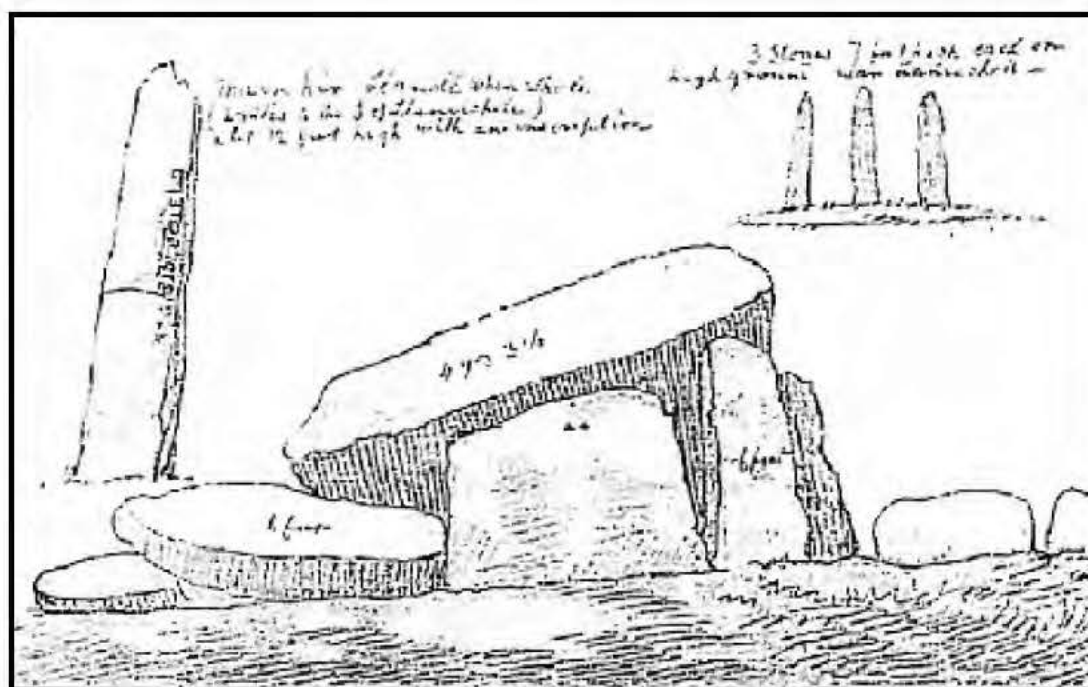


LLANFECHELL: A PREHISTORIC FUNERARY AND RITUAL LANDSCAPE IN NORTH ANGLESEY: Excavations at Cromlech Farm and Carrog Farm



By George Smith with Astrid Caseldine, Catherine Griffiths, David Hopewell,
Frances Lynch, Inga Peck and Ben Stern



Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

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Cover picture: Cromlech: Sketch by Rev. J. Skinner 1802

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INTRODUCTION

Anglesey has a wealth of visible prehistoric archaeological remains and these have been the subject of a considerable amount of research, much of which has focussed on the funerary and ritual monuments, the Neolithic chambered tombs, the Bronze Age burial mounds and the standing stones (Fig. 1a). In 2006 Anglesey was included in a survey by Gwynedd Archaeological Trust, for Cadw, of all prehistoric funerary and ritual monuments in Wales. The identification of sites at risk or in need of evaluation led to work at a number of sites in the Llanfechell area including two described here, at the possible Neolithic chambered tomb at Cromlech Farm and at a standing stone north of Llanfechell church (Fig. 1b). The presence of several other prehistoric features around Llanfechell, including some recently discovered, strongly suggests that it was a favoured place and a focus for ceremony and burial.

The site at Cromlech Farm was first recorded in 1802 by the Reverend John Skinner during a tour of Anglesey.¹ His description and sketch showed it as an apparently intact chambered tomb (Fig. 2a). At the present time it consists of an exposed area of massive horizontal slabs against which leans one loose slab. In 2008 survey and excavation was carried out by GAT for Cadw to assess these remains, to try to ascertain whether the site had been a Neolithic monument and if so, whether any structures or deposits of value survived. In a field about 1.5km south-east of Cromlech Farm and 500m north of Llanfechell church is a large standing stone that had been leaning for many years. In November 2009 it was reported to have fallen over. Cadw requested GAT to carry out an archaeological survey and investigation prior to having the stone re-instated. The results of this work are described here.

Acknowledgements

Thanks are due to the landowner and farmer John Griffiths for permission to excavate at Cromlech Farm and to Robin Grove-White, landowner, and to Jack Jones, farmer, for permission to excavate at the Llanfechell standing stone. Thanks go to Frances Lynch and David Longley for useful comments and discussion, to Dr George Nash, Terry Williams for information and photographs, to Toby Driver of the RCAHMW for permission to publish Fig. 8a and to David Chapman of Ancient Arts for experiments with stone working. The work at Cromlech Farm was carried out by the author with David Hopewell and Jane Kenney, all of GAT, with volunteers, Cliff 'Beaver' Hughes, Jeff Marples, Anne-Marie Oattes and John Rowlands. The work at Llanfechell standing stone was carried out by the author and David Hopewell. The standing stone removal and reinstatement was organised by Stuart Brown of Cadwraeth Cymru, the Cadw works team, and carried out by Aled Ellis, Stone Mason and Building Contractor of Henllan, Denbigh, with the assistance of Gwilym Pritchard of Cadwraeth Cymru. Thanks also go to Kate Griffiths for preparing the pollen samples from Cromlech Farm and to Roderick Bale for processing the bulk soil samples from Llanfechell standing stone.

GENERAL TOPOGRAPHICAL AND HISTORICAL BACKGROUND

The bedrock of the area around Llanfechell is of ancient folded pre-Cambrian metamorphic schist and gneiss. These have been heavily glaciated leaving an undulating landscape (Fig. 1b) of hummocks of bedrock and dumps of fluvio-glacial clay and silt known as drumlins.² The soils of the area are brown earths with alluvium in the valley bottoms (Soil Survey and Geological Survey 1:50,000 maps of Anglesey) and the better-drained parts provide good pasture with occasional arable. It is likely that when the area was first cleared of forest the brown earth soils would have been very fertile and suitable for early agriculture. There are a few rock outcrops and evidence of small scale quarrying for local building. The village of Llanfechell lies within a slight declivity in this undulating landscape, set around the bridge of

Pont-y-plas across the Afon Meddannen. The river is a tributary of the Afon Wygyr, which enters the sea at Cemaes. *Wygyr* means 'The meeting of two rivers' and *Meddannen* means 'the gently flowing river'. This was a favoured place for settlement, sheltered, with a water supply, surrounded by good farmland. The present village is an unusual example, for Anglesey, of a sizeable nucleated settlement. It is thought to have origins in the Early Medieval period as a monastic settlement.³

The Cromlech Farm site, a Neolithic chambered tomb, lies within a declivity. The Llanfechell standing stone in contrast lies on the top of a ridge, which lies south-west to north-east. This hill or ridge-top setting is one common to all the other known sites in the area, which may have provided inter visibility. It is possible that the three stone setting once supported a capstone and formed a chambered tomb.⁴ There is also a large slab in the south-east corner of Llanfechell church that has been suggested to have been part of a cromlech.⁵ Recent aerial photographic survey has identified other prehistoric sites in this area, including a probable Bronze Age burial mound cemetery and a Late Bronze Age/Early Iron Age settlement.

CROMLECH FARM

The site known as Cromlech, at SH 3604 9200, was visited, described and sketched from the south by the Rev. John Skinner in 1802 during an antiquarian tour of Anglesey.⁶ Skinner's drawing appeared to show that it was a partially collapsed chambered tomb with a large horizontal stone slab '4yds 3½ {inches}' (3.75m) long supported by at least three uprights '6 feet' (1.83m) tall at the east end, others, including one '6 feet' long, fallen at the west end (Fig. 2a). The site was drawn again about 1830⁷, from the east, which confirmed that Skinner's sketch was realistic (Fig. 2b). There is no record of any antiquarian excavation or of any casual finds from the site and there is no measured plan of the site. The stones however were photographed about 1900⁸ when it was exactly as it is today, just a low mound from which protruded a number of large slabs of stone with one large loose slab lying at an angle, propped across other stones (Fig. 2c). The monument had therefore been severely damaged during the intervening years and Baynes in 1936, records local memories of 'great quantities of stone being removed to form a wall'. The farm was once part of the Penrhyn Estate, and agricultural improvements are likely to have been carried out. More recently the site has been visited by Dr George Nash of SLR Consulting who identified cup-marks and a possible cup and ring mark on the stones as well as another cup-mark on a rock exposure about 350m to the south.⁹ The presence of cup marks, normally regarded as belonging to the early second millennium BC, provided further indication that the exposed stones were ancient and that the site had then been regarded as important.

At present there are no features or finds that clearly identify it as a genuine Neolithic chambered tomb and it has therefore not been officially recognized as such. However, the main exposed horizontal slab was of a similar size to the cover slab recorded by Skinner and it was possible that the monument was merely collapsed and partly robbed, rather than destroyed. If that were the case then the tomb would be an important monument and so, with support from Cadw, an evaluation survey and excavation was carried out.

The monument consists of a low mound in a fairly flat field. The amorphous 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 and during the excavation plough scratches were found on a bedrock slab at the east end of the mound (Fig. 4) and dumps of small clearance stone were found on the mound.

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. A fluxgate gradiometer geophysical survey and gridded soil test-pitting were first carried out, but neither provided significant information. Three trial trenches were then excavated in September 2008. The first investigated the south side of the rock exposure, to ascertain whether the visible slabs did drive from collapsed. The second investigated the east end of the mound, where an entrance and 'forecourt' might have been a focus of activity. The third trench was further to the west, away from the exposed stone slabs, to ascertain whether the low mound that continued there was a natural or artificial feature.

The geophysical survey produced little evidence for the existence of buried archaeology that might be associated with a tomb but suggested that bedrock is close to the surface where the mound occurs in the field. Several localised anomalies showed that stone and iron rubbish had been dumped, presumably where the large stones were creating an obstruction to ploughing. The soil pitting was designed to complement the geophysical survey and to provide additional information. Twelve small pits were dug on a grid. These showed a uniform dark humic soil across the area and 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 those pits above the mound lay over stony horizons suggesting that 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 two pits at the south side of the mound, which possibly lay over buried features, whether natural or artificial.

EXCAVATION RESULTS

A detailed plan of the mound and all exposed stones was made, as well as a longitudinal profile (Fig. 3). The plan recorded the position of the cup-marks identified by Nash in 2005, as well as new features.

Trench 1 (Figs 3 and 4)

This trench examined the south side of the mound and provided a section across the deposits around mound, showing their relationship to the main rock exposure and the possible 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). 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 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, which continued into a number of small irregular hollows in the top of the sub-soil (119). These features are of uncertain provenance because of the animal disturbance and the proximity to layers with finds of post-medieval date.

The largest slab [118] of the rock exposure, regarded as a possible fallen capstone, was shown to be a natural piece of bed rock, slightly detached but still lying *in situ* on outcropping rock

(Fig. 4a). Two other slabs, however, were not *in situ* bedrock but loose and lying freely. The largest [117] lay at an angle against slab [118]. Its south side was jagged and broken, probably from demolition. The upper face of this stone has a cup-mark and a part of a possible cup and ring mark (Fig. 3), recorded by Nash in 2005. The smaller slab [116] lay under [117]. Both were left in place during the excavation.

Artefacts from the trench were mainly 19th and 20th century domestic pottery and bottles. Two items of earlier origin were a small manufactured stone disc from the modern top soil and a struck flint flake from the lower plough soil (102).

Trench 2 (Figs 3 and 4)

This trench provided a cross-section through the deposits at the east end of the mound. It also coincided with a gap between two surface exposures of large rocks that proved to be *in situ* bed rock. Removal of the topsoil revealed another large stone slab dipping gently to the west, on the east edge of which were a series of deep plough scratches (Fig. 4). Overlying the slab was a stony horizon (3) which contained 19th century pottery, glass, iron and a broken whetstone and interpreted as a dump of field clearance stones and rubbish.

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. This produced a scatter of worked chert fragments (Fig. 4). The subsoil (9) was compact yellow-brown silty clay with about 10% sub-angular small stones.

At the west end of the trench the stony 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 and more angular fragments of stone than those 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, conjoined patches and of dark brown humic soil (11). Excavation of these patches showed them to be a complex of shallow linear hollows with one slightly more larger and more discrete hollow [12] in the top of (20) (Fig. 4). Layers (11) and (13) contained a scatter of charcoal fragments, several pieces of prehistoric pottery and two pieces of flaked chert.

The linear hollows meandered horizontally in the top of the clay subsoil and appeared most likely to be small mammal burrows utilising a restricted space beneath an overlying stone slab that had later been removed.

Trench 3

Removal of the topsoil revealed that the ‘mound’ here was just an outcrop of *in situ* bedrock. The soil below the ploughing zone contained large fragments of broken rock and there were no buried layers or features. The plough soil contained 19th century pottery and glass as well as several pieces of black chert, of which 3 were possibly deliberately shattered chunks and one was a fragment of a fine unretouched blade.

ARTEFACTS

The great majority of the objects recovered were from rubbish dumped on the mound as a marginal area and mainly pottery from the first half of the 19th century. The majority appear to belong to a period before the probable demolition of the cromlech. This is understandable

because after the demolition the outcrop became less of a marginal area and less likely to have been used as a dump.

Pottery (Fig. 20)

By Frances Lynch

These 10 small sherds and 13 tiny fragments come from two contexts (11 and 13) both in a crack between two blocks of bedrock in Trench 2. At least three pots are involved and their sherds are shared between the two contexts. All the pottery is compact and well-fired but the edges are slightly abraded suggesting that these pieces were part of already broken pots.

Find 21 from context 13 is the largest group and most sherds come from the same vessel, a Beaker decorated with alternating bands of horizontal hyphenated lines and smooth undecorated areas. The plain band is 20mm wide and the decorated areas probably 6 or 7 lines deep but none is complete. The diameter is perhaps 140mm. Such a vessel would be among some of the earliest Beakers in Britain e.g. the small pot from Alderbury, Wilts;¹⁰ the type is not represented by any complete pot in Wales. The walls are 7-8mm thick and the fabric is light brown, grading to reddish in the core, hard and well-fired. A very little well crushed stone grit is visible.

Another Beaker decorated more heavily with coarser lines of square-toothed comb stamping came from Context 11. This may have been decorated all over with evenly spaced lines, but too little survives to be certain. The wall is rather thicker and the colour a yellow-beige, but it is equally compact and well-fired. Two other sherds show lighter hyphenated lines, certainly Beakers and probably different pots. There is a single sherd from Find 21 which shows two lines of tiny vertical marks which are probably made with some different type of comb since they are too sharp to be whipped cord.

All the sherds are consistent with being Beaker pottery and the restorable pieces from Find 21 suggest that a surprisingly early example of this pottery style was being used at Cromlech Farm. Such a judgement is based on typology, rather than the radiocarbon date obtained which is compatible with rather later Beakers. The find is really too small to resolve the dilemma.

Stone

The topsoil in Trench 1 produced a small disc of fine sandstone, 30mm diameter and 12mm thick. It seems to have been made from a natural flat piece of stone that has been roughly chipped to shape. It is not likely to be a post-medieval object and would have to have been made with some difficulty. It most resembles an unfinished spindle whorl but is rather small for that, those being most frequently in the range of 40-50mm diameter.

The topsoil in Trench 3 produced a broken whetstone of fine sandstone. It is a common type and probably a discarded post-medieval scythe/sickle hone-stone.

Flint and chert

These are summarised in Table 1. A scatter of 10 pieces of black chert was found in the lower topsoil (2) at the east end of Trench 2 (Fig. 4). Eight other pieces were found elsewhere in the trench but not in a distinctive scatter. 6 came from post-medieval layers, 2 came from layer (11) associated with Beaker pottery.

Table 1 Flint and chert by category and context

<i>Trench</i>	<i>1</i>	<i>2</i>	<i>3</i>
----------------------	-----------------	-----------------	-----------------

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

Material: The black chert is small and of poor flaking quality. Similar chert occurs locally 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 limestone outcrops on the east side of the island.¹¹ The one piece of worked flint was also made from a pebble.

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, from layer (11) in trench 2, was a microlithic-sized blade, probably punch-struck, 26mm by 7mm by 2mm. The one piece from Trench 3 was the mid-segment of a thin blade of chert. The only retouched piece was from the plough soil in Trench 2 and was a small broken flake that had an obliquely snapped end with some abrupt retouch.

The only worked piece of flint was from the topsoil in Trench 1 - a secondary flake of honey-coloured flint from a partially rolled pebble.

Discussion: None of these pieces are diagnostic of date by technique or typology. Although two of the pieces were found in close association with the Beaker pottery the greatest number were found further east and so may be unrelated to the pottery.

ENVIRONMENTAL EVIDENCE

Wood Charcoal

By Astrid E. Caseldine and Catherine J. Griffiths

A small amount of charcoal was identified from charcoal recovered from bulk samples and from hand-picked material, collected during the excavations at the possible chambered tomb, in order to gain some information about former woodland in the area. Two pieces of identified charcoal were also sent for AMS dating.

Methods

The charcoal was randomly selected apart from the samples identified for dating purposes. The charcoal was fractured to produce clean sections (transverse, transverse longitudinal and radial longitudinal) for examination. A Leica DMR microscope with incident light source was used to identify the charcoal. Identification was by reference to standard texts.¹²

Results and discussion

The assemblages are small and it is possible that larger samples would have produced greater diversity. However, it is evident that oak (*Quercus* sp.) and hazel (*Corylus avellana*) dominate all the samples, with alder (*Alnus glutinosa*) and birch (*Betula* sp.) occurring in only one sample each. Birch was present in one of the samples (106) from a soil (11), associated with 'ancient' animal burrows, dated to the Beaker period, whilst alder occurred in sample 109 from a soil (13), within a hollow (12), dated to the Early Medieval period. The latter

feature was continuous with the soil (11) considered to represent burrows indicating mixing of the deposits. In both cases hazel charcoal was used for dating. The assemblages are much too small to draw any conclusions about differences in woodland during the two periods and the fact that the charcoal is from soils from features interpreted as ‘ancient’ animal burrows means that the assemblages might include material from more than one period.

Whereas the latter samples were from the excavation at the eastern end of the mound, the remaining samples, which comprised only oak and hazel, were from a layer (110) containing charcoal fragments and a feature (107) containing a charcoal deposit recorded during excavations on the south side of the mound. Although the charcoal from these samples could relate to the earlier prehistoric period, it is also possible that some or all of it could be later in date.

The evidence suggests oak and hazel woodland in the vicinity of the site during the Beaker and Early Medieval period and is in keeping with charcoal evidence from other sites in Wales.¹³

Table 2 Charcoal identifications from Cromlech Farm

Trench	1	1	1	2	2	Total
Sample	103	104	105	108	109	
Context	110	110	107	11	13	
<i>Quercus</i> spp. (Oak)	2	3	2	7	5	19
<i>Betula</i> spp. (Birch)	-	-	-	1	-	1
<i>Alnus glutinosa</i> (L) Gaertner (Alder)	-	-	-	-	1	1
<i>Corylus avellana</i> L. (Hazel)	3	2	3	4*	6*	18
Total	5	5	5	12	12	39

*includes charcoal used for AMS dating

Charred Plant Remains

By Astrid E. Caseldine and Catherine J. Griffiths

During excavations samples were taken to retrieve environmental evidence and material for AMS dating. Samples for charred plant macrofossil analysis were taken from a possible old land surface (110) and a patch of charcoal-rich soil (107) from Trench 1 on the south side of the mound and from the remains of a soil (11) and a hollow (12) filled with soil (13) from Trench 2 on the east side.

Methods

The samples were processed using manual flotation in the laboratory followed by sieving. The finest sieve used to retain the flots was a 250µm sieve. The minimum mesh used for the residues was 500µm. The samples were examined using a Wild M5 stereomicroscope. Identification was by reference to modern type material and seed atlases.¹⁴ Nomenclature and ecological information are based on Stace.¹⁵ The results and sample details are given in Table 3.

Results and discussion

The assemblages from samples (103 and 104) from layer 110, interpreted as the remains of a possible old land surface on the south side of the mound, differ from each other. Sample 104 produced only a few charred grass (Poaceae) seeds, moss, rhizome fragments and a tree bud,

apart from wood charcoal, reflecting grassland. In contrast the remains from sample 103 included a small amount of hazelnut (*Corylus avellana*) shell fragments, heather (*Calluna vulgaris*) remains and an oat (*Avena* sp.) caryopsis. The oat could indicate cultivated oat but could equally represent wild oat. Similarly, the hazelnut shell could have been gathered incidentally along with wood for fuel or indicate the deliberate collection of wild foodstuffs. The date of this activity is unknown. Sample 105 was from a patch of charcoal-rich soil (107), also on the south side of the mound, but produced only some indeterminate charred material.

On the east side of the mound, charcoal from a humic layer (11), considered possibly to represent the remnants of ancient small mammal burrows, yielded a date compatible with Beaker pottery from the same layer. The only other plant remains from this layer were a gorse (*Ulex* sp.) spine and a seed possibly of wood sage (cf. *Teucrium scorodonia*), suggesting some scrub woodland in the area.

Rather more plant remains were recovered from sample 107 from a larger hollow (12) filled with a similar soil (13) to that of the humic layer and which appeared to be continuous with it. The plant remains included wheat (*Triticum* sp.), barley (*Hordeum* sp.) and oat. Again the oat could be either wild or cultivated but the other cereal remains clearly indicate arable cultivation, as do several of the weed seeds, notably corn marigold (*Chrysanthemum segetum*). Other taxa which are commonly associated with arable cultivation included cleavers (*Galium aparine*), sheep's sorrel (*Rumex acetosella*), docks (*Rumex* sp.) and stitchworts (*Stellaria* sp.). Some of these are also indicative of disturbed ground or grassland, which are likewise habitats of tares (*Vicia hirsuta*/*V. tetrasperma*) which are also represented. Further evidence for grassland was provided by a possible seed of pale flax (*Linum* cf. *bienne*), while grass seeds included heath grass (*Danthonia decumbens*), which is frequently found on acidic and peaty soils today but may have been a weed of cultivation in the past.¹⁶ Sedges, indicating damp conditions, included deergrass which is typical of bogs, moors and wet heaths. Corn marigold is a weed of acidic arable soils, often sandy soils, and with the other indicators of acidic soils, suggests such soils were being cultivated in the area.

Charcoal from layer 13 gave an Early Medieval date and, together with the presence of corn marigold (present from the Iron Age period in Britain), suggests the cereal remains relate to a later period of activity in the area than the Beaker period. Although the charred plant assemblage is small and lacks detailed cereal species identifications, it is not inconsistent with other Early Medieval assemblages from Wales, including sites on Anglesey such as Cefn Du and Melin y Plas.¹⁷ The layer also contained pottery fragments from the same long-necked Beaker pot as in layer 11 and it is perhaps possible that the pottery and older charcoal might have been introduced into the 'ancient' animal burrows in the Early Medieval period along with the later charred plant remains or, alternatively, the Early Medieval charred plant remains might be a later intrusion and the animal burrows earlier in date. However, the complete contrast between the material retrieved from contexts 11 and 13 suggests that the assemblage from 13 is mainly discrete and as such its content would agree with the Early Medieval date, rather than earlier.

Table 3 Charred plant remains from Cromlech Farm.

Trench	1	1	1	2	2	Habitat Preference
Sample	103	104	105	106	107	
Context	110	110	107	11	13	
Volume (litres)	12	4	0.5	6	9.7	
<i>Triticum</i> sp. grain (Wheat)	-	-	-	-	1	A
<i>Triticum</i> sp. rachis frag	-	-	-	-	1	A
<i>Hordeum</i> sp. grain					3	A
<i>Hordeum</i> sp. rachis					1	A
<i>Avena</i> sp. (Oats)	1	-	-	-	5	A
Cereal indet.	-	-	-	-	6	A
<i>Corylus avellana</i> L. (Hazel) shell frags	10	-	-	-	6	W
<i>Stellaria</i> sp. (Stitchworts)	-	-	-	-	1	W, B, A, M, G
<i>Rumex acetosella</i> L. (Sheep's sorrel)	-	-	-	-	1	H, G, A
<i>Rumex</i> sp. (Docks)	-	-	-	-	1	
<i>Calluna vulgaris</i> (L.) Hull	8	-	-	-	-	H, M, W
(Heather) stem/root frags						
<i>Vicia hirsuta</i> (L.) Gray/V. <i>tetrasperma</i> (L.) Schreber (Hairy/smooth tare)	-	-	-	-	1	D, G
<i>Rubus fruticosus</i> agg. (Bramble)	-	-	-	-	1	W, G
Rosaceae - thorn	-	-	-	-	1	W
<i>Ulex europaeus</i> L. (Gorse) spine	-	-	-	1	4	G, H, W
<i>Linum</i> cf. <i>bienne</i> (Pale flax)	-	-	-	-	2	G
<i>Teucrium</i> cf. <i>scorodonia</i> L. (Wood sage)	-	-	-	1	-	W
<i>Galium aparine</i> L. (Cleavers)					2	A, W, D
<i>Chrysanthemum segetum</i> L. (Corn marigold)	-	-	-	-	3	A, D
<i>Trichophorum cespitosum</i> (L.) Hartman (Deergrass)	-	-	-	-	1	W H, M
<i>Carex</i> sp. (Sedges)	-	-	-	-	3	B, M, W, Gw
<i>Danthonia decumbens</i> (L.) DC. (Heath grass)	-	-	-	-	1	H
<i>Avena</i> sp. Poaceae (Oat/grass)	-	-	-	-	1	G, H, M, W, w
Poaceae (Grasses)	-	3	-	-	1	G, H, M, W, w
Seeds indet.	-	-	-	-	2	
<i>Pteridium aquilinum</i> (L.) Kuhn (Bracken) leaf frags.	-	-	-	-	4	W, H
Moss stem frags.	-	2	-	-	-	
Rhizome frags.	3	1	-	-	3	G
Stem node	1	-	-	-	-	
Tree bud	-	1	-	-	-	W
Organic material indet.	14	-	4	-	1	

Habitat preferences: A = arable, cultivated; D = disturbed ground, wasteland; G = grassland; H = heaths, moorland; M = marshes, fens, bogs; W = woods, hedgerows, scrub; w = wet

Pollen

By Astrid E. Caseldine

One pollen sample (107) was examined from the fill (13) of the large hollow [12] that was excavated in Trench 2 on the eastern side of the possible chambered tomb mound to obtain information about the surrounding environment.

Methods

The sample was prepared using standard procedures including acetolysis, treatment with hydrofluoric acid and micro-sieving.¹⁸ Identification was by comparison with modern reference material and by reference to pollen identification atlases including Moore.¹⁹ Pollen nomenclature is modified from Moore following Bennett.²⁰ A minimum pollen count of 300 total land pollen (TLP) grains was achieved. Spores are expressed as a percentage of TLP plus the group itself. Indeterminable pollen is expressed as a percentage of TLP, spores and the group itself. The results are presented in Table 4.

Results and discussion

The presence of relatively high percentages of indeterminable pollen may indicate a bias in the results because of differential pollen preservation. Relatively resistant Asteraceae pollen types are also quite well represented. However the assemblage is dominated by Poaceae (grasses) and *Corylus avellana* type (probably *Corylus* (hazel) rather than *Myrica gale* (bog myrtle)) pollen. As well as Poaceae pollen, cereal type pollen and herb taxa, including *Aster* (daisy) type, *Anthemis* (chamomile) type, Lactuceae (dandelion), *Plantago lanceolata* (ribwort plantain) and *Cirsium* (thistle) type, are well represented. A number of the weed pollen taxa are commonly associated with cultivation and *Anthemis* type includes taxa such as corn marigold which is present in the plant macrofossil record.

The assemblage suggests a largely open landscape with cereal cultivation taking place in the area, but a relatively high percentage of *Corylus* pollen suggests the presence of hazel woodland, perhaps scrub development following abandonment. There is some evidence for the presence of oak and alder woodland in the area as well. The pollen assemblage is consistent with the charred plant macrofossil assemblage recovered from the same context which contained cereal remains and the charcoal record which indicated hazel, oak and alder woodland growing in the area.

However, the sample was from a soil (13) filling a large hollow which appeared to be continuous with soil (11) filling smaller hollows and thought to be the remains of ‘ancient’ animal burrows. An AMS date of Cal AD 720-740 and 770-970 from hazel charcoal from the soil (13) suggests an earlier Medieval date, and this is consistent with the presence of corn marigold seeds and possibly *Anthemis* type pollen, but a date of 2300-2130 cal BC and 2090-2050 cal BC from hazel charcoal from the ‘ancient’ animal burrow soil (11) and Beaker pottery from both contexts suggests mixing of older and later material and the interpretation of the results must therefore be treated with caution.

Table 4 Pollen from Cromlech Farm

Sample	107	
Context	13	
Taxa	Count	%
	TP	
<i>Quercus</i>	5	1.6
<i>Alnus</i>	29	9.5
Total trees	34	11.1
<i>Corylus avellana</i> type	110	36.1
Total shrubs	110	36.1
Poaceae	102	33.4
Cereal type	9	3.0
<i>Aster</i> type	17	5.6
<i>Anthemis</i> type	2	0.3
<i>Cirsium</i> type	4	1.3
Lactuceae	8	2.6
<i>Teucrium</i>	1	0.3
<i>Plantago lanceolata</i>	5	1.3
<i>Fallopia convolvulus</i>	1	0.3

<i>Rumex acetosa/acetosella</i>	2	0.7
<i>Potentilla</i> type	2	0.7
Rubiaceae	2	0.7
<i>Valerianella</i>	1	0.3
Apiaceae	1	0.3
<i>Urtica</i>	1	0.3
Total herbs	159	52.1
Total pollen (TP)	305	100.0
		TPS
<i>Polypodium</i>	10	3.1
<i>Pteridium</i>	7	2.2
Pteropsida (monolete) indet.	2	0.6
Total spores	35	33.7
Total pollen + spores (TPS)	324	100.0
		TPSI
Indeterminable	55	14.5
Total + indet. (TPSI)	379	100.0

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 that the slab was not a capstone but was *in situ* bedrock. This means that the stones recorded by Skinner were almost certainly a constructed feature, subsequently destroyed, of which the loose slabs [116] and [117] are the only surviving parts.

Trench 2 showed a significant scatter of struck chert waste pieces concentrated just off the edge of the mound, with a smaller number 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 presence of the scatter shows that there had been chert working around the east end of the mound. This may have been associated with the deposition of Beaker pottery but none of the chert pieces were diagnostic dateable pieces.

The deeper excavation at the west end of Trench 2 showed that there were some stratified deposits of which part remains in place. Most of the depth of material there, however, belongs to the 19th century 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 slightly detached but still more or less *in situ* stone slab covering layers (11) and (13) and if so, that the pottery and chert were introduced there by small mammals. The missing stone was probably removed when the possible chambered tomb was demolished 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 episode.

The discovery of the pottery and worked chert and of botanical material of probable Early Medieval date, but not of any Post-medieval material, suggests that the hollows formed at some time prior to the 19th century demolition and that the finds were introduced from a deposit that originally existed higher up in the mound. This re-deposition accords with the small size and abraded state of the pottery fragments and the fact that they are a mixture of non-joining pieces, probably from three separate pots. Potentially the original pots could have been complete and accompanied by a cremation burial or burials inserted in the chambered tomb as a secondary deposit.

Two pieces of charcoal were selected for AMS radiocarbon dating, both identified as hazel, young wood by Astrid Caseldine. One, from the general layer (11) produced a date 3780 +/- 40 BP (Beta-254971), Cal BC 2300 to 2130 or Cal BC 2090 to 2050. The other, from layer (13) in hollow [12] produced a date of 1180 +/- 40 BP (Beta-254972), Cal AD 720 to 740 or Cal AD 770 to 970. The first date is broadly compatible with other dated Beaker sherds and the later date matches with the type of palae-macrobotanical assemblage from that layer, indicating later intrusion. But neither would be appropriate for the erection of a megalithic tomb.

The presence of the Beaker pottery and of the charcoal contemporary with it proves that there was some early prehistoric activity here and such a secondary deposit in an earlier chamber is one that is paralleled elsewhere in Anglesey. Secondary deposits of Beaker pottery have been found at the Lligwy and Ty Newydd chambered tombs and a Beaker cist burial was inserted in the chambered tomb of Pant y Saer.²¹ Beakers have also been found in tombs at Capel Garmon (Denbighshire) and Dyffryn Ardudwy (Meirionnydd).²² Although Beaker burials were typically under round barrows it is clear that the older monuments were still appreciated with some form of use. 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 (1.83m) high. The east-west orientation of the monument is also typical of chambered tombs. The form of the tomb, as illustrated by Skinner and Britton, is uncertain but Skinner's drawing hints that it was more than just a small chamber and the lack of evidence of a mound suggests that it was not a Passage Grave. It had a very large capstone, broad side slabs and unusually tall propping stones at the east end. Within Anglesey these features makes it most resemble the eastern chamber at Trefignath, Holyhead, which was the latest of three chambers constructed there. The east chamber had parallels in design with Clyde tombs and, from the styles of pottery found, its latest use in the Middle Neolithic, around 3000 Cal BC.²³

The excavation has shown that all the stone slabs presently visible are part of a natural *in situ* rock outcrop apart from two slabs, [117], lying at an angle at the east edge of the outcrop and a smaller slab [116] beneath. The position of stone [117] is unchanged from that shown on a photograph taken about 1900.²⁴ This stone has a cup mark on its upper face, towards its east edge and a possible ring mark at its east corner (Fig. 3), both features previously recorded.²⁵ The hollow of the ring mark is very irregular compared to that, for instance, at Llwydiarth Esgob, Anglesey²⁶, and lies in odd position on the corner of the slab and so seems most likely to be a natural weathering feature. The cup mark on this slab is also unusual in that its profile is at an angle to the rock face and so appears to have been created when the slab was already at an angle, similar to that at which it now lies. The thickness of stone [117] (c. 0.40m) matches closely with that of the capstone shown on Skinner's drawing and so could be a remnant of that capstone, the cup-mark made when the tomb was already partly collapsed. Prehistoric cup-marks have been found as additions to the cap-stones of other chambered tombs at Ty Newydd, Rhosneigr, Anglesey and Bach Wen, Clynog, Gwynedd. It is possible that at Cromlech, and elsewhere, the cup-marks belong with Beaker period re-use of the tombs.

The work has shown that there are residual remnants of prehistoric activity around the mound and that some early deposits still survive in the cavity at the east side as a result of small mammal activity in the relatively recent past. This cavity was almost certainly created by removal of natural block of stone during 19th century demolition and quarrying of the monument and outcrop. The deposits which remain in this area are a continuation of those excavated and probably include more artefacts and ecofacts, which could include objects that derive from and are contemporary with the monument, but it now seems unlikely that there are any stratified deposits contemporary with the tomb. The former presence of the tomb,

however, does make it likely that there are other contemporary features, such as settlement, in the vicinity.

One unexpected result of the excavation of this small area of buried soil is the recovery of palaeo-botanical material giving a picture of the environment and agriculture of this area during the 8th-9th centuries AD. It shows that there was arable cultivation nearby, including wheat and possibly oats, probably on rather poor soils and that there was some pasture too. This is interesting because there is so far no evidence of settlement at this period in the area, and because it pre-dates the expected foundation of Llanfechell itself.²⁷

THE STANDING STONE NORTH OF LLANFECHELL CHURCH

In November 2009 a large and well-known standing stone close to the east edge of Llanfechell was reported to have fallen down. This followed a period of heavy rain which caused water-logging and may have softened the ground. The Cadw inspector Dr Mike Yates then arranged for a visit from GAT to provide an assessment and project design for excavation of the disturbed stone-hole and re-instatement of the fallen stone.

The standing stone seems to have already been leaning when it was visited by Baynes about 1910²⁸ and was unchanged when visited in 2008 (Fig. 2a and 2b). The stone is a large flat slab, about 2.5m high and 2.1m wide, approximately 0.30m thickness. It is approximately rectangular in shape, tapering slightly to the top and faces approximately east/west. The top edge may have been chipped to shape in antiquity but the north edge has some more recent damage, probably after being hit by farm machinery (Fig. 2a).

The stone had fallen to the east and when visited was lying flat on the ground without damage. Its base could then be seen to consist of an asymmetric triangular point. Only 70cm of the stone had been set in the ground making it surprising that it had not fallen earlier. The basal point had kicked up a part of the pit fill with a packing stone left *in situ* adhering to the stone and lifting some of the natural subsoil from the side of the pit at the same time (Fig. 2b).

METHODS

A measured drawing was first made of the fallen stone and this was used to estimate the size of the pit and to produce a design for a new pit for the stone's re-instatement. The stone needed to be moved before the excavation could take place and this was carried out by a small crane which recorded the weight of the stone as 4.6 tons. An engineering design was then produced for re-erection of the stone, involving excavation of a pit 1.6m x 3m and 1m deep, in which the stone would then be set, the pit filled with packing stones and hardcore to prevent any future erosion by cattle.

A high resolution geophysical survey was then carried out of an area of 40m square centred on the site of the standing stone pit to look for any evidence for other related features, such as burial pits. This showed that the stone had once formed part of a double-ditched *clawdd* field boundary but did not produce any evidence of any earlier features.²⁹ The area of the stone pit was excavated and recorded in January 2010, as described below, and then backfilled. Later in the year, when the ground was sufficiently dry, the stone pit was re-excavated by machine and the standing stone lifted back into place using a small crane (Fig. 2d).

TOPOGRAPHIC AND HISTORICAL BACKGROUND

The area here is undulating lowland of good agricultural quality. The soils are brown earths over glacial drift over schist in which are some areas of tuffs and gritstone with alluvium in the valley bottoms.³⁰ There are some rock outcrops and evidence of small scale quarrying.

The stone lies in a large field, part of Carrog Farm, belonging to the Bryn-ddu Estate, and is situated on a low ridge at 30m OD overlooking the village of Llanfechell. The prominent position of the stone gives it a wide view over the valley and to the west in which direction it is intervisible a low hill on which is an unusual setting of three standing stones (Fig. 1b). Beyond that hill but not visible from the standing stone are the remains of the Cromlech probable chambered tomb, described above. On the small prominent hill of Pen-y-morwydd, 1.5km to the east-south-east, is a Bronze Age burial mound and 1.7km to the north-east a Bronze Age cremation urn has been found. The area also has a number of settlement features of Iron Age type. The standing stone itself appears to be a locally isolated monument but recent aerial survey has shown a number of other features nearby that hint at a densely occupied prehistoric landscape here within which the standing stone must have played a role.

The first record of the Llanfechell stone seems to be its presence on the Ordnance Survey 1:2500 map of 1889. It was not mentioned by Skinner, who visited the village, the setting of three standing stones and Cromlech Farm.³¹ Despite this the excavated evidence showed that the stone was a prehistoric feature. It was described by Baynes, with an accompanying photograph, from which it appears that the stone was already leaning.³² The stone was also noted by the RCAHMW.³³

GEOPHYSICAL SURVEY

Summary of results

By David Hopewell

An area of 40m x 40m centred on the stone was surveyed at high resolution (0.5m x 0.25m) using a fluxgate gradiometer. Survey conditions were good with a flat field and short grass. Background noise levels were very low and geophysical anomalies were generally weak. The data was clipped to $\pm 4\text{nT}$ in order to make archaeological anomalies more visible. Both the stone-hole and the fallen stone produced clear anomalies. This probably indicates that the stone and the packing stones in the hole are weakly magnetic. Two parallel roughly linear anomalies crossing the survey area about 3m apart would seem to be a double ditched former field boundary. The responses in this survey were generally weak but detected several features. The only features that appeared to be prehistoric were the stone hole with its packing stones and the fallen stone itself. For the full report and plots see Smith and Hopewell 2011.

EXCAVATION RESULTS

The pit and an area around it sufficient for the stone's re-instatement were excavated by hand. This showed the stone pit to be teardrop-shaped in plan, deeper on the north side, designed to fit the base of the stone, which had an asymmetric pointed foot. There were no other features in the area around the pit except for a thin layer of dark charcoal-rich material (10), compacted into the top of the subsoil at the east side (Fig. 7). The fill of this feature (Sample 105) included hazel and oak charcoal (Table 5).

The excavation of the stone pit was hampered by rising ground water. The stone pit had medium sloping sides in cross-profile and was cut into a subsoil of orange-brown glacial till. The pit was filled with a darker soil than would be expected if it was just re-deposited subsoil. However, most of it was taken up with twenty large packing stones, varying from 20-50cm in length, all of which had been disturbed to some extent by the collapse of the stone (Fig. 7). A small amount of fill was still *in situ* against the east side of the pit where it had not been kicked out by the foot of the stone. Two pieces of charcoal (Samples 103 and 104), one of which was of hazel (Table 1) were collected from this area and 10L of soil was collected for flotation for other possible carbonised macrobotanical remains. One piece of the charcoal was submitted for AMS dating but proved to be insufficient as it was only partly carbonised and

dissolved during processing. Another piece of charcoal, identified as hazel was obtained from processing of the bulk soil sample and this produced an AMS date (see below).

The pit had a base that sloped down from south to north and had been carefully designed to fit the shape of the base of the standing stone. At the lowest part of the pit, where the toe of the stone had been a small horizontal slab was found still *in situ* (Fig. 7). Removal of this slab revealed a small steep-sided pit [6] 0.30m dia. and 0.12m deep. Its fill was dark and stone-free, with no visible inclusions and this was all retained for laboratory study (Sample 102). This produced a small amount of heather charcoal, one piece of which produced an AMS date (see below).

After backfilling the excavation trench the packing stones were laid over the surface to protect it from cattle trampling. The wet ground conditions meant that the area was left for some time before the re-instatement could be carried out. Meanwhile the site was re-visited to monitor its condition, when it was seen that rain had washed mud off the packing stones, and on one face of one of the largest, had revealed a pecked cup and ring-mark and another single cup mark (Fig. 6e). The cup-marks were roughly pecked, with no subsequent smoothing. Experiment showed that similar marks could be made quite quickly with a suitably pointed hard rock. The carvings were made on the naturally smooth flat face of a sub-rectangular slab c. 0.5m square and 0.15m thick and surprisingly were not set centrally on the slab. The stone was later identified from the excavation drawings and photographs (Fig. 7), where it had fallen beneath the standing stone, showing that the stone had originally been set on the east side of the standing stone. It had probably been set upright and may have been so designed that the cup and ring-mark was exposed to view on the top part of the stone. All the packing stones were subsequently cleaned, studied, drawn and photographed but no other marks were found. Most of the stones were thick flat slabs of a similar rock and thickness to that of the standing stone but of a different rock type. They were not parts of a larger slab that had been broken up because their edges were weathered. They were not all of the same rock type and were most likely glacial boulders recovered during clearance for agriculture.

ENVIRONMENTAL EVIDENCE: THE CHARRED PLANT REMAINS AND CHARCOAL

By Astrid E. Caseldine, Inga A. Peck and Catherine J. Griffiths

Samples were taken during the excavations at Llanfechell with the aim of recovering material for radiocarbon dating and to obtain environmental evidence.

The provenance of the samples was as follows:

Sample 101 - from fill of undisturbed part of standing stone pit

Sample 102 - fill of small pit at base of standing stone pit and sealed by horizontal stone slab

Sample 103 - charcoal from fill of undisturbed part of standing stone pit

Sample 104 - charcoal from fill of undisturbed part of standing stone pit

Sample 105 - from a small spread of possible burnt material at bottom of topsoil

Plant macrofossils

Methods

The bulk samples were processed using standard flotation procedures. The finest sieve mesh used to recover the plant remains was 250 µm. The samples were sorted using a Wild M5 microscope.

Results

The samples failed to produce any charred remains apart from wood charcoal. These are summarised in Table 5.

Charcoal

Methods

Samples were fractured to produce three sections (transverse, transverse longitudinal and radial longitudinal). A Leica DMR microscope with incident light source was used to identify the charcoal. Identification was by reference to Schweingruber and Schoch.³⁴

Results and discussion

Sample 104, one of the samples from the fill of the standing stone pit, failed to produce any charcoal that was large enough to be identified. The charcoal from the other samples was poorly preserved and much of it distorted. A small amount of charcoal was, however, identified from the other samples and samples from this were sent for AMS dating. Sample 102 from the fill of a small pit at the base of the standing stone pit produced only a few fragments of Ericaceae type charcoal. These gave a date of 740 to 390 Cal BC. Apart from sample 104, two other samples, 101 and 103, from the standing stone pit did yield some identifiable charcoal. Hazel (*Corylus avellana*) was identified from sample 103 and sent for dating but unfortunately proved to be insufficient. Ericaceae, hazel and oak (*Quercus* sp.) charcoal fragments were identified from sample 101 and one of the hazel fragments gave a date of 4460 to 4330 Cal BC.

The evidence suggests the growth of hazel and oak woodland in the area prior to the placement of the standing stone. The presence of Ericaceae charcoal dated to the Iron Age suggests the presence of heathland in the area by that time. The occurrence of Ericaceae charcoal in the same sample that was dated to the Later Mesolithic may indicate heathland in the area at that time or it is possible that it is later contamination, given the date on the Ericaceae charcoal from sample 102.

Table 5 Charcoal identifications from Llanfechell standing stone

Sample	101	102	103	105
Context	Fill of stone pit	Fill of 'foundation' pit	Fill of stone pit	From burnt area on north edge of pit
Taxa				
<i>Quercus</i> spp. (Oak)	2	-	-	1
<i>Corylus avellana</i> L. (Hazel)	2*	-	2	2
Ericaceae (Heathers)	9	3*	-	-
Indet.	14	-	-	-

* includes sample used for AMS dating

ANALYSIS OF ORGANIC RESIDUES FROM STONE SAMPLE BY GAS CHROMATOGRAPHY-MASS SPECTROMETRY

By Ben Stern, Archaeological Sciences, University of Bradford

Two micro-samples from the cup-marked stone were taken for trial analysis for residues to test the hypothesis that cup marks may have been designed to contain pigment or of oils for use as simple wick lamps. The samples were taken from inside the cup mark and from a blank area of the stone. These were analysed as part of research into the presence of organic materials in stone objects. The samples produced no evidence of any lipid residues, and closely matched the result from a control sample from the blank area of the stone.³⁵

DATING AND DISCUSSION

One charcoal sample, identified as ericaceae, probably heather, from the fill of the 'foundation' pit [6], produced a date of 2410 \pm 30 BP (SUERC-28587), 550 to 390 cal BC (81.2%) or 740-680 cal BC (11.7%) or 670-640 cal BC (2.6%) at 95% probability. The other was from flotation of a bulk soil sample from the fill of the stone pit, identified as corylus (hazel), which produced a date of 5540 \pm 40 BP (Beta-286714), 4460 to 4330 cal BC at 95% probability.

The small pit under the toe of the standing stone had a covering slab and so was clearly a deliberate foundation deposit and not an earlier post-hole as, for instance, had been interpreted for a small pit beneath the standing stone at Cremlyn South, Anglesey.³⁶ The fill of the probable foundation pit [6] did not contain any artefacts or visible inclusions such as charcoal or cremated bone but was certainly organic-rich. The laboratory analysis identified only small amounts of charcoal of ericaceae, probably heather, which was unusual, see Caseldine above, and no evidence of cremated bone. The fill of the foundation pit seemed likely to derive from a special deposit of organic material, but not a burial.

The presence of the foundation pit provided good evidence that the standing stone was indeed a prehistoric feature and not just a cattle rubbing stone. The foundation pit, sealed beneath the stone, provides primary evidence for the erection of the stone and the date from it should be significant for knowledge about standing stones generally. However, the date that was produced, in the Early to Middle Iron Age, is at odds with previous excavations at or near standing stones, which have produced artefacts or dates of the Early Bronze Age.³⁷

However radiocarbon dating of pits and even burials in the vicinity of standing stones – notably those at Stackpole Warren, Pembrokeshire, and Gogerddan, Ceredigion, has shown that there was a phase of renewed interest in these Bronze Age monuments during the Iron Age. Such interest was seen in Anglesey, too, with Iron Age burials at Bryn yr Hen Bobl and a pit dug at the entrance to Trefignath chambered tomb.³⁸ This said, it is true that the Iron Age date here must indicate, not a renewed interest in an old monument, but its initial erection.

Anglesey and Llŷn are notable for the number of standing stones known with 30 extant on Anglesey and 24 on Llŷn. Similar numbers of other possible stones are known only from place names and old records. There are a few that are probably just Post-medieval cattle rubbing stones. The Llanfechell stone is impressive, at c. 2m high and 4.6 tons weight but there are larger examples on Anglesey. The tallest is the north stone at Pen yr Orsedd, Llanfairynghornwy, which is 5.1m high. The heaviest stone is probably the larger of the two stones surviving of the stone circle at Bryn Gwyn, Brynsiencyn, which stone is 4.7m high and 3m wide. Rocks that split into fairly regular slabs were preferred, for which schist, as at Llanfechell was ideal. This rock also often has strong geologically folded banding which is similar to some megalithic art motifs and so may have been selected as being special. The majority of standing stones on Anglesey use one of the varieties of this rock.³⁹ These rocks could be obtained at several places in Anglesey but would still involve some transport. In a few cases glacial erratic rocks were used and there are a few examples of natural, *in situ* erratic rocks that were probably respected as monuments. Their origin must have seemed inexplicable and some still retain names relating to folk tales. One such occurs near Llanfechell, the huge prominent boulder called Maen Arthur, lying exposed on an outcrop at Mynydd Mechell (Fig. 1b). There are other such stones, such as Maen y Goges (Stone of the cook), near the Alaw Valley, and Maen Bras, Trearddur. Several of the more prominent genuine standing stones have folklore names and it is surprising that the Llanfechell stone does not have a name.

The date and function of standing stones generally is still debated. They are scattered relatively evenly and widely within Anglesey, compared to the more localised occurrence of Neolithic chambered tombs, for instance (Fig. 1a). This most likely just corresponds to the more extensive agriculture and settlement during the Bronze Age as, compared to the more specialised exploitation of the best soils by the first farmers. Standing stones are most frequently situated on slightly elevated summit or ridge locations but do not occur on more dramatic summits, in the way that burial cairns do. They are meant to be seen but only locally and this suggests that they were marker stones rather than purely funerary monuments. Although Early Bronze Age burials have been found close to several that have been excavated in Britain the burials could have been later additions to an existing stone. If they were related to burials then we might expect to find groups of such stones, which is not the case, although there are examples of pairs of stones. At Llanfechell there is an unusual group of three closely set stones, first recorded by Skinner in 1802 (Fig. 2a). There are also a few examples of stone rows in Britain. Some are isolated, like those on Dartmoor and Bodmin Moor and seem to be purely symbolic within the landscape. In Meirionnydd there are two stone rows as well as some isolated single stones that lie alongside major trackways with probable prehistoric origins.⁴⁰ Both these linear groups of stones are also associated with concentrations of burial mounds, indicating a ceremonial rather than just functional marking of the route. In Anglesey there is no evidence of any linearity that might be associated with ancient routes and the standing stones are quite evenly distributed. The island is generally low and undulating with similar soils and agricultural capability and this has led to a fairly even pattern of modern settlement. The same might have been the case in the second millennium BC and corresponds, broadly, with the even distribution of round barrows.

There are few examples of clear association between standing stones and other monuments although they often occur in the same area as, and so are possibly associated with Bronze Age burial mounds. One standing stone, small and squat so not typical, was found beneath an Early Bronze Age burial mound at Bedd Branwen, Anglesey and a date for this stone was surprisingly within the Early Neolithic period.⁴¹ Geophysical survey has identified a ring ditch, about 13m diameter, around the standing stone at Ty Mawr, Holyhead indicating that it probably once stood in the centre of a mound.⁴²

They sometimes have associated features of Early Bronze Age date but which could have been added much later. For instance excavations in the 19th century close to a standing stone at Glynllifon, Caernarfon, uncovered a cremation burial with urn of Early Bronze Age type.⁴³ However, actual primary dating material from a stone is rare. Excavation of some of the packing fill of a standing stone pit within the stone circle at Bryn Gwyn, Brynsiencyn and presumed to post-date the circle itself has produced two radiocarbon dates in the early 2nd millennium BC.⁴⁴ The chance to excavate a stone pit at Llanfechell was therefore welcomed and even more so, the discovery of a 'foundation pit' beneath the stone. Charcoal recovered from the packing fill of the stone pit (oak, hazel and ericaceae), was expected to belong to woodland contemporary with the erection of the stone. However, one piece of hazel produced a date in the later Mesolithic period and so was presumed to be residual; and the ericaceae charcoal recovered from a well-sealed context in the foundation pit, produced a date in the Early Iron Age. Both these dates are at variance with expectations.

The presence of the cup and ring-marked stone in the stone pit provided added interest because it is possibly unique in being found in a stratified deposit. Such marks are usually found on exposed ground rocks but occasionally added to the stones of earlier monuments and therefore at least contemporary or later than them. Some Neolithic chambered tombs have simple cup-marks, for instance at Ty Newydd, Anglesey and Bach Wen, Clynog Fawr, Gwynedd. Cup-marks are also found on the stones belonging to Early Bronze Age burial cairns, for instance at Llecheiddior ring cairn, Llanbedr, Meirionnydd (PRN 1089) and on an outlying stone next to a kerb cairn at Bron-lletty-ifan, Arthog, Meirionnydd (PRN 12895). There is a standing stone close to the Neolithic chambered tomb of Bryn Celli Ddu, Llanidan

and several cup marks have also been found on a rock outcrop close by.⁴⁵ Many examples of cup and ring marks, sometimes associated with more complicated patterns occur on exposed ground rocks in North Yorkshire, Cumbria and Scotland but are much rarer in Wales. The only cup and ring mark associated with a datable feature is that on the capstone of a probable Neolithic chambered tomb at Garn Turne, Pembrokeshire⁴⁶, suggesting that cup-marks and cup and ring marks are part of the same tradition. There is one case that provides a good datable association for cup-marks. That was the discovery in the mid-19th century of a decorated sandstone slab that was probably part of the cist an Early Bronze Age burial mound at Badbury, Dorset.⁴⁷ The slab had very neatly pecked on it the shallow images of two hilted copper or bronze daggers and two flat copper or bronze axes surrounded by a number of simple cup-marks. The daggers and axes are identical to features that were carved on the Stonehenge sarsen trilithons and that can be dated, by style, to about 1800 BC. This provides a good association for the cup marks but it may still be that such marks had a long currency. A similar case is the occurrence of a re-used standing stone with multiple cup-marks and flat axe designs forming part of a cist under the Nether Largie North cairn.⁴⁸ Cup-marks occur frequently on slabs within barrows in Cornwall, with both Food Vessel and Collared Urn associations.⁴⁹

The cup and ring mark here is crudely produced compared to the classic examples in Yorkshire and elsewhere, as if created rapidly and without great care (Fig. 6d). The central cup mark is quite neat and deep. The ring, however, is very shallow, as if incomplete, one part has a neat curve, but the remainder is completed by two almost straight lines of pecking, which may be deliberate or be an unskilled attempt at a completing the ring. The peck marks are heavy and distinct. Experiment has shown that a similar design can be very quickly produced using a rock with an angular point.⁵⁰ The design is simply pecked with no grinding or smoothing. The isolated cup mark is likewise small, oval and deep, showing that it was created by a pick-like point, whereas most cup-marks are shallow with rounded profile and were probably created with a rounded cobble.

In general, cup marks and cup and ring marks are most frequently found on large natural exposures of stone. These provided a suitable place for decoration but may also have been regarded as of similar significance to the Neolithic tombs on which cup-marks and occasionally cup and ring marks were later added. Their primary purpose must have simply been to make a lasting mark, whatever that meant in terms of religious beliefs. The outcrops on which they are found are in prominent positions, often major viewpoints over passages through valleys. Their locations of many in open, upland positions have suggested an association with itinerant populations of hunters or herders.⁵¹ It cannot be certain that the placing of the cup and ring-marked stone in the standing stone pit at Llanfechell was part of its original construction or even if it was added at a later date. The cup and ring marked stone is similar to most of the other packing stones but the decoration could still have been added at a later date and could mark a cremation burial close by that has since been ploughed away. The general designs of cup and ring-marks have been compared to that of chambered tombs and henges, with possible symbolic meaning, for instance of birth and re-birth⁵², and that seems more understandable when found in conjunction with some kind of memorial or burial.

Although standing stones sometimes have close links with burial mounds and other funerary and ritual activity they are quite a different type of feature and are not in themselves primarily funerary monuments. Some of the most productive investigations of standing stones show that they were sometimes preceded by timber posts, were sometimes succeeded by burial mounds and were sometimes associated with more complicated structures of a monumental nature.⁵³ The excavation and geophysical survey here did not identify any such complexity but geophysical surveys are not always effective, depending on the subsoil type and the excavation was of very limited extent. Standing stones on Anglesey have been shown to be set most commonly to face north-east/south-west.⁵⁴ The same predominant orientation has been found by survey of standing stones in Scotland, interpreted as having an astronomical

alignment associated with moon phases.⁵⁵ The Llanfechell stone lies on a low ridge on which, about 500m to the east, a line of four or more burial mounds has recently been discovered by aerial photography and geophysical survey (Fig. 8). Another standing stone at Llanddyfnan, Pentraeth also stands at the west end of a line of round barrows. This suggests that in both cases the standing stones acted as ‘markers’ at the approach to, or boundary of, a ‘cemetery complex’. A similar use of standing stones as indicators to areas of funerary and ritual function has been noted in the Kilmartin region of Argyll, Scotland.⁵⁶ North of the Llanfechell standing stone an area of Early Neolithic settlement has been found, as well as a Late-Bronze Age/Early Iron Age enclosure.⁵⁷ These, with the three stone setting and the Cromlech chambered tomb must have been part of such a special area with an unusual concentration of prehistoric activity which deserves more intensive study.

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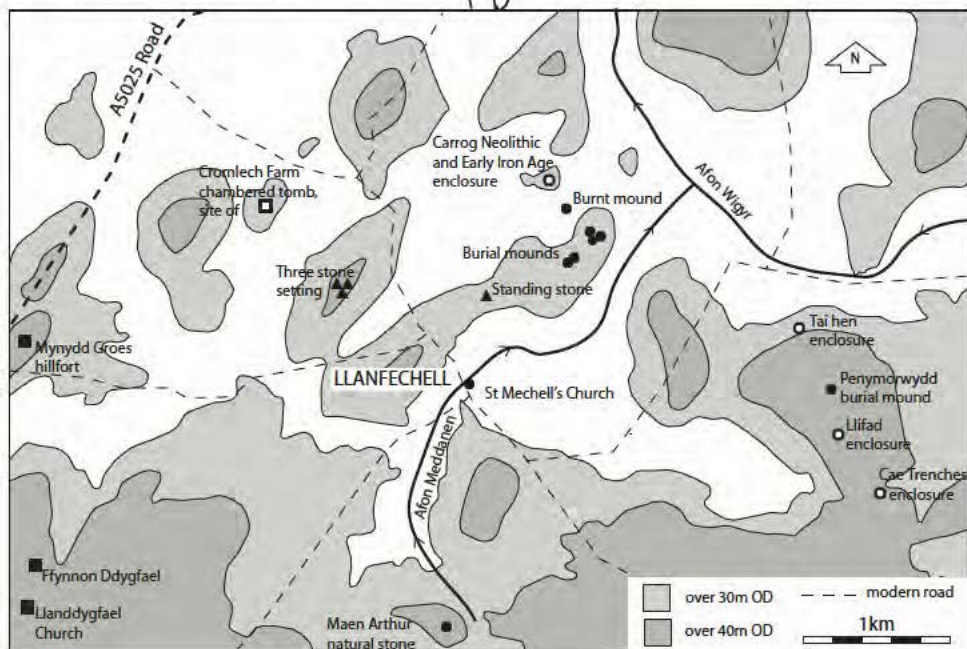
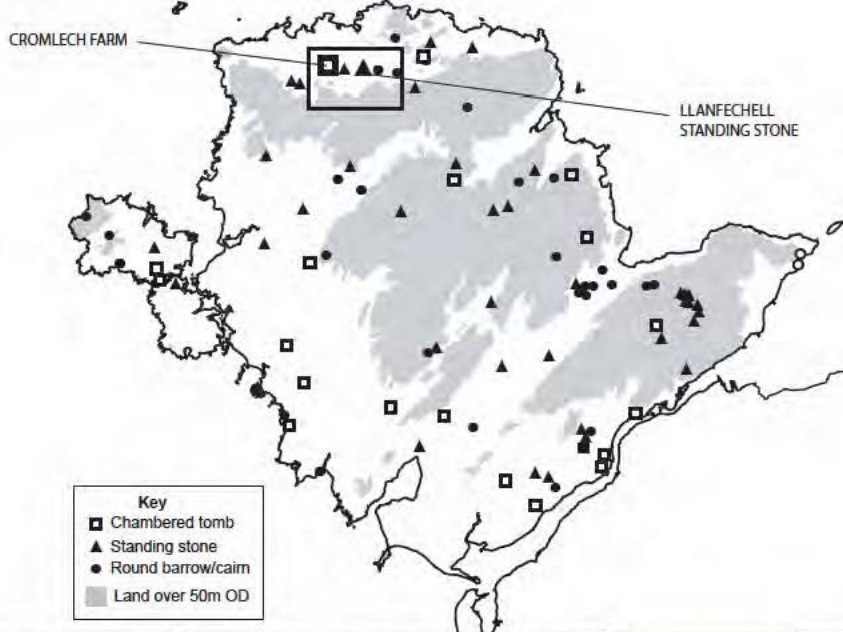
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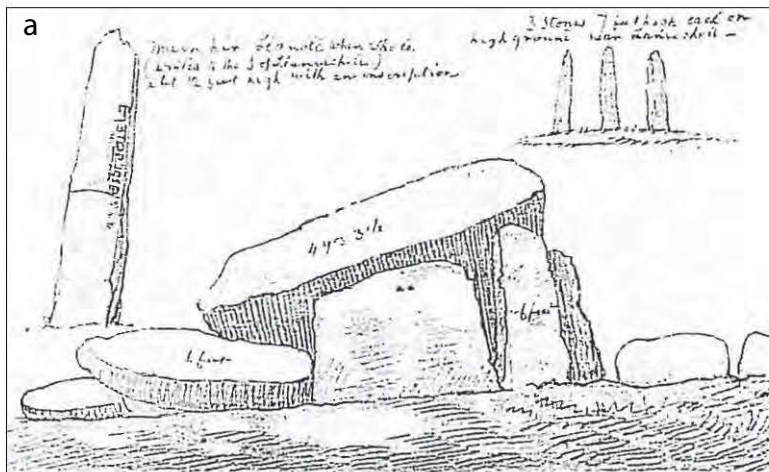
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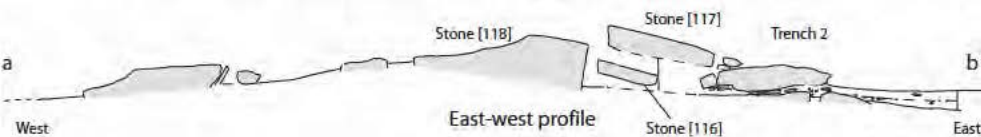
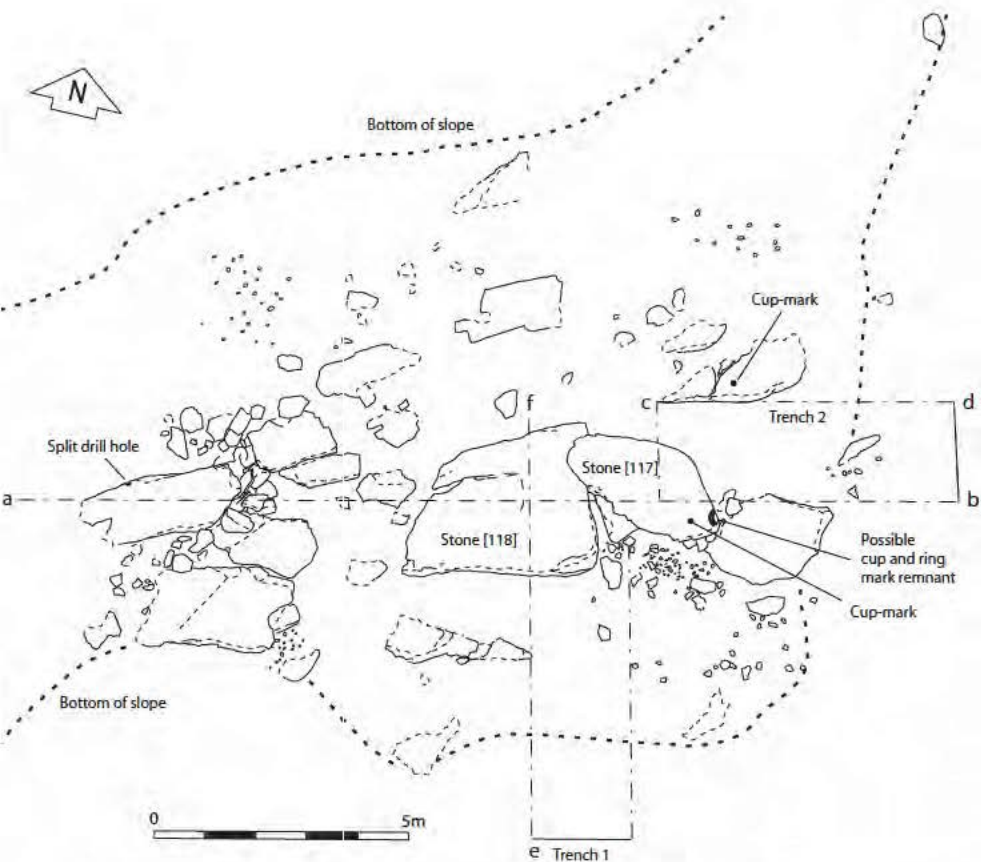
END NOTES

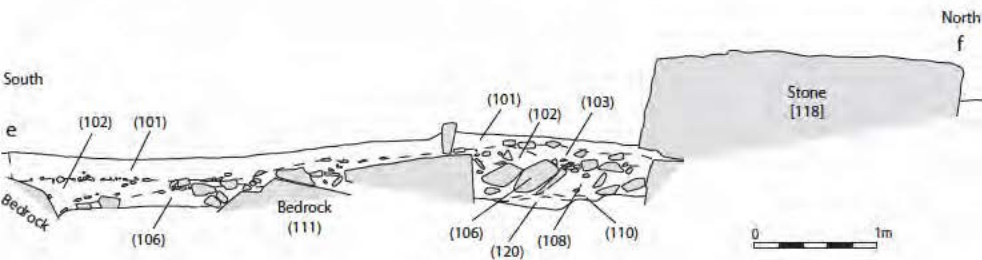
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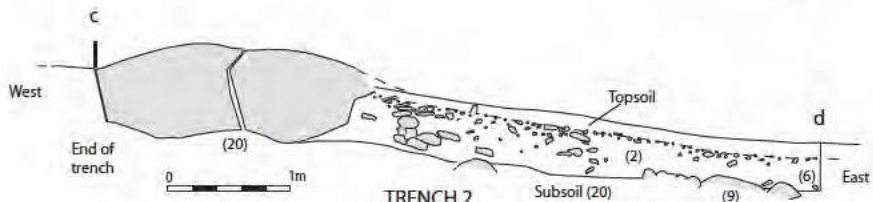
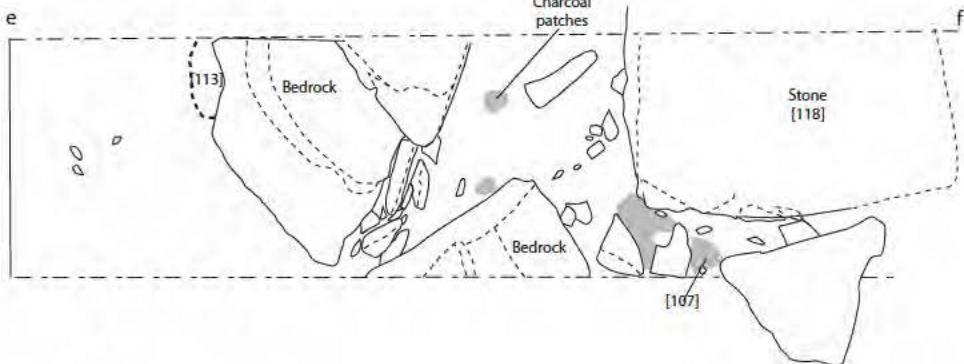




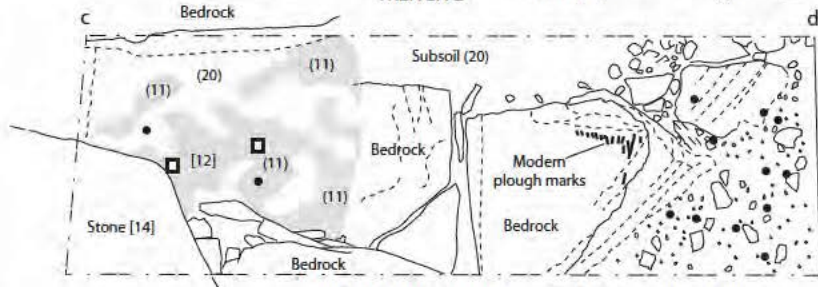




TRENCH 1



TRENCH 2



• Worked chert object □ Pottery concentration

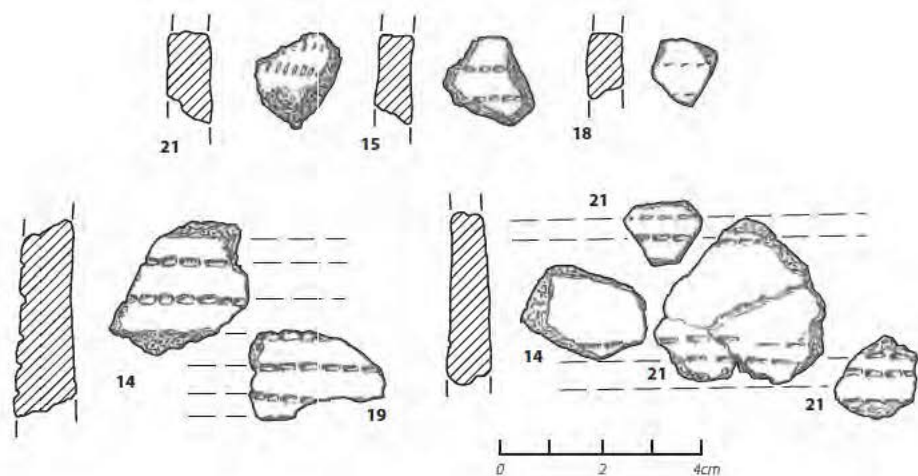
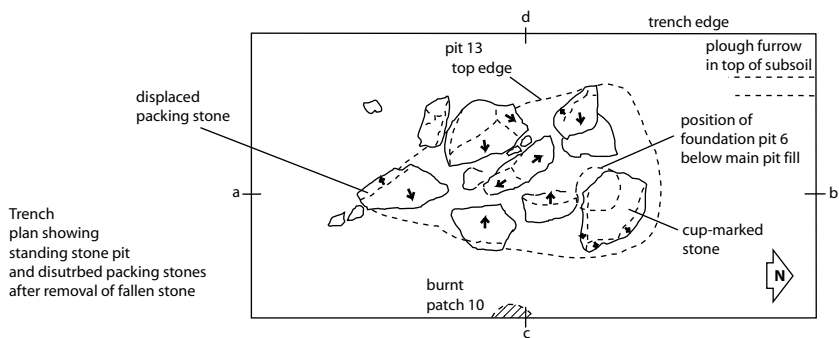
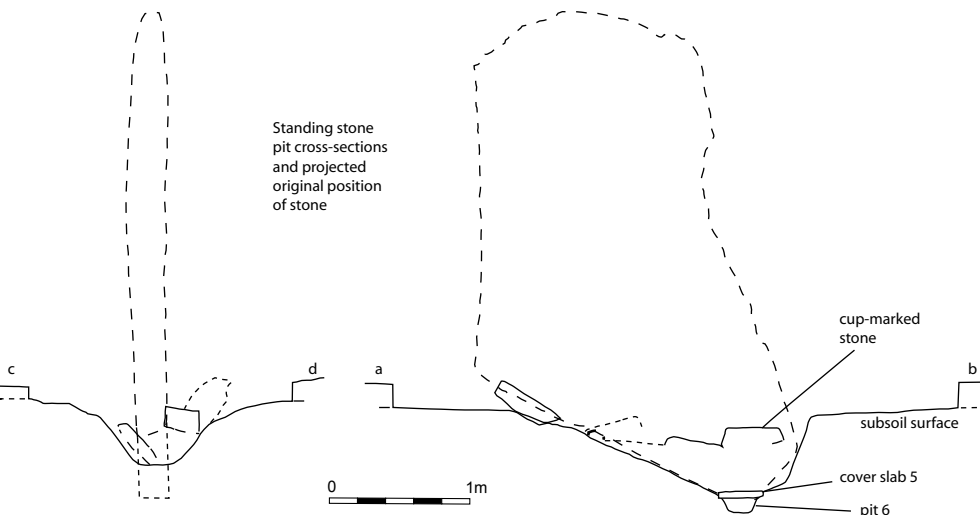
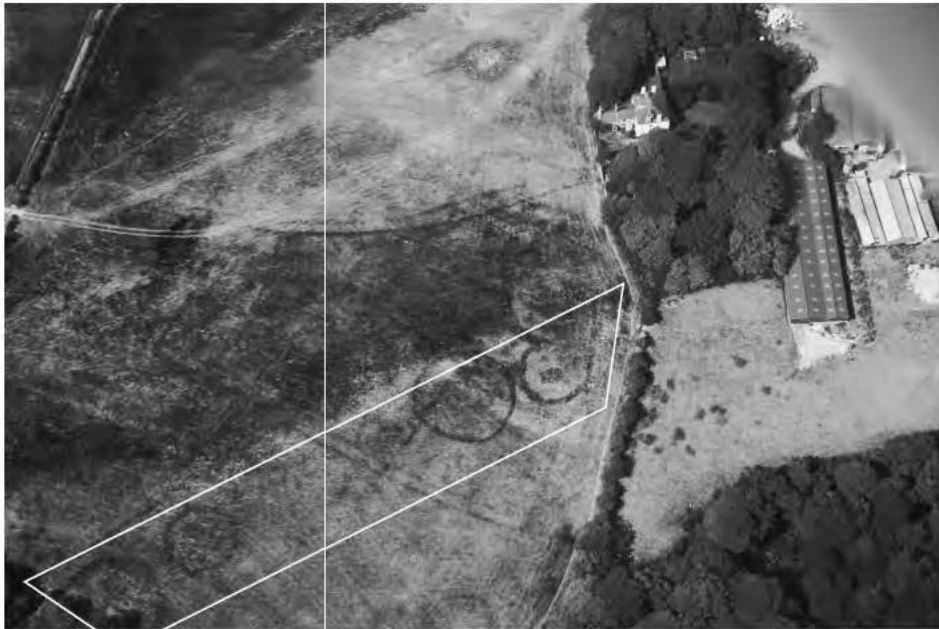


Fig. 5 Pottery. 14-19 Context 11. 21 Context 13. Scale 2:3



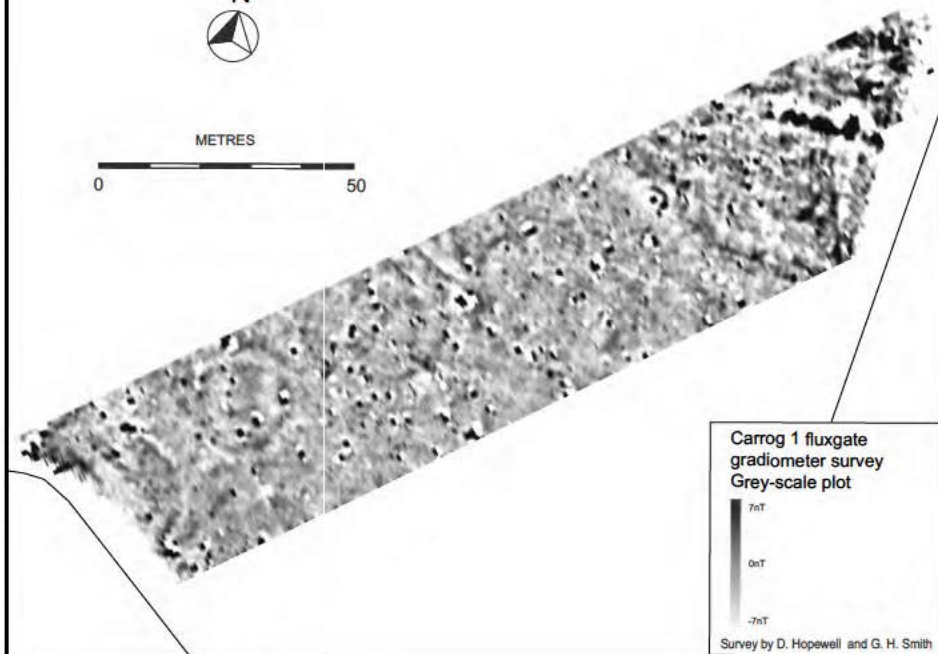




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Carrog 1 fluxgate
gradiometer survey
Grey-scale plot



Survey by D. Hopewell and G. H. Smith



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