

# **CEFN GRAEANOG QUARRY EXTENSION CLYNNOG, GWYNEDD**

ARCHAEOLOGICAL WATCHING BRIEF,  
DECEMBER 2003 – JANUARY 2004  
(G1598)

Report No. 530

Prepared for  
Tarmac Quarry Products Ltd

By  
George Smith

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Ymddiriedolaeth Archaeolegol Gwynedd  
**Gwynedd Archaeological Trust**

Contracts Section  
'Craig Beuno'  
Garth Road  
Bangor  
Gwynedd LL57 2RT  
Tel: 01248 352535  
Fax: 01248 370925  
Email: [gat@heneb.co.uk](mailto:gat@heneb.co.uk)

# **Cefn Graeanog Quarry, Clynnog, Gwynedd**

## **Archaeological Watching Brief: December 2003 - January 2004 GAT Project No. G1598**

### **Introduction**

The watching brief described in the present report is part of a long-standing project monitoring the extension of the sand and gravel quarry at Cefn Graeanog, Clynnog, Gwynedd. The assessment of the proposed expansion area was undertaken in 1994 by Gwynedd Archaeological Trust (GAT) for Tarmac Quarry Products Limited (Flook 1994). A project design was submitted in March 2000 by GAT, proposing a programme of field evaluation and mitigation.

An area of roughly 0.5 hectare was to be stripped of topsoil as part of the next phase of quarry expansion to allow completion of quarrying of Area 2C, centred in NGR SH4580 4960 (Fig. 2). Tarmac Quarry Products Limited asked GAT to carry out a watching brief while the stripping was taking place. The agreed quarry extension area was a triangular shaped piece of land at the north end of quarry Area 2C covered by a previous watching brief where five discontinuous lengths of linear features had been identified (Kenney 2001). These had been interpreted as remnants of field systems associated with Romano-British or medieval period settlements in the near vicinity.

The area to the south of Area 2C had been covered by another previous watching brief but where no archaeological features had been identified (Jones 1999).

### **Archaeological aims**

The aims of the watching brief were to investigate and record all archaeological features revealed during the soil stripping operation, and to recommend whether any further work was necessary.

### **Methodology**

The topsoil stripping was carried out intermittently because bad weather conditions made it unsuitable for heavy machinery to work without damaging the topsoil. The watching brief had therefore also to be carried out intermittently. The larger part of the area was stripped in two parts, the first on 17<sup>th</sup> December 2003, the second on the 5<sup>th</sup> and 6<sup>th</sup> January 2004. Because of continuing wet ground conditions it was finally decided that the remaining part would not be stripped but left to be included with the next phase of quarry operations in the next field to the north (Fig. 2).

The site was visited on 18<sup>th</sup>, 19<sup>th</sup> and 22<sup>nd</sup> December 2003, and the 6<sup>th</sup> January 2004. The area of stripped subsoil surface was walked in parallel lines and general record photographs taken. The limits of the area stripped were measured in by tape from existing field boundaries.

### **Topography and Geology**

The description here is repeated from that prepared for the previous report (Kenney 2001).

The name Cefn Graeanog literally translates as a gravelly ridge (Mason 1998, xvi), and this accurately describes its character. The low, hummocky ridge lies at the eastern end of the Llyn Peninsula, within a basin, about 3km across, surrounded by hills. The ridge rises to a height of 160m and forms an island in area of wetter, heavier soils and bog. The soils in the basin are derived from glacial and fluvio-glacial deposits, mostly of Snowdonian origin, which have been heavily weathered under periglacial conditions. In poorly drained areas silty clays and peat have formed, but the soils on the ridge are well drained, if stony, brown earths of the Arfon series, with brown podsols on the steeper slopes. Although acid, these are some of the best soils in the northern Llyn, and are excellent soils for small-scale arable agriculture (Mason 1998, xvi-xix).

## Archaeological Background (Fig. 1)

The description here is repeated from that prepared for the previous report (Kenney 2001).

### *Prehistoric and Roman activity*

The early prehistory of the ridge is far from clear. No Mesolithic artefacts have been discovered, suggesting that the area was avoided during that period, when occupation was mainly concentrated near the coast. However, there are some slight hints from the pollen record that forest clearance may have occurred before 4000 BC (Chambers 1998, 57), and a patch of burnt stone under a later burnt mound was dated to 5955-5500 cal BC (CAR-721) (Kelly 1992, 85). Kelly (ibid, 86) dismisses the date as a result of dating inadequate quantities of charcoal, but a recent excavation about 1km south-west of the ridge also produced Mesolithic dates. The dates, ranging from 5310-6625 cal BC at 2 sigma, were from a deposit of charcoal within what may be a natural, periglacial formation (Kenney 2000). The evidence raises the possibility of deliberate burning of the vegetation in the Mesolithic period.

The Neolithic period is almost as invisible on the ridge, although the pollen evidence is clear that there was anthropogenic forest clearance during this period (Chambers 1998, 57). The long history of farming on the ridge began during this period, although no trace of the settlements of these early farmers have yet been found. The nearest Neolithic monument is the chambered tomb at Penarth (PRN 199), situated 3.25km north-west of the ridge (Kelly 1998, 161).

The earliest monument on the ridge itself is a standing stone (PRN 124) of presumed Bronze Age date. While the numerous cairns on the ridge are generally undated, the two located close to the standing stone are presumably also Bronze Age, and appear to be funerary monuments rather than clearance cairns (PRN 224, 225). These three monuments are collectively scheduled as Cn 98 (Mason 1998, xix). The pollen evidence shows phases of clearance and regeneration throughout the Bronze Age, and the presence of burnt mounds may indicate Bronze Age settlement in the area (Kelly 1998, 161). One of these mounds (PRN 129) was excavated (Kelly 1992), producing dates demonstrating its use between the mid third and early second millennia BC, and later in the late second to early first millennia (Kelly 1998, 161). There is another burnt mound site, 175m south of the excavated one, which appears to be a complex site with three conjoined mounds (PRN 3997). The chance discovery of a ring (PRN 3446), of the type known as Bronze Age ring money, by a farm worker in 1970, suggests Bronze Age activity near the summit of the ridge.

Major and sustained forest clearance started on the ridge in the mid first millennium BC, and the earliest settlement sites discovered so far date from the mid 2<sup>nd</sup> century BC. Three hut groups have been excavated on the ridge (Mason 1998). The Graeanog site and Cefn Graeanog II were founded in the 2<sup>nd</sup> century BC and continued through the end of the Roman period. The third hut group, Cefn Graeanog I, was established in the 2<sup>nd</sup> century AD, and again continued to the end of the Roman period. There may have been a 4<sup>th</sup> hut group (PRN 118) 300m to the west of Graeanog (Kelly 1998, 162) and there are similar sites about 1km away to the south-west around Caerau (PRN 108, 109). The Iron Age is further represented in the area by a small hillfort (PRN 203) on Y Foel, the rounded hill to the north of the area (Mason 1998, xix).

### *Medieval and later periods*

Although the hut groups went out of use at the end of the Roman period the pollen record shows that the ridge continued to be farmed, and the settlements had probably not moved very far away (Kelly 1998, 162). Resettlement of the ridge occurred from the 8<sup>th</sup> century AD. The Graeanog hut group site was reoccupied between the 8<sup>th</sup> and 11<sup>th</sup> centuries, and a medieval homestead (PRN 120), excavated by Kelly (Kelly 1982), was in use between the 11<sup>th</sup> and 13<sup>th</sup> centuries. A further group of medieval platform houses (PRN 123) were located on the bog margin to the south, but they were destroyed without excavation (Kelly 1998, 162). A possible medieval farmstead (PRN 3999) and an isolated platform house (PRN 4360) are located on the north-eastern slope of the ridge.

In the medieval period Graeanog first appears in written history. The confirmation of the grant of 'Grayanawt' to the *clas* of Clynnog Fawr, in the 1209 charter of Llywelyn ap Iorweth, probably refers to the excavated medieval homestead (PRN 120) (Kelly 1998, 162).

Modern Graeanog was probably founded in the 15<sup>th</sup> century, when the pollen record shows intensified clearance activity. The present settlement was certainly established by the early 17<sup>th</sup> century, when a farmhouse was built. This is now a grade II listed building (RCAHMW 1960, site 800, p. 44). The modern farm of Cefn Graeanog was founded in the mid 19<sup>th</sup> century, and was demolished in 1990 in advance of quarrying (Kelly 1998, 160, 162). The existing field system probably dates to the early 19<sup>th</sup> century, when fields were enlarged to open up areas for progressive farming techniques (Flook 1994, 4). Gravel extraction has taken place on the ridge for at least 100 years, with large scale extraction started after the Second World War (Mason 1998, xvi). The quarrying activity has been the impetus for much of the archaeological work on the ridge, as sites have been excavated in advance of the gravel extraction.

### Results of the watching brief

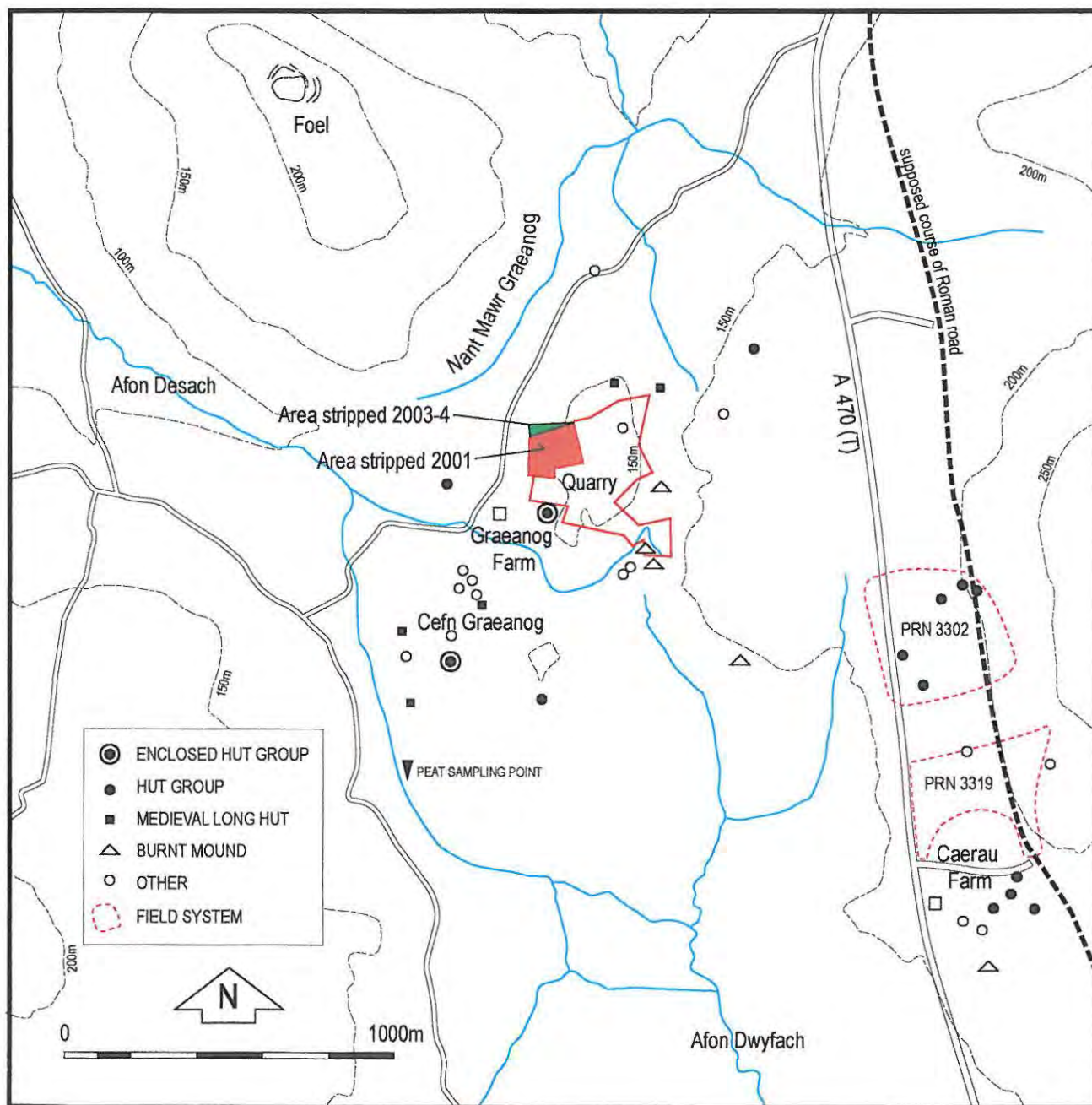
The surface after stripping was very irregular because of the use of an excavator with a toothed bucket and because there were a number of large glacial erratic boulders in the surface of the subsoil, which were dug out as the topsoil was removed (Fig. 3). The heavy disturbance of the subsoil surface made it less likely that archaeological features would be recognised or even survive. It was also noted that an existing field wall had been removed prior to topsoil stripping and there was virtually no sign that it had been present once it had been bulldozed away.

One of the linear features (F5) identified during the previous phase of quarry extension (Fig. 2) could have continued into the present area if it was more extensive but no evidence for it was found and no other features were identified within the stripped area. There may well have been features in this area that did not survive or were not recognisable after the soil stripping process. It is recommended that if possible the stripping in future should be carried out with a flat-edged bucket and that a reasonable portion of any further quarry area is stripped with on-site archaeological monitoring rather than being observed after stripping.

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Graeanog Quarry Fig 1 : Known archaeological sites in the Graeanog area.



Graeanog Quarry Fig. 2: Site plan showing location of features identified in 2001 and area stripped in 2003-2004. Scale 1:2000



Graeanog Quarry Fig. 3 Quarry extension area after topsoil stripping 6th January 2004