



Journal 2015

The Great Orme Exploration Society



GOES

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Hello Readers,

Welcome to the 2015 Great Orme Exploration Society Journal. I'd like to thank all the contributors to this year's edition. Its contents are truly wide-ranging, from ground-breaking academic analysis of Great Orme ore and its possible relationship with Bronze Age metalwork to an amphibian's thank-you letter for services rendered. There are also detailed accounts of our trips on and off the Orme with news of our very latest discoveries. You will find serendipitous stories that will make you smile, accounts of adventures and misadventures that will play with your emotions and an update from a previous article that completes a spiritual journey, well at least for me.

I hope you enjoy reading it.

Regards

Dave Wrennall – GOES Journal Editor 2015

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<http://www.the-snowdonhotel.co.uk/> All are welcome.

The Great Orme Exploration Society (GOES) was formed in 1985 and became a Company Limited by Guarantee and not having a share capital on 7th April 1999. It is a member of the National Association of Mining History Organisation (NAMHO), British Caving Association (BCA), and works in association with the Gwynedd Archaeological Trust (GAT), the Early Mines Research Group (EMRG) and the Gwynedd Bat Group (GBG). Views and opinions expressed are those of the author(s) and not necessarily those of the Society.

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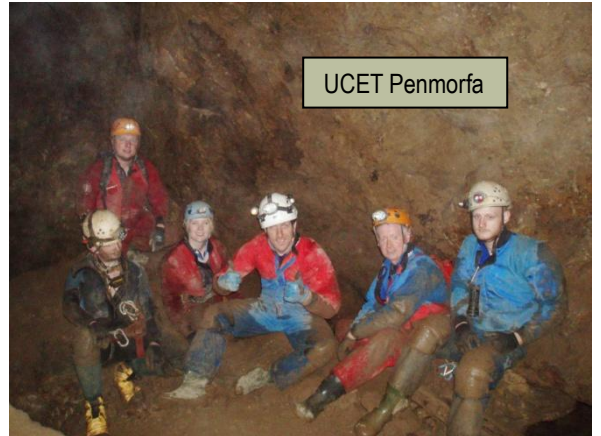
Front Cover: Brian Edwards and Flying Buttress. Penmorfa. Photo: Dave Flowers

Things we got up to since our last AGM in April 2014

It has been a difficult year for the GOES underground team, health problems, long term work projects and just weekend work in general has reduced the number of trips that we have managed to accomplish since our last AGM, but saying that, it has still been quite a busy year.

In April, the mysterious group asking for a trip down the Penmorfa turned out to be members of UCET (United Cavers Exploration Team) based in the Mold area. Their leader was Ian Adams, producer of many underground You Tube videos under the Henllan title, so it came as no surprise that he produced one of his Penmorfa trip! If you haven't seen it.....

<https://www.youtube.com/watch?v=4lbRRewooB8>



Despite our regular appearances at the Bank Holiday Victorian

Extravaganza over the years, interest in our stand remains high, with many visitors coming to share their knowledge as well as learn about the Ty Gwyn mine beneath their feet. Steve and Nick made a special effort this year by dressing up as foreman-miner and mine owner. It certainly added something special to the day; Nick acting out his role as the mine owner with great conviction. I felt quite humble in his presence!

Following a spate of 'sink holes' appearing around the globe, we had our very own appear on the Great Orme on May 19th. The hole, approximately one and a half metres across and about two metres deep was near the entrance to the Ali Series, between Romans and Treweeks shafts. It had been reported to Park staff by a school group who had been playing nearby! After learning of the problem Gaz was quickly on site and a more secure fence was put into place. The following Sunday members conducted an underground site investigation. The conclusion was that although a voice connection was possible between the sink hole and the passage below ground, the route to the Treweeks shaft hadn't been compromised. The hole has since been filled in by Great Orme Country Park staff but we have yet to check whether the route to Treweeks is still open.

At the end of July, Bangor University was the venue for this year's National Association of Mining History Organisations (NAMHO). The GOES contribution was to host underground trips for delegates over the weekend into Romans, Ty Gwyn and Penmorfa, as well as an above – ground guided walk. GOES also presented a poster display in the foyer at Bangor.



It was during one such trip into Penmorfa that visitor Rostam Namaghi offered to do a partial survey of the mine for us using a dedicated laser measuring instrument modified for use underground. Having jumped at his kind offer, Rostam, with friends and GOES members conducted the survey over a weekend in August. Realising the benefits of this survey instrument, we have purchased one for ourselves and have carried on from where Rostam finished. To date nine survey visits have been made, some of the results of which you have seen. With our new understanding of the layout of the Penmorfa workings, it is hoped that new areas will be identified for further exploration in the future.

Sadly, I need to report that at the end of March the Disto was dropped from a great height and although not quite defunct does require some serious surgery!

At the end of October, Dave Wrennall, with other GOES members, led nine Snowdonia Society members on their annual underground walk. This year the walk was to Rhiwbach Slate Mine at the end of the Machno valley. Following the underground tour and exiting the mine high up on the hillside above, Dave then took the group on a tour of the old deserted quarry village, complete with the obligatory visit to the village communal toilets, before descending through the quarry workings back to the cars.

Orme Mines

Of all our mines, Penmorfa has been the most visited mine in this period with thirteen visits being made. Our digging adventures in Rift 3 have been temporarily put on hold for the moment in favour of our surveying trips, but at least it will allow things to stabilise there in the meantime.

The number of trips into the Ty Gwyn must run a close second if not exceed Penmorfa, taking into account the number of visitor trips that Steve Lea conducts there in the evenings. Seeing some of the visitors, I sometimes wonder what mystical stories Dave Broomhead weaves to entice them down that manhole! One sprightly old dear was 88 years old we learnt later!

In March, just before the AGM, the underground team had attempted to dig a way through from the end of the Ty Gwyn adit to the Tyn y Fron shaft. After the first night hopes were high, but returning two days later they found another collapse. With hopes dashed, the dig was abandoned. It is now thought that the only really safe way to accomplish this connection will be from the Tyn y Fron shaft side, a 280 foot abseil.....definitely not for the faint hearted!

Early in January 2015, during one of his visitor trips, Steve Lea's attention was drawn to water flowing through the ginging into the main Ty Gwyn adit. Steve writes about this and the visitor trips later in this journal.

Again this year Romans has been neglected, the only trips down were over the weekend of the NAMHO conference when Gaz and Richie led delegates on a tour of the mine.

Off Orme

Other than the Snowdonia Society trip to Rhiwbach, GOES made six off-Orme trips. Probably one of the most memorable was to Belgrave lead mine near Llanferres in the Mold area. Having obtained information from a



Gaz emerges from the dig at the end of the Ty Gwyn



Into Belgrave Mine

variety of sources we examined two levels hoping to find the route by which we could abseil down to the lowest level (1) from Level 3, before jumaring back up to exit through No. 2 level. Sadly we failed to find the abseil point in Level 3 on this occasion, so possibly something to consider for next year perhaps.

Of possible interest to members is the fact that Cwmorthin has now become another of the **Go Below** underground adventure venues. The publicity notice boasts of an all-day, adrenaline pumping experience 5Km in length, with 9 zip-wires, 14 traverses and a 70ft freefall, although I've since heard that there is a braking mechanism as one nears the bottom! Jumping out of a 'window' into the eerie blackness of a slate cavern and praying that the brake would hold is one thrill I would be happy to leave to others, especially as I have just heard the reaction of one BBC radio reporter! I wonder if that 88 year old lady from the Ty Gwyn will be interested?!

Well worth a look on the **Go Below** website <http://www.go-below.co.uk>

BBC reporter's experience of the 70 ft free-fall – <http://www.bbc.co.uk/news/uk-wales-31804342>

In September another visit was made to the Barlwyd Tunnels above Blaenau Ffestiniog. Despite more favourable weather conditions this time, members still managed to get just as wet as on our previous visit when river conditions were far worse. Since our first visit to the tunnels in 2008 the peaceful nature of this once barren landscape has changed dramatically. The Tunnels are now in the midst of an adventure play-ground, quadruple zip-wires pass high overhead and mountain bike trails criss-cross the mountain-side, dangerously close to the Tunnels' middle adit it is worth noting. Also new to the area and deep within the old workings of the Llechwedd slate mine is the **Bounce Below** gigantic trampoline attraction. If only we could harness this energy for the National Grid we could probably dispense with a couple of wind turbines! Check out below.....



Ange and Dave W in Barlwyd Tunnels

<https://www.youtube.com/watch?v=WyEH06VXJqs>

Also on the cards at Llechwedd is another 'zip below' type underground attraction, to be opened in June I believe.

Thanks must go to Nick Challinor for organising our 2014 Summer Walks programme; a new leader with a refreshingly new slant to the programme. I for one will be looking forward with high expectations to Nick's new programme this year. No pressure Nick!!

Thanks must also go to Dave Flowers for his video contributions of some of our underground trips; allowing you non-underground members to share in some of our adventures from the comfort of your own homesand probably cementing your resolve about ever wanting to join us if truth be known, let alone questioning our sanity!

Hopefully our next GOES year will see the return of some of our old pals, a new access agreement for the Gwydyr , more new active underground members and who knows what else.

.....and so another GOES year comes to an end, well not really an end, it'll soon be time for the Extravaganza. Time to start growing your beards gentlemen!

Author: Brian Edwards

Where did all the Prehistoric Copper go?

Linking the Great Orme ores to Bronze Age metalwork.

My first visit to the Great Orme mines thirty-five years ago was shortly before the great prehistoric discoveries came to light. I had recently graduated with a degree in mining geology from the Royal School of Mines and within a few years the revelations on British and Irish prehistoric mining came thick and fast. I attended the groundbreaking Plas Tan-y-Bwlch conference in 1989 where I listened with amazement as the pioneers in the field revealed their spectacular discoveries, with the most stunning being from the Great Orme. Over the years I have written a few books and articles on mainly eighteenth and nineteenth century Welsh and Irish mining history. Now, after a long career with Pilkington as their chief geologist, I'm using my specialist knowledge to try and solve one of the outstanding enigmas of the Great Orme copper mine. Where did all the prehistoric copper go? This topic is now the basis of my PhD research at the University of Liverpool, Archaeology Department and the following short article summarizes the work done so far. I have tried to keep the scientific parts as accessible as possible and would refer specialists to forthcoming academic papers which also contain a fuller bibliography.

The famous Welsh antiquary Edward Lhuyd recorded a remarkable discovery made in 1686 in a field at Gloddaeth two miles from the Great Orme:

"...there were found...several brass instruments of the shape of axes, but whether they were British or Roman or what use they were designed for, I must leave to be determined by others. There were about fifty of them placed under a great stone placed heads and points, whereof some are yet preserved...They have been found in several other parts of Wales" This was one the largest hoards of Middle Bronze Age bronze axes or palstaves discovered in Wales and was long before the names of prehistoric periods were coined and the depth of prehistoric time was appreciated.

Could the Great Orme mine be the source of the copper in the Gloddaeth palstaves but more importantly the source of some of the metalwork found across the region, across Britain, and Ireland and perhaps even in parts of the continent? To properly answer this deceptively simple question requires the mobilization and integration of wide range of scientific, archaeological, geological, mineralogical and metallurgical concepts, ideas, samples and data.

Identifying the location of the copper sources during the 1,500 years or so of the British Copper and Bronze Ages can potentially throw new light on local, regional and European exchange networks, reveal important centres of activity and how they changed with time. Indeed there is a growing realization of the significant extent of social interactions and movement across Britain and mainland Europe during the Bronze Age.

What do we know about copper sources in the British and Irish Bronze Age? Current dating evidence from about ninety



Fig.1: Palstaves from Gloddaeth
(Davies 1945,205 Arch. Cambrensis)

radiocarbon dates suggests that the Ross Island mine in S W Ireland was the main source of the earliest Bronze Age copper (2400-1800 BC) followed within a few centuries by smaller mines in North and Mid Wales plus some in west



Fig.2: Bronze Age mines and trials

central England (Fig. 2). However, by around 1600 BC all the currently known British mines had probably closed except the Great Orme mine (1884 to 933 BC), which became the only known British copper mine to be working by the Middle Bronze Age. The probable copper metal output from the Great Orme mine exceeded all the other known mines although the current estimates need reviewing.

Previous detailed research on the Great Orme mine has focused on the archaeology of the surface opencast excavations (Dutton et al 1994), establishing criteria for identifying ancient mining underground (Lewis 1996), a detailed analysis of the faunal remains and their implications ((James 2011) and a broad review of the character and context of the site (Wager 2001). Other important work has been on the Pentwyn smelting site, discovered by Dave Chapman in 1987 and also work on the washing sites (Jones 1994; Jones 1996).

To link Great Orme ore to metal, two independent techniques are being used, namely establishing a chemical 'signature' using the amount or absence of certain trace elements and a lead isotopic 'signature' using the amounts of different lead isotopes. Using these two different 'signatures' allows Great Orme metal to be more clearly distinguished from other possible mines. There are many potential complications to this type of 'signature' work with ore and metal. The chemical signature can be affected by variability of natural ores and whether, during smelting, the ore trace elements have a natural tendency to transfer into the copper metal or prefer the slag and hence are 'lost'. The 'losses' into the

slag can be affected by variable smelting conditions (oxidizing/reducing) and another factor is the loss of volatile elements like arsenic. 'Foreign' trace elements or lead isotopes can be introduced by the addition of smelting fluxes, alloying metals (like tin and lead) and also from metal recycling. Let's consider the chemical side of things. Peter Northover (1980) divided all Bronze Age metal artefacts into groups on the basis of their content of arsenic, antimony, silver and nickel during the Early, Middle and Late Bronze Age. He noted a radical change in metal compositions

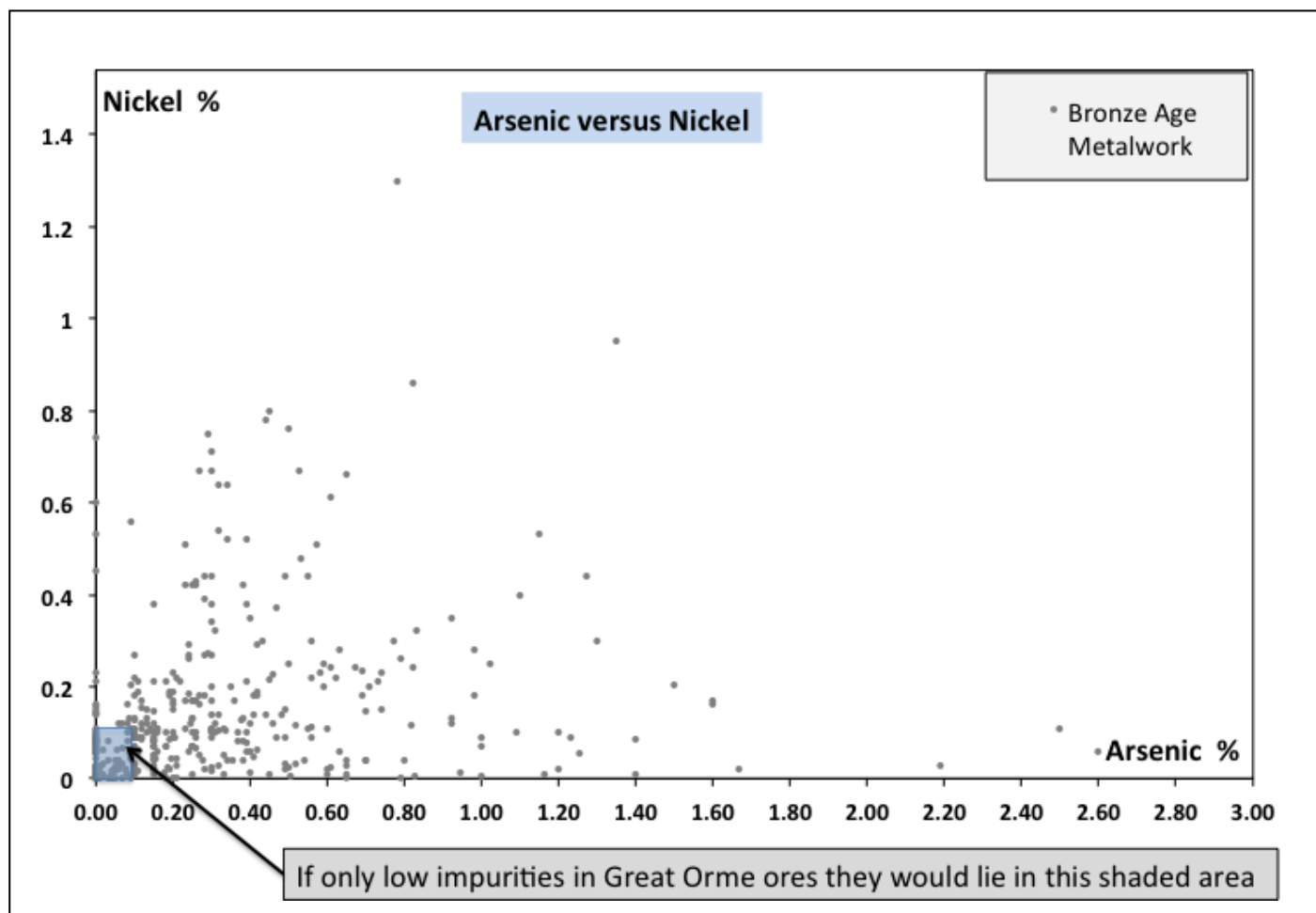


Fig. 3: British Bronze Age metalwork. Graph of nickel versus arsenic content.

in the Middle Bronze Age to those containing mainly arsenic and nickel across most of Britain. He speculated, on the basis of distribution of objects, that the source was somewhere in North Wales. As this period was when the Great Orme was very active, why not attribute the source to the Great Orme mine? The reason comes down to influential mineralogical studies (without chemical analyses) about twenty years ago (Ixer et al 1998) which came to the conclusion that the metal produced from the Great Orme ores would be trace element poor and so, by implication, could not produce the dominant arsenic-nickel metal of the Middle Bronze Age. (Fig:3) Hence, the consequence of that conclusion was that the Great Orme mine was not as important in the Bronze Age as the size of the workings would suggest.

These studies have been quoted in numerous papers and other scholars have indirectly implied disagreement but without suggesting any resolution to the conflicting scientific evidence. The current research has aimed to re-examine the whole topic by adopting new methods and integrating knowledge of ore mineralogy, geochemistry and pyrotechnology.

A variety of analytical methods are being used to ensure the final results are robust. Some analyses have been done in the Archaeology Department of the University of Liverpool (AAS and SEM-EDS) while others were done at laboratories in at the University of Cardiff (LA-ICP-MS), University of Leicester (XRD-WD) and at NIGL Keyworth (MC-ICP-MS)) with specialist advanced technology equipment. The materials being analyzed are the ores, the bronze fragments excavated in the mine and the copper prills found at the Pentrwyn smelting site. Thousands of Bronze Age metalwork samples have been analyzed over past decades and are available in databases.

The first type of material sampled and analyzed are ores. One of the reasons that Great Orme copper mine was probably so extensively worked was that it was one of the largest near surface deposits in Britain of easy to smelt oxide ore (malachite and other oxide minerals) rather than much harder to smelt sulphide ore (e.g. chalcopyrite) which would require multiple stages to remove sulphur and iron. The original chalcopyrite veins have been extensively converted by oxidization (supergene weathering) to an imitate mixture of goethite (hydrated iron oxide) and malachite (a hydrated copper carbonate). In addition, the zone each side of the vein was often soft and friable dolomite allowing the use of simple bone tools. Both these factors may have made the deposit much more attractive (easier to mine) than other British mines in much harder silica rich rocks and could be one of the reasons the other mines closed. In-situ studies throughout the mine have shown that the malachite-goethite ore was the main type worked. While some small amounts of malachite-only ore were observed it was only a minor ore type. Analyses have revealed that the trace elements were often concentrated more in the goethite than in the malachite and so sampling the malachite alone could give a misleading picture of impurity levels. Both the malachite and goethite would have been smelted together.

The second type of material analyzed were copper prills from the nearby smelting site at Pentrwyn. Remains are fragmentary and it appears to have been a small site. A few hundred grams of copper slags and copper prills were recovered from excavations in 1998 and 2011 carried out by Dave Chapman, George Smith and others. Dating of charcoal samples from the 2011 dig were all Late Bronze Age around 900 BC (matching the probable date of Bronze Age metal artefacts found in nearby Pigeon's Cave) unlike the much earlier single sample from the 1998 dig. The copper slags and prills examined have revealed a lot about the Bronze Age smelting technology being used at the site (see Williams 2014). I think we still lack the major smelting site or sites that probably existed to smelt Great Orme ores. Analyses of the copper prills help us to see whether the trace elements in the ores transfer into the copper metal after smelting.

The third type of material being analyzed are the small pieces of bronze that have been found in the mine, firstly one found in 1831 when miners broke into old workings which could be the point of a bronze pick. Secondly, numerous small fragments discovered during underground excavations in the 1990s and whose origin is less clear but could be from broken picks as seen in Bronze Age mines in Austria. It is reasonable to suppose that this metal was made using ores from the mine and are useful to compare with the ore analyses.

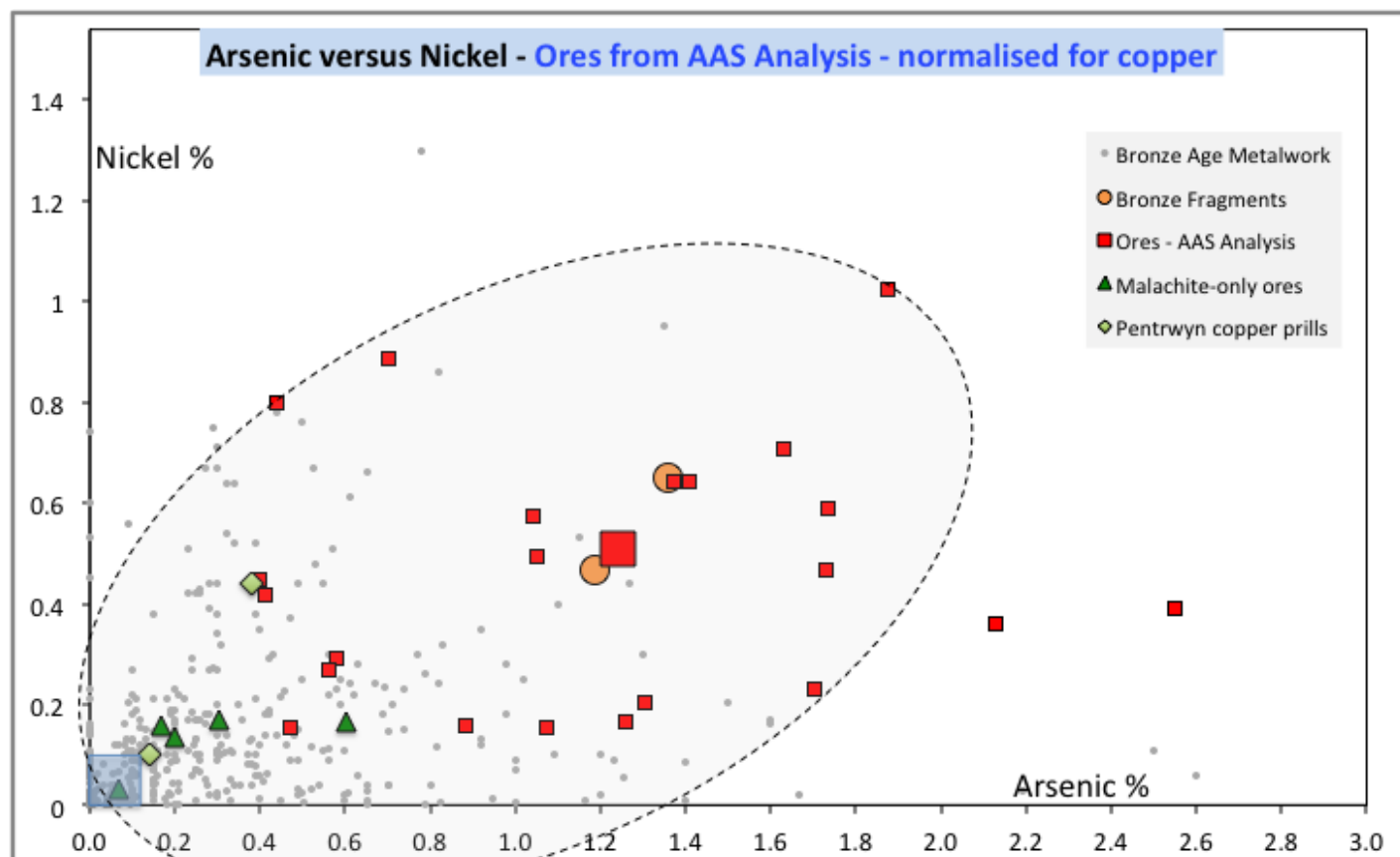


Fig. 4: Graph of arsenic versus nickel for Great Orme ores, bronze fragments, copper prills and British Bronze Age metalwork.

So what are the preliminary results from the research showing? Firstly, let's look at the chemistry. We can consider a variety of elements but here we shall just look at nickel and arsenic and in Figure 4 you can see a plot of British Bronze Age objects. (grey dots). If conclusions from past studies (Ixer et al 1998) were correct (i.e. that Great Orme only produces low impurity metal taken as <0.1%) then we would only expect the analytical results from the ores to lie in the small blue shaded square and consequently only match a very small number of artefacts. So what did the results from our ore analyses show (assuming no loss of trace elements and normalizing for copper)? These results (Fig. 4, red square symbols) strongly suggest the metal produced from the ores could have contained significant amounts of arsenic and nickel and so potentially match a large proportion of metal artefacts. To even out the wide natural chemical variation in ores the average ore analysis of the malachite-goethite ores is shown by the larger red square. The minor malachite-only ores are also shown (green triangle symbols) which have lower levels of impurities.

How then does this compare with the existing analyses from the bronze fragments from the mine? These (orange circles in Fig.4) show a remarkable correlation with the average ore analysis. What about the Late Bronze Age copper prill analyses from the smelting residues from Pentrwyn? These have lower impurities (green diamond symbols) but are still within the range defined. Taken together a mine-based metal group (large ellipse Fig 4) is emerging with some arsenic outliers but some arsenic will be lost on re-melting for refining or recasting.

The most prominent Middle Bronze Age metalwork in North Wales is the Acton Park assemblage named after a hoard found near Wrexham. This is a period when radiocarbon dating suggests the Great Orme was active. When British metalwork

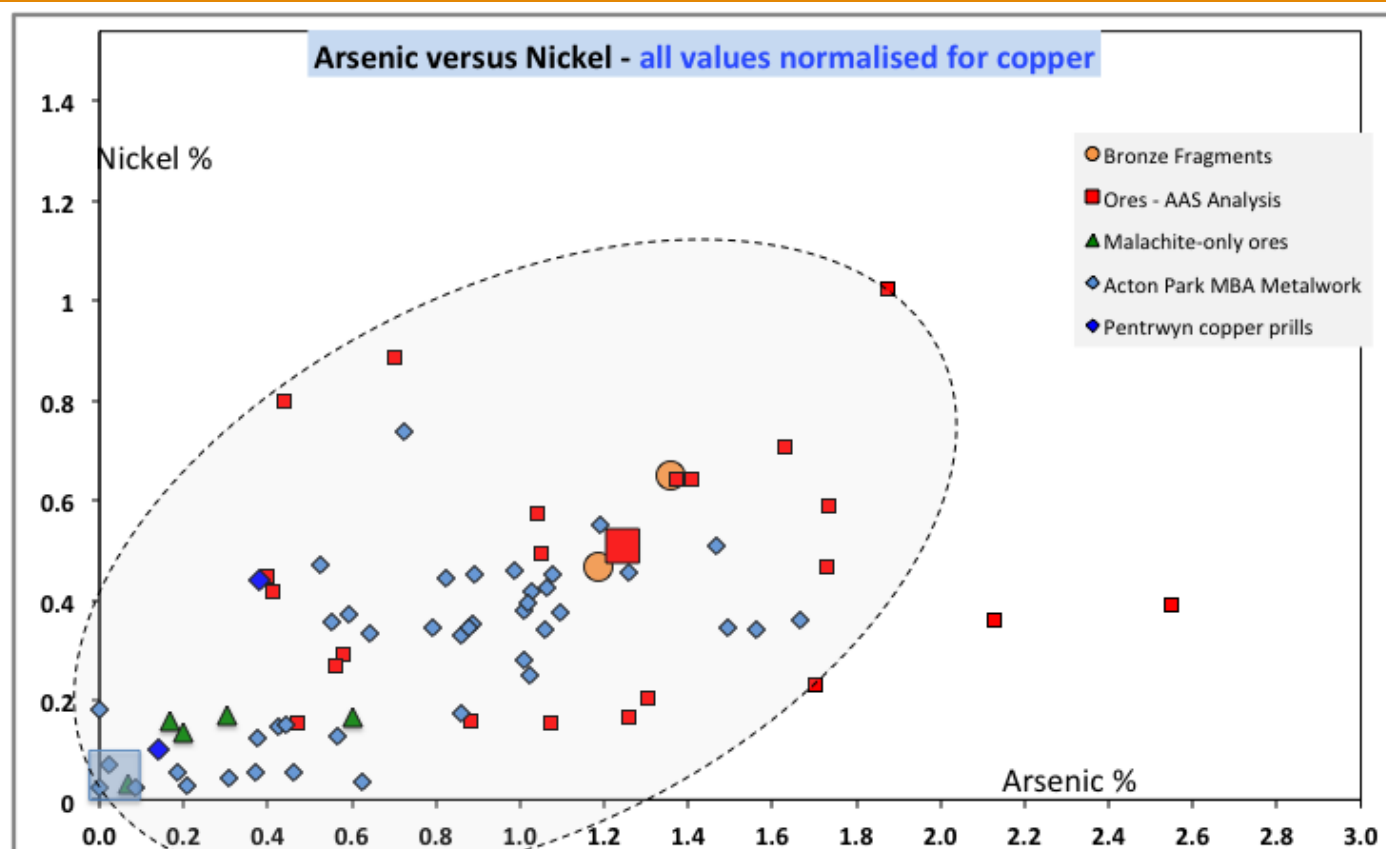


Fig. 5: Graph of arsenic versus nickel. Repeat of Figure 4 with the addition of Acton Park metalwork.

from the Acton Park period of the Middle Bronze age is added to Figure 5 it is seen to plot in the same area as the Great Orme ores and so this is consistent with the source of the metal being from the Great Orme. (see later). If we look at other pairs of elements (e.g. antimony and nickel) a similar picture is emerging. Great Orme is also characterized by very low antimony levels.

Due to the possibility of overlaps with other ore deposits there is a need for a second independent signature, which can be obtained from lead isotope data. Each ore deposit can have a different mixture of lead isotope ratios and plot in different areas of a graph. This type of study has been widely used in metal artefact, and ore deposit studies around the world. There are four important lead isotopes of lead for this type of work. While lead isotope 204 has been constant since the Earth was formed the other three lead isotopes (206, 207 and 208) are from the radioactive decay of uranium and thorium whose levels vary depending on many geological factors. The isotopic ratios are unchanged by the smelting process. Ideally, an ore deposit will occupy a small discrete area on a plot of these ratios unless there is uranium in the ore deposit then these ratios change after the mineral deposit was formed.

So what does the Great Orme ore isotopic data tell us? Rather than occupying a discrete fixed area on the isotope ratio graph like most metal mines, the Great Orme results stretch over a wide range suggesting there has been some post mineralisation change in the lead isotope levels. This change is caused by the presence of uranium in the mineral deposit which, due to radioactive decay, forms completely new lead isotopes (extra lead 206 and 207) and so affects the plot of lead isotope ratios. The affect on the ratios is greater when the lead level in the copper deposit is low (away from the earlier lead vein). Another factor affecting the ratios is the variable and non-uniform presence of uranium in the deposit. Putting the scientific detail to one side, the overall consequence of all these special factors is give the Great

Orme an unusual lead isotope signature. Isotopic data on the copper prills from the Pentrwyn smelting site also show this trend indicating they are consistent with the Great Orme ore source as might be expected. The separate vein(s) of lead ore that crosses the mine has an isotope value in the top right area where most British Bronze Age metalwork also lies (top right ellipse). About half the Great Orme ore data (including the bronze fragments found in the mine) lies in this top right area, possibly because of lead pick-up from the lead vein shifting the isotope values to this area.

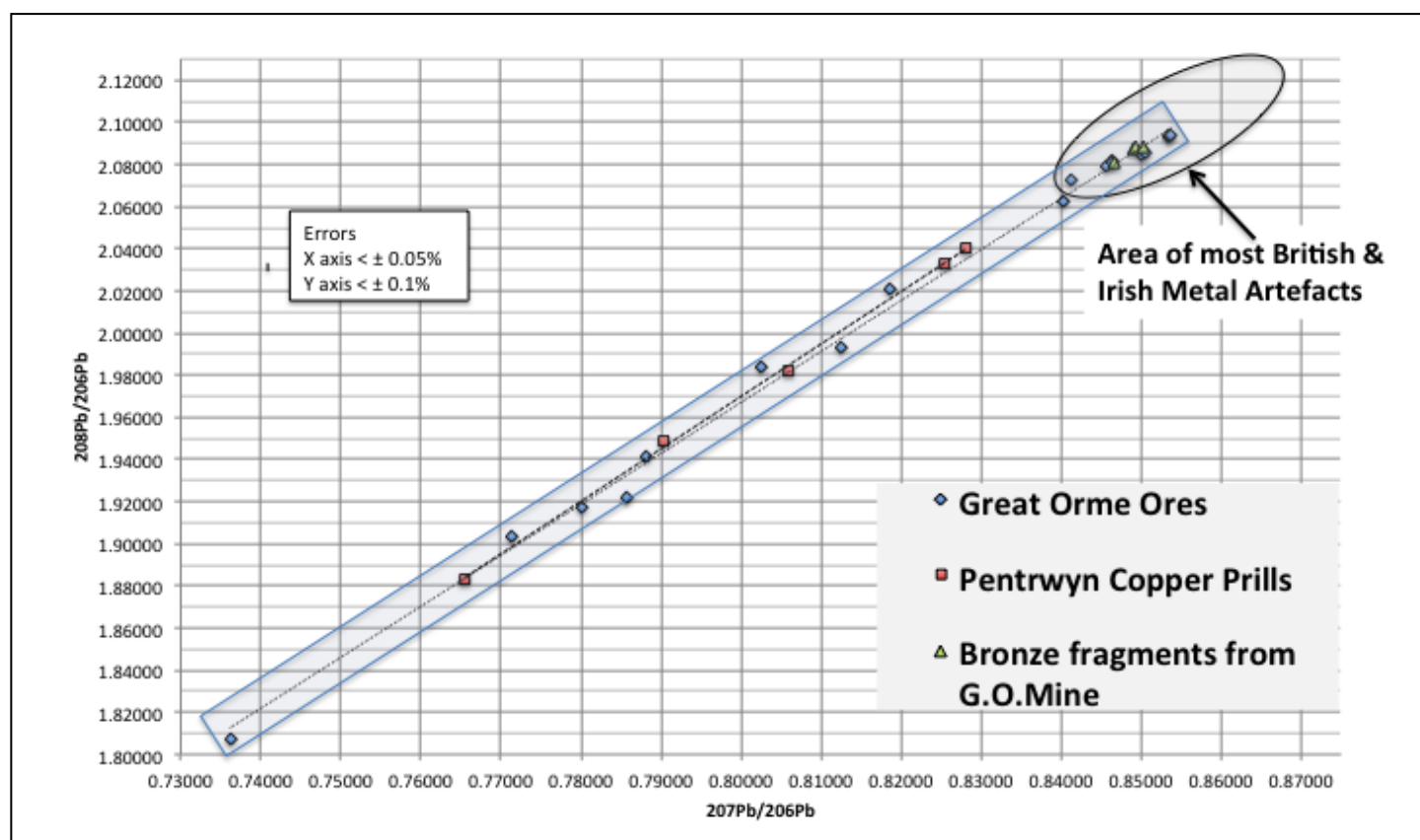


Fig. 6: Lead isotope ratios for Great Orme ores, copper prills and bronze fragments from the mine (blue shaded area). Top right ellipse area is where most British Bronze Age metal artefacts lie overlapping with the Great Orme field.

Let's now zoom in on this top right area and look at where the main British and Irish Bronze Age copper mines plot (Fig. 7). The Great Orme mine ore plots separately from the other mines (blue area highlighted) except for an overlap with the Alderley Edge mine ores in Cheshire but that is a small mine that predates the main period of working at the Great Orme mine. We can add to this mine data the metal artefacts for each period in the Bronze Age. If we just look at the Middle Bronze Age metalwork (red squares in Fig. 7) the Great Orme mine was the only British copper mine known to have been still working and there are plenty of metal artefacts that match its ores but also many others, particularly from the SE of England, that match no known British mine and suggest an imported source(s). There is possibly a recycling mixing line between Great Orme and this other source(s).

If we again test whether the Great Orme ores matches Middle Bronze Age Acton Park metal artefacts (Fig. 8) we find (as with the chemical 'signature') many have a very close match. Having a match with the Acton Park metalwork is particularly significant as Peter Northover (Lynch 2000) has identified this metal not only over Wales and lowland Britain but also on the continent (see Fig. 9) from Brittany to the Netherlands.

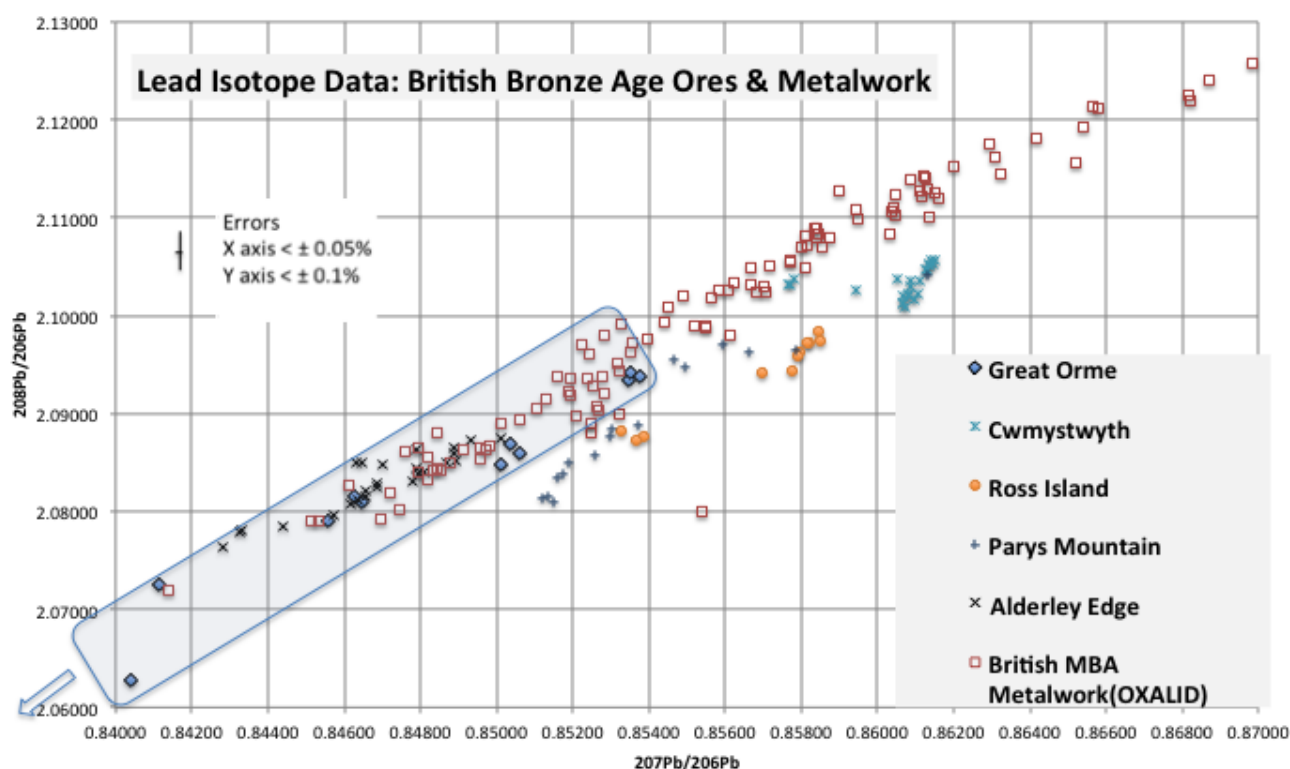


Fig. 7: Lead isotope ratios for Great Orme ores (blue shaded area), other Bronze Age mines and Middle Bronze Age metalwork. Some metalwork (including Acton Park) match Great Orme. Other data suggests another source probably imported.

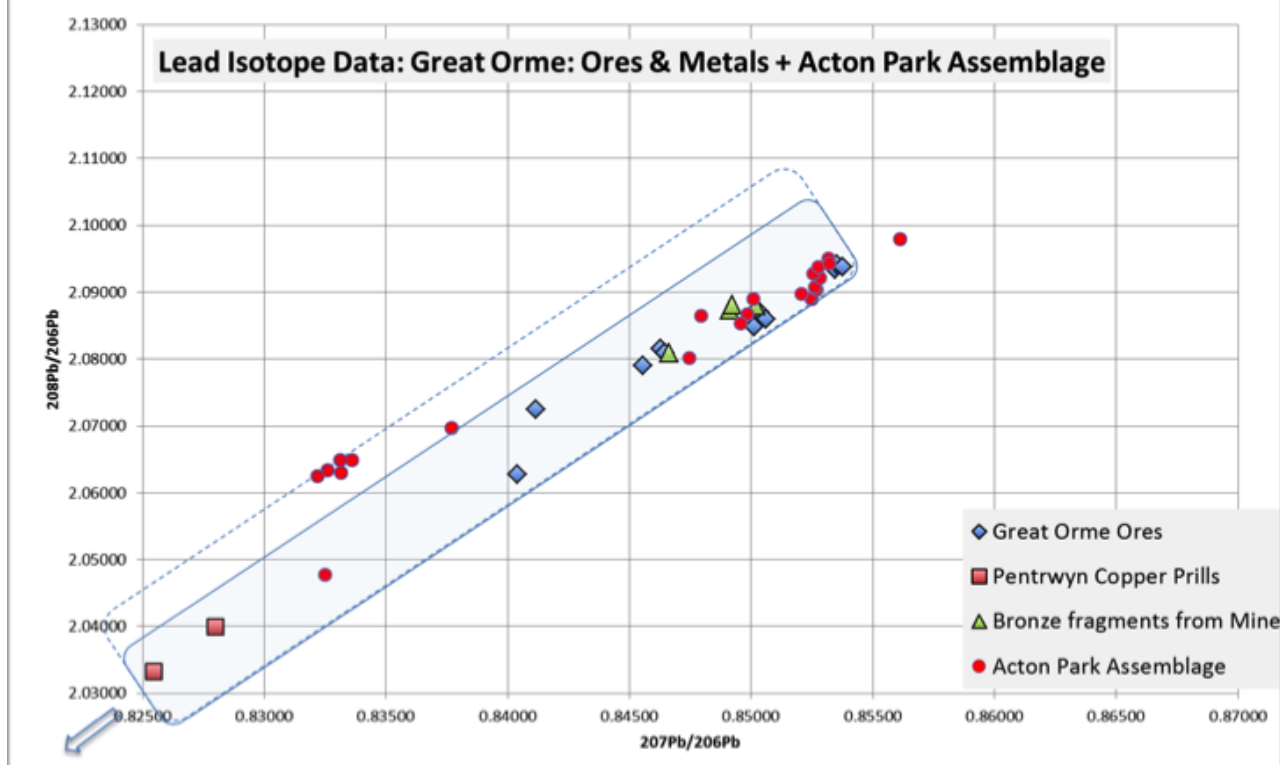


Fig. 8: Lead isotope data for Great Orme ores, copper prills and bronze fragments from mine plus Middle Bronze Age Acton Park metalwork

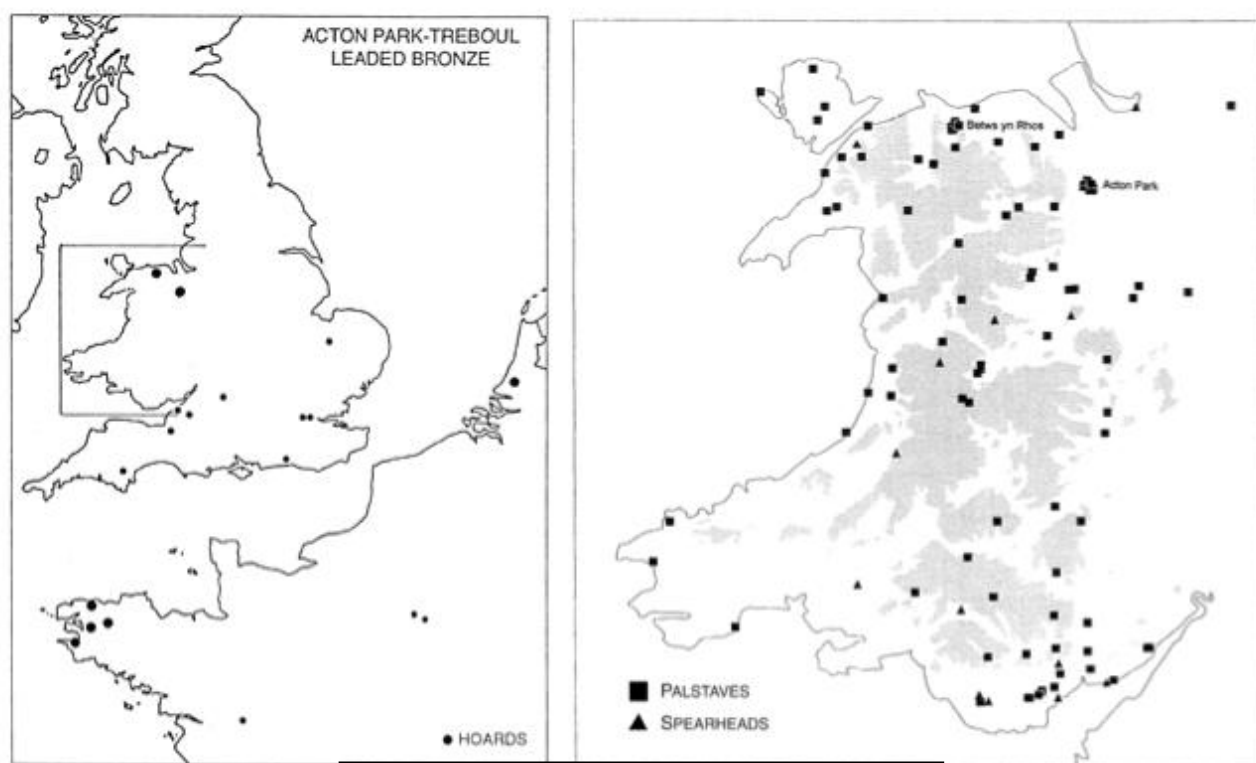


Fig. 9: Distribution of Acton Park metalwork from Northover's analyses (From Lynch et al 2000)

In summary, good progress is being made in linking Great Orme ores chemically and isotopically with particular British Bronze Age metalwork. Contrary to previous papers that claimed the Great Orme ores were low in impurities and so could only produce low impurity metal, this study has found significant levels of arsenic and nickel in the ores. A metal with nickel and arsenic impurities is consistent with the bronze particles from the mine, the Pentrwyn copper prills and more importantly with a substantial proportion of British Middle Bronze Age metalwork particularly the Acton Park assemblage (1500 to 1400 BC). Further work may allow the metal to be identified in other periods of the Bronze Age. The analytical programme on ores, bronze fragments and smelted copper prills is continuing and smelting experiments are planned with Dave Chapman at Ancient Arts. This work should lead to a greater understanding of the importance of the Great Orme mine in the Bronze Age, the ores and the smelting technology being used, the social organization of the mines and the exchange networks within Britain and into parts of mainland Europe.

The current indications are that during a millennium or so of mining (continuous or intermittent) at the Great Orme there were probably a couple of centuries when it was the principal copper source for most of Britain and some metal ended up, one way or another, being exchanged with areas along the continental coast. In cooperation with the University of Gothenburg we are currently looking at data from Denmark to see if we can identify any Great Orme metal amongst their many imported sources. If Great Orme metal can be identified this may indicate a link with the Scandinavian amber trade. All this will help to cast light on the emerging picture of the movement and interaction of people and materials during the Bronze Age that was perhaps much greater than previously realized. There is now general recognition that the Great Orme mine is one of largest Bronze Age mines in Europe (O'Brien 2015).

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To My Rescuers

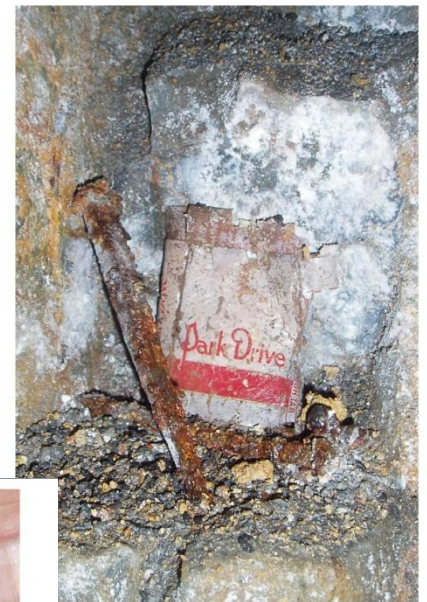
Last summer I was in a spot of bother, having fallen into an underground passage whilst searching for shade, water and the flies. I found all three, but it was a lonely life. Following a trickle of water hoping to escape, was a mistake, hopping down to the lower level I found only a blockage. My fate seemed sealed, time passed in complete darkness with a dribble of water and little to sustain me.

How long I was there before you three explorers arrived, with your noise and lights I can't say, but it certainly got my heart pounding. You seemed to be enjoying yourselves. When one of you eventually threw down a rope and descended to my confine, I kept still out of fear. Luckily for me I was spotted and was shown only kindness. Carefully placed in that plastic 'camera' box and tucked inside a jacket to be carried back up to the outside world.

Once there, dazzled by the light, you released me into this idyllic woodland pond... still my home. To my delight I found that I had lost none of my swimming ability and was quickly into the shade. All the proper grub on offer soon had me croaking fit and before you know it companions arrived. There was even time for some flirtation.....!

Thanks for the lift folks!

Hoppy



Hoppy

Access to Forestry Mines

The Cambrian Caving Council Newsletter, February 2015, announced that contracts have been signed by a new company called Cave Access Ltd (CAL) to provide access for cavers and mine explorers into eleven sites on former Forestry Commission Wales and on former Countryside Council for Wales land for one year. Hopefully this remit will be extended in the future. CAL will be an independent, non profit making, unpaid body, providing free permits to managed sites under the BCA insurance scheme. Risk assessments and management plans need to be written before permits can be issued. Priority is being given to the sites in bold.

Follow the link for more details

http://www.cambriancavingcouncil.org.uk/pdf/newsletters/44_Feb2015.pdf

Gwrych Castle Mines Abergele

Parc Lead Mine Gwydyr Forest

Cae Coch Sulphur Mine Gwydyr Forest

Rhiwbach Slate Mine Penmachno

Bryneglwys Quarry Abergynolwyn

Hendre Ddu Slate Quarry Aberllefenni

Henfwlch Pryse Estate Sheep Walk Nant-y-Moch, Ceredigion

Minllyn Slate Quarry Dinas Mawddwy

Allt y Crib Tal-y-Bont, Ceredigion

Temple Mine Rheidol Valley

Draethen Lead Mines Draethen, Caerphilly



If the agreement goes ahead we should be able to walk in Ben's footprints again.

Three Days of Rhiwbach Mine

Inside.....

On Thursday 25th of September 2014, I led a group from The Towers Outdoor Education Centre through Rhiwbach Slate Mine in Cwm Penmachno. It was an average trip, memorable mostly for the number of people in there that day. Outside, a queue to enter the lower adit and, inside teams using the boat, stationed on the rope work sections or disappearing down side tunnels just as I reached them. I had an early lunch immediately after the boat trip before sharing one of the water filled chambers with another group. My team completed a rope traverse above the pool into a side passage from where the other group had rigged their zip line. Confronting inhabitants at every turn, I eventually decided on minimal exploration and was soon up the waterfall pitch and exiting out through the air shaft.

Bedside.....

The following day, Friday, I travelled with my wife Nia to Liverpool to stay with her mother. On our bedside table was a book entitled 'Uncle Tom at War - from Penmachno to Prison Camp' (by Hywel Roberts published 2014) Having been there just the previous day, I was naturally intrigued, especially in the contents of the first chapter which contained historical details about Rhiwbach. 'Uncle Tom' was born in 1886 and many of his forebears had worked there. His grandfather (William Williams), great uncles (Richard and John Williams - in 1833 the first person to be killed at the quarry) and Tom's father William 'Prichard' Williams. Tom's elder brothers (John and Robert Cadwalader Williams - the author's grandfather) also worked at the quarry. They lived in Penmachno, walking to Rhiwbach early on Monday morning to stay in barracks through the week, returning to Penmachno after a morning shift on Saturday. Photographs taken of pupils at Penmachno National School suggest that as young quarry workers they also attended evening classes, indicating the importance placed on education even if it meant additional walking.

Seaside.....

I'd had wanted to cycle to New Brighton for some time, having seen it so often from the Liverpool waterfront. On Saturday morning with a full day ahead, the weather improving and shopping suggested as the only alternative, I was soon pedalling down towards the Mersey. The ferry crossing was made to the accompaniment of Gerry Marsden, an historical commentary and the stunning Liverpool skyline. From the ferry terminus a scenic promenade ran northwards. Over two miles of delightfully traffic free flat cycling, leading to New Brighton, a hub of activity, its vibrant sunny seafront overlooking the junction of river and expansive blue sea. A cluster of shops, equally busy, were easily avoided. Beyond the town the 'Wirral Circular Tour' took me inland at one point to follow a ditch 'The Birket' between a golf course and a drab estate. It was a timely moment to beat a retreat, rediscover the seafront and return to New Brighton. Where was that nice cafe that cyclists frequent?

A small blackboard advertised homemade cakes and refreshments at 'Times Past' (Or something of that sort I can't recall the actual name) up a slight hill, just off the esplanade. First impressions were that it was a little twee, a shop selling pictures and bric-a-brac with an empty cafe, not quite what I was wanting, so I cycled on. That was until I saw in the distance the ferry sailing into the Wirral terminus. Realising that I was going to miss it and that the next one was in an hour meant that a refreshment stop was essential, and something about that cafe was drawing me back.

The lady serving was welcoming and I was soon comfortably seated with coffee and carrot cake, keeping an eye on my

chained up bike outside. A young couple came in, obviously local. I gleaned from their conversation with the lady that the 'cafe' side of the business was fairly recent and was doing better than expected. The gentleman who had been looking at the pictures adorning the walls told a lovely story about a friend who when in Brighton (Sussex) had discovered and brought a postcard of New Brighton's boating pool. Upon returning home the friend realised that he, as a young boy together with his father were on the postcard. 'What were the chances of that!' the man exclaimed. A wonderful story to enrich my day; I was glad that fate had led me to hear it.

By way of conversation I mentioned to the proprietor that the last time I was on The Wirral I was cycling back to Wales. 'Did you hear that?' she said to the couple 'He was cycling to Wales!' The man asked me which part. When I stated 'Llanrwst', he replied 'I've just come back from there'. When I enquired what he had been doing, his school's visit to Oaklands, Wirral's Outdoor Centre came to light. I suddenly realised that there was a possibility of something highly improbable. 'Were you with Andy down Rhiwbach Mine on Thursday?' I was already anticipating the answer, it really wasn't a shock when he said 'yes'.

Usually groups in the mine try and avoid each other, just passing in the gloom. It was only because I had offered to take another group's boat back across a flooded chamber that I had spoken to Andy, we had shook hands and introduced ourselves. It was Andy's group that I had met up with again at another pool of water further into in the mine. 'So you must have been the person stood in the corridor pushing children off across the pool of water on that zip wire, whilst I was hanging in a sling just a few feet away supervising my team down from the rope traverse'. The man agreed. Although we hadn't actually spoken, we had been next to each other in the mine for about fifteen minutes. It was an astonishing coincidence to meet up again in an offbeat New Brighton cafe.

Naturally we laughed in amazement at the situation and exchanged details. Nick taught at a local primary school. I explained my surname is like Reynolds but spelt differently whereupon Helen, his wife, asked 'Is it spelt W R E N N A L L?'. I was surprised, nobody ever knows how to spell my name. It turns out they used to live in Fulwood, Preston (10 miles from my home town of Garstang) and whilst employed there as a radiologist she had worked with a Wrennall, probably one of my extensive family of second cousins.

It was all so extraordinary. We continued laughing and chatting for twenty minutes or so. As we were leaving, I joked that the cafe owners are probably time travellers and that if we ever came back there would be no cafe and no history of there ever having been one. Interestingly, I have so far been unable to locate the cafe on the internet, possibly because it was a new venture but don't rule out the other option. Nick suggested we would meet again, I think he might be right.

Refocused on cycling I headed down to the promenade without glancing back which, in retrospect, I regret. I resumed my journey to the ferry marvelling at the magic of the occasion, happy with life and full of smiles. I haven't stopped looking back since.

I subsequently got in touch with Nick via his school web site, he doesn't know the name of the cafe either, it was his first time in there! I sent him a copy of this article and was rewarded with his own account of Rhiwbach Mine. He had really enjoyed his day underground and the place had left a lasting impression on both him and his pupils. Nick wrote about the experience for the school magazine, he has kindly given permission for me to include it here.

Author: Dave Wrennall

Going Underground at the former Rhiwbach (Small Hill) Slate Mine

by Mr Purslow

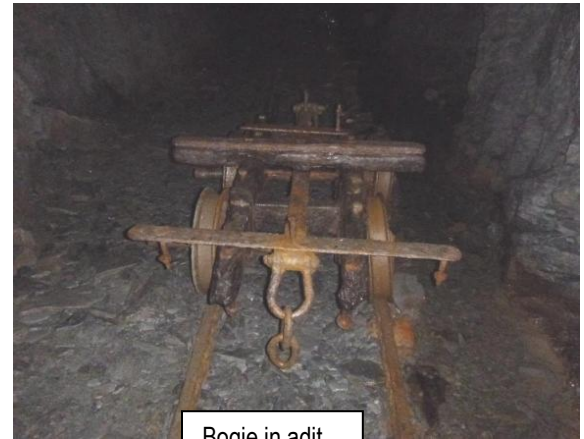
Situated in the picturesque Conwy Valley, this erstwhile powerhouse of industry now lies dormant, save for the few hours of each day when its myriad of man-made tunnels and caverns echo to the sound of wellington shod children eager to learn how their forebears struggled to earn a living. The true scale of their efforts is evident even as we approach the entrance over years of accumulated spoil; (Only 10% of the mined material was viable for use as roofing slates but the rest still had to be removed.)



Jumper

From the moment we enter through an eerie drainage adit, we begin to empathise with the men and boys whose tough subterranean existence is reflected in the discarded remnants of their working lives; a bogie once used for removing spoil still lies on its tracks and in one huge cavern, a variety of chisels, a cylllell (knife) used to cut slate to size, a saw blade and a curious long weighted boring device called a jumper bit (jympar) wait in vain to be used again by a skilled practitioner. Our combined efforts with the jympar succeed only in grazing the surface of the slate that remains, whilst tiring our shoulders in seconds. It would take ten hours* of repeated striking and twisting to prepare a hole that could be filled with the black powder necessary to open up a seam of rock. Thousands of borehole marks representing generations of the same family bear testament to the unstinting graft of the miners.

That these people lived, worked and in some cases died in family groups lends a further poignancy to our fleeting visit. There is a feeling that we are truly "standing on the shoulders of giants."



Bogie in adit

Under the expert leadership of the Oaklands staff, we are conveyed across an underground lake in a boat, given the opportunity to traverse rock faces and to climb waterfalls on ropes. We cross water courses on a zip wire; we scramble, crawl, duck and are otherwise cajoled to perform a host of challenging activities whilst underground.

That we rise to those challenges without complaint is the school's way; that we actually surpass our own expectations in completing our tasks, honours the memory of those who lived and worked here and is perhaps moreover inspired by their spirit of bravery and commitment to their friends and family. We are all honoured to have been given this opportunity which will live long in the memory. We are perhaps grateful too that for all we may complain in our modern world, life will never be quite so hard as it was for those mining heroes of the past!



Collection of tools

**This 10 hour figure is open to conjecture. Miles Moulding from 'Go Below' maintains they were supposed to have the shot hole complete by lunch time, typically 4-5 foot deep, so about a foot an hour. Soap was apparently added to the hole as it was drilled to bring out the dust. Ideally the hole should be charged and blasted before lunch giving time for the dust/fumes to disperse. The afternoon was focused on getting the block onto the slab wagon, clearing the waste into a rubbish wagon, and getting both to haulage.*

In 2014 (Oct 26th) Rhiwbach was the venue for the Snowdonia Society's annual underground walk. Nine visitors were guided by GOES members through the system.

Ty Gwyn Mine Visitor Trips

During 2014 we have welcomed many people to the joys of the Ty Gwyn Mine by way of an introductory trip to the mine led by me. These have been arranged by our Public Relations Officer David Broomhead who has tirelessly encouraged people from church groups to café staff and builders in and around the Llandudno area.

Trips generally had groups of up to eight people including young café waitresses with fantastic nails (which survived) to



a lady who was 88 years old who did especially well and still talks about the night she went down under Llandudno.

Whilst no charge is made for any trip donations of over £130 were raised last year by Dave's efforts and a number of people have expressed an interest in joining the Society.

A typical trip is shown on the left and Dave (right) is modelling his own take on a personal lighting system which does brighten the evening somewhat, as each lamp can be angled in different directions for all round illumination.



It was on one of these trips that Dave noticed a new water flow into the mine at the start of the second section of ginging. This is currently being investigated by Welsh Water as it contains an element of mains water but is likely to be from drainage discharge not the mains, hopefully soon to be resolved as the Coffin Level is not passable in wellingtons anymore.

Welsh Water subsequently found a leak at the back of the Belmont Hotel below Hill Terrace. Once this was repaired the flow of water into the Ty Gwyn ceased.

Author: Stephen J Lea

Ty Gwyn: New Discoveries

Another hole through the ginging.

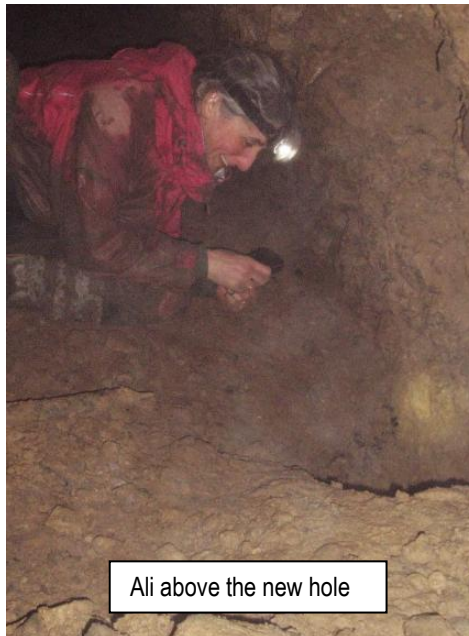
On February 15th 2015, Ali Davis and I accompanied Steve Lea into the Ty Gwyn to better investigate the route by which the troublesome water was entering the mine. We knew it was pouring from the ginging but was it visibly flowing down the second incline? Perhaps we could provide Welsh Water with some additional information, a site visit being planned for later in the week. Ali and I wriggled through the tight crawl to reach the first incline, the route up which leads to a link with the second incline was as usual blocked by the damp spoil slumping in from a rubble filled shaft.

The infill which had been dug out numerous times over the years, stays open for a while but is always blocked by the next visit. However, the various artefacts occasionally discovered whilst digging are some compensation for the creation of only a temporary passage and they can be passed via a convenient hole in the ginging, immediately next to the dig, into the main adit for safe keeping and display.

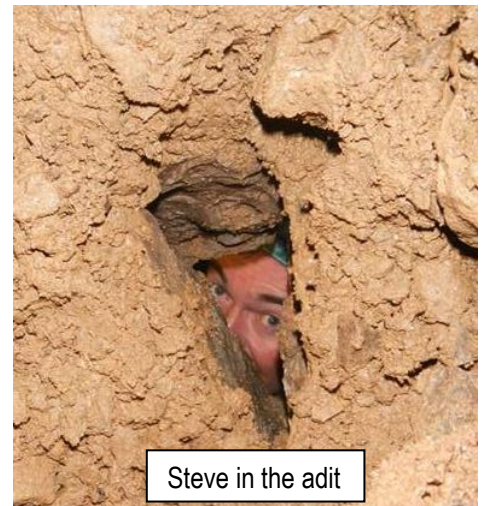
Nearly an hour later, after all too many buckets of grot had been laboriously filled, hauled and emptied we were through, a pipe bole and bits of pottery our only finds, posted to Steve in the adit. The higher section of the first incline was dry as was the second incline, reached by a short cross cut. No water was observable finding a route down through either incline. Possibly it was flowing beneath the rubble floor?

What was discovered was a voice link between the floor of second incline and the roof of the main adit and with a little probing a visual connection was established through the top of the ginged arch. This confirmed the second incline lies directly above and runs in line with the main tramming adit. I recalled my exit through the lower end of the second incline in 2009, emerging into the main adit at the end of the ginging after an increasingly constricted slither. I had thought I was the first to do it but Ali confirmed she had been through previously. Neither of us wanted to repeat the feat so we returned the way we had come in, longer but much less daunting.

As we went back down through our still open dig, I thought how useful it would have been to have supported the grot to prevent its inevitable collapse. The route would then always be passable and the madness of redigging ended.



Ali above the new hole



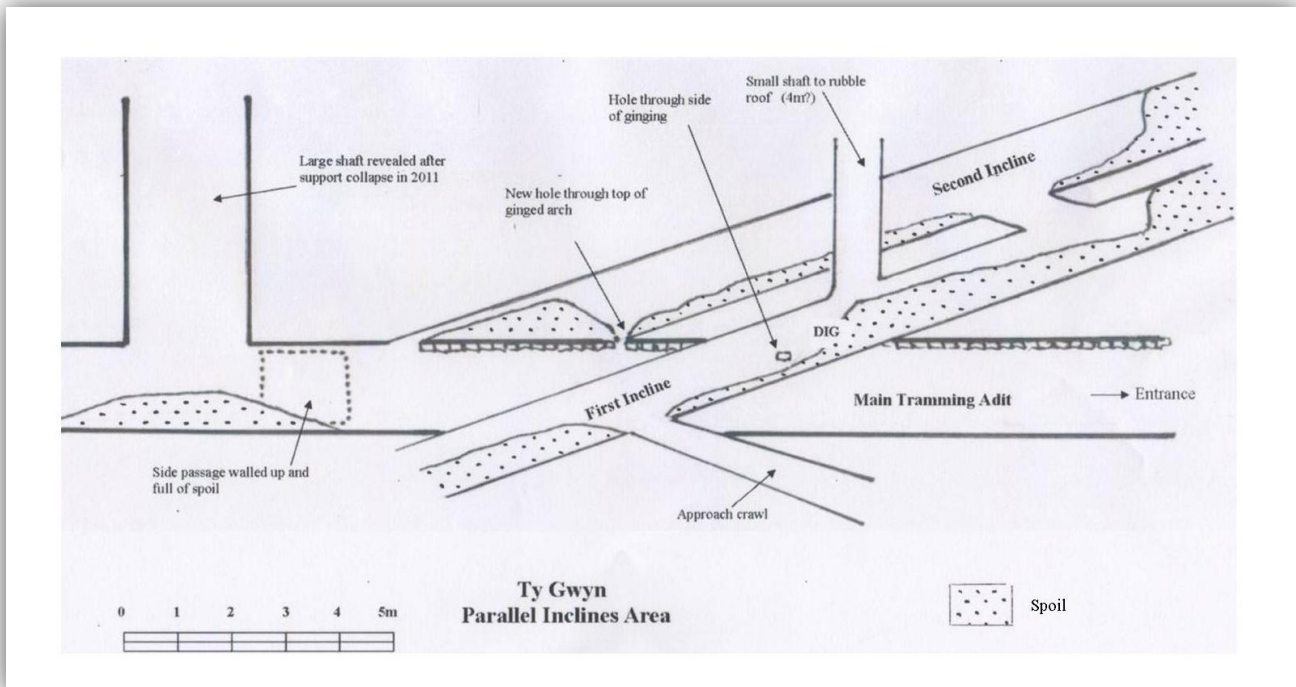
Steve in the adit



Looking back at my 2009 slither

Another shaft emptied.

Just over a month later (March 22nd) Steve and I were back, this time with Brian Edwards. We carried with us a variety of treated wooden planks and posts from a dismantled garden fence, with a plan to use them as shuttering to support the infill after we had dug through it again!



Once in the first incline Brian and I were delighted to discover that it wasn't totally blocked, space above some freshly fallen spoil revealing the blackness of the inclines higher section. More digging was still required to actually create a good passageway and this was in full swing when the cleared shaft (1.5m in diameter?) was first noticed. It wasn't possible to look up it properly until more fill was removed but eventually, as we opened our route through, I was able to look up some 4m to what seemed to be a rubble roof, hopefully concreted up. Whatever might fall from now on was likely to be hard!

Steve posted some of the wooden planks through from tramming adit. These were placed in a line, just off vertical leaning against the roof and packed behind with spoil to hold them in position. They now form a passageway that should stay open in the future and provide security from any falling rubble.

Whilst digging I was also very pleased to post back to Steve an intact torpedo bottle with the inscription

R. ELLIS AND SON RUTHIN
MANUFACTURERS OF SUPERIOR AERATED WATER
TO THE ROYAL FAMILY



Given the possible instability of the newly emptied shaft it was wise to let it settle down before making a closer inspection. We had had a very successful day and left in good spirits through the access crawl, the opening of which Brian had been enlarging between my bucketfuls. No wonder he was tired. Future visitors should be appreciative of his efforts.

Author: Dave Wrennall

The Penmorfa Chronicles

Moonstruck

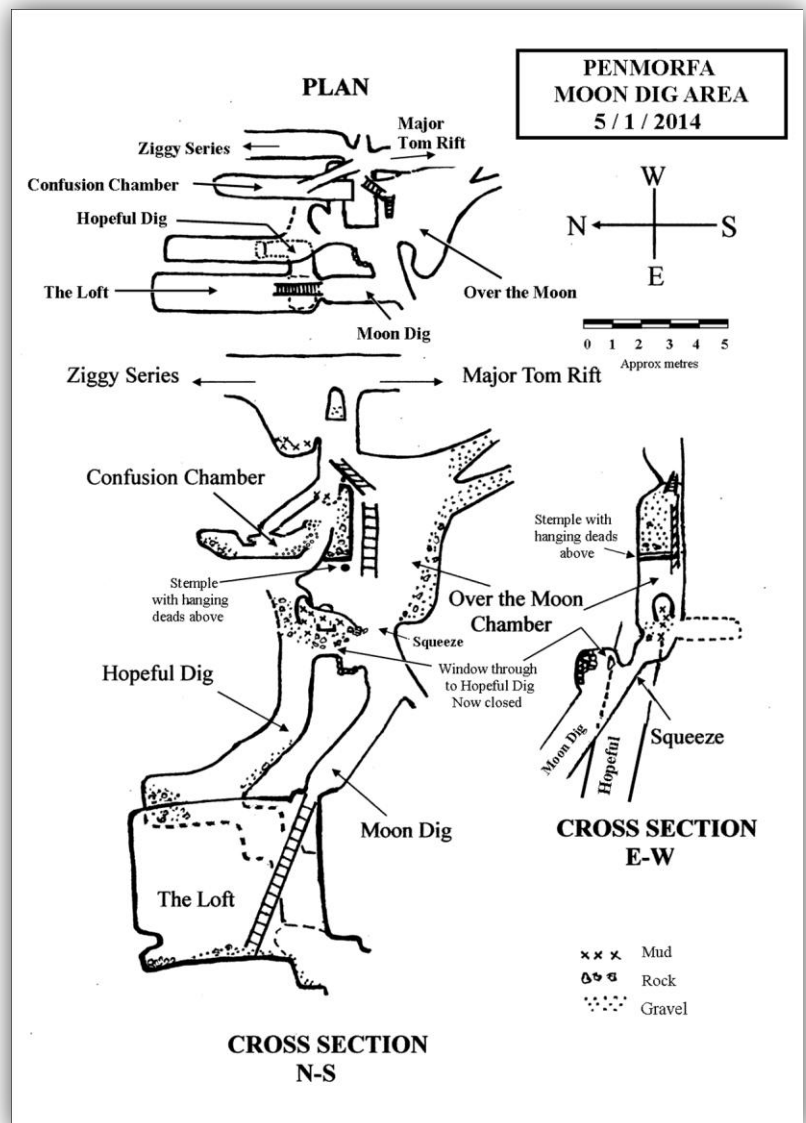
The Moon Dig which had received so much attention 2012-13 has had fewer visits. Instability, a shortage of personnel and more recently a focus on surveying elsewhere in the mine conspiring to leave it largely dormant.

Unexplored tunnel....

One incident however proved especially memorable for me. On November 24th 2013, whilst Brian was showing two guest around the main workings, Dave Flowers and I went to check the situation at the Moon Dig. We found it open but as usual highly unstable. Above the hanging deads, next to the top of our highest ladder, we looked into an unexplored tight crawl, dipping down at about 40 degrees for 3 to 4 metres, and spied an intriguing black slot at its end. There was loose rubble on the floor but the roof was solid enough. Encouraged by this fact I quickly removed some initial rocks and slithered in head first. At the hole I peered through and saw a short drop to a small tunnel which continued out of sight. Squeezing through the tight slot, (Perhaps I rotated first, but I can't recall), I fell into a passage just high enough to kneel in and quickly grovelled under a lower section to see where it led. Things opened up slightly but immediately there was an apparent dead end with lots of broken rock on the floor.

Unexpected rubble....

'You go back to down to the bottom of the long ladder and climb into Hopeful Dig and we might be able to hear each other' I shouted. 'I'll dig some of these rocks out and see if the floors solid'. (Finding an alternative route avoiding the unstable Moon Dig was highly desirable - an audible connection with Hopeful had already been noticed just below the hanging deads.) After ten minutes or so it was clear there was only solid rock and my shouts weren't being answered. Time to get out and team up again. Squirring back under the lower section I was stunned to see rubble piled up to the roof. There must have been a collapse! The fact that I hadn't heard anything fall was strange but the reality was there for me to see. I'd obviously misjudged the stability of the crawl down very badly, or perhaps there had been a collapse higher up that had caused it to be filled? Additional shouts went unanswered. Dave was probably waiting for me at the foot of the long ladder. He might be in for a long wait.



Flustered....

How much rubble was blocking me in? Could I extricate myself with a little digging? I began dragging the rocks back from the face with my arms pushing and kicking them into the recesses of my confine. Numerous larger rocks fell down and as space was at a premium I thought it prudent to push them to the very far end, crawling repeatedly under the lowering to stack them. This process continued for fifteen minutes or so, the rubble getting increasingly damp and the situation getting increasingly congested as more stuff fell replacing that which I removed. Squirming backwards and forwards taking bigger rocks under the lowering was awkward and making me hot and flustered. Was the air quality deteriorating? Carbon Dioxide building up in the lower section? Certainly it felt nice getting back to the cooler damp dig slightly more elevated and open, where I could lie and reassessing my predicament.

My efforts had succeeded merely in creating a small hollow above my head, a section of solid vertical wall surrounded by larger rocks holding back yet more debris. Resting on my back, regaining my composure, I noticed all the pick-marks in the roof, they had been there for a very long time. What a fool I felt getting stuck and gazing up at them.

Thoughts....

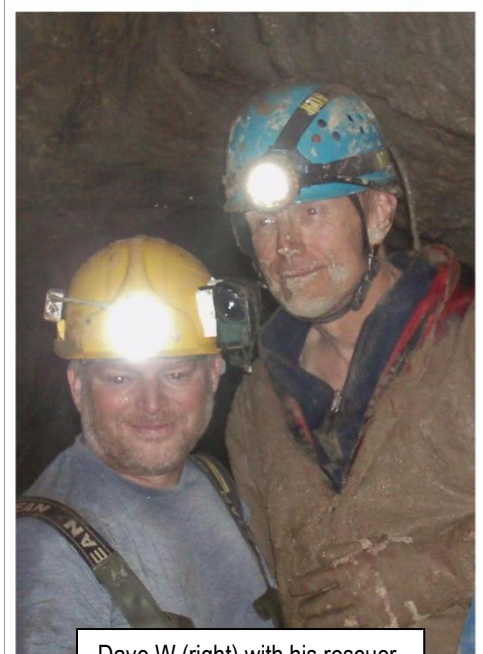
Was Dave going to return? Still no answer to my calls. Had he been caught out by the same collapse, and in need of help himself, or worse? Perhaps I was going to be here for many hours yet, till Brian comes looking? Maybe he will have left the mine by now? A glance at my watch it's 12:30pm. The air quality seems OK after my time out, fresher air might be seeping in through the rocks. I think of the successful rescue of those Chilean miners and bizarrely how wonderful it will feel pushing a trolley around Tesco's, when I eventually get out! Gazing around at my prison I reflect on two other occasions that I've been trapped by rock-fall, they were worse, totally pinned for several minutes until pulled out by colleagues, both in the Moon Dig. This place has got it in for me!

Yet more digging and stacking, under the lowering and on a small ledge above it, left affairs much as they were, more large rocks threatening to fall along with the grot they supported, but with less space for me to exist in. Was it time to wait patiently for rescue, conserving my energy and the air supply? It seemed to be the best option, when thankfully I heard Dave's voice. We had probably been apart less than an hour but it had seemed much longer, soon he was close, very close. He had just come through the squeeze into Over the Moon Chamber and was stood next to the hanging deads, he sounded no more than a couple of metres away at the other side of the rubble. Perhaps he might get a scaffold pipe through so at least my air supply would be guaranteed whilst Cave Rescue are called to extricate me.

Deliverance....

I tried to explain my situation, how the way in had become blocked. 'Go and look what's happened' I suggested. So Dave climbed the ladders and shone his torch down the inclined crawl I had blundered down earlier. Amazingly a light flickered close to my feet, through a thin slot, to one side, above the lip of the small ledge I had earlier been placing rocks on. In a dark recess it had been completely overlooked.

A very serious situation had suddenly transformed to one of bewilderment and amusement. It was unbelievable that I hadn't seen the opening! When I had dropped through the slot I had obviously faced the one part of the passage I could see from above, not noticing the tunnel behind my back, already run in with rubble. After several minutes of rock shifting and shouting



Dave W (right) with his rescuer

I had wriggled back under the lowering to be confronted with the rubble for the first time, mistakenly thinking it was blocking me in, whilst the original point of access was still open, just above my head. I wouldn't have got so confused had I gone under the lowering and straight back out or had Dave stayed where he was, I would naturally have seen his light. Fate had conspired to make me look foolish. I should have listened to that inner voice: I hadn't heard any collapse, that the crawl in had seemed safe, and hadn't the entry slot been quite tight? Confusion Chamber was certainly an apt name for the place.

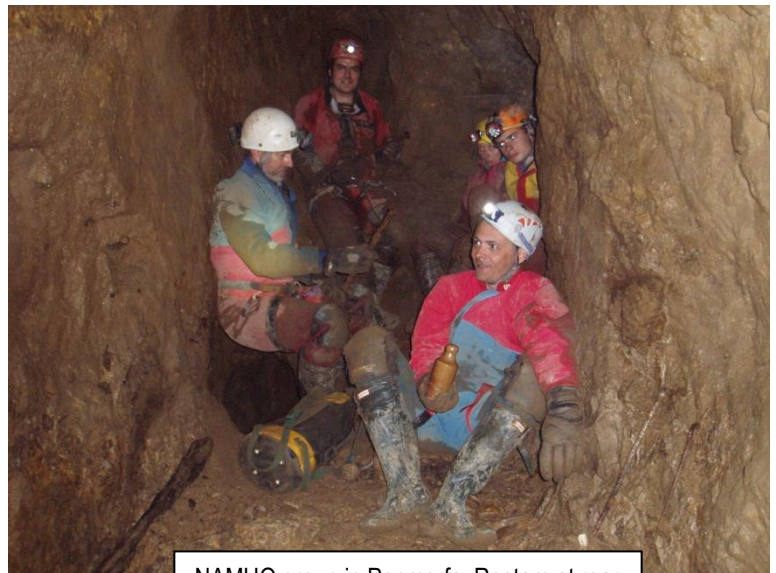
Back in the tramming adit Brian's picture caught my euphoria. 'What have you been smoking?' he asked. 'I'm breathing in freedom' I replied! On the way out of the pipe next to the entrance, I noticed a small birds nest hidden in some brambles. My acute powers of observation had returned!

Hope....

The Moon Dig saw a minor flurry of activity early in 2014 with three trips intent on clearing 'Hopeful Dig', as an alternative and possibly safer route. Much effort only succeeded in creating a small visual connection through to the Moon Dig immediately below the hanging deads in 'Over the Moon Chamber'. (Which we had hoped our new route might bypass.) A steady flow of heavy mud and rocks soon refilled the dig back to its original state, blocking the new link and leaving us disillusioned. Hopeful was indeed 'Hopeless'.

Laser Surveying

During July 2014 groups attending the National Association of Mining History Organisations' (NAMHO) conference in Bangor were shown around Penmorfa. One of the visitors Rostam Namaghi, (originally from Bangor, currently training to be a doctor in Sheffield) offered to do a laser survey of the system. Over the weekend of August 9th/10th Rostam and his friend Glen Sankey accompanied by GOES members surveyed from the entrance to the tallyboard before striking up into Rift One and plotting the regular 'visitor' route up to the highest workings and completing the Stemple Shaft, Devil's Head Chamber, Erik's Back Passage circuit. Subsequently GOES have purchased a laser measuring device and continued to survey the system. More on this topic will appear in the next journal.



NAMHO group in Penmorfa, Rostam at rear

Author: Dave Wrennall

The GOES mystery quests 2014

The GOES mystery quests set for the early part of 2014 are shown below, in no particular order. Ali Davies was the overall winner by guessing 6 out of the 7 quests first. I have not listed the locations as they still remain as mystery quests for any other potential searchers. I am still happy to accept answers and there could still be a few prizes available for correct guesses.



Quizmaster: Nicholas Challinor

1965 Carlsark Cavern Rescue Update

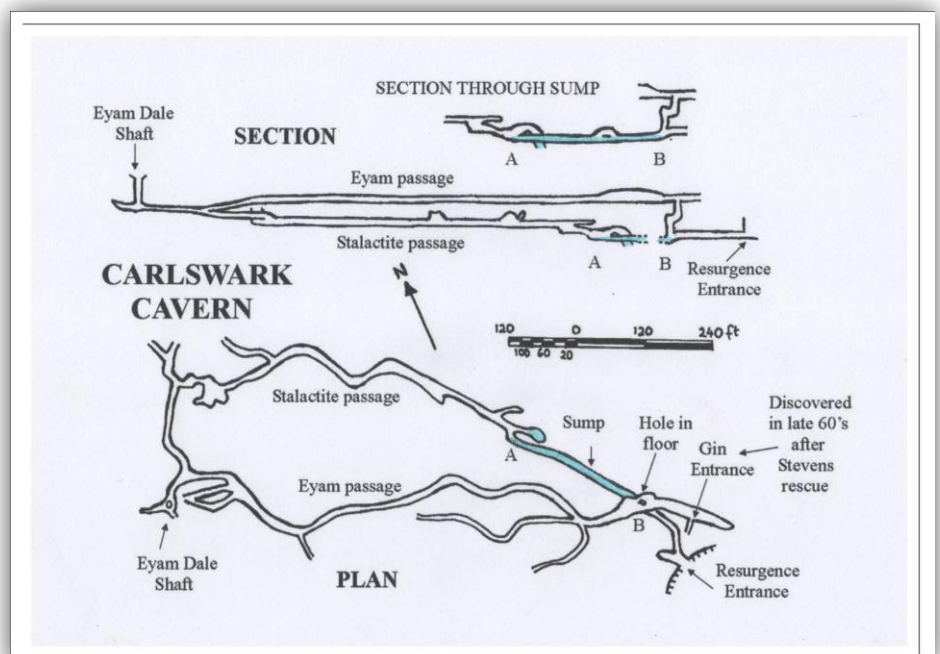
In the 2014 Journal in my article 'An Excursion into Carlsark Cavern' I investigated the rescue in 1965 of John Stevens a 16 year old boy soldier who became 'lost' during an army exercise. He swam 90ft up a flooded passageway (sump) in complete darkness to miraculously find a pocket of air large enough to squirm into. After 12 hours Derbyshire Cave Rescue Organisation (DCRO) had lowered the water enough to reach what they thought would be a body, instead they heard whistling and Stevens was eventually able to walk out with them.

One of the rescuers Dave Allsop, kindly allowed me to use his personal account of the incident and provided me with newspaper cuttings of both the rescue and the reunion of Stevens with the DCRO team in 2001. When I visit Dave at his home at Buxton in 2012 I was made very welcome, and was able to read through his many scrapbooks whilst he related stories and anecdotes reflecting his passion for caving and the local area. Whilst there I explored Carlsark alone, using a candle (that is all the boy soldiers had!) to hopefully gain an insight into the incident. There were accounts of being ordered into the sump, the suggestion of genuine error or even bravado. I concluded my article by stating that perhaps only Stevens himself knew what actually happened.

Following publication in July 2014, I was saddened to receive a telephone call from Dave Allsop's wife informing me that he had died unexpectedly in March 2013 following an embolism. She had been extremely touched by the article in the copy of the Journal sent by GOES and thought it right that we should know of his untimely death. Although Dave and I had corresponded and phoned each other over several years we met only once. He was a lovely man and it was always my intention to revisit. I feel that I have lost a friend. A fitting eulogy can be found on the Buxton Advertiser's website.

In October, Paul Stevens phoned Dave Broomhead our PR Officer after reading my article online. Several days later after receiving his contact details I gave Stevens a call. He was, thankfully, very pleased with the article, especially as some of the pictures were new to him. However he pointed out that there was a lot of rubbish in many of the newspaper stories and that he had only ever spoken to The Manchester Evening News and The Daily Mirror. He came across very warm-hearted and eloquent. He had never dwelt on his near miss, life was full of risk. Our conversation ranged from his career in the army and employment in the 'building game' to his friendship with Dave Allsop and a continuing association with the DCRO team.

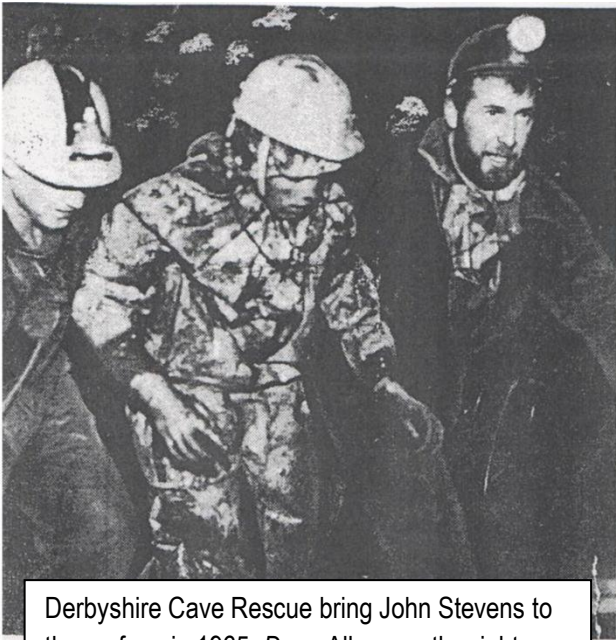
I quizzed him about the army exercise he had been sent on in 1965. As we talked, it became clearer what may have taken place. No, he hadn't been leading. The boy soldiers (8 perhaps) together with an officer were looking for a way out that they hadn't already used to go in. The abseil to the lower level which contained the sump was



the second abseil, the first had been from the surface. This information pointed to the squad entering Carlswark via the higher Eyam Dale Shaft. To then crawl 300m along the Eyam Passage and locate an obscure abseil through a hole in the floor down to the lower level, before finding a different way out, had always seemed to me, the obvious challenging trip especially with just candles! However, I still find it odd that none of the newspaper accounts describe this scenario, even Dave Allsop had seemed unaware of it.

The fact that it was a through trip, throws a new light on events. Had they simply accessed Carlswark by the lower Resurgence Entrance they would have been extremely unlikely to consider swimming into the sump whilst retracing their steps, looking for what would have been a dry way in. However they had reached an area at the foot of the second abseil that was totally unfamiliar to them, right next to the water- filled passageway.

John Stevens told me that he was the last one to abseil. Everyone else was already assembled in the small chamber at the foot of the rope. The officer was adamant that the way on was through the water and wanted him check it out as he was the best swimmer. John argued that the instructions had been 'with the rope at your back go up and left' but the officer was insistent on John entering the watery passage down to the right. Despite strong misgivings, he went along with what was effectively an order. John came back several time to state that it wasn't the way, but he was sent back in. Committing to a longer underwater swim finally led to his entrapment and subsequent rescue.



Derbyshire Cave Rescue bring John Stevens to the surface in 1965. Dave Allsop on the right.



John Stevens (centre) back at the cave entrance in 2001, with his daughter Ceri, her two-year old daughter, Paige, and Dave Allsop

My interest in this incident began following the death of founder member Billy Davies in 2009. I received one of his books 'Caves' by Tony Waltham. In it was a small paragraph about the 1965 rescue. It left a lot of unanswered questions. Further research led me on an intriguing journey. Along the way I visited Carlswark Cavern, met up with one of the rescuers and eventually talked to Stevens himself. Hopefully this account endorsed by John sets the record straight.

In one final closure of the circle, I have been able to give John all the many newspaper cuttings sent to me by Dave Allsop, photocopied from his scrapbooks, of the rescue and the 2001 reunion. John's own cuttings had been lost in a fire many years ago.

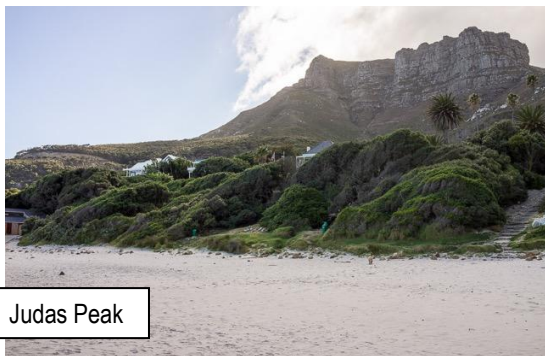
Author: Dave Wrennall

Llandudno in South Africa

Tony and Ali Davies recently returned from a trip to South Africa where they visited Llandudno. According to Ali it's not like our Llandudno; The beach was covered in beautiful pale sand, not rocks, and the sea looked blue and was crystal clear. The water was so cold that she couldn't stand more than a few seconds of splashing in the surf. The 'Ormes' are Little Lion's Head and Judas Peak. The former is quite pointy and the latter is the most southerly end of the Twelve Apostles mountain range. The town itself has no shops, cafes or pubs, there are just rather posh houses for the likes of David Beckham (apparently).

According to Wikipedia, Llandudno is a residential suburb of Cape town on the Atlantic seaboard of the Cape Peninsula. There are no street lights, shops or commercial activities, and the suburb has some of the most expensive residential property in South Africa. The beach is one of the Cape's most beautiful surrounded by large granite boulders and overlooked by mountains. It is a popular surfing spot, but the swimming can be treacherous, with rough seas and extremely cold water. Lifeguards are on duty during the summer season.. It is also the access point for the walk to Sandy Bay an isolated beach still popular with nudists.

On 26 September 1903 the valley was declared a township and named Llandudno. The striking similarities between Kleinkommetjie Bay in which the valley resides and Llandudno in Wales were noted as reasons for choosing this name.



Judas Peak



Little Lion's Head



Sandy Bay (photo from internet)



Tony on the edge of town

Ali Davies / Dave Wrennall

GOES Summer Walks 2015

All walks start at 7pm and are usually gentle strolls, which last approximately 2 hours. Sturdy footwear is recommended. Below is a list of the proposed walks, but all are subject to confirmation. Please check the community news section in the North Wales Weekly News, which will provide full details of the walk taking place and the arranged meeting place. If however, the weather is poor, then the walk is very likely to be postponed until a later date.

28th May	Great Orme Park Wall. Meet at Great Orme Visitor Centre car park. GR SH 766 833.
4th June	Pigeons Cave and Fisherman's Ledge. Meet at Llandudno Pier entrance . GR SH 784 829.
11th June	The Great Orme - a Warden's view (with Sally Pidcock - The Orme Warden). Meet at Great Orme Visitor Centre car park. GR SH 766 833.
18th June	West Shore (Walk along the beach and the boating area). Meet at the West Shore Toll House. GR SH 768 823.
25th June	Dowsing/Divining an ancient art/skill (bring your own or use provided dowsing tools) - Maes y Facrell area. Meet at the Pump House. GR SH 771 832.
2nd July	The Great Orme 9 hole Golf Course area. Meet at Green Triangle. GR SH 774 828.
9th July	Rocks and Awe (please excuse the pun) with Martin Trevelyan-Jones. Meet at Great Orme Visitor Centre car park. GR SH 766 833.
16th July	St Tudno's Cemetery - a revisit continued (with Christine Jones). Meet at St Tudno's Church. GR SH 769 838.
23rd July	Great Orme Gun Site (visit gun positions). Meet at West Shore Marine Drive Toll House. GR SH 768 823.
30th July	Penmaenmawr (Beach or mountain - weather dependant) with Major (Retd) Andy Fowl (Herresbergfuhrer). GR SH TBC.
6th August	Little Orme - Walk and shoot (weather permitting - bring cameras). Meet at Little Orme end of North Shore. GR SH 804 822.
13th August	Happy Valley Walk. Meet at the Llandudno Pier entrance. GR SH 784 829.
20th August	Lovers'/Invalids' Walk. Meet at West Shore Toll House. GR SH 768 823.

Walk Coordinator: Nicholas Challinor