



ISSN 1393-7995

NEWSLETTER

NUMBER 11

JULY 1999

Cumann Oireacht na Mianadóireachta

CONTENTS NEWSLETTER 11

2. EDITORIAL. VISITS AND EVENTS: Reports - Linares, Spain; Isle of Man, Bunmahon Initiative.
5. SOCIETY NEWS: Items received; Membership, Letters,
7. VARIOUS: Additional bibliography; Cornish Engine Houses - Knockmahon/Tankardstown; Du Noyer Photographic Competition.

MHSI PROGRAMME OF EVENTS 1999-2000

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

1999

July 27th - 1st August (Tuesday-Sunday): MINET conference in: Perosa Argentina, Piemonte, Italy (July 27 - 29th) and L'Argentiere la Bessee, Hautes-Alpes, France. (July 29 - Aug. 1st)

1st Sept.: The closing date for entries for the first [1999] "Du Noyer Competition" (see page 12)

5th - 12th September: National Heritage Week.

- **Rob Goodbody - a guided walk to the former Ballycorus Lead Mines and Chimney on Saturday 11th Sept at 15.00. Meet at junction of Ballycorus Road and Sutton's Lane, Co. Dublin (page 55 of the OS Street Guide to Dublin). 01-2823419**
- **John Morris - a tour of the 19th century historic lead mines of East County Clare on Sunday September 5th at 14.00. Meet outside Court House, Tulla, Co. Clare 01-6041473**
- **Des Cowman - "The Bunmahon Mining Experience", visit to Museum, Geological Garden and walk the "Mining Trail". Meet car park, Bunmahon 2.30 on Sunday 5th. 051-396157.**
- **John Colthurst - a guided walk through the Victoria and Ormonde Slate quarries in Lingaun River Valley on Sat. 11th Sept. (NOTE Saturday) Meet at Delaney's Pub, on the road south of the Windgap, between Callan and Carrick on Suir, L26, NGR S42 30 at 2pm. 045-868868**
- **Nick Coy. *Avoca, an underground world of fire and brimstone: a walk over East Avoca Mines starting at White Bridge, (about half way between Avoca Village and the Meeting of the Waters). Signposted. Commencing at 3.30 pm. Sunday 5th September. 045-866400***

24th - 27th September: NAMHO conference in the Forest of Dean.

9th - 10th October: Field Meet in Connemara visiting Sheeffry and other local lead mines.

3rd - 6th November (Wednesday-Saturday): MINET conference centred in Abbey Court Hotel, Nenagh (see accompanying notice).

21st November (Sunday): Inventory day at Glendasan (meet 10 am at car park near waterfall).

12th December (Sunday): Inventory day at Glendasan (meet 10 am at car park near waterfall).

2000

9th January (Sunday): Inventory day at Castlecomer (meet 10.30 at Newtown Cross on Athy-Castlecomer road, S261 795).

12th / 13th (Saturday/Sunday) February: AGM and field trip (details will be circulated later).

12 March (Sunday): Inventory day at Tassan, Monaghan (meet 10.30 at Annyalla village)

8th / 9th April (Saturday/Sunday): Inventory weekend in Donegal.

14th - 18th July (Friday-Tuesday): NAMHO Conference in Truro, Cornwall.

Mining Heritage Society of Ireland

MHSI

VISITS AND EVENTS

LINARES, SPAIN 22ND-25TH APRIL

On Thursday 21st the four Irish delegates to the MINET project, Des Cowman, Eamonn de Stafort, Martin Critchley and John Morris, found ourselves on the excellent NIV driving south from Madrid through Don Quixote's countryside. As we came off this AutoRoute, approaching Linares there were various exclamations – "Look, a chimney—", "There's an engine house over there---", "--- and another ---", "Two, no three chimneys between the trees --". We realised with mounting excitement that here was a Cornish landscape sandwiched between the eucalyptus groves and olive plantations.

As transpired, from the next morning's introductions, the other delegates had exactly the same reactions. None of us had any idea of the richness that was packed into about 12 square miles around Linares. It also emerged that no one locally, except a small group of local activists, the Arrayanes Project Group, saw this as other than a ruined landscape. No inventory of sites appears to have been made so the purpose of the conference, as far as our activist hosts were concerned, was to create a wider appreciation of the mining heritage of the area, both locally and globally.

Something of the background to this very conspicuous heritage was revealed during the tour of the Archaeological Museum where the first meetings were held. The area had been mined by the Romans with particularly intense activity taking place during the Punic wars. Many leaden artefacts were on display from that period and archaeological work is on-going. It was also worked during the middle ages but most of the visible remains were from the 19th and 20th centuries.

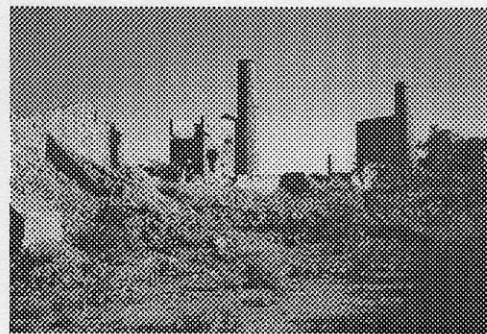
Following a business meeting of MINET and an extended lunch we convened for a visit to a small fraction of Linares mines. Our transport, laid on by the local activists, was a fleet of four-wheel drives – essential as transpired. For much of our way we jolted over rough tracks through a bewildering landscape of which the conspicuous chimneys and engine houses formed only a small fraction. Each lurch around a twist of track revealed new waste tips, flues belonging to smelters, stumps of chimneys, probable engine houses, mineral railways, stone struts for head-gear, existing iron head-gear and a miscellany of other buildings obviously associated with mining.

EDITORIAL

A number of important issues were raised at a recent committee meeting. It was decided to give a priority to the site inventory with a view to having surviving buildings listed. This has become important due to some recent casual destruction, particularly the demolition of the captain's house at Allihies. Therefore a series of inventory meets and weekends have been put aside as part of our programme. We get to visit some of the more exotic mining sites, so do come along!

Also discussed was the MINET Conference next November centered in Nenagh (which will showcase much of what MHSI has brought about or been involved with over its short few years of existence - see enclosed notice); our participation in Avoca Heritage Trust (more on this anon); our joint publication of the *Mineral Statistics of Ireland* (which is now bound up with the site inventory) and other publications.

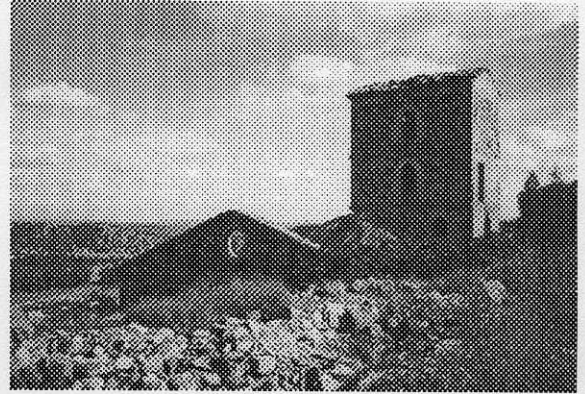
Amongst them, as agreed in principal, would be the publication of a journal. Committee members are checking the feasibility of this being annual, occasional or in association with another organisation or grouping. So, any members who have any researched items of Irish mining interest, resurrect them ...!



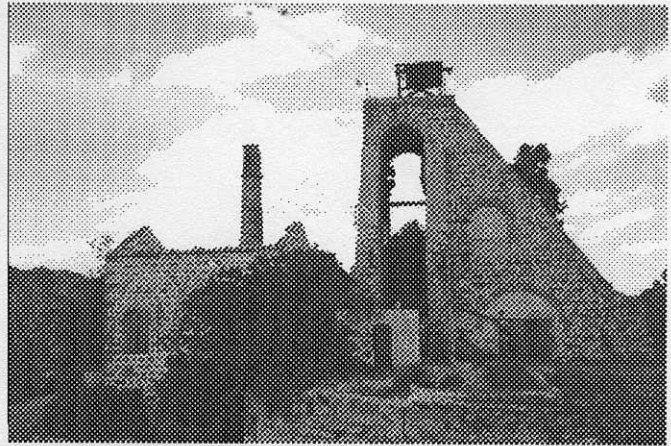
Part of the mining landscape around Linares

We stopped at a mere half dozen sites in this wonderland (that is for those that read this Newsletter) – two huge smelters, three Cornish engine complexes (one with five intact houses and perhaps seven chimneys) and a mine with winder and cable to head-frame worked into the 1970s. Somewhat overawed we retired to prepare ourselves for what proved to be lavish hospitality, well washed down with a powerful sangria.

Next morning, ruefully in some instances, we embarked once more on the Land Rovers and made our way some 30 km north to a separate mining area, La Carolina - El Centenillo. Much of this was in a scenically spectacular Nature Park. While the mine remains here were more dispersed than around Linares, the spoil heaps on the hillsides were much bigger but seemed to blend well into the rugged landscape. Access to one huge smelter was denied by a herd of black fighting bulls. However, we ended at a massive furnace/smelter complex high up in the hills at El Centenillo. This village is now primarily a mountain holiday home retreat, although it was established and constructed originally as a Cornish miners village. The location and views around are simply stunning.



From there we dashed back to Linares for an even more extended lunch (3.00 to 5.30 approximately), well washed down. Granted a lull (which some used for surreptitious visits to more engine houses) we met again to deal with the various businesses of the Conference. John Morris' proposal for a Mine Heritage conference at Silvermines was approved and date set for 3-6th November 1999. Some of the structures for MINET were firmed-up, including the logo. Martin's web-site proposals were accepted.



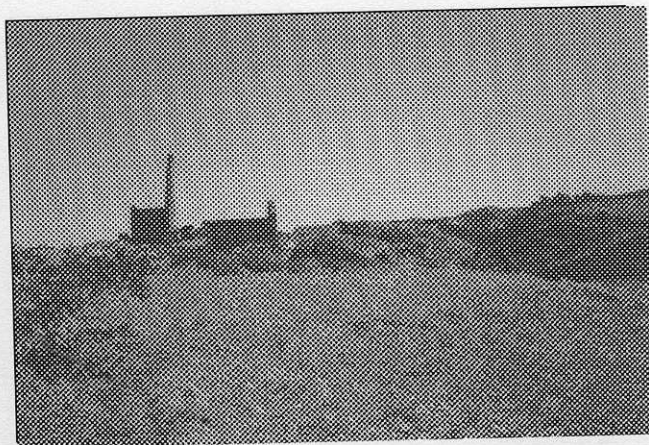
The final session was dedicated to discussion of how the local activists could change attitudes in and around Linares to these mine remains and then create a wider awareness with a view towards exploiting their tourism potential. Between them, the delegates had considerable expertise to offer. All the MINET delegates were undoubtedly awe-struck by the sheer immensity of this almost totally unknown "Cornwall in the sun". Ken Brown, in particular, was in a seventh heaven of happiness, recording and measuring engine houses from dawn to dusk: not even being chased by a herd of black bulls put him off! Many constructive suggestions were offered, including a proposal to twin Linares with Cornwall as a mechanism to heighten the international profile and local awareness of the value of the Linares heritage. Amongst our own offerings, John, for instance drew attention to the integrity of the natural and man-made landscape and outlined how the new EU Framework 5 programme could offer an opportunity to develop demonstration projects. Martin offered his template for a mining inventory. Eamonn assured them that there had also been negative local attitudes at Silvermines and how that had turned around. Des advocated that listings of sources of information on the mines, both printed and archive, be compiled. All these suggestions have been amplified, added to and expanded subsequently in a detailed SWOT analysis, the primary site report mechanism being used by each delegation.



Nothing remained except to express our sincere thanks to our hosts for their generous hospitality and next morning the 300km. drive to Madrid having quickly taken in just a few more engine houses. A last stop at the Pozo Ancho complex of 2 engine houses, one that of a 60" pumping engine, the other an 18" winding engine, finished our visit on our dash back to Madrid. But this site also provided an enduring image of local conservation actions - a solitary chimney, totally surrounded by an olive grove, capped and surmounted by an angel! This is a region which we all agreed was well worth a return visit, an aspiration reinforced by the return to the dull grey, leaden skies over Dublin.

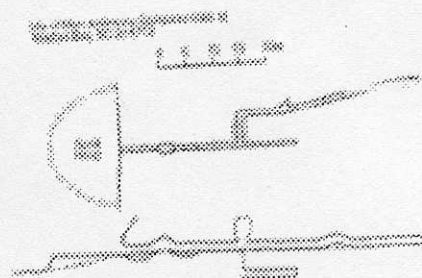
ISLE OF MAN, 30TH APRIL - 3RD MAY 1999

A total of twelve MHSI people (4 arriving from the east, the rest flying from Dublin met in Douglas on Thursday evening 29th April. The next morning, by way of visit to Tynwald (site, it is said of the earliest modern democratic assembly) and its museum, we came to Peel and took the coastal walk south to look at three slate quarries. Apart from their intrinsic interest John Morris' intimate knowledge from mapping the area (published Summer 1999) added an enlightening dimension as the significance of various slate horizons were interpreted including the wonderfully exposed "flute" bed representing high-speed mud-flows down a continental shelf.



Beckwith mine buildings

From there, via a delightful lunch in the sunshine, to the Mona Erin mine in beautiful Glen Maye. The wheel pit there was in fact a large overground structure. Those intent on underground exploration were disappointed with the three adits but the rest of us loved the valley. From there to the coast at Niarbyl and a long scramble across the rocks (unnecessary as transpired - we'd missed an easy cliff-top walk) to the island's only antimony mine identified by its spoil heap. The intrepid were reasonably satisfied with the adit, the rest, very, with the sun and scenery.



From there we drove to South Barrule with its surprisingly extensive (in view of the reported low quality of the slate) quarry. A feature of it was what appeared to be a windmill used seemingly to dress the slate. Back to Douglas to change and meet our hosts of the Laxey Mines Research Group appropriately in the Mines Tavern.

Matthew Parkes' plan and section of Niarbyl.

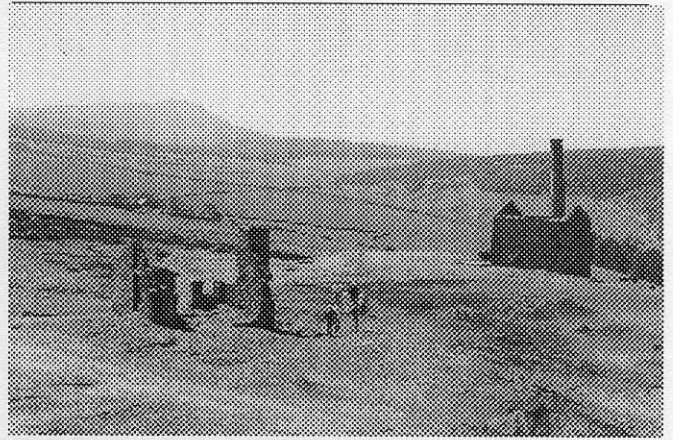
Over the next two days we found out what they mean by "research". It comprises physically hauling debris out of the local mines to expose the mechanisms beneath. At Laxey they walked us past the great waterwheel without comment for us to view their major projects underground and their surface connections. From the mornings activities we gleaned bits about the wheel. It first turned in 1854 to pump the rich lead-zinc veins below. However, its siting and ornamentation was designed to attract tourists. Unfortunately for the LMRG the underground state of the pump shaft makes them currently inaccessible.



South Barrule windmill

As the mine reached greater depths and time on the ladders increased, the decision was made in 1881 to erect a hydraulically driven man-engine. We looked at the complex of pipes and cylinders through which this operated just underground and at the iron rod which disappeared below. To what we were told was a balance-bob in the entry adit from where the platforms of the man-engine began.

That afternoon saw us there, right at the other end of the iron rod gazing in awe at the giant underground bob. To get there we had walked waded clambered and slithered for nearly a mile beneath along the main adit circumventing its various blockages. While the shaft below was debris-filled, it was easy to envisage the cyclical down-stroke and return imparted by the bob. Strangely the man-engine itself brought the miners less than half-way to the bottom of the workings, possibly because it was operating at an angle of 12 degrees. We penetrated further to Dumbell Shaft before resurfacing through the adit.



Beckwith mine

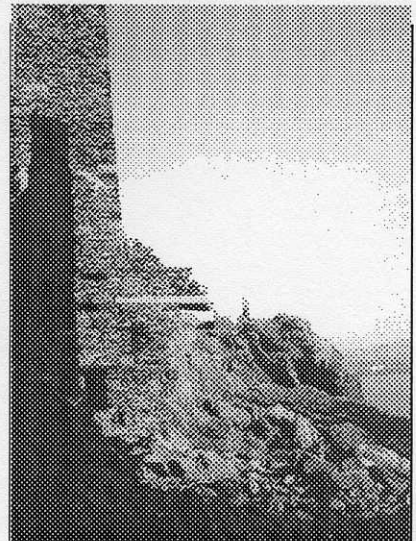
At Laxey also we saw the complex water systems including the diversion of the Glen Mooar river through a tunnel in the late 1840s. Peter Geddes explained how the water turbines worked and were linked to the winding equipment as well as the various arrangements for air compressed drilling dating from the 1880s. We were also given details of the highly ambitious hopes of the LMRG to expose and make safe even more of the underground workings.

Next day, Sunday, some of the party travelled Victorian style by steam train to Port Erin to meet the Laxey group again. They had the access key to North Bradda and requested our assistance to bring wheels and base for a wagon they were constructing to clear rubbish out of an adit they were working on. This transpired to be at the base of a precipitous cliff! Safely negotiated and the wagon having been constructed, we clambered along the water's edge to another adit.

In everybody's life-time there are defining moments and some of us baulked at the vertical climb on stemples to give access to the level above. Those who persevered faced other hazards – a shaft bridged only by a narrow plank and a shaft without a plank to be negotiated only on a narrow ledge. Those MHSI

members who were unaccustomed to such activities emerged palely on a cliff ledge where stood an engine house. Having duly inspected this they turned back to face the same hazards followed by the clamber and the long climb up the cliff. There are defining moments --!

In the afternoon, the walk to the cliff-base engine house at south Bradda was along a delightful path followed by leisurely scramble over rocks. A happy hour in sunshine was spent there with Peter Geddes speculating on why on earth it was built there rather than on the cliff-top. A hole at the bottom of the square chimney was patched-up before we made our way back to enjoy the hospitality of the Mines Tavern.



South Bradda mine

Next day we met Peter again at the excellent Manx Museum where we managed to pick up various publications on the mines and

minerals of the island. From there to the Foxdale mines via a cursory inspection of the rather dismal "Snuff the Wind" (how not to conserve a mining site), to the more intriguing complex at Beckwith Mine

dominated by the “banana” chimney (such is its tilt). A number of wooden beams from leats lay scattered on the upper surface and from there at least one major watercourse feeding three waterwheels in sequence down the valley slope. Again we spend a happy hour speculating on the largest wheel pit at the bottom. If the large arch immediately uphill carried the rods, how did the water reach the wheel ---etc.? Peter regaled us with stories of ochre sludge underground.

The final stop, after lunch, was at the low promontory of Langness near the airport. Peter presented an angular-S-shaped engine-house and asked us to guess where the shaft was. Learned expostulation took place and sagacious consensus was arrived at identifying the vicinity of a furze bush. Peter jumped in the engine house evoking a hollow echo. (He has since drilled through the cover confirming that the shaft was indoors). More debate – how were they winding from within such a small engine house?

On the basis that it is better to speculate hopefully than to arrive (at conclusions) we took our departure from the airport. We said goodbye to the Goslings and Saunders who intended spending another few days on the island before heading back to Bristol and Cornwall respectively. A special handshake for the indefatigable Peter Geddes our mentor and guide and through him all the stalwarts of the Laxey Mines Research Group. We look forward to meeting some of them in Silvermines in November, rather conscious that our interpretation of mine heritage “research” is anaemic in contrast to their more robust version.

THE BUNMAHON INITIATIVE – MULTIPLE LAUNCHES, 23rd MAY

At 10.30 on Sunday 23rd May local people were joined by some very distinguished visitors from Dublin to hear Dr. John Morris’ introduction to the *Copper Coast*. Its origins were, he explained, muds at the bottom of an “Antarctic” ocean, later riven by two separate volcanic events, inter-layered with the petrified life of a teeming shallow sea and equatorial desert sands. His graphic descriptions were accompanied by a series of vivid drawings. From there along a cliff-path to “The Pipes of Baidhb” – two series of columnar volcanic rhyolite marching up the cliff towards an arch long gone.

A concourse of about a hundred people gathered in and around the Museum and Resource Centre (“Heritage Centre” the nicely painted signs said) opened by local historian and broadcaster Julian Walton. In paying tribute to those most involved in creating the displays he paid special tribute to Mr. Ike Wilson who not only collected the mining and mineral displays but physically made and erected the cabinets. In introducing the show mine he gave great praise to its creators, Chris Morrissey and Micheál Kavanagh.



Following the formalities, people took patient turns to view the exhibits and enter the show mine (some circulating several times to savour the full effect). Those who wondered whether the vivid greens and blues within were exaggerated had their attention drawn both to the mineral display and to photos taken underground. From there around the corner to the hospitality (thanks to Bunmahon Caravan Park and Tidy Towns) of Hayes’ pub presided over by Mary Galvin. In the sun-drenched garden there John Morris introduced the pamphlet series providing a simplified lavishly illustrated introduction to the rocks of the Copper Coast. These were then formally launched by Dr. Peadar McArdle, director of the Geological Survey of Ireland and put in context by Dr. Martin Critchley, Chairman of the Mining Heritage Society of Ireland.

From there the party moved onto the site of the Geological Park, introduced by Ike Wilson. The sad story of why it was still only a site was explained by Des Cowman. John Morris put the rocks that were sitting there awaiting distribution into the context of the morning’s field trip. Finbarr Moore, archaeologist, Dúchas, explained the significance of the two local ogham stones in relation to how they are to be incorporated into the rock garden as a solar alignment.

From there John Morris led the group along the "Copper Trail" where people had an opportunity of assessing the newly erected explanatory plaques giving an overall picture of the various phases of the 19th century mining operation. He brought the Tankardstown engine houses to life with his posters of similar ones restored in Cornwall and outlined the conservation plans for these local ones.

At 6.00 we reassembled in Knockmahon Lodge and were addressed by Minister of State, Martin Cullen. He professed himself "astonished" in particular by the Museum and, pointing out the importance of people taking initiative in their own localities, bestowed praise on those involved. Having enjoyed Karen Tobbe's lavish hospitality we settled in her studio to hear Dr Richard Braithwaite explain what is special about the local mineralogy, Finbarr Moore put the two local ogham stones into their wider context and Turlough Cowman tell how vertical stone time-markers have worked and can be put to work. Questions and answers rounded off a memorable day.

[Apart from those referred to above, special thanks is due to David Crowley of Crowley Furniture, Bunmahon who donated the beautiful ash display cases, the screens and desk to the Museum]

SOCIETY NEWS

ITEMS RECEIVED BY THE SOCIETY.

1 From Alan Williams five folders relating to Abbeytown Mine, County Sligo. Alan writes: "these were given to me by John Bennet of the Welsh Mines Society a few years ago".

- Tabulated drilling results by Johannesburg Consolidated Investment Company Ltd., 1950-'53.
- Statements of Account 30th April 1951 and 1954.
- Miscellaneous correspondence 1953-'55,
- Correspondence, mainly re Technical Assistance Grants 1960 and '61.
- Diamond drill logs, some dated 1961, rest undated.

Also presented by Alan a copy of *Memoirs of the Geological Survey* 1871, Sheets 81 & 82 (Louth, Meath and Monaghan).

2 John Morris has kindly donated to the Society a copy of the video ' *Manx Mines and Minerals. The Story of Mining in the Isle of Man* '. This is a comprehensive and well researched documentary on the Isle of Man mines. It contains extensive historical footage as well as a valuable underground section, aided by the Laxey Mines Research Group, who gave the Society such an excellent trip. As with other videos and publications it can be borrowed by members from Matthew Parkes

MEMBERSHIP

WELCOME TO NEW MEMBERS

The Department of Mineral Engineering, Institute of Technology, Athlone as Institutional Members

Andrew Catt
31 Wellens Way
Middleton
Manchester
M24 4PB
England

Mark Redmond
129 Meadowgate
Eston
Cleveland
T56 9LD
England

Also welcome to Eamon Lynch and Noel Dwyer

CORRECTION AND ADDRESS CHANGES

Andrew Cassells
3 Lindsay Brae,
Highfields, Dunblane,
Perthshire, FK15 9FB
Scotland

Peter Cloughton,
Blaenpant Morfil,
Rosebush, Clynderwen,
Pembrokeshire, Wales SA66 7RE.
Tel. 01437 532578; Fax. 01437 532921; Mobile
0831 427599
University of Exeter - Department of History,
School of Historical, Political and Sociological
Studies
E-mail: P.F.Claughton@exeter.ac.uk

Rowena Magdan
104 Old Chester Road,
Castle Bromwich,
Birmingham, B36 0AL
England.

Aisling (Ash) O'Sullivan
Wetland Ecology Research
Department of Botany
University College Dublin
Belfield, Dublin 4
Ph: 353-1-7062245
Fax: 353-1-7061153
Email: Aisling.OSullivan@ucd.ie
<http://www.ucd.ie/~wetland/wethome.htm#Aisling>
<http://www.ucd.ie/~wetland/aisabs.htm>

Conor Spollen,
21 Richview,
Castlecomer Road,
Kilkenny,
e-mail:- cspollen@minorco.ie

NEW/ALTERED E-MAIL OR PHONE.
Noel Davin -nivad@tinet.ie
Mary Mulvihill, ph. 01- 670 5029

Starkey - ROYSTARKEY1@compuserve.com
Dr Richard Unitt -runit@bureau.ucc.ie

LETTERS

MINING ACCIDENTS (1)

Since I am trying to locate the place of origin of a great grandfather, William Moylan, I needed to know where working mines had been located. He was said to have been killed in a mine ca. 1870-80 in either one place or the other. Would you mind informing me where I can see a list of mine disasters or miners killed in mine accidents?

Mary Kay Whitehead,
Braham MN USA

MINING ACCIDENTS (2)

I am a retired teacher who has spent much time researching mining history in Great Britain. have, and am still working on a Database of Mining Deaths in Great Britain which at present runs from 1850 to 1899 and contains over 50,000 names of men women and children killed and injured in the mines and quarries of Great Britain (including Ireland). I have also written and reprinted books on mining history and edited many of the 1842 Royal Commission Reports of Children in the mines.

I have an embryo web site:-
<http://wkweb5.cableinet.co.uk/ian.winstanley>
Ian Winstanley

SLATE QUARRIES

In researching and writing up the history of the slate quarrymen who emigrated to Vermont USA from Tipperary and Kilkenny in the mid 1800s, I've had a hard time finding much of anything. on the history of the Irish slate industry they left behind. Any suggestions would be greatly appreciated. Sincerely, Peter Patten (TYRTIPP@aol.com)

RUDOLF RASPE

I'm interested in Rudolf Erich Raspe and I've just finished reading his biography by Carswell, "The Prospector" (1950). It's a fascinating story but, unfortunately, gives very little detail about Raspe's short stay in Ireland. It seems he travelled to Dublin late in 1793, visited mines near Arklow (presumably Avoca) and then went to Muckross where he died a few months later. Carswell gave just two references for Raspe in Ireland: R. Hayward, 1946, "In the Kingdom of Kerry"; and E. Wakefield, 1812, "An Account of Ireland, Statistical and Political". His employer at Muckross was one Henry Herbert who owned the estate. If the family papers survive somewhere they'd be worth a look at. Meantime, any help or suggestions readers can provide concerning Raspe would be much appreciated.

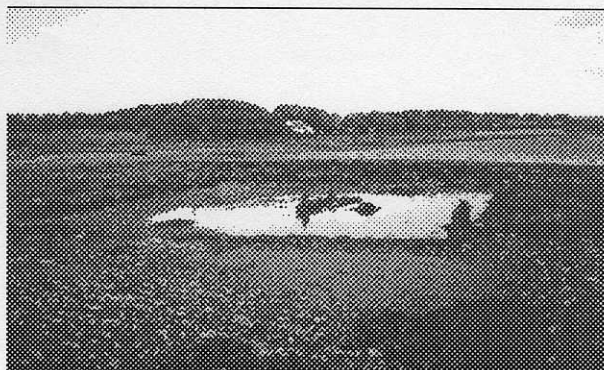
From Stephen Moreton.

BANNOW LEAD MINES, COUNTY WEXFORD.

Robin Leigh of Rosegarland draws attention to a feature in the tidal zone nearby associated with Bannow Mines and provides photographs. As illustrated here it comprises a shaft with a wooden almost-square surround some 9m by 9.5m which also has an entrance feature. It comprises planed oak planks about 2.5 cm thick. A shaft in the middle was filled with stones by the county Council some years ago. The line of stakes seems to border this.



One interpretation is that there has been steady intrusion of the sea in Bannow Bay. During the last major working of the mine at Barristown (variously spelled) between 1845 and 1851 the shaft here may have been subject to flooding at high spring tides. The outer planking possibly acted as a protective collar. The inner planking could be the remains of a second collar which also shored up the sides of the shaft. Possibly there was a whim associated with this with pumping being done by the steam engine.



A MINER'S GRAVE?

Julian Walton reports on finding a headstone hidden by a holly bush in the north-west corner of St. Patrick's graveyard, Waterford city. It reads:

*Heare lies the body of Ann Plent who departed
this life 29th September 1790 aged 40 years. Also
the body of John Plent who departed this life the
(2)9 of October 1800 aged 67 years. Also four of
their children who died in their infancy.*

*A Minor's (sic) life is spent
By searching in the earth
And not content therewith
Till laid therein by death*



VARIOUS

ADDITIONS TO IRISH MINING BIBLIOGRAPHY (since 1950)

(as published in MHSI Newsletter 4).

Mining in the Kilcrohane area, by Frank O'Mahony from *Bantry Historical and Archaeological Society* JI Vol 2 1994. 18pp article with map. Gives details of these Irish mines and examines reasons for their closure.

Cappagh mine an endangered heritage site by Tom Reilly and Des Cowman from *Mizen Journal* No 6 (1998). 12pp article with line drawings and plan of these Irish Mines which have the most complete set of surface ruins in West Carbery.

Our mining past: the metal mining heritage of Cork by William O'Brien (Cork Public Museum 1994), pp23.

Avoca mines by Ernie Shepherd from *Arklow Historical Society Journal*, 1986. 12pp article with plates and line drawings examining these mines in the Wicklow Mountains, Ireland.

Avoca; Our mining Heritage (A Brief History of Metal Mining in the Vale of Avoca, County Wicklow) by Alan Thomas and Peadar McArdle, (GSI, Dublin 1998). Generously illustrated.

The accomplished art: Gold and goldworking in Britain and Ireland during the bronze age (ca. 2300-650 bc), by G. Egan, Oxbow Monograph 42, (Oxford 1994), pp 199.

Nixie Boran and the colliery community of north Kilkenny by Anna Brennan and William Nolan in *Kilkenny History and Society* (Dublin 1990) pp 567-590. Recollections mainly of labour relations 1917 to closure in 1969, plus twelve photographs.

Nicholas Boran, Jimmy Walshe and the Castlecomer miners, letter from Peter O'Connor in *Saothar* 23 (Irish Labour History Society 1998), p. 10. Recollections of labour personalities.

Hibernia im Ruhrgebiet: William Thomas Mulvaney and the industrialisation of the Ruhr, by Jim Dooge in *History Ireland* (Autumn 1997) pp 31-35. This contains three illustrations and two maps. It is an extension of an article by Olaf Schmidt published in MHSI Newsletter 1. An article and book on Mulvaney mines in the Rhur are cited, viz –

W.T. Mulvaney: an Irish pioneer on the Ruhr by W.O Henderson in *Britain and Industrial Europe* (Liverpool 1954), pp 179-193.

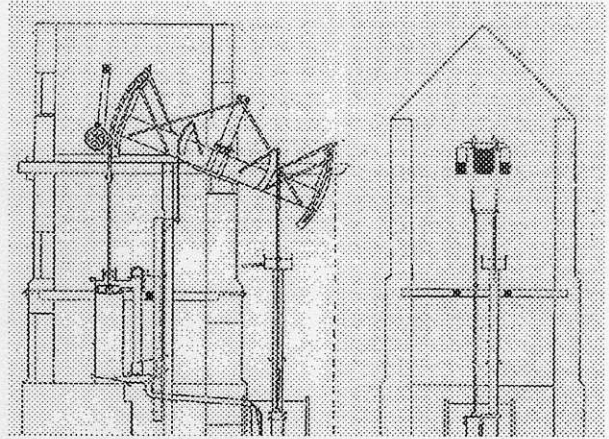
Thomas Mulvaney (1806-1885) by K. Bloemers (Essen 1922). In German only.

Fassadinin: Land Settlement and Society in south east Ireland 1600-1850 by William Nolan (Dublin 1979) re Castlecomer: pp 92-97 "Coal and change" 1700-1800; pp142-148 "Middlemen and coal" 1800-1840; p. 216-218 "Landlord involvement in mining" 1840-1850.

Irish Immigrants in Cornwall: the Camborne experience, 1861-'82 by Louise Miskell in *The Irish in Victorian Britain; The Local Dimension* (Dublin 1999), pp 31-51. Makes the point that there were Irishmen mining in Cornwall.

The First Boulton and Watt Steam Engine in Ireland by G. Bowie in *Irish Engineers Journal*, March 1973, pp20-21. Erected 1782 at Doonane Colliery, Co. Laois (part of Castlecomer coalfield) to replace Newcomen engine of 1740. (Illustrated right)

- The first three per Adrian Pearce, contributed by Tony Oldham, Specialist Bookseller for Mines and Caves. The last was supplied by Dr. Tom Reilly. If anybody else finds hitherto unlisted references published post-1950 do please send them on.
- Visit the British Mining Database for references to all kinds of mining subjects.



The first Boulton and Watt engine in Ireland.

["http://wkweb4.cableinet.co.uk/adrian.pearce/BMD.HTM"](http://wkweb4.cableinet.co.uk/adrian.pearce/BMD.HTM)

- The Federation of Local History Societies, of which MHSI is a member, published its Local History Review (Vol. 9, 1999) including reports on MHSI activities as well as activities of about 110 different groups around the country. If any member wishes to consult it please contact Matthew Parkes.

CORNISH ENGINE HOUSES IN IRELAND V

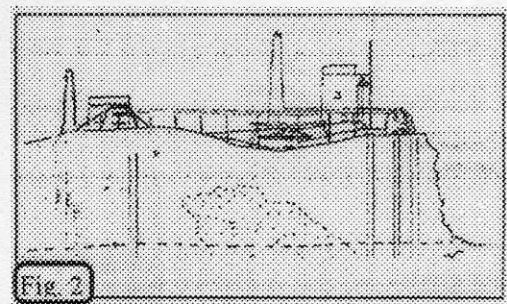
By KEN BROWN¹

KNOCKMAHON/TANKARDSTOWN

Topographically the mine here bears some relationship to Wheal Trewavas in Cornwall being situated on a south facing cliff. The lodes trend north east to south east stretching out diagonally under the sea. The principal engine shaft on Stage lode (called Purdy's after the company secretary) was situated on the very edge of the cliff with the engine facing seawards. .

The pumping engine here was a 50 inch, designed by William West and shipped out by Harvey & Co in February 1837.² It had a 9 foot stroke. The boiler had been despatched a month earlier on Harvey's vessel "Carnshaw". In April 1838 Harvey sent another engine to Knockmahon, an 18 inch rotative engine, 4 ft. stroke, presumably to drive a whim and crusher.³

Both of these are shown on a plan of 1840. At the pumping house (right) the sheer legs are clearly discernible with what appears to be the roof of the boiler-house extending to the stack. On the near side is the manual capstan for handling the pit-work, rod-changing, etc.. It has a conical wooden roof on it in an attempt to keep the hemp rope on the drum beneath dry. (I doubt whether this was very effective!). As this was the usual practice at the time, in some place only the circular evidence of the capstan shows us where a pump shaft once stood although that is not the case in Knockmahon.



The second "whim" engine is for raising the ore in kibbles. A drive shaft comes out of the wall with a flywheel inside. driving a pair of narrow drums (called confusingly "cages") set horizontally on an

¹ Apologies to Ken Brown for mislaying this which should have formed part of the main series, the last of which appeared in Newsletter 8. It was found too recently to send proofs to him.

² . Harvey's Letter Books, 4th February 1837. Harvey says that the delay in delivery was due to having to take up the deck of the vessel Nautilus.. the engine was probably a sister to the Holmbush 50 inch in East Cornwall.

³ Harvey Ledge, no. 16 gives cost of !31580 for the engine and £286 for the boiler.

upright shaft by means of a bevel gear. The twin ropes are then carried to a separate shaft close to the pumping one where they descend over a simple A-frame with pulleys.

About 1850 Knockmahon was showing signs of exhaustion and the company took the bold step of moving engines and engine houses eastwards to the newly discovered Tankardstown. This was done under John Petherick (born 1804) who had come to Knockmahon about twenty years before from Fowey Consols. Having masterminded the move he returned to Cornwall as a consultant.

The remains of these engine houses still stand at Tankardstown. Measurements there confirm a 50 inch engine with 9 and 8 foot strokes once stood in the rendered larger engine house there. Not much remains of the whim engine which seems to have been all enclosed and stood at right angles to the pumping engine indicating that the same shaft was used for both operations. The line of the boiler-house roof is still clear at the latter and the truncated chimney that stands between them probably served both. The entrenchment for the rail that carried the ore from here to the dressing floors on the river-valley below Knockmahon is still clear on the seaward side of the road.

To the north lies a later engine house in fine condition with boiler-house attached but only the base of a stack. It seems to have housed a rotative engine about the same size as the one preserved at the Levant mine in Cornwall. It probably pumped and hoisted from a shaft a short distance away. It has fine brick arches to the window but two of them lie directly beneath the line of a cross girder that would have carried the engine beam. This is definitely not a Cornish feature.

DU NOYER PHOTOGRAPHIC COMPETITION

Entries are invited for the first Du Noyer Photographic Competition

George Victor Du Noyer, who served as a geologist with the Geological Survey of Ireland from 1847 to 1869, was a skilled field artist whose numerous sketches and pictures, with their combination of artistic skill and technical accuracy, were the "field photographs" of their day. This competition seeks to encourage the same blend of artistic and scientific skills through the modern medium of photography.

An objective of the competition is to encourage geological photography with a high technical and artistic content and also to add to a central collection. The photographs entered may be recently taken images but older, historical photographs, especially ones not in any archive and liable to be lost, would be welcomed and so conserved.

Entrants may submit photographs [prints, slides, digital images etc. are all acceptable] illustrating an aspect of field geology in Ireland in one or more of the following categories:

1. Open category
2. Photographs by a person under 18
3. Most interesting historical photograph[s]

Prize money of £150 will be awarded in each category

All photographs entered must be clearly labelled with the following information:

Name, address, telephone number, fax, Email of entrant/photographer

Short title/ description of geological/historical content of photographs

Place and Date when taken

Category being entered

[please do not write directly onto the photographs]

It is a condition of entry that the GSI, on behalf of the organisers, will retain the entries as part of a photographic database on Irish Geology and that the GSI may use these photographs where appropriate in their publications, subject only to acknowledgement. Entries will be judged by a panel including representatives of the IGA, the GSI and external nominees and their decision will be final. Entries will be exhibited and prizes awarded at the GSI Awards ceremony in December.

Entries should be sent to: The General Office, Geological Survey of Ireland, Beggars Bush, Haddington Rd, Dublin 4. and the envelope marked "Du Noyer Competition"

The closing date for entries for the first [1999] competition is:

Wednesday, 1st September 1999

This is organised by IRISH GEOLOGICAL ASSOCIATION/GEOLOGICAL SURVEY OF IRELAND