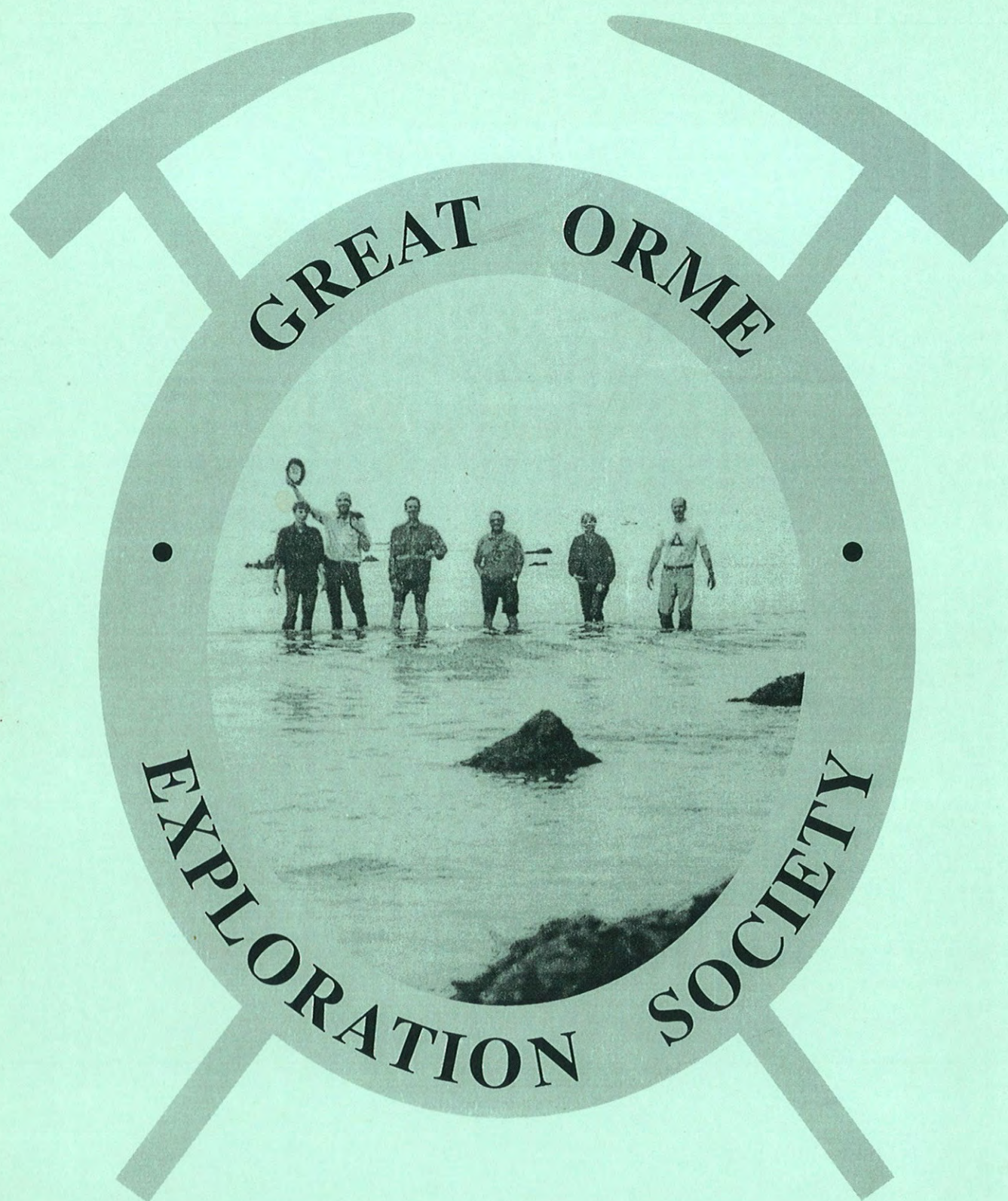


JOURNAL OF THE



Issue No. 2, 1999

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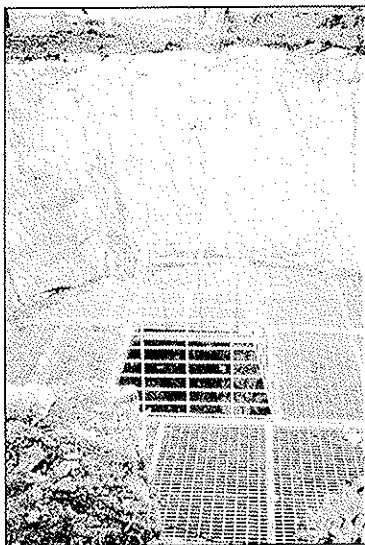
FRONT COVER

GOES members on a memorable Summer Evening walk to the Little Orme Memorial...the tide came in too soon on the way home!

PENNANT WINE LATEST

GOES were invited back to Pennant over the Whitsun Bank holiday to see how work to tidy up the area had progressed. The large gaping holes in the ground had been carefully landscaped and bat-friendly capping erected to secure them. Restoration work on the old engine house was also very impressive.

One of the capped shafts



TY GWYN LATEST

Digging in the Ty Gwyn proved fruitful once again when new passage was found leading to the Simms Shaft (beneath Tan yr Ogo Terrace). Future digging in the shaft may lead to further passages.



Entrance portal to the Simms shaft

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Articles are always wanted! The next journal is due out in April 2000, so please put pen to paper

GOES on the Web: WWW.alex.phatcatz.net/goes

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TRENDY WETSUIT IN NEW "ULTRASLEEK" IT'S A WOW

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NEOPRENE NOSE-SUIT. PROTECTS NOSE AGAINST KNOCKS AND ABRASIONS IN LOW CRAWLS. MOST SIZES: 39"-42" (CHEST).

"HI-HAT" - THE VERY LATEST THING IN HEADGEAR. WILL NOT RUIN A NEW HAIRDO!

MESKWAKI TO REINFORCE BOND WITH BRITAIN MADE 261 YEARS AGO

During the 17th century, the Meskwaki Nation included more than 40,000 members who lived along the Mississippi, other bodies of water and the East Coast. However, in the late 1600s and early 1700s, the tribe was nearly wiped out by European diseases and by attacks from the French.

'We are the only tribe the French ever declared war on', said Donald Wanatee, a member of the Meskwaki Nation from Tama County.

The French declared war after the Meskwaki began charging them tolls to travel along the Mississippi and St. Lawrence rivers. 'We learned this from the French', said Preston Duncan, another tribe member. The French had charged the Meskwaki similar tolls, he said.

To the relief of the Meskwaki people, the British offered to help them fight the French, and the Meskwaki survived. In 1739, Great Britain and the Meskwaki Nation signed a treaty, promising to remain friends and allies forever. During the signing of the treaty, King George II presented the Meskwaki with a British Ensign flag to seal the friendship.

Were it not for help from the British, Duncan said, his tribe would have been annihilated. 'It's because of the British that I am sitting here today', he said while sipping coffee at the rural Galena home of Nancy Boonstra. Today there are about 1,200 to 1,400 tribe members, according to Duncan.

To this day, Duncan, said, the Meskwaki Indians hold the British flag sacred. Each year at powwow, they hold a ceremony to honour it and the promises made. About a year ago Boonstra and a friend, Andy Lewis of Galena, became acquainted with Duncan through their interest in archaeology. Eventually they learned about the Meskwaki Nation's relationship with the British. They also learned that the flag had been severely worn by age.

So, Lewis, a native of Wales (Llandudno), looked into having a reproduction of the flag made in England. (The British flag has changed since 1739). In so doing, he and Boonstra made contact with David Spencer of Derbyshire, England. Spencer is a member of a British war re-enactment group.

Having visited members of the Meskwaki Nation in Oklahoma in 1997 and knowing the history of the Meskwaki and the British, Spencer offered to bring the flag in person. He coordinated his visit with the annual Meskwaki Indian powwow (which took place in August). He and Lewis presented the flag at a traditional gift-giving ceremony. Spencer, who is employed by the Duke and Duchess of Devonshire, would also have presented a Red Coat uniform and gifts from the Duke and Duchess. 'It is a real honour to be recognised as a nation by the British nation', Duncan said. 'I hold it very sacred that we are being thought of as a nation'.

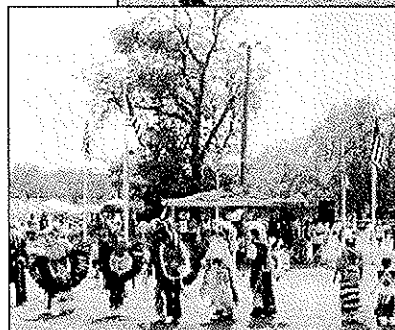
During the ceremonies the Meskwaki adopted Spencer and Lewis as brothers into their tribe. Lewis received the Indian name of tetatayami, which means 'crosser of the oceans'.

Lewis said that most Britons are unaware of the treaty between Great Britain and the Meskwaki Nation. 'Its significance has probably been lost in history', he said. Sadly, Duncan said, much of the history has been lost on the young people of his nation, too. He said that he hopes that the gift-giving ceremony will renew interest in the Meskwaki language and in the tribe's traditional ways.

Andy Lewis, Galena USA, August 1999



These images were taken from the internet and show scenes from a previous Meskwaki Pow Wow



WHAT IS NORTH WALES CAVE RESCUE ORGANISATION (NWCRO)?

NWCRO is a voluntary organisation that provides cave and mine rescue services in conjunction with the Police in North Wales.

NWCRO's 'patch' is that of North Wales Police and Merseyside Police (i.e. the counties of Wrexham, Flintshire, Denbighshire, Gwynedd, Conwy, Isle of Anglesey and Merseyside)

The Police are ultimately responsible for cave and mountain rescue. NWCRO only initiates a rescue if asked by the Police.

To call out the NWCRO dial 999 and ask for POLICE. Once connected to the Police, ask for Cave Rescue and give them as much information as possible. Vital information is the location of the cave or mine, the number of people involved and a description of what has happened.

The Police then contact one of the NWCRO controllers from a list kept in the Police control room. This Controller then considers the size, type and location of the 'callout' and decides what is the appropriate response is. This may vary from calling out as many team members as are available to asking two or three team members to investigate further. The controller will also have to consider where a suitable rendezvous point would be and what equipment is needed.

NWCRO was started in the 1970s and became a Registered Charity in 1996. NWCRO is a Registered Charity number 1052986. It is managed by a ten person executive committee. This committee is elected each year at an AGM by the NWCRO members. The committee members are regarded as trustees by the Charity Commission and hence are regulated by the various Charity Acts. The committee meets approximately four times a year.

The members of NWCRO are a) the caving clubs within North Wales and b) all individuals active on the team list. The current club members are: Great Orme Exploration Society, Grosvenor Caving Club, Gwynedd Cave and Pothole Club, North Wales Caving Club and Parys Underground Group.

NWCRO was originally formed under the care of the North Wales Caving Club, but it is now a separate body. The current committee includes members of the GCC, GCPC, NWCC and other caving clubs.

All NWCRO members are welcome at committee meetings where their views will be listened to. Each member club can also send a delegate to represent the club's views. Any NWCRO member may stand for election to the committee at the AGM, and the committee aims to co-opt additional ordinary members to represent a broad cross-section of the local caving community and member clubs.

NWCRO is a member of British Cave Rescue Council (BCRC) and North Wales Mountain Rescue Association (NWMRA).

BCRC consists of all the cave rescue organisations within the UK and co-ordinates cave rescue nationally. NWMRA consists of North Wales Police, all North Wales mountain and cave rescue teams and other associated organisations. NWMRA provides co-ordination with the Police and within the rescue community and provides some funds.

NWCRO raises a small amount of income from an annual levy on each of the member clubs (currently £25 pa). The bulk of the income comes from grants (from organisations such as Sports Council from Wales and North Wales Mountain Rescue Association), donations from companies and fund-raising (e.g. the annual BBQ and raffles at caving club dinners). The average income of NWCRO over the last four years has been £1300 per annum.

NWCRO is an extensive amount of cave rescue equipment (including 3 stretchers, first aid equipment, rope and other hauling equipment, bolting kits and digging equipment). This is stored at the main NWCRO store at Mold Police Station and a smaller store at Plas Nant, Betws Garmon in Snowdonia.

NWCRO aims to organise 2 practice rescues and 2 techniques meets each year to provide training in all aspects of cave and mine rescue. Most NWCRO training is informal with everyone encouraged to put forward their views and opinions. NWCRO also provides an intensive two day first aid course to all members who wish attend on a bi-annual basis.

If you cave a lot and are familiar with many techniques for rescue you should still come to the practices? NWCRO is a team and it is important that you know and are able to work with all the other team members. It is also essential that the NWCRO controllers get to know you so that they know that you are reliable and competent. It is also probable that your experience can be of great help at practices. Perhaps you have a better way of doing something. Maybe you can see an improvement that could be made to one of the techniques in use.

If you are interested in getting involved with NWCRO as an active team member, or just want further information, please contact the NWCRO Secretary, Jon Partington on 01352 757685 or on gwerny@aol.com .

Donations to NWCRO (registered charity number 1052986) are always very welcome. Please contact our Fundraising Officer, Adrian Farrel on 01978 860944 for more details. Donations or loans of equipment are also welcome, as is help with the maintenance of the equipment. If you have specific organisational or specialist (e.g. medical, diving) skills, we are also interested.

The current committee comprises of Pete Robertson (Chairman), Jon Partington (Secretary), Tim Palmer (Treasurer), Jerry Dobby (Training), Bob Kynaston (Equipment), Andy Goodall, Rob Griffiths, Adrian Farrel (Fundraising), Mick Murphy and Richard Kinnear.

NWCRO, Version 1.0, July 1999

DISCOVERY OF ANCIENT GRAVES NEAR PENTROVOELAS

On a ffridd, or a mountain enclosure called Ffridd-canawen? In the neighbourhood of Pentrovoelas, about a mile and a half from the village, was lately discovered a series of ancient graves or cists. The farmer to whom the enclosure belonged, upon clearing this uncultivated waste, came upon a number of stones arranged in oblong form, and this coming to the ears of the vicar of Pentrovoelas, the Rev. Owen Jones, visited the spot, and saw at once that the stones were a series of ancient graves. The removal of the rushes brought just the tops of the stones to view.

Mr. Jones proceeded to open one of the graves, with the following results. For about a distance of a foot he removed the ordinary soil of the country, then he came upon a layer of small white stones which he cleared away, and underneath he found, for a distance of about 18 inches, a dark soil resembling burnt peat, and at the bottom he discovered a heap of black mould intermixed with quantities of burnt bones, which ultimately were ascertained to be human bones. There were no other remains of any kind whatsoever discovered at this grave.

In company with Mr. Cocks of Great Marlow, Mr. Jones excavated two other similar graves with the same results. These gentlemen made a minute inspection of the contents of the graves, but failed to discover any arrow-heads or other remains except calcined bones. In the same ffridd, about fifty yards to the west of the graves (which measured, it may be stated, 3 x 1.5 feet, and 4 x 2 feet, and were three in number), were also discovered a number of parallel rows of upright stones. They apparently had no connection with the graves, but evidently belonged to the same period.

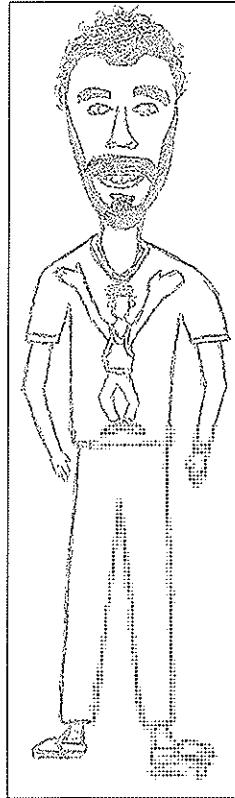
Near these latter remains is a farm called Cefn-y-Gaddfa. (or the Brook of the Army or Battle). These names point to a battle having been fought here in ages long, long ago.

This is also corroborated by the discovery of a bronze celt near this farm about two years ago. The whole of this district is well worthy of a thorough exploration. There is also another series of parallel, erect stones belonging to Hafod-y-dre-uchaf Farm, and these are closed to the mountain fence, and are in number sixteen rows, forming a pretty perfect square, but one part of the square terminates in the turbary. By probing with a stick, the stones are easily traced even in the bog. The rows here are much more perfect than those on the ffridd at the place called 'Ffridd-can-awen'.

1810 Promotion by King William at Giler in the parish of Kerrig-Druidion was born Judge Robert Price, Baron of the Exchequer and justice of the Common Peace.

*Donated by Ramon Rainford, Llanbedr y Cennin
from Archaeologica Cambrensis, April 1884*

ROGUES' GALLERY



Tony must be the most sketched member of GOES. This cartoon was drawn by Tom Carpenter in the Kings Head one Sunday afternoon.



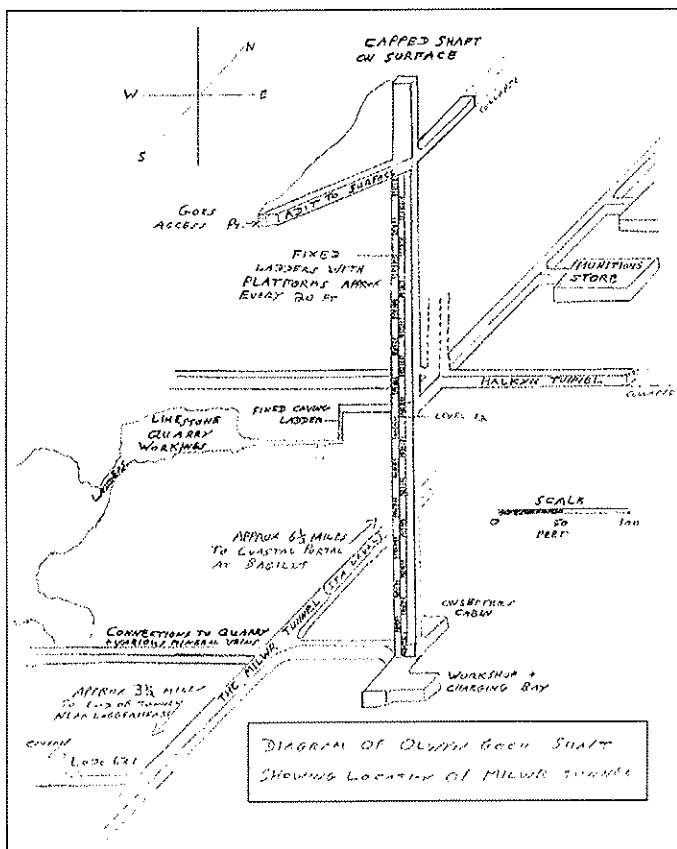
Steve appears to be suffering with a balancing problem!



Dave Edwards celebrating his ???th birthday... and he swears he was sober when this was taken!

JOURNALS OF THE HISTORY OF THE EARTH FOR Halkyn Mountain

Well at last the GOES underground team have been there, done that and all successfully negotiated the 400ft plus ladder climb out. The much talked about Milwr Tunnel trip finally took place on Saturday 17th July thanks to Steve's perseverance and Grosvenor Caving Clubs kind invitation to take us below ground and show us around. At the time of the last Journal I hadn't even heard of the MILWR TUNNEL, now some months later I consider it probably the most exhilarating trip I've been on to date - admittedly combined with a sense of relief that I actually survived the physical ordeal of it all, along with everyone else.



The trip was such a success, I thought it would be worth recording the day's events, as remembered by me, for the benefit of fellow trip members and any interested Journal readers who like me were once unaware of the existence of these extensive workings. Firstly, perhaps a little background information on the history of The Milwr Tunnel, would be helpful.

The metal mines of the Halkyn Mountain area had reached their heyday by the 1860's and due to favourable ore prices became very lucrative businesses indeed, some mine companies making fortunes during this period. The land owners, The Grosvenor Estate, reported the raising of 3 million pounds worth of ore from two veins alone. By 1939 geologists at Halkyn Mines calculated that during the previous two centuries the lead and zinc mines of Flintshire and Denbighshire had produced a total 20 million pounds of wealth for the owners.

However, returning to the 1890's, most of the mines had been worked out down as far as water levels and pumping would allow - familiar problems to all mining areas. Frustrated by this and the thought of all those lucrative veins below water level failing to be exploited, the mine companies decided to amalgamate in 1897. They began a huge project to drive a drainage tunnel from sea level hundreds of feet below the workings, hoping this would clear them and allow mining to continue. Starting at the coast near Bagillt (SJ 213 760) the tunnel was eventually driven southwards all the way to Cadole near Loggerheads. Incredibly, a total distance of over 10 miles. As one might imagine these tunnelers had to operate in horrendous working conditions, so far underground, their lives constantly threatened by roof collapses. They operated in two shifts, one for the drilling team to prepare the face and the other for the blasting team to complete each phase of work. Initially each blast advanced the tunnel 4ft, making 40 to 45ft progress each week.

The rate of tunnel advance was increased by an ingenious tactic - whilst the Bagillt crew were tunnelling from the coast, an intermediate shaft was sunk ahead of them, from where two crews drove the tunnel in opposite directions, one to the next mine intersection at Hereward Shaft and the other Northwards to meet the crew driving from the coast. The tunnel was therefore being driven from three points simultaneously. As each vein was struck, the crew worked it for a short distance in both directions (presumably to provide an on-going income to finance the work) after which work on the main tunnel face would continue and new crews would be sent down to work the vein. When the coastal and intermediate crews finally met, the tunnel centres were only 1 inch out of true - quite an engineering feat in those days.

The section of the tunnel is initially circular, 8ft in diameter with a water channel cut in the floor measuring 6ft wide by 6 inches deep, on top of which timbers and then rails were laid. The tunnel in this area is brick lined for 1.5 miles as it passes through unstable areas of shale and coal measures, but after this it is cut through chert and limestone which is self supporting most of the way with occasional frames of heavy duty girders as roof supports.

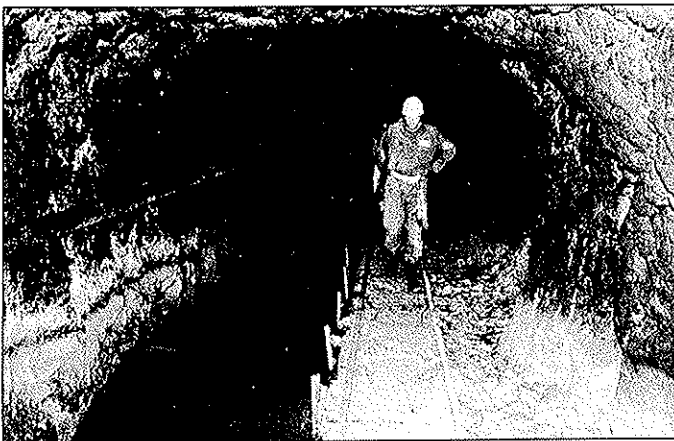
The Tunnel reached the edge of the company's boundary at Caeau in 1919, when the shaft was sealed up. It was opened once again in 1928 when the newly formed Halkyn District United Mines Ltd took over and a further 5000ft was driven to intersect with the 'Union Vein' at Windmill.

As the Tunnel now cut through more natural water courses and flooded mineral veins, the volume of water inside it increased dramatically. As a result the tunnel from Caeau had to be adapted to cope, as the water now flooded the rails. This was achieved by filling the sectioned off tunnel on one side with debris from the tunnel face, this enabled the rails to be re-laid on an embankment 3 feet above the original floor. This, of course, also reduced the relative height of the tunnel on

this side so smaller ponies were now needed, those of not more than 12 hands in height. 10 of these were purchased, 3 to work each shift and 1 in reserve, during each shift they hauled 3 or 4 trains of 5 cars, each train weighing 5.75 tons. The constant gradient of 1 in 1000 making their work slightly easier.

The Tunnel now advanced to the 800ft deep Pen-Y-Bryn shaft in July 1929, eventually when surface operations were transferred here, it was fitted with 2 cages which held 8 men or 1 loaded mine car each. A 'Banksman' on the surface and an 'Onsetter' at the shaft bottom controlled the signaling to hoist the cages.

Continuing South from the Pen-Y-Bryn shaft the tunnel was enlarged to 10ft wide and 8ft high, the distinguishing feature being a water channel 4ft wide and 2ft deep, cut into the floor to one side. This was termed 'The Grip', an American mining expression.



Walking beside the 'grip'

Three Quarters of a mile south of the Pen-Y-Bryn shaft a major branch tunnel was driven, 1 mile to the East towards Rhosesmor, it was here that 'Powell's Lode' and 'Barclays Lode' were followed and worked rewardingly for many years. The main tunnel now advanced to Hendre to an old shaft called Olwyn Goch which was widened and deepened to 490ft. This shaft also had a hoisting system but the cages were larger than those at Pen-Y-Bryn, each of these capable of carrying 16 men or 2 mine cars. Unlike Pen-Y-Bryn which was used for raising ore, Olwyn Goch was used mainly for raising men and materials, apart from when an underground limestone quarry was in production during the 40's. Close to the surface at Olwyn Goch, were located the offices, changing rooms, bath houses and lamp rooms sufficient for 500 men. Access to the shaft was facilitated by an adit which was driven from a point behind the surface buildings to a point 70ft below the shaft collar, where alongside the cages, fixed ladders to shaft bottom provided a means of escape in the event of any emergency.

By 1938 'Pant-Y-Mwyn Vein' was intersected but low lead prices had devastating effects, as well as halting tunnel progress the workforce was reduced to 40 from the original 650. Fortunately though, the mine contained an exceptionally high grade of limestone, which Pilkington's of St. Helens became interested in, for the production of quality glass. So in 1939 work began on quarrying this

rock in the area to the West of Olwyn Goch shaft approximately 200ft underground, the output ranging from 70 to 80,000 tons per annum. (This quarrying continued until 1969 leaving 2 miles of spectacular white chambers some up to 80ft high). During the early years of activity this diversification helped keep the company afloat, until in 1948 higher lead prices made mining profitable once again, enabling tunnel activity to resume after a 10 year gap.

Continuing south of Gwernafield several more veins were intersected one of which, 'Lode 530' was so rich in ore that it provided work for another 10 years. Midway between here and Cadole the rich veins 'Lode 524 (Pant-Y-Buarth)' and 'Lode 501' were mined until The Milwr Tunnel reached its present end in 1957, at 'Lode 477' (Cathole Vein) just before the main Mold/Ruthin Road. No lead was mined from 1958 to 1964 when all work was concerned with limestone extraction, until in 1964 ore prices rose once again, providing work for the remaining few miners, ore left in the existing lodes being mined until 1977.

From 1977 all work was centred around tunnel repairs and general maintenance until the mines closed in 1987 and surface access to The Tunnel was sealed off. During its lifetime the various operations had produced a total of 200,000 tons of lead ore (mostly pre-1957) and 80,000 tons of zinc ore.

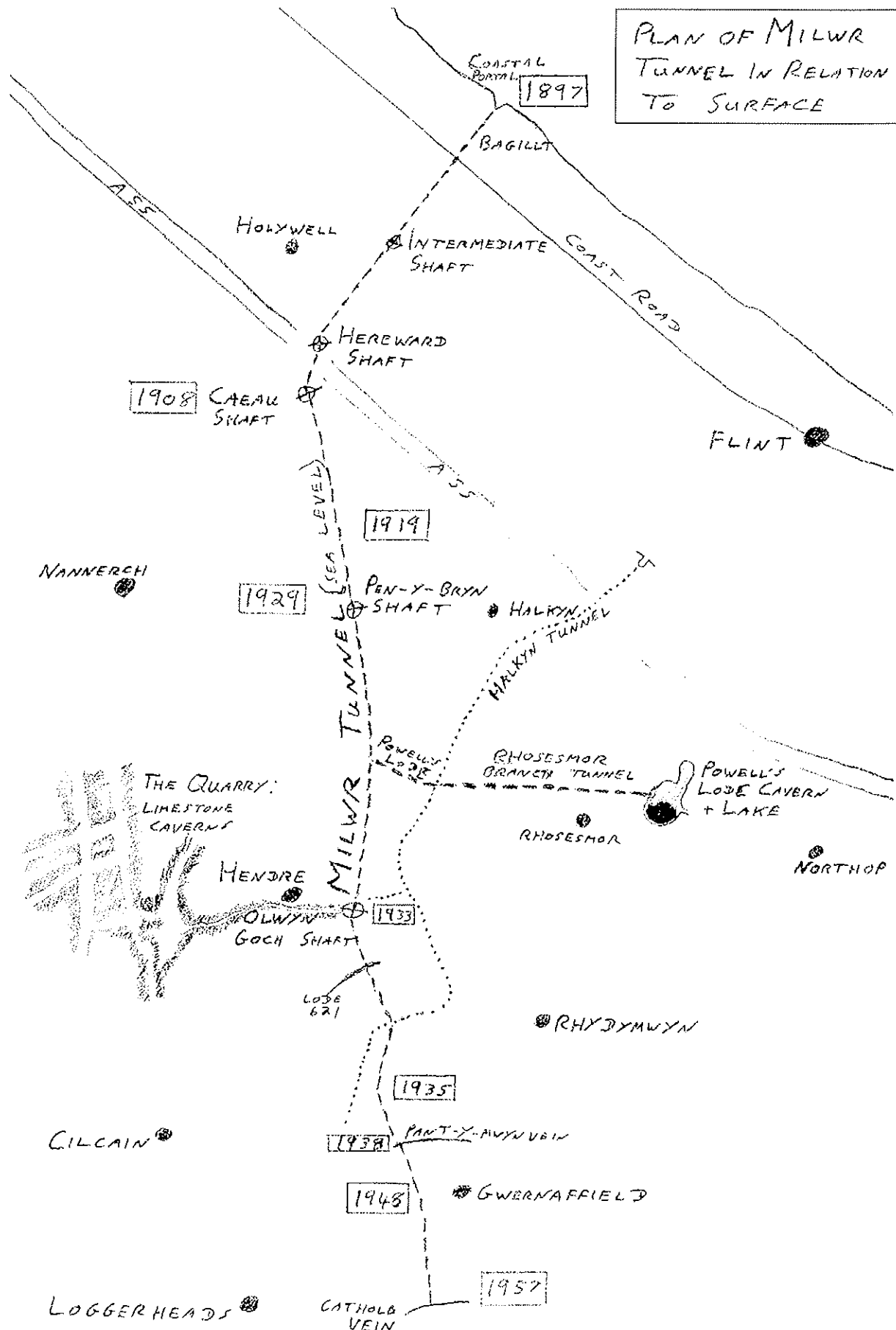
The Milwr Tunnel is now owned by Welsh Water, as the considerable water source now supplies local industry in the Holywell valley.

The area visited by GOES centred around the region of the Olwyn Goch shaft, which was to be our access point. Beginning Westwards, to the underground quarry from a tunnel half way down the shaft and then down into the tunnel and Northwards to 'Powell's Lode' and a lake, via The Rhosesmor Branch Tunnel. From there, back again to 'Lode 621' just south of Olwyn Goch - a total distance, both ladder climbing and walking, of about 7 miles which kept us underground for 7 and a half hours! (and that was just a brief 'Tourist Trip', there are about 60 miles of workings in total).

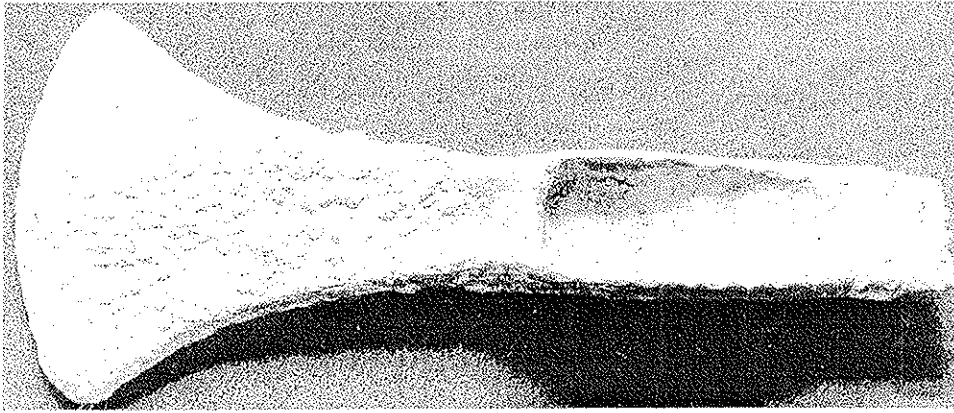
It was plainly obvious to me, having read the 'trip sheet' sent by our hosts, that this was going to be a different proposition entirely to our normal trips on The Orme, which last about 3 hrs in areas which we know well and at most times are not far from an exit point - always reassuring when underground. This was going to be a fascinating trip for us, but also quite clearly a physically demanding one. It was requested by our hosts that only experienced, well equipped members who regularly go underground and have the appropriate fitness levels be allocated a place on the trip - which was reasonable enough considering the distances involved. What if an inexperienced person got into difficulty or their non-Goes equipment happened to let them down?, we could be 2 or 3 miles from the shaft with a 400ft+ ladder climb to get them out - No Thanks!

So having fully appreciated what we were about to let ourselves in for, the next question dominating my mind

PLAN OF MILWR
TUNNEL IN RELATION
TO SURFACE



BRONZE AGE FIND ON BRYN PYDEW



This beautiful example of a Bronze Age axe head was found by Wayne Evans whilst metal detecting on Bryn Pydew back in September this year. It was dated to somewhere between 750-1450BC by Bangor University and measures approximately 18.5 cm in length.

Many thanks to Wayne for allowing GOES to have a good old look at it one Thursday evening.

THE GREAT ORME MANAGER LOOKS ON ORME

The Great Orme Management Plan:

You may well have recently read about the oodles of cash (£360,000) about to be spent on the Orme. This project has been jointly funded by the European Regional Development Fund, Conwy County Council, Cadw, Wales Tourist Board and the Welsh Development Agency and aims to secure a long term strategy to improve the environmental quality of the Orme whilst balancing conservation and ecological objectives with tourism, business and the needs of the agricultural community. In other words protecting all the elements that make the Orme the amazing place it is and allowing others to enjoy them without damaging them.

Some of the project funds (though don't overestimate how much!) will be spent on (here come the buzz words) a *Heritage Management Plan* which will form part of the wider management plan for the Orme. Archaeology's role in this is clearly important, as it is concerned with all aspects of the landscape and all evidence of man's impact on the landscape from the earliest times to the present day. This evidence identifies the way in which human activity in all its diversity has formed the contemporary landscape. The surviving evidence of this development is represented in all manner of ways (e.g. discrete sites, patterns of field boundaries and the relationship between sites) and constitutes an invaluable resource for education, local history, leisure and tourism, giving local people a sense of communal identity and visitors a sense of local character. In order to understand and interpret the present landscape we need to understand the processes which have formed it. The variety of archaeological sites which can tell us this are a finite and non-renewable resource, which can be easily damaged or destroyed if they are not properly managed.

Gwynedd Archaeological Trust (my employers) have been awarded the contract to develop this plan which aims to:

- identify the heritage resource (the sites)
- provide management objectives (how best to preserve and present sites)
- a management strategy (how best implement the above objectives)
- implementation procedure (undertaking recommended work)

The actual project will involve a desktop study of the Orme which would look at the available printed

literature, manuscripts sources, maps, aerial photographs, place name evidence and oral testimony. A field search, which will involve field walking all available areas of the Orme (me staggering about probably) to confirm the existence and condition of 'known' sites and to look for previous unrecorded sites. This information will then be brought together as database and digital mapped information. For example, there is wealth of documentary evidence from the medieval period for the Orme. However, very little work has been done to link the archaeological remains of medieval settlements, field systems and other aspects of the medieval landscape with these sources. Bringing these types of evidence together will provide a clearer picture of the Orme in the medieval period and how that society and landscape subsequently developed.

It is also intended to produce a research framework to highlight areas for future research and to allow for a co-ordinated strategy of research to be developed and undertaken, one which would allow the results of future research to be feed back into an updated management plan.

On another level the management plan will make practical recommendations for the archiving and storage of records and artefacts produced by all archaeological work carried out on the Orme. Interpretation boards and information leaflets will also be produced to explain and guide visitors to sites of interest in non-sensitive areas. The project must involve close liaison with interested local groups and individuals; local knowledge and input will be essential for its success. I intend to contact as many as possible for their views on the future of archaeology on the Orme and incorporate then into the final recommendations. I will have a meeting with Dave Edwards before Christmas, but if anyone would like to contact me with their own personal views I can usually be found in the King's Head on Thursday nights or you could ring me at Gwynedd Archaeological Trust...

Tel: 01248 352535.

PS...If you do come across archaeologists on the Orme, don't make any sudden movements, talk soothingly to them and provide them with tea and cakes - they are generally slow-witted and quite harmless.

Sue Jones, November 1999, Great Orme