

# Excavation of a Romano-British roundhouse at Rhiwgoch, Harlech

By JANE KENNEY

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*Excavations at Rhiwgoch Water Treatment Works, near Harlech, revealed the fragmentary remains of a large stone-built roundhouse, with some distinctive internal features and an associated enclosure. The roundhouse was built just prior to Roman penetration of the area and continued in use into the second century AD. There were few finds but they included a Roman melon bead and a small number of Roman pottery sherds, as well as hammerstones and two unfinished spindle whorls. A small oval structure, possibly a sheepfold or shelter, had been built in the robbed-out remains of the roundhouse, but the date of this was not determined. The site is located within an extensive relict landscape, one of the field boundaries of which was also investigated. No dating evidence was found, but it is argued that this wall may have been contemporary with or earlier than the roundhouse and continued in use into the medieval period.*

## INTRODUCTION

Gwynedd Archaeological Trust (GAT) carried out a programme of archaeological excavation work at Rhiwgoch, south-east of Harlech (SH 5920 3037), for Black and Veatch on behalf of Dŵr Cymru Welsh Water, in advance of the extension to the existing water treatment works (Fig. 1). The work was monitored by the Snowdonia National Park Authority's Archaeologist. Groundworks at the water treatment works were preceded by an archaeological assessment (Evans 2008), an evaluation, including a detailed topographic survey (Berks and Davidson 2008), and the excavation of 11 trial trenches (Kenney 2011). The archaeological assessment and evaluation (Fig. 2) identified several features of archaeological significance close to the limits of the works—a site initially interpreted as a burnt mound,<sup>1</sup> a field or enclosure boundary,<sup>2</sup> and a longhouse of probable medieval date.<sup>3</sup> The longhouse was avoided by the works but the evaluation led to the recommendation for full excavation at the supposed burnt mound (Site A) and the boundary (Site B), which were carried out between 22 November 2008 and 13 March 2009.<sup>4</sup>

The main excavation was Site A, an area of 464 square metres designed to investigate the possible burnt mound identified during the evaluation. In addition, a small trench, Site B, was excavated across the relict field boundary to examine and record the nature of the wall. In order to achieve this, a 4m length of the wall was exposed, and a trench 1m wide was fully excavated across the line of the wall. Turf was stripped from both sites by a small mechanical excavator under archaeological supervision. All subsequent excavation was by hand, undertaken stratigraphically and features and layers were recorded by drawings, photographs and written records. The majority of features were fully excavated, with only minor features or those of natural origin partially excavated. All finds were collected and bulk soil samples, generally of 20 litres, were taken from all significant deposits, particularly those with prehistoric finds or charcoal. The bulk samples allowed the recovery of charcoal and other charred plant remains as well as very small artefacts.

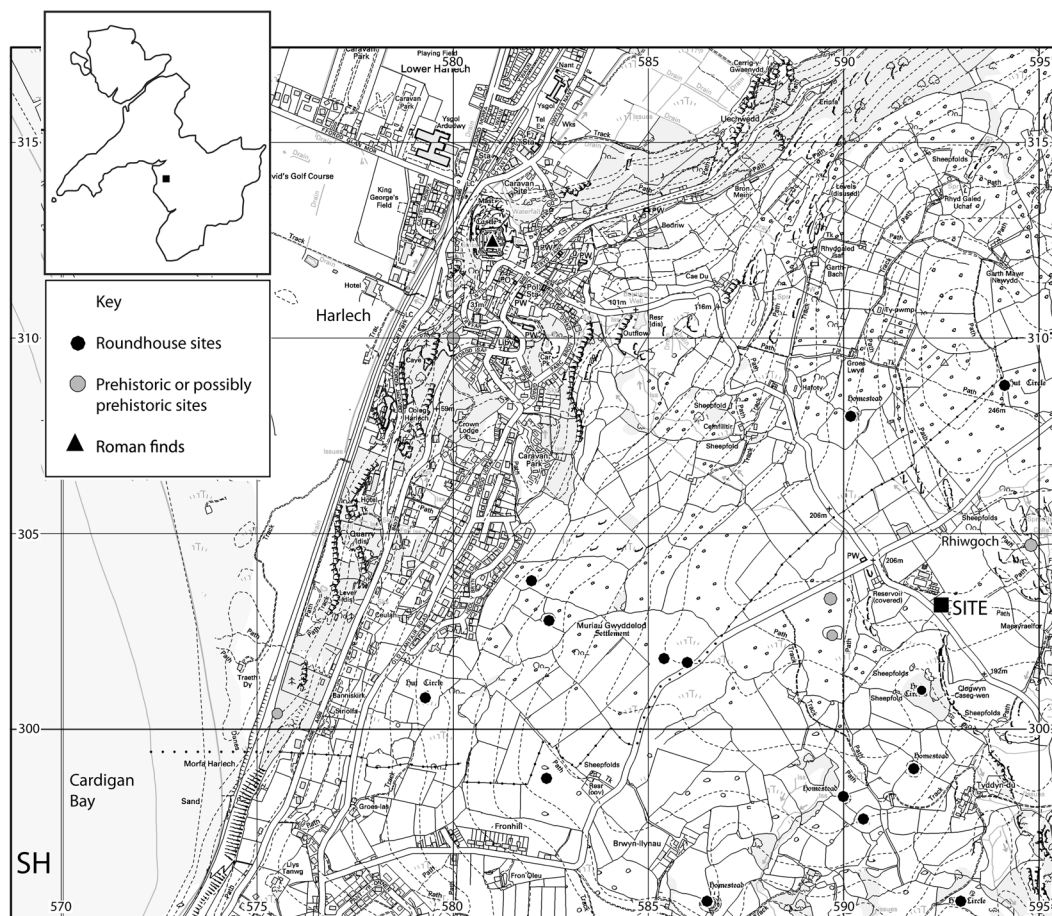


Fig. 1. Location of site showing roundhouse settlements and prehistoric and Roman sites in the area (contours at 10m intervals) Base map © Crown copyright Ordnance Survey. All rights reserved.

#### ROUNDHOUSE: SITE A

Site A (Fig. 3) was difficult to excavate and interpret, as it was confused by geological features, stone robbing and dumping, and a modern pipe-trench cut through the middle of it. When the site was initially identified it was thought to be a burnt mound due to quantities of burnt stone. On excavation a small oval stone structure was identified along with a variety of other features that were thought to be roughly contemporary. Post-excavation analysis led to the reinterpretation of some of these features and the identification of the remains of a substantial roundhouse. The radiocarbon dates demonstrated that there was no significant activity before or after the Roman period, showing that almost all the features were contemporary with the roundhouse, with the exception of the small oval structure, interpreted as a sheepfold or shelter.

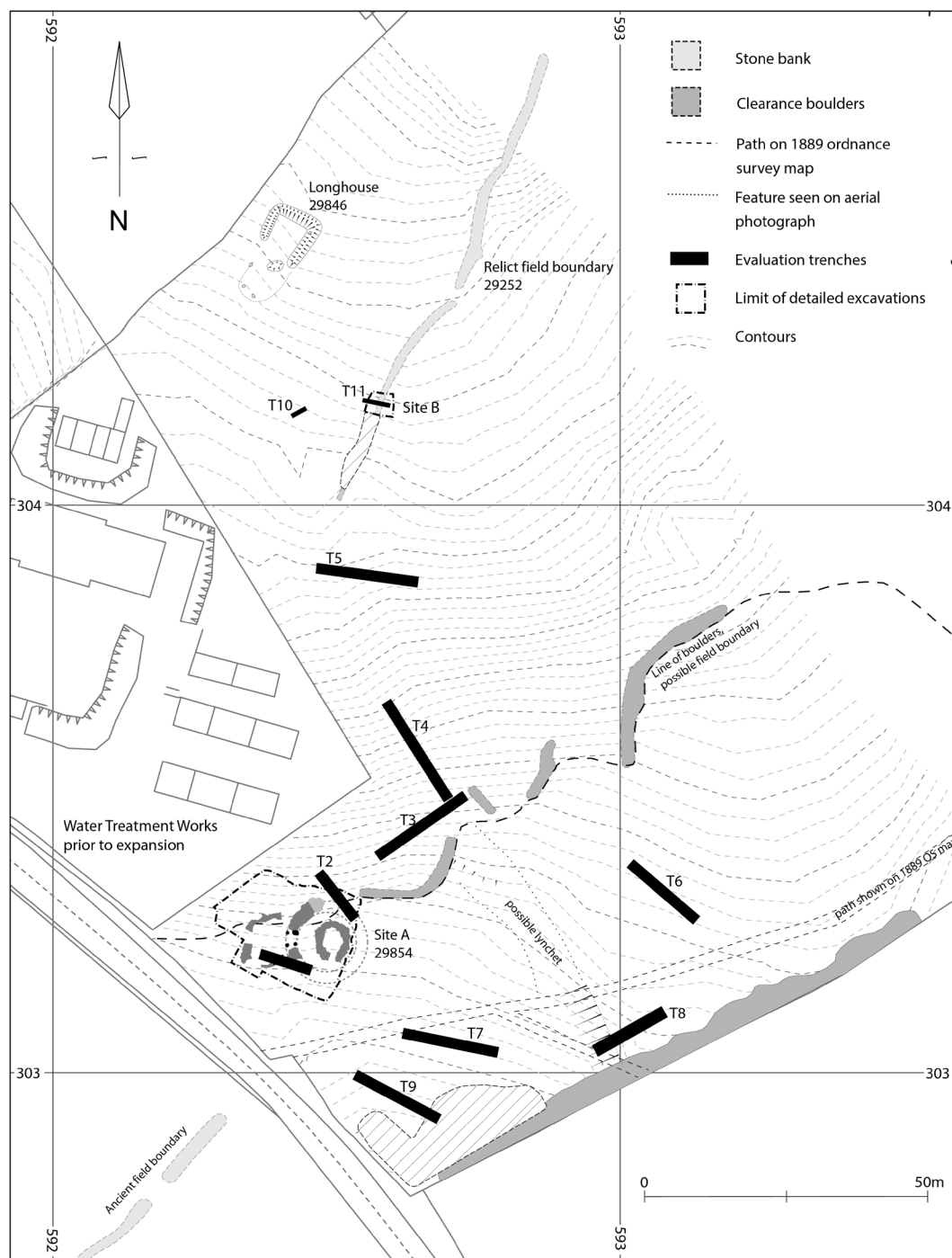


Fig. 2. Location of Sites A and B with trial trenches and surveyed detail (contours at 0.25m intervals).



Fig. 3. Overhead view of Site A during excavation.

The revised interpretation identified a large stone-walled roundhouse with an internal capped drain, built just before Roman occupation of the area and used into the second century AD. There was a small stone-walled enclosure attached to the western side of the roundhouse from which the main roundhouse entrance with a wooden porch opened. Within and possibly prior to the enclosure there had been considerable activity involving the use of hot stones; the origin of the considerable quantities of burnt stone on the site.<sup>6</sup>

After the abandonment of the roundhouse, some of the dumps of burnt stone were levelled into the ruined remains of the enclosure and the walls began to collapse. The roundhouse wall was almost entirely robbed away, leaving only a short section either side of the entrance. Very much later, either in the medieval period or even more recently, a small oval structure was built within the former roundhouse. There were no other features associated with this phase, and there was no definite evidence for roofing.

Following abandonment of the oval structure burnt stone, probably from previously undisturbed heaps nearby, was dumped over the site along with some large field clearance stones, presumably to improve the adjacent pasture.

#### **Local geology and periglacial features (Fig. 4)**

The natural substrate beneath the site was stony boulder clay containing gravel and numerous large boulders. Some of the boulders were embedded within the boulder clay but projected well into archaeological deposits. Over the boulder clay had developed an orange-brown silty layer, possibly based on wind-blown loess, fine wind-blown silt deposited at the end of the last ice age. This was rarely more than 0.25m deep, and represented the B horizon of the soil that developed on the glacial till.



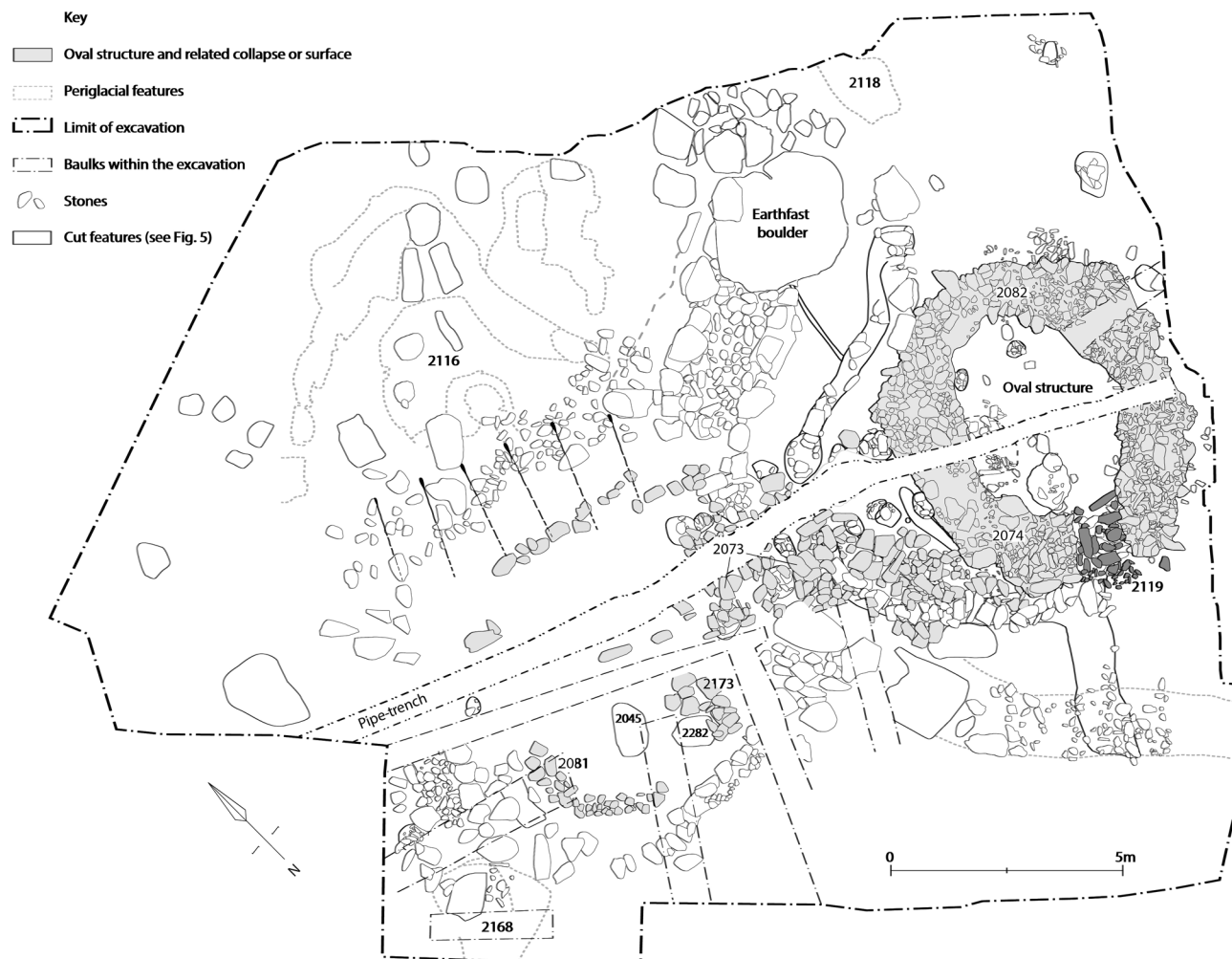


Fig. 4. Plan of Site A with upper stone spreads removed showing the oval structure and periglacial features.

A complex of ice polygons had been formed by periglacial frost action in the northern corner of the site. Boulders had been sorted by the frost action to be concentrated in an ice polygon (2116), which was initially mistaken for a small structure, but excavation demonstrated its natural origin. In the south-western part of the site a ditch-like feature (2168) seems to have been another ice wedge. This had a V-shaped profile and its stony fill was inorganic.

### **The main elements of the roundhouse (Fig. 5)**

Projecting south-west from a large boulder (2131) was a short section of wall, *c.* 4.5m long and 2.4m wide, surviving in places up to three courses high. The wall faces (2053, 2096) were composed of large stones with a closely packed core of smaller stones (2036). After a gap of 3m there was another patch of similar walling, 2.2m wide. This had two orthostatic facing-stones (2012, 2015), which projected through the later deposits, a flat stone (2016), also part of the facing, and a core of densely packed stones. Both pieces of wall were similar in character and seemed to be part of the same structure but the form of that structure was not initially evident as most of it had been robbed out in antiquity. A single stone (2286) to the east of boulder (2131) seems to have been an *in situ* facing-stone, which together with the two fragments of walling can be seen as part of a roundhouse 10.5m in diameter internally and 14.5m in diameter externally. Running roughly concentric with the roundhouse wall were two gullies interpreted as sections of a stone-capped drain. Drainage gully 2161, 0.4m wide and 0.25m deep, started close to the northern arc of the wall as a broad and shallow stone-filled gully and became more clearly defined with partially surviving stone capping. A similar gully, 2241, seemed to continue the line of 2161 to the south, but the two seem never to have joined. Instead, gully 2161 ended in a large bowl-shaped pit, 2219, measuring 1.1m by 0.8m, and 0.4m deep. This had traces of clay lining along the base and one flat stone remaining from what may have been stone lining around the sides. When the pit had been partially infilled two stones had been wedged against the end of drain 2161, possibly to deliberately block the drain. The relationship between the pit and the drain was not entirely clear, but it seems most likely that pit 2219 was part of the drainage system and that drain 2161 was designed to run into it rather than flowing out of the roundhouse.

The southern length of gully 2241, was up to 0.6m wide and 0.4m deep, with well-preserved capping stones. This ran into the north-eastern end of a broader gully, 2054, also joined by another short length of stone-capped gully 2239. Feature 2054, filled with loose stones, ran downhill to the south-west before petering out. All these gullies seemed to have functioned as part of the same system, and resemble the Y-shaped drains often found in roundhouses in North Wales.

The gap between the two segments of wall, which faced almost due west, formed the entrance to the roundhouse. Within this gap were four large postholes: 2121, 2206 and 2232 had diameters of about 0.6m, while 2164 was about 1m across. They were all between 0.4m and 0.5m deep, with large post-packing stones. In posthole 2164 long thin stones had been inserted once the post has been removed, and the packing stones in feature 2206 had been disturbed. The other postholes also had some stones filling the former position of the post and it is suggested that the postholes were filled in deliberately after the posts were removed.

On the northern side of the entrance was an additional posthole, 2205, containing undisturbed packing stones. It is possible that 2205 may have supported a door within the entrance porch, but posthole 2123 may be a better candidate, as discussed below.

There was a hint of a second entrance in the eastern arc of the wall. This part of the wall had been entirely robbed out but posthole 2117 lay exactly central to its proposed line. This posthole, measuring 1.1m by 0.7m and 0.6m deep, was the size of the main entrance postholes, and had large packing stones, some set vertically. If this posthole had a partner it lay just beyond the limit of excavation. As the possible

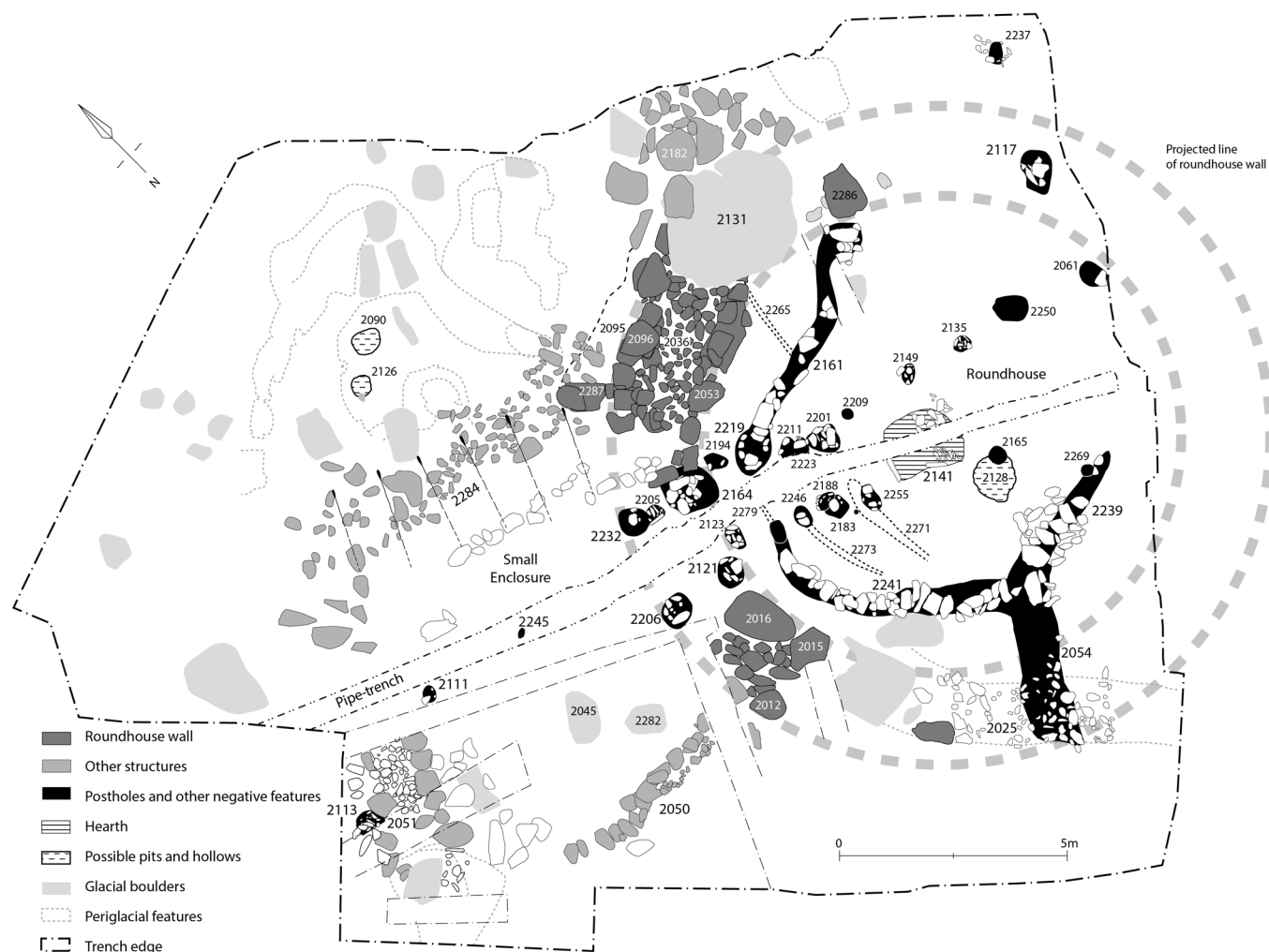


Fig. 5. Plan of Site A showing roundhouse and related features.

significance of this feature was not realised until well into the post-excavation process the excavation was not extended to find further evidence of an entrance. If this was an entrance it was not quite opposite to the western entrance, but offset slightly to the north.

### Features inside the roundhouse

The roundhouse had a central hearth, 2141, measuring about 1.7m by 1.25m and filled with soft black silt containing charcoal and fragments of burnt bone. Posthole 2165, adjacent to the hearth, contained two post-pads of schist in its base, and may have been related to the use of the hearth.

Immediately inside the entrance were two parallel rows of small postholes aligned nearly east-west. These defined a rectangular feature 3.5m long and *c.* 2m wide. The gap between the post lines was about 1m. Six postholes (2123, 2279, 2246, 2188, 2183, and 2255) formed a southern line, and four postholes (2194, 2211, 2201, and 2223) formed a northern line. However, 2223 and 2188 seemed to have been replacements and not originally part of the design of the structure. There was a gap in the northern line occupied by pit 2219. The postholes all contained packing stones, many of which were *in situ*. Posthole 2279 had vertical slabs forming a carefully constructed post setting, wedged within the end of drain 2241. Most of the postholes appear to have been paired, and even posthole 2279 seems to have been positioned neatly opposite pit 2219. It is possible that the pit replaced an earlier posthole that was part of the structure, but there is no evidence of this. The pairing scheme leaves out 2255, which might have been paired with a posthole not recognised under the wall of the later oval structure. The postholes were aligned on the entrance except posthole 2123, positioned where its post would have significantly blocked the entrance. This post would have reduced the entrance, at the point where it opened into the house, to a width of only about 0.75m, suitable for a door, which the post might have supported.

Further inside the roundhouse a line of four postholes, 2061, 2135, 2149 and 2250, ran east-north-east to west-south-west across the roundhouse, just north of the centre. These had well-defined post-packing stones which included a reused hammerstone in 2149. Feature 2209 may have extended the line further west, although it was severely truncated. This line was almost but not quite on the same alignment as the entrance and seems to have divided off the northern part of the house.

### Small enclosure

The western entrance of the roundhouse opened on to a fairly level, rectangular area about 5m across surrounded by the remains of a wall. Part of the western side of this enclosure wall was quite well preserved. Here the wall 2051 was broad, 1.6m wide, with two faces. The rest of the structure was much more fragmentary: the northern side was a loose scatter of stones (2284), with a large facing-stone (2287) adjacent to the roundhouse wall, and only the northern face of the southern side (2050) survived.

Within the enclosure was a thin, patchy layer of yellow and grey gravelly clay (2086/2147), no more than 0.03m thick, but containing considerable quantities of burnt clay, as well as fragments of burnt bone and some burnt stone. Above this and built up against the enclosure wall, was a stony layer 2084/2144 containing heat-cracked stones, fragments of burnt bone and pieces of burnt clay. Over this and extending through the roundhouse entrance were more or less continuous patches of flat stones (Fig. 4, 2081 and 2173), probably best interpreted as collapse from the walls. Within the eastern part of the enclosure were two large boulders, 2045 and 2282, possibly dislodged from the roundhouse wall.

A deposit of densely packed burnt stones (Fig. 5, 2095) with burnt clay, burnt bone and charcoal was found to the north of the enclosure wall and adjacent to the roundhouse wall. This had many similarities to the layers described above, especially the type of burnt clay it contained, but seemed less disturbed than (2084/2144), and it may represent a largely *in situ* heap of burnt stones.



Three postholes (2113, 2111 and 2245) were discovered in this area, but these were late in the sequence as they were dug through the stony deposits. The last was located beneath the modern pipe-trench but still survived to a depth of 0.23m and had two surviving packing stones.

### **Oval structure (Fig. 4)**

The rough stone foundations of an oval structure were found on the eastern side of the site which measured 7.5m by 6m externally and enclosed an area *c.* 4.5m by 3.5m across. Its long axis was aligned roughly north–south, perpendicular to the slope and it was cut into two by a modern pipe-trench. The wall was composed of densely packed, medium and large sized stones, and was up to 1.45m wide. There were no obvious facing-stones and no bonding matrix between the stones but there were considerable quantities of charcoal between the stones, especially in the southern part of the structure. An entrance seemed to lie on the southern side, where a series of flat angular slabs (2119) appeared to form a threshold.

The haphazard nature of the stones forming the wall of the oval structure suggests only a foundation layer of stone may have been laid down and the wall itself may have been built of a different material. The lack of clay between the stones argues against clay or cob walls, but turf is a possibility. Alternatively, the wall may have been low and very poorly built. There is no secure evidence that this structure was ever roofed. No other activity seems to have been associated with this structure.

### **Other features**

A number of other features are assumed to be associated with the roundhouse occupation though there is no evidence to securely link them to this period. In the north-western corner of the site, amongst the periglacial features, were two small pits (Fig. 5, 2090 and 2126). Beneath the activity inside the roundhouse were two narrow gullies (2271 and 2273), roughly aligned north–south. These were roughly parallel, up to 0.25m wide and 0.12m deep, and cut by features related to the roundhouse. These gullies may have been animal burrows (2265 certainly gave that impression, although it was very straight), but it is possible that they were subsidiary drains for the roundhouse internal drain or possibly traces of pre-roundhouse ploughing.

A collection of fairly large stones (2182) to the north of the large natural boulder 2131 may represent the start of a field wall running uphill from the roundhouse, but the stones were disorganised and no trace of a face or deliberate structure could be determined.

### **Overburden and upper layers of the site**

The site when first identified was thought to be a burnt mound due to the extensive spreads of burnt stones lying immediately below the turf. There were two main layers of burnt stone with a deposit of unburnt stone between. The upper layer largely consisted of heat-cracked stone and covered the central and south-western parts of the trench. Under this were extensive patches of unburnt, rounded stones. In places lower burnt stone layers, containing charcoal, burnt bone fragments and some artefacts, extended under the unburnt stone. These lower layers were concentrated over the area west of the roundhouse. Over the top some large field clearance boulders had been dumped.

Much of the unburnt stone sandwiched between the burnt stone layers seemed to be tumble from the structures on the site, suggesting that the burnt stone was produced or spread over the area prior to the main collapse of the roundhouse. The upper layers of burnt stone, overlying the tumble from the walls, contained few artefacts and less charcoal than the lower layers. It is suggested, as discussed below, that the activity on site produced burnt stone, which was deposited in heaps and that at various stages in the decay of the site stone from these heaps was spread about.

The area was further disturbed by a field track running from the gateway to the south-west through the middle of the site. This seems to have unknowingly used the hollow formed by the roundhouse entrance and must have resulted in some disturbance to the ends of the roundhouse wall on either side of the entrance.

#### RELICT BOUNDARY: SITE B

Site B (Figs 2, 6) was a relict field boundary, visible for much of its length as a raised stone bank protruding through the turf though for part of its length it survived as an upstanding stone wall. The boundary could be traced for some 70m to the north and may have been part of a wider field system associated with the probable medieval longhouse (Fig. 2),<sup>5</sup> but its origins could have been in the Iron Age.

The excavations revealed a 1.5m-wide wall (2019) surviving to a height of 0.6m. It consisted of medium and large sub-angular cobbles and small boulders, with very large cobbles used as facing-stones. It was

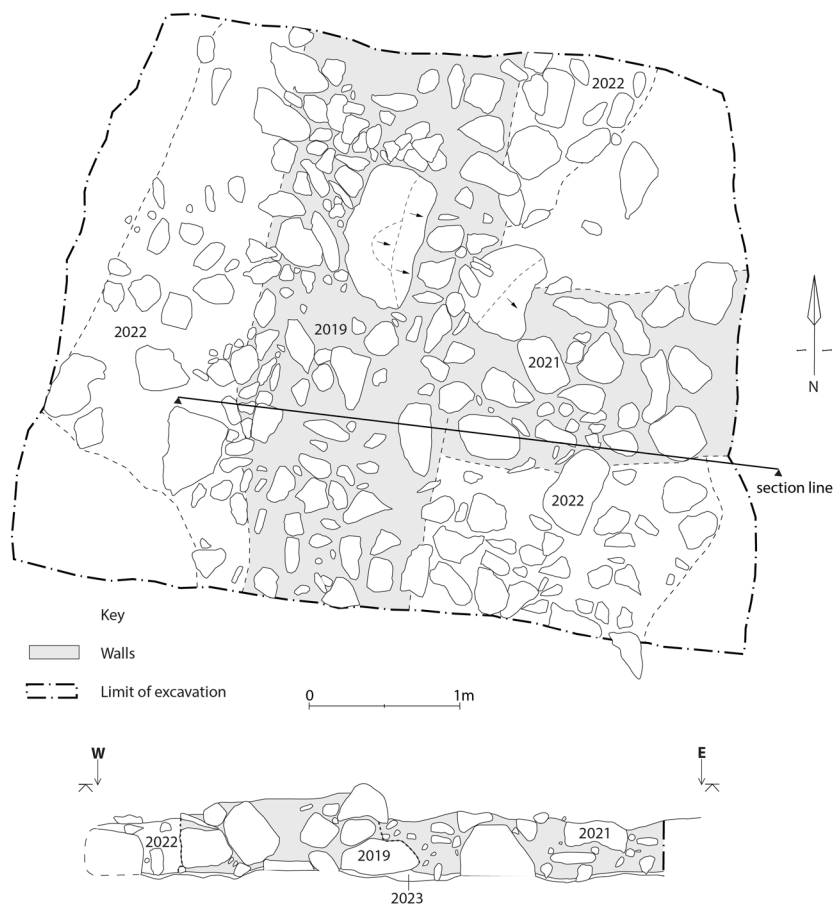


Fig. 6. Plan of Site B and section through walls 2019 and 2021.

built on a reddish brown relict soil (2023), and was abutted by a less well-defined wall (2021), consisting of a rubble core of sub-rounded small cobbles. This was 1.2m wide and survived to a maximum height of 0.45m. No dating evidence was recovered and this boundary can only be dated by its spatial relationship to other features in the area (see Discussion).

### POTTERY

By J. R. Evans, P. Mills, and S. Rátkai with a contribution by G. Monteil

Sixteen sherds were presented for study, consisting of small well-worn sherds, in a very poor and friable state.

A tiny fragment of pottery (part of SF39) from burnt stone layer 2006 is not closely datable but is probably more likely prehistoric than Roman or medieval in date.

Roman material includes two sherds of Dorset Black Burnished Ware (BB1) (Tomber and Dore 1998, DOR BB), a jar rim (SF74 from 2009, the core of the roundhouse wall) and a jar shoulder (SF30 from 2130, the fill of the hearth), and a small fragment of Central Gaulish samian (part of SF39 from 2006, a burnt stone layer). The material suggests a date range of the mid to late second century AD.

Medieval material comprised a cooking pot jar rim (SF15) from context 2055 (the fill of the drain outlet 2054), probably an import from Flintshire/North Wales, and a base sherd (SF8) in a similar fabric from an upper stone dump 2007. The material seems to have a thirteenth- to fifteenth-century date range.

### GLASS MELON BEAD

By Hilary Cool

Frit melon bead (SF 35, Fig. 7) recovered from the fill of the drainage gully 2161 of the roundhouse, now appearing brown with turquoise glaze remaining in the base of some gadroons. It has a cylindrical perforation and regular gadroons and measures 15mm in diameter with a perforation diameter of 6.5mm. Frit melon beads are a common find from the Roman conquest to the middle of the second century AD and are especially common on military sites, as for example the *vicus* at Caersws (Owen and Arnold 1989) and within the fort at Caernarfon (Allen 1993, 226, nos 44–5). This is the second example of a frit melon bead recovered from a native site in the region recently, the other being found unstratified at Parc Cybi, Holyhead (Jane Kenney pers. comm.). A fragment of one in translucent deep blue glass was also found at Dinorben (Gardner and Savory 1971, 187, fig. 31, no. 5).

The question arises as to why melon beads were found desirable on native sites which otherwise seem to have shown little interest in acquiring Roman material culture in the second century. It could just be that they were brightly coloured curios and were just regarded as an alternative to the large native beads. There is some evidence that within the more Romanised parts of Britain, melon beads had an amuletic significance. At Wanborough, Surrey one was recovered from the dedicatory deposit made around AD 160 to 170, prior to building one of the temples there (O'Connell and Bird 1984, 129, no. 1). A large copper-alloy bell with three melon beads had clearly formed a threshold deposit at Scole (Seeley 1995), while a similar combination of bell and bead was found in a make-up level for a large house at Culver Street, Colchester (Crummy 1992, 187, no. 1663). A similar impetus may have been at work here and it may be that the presence of the bead in the drain is not fortuitous but was the result of deliberate placing.

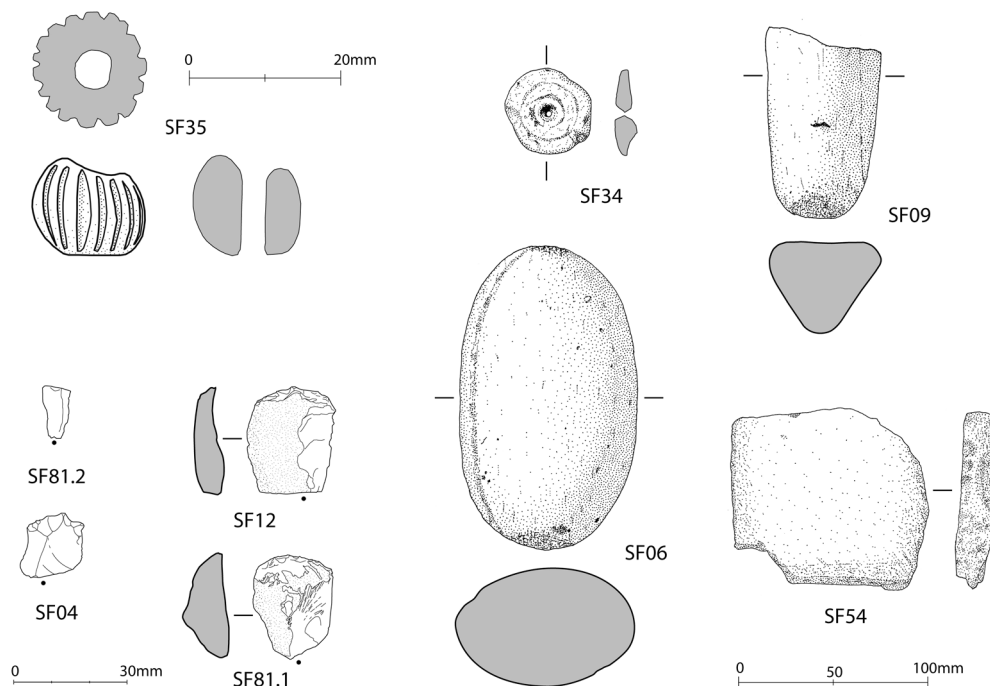


Fig. 7. Flints (SF04, 12, 81.1, 81.2); stone spindle whorl (SF34); stone pallet? (SF54); representative hammerstone (SF06); hammerstone/whetstone (SF09); glass melon bead (SF35).

## FLINT AND STONE

By George Smith

### Flint

Four pieces of worked flint and one flint pebble were recovered. Two pieces with surviving cortex were made from small fluvio-glacial pebbles, like the one flint pebble. Such pebbles, with flint of varying quality and colours can be collected on local beaches. The other pieces were small and probably made from material from a similar source. Although made from pebbles the worked pieces were all proper flakes, rather than scalar pieces from bipolar split pebbles, suggesting that the raw material was not too limiting.

The tip of a small, unstratified, thin narrow blade (Fig. 7, SF81-2) may denote a Later Mesolithic element. There are two retouched pieces (Fig. 7, SF12 and SF81-1), both small convex scrapers made on secondary flakes retaining some pebble cortex. The scrapers are not closely datable, but a pre-second millennium BC date is likely. SF12 came from the lower burnt stone layer within the small enclosure and SF81-1 was unstratified. A small broad and thick tertiary flake SF4 (Fig. 7) from context 2017, part of the wall collapse, has some micro-flaking on one sharp edge which could indicate casual use or just damage, and which may be of a similar date to the scrapers. A broken pebble (SF13) may have been collected and brought to the site for possible knapping raw material but as it is rather small for this purpose it could possibly have been collected as a strike-a-light.

The presence of some small flakes as well as retouched pieces shows that flint working did take place on site but the amount is very slight. The finds came from reasonably close proximity and although it is uncertain whether they all belong to the same phase of activity they probably derived from an earlier scatter that was incorporated by chance in later contexts at the site.

### **Quartz crystal**

A quartz crystal (SF5) has been crushed at one end and may have used as a strike-a-light.

### **Unfinished spindle whorls**

Two unfinished spindle whorls were found. SF 19 was from relict soil inside the oval structure and SF 34 came from within the southern half of its wall. However, the loose and reworked nature of the site makes it difficult to securely associate these finds with the oval structure. The grinding of the whorl blanks could have been carried out using one or more of the utilised stones described below.

SF34 (Fig. 7) is a slightly irregular circular disc of fine-grained stone, between 44–47mm in diameter and 13mm thick, with a central drilled hole of ‘hour-glass’ profile that only just perforates the disc. There are some concentric incised grooves on both faces that seem to be accidental, not decorative. The whorl could have been turned on a small lathe but the grooves are perhaps more likely to represent hand drilling. The disc has been chipped and hand ground to shape and both faces have multi-directional grinding striations, which have partially removed the concentric drilling grooves. The disc has been damaged, anciently, by chips on the edges, which may have caused it to be rejected because the central hole was never enlarged enough to make it usable as a whorl.

SF19 (not illustrated) is a spindle whorl blank, with no perforation, a slightly irregular circular disc of shale, between 46–47mm diameter and 9–12mm thick. It is made from shale that has been chipped and then ground to shape. The faces have some coarse grinding striations, mainly parallel and in one direction. The rim has been ground but irregularly, not turned.

### **Utilized and unused beach pebbles**

A total of 19 imported beach pebbles were recovered of which 10 have been utilised, and 6 show no signs of use, of which 3 of the latter show no signs of utilization but have been burnt, perhaps from use as pot boilers. The distribution of all the stones was quite wide with several found in the burnt stone layers as well as the lower undisturbed deposits. In addition two small natural pebbles were recovered, of which one is of white quartz (SF56), and one is possibly of red jasper (SF7), which were both perhaps collected and brought to the site as curiosities.

The utilised pebbles have clearly been carefully selected. They are mainly ovoid and of dense, hard igneous rock. They are mainly between 100mm and 150mm in length, a size and weight suitable for use in the hand. Four show more than one type of utilisation. Seven have evidence of use as hammers, four as polishers and one as a whetstone. The stones used as hammers show light pecking on the tips of the stones which in the most developed cases developed into a facet, which is at an angle to the axis of the stone (see Fig. 7, SF06, for typical example). The polishing evidence occurs on the flat faces of the pebbles and in the case of stone used as a whetstone, on the sides of the stone (Fig. 7, SF09). The unused stones are similar to the others and were probably brought to the site for future use. The wear on all the stones was light and suggests domestic activities such as sharpening or food, clothing or leather preparation rather than industrial, such as metalworking.



**Possible stone palette**

A thin sub-rectangular plaque of fine, split shale or slate (Fig. 7, SF54) shows slight dishing and smoothing from wear on one face, probably from use as a palette. The object was found within the wall of the oval structure, but this wall was patchy in places and probably reused stone from the roundhouse, so it may have originated from the activity associated with the roundhouse.

**SLAG**

A large lump of slag (SF 36), weighing 1536g, was recovered from context 2081, part of the wall collapse within the small enclosure. There were also two smaller fragments (SF14 and SF42), weighing 14g and 36g respectively. These came from layers the lower burnt stone layers 2034 and 2006. The large piece was assessed by Peter Crew, formerly the Snowdonia National Park Authority Archaeologist, who described it as probably a cake of smithing slag, which forms just below the blowing hole in the hearth. It is not wholly typical, however, and could be a furnace bottom piece from smelting. This is suggested by the difference between the under-surface and the rest of the lump, which is due to the slag cooling in the charcoal bed. However, such a small quantity of material would generally be regarded as from smithing. Smelting would normally generate much larger quantities of material and it could only be interpreted as such if there was supporting evidence in the form of roasted ore fines, smaller runs of fluid slag or remains of a furnace. The smaller fragments are of little informative value, although SF14 consists of slag stuck to burnt clay, most probably from a smithing hearth.

All the fine residues from wet sieving were tested for magnetic metalworking waste as well as being visually inspected for non-magnetic waste. None was found in any of the samples, which indicates that no smithing or other metalworking took place on the site. This strongly suggests that the slag originated from elsewhere, and was dumped on the site.

**BURNT CLAY**

A total of 915g of burnt clay was collected by hand collection and wet sieving residues from 16 contexts, mostly concentrated in the small enclosure to the west of the roundhouse. This was generally fairly pale in colour, varying from red-brown, through pink to grey. It is fairly well-fired, being quite hard to break and some broken pieces showed laminar structure internally. Most pieces are amorphous lumps but there are occasional pieces that may include impressions where they have been pressed against other objects such as sticks. Tim Young of GeoArch examined the pieces and could see few clear wattle impressions on the material, however, making daub a less likely origin for the material. The clay is generally quite dense, with little organic temper and frequently some very poor mixing, also possibly arguing against daub. Flat, hard, pale surfaces occur on material from deposits 2048, 2084, 2086, 2095 and 2099, suggesting that the material from these contexts has the same origin. The planar surface could be a wall face, but equally it could be the side of an oven, or even the surface of a floor. There is no trace of vitrification or any other evidence that the clay was related to a smithing hearth or furnace.

**IRONWORK**

Six iron objects were recovered, all iron. These were x-rayed, cleaned and stabilised by Phil Parkes of Cardiff Conservation Services. Three larger items were from late dumping or soil build-up layers and are

probably recent in date. These were a long metal bar (SF20) with a rectangular cross-section, a tapering object and an object with a looped head (both SF38). Three nail heads and part shafts (SF 32, 52 and 53) were recovered from the fill of posthole 2219 and the wall 2074 of the oval structure.

#### ANIMAL BONE

By Nóra Bermingham

A small collection of animal bone, amounting to 18 individual finds from 15 contexts, was retrieved by wet sieving. The assemblage comprised approximately 88 burnt bone fragments, ranging in size from 2mm to 20mm in length and with a total weight of less than 10g. The material is poorly preserved with mainly calcined, cortical bone occurring. There are no intact bones or diagnostic bone fragments present which would allow positive identification to species. All bone fragments derive from mammals, with post-cranial material, mainly limb bone fragments, and a small number of cranial fragments occurring. Small to medium, medium and large mammals, such as domesticates like dog, sheep/goat, pig and cattle are represented, though no species identifications are possible. The assemblage represents waste or debris derived from an undetermined activity. This may be domestic consumption or cooking, with waste dropped or thrown into fires.

#### PLANT MACROFOSSIL AND CHARCOAL EVIDENCE

By Rosalind McKenna

Of the 80 samples recovered from flotation of bulk soil samples, charred plant macrofossils were present in 47 of the samples but were generally poorly preserved, and were lacking in most identifying morphological characteristics. The samples produced small assemblages of plant remains both in volume and diversity. The most common remains were indeterminate cereal grains, which were present in small numbers. Where it was possible to ascertain identifications, oat, wheat and barley were represented, although mainly as single occurrences. Another, more indirect, indicator of cereals being used on site is the remains of arable weeds that were found in twelve of the samples. Among these weeds, some of which are characteristic of cereal fields and rarely found elsewhere, are dock (*Rumex*), and goosefoot/orache (*Chenopodium* sp./*Atriplex* sp.). Due to the small numbers of cereal grains and associated weed seeds, there is limited interpretative information.

Charcoal remains were present in all 80 of the samples, and there were identifiable remains in 61 of the samples. The preservation of the charcoal fragments was relatively variable, even within the samples, with some charcoal firm and crisp but most of the fragments were very brittle. Of the samples that produced identifiable remains 10 were dominated by hazel (*Corylus*), 18 were dominated by oak (*Quercus*); 3 contained only hazel and 20 contained only oak. Ash (*Fraxinus*) was also present in 5 samples (being the dominant species in one), willow/poplar (*Salix/Populus*) was present in 13 samples (being dominant in 3 samples) and alder (*Alnus glutinosa*) was present in 3 samples, in small numbers. The total range of taxa present indicates a local environment with a range of trees and shrub species. Oak is by far the most numerous of the identified charcoal fragments, and it is possible that this was the preferred fuel wood obtained from a local environment containing a broader choice of species. Bark was also present on some of the charcoal fragments, and this indicates that the material is more likely to have been firewood, or the result of a natural fire.

Hazelnut shell fragments were present but these show no marks typically associated with processed shells. Together with the high portion of hazel charcoal, this may indicate that they are merely representative

of hazel wood trees being burnt, which could be either a natural or a man-made process. However, with the remains of several cereal grains throughout the samples it is more likely that the samples represent occupation build-up of domestic waste.

### RADIOCARBON DATING

By Peter Marshall, Gordon Cook and Jane Kenney

Twelve samples were submitted for AMS dating to the Scottish Universities Environmental Research Centre (SUERC), East Kilbride. A Bayesian approach has been adopted for the interpretation of the chronology from the site (Buck *et al.* 1996), the main focus of which was the dating of the roundhouse and oval structure. This required an investigation of the chronology of the paired posts, the line of postholes and the hearth, and their relationship to either the roundhouse or oval structure. Samples for dating were selected that were most probably not residual in the context from which they were recovered. All samples consisted of single entities of identifiable short-lived materials (cf. Ashmore 1999).

Duplicate samples from a number of features were dated to determine whether the material was potentially of the same actual age (Table 1). The duplicate samples from posthole 2250, part of the line of four postholes and sealed beneath the wall of the oval structure and feature 2219 could be of the same age, but those from the entrance posthole 2206 and the two postholes 2194 and 2202 from the paired post structure suggests the contexts formed over a period of time, albeit relatively short in duration. The walls of the oval structure contained large quantities of charcoal and measurements on two samples from context 2074 are not statistically consistent, suggesting that the charcoal within the walls is of different ages. As there was burnt stone and charcoal dumped over this structure it was not clear where the dated charcoal originated from and how closely it was related to the use of the structure.

Table 1: Chi-square tests on radiocarbon dates from duplicate samples

Feature	Context	Laboratory Code	Radiocarbon Age (BP)	Chi-squared test (Ward and Wilson 1978)
entrance posthole	2216	SUERC-34045 SUERC-34049	1830±30 1945±35	T'=6.2; v=1; T'(5%)=3.8
hearth	2130 2108	SUERC-34052 SUERC-34053	1870±35 2010±30	T'=9.2; v=1; T'(5%)=3.8
oval structure wall	2074	SUERC-34050 SUERC-34051	1905±30 1795±30	T'=6.7; v=1; T'(5%)=3.8
fill of posthole	2251	SUERC-34059 SUERC-34060	1920±30 1965±35	T'=1.0; v=1; T'(5%)=3.8

Three models were constructed to reflect the different interpretations of the archaeological evidence (Kenney 2011). The preferred model did not attempt to date the oval structure but used the dates from this as a *terminus post quem* for the activity on the site. It assumed that all the other features are related to

the roundhouse. This model shows good agreement between the radiocarbon dates and prior information outlined above (Amodel=100%; Fig. 8), and provides an estimate for the construction of the roundhouse of 85 cal. BC and probably 30 cal. BC–cal. AD 45 (68% probability). The roundhouse was in use for 40–240 years (95% probability) or 75–185 years (68% probability), going out of use in cal. AD 85–250 (95% probability) and probably cal. AD 105–190 (68% probability). All the dated internal postholes fit within this chronology and the dates suggest that they associated with the use of the roundhouse, with no dated evidence for a later phase of activity. As the oval structure overlaid the roundhouse the stratigraphy demonstrates that there was some later activity on the site but the radiocarbon dates could not provide an estimate for the date of this event.

Details of each sample and the results are given overleaf. The calibrations of these results have been calculated by OxCal v4.1 (<http://c14.arch.ox.ac.uk/>) using the datasets published by Reimer *et al.* 2009. The calibrated date ranges cited are quoted in the form recommended by Mook (1986), with the end points rounded outward to 10 years for errors greater than 25 years.

#### **SUERC-34045**

*Material and context:* carbonised grain (*Triticum* spp.) from 2216, fill of the roundhouse entrance posthole 2206

*Radiocarbon age:* 1830±30 BP

*Calibrated date (95% confidence):* cal. AD 80–260

*Posterior Density Estimate (95% probability):* cal. AD 75–205

#### **SUERC-34049**

*Material and context:* charcoal (*Corylus avellana*) from 2216, fill of the roundhouse entrance posthole 2206

*Radiocarbon age:* 1945±35 BP

*Calibrated date (95% confidence):* 40 cal. BC–cal. AD 130

*Posterior Density Estimate (95% probability):* cal. AD 1–130

#### **SUERC-34050**

*Material and context:* charcoal (*Corylus avellana*) from 2074, wall of the oval structure

*Radiocarbon age:* 1905±30 BP

*Calibrated date (95% confidence):* cal. AD 20–210

*Posterior Density Estimate (95% probability):* cal. AD 25–215

#### **SUERC-34051**

*Material and context:* charcoal (*Corylus avellana*) from 2074, wall of the oval structure

*Radiocarbon age:* 1795±30 BP

*Calibrated date (95% confidence):* cal. AD 130–330

*Posterior Density Estimate (95% probability):* cal. AD 130–330

#### **SUERC-34052**

*Material and context:* charcoal (*Corylus avellana*) from 2130, part of the central hearth of the roundhouse

*Radiocarbon age:* 1870±35 BP

*Calibrated date (95% confidence):* cal. AD 60–240

*Posterior Density Estimate (95% probability):* cal. AD 55–200

#### **SUERC-34053**

*Material and context:* charcoal (*Salix/Populus*) from 2108, part of the central hearth of the roundhouse

*Radiocarbon age:* 2010±30 BP

*Calibrated date (95% confidence):* 90 cal. BC–cal. AD 70

*Posterior Density Estimate (95% probability):* 35 cal. BC–cal. AD 75

#### **SUERC-34054**

*Material and context:* charcoal (*Corylus avellana*) from 2202, fill of 2201, one of the northern posts of the paired posthole structure

*Radiocarbon age:* 1895±35 BP

*Calibrated date (95% confidence):* cal. AD 20–230

*Posterior Density Estimate (95% probability):* cal. AD 25–170

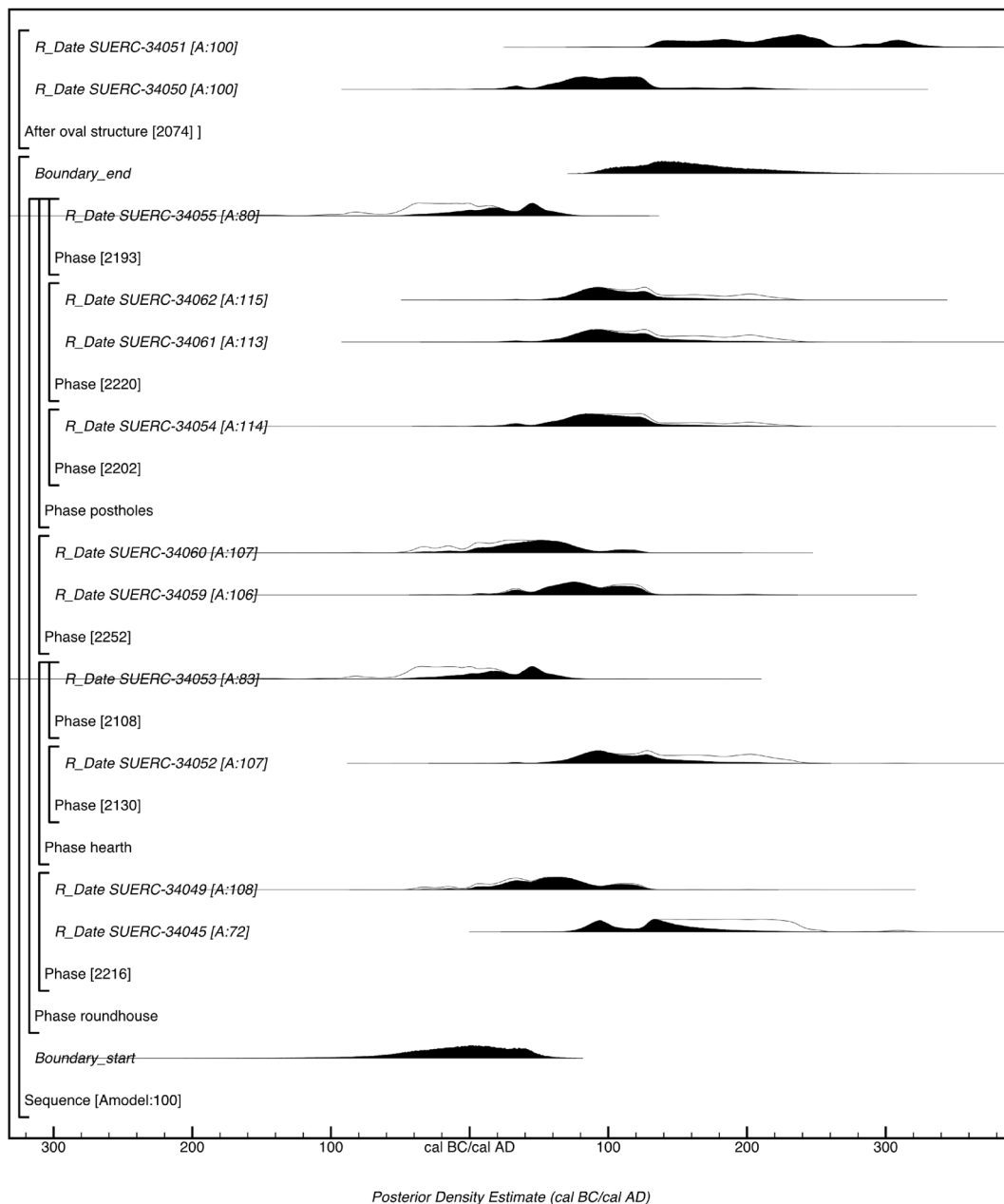


Fig. 8. Probability distributions of dates from Rhiwgoch (Model 1). Each distribution represents the relative probability that an event occurs at a particular time. For each of the radiocarbon dates two distributions have been plotted, one in outline, which is the result of simple calibration, and a solid one, which is based on the chronological model used. The other distributions correspond to aspects of the model. For example, the distribution 'Boundary\_end' is the estimated date for the end of use of the roundhouse. The large square brackets down the left hand side along with the OxCal keywords define the model exactly.



**SUERC-34055**

*Material and context:* charcoal (*Corylus avellana*) from 2193, fill of 2194, one of the northern posts of the paired posthole structure

*Radiocarbon age:* 2015±30 BP;

*Calibrated date (95% confidence):* 100 cal. BC–cal. AD 60

*Posterior Density Estimate (95% probability):* 40 cal. BC–cal. AD 75

**SUERC-34059**

*Material and context:* charcoal (*Corylus avellana*) from 2252, fill of posthole 2250

*Radiocarbon age:* 1920±30 BP

*Calibrated date (95% confidence):* cal. AD 20–140

*Posterior Density Estimate (95% probability):* cal. AD 20–135

**SUERC-34060**

*Material and context:* charcoal (*Corylus avellana*) from 2252, fill of posthole 2250

*Radiocarbon age:* 1965±35 BP;

*Calibrated date (95% confidence):* 50 cal. BC–cal. AD 130

*Posterior Density Estimate (95% probability):* 20 cal. BC–cal. AD 125

**SUERC-34061**

*Material and context:* charcoal (*Corylus avellana*) from 2220, fill of drainage pit 2219

*Radiocarbon age:* 1880±35 BP

*Calibrated date (95% confidence):* cal. AD 50–240

*Posterior Density Estimate (95% probability):* cal. AD 50–190

**SUERC-34062**

*Material and context:* charcoal (*Corylus avellana*) from 2220, fill of drainage pit 2219

*Radiocarbon age:* 1880±30 BP

*Calibrated date (95% confidence):* cal. AD 60–230

*Posterior Density Estimate (95% probability):* cal. AD 50–185

## DISCUSSION

**Wider landscape context of the roundhouse and boundary**

The Ardudwy uplands east of Harlech are an area of outstanding archaeological richness and the marginal nature of recent agriculture here has enabled monuments to survive as upstanding structures (Fig. 9). Even in the more improved pastures ancient field walls and settlements can be seen representing extensive areas of surviving ancient landscape. This landscape has been studied in some detail by Bowen and Gresham (1967), Kelly (1982), and more recently in advance of pipeline works associated with the water treatment works (Cooke *et al.* 2010, Kenney *et al.* 2009). Similar relict landscapes are found all along the hill slopes above the coastal plain and surveys of these have been undertaken recently at Muriau Gwyddelod (Smith *et al.* 2011) about 1 kilometre to the west of Rhiwgoch, and further afield at Dyffryn Ardudwy (Johnston and Roberts 2004), and Egryn (Muckle Partnership 2003; Berks and Evans 2009). Recent excavation has included a possible hut circle settlement and a small embanked enclosure as part of the Ardudwy Early Landscapes Project (Johnston and Roberts 2004) and investigations of field boundaries near Muriau Gwyddelod (Smith *et al.* 2011) and to the east of Rhiwgoch (Cooke *et al.* 2010; Kenney *et al.* 2009). Larger scale excavations include the settlements of Erw-wen and Moel y Gerddi, about 3 kilometres to the north-west (Kelly 1988), Crawcwellt (Crew 1998) about 9 kilometres to the east, and Cors-y-Gedol (Griffiths 1958) about 6 kilometres to the south.

Iron Age and Romano-British sites in Merioneth are mostly, but not entirely, distributed along the north- and west-facing slopes of the uplands above the coastal plain (Smith 1999), with concentrations extending up the valleys at Egryn and Dyffryn Ardudwy. The site of Muriau Gwyddelod, with its two well-preserved courtyard houses (Bowen and Gresham 1967, 198–200), forms the focus for the field system to the east of Harlech but enclosed roundhouse settlements and fragments of fields continue to the north,

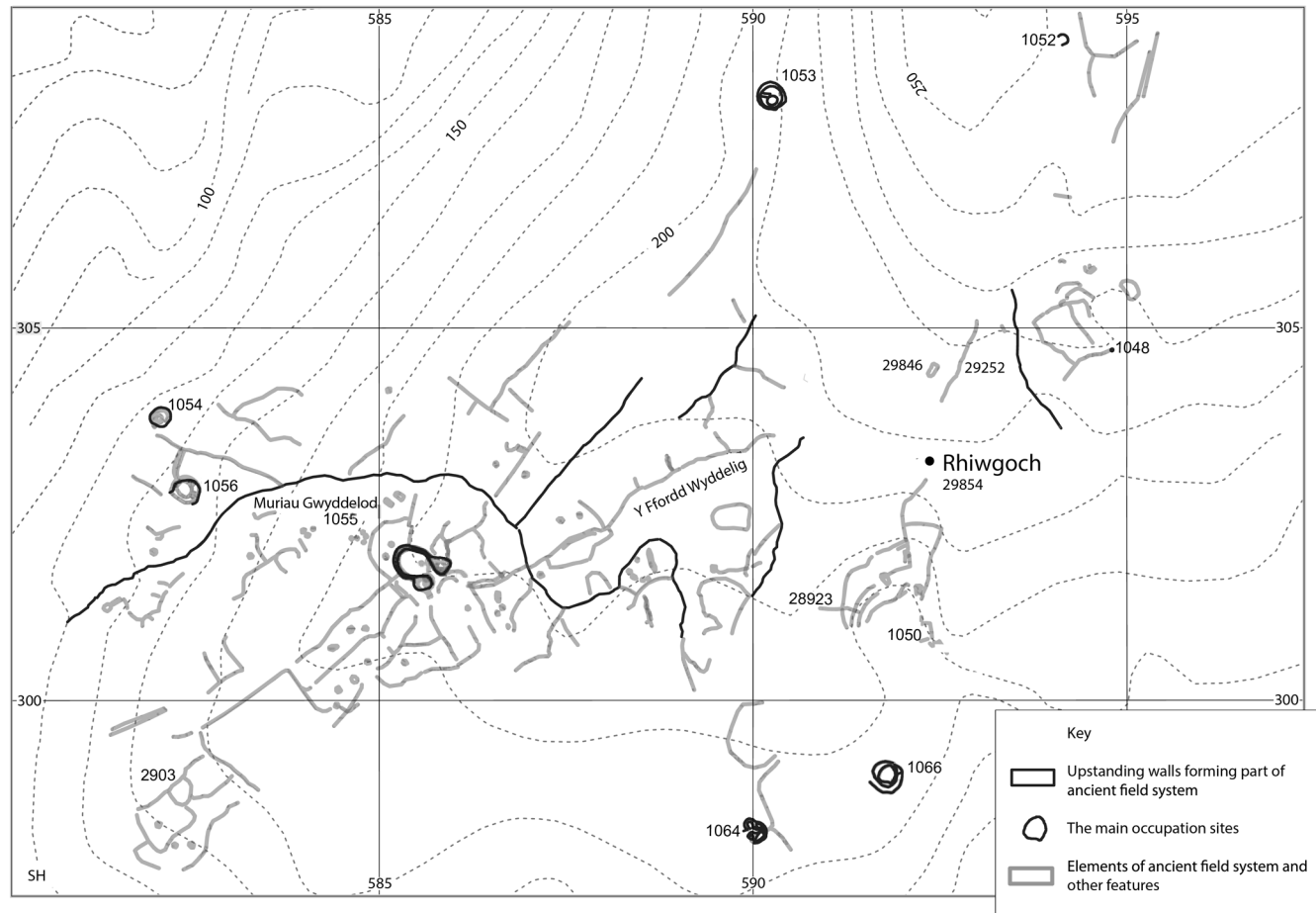


Fig. 9. The ancient landscape around Rhiwgoch showing the main settlement sites and other sites mentioned in the text are labelled with the Gwynedd HER number. The ancient field system is based on the survey by Johnston (in Smith *et al.* 2011). Air photography transcriptions are by Richard Kelly (copy held by GAT).

around the slopes of Moel Goedog, with its hilltop enclosure,<sup>10</sup> and to the south to the defended enclosure of Clogwyn Arllef<sup>11</sup> and beyond. Roundhouses and field boundaries extend well into the uplands with complex enclosed sites up to a height of at least 300m OD.<sup>12</sup> Much of the most densely settled area is above 140m OD and Muriau Gwyddelod itself is at 190m OD, so the Rhiwgoch site is not particularly high at 210m OD.

The ancient field system around Muriau Gwyddelod is well-preserved and some of the walls that form part of this system are still in use as modern boundaries. Many of the early boundaries radiate out from Muriau Gwyddelod and seem to form a coherent system, suggesting they are contemporary with the settlement and therefore probably Iron Age. However, Muriau Gwyddelod has not been excavated and its date and development is not known with certainty.

### **The roundhouse**

The substantial stone-built roundhouse at Rhiwgoch forms part of this extensive multi-period landscape and was built on a site that may have seen sporadic activity in the Bronze Age or earlier, suggested by a possible sherd of prehistoric pottery and a small number of worked flints, possibly of pre-second millennium BC date.

The roundhouse had a broad stone wall, a central hearth, Y-shaped capped drains exiting under the wall to the south and an entrance on the western side. It probably had an external diameter of 14.5m and an internal diameter of 10.5m. The entrance had a porch composed of four large posts, with the possible location for a door-post. There may also have been an eastern entrance, perhaps with a simple door rather than a porch. The northern part of the house was divided off from the rest, including the hearth, by a line of posts.

Inside the house, continuing the alignment of the porch, there seems to have been a further passage or entrance structure. The passageway led to within 0.75m of the hearth, which would have restricted access to the main part of the house. The extra post on the southern side of the passage may have made access round the south side of the hearth difficult and directed movement round the north side, although movement was further restricted here by the line of posts. It is possible that these supported a partial upper floor of crogloft style and that there was access between them at ground floor level.

The drains inside the roundhouse seem to respect the passageway. There was no evidence of the drains crossing the passage and pit 2219, into which 2161 seems to have drained, appears to have been deliberately placed to be on the line of the north side of the passage. If the posts forming the passage were joined by wattle to form an enclosed passage it might be imagined that there was a gap at this point allowing access to pit 2219. It is possible that pit 2219 and drain 2161 post-dated the passage and cut away one of the passage postholes, but there is no firm evidence to prove either way.

The substantial character of the Rhiwgoch roundhouse does not fit well with Gresham's class of unenclosed hut-groups, including single hut circles (Bowen and Gresham 1967, 177), as most of these roundhouses are small and built of small stones. However, Kelly (1982, 146–148) adds several more single hut-circles of a more substantial form, some constructed with orthostats. Many of these are at a similar or lower altitude to Rhiwgoch, one of which<sup>8</sup> forms part of the archaeological landscape to the south of Rhiwgoch. It appears that larger single buildings were part of the field system on the slopes above the coastal plain.

Several of the enclosed homesteads, including the Cors-y-Gedol site (Griffiths 1958), were built with 'massive orthostatic construction' (Bowen and Gresham 1967, 187), with orthostatic wall-faces and a core of smaller stones, comparable to the construction of the Rhiwgoch roundhouse. However, the Rhiwgoch structure, as currently reconstructed (at 10.5m internal diameter), is somewhat larger than the enclosed roundhouses listed by Gresham, though there are several with an internal diameter of 8m or above.

Most excavated roundhouse entrances are orientated to the east or south-east with western entrances being rare. The stone phase of Erw-wen roundhouse had a western entrance but this was probably influenced by the opposed east and west entrances of the timber phase (Kelly 1988, 122). In the wider region, north-western entrances were suggested at Parc Bryn Cegin, Llandygai (Kenney 2008) and, more clearly, at Parc Cybi (Kenney *et al.* 2011), where some buildings also had opposed south-eastern entrances. It is possible that the western entrance at Rhiwgoch suggests that it also had a more easterly entrance. The presence of the large posthole 2117 does suggest a possible north-east facing entrance, but, like the Parc Cybi buildings, the western entrance with its substantial porch was clearly of more importance. The entrances of the excavated buildings at Cors-y-Gedol faced north, suggesting that local topography and other considerations overrode the tendency for entrances to face the east or south-east in some cases. At Rhiwgoch the location of the main focus of contemporary settlement and the route of a contemporary trackway, Y Ffordd Wyddelig,<sup>9</sup> may have influenced the direction of the entrance.

The capped drains were well-developed in the Rhiwgoch roundhouse but are perhaps more commonly found within clay-walled roundhouses, such as Melin y Plas (Smith 2012), Parc Bryn Cegin (Kenney 2008) and roundhouse A at Bryn Eryr, Llansadwrn (Longley 1998). However, some stone-built roundhouses at Bryn Eryr (Longley *et al.* 1998), and at Ty Mawr (Smith 1986), did possess such drains. Erw-wen had a drain, probably originally capped, running out of its entrance. This ran from feature 21, interpreted as a posthole and considered to be unrelated to the drain, but it resembles feature 2219 at Rhiwgoch. A drain with a stone-filled hollow at the end in Hut 1 at Cors-y-Gedol may have been a similar feature and Hut 2 on this site also had evidence for capped drains.

Porches supported by substantial timbers are common in roundhouses of all types. In clay-walled and stone-walled houses the porch posts were often set within the thickness of the wall, as at Bryn Eryr A (Longley *et al.* 1998), Parc Cybi A (Kenney *et al.* 2011) and Mellteyrn Uchaf B (Ward and Smith 2001), rather than projecting outwards as in timber houses. The line of posts dividing off the northern arc of the Rhiwgoch roundhouse can be compared to other divisions of internal space, especially in roundhouses B and E at Parc Cybi (Kenney *et al.* 2011) where the northern sides of the houses were distinguished from the rest of the interior, although posts were not used to form the division in these examples. No other excavated houses in the region show such a clear use of posts to create an internal division.

The most difficult structure to parallel at Rhiwgoch is the double row of posts just inside the entrance. This has some similarities in shape and size to the square post-built granaries found at Ty Mawr, Southstack (Smith 1986) and at Parc Cybi (Kenney *et al.* 2011), but both the radiocarbon dates and the layout suggest that the structure was contemporary with and integral to the roundhouse, suggesting that they represent an extension to the porch leading into the interior. The postholes at the timber roundhouse at Little Woodbury, Wiltshire (Bersu 1940) similarly extended the porch into the interior, but the design was not the same as Rhiwgoch but so far no other close parallels for this structure have been found.

There is evidence for a small stone-walled enclosure approximately 5m square in front of the western door of the Rhiwgoch roundhouse. The burnt clay found within this area may indicate small clay hearths on which stones were heated, as evidenced by the quantity of burnt stone, which together with the presence of burnt bone and cereals suggest food preparation and cooking. It seems likely that the waste burnt stones were originally dumped in heaps to the north of the enclosure.

When the roundhouse was abandoned its walls were largely robbed out and it is possible that the timbers of the porch were also removed. Some of the heaps of burnt stone were subsequently either deliberately dumped into the enclosure or eroded into it after abandonment to form layers 2084/2144, a process that may have been contributed to by disturbance caused by dismantling the roundhouse porch. The robbing of the roundhouse wall must also have caused significant disturbance. Boulders 2045 and 2282 may have originated from the wall and were moved as part of the robbing activity.

Radiocarbon dating shows that the roundhouse was almost certainly occupied throughout the first century cal. AD and probably well into the second century. Roman pottery sherds indicate that activity continued into the second century AD, but there is no evidence of occupation continuing into the third century. Considering the element of doubt normally attributed to the dating of roundhouses in North Wales this gives a very high level of confidence for the use of the roundhouse in the first and second centuries cal. AD, with the possibility of construction towards the end of the last century cal. BC.

The finds from the Rhiwgoch house were few but are generally comparable with other excavated roundhouses in the region. The occupants had some contact with the Roman world, acquiring a melon bead in addition to a small number of Roman pots. The bead, dating to the first/second century AD, which may have arrived on site as a single object rather than as part of a necklace, and may have been considered a charm that was ultimately placed in the inner drain under the floor of the roundhouse. The number of pottery sherds is low for a site occupied during in the Roman period but can be compared to the 17 sherds recovered from the smaller excavations at Cors-y-Gedol (Griffiths 1958), which also mainly dated to the second century AD. The scarcity of pottery at Rhiwgoch might be interpreted as indicating a low status but this appears to be contradicted by the size of the building.

A majority of the stone artefacts probably originated from activity associated with the roundhouse, though only two were securely within roundhouse features. The hammerstones, whetstones and spindle whorls from are typical finds for sites in the region though in contrast to other native Romano-British roundhouses that the stone assemblage lacks any evidence of querns, rubbing stones or mortars. The hammerstones were used for a variety of different activities and spinning, or at least the production of spindle whorls, may have been an activity undertaken on the site. It is notable that Cors-y-Gedol produced four small slate discs, which also fit the description of unfinished spindle whorls, but it is possible that discs with no trace of a central hole were intended for some other function.

The burnt clay seems to have originated from contexts 2086 and 2099 inside the small enclosure. The forms of the burnt clay pieces suggest flat surfaces exposed to heat, possibly hearths. None were found *in situ*, but as clay from the same source was mixed into the layers above it shows that this area was much disturbed. There may have been one or more hearths just outside the entrance of the roundhouse where cooking and other activities took place. The presence of burnt bone from these same deposits supports this. The amount of bone recovered was tiny (less than 10g in total) and none was identifiable, but it is the sort of material that might be expected from cooking hearths.

Burnt bone and burnt clay from these hearths appear to have been mixed into the layers above. These layers also contained quantities of burnt stone, probably also generated by activities at the hearths. There was no trough of the sort usual in a burnt mound but burnt stone on settlement sites is commonly found without associated troughs. It is possible that organic containers, such as baskets lined with clay or leather, were used for cooking with hot stones. The quantity of burnt stone produced was quite large and the stones might have been heaped outside the enclosure. Some of the burnt stone found in the north-western part of the site could have been the remains of such stone heaps, and part of a burnt stone pile (2095) did survive against the partially robbed out northern wall of the enclosure, but most seems to have been spread out to level the interior of the enclosure. There was little burnt stone to the south of the enclosure, so it seems unlikely that burnt stone was discarded in this area.

The burnt stones were not only dumped into the enclosure but remaining heaps were spread around during the later history of the site. The latest burnt stone layers may have originated from heaps that had survived nearby, just outside the present excavation trench, which were moved in recent times in order to concentrate the stone in one area and so improve the field.

All the burnt stones seem to be of local origin with a bias against friable shaley stones but no specific attempt to collect particularly heat resistant rocks from further afield. The lack of shales within the burnt



stone samples demonstrates that these were deliberately collected and not just the result of general burning over the pre-existing stones on the site.

The presence of a large lump of slag could be taken to suggest metalworking within the enclosure, but the lack of hammerscale and other small waste suggests that the slag lump came from elsewhere. There were a small number of iron objects on the site, some probably agricultural items of fairly recent origin. The only securely sealed iron objects were nails. Two nails (SF32 and SF52) came from pit (2219) and a nail (SF53) was also recovered from within the wall (2074) of the oval structure. The latter could be intrusive but the two nails from the pit may suggest that the roundhouse or some elements within it, such as the door, had nails in its construction.

The charred plant remains from different features were compared in detail in an attempt to detect different activities across the site. A large proportion of the charred cereal grains came from features directly related to the roundhouse, but very few grains came from the deposits within the small enclosure, possibly due to the disturbed nature of these deposits. Most of the grains were unidentifiable but some wheat, barley, and a small amount of possible oats were identified. Fifteen unidentifiable grains were recovered from the charred material within the wall of the oval structure. The lack of identifiable grains within this assemblage may suggest that these were residual from the roundhouse activity. Charred seeds of arable weeds were also concentrated in deposits related to the roundhouse but were not found in the wall of the oval structure. These seeds would be unlikely to survive in deposits that had been extensively disturbed.

The deposit with the most charred cereal grains, many identifiable, was deposit 2095. As described above this is interpreted as a dump of burnt stone resulting from activity in the small enclosure. This contained many indeterminate grains but also wheat and barley and a single grain of oats.

Charred hazelnut shells were quite widely distributed across the site, but again with most concentrated in deposits related to the roundhouse. However the numbers were very low considering that the consumption of hazelnuts is likely to produce large quantities of shells as waste. It is probable that these nuts shells represent the use of hazel as a fuel, and it may indicate the occupation of the site in the autumn.

Most of the identifiable charcoal from the site was oak and much of this was probably used as fuel; the roundhouse hearth contained oak as well as hazel charcoal. Hazel was the next most common identifiable charcoal, again probably present as fuel. Ash, willow/poplar and a small amount of alder were also present. Although there was a large amount of charcoal recovered from the oval structure wall only a small quantity of this was identifiable, mainly as hazel. The low level of identification is probably due to it being disturbed and reworked.

It is argued that the dates from the wall of the small oval structure were on material originating from the roundhouse occupation and mixed into the wall material either during construction or during the dumping of the burnt stone deposits. This structure could therefore have been built inside the remains of the roundhouse at any period. It is unclear whether this structure was entirely stone-built or if the surviving wall represents a stone foundation for a superstructure of timber, clay or turf. The lack of a contemporary hearth and the relatively poor quality of construction suggests either a small pen for livestock, perhaps associated with milking sheep or goats, or a seasonally occupied shelter for a shepherd.

The prominent heap of stones left after much of the site had been robbed out seems to have attracted further dumping of field clearance material, including burnt stone from just beyond the excavation limits or from mounds that had survived in the north-western corner of the excavation that were flattened over the area.

The only significant stratigraphic relationship on the site was that the oval structure post-dated the roundhouse, yet the radiocarbon dates on samples from within the wall of this structure fell within the use of the roundhouse. The two samples from the wall of the oval structure are of different dates, suggesting

they resulted from different events and indicating that this deposit has probably received charcoal from mixed sources. An interpretation of these results is that the charcoal from the wall originated from activity related to the roundhouse and the results obtained do not date the construction of the oval structure.

The medieval pottery found at the site was insecurely stratified, and the presence of single sherds suggests that it may have originated from midden material spread on the fields. The probable medieval longhouse<sup>7</sup> lies a short distance up-slope of the site, and the sherds may have come from there. The association of the medieval pottery with the oval structure is not secure. The pottery dates to the thirteenth to fifteenth centuries AD but this cannot necessarily be used to date activity on the site. The lack of other evidence for domestic activity associated with this structure, which was probably not roofed, makes the use of pottery here difficult to explain.

### **The field boundary**

The excavation across the north–south field boundary at Site B, approximately 25m south of the probable medieval longhouse, revealed a fairly well-built wall. It was butted by a slighter wall running east–west. No dating evidence was found but the dating of the north–south wall might be possible by comparison to other features in the landscape.

The north-south wall had been eroded and lost at its southern end by disturbance related to the original building of the water treatment works. It is probable that it continued south towards the roundhouse. There was no evidence in Site A of it joining the small enclosure but it could possibly be represented by the stones 2182 scattered to the north of the earth-fast boulder 2131 (Fig. 5). South of the road from Site A is another tumbled, relict field wall running south-west to north-east towards the roundhouse (Fig. 2). Any trace of this joining the roundhouse has been lost but it is possible that this wall and the wall in Site B were originally part of the same boundary with the roundhouse lying directly along it.

It is possible that an irregular line of boulders that marks the limits of an area cleared of stone was also a field related to the roundhouse (Fig. 2). However the boulders seem never to have been built into a wall and the boundary of the cleared area was even more irregular than the more gently sinuous lines of the field walls. This clearance activity may therefore be of a much later date than most of the field walls and the roundhouse.

This combined boundary runs roughly parallel to some the boundaries that radiate out from the Muriau Gwyddelod settlement. The possible association with the roundhouse and its coherence within the Iron Age/Roman period field system makes a roughly contemporary date for this wall likely. Recognising the chronological development of the Iron Age field system around Rhiwgoch is almost impossible, however, due to the scarcity of excavation in the immediate area. The excavated sites of Moel y Gerddi and Erw-wen were dated to the mid first millennium cal. BC but the Rhiwgoch house was not built until the end of the first century cal. BC or start of the first century cal. AD. Although not radiocarbon dated the pottery from the Cors-y-Gedol site indicates that this was in use at about the same time as Rhiwgoch. It is likely that the Rhiwgoch house was in use for a duration of 75–185 years (68% probability); occupied for perhaps three generations. The evidence from Erw-wen suggested a long-lived settlement, while that from Moel y Gerddi showed a shorter period of use (Kelly 1988). It seems likely that settlements were inserted into the field systems at different times, some potentially continuing in use for long periods but others less long-lived. Much more work is required on the chronology of the Iron Age and Roman period landscapes in this area to determine their development and to investigate the relative status and function of sites.

Elements of the field system have continued in use through to the present day, so the development and insertion of settlements into the pre-existing fields continued long after the Roman period. The oval structure built inside the remains of the roundhouse at Rhiwgoch has not been well dated. It is possible that it may have been a medieval sheep shelter, but could have been later in date. If medieval it may have

been related to the probable medieval longhouse to the north-west (GAT HER 29846), which has not been excavated but represents the later development of the field system. The fact that the longhouse is apparently aligned on the adjacent boundary (GAT HER 29252) presumably suggests that this boundary was still in use in the medieval period. Most of the medieval longhouses known or suspected in the area seem to be set within pre-existing fields. Several walls forming part of the Iron Age/Roman field system are still in use today so continuity in field boundaries would appear to be the norm in this area.

## CONCLUSIONS

The excavation of this site led to discoveries unanticipated from the initial evaluation. Although the number of roundhouses in the area makes the discovery of another unsurprising it does indicate that other heaps of stones might hide fragmentary roundhouses of a similar sort. This could fill out further an already densely occupied Iron Age and Roman period landscape. With the exception of Erw-wen and Moel y Gerddi none of the many settlements of different types have been reliably dated and the precise dating of this roundhouse in fairly close proximity to the settlement of Muriau Gwyddelod gives some indication of the date of at least some of the neighbouring sites.

Despite the fragmentary character of the site evidence was recovered indicating activities on the site, particularly the extensive use of hot stones, probably for cooking. It was possible to provide a date for the activity and obtain some indication of farming practices and wider contacts. The range of data retrieved from this site highlights the potential of this landscape, the targeted research of which could provide a firm basis for understanding the Iron Age in North Wales. This project has provided hard evidence to start this process and especially to start fixing this landscape chronologically.

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## NOTES

1. Gwynedd Archaeological Trust (GAT) Historic Environment Record (HER) 29854.
2. GAT HER 29252.
3. GAT HER 29846.
4. The extension of the water treatment works was carried out in the context of a wider infrastructure programme including a new water link main between Harlech and Llanfair, the replacement

of the raw water pipeline to the water treatment works and the building of a pumping station. Archaeological assessment and mitigation works were carried out for all these: unpublished reports available in GAT HER and Kenney *et al.* 2009. The finds, including the charred plant remains, are held by the Gwynedd Art Gallery and Museum, Bangor and the paper and digital archives are held by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW). A more detailed unpublished report on the excavations (Kenney 2011) is available from the GAT HER and is also available for download from the RCAHMW *Coflein* website.

5. GAT HER 29846.
6. The burnt stones were examined by Dr David Jenkins who established that they were composed exclusively of one rock type which corresponds to the local solid geology, the Lower Cambrian sandstones of the Harlech Dome. For a fuller report see Kenney 2011.
7. GAT HER 29846.
8. GAT HER 1158.
9. GAT HER 2901.
10. GAT HER 1000.
11. GAT HER 1061.
12. e.g. GAT HERs 1001 and 1002.

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