

CPAT Report No. 1407

Llanymynech Ogof

Archaeological Evaluation 2016






Llywodraeth Cymru
Welsh Government

YMDDIRIEDOLAETH ARCHAEOLEGOL CLWYD-POWYS

CLWYD-POWYS ARCHAEOLOGICAL TRUST

Client name: Cadw
 CPAT Project No: 2100
 Project Name: Llanymynech Ogof
 Grid Reference: SJ 26565 22212
 County/LPA: Powys
 CPAT Report No: 1407
 Event PRN: 140098
 Report status: Final
 Confidential: No

Prepared by:	Checked by:	Approved by:
		
R Hankinson Senior Archaeologist	Nigel Jones Principal Archaeologist	Nigel Jones Principal Archaeologist
29 March 2016	29 March 2016	29 March 2016

Bibliographic reference:

Hankinson, R., 2016. *Llanymynech Ogof: Archaeological evaluation 2016*. Unpublished report. CPAT Report No. 1407



Llywodraeth Cymru
Welsh Government

YMDDIRIEDOLAETH ARCHAEOLEGOL CLWYD-POWYS
CLWYD-POWYS ARCHAEOLOGICAL TRUST

41 Broad Street, Welshpool, Powys, SY21 7RR, United Kingdom

+44 (0) 1938 553 670

trust@cpat.org.uk

www.cpat.org.uk

©CPAT 2016



The Clwyd-Powys Archaeological Trust is a Registered Organisation
with the Chartered Institute for Archaeologists

CONTENTS

SUMMARY	ii
1 INTRODUCTION.....	1
2 BACKGROUND.....	4
3 EXCAVATIONS IN THE SHAFT CHAMBER	7
4 CONCLUSIONS.....	10
5 ACKNOWLEDGEMENTS	11
6 SOURCES	11
APPENDIX 1: SITE ARCHIVE	13

Summary

An evaluation was carried out within the mine known as Llanymynech Ogof in response to the unauthorised disturbance of human bone in a section of the workings called the 'Shaft Chamber' in 2014. This resulted in a police investigation which determined that the human remains consisted of the skull of a child of between one and two years of age, which radiocarbon dating identified as belonging to the post-medieval period, with a most likely date of the second half of the 18th century; this would fit with the timing of a series of limited investigations of the mine which seem to have been made around this period by people interested in the exploitation of surviving mineral deposits. Some additional human bone seems to have been disturbed, but its appearance suggests this was potentially somewhat earlier and it is known that the mine was utilised as a place of burial in the later Roman period.

The evaluation proved that there was no evidence for an associated grave or other skeletal remains at the location from which the skull was recovered, so it must be assumed that the child was originally buried elsewhere in the chamber; where and at what level within the chamber deposits, also whether there are additional surviving remains in-situ, will probably never be known. It seems clear that the material from which the skull was recovered had already been disturbed, perhaps a number of times, by attempts to rework the mine for minerals and by a search for unknown passages in the Ogof by the Shropshire Caving and Mining Club in the 1960s. Much of what is known about the mine is the result of the 1960s investigations, which included survey and exploration and also drew together information about the Ogof from disparate sources, some dating back to the mid-18th century.

The question of why the infant was buried in the mine, as it seems to have been too young to have made its way there unaided, must remain a mystery. Perhaps the most likely scenario is that it was not possible to bury the child in consecrated ground owing to the strictures of the time and the mine workings were seen as a convenient place.

1 Introduction

- 1.1. Llanymynech Hill on Montgomeryshire's northern border with Shropshire presents an imposing landmark, its limestone cliffs visible for some considerable distance from the south and east (Fig. 1). The hill lies on the western edge of the Shropshire Plain overlooking the confluence of the rivers Vyrnwy and Severn, and the ramparts of the scheduled hillfort (SAM MG 030) that occupy the hilltop define both a physical and political boundary between Wales and England.

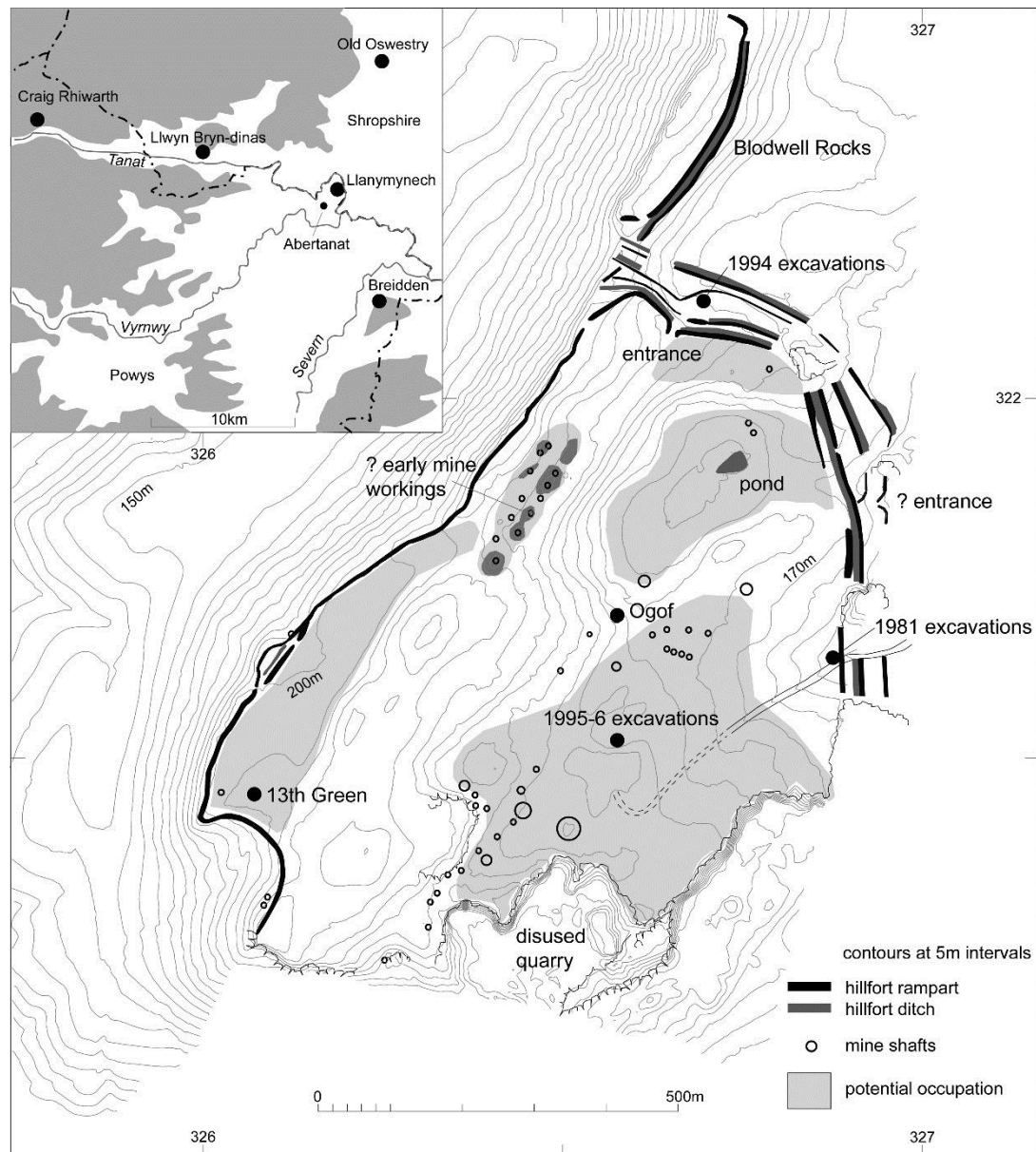


Fig. 1: Llanymynech Hillfort, showing the location of the Ogof (after Jones and Hankinson 2015)

- 1.2. In 2014-15 the Field Services Section of the Clwyd-Powys Archaeological Trust (CPAT) carried out an assessment, with grant aid provided by Cadw, of caves in north-east Wales already known to contain archaeological material or where this was thought possible (Hankinson 2015). This updated an earlier assessment, conducted

in 2008-9 under Cadw's scheduling enhancement programme, as a result of additional evidence coming to light. Following on from this, in 2015, a programme of evaluation was conducted on four of the north-east Wales caves (Hankinson 2016). The methods of evaluation utilised in the investigation of these caves were adapted for use in the work described in this report.

- 1.3. The Llanymynech Ogof, contrary to its name which implies it is of natural origin, is a network of mine workings located within the scheduled area of the hillfort and is readily accessible, although visitors are normally dissuaded from exploring certain localities by the restricted size of some passages and the presence of water. While there is no agreed public access to the mine a public footpath approaches within a few metres of the entrance and it is regularly used by caving and mining enthusiasts, as well as outdoor activities groups. The main routes used by visitors extend as far as the 'Belfry', passing through the Entrance, Mandible, Shaft, Five Ways and Burial Chambers (see Fig. 3). This activity does not generally represent a major threat to the site, but the uncontrolled access to it means there is a potential for damage or disturbance by less well-minded individuals.
- 1.4. This was highlighted by the unauthorised disturbance of deposits within the 'Shaft Chamber' in August and September 2014, which involved the removal of human remains and other artefacts and was the subject of a police investigation. The initial disturbance was apparently caused by a metal detectorist involved in a search for artefacts within the chamber, and it is believed that a copper disc was recovered; a month later another individual seems to have carried out additional excavations nearby, after knowledge of the initial disturbance came to be more widely known. Radiocarbon dating (SUERC-55055) and skeletal analysis carried out on behalf of the police suggested that the human remains were part of a child burial potentially dating from around the second half of the 18th century.
- 1.5. A total of three likely areas of disturbance were identified by the writer in a visit to the site with the police in September 2014, all of which were either within or in very close proximity to the Shaft Chamber, about 50m horizontally from the entrance. While the context from which the artefacts were derived was uncertain, discussions with the Shropshire Caving and Mining Club (SCMC) have indicated that some excavation was carried out by them in the Shaft Chamber in the 1960s, with a view to revealing further mine workings. That these excavations took place there highlights the fact that the bedrock is not visible in the floor of the Shaft Chamber, and it seems that it has been used as a convenient place for depositing mining waste over a significant period of time; it is known that some of the waste was already in place in the Roman period. There was thus a good reason to suggest that the deposits forming the floor of the chamber had seen past disturbance, although the extent of this was not apparent.
- 1.6. The largest area of disturbance in 2014 lay immediately to the left of the point where the entrance passage opens into the chamber and seems to have involved digging into what had formerly been a stable clay/rubble slope that borders the east side of the chamber and gives access to a short passage. Examination of police photographs showed that this was the locality disturbed in August, and was therefore the place from which the human remains were recovered, but it had been extended to the south by the second phase of disturbance to cover an area about 1m square. Some bone was visible but this appeared to be of animal origin (probably sheep), and it was

associated with bottle fragments of relatively recent origin. No evidence of any ceramic finds was found. At the point where the entrance passage enters the chamber, material that had been disturbed was also evident and various items of human skeletal material were observed (probably the top of a femur, the base of a skull, a tooth and a vertebra), as well as a number of other bone fragments which were less readily identifiable. All of the recognisably human skeletal material from this area appeared to be of some considerable antiquity and therefore of archaeological interest, in that human burials dating to the Roman period have been identified and recovered from this approximate locality in the mine as far back as the mid-18th century. The third area of disturbance was a fairly small scoop in a spoil slope which overlooks the exit from the Shaft Chamber, where a crawling passage at floor level leads to the 'Burial Chamber' (on the opposite side of the Shaft Chamber to the entrance) but there was no evidence that any artefacts had been present. A number of small piles of recently disturbed bone and glass were placed in the area near the largest disturbance, implying that they had been recognised and deliberately stacked.

- 1.7. With the exception of 'Mandible Chamber', which is just inside the entrance, it was not possible to examine the remainder of the accessible portions of the mine in September 2014. No further evidence of disturbance to the mine deposits was found in that locality. The items which were recognisably human were left in the section of the mine where they were observed, but were moved to the side of the passage and covered by loose stones to ensure they were not damaged by other users.



Fig. 2: The entrance to Llanymynech Ogof. Photo CPAT 3510-0004

- 1.8. This report presents the results from an archaeological evaluation conducted within the Shaft Chamber of the Ogof. The evaluation was undertaken with contingency funding from Cadw in March 2016 and was subject to Scheduled Monument Consent, granted in January 2015. The objective was to provide information to assist with the future management of the Ogof and, in particular, to determine the potential and significance of the deposits within the Shaft Chamber which had been subject to disturbance in 2014.
- 1.9. In advance of the evaluation, and in order to allow for the potential presence of bats in the workings, a European Protected Species Licence was obtained from Natural Resources Wales. This involved the examination of the site of the excavation by a member of the Montgomeryshire Bat Group in advance of the start of work; the methods of excavation and the routes used to access the Shaft Chamber were deliberately chosen to minimise any noise or other disturbance.

2 Background

- 2.1. The prominence of the hill, together with its natural defences, offered an ideal site for the development of a large hillfort in the later prehistoric period, and there is a belief in some quarters that this was the site of the last stand of the British leader, Caractacus, against the Romans in AD 51, during the governorship of Ostorius Scapula (Jones and Mattingley 1990, 67). The defences of the disused hillfort were subsequently incorporated in the line of Offa's Dyke in the early medieval period. The natural resources of the hill, principally copper, lead, zinc and limestone, were exploited from prehistoric times and this may well explain the size of the hillfort in comparison to others in the region. The primary focus of industrial activity shifted from the top of the plateau to its base during the industrial revolution in the later 18th century, and from the 1930s the hilltop has been the setting for the Llanymynech Golf Club.
- 2.2. Our understanding of the history of the Ogof is inextricably linked to a programme of survey and exploration carried out by the Shropshire Caving and Mining Club in the 1960s, which led to the publication of a work on the mines of Llanymynech Hill (Adams and Pearce 1991) drawing together information about the Ogof from disparate sources, some dating back to the mid-18th century.
- 2.3. Explorations of the Ogof and the surrounding area in the 18th century, perhaps as part of a proposed phase of reworking the mine, apparently exposed a number of in-situ burials, some of which were found in conjunction with material considered at that time to be of Roman date; much of this material is now missing so the real cultural context is impossible to determine. In the case of these early discoveries, information on the date of discovery and the place where the burials were found is confused and it is possible that the same event was reported by a number of sources.
- 2.4. It is, however, generally accepted within the archaeological profession that both prehistoric and Roman mining is likely to have occurred in the Ogof (Rees 1968, 28). Present knowledge further suggests that there could have been mining on the hill in the Bronze Age, as a number of large opencast workings have been identified, akin to others in Wales thought to be of that date. Whether these extended as far as the Ogof is not known, but at least one opening has been found which seems to represent

a backfilled 'pit' originating at the surface that intersects with the passages in the Ogof.

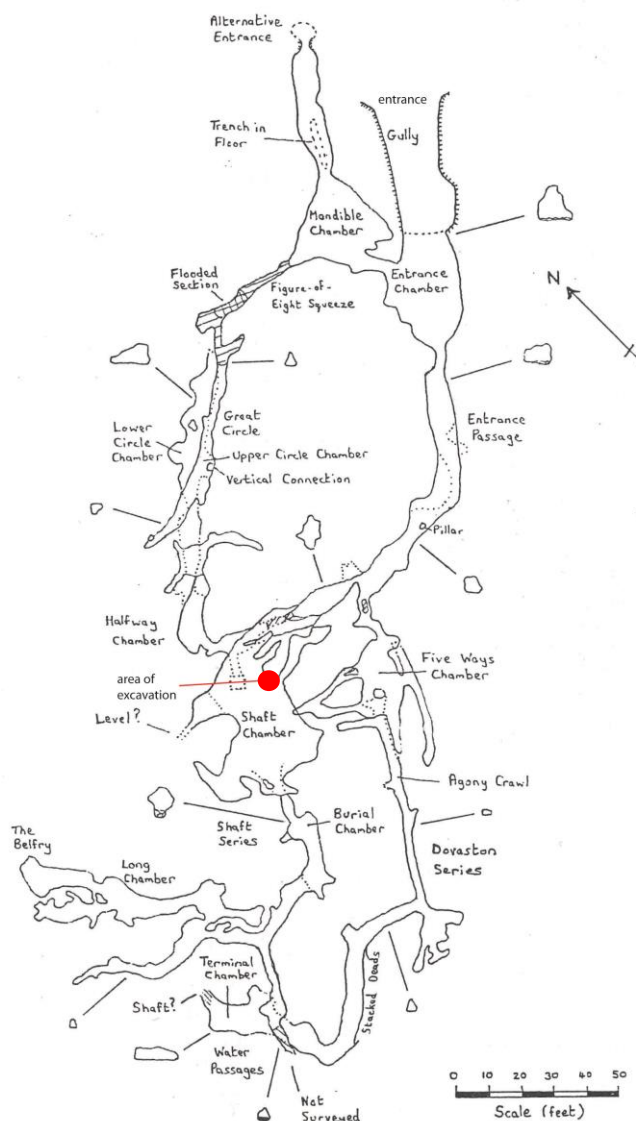


Fig. 3: Plan of Llanymynech Ogof showing the location of the evaluation (after the 1970 Shropshire Caving and Mining Club survey).

- 2.5. At least some parts of the Ogof workings are thought to belong to the Iron Age and early Roman periods. The site was visited in 2014 by the Early Mines Research Group (EMRG), and their examination of the mine suggested that blunt iron tools were used to create the passages beyond the Shaft Chamber; iron picks have been recovered from the workings in the past and evidence of the marks made by them or by similar tools were observed in places. A late Iron Age/early Roman date was suggested for this activity, but while some passages nearer the entrance were thought by them to be earlier, the evidence was not conclusive.
- 2.6. There seems to have been a hiatus in mining later in the Roman period, when the mine appears to have found use for funerary activities; this can be inferred by the discoveries of Roman burials, dated by their associated material, that were found in

- the mine in the 18th and 19th centuries. Material recovered included coins and pottery sherds of black-burnished ware; a hoard of Roman silver coins hidden in mine waste was also found in the Shaft Chamber by a member of the public in 1965, suggesting that this waste material was already in place when it was concealed. Overall, it seems unlikely that funerary activity and the concealment of valuables would have taken place while the mine was active.
- 2.7. Nothing is known of any medieval mining at the Ogof, although there was a short-lived silver mine on the southern end of the hill at the end of the 12th century when the Carreghofa mine came briefly to prominence. The bishop of Salisbury, while raising the ransom money for Richard I in 1193, became aware of the discovery of silver at Llanymynech (Eyton 1860, 358) and induced the Archbishop of Canterbury to develop the mine and re-open a mint at Shrewsbury for the purpose of coining the silver. The castle at Carreghofa was refurbished and re-garrisoned to protect the mine, which was opened by the middle of 1194 but it was to close down by the end of 1195; the overall picture is one of a loss-making enterprise (Lewis 1967, 33).
 - 2.8. The Ogof appears in the record in the 1750s, when it is named and depicted on a map which showed the surface workings on the hill and was created on behalf of Slaughter, Richardson and Goldsmith, who are known to have investigated mining opportunities in the region. Further exploitation of workings on the hill in the 18th and 19th centuries seems to be harnessed to particular dates rather than to continuous activity and it seems reasonable to assume that some of the discoveries of human remains and artefacts at the Ogof were associated with this sporadic mining.
 - 2.9. The shaft which gives the Shaft Chamber its name connects to the surface and is believed to date to the first half of the 19th century. This probably represents the final phase of mining, as while it is obvious that it was dug with the use of gunpowder, owing to the presence of shot-holes drilled from the direction of the surface, no evidence of similar methods has been found anywhere else within the workings. Speculatively, it may have been dug with the intention of allowing existing waste material to be removed from the mine more easily and processed by later, more efficient, methods, but there is no evidence of this.
 - 2.10. Subsequent excavations in the Ogof have been largely those carried out by the SCMC in their search for additional passages in the 1960s. It seems that a number of links were made between existing passages and some parts of the workings which were not previously known were accessed. In relation to the Shaft Chamber, their work seems to have opened the link to 'Five Ways Chamber', which was not recorded on a plan of the mine drawn by Rev John Parker in the 1820s or 30s, and it is at the point where the link emerges into the Shaft Chamber that the hoard of Roman coins was found. Their other excavations in the Shaft Chamber seem to have focussed on their belief that there may have been a continuation of the shaft below the surface of the chamber extending down to the level of 'Halfway Chamber' in the 'Great Circle' passages, but how far they got in investigating this supposition is unclear. Further skeletal remains were found elsewhere in the system in the course of the 1960s explorations, mostly in Mandible Chamber and Burial Chamber. Bones found in the late 1960s were subsequently identified as having come from at least two individuals (Tyler *et al.* 1999). It is worth noting in passing that Llanymynech Hill is composed of Carboniferous limestone and these rocks provide a favourable environment for the preservation of skeletal material.

3 Excavations in the Shaft Chamber

- 3.1. The first objective of the evaluation was to determine the exact location of the disturbance that had taken place in 2014, as it appeared to have been partially backfilled in the intervening period. In this, the police photographs proved to be invaluable as they documented both of the two episodes of disturbance. A small trench, measuring 1.9m north-north-east/south-south-west by up to 0.9m wide, was placed to encompass the disturbed area (see Fig. 6). All excavated material was stored adjacent to the trench for later backfilling. In the discussion which follows, the numbers in brackets refer to the context numbers assigned to features and deposits in the project archive.
- 3.2. The two phases of disturbance from 2014 could be readily identified, with the cut (4) for the earliest (from August 2014) being that which revealed the human remains; this occupied an area of up to 0.3m diameter at the north-north-eastern end of the trench and had a maximum depth of about 0.2m. It still contained a mixed and disturbed fill of small stones in brown clay silt (2), which probably represented a combination of some of the excavated material and other debris gathered from nearby. Significantly, the upper right jaw and cheek bone of an infant was recovered from context 2 and this matched a missing section of the skull found in August 2014 (see Fig. 4, which shows the human remains). The police report suggested that it represented a child of between 1 and 2 years of age.



Fig. 4: The infant skull recovered in August 2014, the part found in March 2016 is at the centre left of the image. (CPAT 4146-0033)

- 3.3. The cut (3) for the later disturbance, from September 2014, lay to the south-south-west and was somewhat larger, measuring approximately 1.1m by 0.6m wide and 0.3m deep; its relationship with the earlier cut could not be judged but it is possible there was some overlap. The material in the resultant hollow was a mixed grey-brown silt (1) containing small stones and plentiful bones, most of which were probably sheep. Given the quantity, it seems possible that a sheep had died in the chamber and been interred somewhere hereabouts, but when this had happened and whether it had wandered in from the entrance or fallen down the shaft from the surface cannot be gauged.



Fig. 5: The extent of the 2014 disturbance, from the south-south-west
(CPAT 4146-0013)

- 3.4. Once the maximum extent of the disturbance was reached, two layers could be identified. These were investigated by careful hand excavation that entailed opening up the trench to its maximum extent and removing the layers in sequence. The uppermost, and so most recent of these was a layer of brown clay silt (5), up to 0.35m thick, which contained stones of a range of sizes, up to approximately 0.4m across. The relative thickness of this layer in relation to the disturbance hollows made it clear that this was the material from which the human remains had been recovered; parts of the layer which had escaped disturbance in 2014 were excavated and produced two human incisors, both likely to be from the infant. A range of other artefacts were recovered, including two small buttons, glass bottle fragments and a small section of what seemed to be a bulb, possibly a flash bulb to judge from a deposit on its inner surface. Some animal bone was also recovered. Both the surface and base of layer 5 had a pronounced slope down towards the centre of the chamber (see the section drawing in Fig. 6).
- 3.5. Layer 5 overlay a deposit of limestone rubble (6) containing some greyish clay silt, and from its appearance and siting it could be inferred that this represented

discarded mining waste. Up to 0.6m of this material was removed to assess its composition and two artefacts were recovered, an iron ferrule of thin, rolled, sheet and a glass fragment; neither is likely to be earlier than 19th century in date. The extent of the layer below the base of the excavation was not tested but there was no evidence of a grave cut for the child burial.

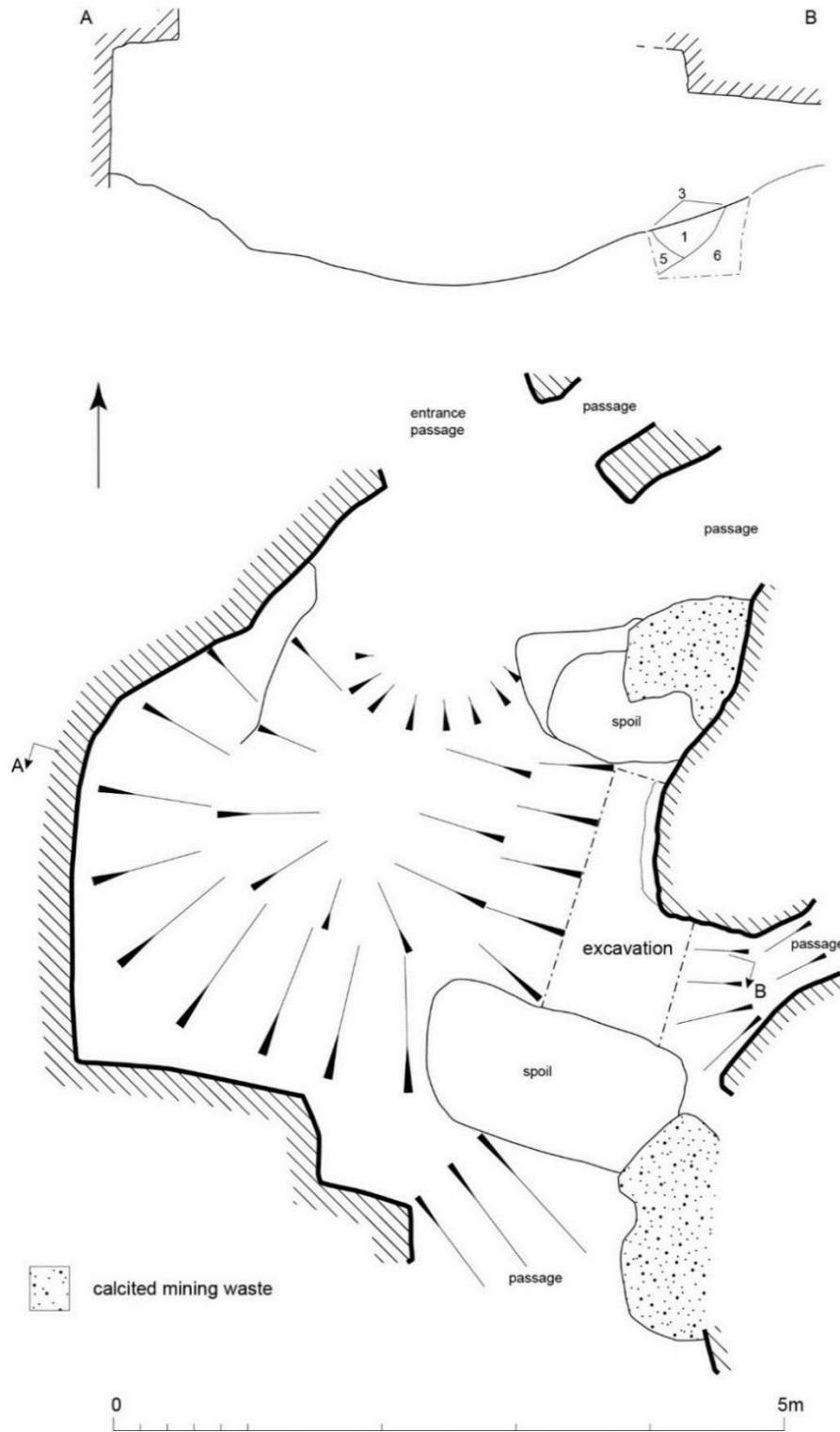


Fig. 6: The 2016 excavations within the Shaft Chamber

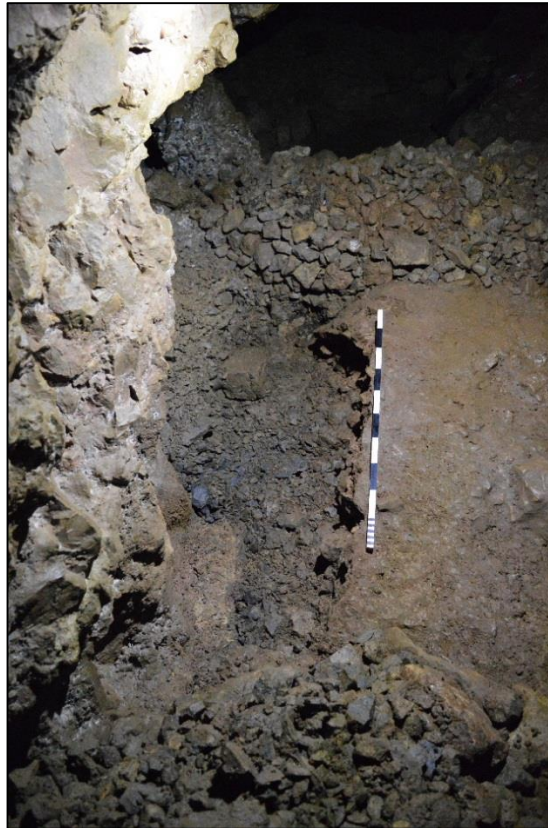


Fig. 7: The completed excavation, showing the mining waste (6) below the brown clay silt (5) that forms the floor of the Shaft Chamber. (CPAT 4146-0027)

4 Conclusions

- 4.1. The excavations were prompted by the discovery of skull fragments from an infant in the material disturbed by unauthorised digging associated with the activities of a metal detectorist in August 2014. An additional fragment of the skull was recovered during the evaluation from loose material within the cut of the original disturbance. The infant had already been dated to the post-medieval period as a result of radiocarbon dating carried out as part of the police investigation. The mostly likely date range was determined as cal. AD 1730 to 1809, which corresponds with a series of limited investigations of the mine which seem to have been made around this period in an attempt to retrieve any surviving minerals not already removed by previous workings. The other potential dates belong to the periods between cal. AD 1646 and 1688 and cal. AD 1926 and 1955, although these are statistically less likely.
- 4.2. Why the infant was buried in the mine, as it seems to have been too young to have made its way there unaided, must remain a mystery, although it is possible to indulge in some speculation. Perhaps the most likely scenario is that it was not possible to bury the child in consecrated ground owing to the strictures of the time and the mine workings provided a convenient solution. The evaluation revealed no evidence for a grave or other skeletal material at the location from which the skull was recovered, and it must therefore be assumed that the child was originally buried elsewhere in the chamber and had been disturbed by later activity.

- 4.3. It now seems clear that both the August 2014 and September 2014 episodes of disturbance involved the layer of brown clay silt (5) that forms the surface of this part of the chamber. Material recovered from parts of the layer which had been unaffected by this activity indicate that it is itself disturbed and contains material with a wide range of dates, including the post-medieval, and probably also Roman, periods. The dating of the time at which this earlier disturbance took place is not straightforward, given that the constituents are likely to have been moved from their original positions and mixed together, but the discovery of a fragment of a small bulb, perhaps a flash bulb of a type in use in the second half of the 20th century, seems to indicate that its origin is most likely contemporary with the work carried out by the Shropshire Caving and Mining Club in the Shaft Chamber in the 1960s.
- 4.4. The layer (6), beneath that believed to have been created in the 1960s, seems to represent mining waste and dates to no earlier than the post-medieval period from objects found within it. This perhaps implies an even earlier phase of disturbance, potentially associated with attempts to rework the mine in the 18th and 19th centuries. It perhaps involved moving waste rock around within the chamber and it could be speculated that the shaft was dug to aid in this process.

5 Acknowledgements

- 5.1. The writer would like to thank Llanymynech Golf Club, and particularly their grounds manager, Allen Lewis, for permission to carry out the work. Also Matthew Ellis, the Senior Species Officer at Natural Resources Wales; Richard May, Conservation Officer at Natural Resources Wales; Amy Green of the Clwyd Bat Group; and Simon Cope of the Montgomeryshire Bat Group for their help and advice in obtaining the European Protected Species Licence.
- 5.2. The writer would also like to thank Will Davies, the Regional Cadw Inspector, for his support of the project and his colleagues at CPAT, Viviana Culshaw, Ian Grant and Will Logan for their help and assistance with the excavation.

6 Sources

Written

Adams, D. R. and Pearce, A. J., 1991, *The Mines of Llanymynech Hill*, Newport: Shropshire Mining Club.

Branigan, K. and Dearne, M.J., (ed), 1992. *Romano-British Cavemen: Cave Use in Roman Britain*. Oxford: Oxbow Monograph No 19.

Eyton, R W, 1860. *Antiquities of Shropshire*, London: J. R. Smith.

Hankinson, R., 2015. *Caves of North-East Wales: Archaeological Assessment 2014-15*. Unpublished report. CPAT Report No. 1313.

Hankinson, R., 2016. *Caves of North-East Wales: Archaeological Evaluation 2015-16*. Unpublished report. CPAT Report No. 1380.

Jones, G. D. B. and Mattingly, D., 1990, *An Atlas of Roman Britain*, Oxford: Basil Blackwell Ltd.

Jones, N. W. and Hankinson, R., 2015. *Llanymynech Hill*. Montgomeryshire Collections 103, 9-30.

Lewis, W. J., 1967. *Lead Mining in Wales*, Cardiff: University of Wales Press.

Rees, W., 1968, *Industry before the Industrial Revolution*, Cardiff: University of Wales Press.

Tyler, A., Burgess, A. and Richardson, J., 1999, 'Human and faunal remains from the Ogof (Roman mine), Llanymynech Hill', *Shropshire History and Archaeology* 74, 75-6.

Drawn

1969 Survey of Llanymynech Ogof, Roman Copper Mine by the Shropshire Caving and Mining Club.

n.d. (1820s or 1830s) Rev John Parkers' plan of 'Llanymynech Ogo' (National Library of Wales drawings volume collection DV 332 (Folio) W6, No 059).

Appendix 1: Site Archive

Written and drawn

- 2 trench recording forms
- 1 A4 plan and 1 A2 plan of the excavation
- 1 A2 section drawing of the Shaft Chamber

Photographs

- 33 digital site photographs, CPAT Film No 4146

Finds

Context 1

- 3 glass bottle fragments
- 3 'Coke' bottle fragments
- 2 short pieces of barbed wire (not retained)
- 4 pieces of corroded tin can (not retained)
- 74 animal bones, mostly sheep and rodents

Context 2

- 1 additional skull fragment from the child identified in the disturbed material in 2014
- 1 possible Roman intaglio ring fragment of circular white glass in what seems to be a bronze mount
- 1 small button with a dished centre - metal?
- 3 glass fragments, one from the base of a bottle
- 2 animal teeth (sheep?)

Context 5

- 2 human teeth (incisors), possibly from the child
- 1 small button - pewter? - corroded, but the same size and shape as that from Context 2
- 1 small button - patinated, possibly bone
- 1 possible glass bulb fragment - potentially from a 20th-century flash bulb
- 6 glass bottle fragments
- 22 animal bones

Context 6

- 1 iron ferrule of thin folded sheet (19th century or later)
- 1 small glass fragment