th century pottery and glass. This overlay a deeper layer (8) of mid to dark brown silty loam containing many larger angular fragments of stone than in (5). This contained a few fragments of early 19th century pottery.

Layer (8) overlay a layer of yellow-buff silt (20), similar to the sub-soil (9) at the east end of the trench but relatively stone-free and mottled with numerous irregular patches of dark brown humic soil (11). Excavation of these patches showed them to be a complex of shallow linear hollows and one larger hollow [12] in the top of (20) (Fig. 16). The fill of [12] was given a separate number (13) although excavation showed it to be continuous with (11). These features looked most like a series of conjoined animal burrows but clearly too small to be rabbit burrows. Layers (11) and (13) contained a scatter of charcoal fragments suggesting that these hollows might be related to the charcoal-rich patches in the top of the subsoil in Trench 1.

The way these hollows were worked through the top of the subsoil suggests that they were once confined by an overlying stone slab that occupied the space between the two that lay on either side of the trench (Fig. 14) and so might have been ancient small mammal burrows. The soil filling these hollows produced a number of pieces of Beaker pottery and two pieces of flaked chert. Hollow [12] contained the a small group of these objects.

6.3 Trench 3 (Figs 17-18)

This was designed to test whether the low mound further to the west of the main rock exposure was an artificial cairn or not. It was laid out to provide a cross-section of the foot of the slope of the grassed-over mound. Removal of the topsoil revealed that the 'mound' here was just an outcrop of *in situ* bedrock. The soil below the plough soil contained large fragments of broken rock and there were no buried layers or features. The plough soil contained 19th century pottery and glass but also produced 10 pieces of black chert, of which 3 were possibly deliberately shattered chunks and one was a fragment of a fine unretouched blade.

7 ARTEFACTUAL EVIDENCE

7.1 Post-medieval objects

The great majority of the objects recovered was from the plough soil or lower plough soil, deriving from rubbish dumped on the mound as a marginal area. The objects were mainly of the first half of the 19th century and comprised fragments of kitchenware - thick dark brown glazed bowls, finer dark brown glazed bowls and jugs, Staffordshire stoneware and tableware, mainly blue and white transfer-printed and some hand-painted. There were also some fragments of glass bottles and jars, iron objects, including a 'hunter' type horseshoe and two cast lamp-bases and some 20th century bottle fragments, probably milk bottles. There was one fragment of thin, leaded-window type glass.

These do not add much to the interpretation of the site although the majority belong to a period at or before the drawings made by Skinner and Britton and therefore before the probable demolition of the cromlech. This is understandable since at that time this was a substantial feature but after the demolition was largely leveled off, incorporated into the pasture field and grassed over, so would not have been used as a dump.

7. 2 Stone (Fig. 19)

A broken whetstone came from the topsoil in Trench 3. It is a common type and probably a discarded post-medieval scythe/sickle stone.

The topsoil in Trench 1 produced a small stone disc, possibly of sandstone, 30mm diameter and 12mm thick. It seems to have been made from a natural tabular piece of stone that has been roughly chipped to shape. There is little likelihood that this is a post-medieval object and would have to have been made quite deliberately and with some difficulty. It most resembles an unfinished spindle whorl but is rather small for that, those being normally in the range of 40-50mm diameter, but that is the only likely interpretation of it, although stone discs of various diameters are found in some Bronze Age burial mounds, presumed to be of some symbolic significance.

7.3 Flint and chert (Fig. 19, Table 2)

A scatter of 10 pieces of black chert was found in the lower topsoil (2) at the east end of Trench 2 (Fig. 14). Eight other pieces were found elsewhere in the trench but not in a distinctive scatter. 6 in post-medieval layers, 2 in layer (11) associated with Beaker pottery.

	Trench 1	Trench 2	2				Trench 3
	Context	Context				Context	
Black chert	102	2	3	8	11	15	7
Chunk		8	2	1	1	3	3
Flake/frag		1	1		1		1
Retouched piece		1					
Natural frag	3	1	1		1		6
Flint							
Flake	1						
Natural frag		1					

Table 2 Flint and chert by category and context

7.3.1 *Material*: The black chert is small and of poor flaking quality. It occurs as pebbles in the glacial drift and one of the pieces here was part of a shattered cobble. However, some of the pieces are banded chert that is more tabular and were probably collected from outcrops in the limestone, which can be found exposed in coastal cliffs on the east side of the island and in the scarps of outcrops elsewhere inland (REF).

7.3.2 *Techniques*: Most of the pieces here were unmodified and quite small but could have been collected for potential use. Most were irregular chunks that showed evidence of flaking or attempts at flaking. There were four deliberate flakes of which one, of chert, from layer (11) in trench 2 was a microlithic sized neat blade, probably punch-struck, 26mm by 7mm by 2mm. The one from Trench 3 was a mid-segment of a very thin and fine blade of chert. The only retouched piece was a small broken flake from Trench 2, plough soil that had an obliquely snapped end with secondary retouch on the snapped edge.

The only worked object of flint was from the topsoil in Trench 1 - a secondary flake of honeycoloured flint with cortex from a partially rolled pebble retaining some cortex. 7.3.3 *Discussion*: None of these pieces are diagnostic of date by technique or typology but two of the pieces do have a close association with the Beaker pottery. If the pottery came from a funerary deposit the rest of the chert working could belong to another period.

7. 4 Pottery (Fig. 20)

Contexts (11) and (13) in Trench 2 produced a small scatter of twenty-five pottery fragments (Fig. 14). All are of a similar slightly vesicular silty fabric with small angular rock filler. The pieces are oxidized red on the outside faces and dark grey reduced on the interior faces. The sherds vary from 6 to 9mm in thickness. Although the fabric is quite coarse the exterior is well-smoothed with some evidence of burnishing. 9 of the sherds have impressed decoration with only 3 being plain, the remainder, 13, being very small fragments.

All the pieces are body sherds and their small size makes it almost impossible to say what shape of vessel they came from. One of the pieces has a slight angled convex carination or shoulder. The decoration on 6 of the pieces is fairly heavily impressed square-toothed comb probably in horizontal lines, some multiple. Two pieces have more lightly impressed comb decoration of which one has two lines, 15mm apart, probably in a horizontal band. One piece has a different decoration with a line of a series of short vertical narrow lines, perhaps impressed with a different type of comb.

These pieces probably all come from one of the later series of long-necked Beaker pot and so consistent with the one early radiocarbon date obtained. A full report with illustrations will be produced by F. Lynch for inclusion in the published report.

8 DISCUSSION AND DATING

Trench 1 showed that there were no significant buried horizons around the rock exposure on that side. The largest horizontal slab of the exposure, a massive slab at 0.9m thick and of many tons weight matched quite closely in length and appearance the capstone shown in Skinner's drawing of 1802 (Fig. 2). However, the excavation showed clearly that the slab was not a capstone but *in situ* bedrock.

Trench 2 showed a notable scatter of struck chert waste pieces concentrated just off the edge of the mound with a smaller numbers in layers higher up the slope. This scatter did not continue into the area of Trench 1 where only three fragments of chert were found, none worked. The possible interpretation is that there had been an area of chert working localised around the east end of the mound, possibly associated with the deposition of Beaker pottery.

The deeper excavation at the west end of Trench 2 showed that there are some stratified deposits of which some still remain. Most of this depth however dates to only the 19th century and possibly to the period of demolition and robbing of the outcrop and possible chambered tomb. The deepest deposits did produce some prehistoric artefacts but it is suggested that there was once a stone slab covering layers (11) and (13) and if so that the pottery and chert were introduced there by animals. The missing stone was probably removed when the possible chambered tomb was demolished and the rock exposure quarried in about the mid-19th century. The layer (8), above the artefact-rich layer contained many angular stone fragments and was probably the result of that demolition and quarrying episode.

The discovery of the pottery and worked chert but not of any more recent material suggests that the hollows formed at some time after the original deposition of these pieces, which were introduced from a deposit higher up in the mound. This accords with the small size of the fragments and the fact that they are a mixture of non-joining pieces although almost certainly all from the same pot. Potentially the original deposit could have been a cremation burial accompanied by some worked chert pieces in a pot, perhaps inserted in the chambered tomb as a secondary deposit. Charcoal from the dark soil has yet to be fully identified but two pieces were selected for AMS radiocarbon dating and both were identified as hazel, young wood (A. Caseldine pers. com.). One, from layer (11) produced a date of Cal BC 2300 to 2130 or Cal BC 2090 to 2050. The other, from layer (13) in hollow [12] produced a date of Cal AD 720 to 740 or Cal AD 770 to 970. The first date is compatible with other dated pieces of equivalent style to the Beaker sherds but the disparity of the later date, from a similar sample makes interpretation difficult and it is possible that there has been some error. One interpretation is that the charcoal scatter includes some associated with the pottery and some from the period when the pottery was introduced into its context by animals.

The presence of the pottery and of the contemporary charcoal provides proof that there was early prehistoric activity here and such a secondary deposit in an earlier chamber is one that is commonly paralleled elsewhere. Several of the extant chambered tombs in Anglesey have produced secondary deposits of Beaker material. The orientation of the monument to the east is also typical of chambered tombs. Careful consideration of Skinner's and Britton's drawings shows they cannot be explained as simply fanciful interpretations of a natural rock outcrop since the rock here is horizontally bedded with vertical weathering fissures and some of the 'supporting' slabs shown in the drawings are clearly set upright, one shown as 6ft high.

However, the excavation shows that all the stone slabs presently visible are part of a natural *in* situ rock outcrop apart from one slab, stone [14], lying at an angle at the east edge of the outcrop. This stone is unchanged from that on a photograph taken about 1900 (Fig. 4). This stone has a cup mark on its upper face, towards its east edge and a possible ring mark at its east corner (Fig. 9), both features first recorded by George Nash (2005). The hollow of the ring mark is rather irregular compared to, for instance that at Llwydiarth Esgob, Anglesey (Lynch and Jenkins 1974), with no signs of pecking and so may be a natural weathering feature. Its position on a corner of the rock is difficult to explain because if it were originally a ring, probably more central to the slab, then the slab must have originally have been much larger and broken just at this point. The cup mark on this slab is also unusual. Cup marks are most often found on roughly horizontal surfaces, where pecking with a hammer stone is most effective. Although this slab may once have been more horizontal the cup mark is worked at an angle to the face, suggesting that it was worked when the slab was at an angle and one similar to that at which the slab now lies. This, and the discovery of a split drill hole on the edge of an *in situ* outcropping slab at the west end of the mound (Fig. 9) means that great care needs to be taken to distinguish genuine prehistoric cupmarks from 'jumper' holes made to start a drill in order to break up outcrops for quarrying or field clearance. This is a factor that needs more study.

The presence of the Beaker pottery shows that there was prehistoric activity, possibly funerary, in the area of the mound and that this could have been re-deposited from a chamber higher up, but now removed. Stone [14] is the only slab that may be a remnant of an early structure. It is incomplete, being obviously broken on its south edge, while its north edge has the convex edge of an original weathered outcrop face (Fig. 15). This stone could be part of an originally much larger capstone and this might explain the presence of a cup mark on it.

The work shows that there are remnants of prehistoric activity around the mound and some stratified deposits survive in the cavity at the east side. This cavity, created by removing a naturally detached block of bedrock may have been part of the original construction but seems more likely to have been created during 19th century quarrying. Baynes (1936) records local memories of 'great quantities of stone being removed to form a wall'. The remaining deposits in this area (Fig. 14 g-h) are a continuation of those excavated and so may include more artefacts but it is unlikely that any stratified deposits exist that are contemporary with the possible chambered tomb.

A better interpretation of the mound could be made by excavation of a wider area over the outcrop to reveal its topography; this may give a clue to its original appearance and could reveal more cup-marks. One or more additional radiocarbon dates from charcoal from layers 11 and 13 in Trench 2 and from feature [107] in Trench 1 could establish more reliable dating than the presently conflicting dates. Bulk samples from these layers are yet to be analyzed and may produce some useful macrobotanical information.

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APPENDIX 1

PRELIMINARY RADIOCARBON DATING REPORT

Beta no.	Received	Completed	Sample no.	Method	Material	Measured age	13C/12C	Conv age	2 sigma Cal
254972	Monday, January 26, 2009	Monday, March 02, 2009	G1629CF111	AMS- Standard delivery	(charred material): acid/alkali/acid	1200 +/- 40 BP	-26.2 o/oo	1180 +/- 40 BP	Cal AD 720 to 740 (Cal BP 1230 to 1210),Cal AD 770 to 970 (Cal BP 1180 to 980)
254971	Monday, January 26, 2009	Monday, March 02, 2009	G1629CF110	AMS- Standard delivery	(charred material): acid/alkali/acid	3780 +/- 40 BP	-25.2 o/oo	3780 +/- 40 BP	Cal BC 2300 to 2130 (Cal BP 4250 to 4080),Cal BC 2090 to 2050 (Cal BP 4040 to 4000)

APPENDIX 2

SAMPLE INDEX

Sample	Context	Sample	Purpose of sample	Quantity	Sent to/date
No.	No.	Туре			
101	112	Soil	Fill of a small feature probably an animal	2 x 30cm	
			burrow. Retrieval/ID of charcoal macrobot	bags	
102	114	Soil	Ditto	1 x 30cm	
				bag	
103	110	Soil	Possible remnant of OLS. Retrieval/ID of	1 sack	
			charcoal macrobot		
104	110	Soil	Ditto	1 sack	
105	107	Charcoal-rich	Charcoal ID and possible C14	1 x 30cm	
		soil	1	bag	
106	11	Soil	Assessment for macrobot/pollen. May	1 sack	
			contain pot frags.		
107	13	Soil	Ditto	1 sack	Sub-sample
					to AC/9-1-
					09
108	11	Charcoal	Charcoal ID and possible C14. (15 indiv.	1 x 15cm	AC/ 9-1-09
			bagged pieces and one bag of mixed)	bag	
109	13	Charcoal	Charcoal ID and possible C14 (6 indiv.	Ditto	AC/ 9-1-09
			bagged pieces)		

G1629 CROMLECH FARM SAMPLE INDEX



Based on Ordnance Survey maps. © Crown copyright. All rights reserved. Licence number AL 100020895. Cromlech Farm Fig. 1 Location maps

Cromlech Farm Fig. 2 Sketch of the cromlech by Skinner in 1802, from the south

Cromlech Farm Fig. 3 Sketch of the cromlech by Britton about 1820, from the east

Cromlech Farm Fig. 4 The stones from the south-east c. 1900 (Griffiths)

Cromlech Farm Fig. 5 The stones from the south before excavation 2008

Cromlech Farm Fig. 6 General location of the mound, geophysical survey area and soil test pits. Scale 1:1000. Based upon Ordnance Survey data © Crown copyright. All rights reserved. Licence number AL 100020895

Cromlech Farm Fig. 9 General plan

Cromlech Farm Fig. 10 Trench 1 Plan and sections

Cromlech Farm Fig. 11 Trench 1 Stony layer (106), from the south. 2m and 1m scales

Cromlech Farm Fig. 12 Trench 1 Charcoal deposit (107), from the west. 25cm scale

Cromlech Farm Fig. 13 Trench 1 Bedrock stone [118], from the south. 25cm scale

Cromlech Farm Fig. 14 Trench 2 Plan and sections

Cromlech Farm Fig. 15 Trench 2 Stony layer (3) over mound, from the east. 2m and 1m scales

Cromlech Farm Fig. 16 Trench 2 Top subsoil of layer (11), showing probable burrows, from the south. 1m scale

Cromlech Farm Fig. 17 Trench 3 Plan and section

Cromlech Farm Fig. 18 Trench 3 after excavation to bedrock and subsoil, from the south-east. 1m scale

Cromlech Farm Fig. 19 Stone and chert objects. Scale 1:1 1-2 Stone. 3-6 chert

Cromlech Farm Fig. 20 Pottery. 14-19 Context 11. 21 Context 13. Scale 1:1

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