



NEWSLETTER

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Iontaobhas Oidhreacht Mianadóireachta na hEireann

Mining Heritage Trust of Ireland

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MHTI PROGRAMME OF EVENTS 2004/5

(**Bold print** indicates finalised programmes; further details will be sent to members of events in ordinary print; *italics* indicates non-MHT activities)

12/13 March 2005: Field meet in Arigna, meeting 2.00 pm in the colliery museum, with dry tour of show mine and surface remains.

The weekend will include a re-evaluation of the 17th century iron-mining heritage including re-appraisal of the furnace at Creevealea.

16th April 2005: 2.00 pm AGM of MHTI at Castlecomer, Co.

Kilkenny. This will be followed by a visit to the restoration and preservation work that has taken place at the colliery there. (A separate notice will be sent out). **NOTE CHANGED DATE.**

28th May 2005; Introduction to the archaeological finds and conservation work done at **Tankardstown, Bunmahon, Co.**

Waterford and plans for its presentation within the Copper Coast European and Global Geopark Network context. Meet car park, Bunmahon at 12.00 noon. A visit to Bannow and Caim lead/silver mines in County Wexford is also envisaged.

8-10 July 2005: NAMHO Conference in Dorking, Surrey. The theme is *European Mining History* with the emphasis on common mining aspects. For details check with P.F.Claughton@exeter.ac.uk

September 4th-11th 2005: National Heritage Week (provisional). A programme of mine heritage/history events will be in NL 30.

Late Autumn 2005: It is anticipated that MHTI Journal 5 for 2005 can be issued early, as many of the articles are already available. However, contributions are still invited. Contact dcowman@iol.ie

EDITORIAL

From the programme, and reportage below much that has been happening within the auspices of the Mining Heritage Trust of Ireland is apparent and more will be featured in the next two Journals. For instance, the work that has been done at the engine houses in Tankardstown, County Waterford, will form a special feature. In brief, this comprises a geophysical survey of the site as a guide to archaeological excavation there. This revealed the buried walls, floors and fittings for the boiler houses attached to the pumping and winding engines, their flues to the single chimney as well as the winding-drum pit with some timbering intact. Crawl channels in both engine houses emerged as well as broken parts of the base stones for the engines with their bolt holes. As these last were buried for so long they uniquely retain a firm brown plaster on them, probably used to level the cylinder. Excavation beneath the much ruined walls of the winding engine house revealed rich floor detail much of which has yet to be interpreted.

Conservation work is now taking place at Tankardstown details of which will be presented in the Journal in the same manner as similar work at Allihies man-engine. MHTI members will have a preview of all that is being presented to the public on 28th May. Before that members will have had the opportunities of seeing what the local communities have done in Arigna and Castlecomer in preserving and presenting their collieries and commemoration of those who worked in them.

Des Cowman, "Knockane", Annestown, Co. Waterford. ☎ (051) 396157 📧 dcowman@iol.ie

www.mhti.com

CORRESPONDENCE

Bats in Caherglassaun mine

Caherglassaun mine (Newsletter 27) is a very important hibernation site for lesser horseshoe bats during winter. There were probably none visible during the August visit, but from Winter on, the numbers of bats will be increasing; the maximum number is usually present in Jan/Feb, depending on when a cold snap comes. The site contains over fifty bats which makes it a hibernation site of international importance. I first discovered the bats there during a winter survey of underground sites in 1994, when I found 27 bats, but thankfully the number has been steadily increasing ever since.

Kate McAney, Field Officer, The Vincent Wildlife Trust, Donaghpatrick, Headford, Co. Galway.
Tel/Fax: 093 35304

Geologist G.J. Murphy.

I have just finished reading *The Avoca enterprise -2 The Geology of the Mineralised Area* (1959) by G. J. Murphy the mine geologist at the time. It is an excellent article and I would be most interested in finding out more of his subsequent life. Any information please to - Colin Wilson, 93 Leam Terrace, Leamington Spa, Warwickshire CV31 1DF
E-mail: colin.wilson21@ntlworld.com

Irish mining correspondence to Benjamin Franklin

I'm trying to identify a correspondent of Benjamin Franklin's. I have 4 letters written from Ireland in early 1783 that are signed only with indecipherable initials. BF's correspondent is angling for the job of American consul, and offers all kinds of information about himself--except for his name. One of the clues that is the most tantalizing is his association with a mining venture in County Wicklow. In his letter of March 31 (American Philosophical Society) from Dublin he mentions it as "*a Mining Concern we are prosecuting upon the Estate of a noble Peer of this Realm [which] we expect will turn out very valuable.*"

He writes again on April 3 (also at the APS) he says he has been in Ireland for 2 years: "*I had an Offer to come hither [he writes from Wicklow] and take a Concern in some valuable Mines a more particular Description of some of which may be seen [in] the Philosophical Transactions Vol: 47 & 48 described by the learned Revd. Dr. Henry D.D....We have a Lease perfected of a Copper One--and an Offer of one of Lead—the Ore of which is said to produce 15 [percent] of Led in a Ton--and out of a Ton of the Lead there may be extracted 19 oz. pure Silver. ...A Gent in Dublin who is concerned has erected Mills for rolling the Copper & Lead some Samples of which I have sent to Bordeaux & more*

prepared to send to Philadelphia & New York &c of both articles." His final letter, written from Dublin on May 14 (Historical Society of Pennsylvania) tantalizingly suggests he has a plan to help the United States with its debts "*by introducing and bringing into Circulation a very large sum in Specie with considerable Profit & Advantage.*"

The fourth letter of the series was written April 11 from Rathdrum, and the APS has what appears to be the postscript of it. There's considerably more in these letters about the correspondent than what I've mentioned here. My research has led me to believe that BF's correspondent is likely not associated with John Howard Kyan and the Camac brothers contemporary operation (beginning also 1783), but perhaps some unknown group trying to exploit the resources of the Carysfort Royalty (the "Noble peer"). Neither the Geological Survey's *Index to Mineral and Mining Public Records*, nor other sources (such as Ruttly 1772) cast any light on this, not surprisingly as nothing seems to have come of it. Neither has any mention been found of the Dublin "mills" and the only known processing plant there was in Dolphins Barn in the 1760s. However, perhaps somebody has access to an uncatalogued resource. If so, contact the editor, or -

Kate M. Ohno, Assistant Editor The Papers of Benjamin Franklin, PO Box 208240. Yale University Library. New Haven, CT 06520-8240 (203) 432-1813. E-mail kate.ohno@yale.edu; web site <http://www.yale.edu/franklinpapers>.



MINE PUMP ON AVONDALE ESTATE.

Parnell's pump at Avondale.

(from Diane Hodnett)

Pat Power's article in Journal 3 prompted interest in an e-bay offer of a page numbered 640 from an unnamed publication with the appended illustration of a "primitive" pumping device with its balance bob. The page of accompanying text stated that the bob was

raised by wire rope (line left although other elements are neither clear or explained). Power came from a waterwheel a quarter of a mile away which also drove a device for making brush handles! The artist of this, Mr Wallis Mackay, sketched all around Avondale This adds a little to Pat Power's intimation of a Parnell driven by a need to make money but prepared to be pragmatic in acquiring it. Mackay sketched all around Avondale, and gave quite a lot of information about the mining - including "wild mining colonies, a deserted village and abandoned shafts".

This single page is dated December 23 1880 and is part of a longer item. At the start of the article the writer says Parnell is going for trial on Dec 28th next. (He was, in fact, jailed for two years and mining became a less important element in his life thereafter.) This artist sketched around Avondale, and gave quite a lot of information about mining - including 'wild mining colonies, a deserted village and abandoned shafts'

Mining in Ireland in 1952

Sylvester Ó Muirí has sent a photocopy from an item title "Interest Grows in Irish Mining" from the *Irish Times* of 18 March 1952 which nicely states the state of the nascent Irish mining revival at that stage. Out of this the following emerges:-

The war had refocused attention on Ireland's underground resources. The Connaught coalfield had been re-opened and produced 72,000 tons of "semi-anthracite" in 1950. The Leydon family operation at Arigna was cited and 25 years supplies were anticipated. In Leinster, Castlecomer (Prior-Wandesford), Swan (near Athy, Fleming Brothers) and Rossmore Colliery Company (in Carlow) were all in operation as was Slieve Ardagh in Tipperary under Mianraí Teoranta, a semi-state body. The "biggest field in the country" was said to stretch from Banteer in Cork to Killarney and north to Ennis though "crushed by earth movements".

Lead was then being worked in a small way in Shallee (Silvermines) and Abbeystown (Sligo). Lead prospecting was going on in Glendalough, Avoca, Milltown (Clare) and Castleblaney. No copper was being worked as there was a large world supply. Two firms were reportedly working the huge (six miles long) gypsum bed around Kingcourt/Carrickmacross and the industry was said to be expanding. Barytes was being extracted on Benbulbin and steatite or soapstone was being quarried on Inishshark Island for electrical insulation. The phosphate deposit near Lisdoonvarna had been worked out to supply fertilisers during the war.

KESWICK MINING MUSEUM

We have received a notice from Ian and Jean Tyler that the Keswick Mining Museum, in the English Lake District, has moved. They are now at Otley House, Otley Road, Keswick, Cumbria CA12 5LE Telephone 017687 80055 or 01228 561883 Email: coppermaid@aol.com

For anyone planning a trip in their direction, Matthew Parkes has a couple of leaflets describing their Museum, available on request.

BOOK NOTICES

Higgins, John, *Study of a Mine Cost Book, Wheal Agar October 1855-November 1859, 72 pages (privately published, 2004). Available from *, cost %%%***

As far as this reviewer knows this is the first time that a mine Cost Book has been interpreted, samples provided and their significance analysed. To take the example of Matthew Reynolds and his team of five other men driving the forty-fathom level west of the Boundary Shaft at Wheal Agar. They had made a "bargain" of £4 per fathom and in the month of January 1857 drove five fathoms (30 feet) and three inches. This earned them £20-3-4d. However they owed the stores £6-13-2d for candles, explosives, fuses and chisel sharpening. Each man also paid one shilling a month into "Doc. and Club", which, as is explained, "was a form of insurance which was used in the event of sick pay", examples of which appear elsewhere in the Cost Book. Strangely each man had also a voluntary deduction of three pence per month for the company barber. Thus the teams net pay for the month was reduced to £13-2-3d which if divided equally (which it probably was not) would give each £2-3-6 ½ d, about 54 pence per week each in metric money.

Such detail is available for miners, those landing kibbles and ore dressers, all of which throw similar light on these practices. Most fascinating for this reviewer were the six pages costing the building of three engine house and installing their mechanisms. For example a sixty-inch engine was bought in October 1855 from Penhale Consols and had to be brought the twenty miles to Wheal Agar. In charge of the operation was a gentleman with a cartoon name, Captain Champion, who was paid 10/- per week subsistence allowance for the five weeks he was "taking out" the engine at Penhale. Total cost of this operation was £61.33 (the book converts such payments to metric) and the cost of transporting it in December was £77. It must have been decided not to use the old rods as a

carpenter was paid five shillings expenses to select new rods at Truro and Perran.

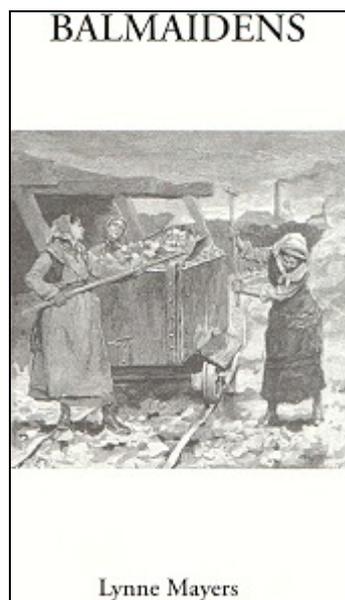
The shaft was being sunk while they were building the engine house in February and March 1856. By April they were ready to erect the engine, Hocking and Loam being paid £31.50 for this. However, much work still had to be done before the engine could start. In May they bought various second-hand material from Leedstown mine including a capstan and sheers which they did not seem to use for another fourteen months. Over that period much of the development work was taking place underground including putting in a skip road and purchasing skip wagons (£16.23). In July and August 1856 they put in the balance bob (a surprisingly big job) but not until the following August were they ready to start sending down the rods to which it would be attached. Thus in August and September 1857 progressively 6, 8 and 17 men worked at the capstan sending down rods, with it being also used to send down pitwork. Between that September and February 1858 more pitwork was being installed including "ladder roads". The engine must not still have been started two years after it had been erected as between March and May six boys were being paid for "drawing water in the engine shaft". Meanwhile, pitwork and preparation of skip road continued up to July 1858 when these preparatory expenses finish and presumably mining at last began.

The entire cost of commissioning this sixty-inch engine with all its attendant fittings was £1340.03 and it took two months short of three years to do it. A different pattern emerges from another pumping engine at Windstraw shaft where much of the underground work was done first, sporadically from March 1856 and consistently from November 1858 with the engine being installed the following March and started in May. A whim engine could be commissioned far more rapidly as the slow underground preparatory work would have been already in place. Thus work started on the "New Whim Engine House" in June 1859 and it was working that November.

This then is only a sampling of what this rich book has to offer and John Higgins is to be congratulated on his private initiative in publishing it. What is revealed about Wheal Agar at least serves as an analogy with other Cornish-run mines such as those in Ireland. A cursory examination of similar records for a much earlier period at Avoca reveals similar patterns (National Library ms. 16304-16,307, Associated Irish Mining Company papers, August 1785 to October 1805). The question now arises of doing something similar with these. Cost Books for Allihies have recently come to light and are being worked on. It is hope to publish selections from these with commentary in MHTI Journal number 5.

BALMAIDENS

by Lynne Mayers



Hypatia Publications, Trevelyan House, 16 Chapel Street, Penzance, Cornwall TR18 4AW £20 pp 246

This book can be purchased online at:

<http://www.hypatia-trust.org.uk>

Follow the links to Publications and Cornwall.

With this book, Lynne Mayers has brought out of the shadows the enormous number of women and girls who worked in the mines, quarries and clay pits of Cornwall and West Devon. Between 1720 and 1921 it is estimated that about 60,000 females were engaged in hard, dirty and specialised labour in the mines or 'bals'. Most of them were involved in dressing the ores. i.e. separating the ore from the waste rock as it came from underground.

This book covers their working and their home lives in very well researched detail. The chapter on 'Balmaidens at the copper mines' covers: the dressing floor, the dressing process, spalling, riddling, washing, picking, cobbing, bucking, jiggling, buddling, barrowing and sampling.

The very old photographs, many from the Royal Institution of Cornwall, are of the women at work, in their distinctive headgear and aprons. A cobbing hammer weighed between 2 and 4 lbs, and was used in breaking down the mixed ore to small pieces. This was further broken down to small granules and powder by bucking. This was a very demanding task, amply demonstrated by a photo of a bucking iron, showing considerable wear.

While the book describes the work on the Cornish mines, it is very relevant to the mines in Ireland, where female and child labour was also used. We know

females were employed at Caime lead mine, Knockmahon copper mines, Allihies copper mines and the Kenmare copper and lead mines. At Glandore manganese mine in 1833 the landlord was concerned for the education of the 100 young girls working at the mine. In March 1846, William O'Connell wrote to the Relief Commission in Dublin:

'I am Secretary to the Southern and Western Mining Co. of Ireland and am a large proprietor and principal Manager of the Mines of Coosheen, Dhurode and Gortavallig, which are situate in the extreme West of this County, a distance of from 70 to 90 Miles from Cork. The number of people (including Women and Boys) daily employed at the Mines are from 560 to 600: mens Wages vary, 10d to 1/2d per day, the women and Boys 4d to 6d.' (sic)

This book is a very useful contribution to our knowledge of mining.

Diane Hodnett

SITE VISITS/RESEARCH BY MEMBERS

Rooska Lead/Silver Mine near Bantry, Co. Cork

The lead and silver mines are in the adjoining townlands of Rooska West and Killoveenoge, near Bantry. The earliest reference to this mine that I can find is 1842. It is marked on the 1845 OS map as a silver mine, but on the later (1901) edition there is a lead mine also marked very close by.

This mine intrigued me because 147 acres was mentioned in Griffith's Valuation as belonging to Benjamin Jago of Rooska. Benjamin Jago also rented the dispensary in the Cornish Village at Allihies copper mine. However, the mines at Rooska, while very near to the Jago holdings, are not on this land.

The landowner and his wife were kind enough to invite Frank and I to look around at what little remains. It was lashing rain, but we did our best to ignore this. Lots of cups of tea in their kitchen afterwards soon dried us out.

The owner came up with the interesting information that he came across quite an amount of red bricks 'with mortar' near the lead mine when he was digging foundations for another building. There is no evidence of an engine house, however.

The shafts (four) are all filled in. This happened about twenty-five to thirty years ago; although there has been subsidence since. The most interesting bit of information is that there is an adit running from the silver mine area to the sea, about a half a mile distant. It is still open, and can be accessed. It is clearly visible

from the sea. I hope to fully write about this mine at a later stage.



The site of a silver mine shaft. Close to it there is one of the original mine buildings, which had a fireplace.



A filled silver mine shaft, now marked by a mound after subsidence. It is thought the adit draining to the sea comes from this area. It is thought locally that this shaft is over 100 feet deep.



The track going between the two silver mine shafts. The lead mine is further over on the left – nothing remains.

I am sorry these photos are so dark – it was raining heavily at the time!

NB The Mineral Statistics show production for Killoveenoge (thus spelt) for years 1849, 1850 and 1852 giving respectively 24, 22.8 and 18 tons of lead with 14, 13.5 and 10 oz of silver. Total value is given only for 1852 as £70.

Diane Hodnett

Derreenalomane barytes mine, Co. Cork.

We could find nothing to do with any mine buildings! We went up and down the road for about four miles! Photos are on their way to Tom Richards (see the item on this in MHTI Journal 2 (2002) p. 69-70). We could only find a derelict and very old cottage near the junction with the Mine road and the Durrus/Ballydehob road. However, we did get news of an old photograph which is still being pursued. The possibility of this being in the archive of the Bantry Estate in U.C.C. was pursued., but there is nothing relevant in “The Bantry Estate Collection” CD from them.

Diane Hodnett

CURRAGHINALT GOLD MINE VISIT

Mick Carragher and Gerry Clear visited the Curraghinalt gold project in the Sperrin Mountains on a bright sunny 12th October this year. The visit was arranged through the Vancouver office of Tournigan Gold Corporation, which owns the relevant licences for gold exploration in the area, and through the Navan office of Aurum Mining plc.

On arrival at the company offices in the village of Gortin, John Cuthill, structural geologist with Tournigan and Vaughan Williams of Aurum, gave us an overview of the regional and local geology. The Curraghinalt gold deposit comprises a series of sub-parallel quartz sulphide veins localised between a set of east-west striking shear zones. There are occurrence of veins and geochemical anomalies over 8 kilometres of strike length and exploration by the current, and former, operators has demonstrated the potential for gold mineralisation to continue both along and across strike of the existing resource veins.

The mine is located on the sloping hillside of a valley in the townland of Curraghinalt with the only evidence of the mine being a concrete portal leading into the hillside, and located out of sight below the public road. The Owenkillew River flows along the valley floor.

The mine was developed in the late 1980's by initially closing the public road, opening a large trench and fitting precast concrete sections through the overburden and weak rock. The trench was filled in and the road reopened. The remainder of the development was by roadheader. This means of advance through hard rock meant slow progress but eventually all veins were intersected and some veins were followed for a

distance along strike. The sidewalls and back of the drift bear the marks of the roadheader's rotating picks. A ventilation raise at the end of the drift provides a natural airflow back to the portal.

John Cuthill gave us a detailed and very educational description of each vein and related geological features.

A diamond-drilling program has recently been completed and the results of core assaying were released to the public the following day, Wednesday 13th October. The hole was drilled to 480m and confirmed that all of the main resource veins extend to a much greater depth than previously defined. In addition, a new vein was discovered and results show increased widths of existing veins. The most significant intersection was in the No. 1 vein that graded 66.95 g/t over 1.32m.

There is an unmistakable air of optimism among those involved in this project that gold is present in these hills and that it will be mined. It is indeed an exciting project, an underground gold mine on this island, and we wish continued success to all those involved.

Our sincere thanks to John and Vaughan for their time and for sharing some of their 'gold fever' with us.

Gerry Clear



John Cuthill and Gerry Clear at the mine portal, 12th October 2004.

Cumbria

I am delighted to be able to relate the details of our recent trip to the Northern Pennine Region in Cumbria, England. I say 'our recent trip' because I was accompanied by Joe Rice, Safety Officer, Tara Mines. It was Joe who initially got the invite over to the U.K. from a little group who call themselves 'Friends of the Northern Pennines'.

They have been over here in Ireland over the last two years visiting Tara Mines and Lisheen Mine. They

also visited the Avoca area and this summer took in Tynagh Mine in Co.Galway. Because of the hospitality they were shown in Tara they duly invited Joe and some of his mates over to visit their territory. This is where I came on the scene. The two of us accepted their invite and on August 29th we flew into Newcastle.

From the moment we landed that Sunday evening we were treated like royalty, picked up at the airport by our chief host and guide Gary Talbot. Gary a big 6'2"man is the main driving force behind this little group who are determined to keep their mining heritage in Northern England alive. Gary was accompanied to the airport by a no-nonsense, live wire of a little woman, introduced to us as Helen Sherlock. Helen it transpired was the landlady of our B&B and Gary explained that she 'just came for the spin'. It soon became obvious that even though Gary is a lorry driver by profession it was Helen who guided him out of Newcastle through the dark country roads and eventually safely to our cottage on the outskirts of the village of Nenthead in Cumbria. Even though it was now past mid-night and as far as we could see the whole of England was in bed except for the three other members of the group who were to be our guides for the next four days. John Simpson retired medical doctor, well recovered from a triple by-pass and living life to the full, Alan French a mechanical engineer and Neil Rowley Safety Manager at Cleveland Pot Ash. After the initial introduction, a bit of chitchat over a 'cup of tea' we were glad to see the bed but also in anticipation of our first full day in the Pennines.

Helen's B&B is a lovely stone building which is built in the traditional style of the area. The original cottage and coach house was built in 1503. Helen herself with some local help built on a self-catering area along with the B&B area we occupied. Her home is known as 'Cherry Cottage'. After a full breakfast, away with us on our first underground visit to a mine known as Rampgill, about half a mile from Cherry Cottage. Beside the entrance to the mine they have set up the Nenthead Mines Heritage Centre which has the whole mining history of the area explained with some of the mining gear set up in a series of old black and white pictures in the main building. The little group with Joe and myself on toe entered the mine by opening a steel gate, which is normally locked, the key being available only to organised groups with underground experience. Waders are an essential part of our kit as there is a constant flow of water, which in places is up to 2' deep. The drifts are small with an average height of 5' x 4'. The ore was mined and dumped into hoppers where it was loaded into mine cars. These were in turn trammed along a 24" gauge track by ponies and out of the mine. I suppose the biggest feature to us was the stone arching of the drifts in areas where the ground need support. Because of the lack of timber in the Pennine area the only way to support the ground was

by building stone, which was quarried and 'dressed' locally, from one sidewall across the back and down the other side. Seeing this craftsmanship left us in awe of the men who did this work all those years ago.

Gary tells us that this arching is a feature of the mines the Pennine region and is known nowhere else in the U.K. 8' per shift was the rate of advance of this arching and the two men crew worked mainly on night shift so as not to interfere with the production crews on day shift. We walked for an hour and half examining areas that looked like small stopes, examining and closely inspecting areas that have become regular features of these guided tours. We had a rest at an x-cut junction known as 'Whiskey Bottle Corner'. We climbed off the main haulage by a series of 'horse steps' where the ponies used to traverse. Here we see on the sidewall the initials C.B. and J.P. chiselled out with the date 1795. After our extensive tour we seemed to be heading back when suddenly they sidetracked us along a very low arch drift, which could only be accessed on our hands and knees. A large mined out area opened up to us and we had to descend down about 2 metres to the floor. Al and Neill began moving large rocks on the floor to one side. A man way door was revealed and opened and what appeared to be a very tight shaft access was exposed. As I am still in recovery mode Joe was nominated to follow Al down this passage way, which he told me later, was about ten metres deep and just wide enough to climb down.

Our hosts were showing us a feature of the Rampgill mine, which they keep a very closely guarded secret.... the only known horse gin underground in the U.K. I had to wait until I returned home and Joe downloaded the digital photographs before I knew what they were talking about. While now it lies derelict and not set in its original working position, the horse gin was an amazing feat of engineering as it hoisted ore using horse power up the nearby internal shaft. When Joe and Al returned up the narrow vertical climb the man way door was again closed and covered with large rocks and the secret of the horse gin remains. Remember we were side-tracked, we could never locate this area on our own again. We exited the mine, had a beer and relaxed in the glorious Pennine sunshine.

Having rested for half an hour, we went up the hill on the other side of the heritage mining centre and entered a mine known as Capple Clough. Again, we entered through a wrought iron gate having got permission and the key from the centre. Our guides were not confident of making progress too far under the mountain and sure enough after about ten minutes of walking through the now familiar stone arch drifts we had to retreat because of deep water but not dismayed by this setback, we drove about three miles out of Nenthead to visit the museum mine at Killhope. The Pennine Heritage group have done a great job of preserving the site as

near as possible to a working mine. A large working water wheel which powered the mill dominates the mine site. The water then continues across the site and was used for various processes in extracting the ore. From there the water was channelled down the valley to work other water wheels at other mines. What energy water has when used in this way. We visit the rooms where the miners slept, four to a bed and eight beds to a room. A big open fire, to help keep the chill out of their bones, is blazing as we enter. In Kilhope they have also opened an underground section for tourists. It being a bank holidays Monday the place was thronged with visitors.

Back to Cherry Cottage for a hot shower then down to the only pub in the village of Nenthead, 'The Miners Arms', for a feed. Full of locals, we were seated at a big table down the middle of the pub. Dinner served at 8.00pm, all at stg£6.50 a head and no one for "pudding". A couple of pints of the local brew and back to the cottage for the next item on our very full schedule - the slide show.

Brought in for the night was local historian and archivist, John Crompton. Described by all as the most knowledgeable man in the whole county on local mines and mining heritage. Two other gentlemen were invited to meet us, John Wearmouth and Bill Heyes and this was all for our benefit. For two hours the local historian went through a series of slides he had chosen for the night's show. He narrated as we sat, watched and listened. Brought back to and through an era gone forever. An era which has left a heritage in this mining area guarded and nurtured by the men and women of the Pennines. We could only look in awe and admire.

Tuesday - Today our host decided to give us an 'easy day'. A trip through the Pennines taking in various mines on the way. The Pennine terrain reminds us of the Wicklow Mountains expect of course on a much larger scale. Garry could point out all and I mean all of the adits, the spoil heaps, the mines they have visiting and the ones they have yet to explore. The owners of these mines are usually the farmers on whose land the mine is located. Garry knows them all and has permission to go here and go there. You would just wonder how this big man gets the energy and enthusiasm, he lives it. Our first port of call today is the Grove Rake mine. This was producing up to about five years ago but now it lies derelict and very forlorn looking. The old head frame is still there. The skips are gone, the winding gear is gone, all taken for scrap. The shaft is plugged. About a mile away there is a smaller mine known as Fraisers Hush. The workings were connected to the Grove Rake mine and this was a designated escape route if required. To travel from one mine to the other over the distance of a mile took 2 ½ hours, such was the complexity of the mine layout. It was here that Joe found his way into a small building beside an even smaller derelict head frame. It turned

out to be the hoist room with the original hoist / winder still in place. Our guides had never been in here before. This new discovery generated great excitement. The manufacturers name plates said

Francis Lane Lanwill Works Brierly Hill

On the wall measuring 4' x 3' is an M&Q 106 Form with the heading 'ABSTRACT OF THE METALIFEROUS MINES GENERAL REGULATIONS 1938'. It is signed by the manager and is dated 12th May 1940.

How I wished I could bring the winder back with me. A week, two at most, a mehil of men and we would have that winder hoisting as good as new.

From here we travelled to the little town of Wearsdale where we decide to go native - fish and chips al'round. It's festival week in Wearsdale and as part of their celebrations a sculptor is at work, live in the town square, sculpting a large limestone rock into a specially commissioned piece. As we approached he stopped. We chatted about his work, duly apologised for holding him up, 'not a word about it, the whole idea is for people to stop me to hold me up and chat and ask me about this special piece' he tells us. He gave us all his card and a sample of limestone which he informed us was 350 million years old. We thanked him and soon we were back on our own special mission of travelling through the beautiful Pennines. We visit a series of mines in quick succession. Stanhope Byrne mine where lead and then fluorspar were mined. A few galvanised buildings remain but otherwise a derelict site. West Pasture mine where a recent fall of ground inside the entrance of the adit has been cleared and the roof supported with rsj's. All the work of one enthusiast, a man by the name of Robert Bunting. He has been over to Ireland on a number of occasions and is well known to Joe from his visits to Tara. A 'mineral enthusiast' Garry called him.

Now we cross the river Weir at Stanhope Forde and onto Cambo Keels mine. At the entrance over the adit is chiselled out the date 1841. The entrance is barricaded off with steel strips but once again we can see the fabulous stone arching of the drifts. You can only ask yourself 'where would you start'.

On and on we go through the hills. We see mines, adits everywhere we go. The Cold Berry Gutter ---- where the vein ran right along the surface. Dug out during the day for the making of tiles while the mine underneath, Reed Groves, is worked at night. Flushie Mere mine just off to the right with its large spoil heap spread over the mountain side, a testament to the men who mined here. Low Skiers mine, High Skiers, there seems to be no end to this 'easy day'. Until at last our

comrades inform us that we are now 'on the roof of England' - the highest point of the Pennine range. How long has it been since I heard the term 'the roof of England' in school in Cullyhana. Did I ever think what circumstances would bring me here. It's getting duskish and the fish & chips are a faint memory. We stop for a pint and supper in a little pub nestled under the hills. Boys did we sleep that night.

Wednesday - today is Garry's big day. This is the trip to Bulby and an underground visit to the Cleveland Potash mine. A huge operation on the east coast of the North Sea. He has gone to a fair bit of effort to arrange this visit for us. Visitors are a rare commodity at Bulby but Garry has fixed it for us. We are up 7.15am, flakes and tea and we are away. Helen our landlady joins us on this trip. The weather is glorious and the banter as we go lightens the journey. There is a scarecrow competition across the valley Helen informs us and sure enough we see an assortment of straw filled men in various dress as we go along. Joe and I give first prize to the scarecrow in the bobby uniform, peak cap and all, he lays against a whitewash wall with the hairdryer in his hand - a speed trap. Simple fun by these hospitable people. We hit rush hour traffic here and there but we make good progress. 9.45am we arrive in Whitby, a seaside town about six miles from Bulby. Breakfast in a local café and an early tour along the promenade. Captain Cook the famous explorer was born here and the whole life of the town is centred around the sea. Helen does some shopping, we just take in the sights. The series Heartbeat is filmed here. We hope we might see one of the films being filmed. Our scheduled time for arriving at Bulby is 11.30am and we are on time. Joe is elected to go to security to check us in. "The five visitors from Ireland" the security man spouts when he hears Joe's accent. They are obviously expecting us alright. Straight to the induction room and again we meet Neil Rowley who was one of our guides on Monday at Ramp Gill. He gives us the whole low down on his mine and while he explains the workings of various PPE to Garry, John and Helen, he allows myself and Joe to visit the mine rescue station accompanied by the safety officer, a man called Frank. Eventually we are reunited with our companions and we change for underground. No watches allowed and we have to get special exemption to bring cameras. The only entrance into the mine is via the main shaft - over a mile down. The cage is in three sections. The top section holds twenty men while the other two hold thirty men each. We descend to the bottom level where a jeep specially modified to carry personnel brings us six miles to the working face. We are now over a mile down and three miles out under the North Sea. The headings are hot. Men in singlets and trunks mine the potash on electrically operated machines. The cameras are getting it hard to work. Joe manages to get a photograph of myself and Ray. Ray is the supervisor on shift and is 62 next birthday. He seems happy. The tea room cum shifters office is a

long table positioned along the side of the drift with a single light at one end. The 'long bake' they call it, it's easy to understand why. We chat with some of the miners, young men all curious to know who we are and where we are from. They have never heard of Tara Mines. Again we load up and travel up the six miles to the shaft. It's the end of the shift for some of the crews. The cages are full and the chat and craic is the same as home as we speed towards the surface. Neil brings us on a tour of the hoist room. The motors on the hoist are 7,000 horsepower and can lift 30 tonnes of potash on each skip, travelling at 52 feet a second. The two hoist drivers can't do enough for us. One of them tells us his father is from Donegal. I suppose it makes a change from Tipperary. After our showers we thank Neil for their efforts in making this trip so memorable. He tells us he is coming over to Ireland next year for his first visit. Garry is delighted with the day.

We return to Whitby and as we walk towards the seafront we see a crowd gathered - we inquire. They are making a scene from Heartbeat. The props are there..... the 1950's Norton motorcycle with sidecar and a Hillman Super Minx parked along the roadside. The blue and white panda is back the way. Myself and Joe decide to try and get ourselves into this episode but we are soon 'whooshed' away by a security guard. We are too young anyway for a 1960's drama. We decide to leave Whitby and shorten the journey home before we stop for dinner. We stop at a lively looking pub in the heart of the country. We eat well and we try our first Newcastle Brown Ale. We bring a few bottles back with us to Cherry Cottage but that's another story.

Thursday - This is our final day in the Pennines. It is decided to split us up. I go with Garry and John to visit Low Skiers mine. Al takes Joe up the hills to visit Small Clough. This mine is two miles from the cottage, so while Joe and Al head off on foot, dressed in full underground kit, I'm driven back to the Pennines to visit Low Skiers.

Low Skiers is easy to access. At this stage I am getting confident that I can read the mining methods. I point out the old bootlegs, explain why that drift was driven that way and the direction it came from. We mined similarly to this in Sligo. As I walk along the drift with my cap lamp in my hand Garry quips "you really look like the shift boss today Mick". We all laughed. 3,000 feet we walk under the hill into this beautiful little mine. When I look back along the drift, even from this distance, I can still see the daylight at the entrance. The drift was driven dead straight. It reminds me of Newgrange. Before we start our retreat I notice, under about a foot of water what appears to be wooden rails. My comrades tell me that they are the original wooden rails, which were used ever before iron rails were invented. I can only marvel at this. We leave the mine and having failed for the third mine made contact with Ian Forbes at Killhope Museum

Mine. I suggest that its time to call it a day. I knew Joe would be getting anxious so we returned to Cherry Cottage. Sure enough he is out at the gate checking for our return. "I was just about to call out the mine rescue teams" he says, half serious as he chastises me. "Alls well that ends well" I say.

We have tea and say our farewells. Helen is driving us back to Newcastle Airport. We make a small presentation to Garry. A token of our appreciation for all the trouble and effort this little group has gone to on our behalf. For the first time, he is stuck for words. They ask again about their planned visit to Ireland next year. Will we bring them to Avoca? A trip down Tara and if possible a visit to Sligo. Garry says he would love to go to a ceili. I think we can manage that.

Helen brings us back to the airport through the hills and through little English villages that have a living heritage of their own. There is no rush hour traffic here and we never met one set of traffic lights. We thank her sincerely at the set down. In a couple of minutes she is gone and the spell of the last four days is broken. Just the two of us with our luggage as we drink two cappuccinos in the airport lounge, well back into the 21st century.

Mick Carragher

MEMBERSHIP NEWS

We welcome new members:

Mike Sweeney

Frank and Diane Hodnett

Peter Crowther (Ulster Museum Geology Department)

MHTI ARCHIVES

We have received a donation of a Trevithick Society reprint of an Illustrated Catalogue of Pumping and Winding Engines and other plant used for mining purposes, manufactured by Williams' Perran Foundry Co., Cornwall. Our grateful thanks to Diane Hodnett.

As with all items in the MHTI collections, they are available for loan or consultation to members. Contact Matthew Parkes for more information.

HISTORY IRELAND

We have received a sample of the magazine *History Ireland*. If you are not familiar with this, it a quarterly glossy colour magazine with high production values. It comes from Wordwell, the publishers of Archaeology Ireland and many Heritage Council publications. Subscribers also get a 6 page folded, high gloss insert series – the Irish Historic Towns Atlas. Subscription rates start at €20 per annum or £15.50 for Ireland and the UK. If you are interested contact Matthew Parkes for a flier with subscription details.

PRAEGER FUND

Members may be interested in applying for a grant from the Praeger Fund for Field Natural History, administered by the Royal Irish Academy. This grant, up to €270 each, is for field work relevant to the natural history of Ireland. Geological projects have been funded in the past, and potentially, ecological projects at old mine sites must stand a good chance of getting an award. Closing date for 2005 applications is 14th February. Application forms may be obtained from the Academy at 19 Dawson Street, Dublin 2, or from <http://www.ria.ie/committees/praeger/new/html>

EUROPAMINES CORNWALL, UK MISSION 2004

SEPTEMBER 23: evening : "Interpreting the ruins of Cornish Engine Houses"

Ken Brown presented a special seminar on interpreting Cornish Engines and Engine Houses. The seminar will also be used to create the first Europamines training manual "*Interpreting the ruins of Cornish Engine Houses*". It is anticipated that this volume will have widespread relevance, and be of use and assistance to mining historians and mine heritage conservations in many countries throughout the world, wherever ruins of Cornish Engine Houses still exist. Production in both English and Spanish could significantly enhance this international impact.

SEPTEMBER 24: morning : *Cornish Mining*. UNESCO World Heritage Site bid.

A full outline of bid objectives, developments, draft application document, and other information is available on a web site, www.cornish-mining.org.uk One of the key outcomes of this session was the expression of full support given to Cornwall CC in their bid by the Europamines Network.

Environmental impacts of mining

Loveday Jenkin presented an overview of the impacts of mining upon pre-existing environments, with particular emphasis upon natural regeneration of historic mining sites to create new ecosystems and habitats. The "Cycleau" project [www.cycleau.com], involving partners in France, the UK and Ireland, aims to seek innovative methods for managing and improving water environments, to share knowledge and experience, and to involve local communities in river basin management schemes. Of particular relevance to Europamines, is the inclusion of the Red River drainage basin in Cornwall. This river has been associated with tin and copper mining for centuries, and its sediments are enriched in metals.

Afternoon

Stuart Smith provided a conducted tour to view display and presentation facilities at two mine heritage centres, Robinson's Engine House, East Pool and Agar Ltd, under the management of the Trevithick Trust, at least until the end of September; and then on to the Poldark Mine, an entirely privately owned and operated site.

It was with considerable sadness that we learned of the imminent demise of the Trevithick Trust, which in 1999 provided an enormous stimulant to so many involved in the MINET project for its visionary and pioneering actions to develop, present and promote mine heritage as part of the overall industrial heritage of Cornwall. Sadly, all the sites once managed and operated through the Trust, including grouped access to all sites on a "passport" system, will now revert to an array of different organisations, which will inevitably result in fragmentation and loss of marketing and promotion benefits. Whatever the reason for the dissolution of the Trevithick Trust, we felt that this was a very retrogressive development, a view apparently shared by others involved in mine heritage in Cornwall.

The visit to Robinson's Engine House was especially poignant, as it was during the MINET project visit that we were so proudly shown the then brand new presentation facilities, including an audio-visual theatre. The photographs below show some of the facilities during our visit, though it is likely that these will be changed under the new management.



A view of a magnificent fully operational model of a Cornish Engine in a cut away engine house frame; a view down the illuminated exhaust flue between the engine house and chimney, now adapted for use as a visitor passageway – note the steel mesh arch in the upper foreground, shaped to mimic the flue.

The Poldark centre, so named after a UK TV series of that name, presents a rather eclectic mixture of features and attractions, which might, at least to the mine heritage enthusiast, appear very dubious and questionable. But it must be remembered that this site is entirely privately owned and financed and dependent upon revenue generation for its survival – including the conservation of the oldest underground mine workings in Cornwall accessible to the general public. The workings were first developed in the mid-18th C and show many features characteristic of the very early stages of mining: low height, twisting and irregular levels and raises, coffin levels, so called because of the coffin shape of the drives and levels, and a bucket shaft. All levels were relatively smooth surfaced and dry, back and wall surfaces rock bolted for stability, and timber supports in excellent condition. The lighting system was very impressive, as were the tableaux presentations. All in all, we were extremely impressed with what has been achieved.

The underground mine tour is managed and operated by the site owner, Richard Williams, whom many may well remember from the MINET project. In contrast many of the surface facilities are leased out as franchise operations, including the café/restaurant, antique and antiquarian book shops, and a craft shop. One part of the site operates as a small bowling alley cum video games centre, also a candle making centre and young children's activity centre. The open space around which all these features are located is presented as an attractively landscaped area, with picnic tables, along with static machinery displays, include a full size industrial steam locomotive and a vertical beam engine recovered from amine in Mexico. Whatever about the purist dimension, the variety of non-mining related attractions certainly seems to appeal to a broad range of the general public, making the centre one in which visitors will linger, and spend money, thereby adding to its commercial viability. The following photographs give an idea of what is on offer.

Evening. *"Cornish Engine Oddities"*: a scheduled lecture presented by Ken Brown to the Trevithick Society in Liskeard, Cornwall.

SEPTEMBER 25: full day

Ken Brown had organised an extremely ambitious programme of nearly 12 different engine houses to visit, and demonstrate and provide training in how to measure and interpret surviving features.



Captions: Michells' Whim Engine, Camborne; Ken standing beside by remains of a steam exhaust pipe, EPAL; Antonio Perez and Martin Critchley examining the flywheel crank and gearing components from the complete, but yet to be restored and reassembled 22" engine from the Rostowrack China Clay works, King Edward mine.

SEPTEMBER 26 : morning

The entire morning was devoted to the design and operation of the fully preserved and operational Levant Winding Engine House and 27" engine, as a remarkably similar design winding engine house has now been discovered as a result of the first ever archaeological excavation on a 19th C mine heritage site in Ireland, at Tankardstown, Co. Waterford.



The floor level remnant of the "Miners Dry", changing room, with one of the two baths in the foreground, with Martin Critchley standing at the top of the spiral stair down to the Man Engine access tunnel

Afternoon

The entire afternoon was spent examining a range of cultural features directly related to the mining heritage but reflecting the social, cultural and religious aspects of the mining communities. These include housing, ancillary industries, churches and other religious structures, educational and social facilities, and crofters enclosures, all of which feature prominently in the Cornish Mining WHS site documentation.

SEPTEMBER 27: morning only.

The morning was spent in the company of Mr. Nicholas Johnson, County Archaeologist, Dr. Loveday Jenkin, Cornwall County Council Environment Services and Ms. Kath Statham, Landscape Architect, Minerals Tramways Project, examining natural recolonisation, conservation and landscape architecture features at the Wheal Poldice and United Mines sites.

KEY OUTCOMES OF MISSION

- Establishment of good network of contacts with key individuals and organisations involved in mine heritage conservation and presentation in Cornwall;
- Detail and complexity of requirements to mount a full UNESCO WHS bid clearly outlined;
- A clear understanding of the total mine heritage concept, embracing social, cultural and other aspects of the heritage, plus the technology;
- Support given by Europamines to the Cornish Mining UNESCO WHS bid, which could provide an opportunity in the future to annex sites representative of the global diaspora of Cornish miners, technology and cultural traditions
- An extremely successful and productive training course on Interpreting Cornish Engine House ruins, now being formatted into a bi-lingual booklet.
- International transference of knowledge concerning the detailed design features of the Levant Winding Engine House for use and application in the conservation of a similar building in Ireland.