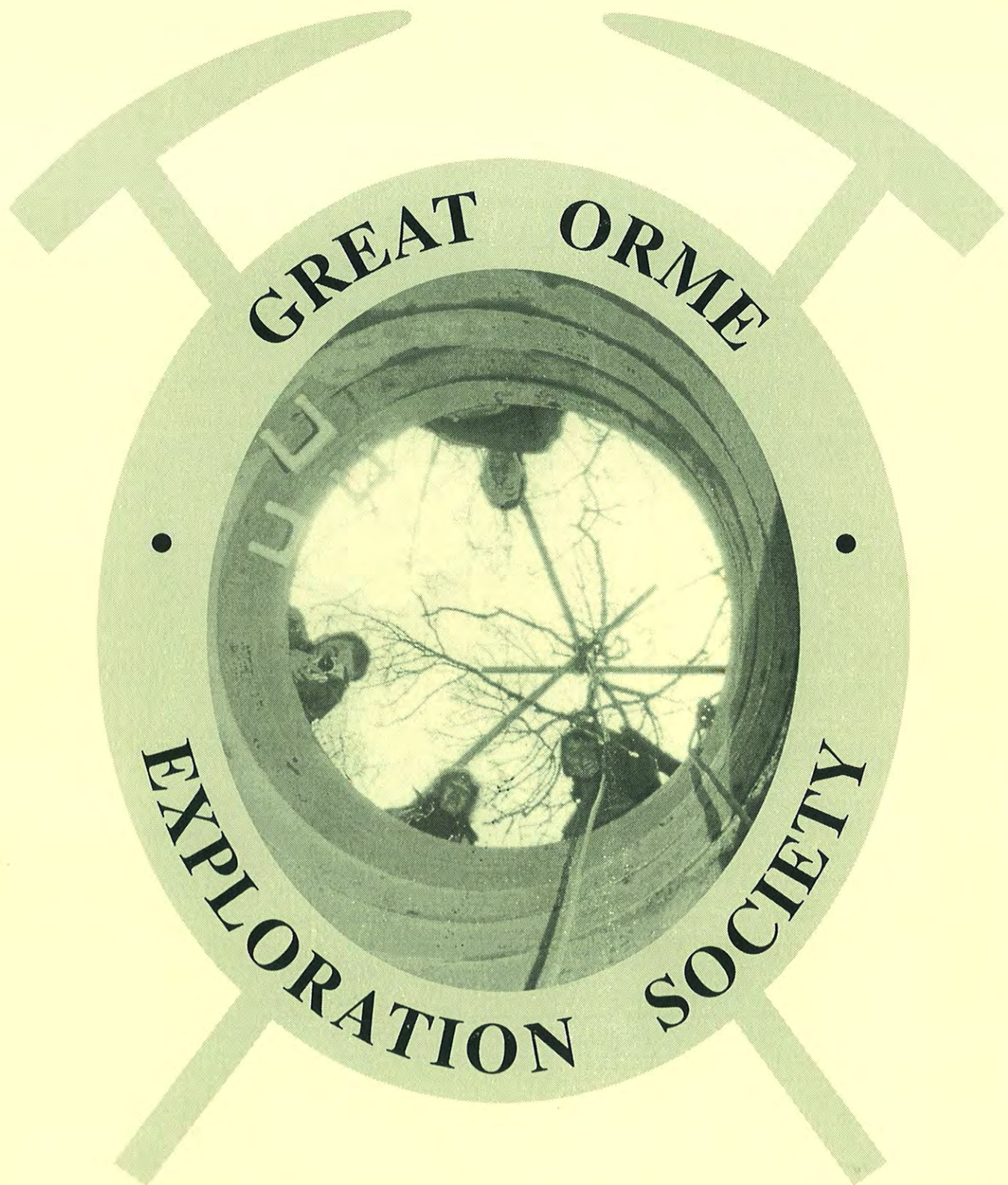


JOURNAL OF THE



Issue No. 2, 1998

£2.50 to Non-members

FRONT COVER

Happy Valley shaft. Picture taken by Mark Beardsall last winter

CHRISTMAS DINNER 1998

Mark Beardsall has been kind enough to organise this years christmas dinner which will be held at The Kings Head on Friday 27th November. It will cost £10.50 per head for the basic menu. There are a couple of additional options also, but they will carry an extra charge. Enclosed in this journal is a separate menu/order form for you to make your choice.

Please would you send your completed order forms, with remittance, to: Mark Beardsall, 47 Ormeside, Penrhynside before 20th November. There will be a slide show after the meal so if you have any pictures you would like to share with everyone, please bring them along.

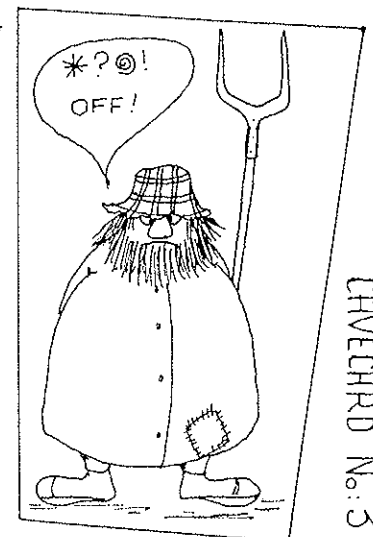
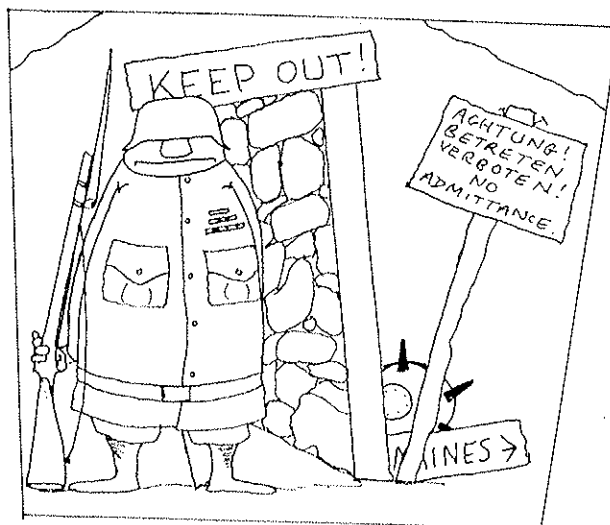
TY GWYN

Back in 1996 there was a dig in progress in Ty Gwyn. The main aim was to dig through a blockage and break through to the Tyn y Fron mine. The only problem was that the blockage consisted of thick, gloopy, sticky glacial clay. Every week the diggers would arrive eager to get to work, but every week the digging seemed to get harder and progress seemed non-existent... The dig was abandoned.

GOES then made a survey of the whole Ty Gwyn mine. The diggers pondered over the plans, looking in the area of the blockage and wondering just how far the blockage stretched. A plan of Tyn y Fron was found (previously surveyed by Andy Lewis) and when the two surveys were put together it was discovered that in theory the diggers were already into Tyn y Fron...by 6 feet! Thrown into confusion, many theories were banded about.

Digging has resumed in Ty Gwyn. Progress is still painfully slow, but maybe moving just one more rock will reveal the passages of the Tyn y Fron mine.

*Alison Walton, Llandudno
1998*



SOME FARMERS MAY RESENT CAVERS ~
POLITELY SEEK THEIR ADVICE AND PERMISSION! /

© BIVOUAC HARRIS 1/2

CONTENTS

Tom Stone - A Eulogy	2
Two From Cromlech Road	2
Early Copper Smelting on the Great Orme	4
Happy Valley Dig...Latest News	4
Malachite - The Origin	5
First Impressions of Ty Gwyn	5
Planning Consent for Change of Use of Agricultural Land	6
Name the Peaks!	7
Cwm Dyli Mine - Snowdon	8
The Caving Code	9
List of Committee Members	9

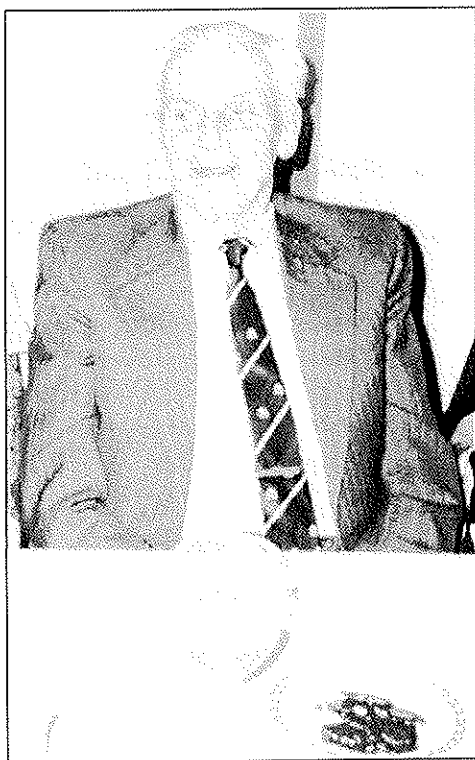
Articles are always wanted! The next journal is due out in April 1999, so please put pen to paper

© Journal - Great Orme Exploration Society, 1998
Printed by H.B.C. Ltd., Llandudno

TOM STONE: A EULOGY

I knew Tom for only a few short years as a member of the Great Orme Exploration Society, a friend and then as the Society's President. Sadly, he died on May 13th this year.

While we had been working constructively on, in and around the Great Orme since the early 1980s, he had been conducting serious archaeological excavations in e.g. Kendrick's Cave, Ogof Pant y Wennol, Badger's cave for many years. His work is legendary and although sustained within current membership is also recorded within our Society Journal and other more august publications.



He insisted his artefacts remain here in Llandudno and not be taken to Cardiff for recording where they might stay. The team from the National Museum of Wales came to his house to photograph and document them, they remain in Llandudno and available for display. While breath allowed he spoke freely to any who invited him but as years drew on this became more and more challenging but that didn't stop him, just slowed him down. In the late 1970s he required major vascular surgery. He was their star patient and far outlived the tenure of the surgeon who has since retired and he was, I believe, their patient with the longest follow up for an operation of that type.

In latter years he moved to Queen Elizabeth Court where he and Aileen were more than happy to see visitors, baby Peter was no exception. It was here that as Editor I had the privilege of working with him as he wrote his account of Ogof Pant y Wennol, Kendrick's cave and Badger's cave for the Journal. I was delighted when he was elected Society President, a fitting tribute to him and his work and one which will be hard to follow. I for one will miss him greatly.

Don Smith, Chester, October 1998

PAO FROM CROMLECH ROAD

In the Spring of 1928, an old gentleman chopped wood, in the garden of his cottage at No. 2 Cromlech Road on the Great Orme. Although bent with age and arthritis, he was a most imposing figure, a giant of a man and of powerful appearance. His beard was long and white and his eyes shrewd and penetrating. As he paused for rest he looked towards the summit, where the ewes were grazing, heavy with lamb. Was he, perhaps, remembering the many adventures in his long life. His name was John Williams and in his youth he had been a copper miner on the Orme. He was also a much travelled man.

70 years later, in the Spring of 1998, another man is chopping wood in the same garden of 2 Cromlech Road. He is of slight build with auburn hair and a moustache. He is considerably younger than John Williams. Perhaps, as he looks towards the summit of the Orme, Billy Davies, mine explorer and traveller, is also remembering.

In 1911, John Williams, then aged 74, was interviewed by G.A. Humphries, the Agent of Mostyn Estates. John Williams told the Agent how, at the age of 12, he went to work in the Old Mine. He said that his Father, William Williams, had worked for 65 years in the Llandudno Mines, and must have been very old when he finally retired. During the week, John and his Father stayed with his Uncle, James Roberts, in a cottage at Pant y Ffridd, a short distance from the mine. Every weekend, John and William walked back to their family home at Bolrhyddan, which, John told Mr. Humphries, was situated about 2.5 miles above Glan Conwy. This would have been a distance of approximately 10 miles and on a cold, dark Winter's night, after a gruelling shift in the mine, must have seemed a very long walk to the young boy.

When he first started work, John was considered by his Father to be too young to climb down the dangerous ladders of Shaft Copper Ddu, (Vivian's), where he was then employed. Instead his Father insisted that John walk down to the West Shore and along the Penmorfa level, to his place of work.

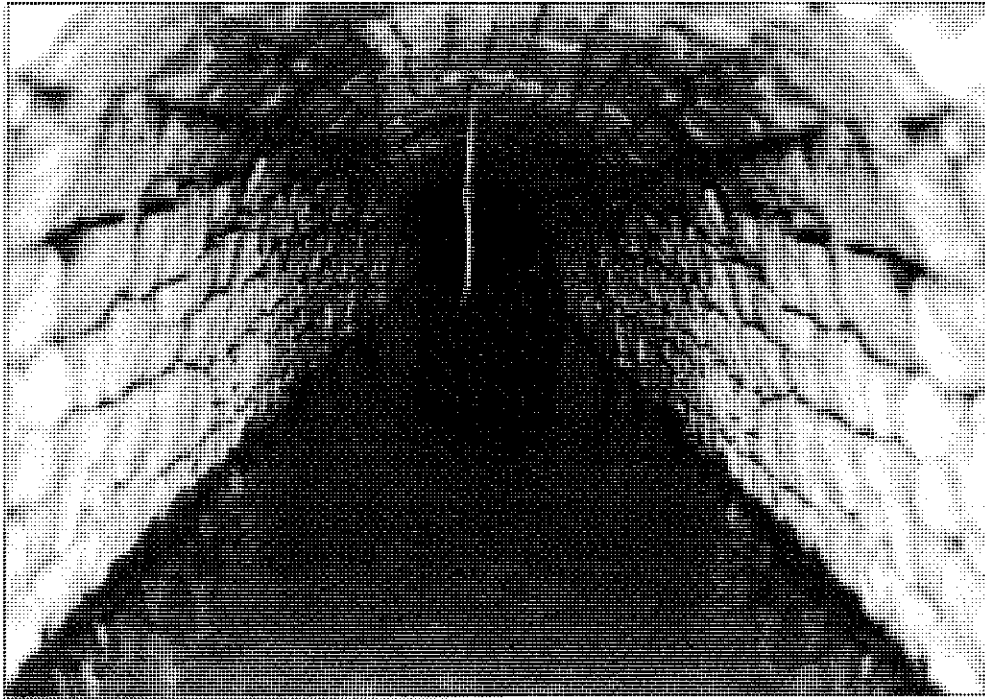
Like John, Billy Davies first began to discover the old copper mines at the age of 12. He and his friend, Roger Thomas, began by exploring the old workings on the gun site. Later they went further afield to Llanrwst. It was not until the sixties that an informal Club was formed when Billy and a few mates went in for more adventurous stuff. One day, Billy wandered into the Pen Morfa level, as he says, 'just to see how far it went'. Fortuitously he bumped into C.J. Williams and a friend. C.J. Williams is, of course, the well known authority on North Wales mining, and author of many books. Billy was only wearing a pair of bathing trunks and a T-shirt, but was allowed to accompany the pair. This was the beginning of his exploration of the Pen Morfa. In the time of John Williams, the Pen Morfa level would have been a reasonably easy walk along a round passageway,

approximately six feet in height and the same distance wide. When Billy began to investigate the mine, it was in a poor state of repair, and the infamous, glutinous mud slide had to be negotiated.

John Williams went on to say, in his interview with Mr. Humphries, that he 'went to America', and again 'nearly 20 years in America'. John was about 20 when he set off on the big adventure. It is known that his Cousin, Thomas son of James Roberts, also travelled to America around this time, and it is possible that the two young men accompanied one another. We can only imagine the horrors of the Atlantic crossing in the middle of the last century. Richard Garrett in his book, 'The Search for Prosperity', says that anything that could float

John Williams, after his return to Wales, married a Hannah Thomas from Pen-Nant in the Conwy Valley. Hannah was older than John, and was probably past the age of child bearing. Certainly the couple had no children. John then worked for about 25 years as the Sexton at St. Tudno's Church. He died in Conwy Workhouse Hospital in 1932, at the age of 96, after a very bad fall in his kitchen, which resulted in a fractured femur. He is buried in St. Tudno's graveyard under a simple slate slab. His obituary reads, 'His great desire was not to die on the parish and he succeeded'.

Billy Davies continues to explore the mines on the Great Orme. These days his time is limited because of domestic commitments, and it is no longer possible to



enter the Pen Morfa level, but he retains his great interest in the Copper Mines. Now where John Williams once saw the opencast workings, there are only grass covered mounds and depressions. Billy enjoys searching for strange features, the purpose of which, are long forgotten. Ancient walls which perhaps would have been known and understood by John Williams, are now not so easily explained. If by some miracle the two could meet and talk, how many mysteries might be solved?

Eve Parry, Great Orme, 1998

was brought into service, and if you packed in the wretched people tightly enough there was plenty of money to be made. Voyages of 78 days were not unknown, and if they did not bring enough food sometimes the passengers starved to death, if they did not die first of Typhus or Cholera. John Williams's obituary tells us that in America, 'he took part in the Californian Gold Rush of 1863 and had considerable experience there in mining, moose trapping, bear shooting and forestry'.

When Billy Davies was about 30, he also set off to see the World. At the time he was working for Hotpoint, to whom he gave a week's notice before starting his travels. With his pack on his back he hitchhiked across Europe, visiting most of the countries, apart from Spain and the eastern block. When the money gave out, he returned to Wales and once again took up his work with Hotpoint. Needless to say, work was a little easier to find in those days! Billy continued to travel in this way over a period of about 3 years.

EARLY COPPER SMELTING ON THE GREAT ORME

An early copper smelting site has been found and excavated on the Great Orme, Llandudno in North Wales. This is a brief up date on progress, a full paper will be available in the near future.

The site was reported in the HMS newsletter 38, since then the site has been excavated by the author in conjunction with Gwynedd Archaeological Trust. The results so far obtained look to be promising. The site was one that had been occupied for some time, as there was abundant evidence of habitation on the site. The area of the excavation was on a cliff that has been sectioned through by a road the (Marine drive) and represents only a small portion of the original habitation site.

Evidence for the smelting of copper was found in abundance, slags from the copper smelting, prills of copper and copper ore was present right through the stratification of the site. The ore found on the site is consistent with that of Great Orme mines and has been identified as a copper carbonate ore in dolomitic limestone. (per com. A. Lewis)

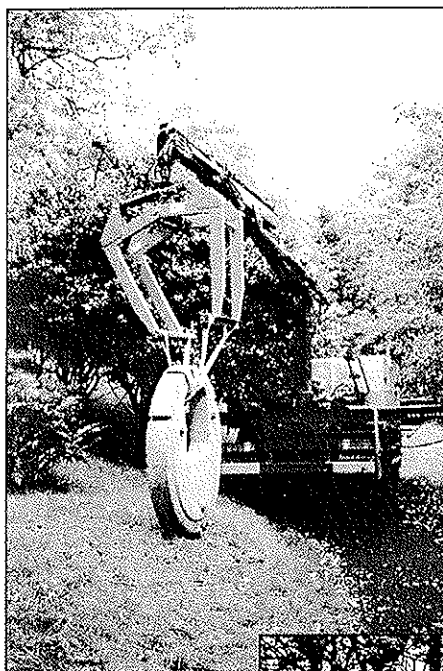
A midden pit was excavated along with several burnt layers, all of them containing smelting debris as well as bone, shells, burnt beach stones and charcoal. A small section of a shale bracelet was found near to the midden pit. The slags that were present are in the form of a spongy black matrix, containing small prills of copper metal, the largest of which was only about 7mm long. The average size of the slag was approx. 3mm so they appear to have been crushed, probably from the collection of copper prills. Further evidence for this was found in the form of a smiths whet stone that was excavated in the midden pit, this stone had been used as both a hammer stone and as a pestle, as both sets of wear marks are clearly seen on the stone. These wear marks were likely to have been produced during the copper smithing process as some of the damage to the stone has been worn over during further sharpening of metal tools on it. These wear marks are consistent with the stone having been used to pound and crush the copper prills from their slag matrix.

The location of the site is of interest as it is a considerable distance from the mine and perched on a cliff is not an immediate choice for a camp site give the large area of the Great Orme that is flat and habitable. The excavation was undertaken during January of this year and the inclement weather gave us a possible insight as to why it was chosen. The site on the North Eastern cliff provided excellent shelter for a camp and a good harbour for boats, and is located near to the only present sea access available on the Great Orme.

Further work is now being carried out at the site, and post excavation analysis is being undertaken. We are now awaiting the results of the radio carbon dates to give us a time frame into which the site may be placed.

David Chapman, Deganwy, September 1998

HAPPY VALLEY DIG: LATEST NEWS



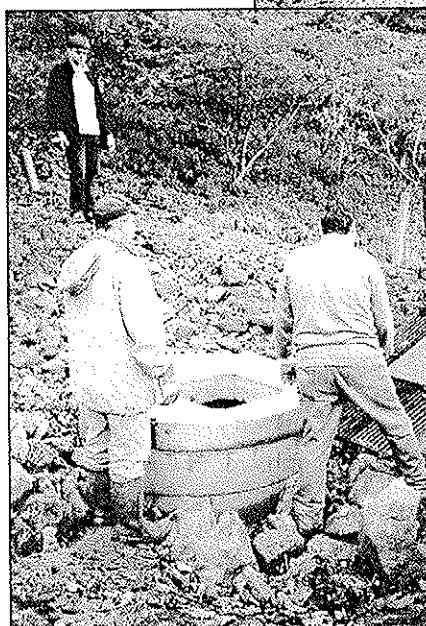
This was reported on in the last journal (No1 1998) and at that time a new passage had been found to be blind. The diggers were keen to continue downwards in the shaft, but unfortunately this was blind also.

The shaft was temporarily sealed until 11th October when a large (3/4 ton) concrete lid was delivered. There was a good show of hands and within hours this 'biscuit' was manhandled up a very slippery slope in the pouring rain and placed on the existing concrete rings.



With the shaft now safely capped the protective fencing was removed and the site was left for nature to add the final landscaping touches.

*Alison Walton
Llandudno, 1998*



NWLA CHITE - THE OMUIN

Many people have asked me the derivation and origin of this word, which is so close to our hearts, and always on the tip of our tongues. Some argue that it was the favourite ornament of the 9th century Irish monk Malachy (or Maelmaedoc ua Morgair) 1094-1148, who was such an influence on our lives as the inventor of the gaps between the tines of forks. What a man! To have braved the stormy seas around our coast in his flimsy coracle just to bring us word of space. How much longer would meals have taken without this man, and how much slimmer we would all have been without him. What a tragic end too! Drowned under the weight of his own necklaces, how sad.

No, the origins of this word lie much farther back in time. You may feel that it is somehow connected with the Old Testament prophet Malachi ('My messenger' in Hebrew), writing his book of 6 oracles back in the 5th Century B.C. after the rebuilding of the Temple in Jerusalem. We should all remember his warning that sacrificing second rate animals results in having one's face rubbed in the dunghill, and of course he did refer to the refining of metals.

But no, we must look even further back in time to the era of our own Bronze Age ancestors.

In those days, communications were very poor, due to the denseness of the forest and the lack of mobile phones. Mankind still had a burning need to convey essential messages such as 'I'll be a bit late home for tea' and 'it's raining over here as well', so of course a system evolved. By standing on top of eminences and using wide flat devices consisting of twigs and broad leaves, tethered to the hand with a long twine made of grasses and bark a signal could be sent. Naturally the French were pioneers in this technique, as you would expect of a talkative nation.

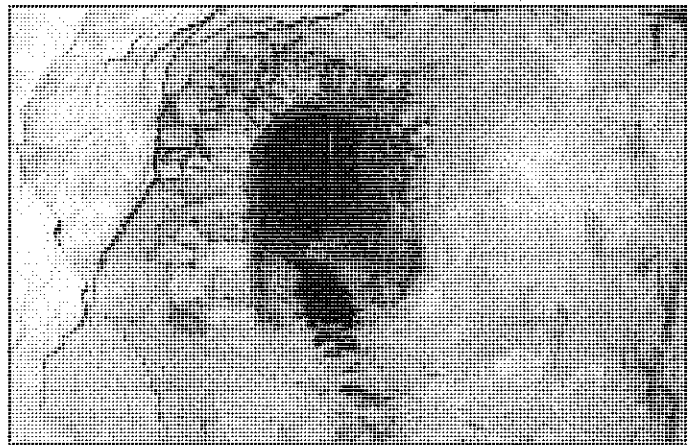
Using such primitive devices did have drawbacks as the home made twine cut and splintered the skin which needed treatment made from a primitive antiseptic derived from ground up copper ore. Hence the true derivation. Mal- from the Old French for ailment, and kite.

So there we have it, coracles, oracles and metaphoricals. Any other queries?

Dr Porcupine?, 1998

FIRST IMPRESSIONS OF TY GWYN

Before seeing Ty Gwyn for the first time a few weeks ago I had only seen the tourist versions of mines and caves such as the Caves of Drac in Mallorca and the Great Orme Copper Mines near the summit café. Ty Gwyn has a similar potential, especially if the link to the Ty'n y fron shaft is discovered and work is carried out to provide lighting and dry, solid floors but visiting the mine, as it currently is, acts as a great inspiration and introduction for a new GOES member. It is incredible to think that most of the several miles of passages were once back-filled and have been cleared by many hours of painstaking work by GOES members. A policy of leaving artefacts where they were found means that visual evidence is at hand for the learner. In particular I mean the bit heads, bit marks, bottles, rivets and cigarette pipes that litter the Ty Gwyn adit and its walls. The preservation of childrens' clog prints in the mud of the main adit inspire theories about Ty Gwyn already having been open to the public in Victorian times.



To the experienced digger Ty Gwyn may not appear to be much of a challenge; the workings do not require abseiling nor hours of crawling through pencil thin passages. The main attraction of Ty Gwyn is the numerous questions it poses about the lives and methods of those who once mined there. Although there is enough to keep you occupied during a 2 hour visit, there is possibly much more to discover and explore. The main Ty Gwyn shaft is currently filled with both fresh and seawater and is a beautiful attraction in itself. The passages coming off this, as yet unexplored, must contain more artefacts and answers about the place.

I believe it would be a shame to turn Ty Gwyn into a general tourist attraction as it acts as both a good introduction to the ways of being underground and an exciting show-piece for visitors in its present state. It contains enough water, mud and darkness to give the visitor an idea of the problems experienced by the original miners. Ty Gwyn also acts as a good training ground for new members as it is not too scary nor cramped. Most of the tunnels have ample headroom and are wide enough for manoeuvre.

Alex Briffett, Llanfairfechan 1998

PLANNING CONSENT FOR CHANGE OF USE OF AGRICULTURAL LAND

Dear Sirs,

I am writing to regretfully inform you that your application for a 'mine' on the Great Orme has been turned down by the Rural Development Policy of the Tribal Council. The fact that you called it a 'mine' in your planning application form was a point which particularly went against council policy, as the area in question has always been held to be ours since the time we obtained the compulsory purchase order against the Irish...

Your application furthermore goes against zonal planning in the sense that this area is earmarked for wild boar and deer hunting, all industrial activity being confined to the worst parts of Penmaenmawr. Which brings me to the next point, i.e. your plans to turn the stone you dig out into so-called 'metal' axes. As you know the axe factory at Penmaenmawr is the largest employer in the area, and whilst we welcome new businesses, we could not countenance any development that may threaten this long-established industry. Most of the craftsmen there have trained since childhood to acquire their skills and you appear to have no authorized Government retraining scheme. Your proposed use of child labour underground is not acceptable in modern times, all children should be free to enjoy the fresh air as they enjoy the traditional children's pastimes of net repairing and axe polishing.

Next, the Council has vetoed your intended method of extraction. Whilst digging with deer antlers is acceptable (within the provisions of the Deer Culling Regulations), aurox ribs are unacceptable due to the current shortage, unless they come from the residue of a tribal feast. All use of wolf and bear bones is, of course, strictly prohibited, being protected species, reserved for hunting by select members of the Council on Mayoral Sundays. The current Health and Safety (Flint Digging) Regulations prohibit the method you propose of extracting rock, namely lighting fires and then throwing water at the rock. You do not state where you intend to get this water from in your application, but I must remind you that the local Water Authority only allows use of the wells on the Orme for drinking and spirit worship. Which brings me to the matter of fuel. I am not an expert in the technique of setting rock alight, but it must require huge quantities of dry timber which could be better used for housing, cooking and canoes. Are you aware of the current shortage of canoe-quality trees?

Finally, I come to your technical points about changing this rock into what you call 'metal'. I have consulted our Council witchdoctor on this point and he says it is impossible. Again you seem to want to play with fire, although goodness knows where, as you have not applied for any designated industrial site to perform this operation. You mention that you wish to start fires, police them carefully, eventually producing something called 'copper', and then, not satisfied with this, you want to mix it with another 'metal' called 'tin'.

As you should know, all rights in this area over the fire starting material (moss), and tin are held by the Mosstin tribe.

I regret therefore that under no circumstances can your application be upheld, after all how would our grand children feel if the Orme were to be despoiled in this industrial way.

Yours faithfully

David Edwards (acting Clerk to the Council)



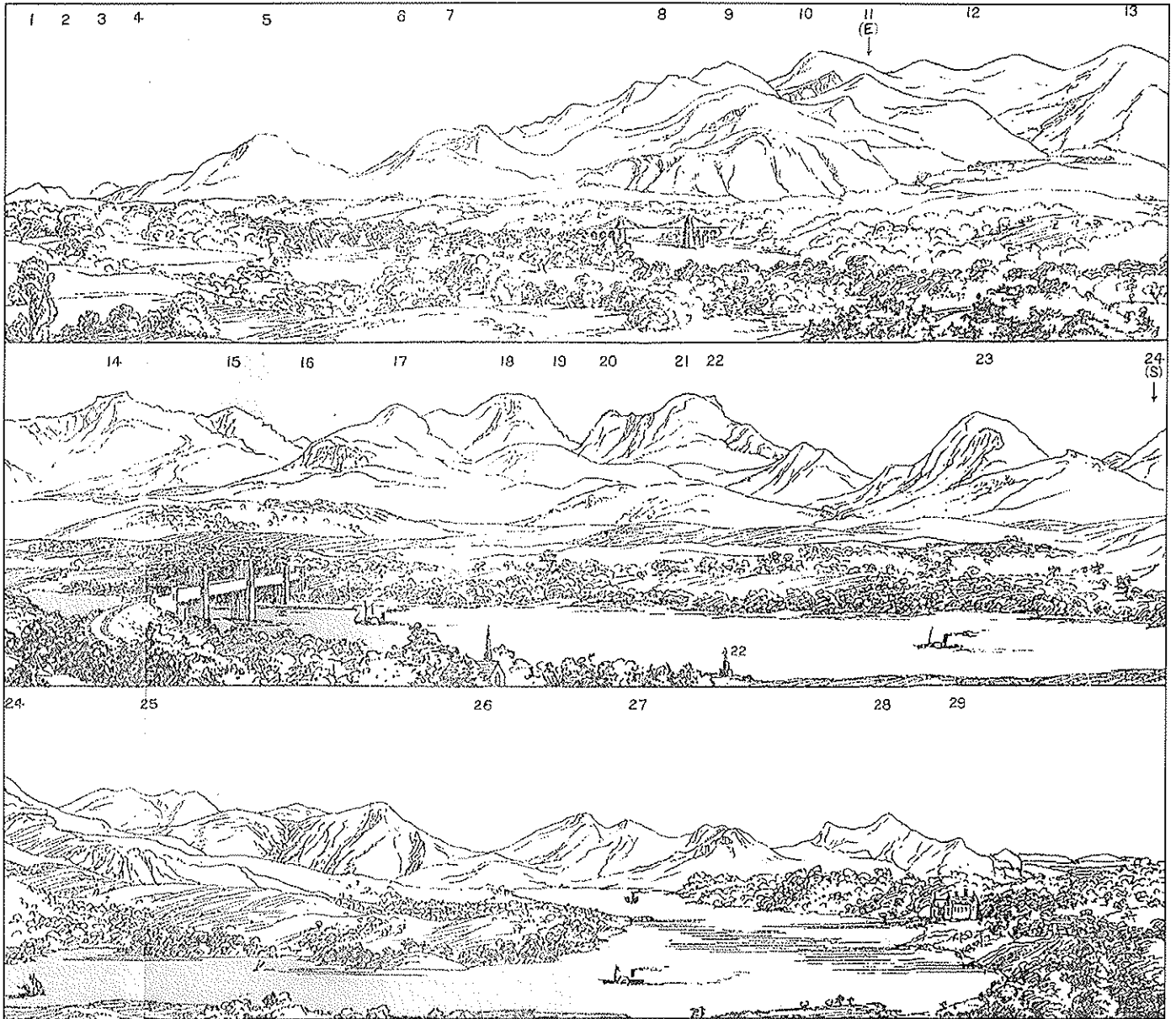
Bronze Age workings off the Big Stope in Romans. Photograph taken by Mark Beardsall. This little chamber is only just big enough to get your head and shoulders into. The walls are very rounded and covered with pick marks. The black staining is possibly remains of fire setting and the green specs are traces of Malachite.

NAME THE PEAKS!

This lovely panoramic view comes from the book
'Thorough Guide Series, North Wales',
published in 1909.

Can you identify all the numbered peaks below?
I'll give you a couple of clues...
the panorama has been drawn from Anglesey and
number 1 is The Great Orme's Head.

Answers will appear in the next journal.



Taking the Miners Track up Snowdon from Pen-y-Pass you will come across evidence of copper mining. The face of Snowdon is scarred with trial workings, most of which never progressed more than a few feet.

To the North side of Llyn Llydaw though there are disused and ruined mine buildings and eight levels driven into the hillside. During the mid eighteenth century this mountain would have reverberated with the sound of blasting rock. The levels were terraced and the extracted ore was lowered onto the dressing floors below. There would have been aerial ropeways and tramways to transport the ore from the upper slopes of Glaslyn to the lower levels of Llyn Llydaw and Pen-y-Pass. Before these were constructed though the ore would have been transported down the mountain on the backs of miners, transferred to packhorses and carts and taken to Caernarfon. From there the ore was shipped to Swansea for smelting.

The mine was worked sporadically and never really became a viable concern, probably due to lack of sufficient capital, intelligent management and technical knowledge. Work ceased in 1915 and the mine was finally closed.

Information taken from an article written in 1970 by N.C. Beck for the Caernarvon Historical Society

