



NEWSLETTER

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Iontaobhas Oidhreachta Mianadóireachta na hÉireann

Mining Heritage Trust of Ireland

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MHTI PROGRAMME OF EVENTS 2005

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

29/30 October. EUROPAMINES trip to North Pennines, visiting Killhope Mine, Durham. This is also the first formal AGM of EUROPAMINES.

Contact Ian Forbes at Killhope for further information
+44 (01388) 537505 Fax: (01388) 537617

Email: killhope@durham.gov.uk

www.europamines.com

Next MHTI Board meeting on Thursday 13th October in GSI

ADVANCE NOTICE

MHTI AGM for 2005 will be held in Bantry, Co Cork provisionally in late March 2006. Subject to finding a suitable venue and available date. It will be an opportunity to visit some of the superb mines in the district, with the formal AGM at a time outside best daylight hours.

EDITORIAL

As will be apparent from the table of contents here, a great deal of work is being done relating to Irish mines and miners with new information constantly emerging. Some were unexpected such as Avoca miners in Mexico in 1825-'26 and the large number of Irish people that wound up working in Cornish mines. This has come out of research being done by members and the contacts they make. Others prefer the hands-on approach, with the hands often being on ropes to swing into inaccessible adits. All will be in due course reported on.

MHTI's expertise has been given formal recognition in that it has been consulted by Galway County Council in relation to a road scheme that potentially impinged on the remains of Derryvlea mine. Consultation and participation in the RTE film on Allihies is reported within. All this indicates a very healthy state of organisational, formal and informal activities in MHTI. Some of its developments within the Copper Coast have already been reported but details of that will be given in Journal 5.

Once again, thanks to all who have sent information – an option that is open to all. And thanks to Matthew Parkes who converts very raw material into a refined product.

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WWW.MHTI.COM

CORRESPONDENCE

Avoca Miners in Mexico

My current research topic involves British interests in Mexico in the period from more or less 1820-1860. In the early 1820s, a large number of joint stock mining companies were set up and millions of pounds raised from British investors to be spent on developing Mexican silver mines. One reason why so many people put their money into these Mexican ventures was the publicity that Mexico attracted in the 1820s. This came largely from the first ever exhibition of Mexican artefacts and culture that was put on in London in 1824. The promoter of that exhibition and himself the owner of a silver mine there was William Bullock.

Bullock's daughter, Ann Elizabeth or perhaps Elizabeth Ann, was married to one Hodgson of Wood Vale, Arklow. He must have been the Henry Hodgson who had leased Ballymurtagh and Ballygahan mines from the Hibernian Mining Company. Bullock, his wife and younger daughter went to Wood Vale in 1825 for a visit before they left for Mexico in 1825. There is also a clear reference to Hodgson being involved in mining and being in London in 1827, having lunch with Bullock's uncle, and seeking to raise more funds for his own mining company in Ireland by the sale of shares. This must have been the preliminary to the establishment of the Wicklow Copper Mining Company that worked Ballymurtagh.

While in Arklow, Bullock almost certainly recruited the 14 miners who accompanied him to Mexico and it seems that the whole party left Liverpool for Mexico in September/October 1825. Bullock and his Irish miners worked his silver mine at Temascaltepec (Mexico). There was a big St. Patrick's day dinner in Mexico City attended by 80 people in 1826. Mining continued until around September 1826 and then, it seems, it was abandoned on economic grounds. It is not yet known what happened to the Irish miners. Some presumably returned to Avoca with many stories to tell. Bullock continued to have an adventurous career until his death in London in 1849.

M. Costeloe, Bristol University

Martin Bundy, Cornish Miner in Ireland

In a book of paintings called *Wild Lakeland* with text by MacKenzie MacBride (A & C Black Ltd., London 1922), Chapter 49 has some details Bundy's mineral exploration of Ennerdale Water in Cumberland. In passing, however, the chapter states:-

"He it was who discovered the copper on the estate of the Parnell family at Avondale in Ireland. ---- He it was who was lowered down with a rope around his

waist to examine the lode of copper which had discovered in the great cliffs at Lough Murraghera on the coast of Mayo. He had a lease of the mines and showed his splendid engineering skill in tunnelling and scaffolding on the face of the 1200-foot cliffs. --- Mr. Bundy was the lessee also of the copper mine at Srahlaghy some seven miles further inland across the great bog. There as everywhere he went, he was the wise father of the village – employer, counsellor, medical advisor and sick nurse".

Whatever about this latter judgement, more objectively, though from Cornwall he described himself as an "iron merchant based in Liverpool and he worked a "Bundy Mine" in west Cumbria in the 1880s.

Alastair Lings

Irish Balmoidens in Cornish Mines

While research has taken place relating to Cornish miners in Ireland, almost nothing has been done which indicated that there were Irish miners in Cornwall. Out of Lynn Meyer's pioneering work on the Balmoidens there she has generously provided MHTI with details from the enumerator's household returns from the censuses of 1841, '51 and '61 This indicates entire Irish communities, mainly from West Cork, it seems. Most of these girls were with members of their families, generally with parents, but there were differing circumstances.

For instance, in 1851 forty-eight year old Catherine Driscoll had her late husband's young nieces staying with her – Mary 15 and Catherine 11. All three were "mine labourers" near Illogen. Aged only 10, Ellen Crowley lived in Camborne with two 21 year olds – her sister Mary and a Mary Donovan. Each of the three was described as "a copper Mine Girl". The two young Mahony girls, Margaret 15 and Mary 13, were respectively "tin mine dresser" and "tin mine girl". The tragedy that saw these waifs boarded with the Gogan (or Gogen) family near Camborne in 1851 goes unrecorded.

The implication is that almost all of them were famine refugees. Of the 42 names listed below, only one was there in 1841. This is borne out from other analysis of enumerators returns for the Camborne area (Miskell, 1999) which shows that of 164 households of Irish-born parents, only three had children born there pre 1845 plus another four born in other parts of Cornwall. Of the list below, 17 had arrived by 1851 and over the following decade a further 24, although this is only a rough indicator.

There is no pattern indicating a distinction between the 1851 cohort and that of 1861. Neither is there any evidence from this small sampling of any ghettoisation, although there is a certain amount of clustering in the Camborne area. While there is no indication of how or why any of these Irish families got

to Cornwall, there are some pointers against looking for a homogenous explanation. Tin dresser, Mary Temperly, aged 13, came to Wheal Back from Ireland by way of Jersey where her sister had been born two years before. Assuming names give a clue, Mary Tregelias may have only been returning from Ireland with her (widowed ?) mother Mary as could Mary Pryor (?) aged 30, daughter of the widowed Catherine Bromley. Likewise Miskell's 1861 analysis shows that twenty four of the 164 children of Irish parents were born in England or Wales on their route to Camborne. While research has taken place relating to Cornish miners in Ireland, almost nothing has been done which indicated that there were Irish miners in Cornwall. Out of Lynn Meyer's pioneering work on the Balmaidens there she has generously provided MHTI with details from the enumerator's household returns from the censuses of 1841, '51 and '61. (on web site) This indicates entire Irish communities, mainly from West Cork, it seems. Most of these girls were with members of their families, generally with parents, but there were differing circumstances.

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This is not be exhaustive, because the enumerators seem to under record female employment (and therefore those at the mines) on a regular basis. (Some parishes by as much as 20 to 30%). They very often forgot to record place of birth as well. Also, the 'Irish' balmaidens were generally among the youngest in the parish - perhaps emphasising the extreme poverty of these families. Work on these census books is ongoing but already digital versions are available at reasonable price of families with Irish-born members, from the Cornwall Family History Society – see <http://shop.cornwallfhs.com>

From Lynne Mayers via Diane Hodnett

Warrentown Mine, Donegal

It is a particular pleasure to receive correspondence concerning historic mines in parts of Ireland which do not otherwise feature regularly in MHTI publications: on this occasion, in Donegal.

May McClintock [An Taisce], New Mills, Letterkenny, wrote enquiring about information on a lead mine in Warrentown, near Derryveagh, which is to be the subject of an archaeological dig to be undertaken by Dr. Charles Orser of Illinois State University. Sadly, there seems to be very little information about this mine, or another in the adjoining townland of Aradaturr, other than what is recorded on 19th Century GSI 6 inch geology field sheets. These note that the mines were developed as trials during the 1840s, on an ENE trending lode, which, at Ardaturr, contained a lead vein 3 inches wide. Shafts were put down at both locations, to depths between 15 and 20 feet.

May subsequently provided further information. She notes the foundation level ruins of several houses beside the Warrentown mine, two of which were occupied by non-local cousins, surname Lawn and Armstrong [Griffith valuation survey]. These families, along with many others, were evicted during the 1860s. Some of their children subsequently emigrated to New South Wales, where they were recorded as “quarrymen”. The archaeological dig will start in 2006, at Glenveagh Cottage, beside the lake, while excavations at the mines will be undertaken in 2007. This should provide an exciting opportunity for an MHTI visit in that year.

**MHTI FIELD TRIP TO GORTAVALLIG,
SHEEPS HEAD, AND
BALLYCUMMISK, CO. CORK:
AUGUST 20 – 21, 2005.**

A small group of MHTI members, as well as Sharron Schwarz from the Institute of Cornish Studies, Univ. of Exeter, enjoyed an extremely interesting visit over this weekend, an excursion inspired by the enthusiasm of two local enthusiasts, Paddy O’Sullivan and Barry Flannery, who is undoubtedly the youngest member of MHTI: to Barry and his mother, in particular, we extend our sincere thanks for accommodating all of us on the Saturday night!

Saturday was spent at Gortavallig, a remote 19th Century mine located on a cliff top site, towards the southwestern extremity of the Sheep’s Head peninsula, overlooking Bantry Bay and the Beara peninsula beyond. Paddy has spent a considerable amount of time exploring and recording this and other historic mines on this peninsula, so the visit was very far indeed from being a step into the unknown – and as his research will be published elsewhere, the history of the mine etc will not be repeated here.



Two views of the mine site: looking down on the small harbour (?), with ore pass/decline carved out of the right hand edge of the sea stack (left); looking up the length of the decline (top right).

The group quickly split into its increasingly usual two sections, the rope swingers - and the rest of us who were more appreciative of surface delights. Indeed, it was very interesting to watch, observe and compare the

considerable efforts of Paddy, Martin, Brian and Matt abseiling down the cliff to get at some adits in the cliff



face; while subsequently Ewan and I found a path down the cliffs to get to the same location – to the bewilderment and consternation of the abseilers! But there you are – some people seem to enjoy doing things the hard way!



The hard and the easy ways: abseil - or walk down the zig-zag path!



Terrace of ten miners cottages

But the efforts of both groups were well worthwhile. For the surface group, we noted and recorded a variety of features, including a terrace of miners cottages, various shafts, and a dam constructed to provide a reservoir for water wheel powered machinery on the dressing floor. Documentary evidence indicated that this was constructed at the base of the cliff, close to an ore pass decline and what could have been a dock for a very small sailing boat. But looking down on the site over the edge of the cliff, it was very far from obvious where such a floor might have been located in such a precipitous and narrow site. It was this enigma that induced Ewan and I to find a safe and easy (!) way down the cliff – and our effort was well rewarded as we did indeed find remnants of a dressing floor, on two levels seemingly. Interestingly, the surviving surface at the lower of these levels seems to have been floored with flagstones, rather than the more normal cobble stone surface – but then there is an abundance of flaggy rocks in the cliffs and in loose debris. But we could find absolutely no remains of where a water wheel or associated machinery might have been located.

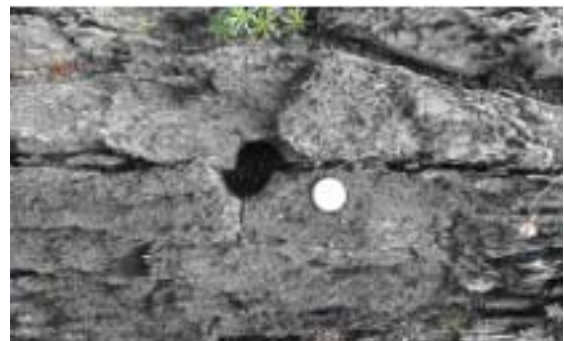


Remnant of flagstone paving, lower dressing floor.



Section through foundation of upper dressing floor, in mid-distance, with reservoir dam on cliff top above.

The most unusual discovery of all, however, has very little at all to do with mining heritage – it is primarily geology. We noticed a number of hand steel drill holes in the walls and floor of the decline path/ore pass carved into the sea stack beside the putative loading dock area. One of these drill holes is notably deformed [picture], split into two hemispheres displaced relative to each other by about 1cm. So what, you might say. The displacement is, however, parallel to a rock feature called “cleavage”, a structure impressed on to rocks when they are subject to enormous external pressures, for example during continental collision events. The displacement we observed here is very clear, tangible evidence that this part of Ireland is still responding to such geological forces. In essence, sections of this very small part of the earth’s crust have shifted, relative to each other, by about 1cm in the last 150 years or so, between 2005 and whenever the drillhole was drilled in the mid-19th Century.



Drill hole cut and displaced by movements of the earth’s crust over the last 150 years.

For those who went underground, after an abseil down a loose steep slope to the lower adit, Paddy showed us the full extent of what he had explored previously. His clever trick of having let down small labelled and brightly coloured fishing floats in each surface shaft, enabled us to tie in underground locations to surface features. The lower adit provided lots of interest, including flooded winzes which led to lower levels, but ended at a collapse. From an 1863 plan in the GSI, it is clear that much more existed beyond this point, but it would not be accessible without serious effort. A paper in the 2005 Journal will describe more fully what can be seen here.

The GSI plan did not show one of two shallower adits which we explored next. Paddy had previously stopped at a dubious looking point not far in, but we passed this satisfactorily and explored to the end of the adit, passing under a shaft to daylight situated very close to the miners cottages. A traverse across a narrow path led to the easterly shallow adit which was also fully explored and photographed as far as we could get, which was where a winze stopped progress. A ladder bridge would be required to progress further; again the plan showed much more beyond our limit that day.

The beautifully sunny day passed very pleasantly, rounded off nicely by a few pints, and a meal in a local pub, after which Paddy, Diane and Frank Hodnett, and Sharron headed their separate ways while we drove eastward to Ballycummisk – to try and find Chez Flannery in the dark. We did – and enjoyed a marvellous evening.

Sunday: what a contrast – leaden grey skies pouring with rain. We seem to be doomed to such weather each time we go anywhere near Ballycummisk! Anyway, off we headed to try and help Barry access some of the old workings, as he was keen and anxious to explore for more exotic minerals, to add to the haul which he has already scavenged from the ore dumps. Our efforts can be summarised very easily in one word – disappointing. A large amount of time was spent trying to dig out an adit portal, only to discover run-ins on the same adit at 2 locations further in towards the mine. So that effort was abandoned. Martin and Co. then did their thing abseiling into the very large open, square shaft on the site – again to be thwarted, this time by piles of malodorous refuse dumped into the shaft, and several blind headings. But there was at least one happy camper in the rain – me! Poking around heavily overgrown mounds by the shaft, I found part of a cylinder bedstone, with two holes, one still occupied by a bolt: the rest is predictable! And that was about it: we headed off soon afterwards, some enjoyed a late lunch together at The Viaduct Pub near Cork, and then headed home.



Cylinder bedstone fragment, with 2 bolt holes (37.5 inch centres)



Martin Critchley abseiling into the very large shaft at Ballycummisk to check for leads.

John Morris

Ballycummisk: Background and History

Ballycummisk mine (**V978323**) was worked from 1857-1878 and produced a maximum final output of 6282 tons of Copper ore with an average yearly output of 200-400 tons a year but in some years that figure dropped to under 70 tons and rose over 800 tons.

In 1857 a shaft was sunk almost 37m into a Quartz lode that was 60cm wide associated with Baryte with Shale mixed through it. Ballycummisk is believed to reach a depth of almost 400m because at a certain stage of its life, miners were mining a single persistent ore chute that seemed to just keep on going downwards. Ballycummisk, unlike many of the other mines in West

Carbery, was one of the most satisfactorily worked and best developed mines..

Near the end of the 1870's, along with many of the other copper mines in West Carbery, Ballycummisk's life was coming to an end because of the discovery of many larger copper deposits in America and Africa causing a fall in the price for copper. So Ballycummisk was forced to abandon working and in 1878. The mining company presumably sold off the mining equipment and the Engine.

A resurgence in the price of copper in 1905-.06 led to the reopening of many mines and the concrete structures around Ballycummisk probably date from this time.

Barry Flannery

RUBBISHING DHURODE

Paddy O'Sullivan describes his maritime visit.

I am sure that like all of us you have seen distressing scenes on television from time to time of Third-World children picking over rubbish dumps for their very survival. I never thought I would find myself in the same predicament until recently. No! this is not an item begging for money to buy a cup of tea, or even a bottle of wine in a brown paper bag – but rather an account of my recent exploits to seek out an adit to Dhurode mine on the Mizen Peninsula.

Having launched my boat from the Kilcrohane side of Dunmanus Bay, I sped across the waves to pause and scan the landscape in the vicinity of Bird Island on the Mizen peninsula. Fortunately the location of the mine is easily identified from the sea by the presence of its powder house set near the cliff edge. A little to the east of it a large mound of mine waste is heaped up on the edge of the cliff top and seems to be spilling over the side. Immediately down the cliff from the waste heap one can see what must have been and still is, the local rubbish dump. The sloping face of the cliff is littered with bits of washing machines, fridges, farm machinery, silage plastic, galvanised sheeting, broken glass, a motor car, a full assortment of builders waste and the bleached skeleton of a farm animal. The extent of the rubbish is not immediately obvious as most is shrouded in drifts of sea campion.

The rock in the area is very loose with much evidence of rock-falls and collapses over the years. I could have been climbing up the side of a gigantic bar of Cadbury's Milk Flake chocolate! Everything looked so precarious and poised to avalanche at the slightest provocation.

Nothing resembling an adit is discernible from the sea. However, I clambered ashore just in case and clawed

my way over ten-ton boulders at the water's edge to reach the foothills of the rubbish mountain. At that stage I could hear the trickle of invisible water. I followed the sound of the water which led me straight up the centre of the rubbish tip. Broken glass had to be carefully avoided and also egg-shell-thin sheets of old galvanise which collapsed at the touch of a foot and trapped the leg

As I ascended to what seemed like forty or fifty feet above sea, I found myself approaching the remains of a long-abandoned motor car. Just beneath the car I was surprised to see a stonewalled structure that looked like a shepherd's hut leading into the cliff face. I entered it and noted that its side-walls were built up with stones which supported a heavy flagstone ceiling. Ten feet in, the side walls seemed to end only to be replaced by caved-in material. Some ceiling had also fallen down at this point in the absence of flagstones for support.

However, in the midst of the confusion a black hole led inward to the cliff itself. I was just able to squeeze head and shoulders through this narrow opening. As I adjusted my head lamp; what a surprise as it illuminated a well timbered adit. Both sides and ceiling were timbered and planked to a point where the rock appeared to be solid. The side posts were angled inwards to meet the ceiling. The adit itself was flooded to within about three feet of the ceiling.

So narrow was the opening that further progress was not possible (short of joining weight-watchers). Any attempt to widen the aperture was deemed too dangerous with all that loose rock about. Photography was only possible by holding the camera at full arm's length through the opening and then firing the shutter at random. With nothing more to do I returned to daylight to take a few pictures of the outside world and vowed to forsake my new-found vocation of rummaging around rubbish tips! I hope the ragged children of the Third World will not be too disappointed by my decision!

A quick dash across the bay once more in my trusty RIB soon saw me seated at Daly's bar in Kilcrohane where a pint of Heineken was consumed with gannet-like speed. Thus ended my Dhurode odyssey.

Paddy O'Sullivan

RTE'S FILM ON ALLIHIES MINES

MHTI's consultancy role in a film for RTE in their "Townlands" series brought a number of members to

Allihies in May 2005 to participate either directly or non directly. Aspects of the latter were important as they led to the opening up of the sealed adit from 1958 which gave access to the 19th century stopes above water-level. The spectacular remains, thus made accessible, raised prospects as to the future presentation of local mining heritage.

There was also the significant presence of ninety year-old Jim McCannell, the man who had pumped out the 19th century workings to the bottom. He travelled from Canada because of his particular interest in Allihies, above all the mines he had worked at world-wide. His unexpected appearance (“*They had all thought I was dead*”, he said) provoked many local memories of his era and their reminiscences plus archives (including many photographs) which he stimulated have been collect by John Morris who will collate them and write them into the record.

John Morris himself was the anchor of the film shown on RTE I on 5th August. It also featured Martin Critchley and Des Cowman as well as some of the local people who had worked there in the 1950s. This film opportunity has been used, therefore, not only to stimulate local interest and to place it in wider context but to open the potential for the wider presentation of the area’s little known mining heritage following MHTI’s 2003’s conservation of unique and visually iconic man-engine house. The opportunity was also availed of to establish what mine records are held locally, where they are, and how they relate to the microfilms held by the Geological Survey of Ireland.

The following comprise the portions of the Puxley mine records presented to the communities of Castletownbeare and Allihies. At present they are in the possession of the former’s Historical Society but the intention is that they will be transferred to the Allihies Mining Museum when it is ready. These comprise seven bound volumes, mostly in good condition, as follows, including their locations in May 2005.

- Accounts 1811-22. In home of Brendan Finch, secretary of the Castletown Historical Society. Also in microfilm in GSI. (It was not possible to compare the content with the seemingly overlapping volume following).
- Accounts Allihies May 1812-Nov. 1818 (which includes two reports on Duneen from Capt. Nettles). In the home of Theo Dahlke for the purpose of reproducing selected pages as museum panels.
- Accounts Book 1816-1833. In the Sea World museum in Castletownbeare. May also be in microfilm in GSI (This could not be inspected as it was in a sealed glass case).
- Cost book Jan. 1825-July 1829. In home of Brendan Finch. Also in microfilm in GSI

- Cost Book, August 1829- June 1833. In home of Brendan Finch. Also in microfilm in GSI
- Cost Book July 1833- December 1837. In home of Brendan Finch. Also in microfilm in GSI
- Cost Book January 1838-June 1844, In the home of Theo Dahlke for the purposes reproducing selected pages into museum panels. Also in microfilm in GSI.

For the wider context of other manuscript sources see Williams, R.A. *The Berehaven Copper Mines* (NMRS 1991), Bibliography, Manuscript Sources, p. 210. These are probably his CABs (company account books). GSI also has a microfilm of Ledgers 1818-’47 comprising two books overlapping for years 1822-’34.

There is also an archive of material from Can Erin and its Irish subsidiary, Emerald Isle Mining Company Ltd. in O’Neill’s Bar and Restaurant, Allihies, dating from 1956-1962. Most of these are routine invoices and receipts but the most significant of them are reproduced and framed on the wall of the west room in the bar as well as a range of contemporary photographs.

A VISIT TO BALLYCORUS

Familiar to generations of south Dubliners, - yet permanently prompting the obvious question. The splendid granite chimney stack on Ballycorus hill is a remnant of a forgotten century of lead mining and smelting here. Built in 1858, its function was to disperse the noxious vapors generated at the lead works in the valley below.

Lead mining began at Ballycorus, on the west side of the hill, around 1805. Initially it was a small opencast or surface working of two veins of galena-rich ore discovered at the Leinster granite’s edge. But by 1820 mining operations had extended deep into the hillside, and the ore raised was being locally smelted to extract the metallic lead.

In 1825 the newly-formed Mining Company of Ireland took over operations at Ballycorus. It sank several new exploratory shafts, but invested mainly in expanding the smelter works to cater for the output from its other mines in Wicklow, Wexford and Donegal. Within 10 years the works complex boasted two furnace houses, rolling and pipe mills, steam engine, shot tower, silver refinery and extensive storage bunkers. Also integrated into the site were 11 worker’s cottages and a manager’s house. The Loughlinstown River was harnessed, via a millpond and watercourse, to power the mill machinery. The furnaces operated 24/7, with the ore arriving in horse-drawn trucks. By 1859 there were 130 people employed at Ballycorus, and the MCI, concerned at the level of literacy among its works

community, pushed for a local national school which opened in 1862.

The Ballycorus operations are described in Sir Robert Kane's 1844 book "*The Industrial Resources of Ireland*". The dressed ore was then producing about 72% lead, which was being manufactured into the lead pipes and sheeting used in the Dublin construction industry. A separate shot manufactory was producing the small spheres of lead used in shotguns. The mine, however, was now only being worked intermittently. In real terms it proved unprofitable and, despite native silver being discovered in 1843, it was finally abandoned as worked-out in 1860. Surviving records suggest that there are perhaps 1km of mine and drainage adits, on four levels, beneath the hill.

The smelting works did continue operating right up until 1913, mostly processing ore from the Luganure mines, near Glendalough, which from 1862 was being transported by train to Shankill. When that source ran out ore was imported from the Isle of Man via Bray harbour. Further improvements during the 1860s included a new shot manufactory with a fine shot tower. Shot was made by dropping molten lead through a riddle sieve at the top into a tank of water far below. It cooled into spherical pellets which were then separated and graded. It is a pity that this shot tower, a rather elegant 37m-tall windowed structure that had the appearance of a lighthouse on the hillside, was demolished circa 1930.

Today's landmark chimney - about 26m tall and 235m above sea level - replaced an 1836 vent system in the valley which was allegedly affecting local livestock. Old photographs show it about one third higher prior to its top section, along with parts of the external spiral granite staircase and viewing veranda, being removed for safety.

A unique feature at Ballycorus is the above-ground granite arched flue which connected the works underground flues to the chimney - a run of some 1.4km. Originally there were metal doors at 50m intervals to allow access for recovery of the economically important "dust" which condensed on the interior brickwork. The regular sweepings were worth £1,400 per annum- a return which allowed the MCI to recover the cost of its construction very quickly. The effects on the workers' health are not recorded.

These days it is just the chimney that attracts hill-walkers, but much related industrial archaeology can still be traced. A track down through the gorse brings you to the top of Mine Hill Lane, along which an overgrown but mostly intact stretch of flue runs all the way to the works site. Here the many individual buildings are now converted, derelict or gone altogether, but the extent of the original complex is discernable, and two distinctive granite pillars still

guard the main entrance. The attractive cut-granite manager's house survives, as do the cottages, gate lodge, old schoolhouse, and the watercourse.

Back on the hillside the 1860s shot manufactory is now a private residence, while on the upper slopes the scar and spoils of the early open cast mine remain - to this day devoid of natural vegetation. An interesting summer ramble, Ballycorus hill and chimney is reached after an easy climb from the Coillte car park at Carrickgollogan, and an added bonus is the majestic panorama from the nearby summit of the same name.

Paul Normoyle June 2005

**THE KNOCKMAHON-
TANKARDSTOWN MINERAL
TRAMWAY, CO. WATERFORD: A
SURVEY UNDERTAKEN SUNDAY,
SEPTEMBER 18, 2005.**

In 1959, Walter McGrath noted that while much of the Knockmahon-Tankardstown mineral tramway route was then still reasonably easily discernible, as some parts still are today, very little was known about its history, when it was constructed or how it operated. And ever since, the generalities of the tramway have been quite sufficient to satisfy most research requirements on the Bunmahon copper mines. However, the knowledge deficiency has been thrown into much sharper focus in 2005, as a consequence of commissioning a set of detailed artist's reconstructions of the 3 key sites in this historic mining centre, as part of the INTERREG 3B funded actions on the Copper Coast European Geopark.

Documentary research has added somewhat to the meagre knowledge base, but, ultimately, much will revolve around a detailed analysis of extant remains and comparison with known tramway systems elsewhere in order to create a conjectural analysis of the system. That analysis will be presented in a forthcoming paper in the special, 2005 thematic edition of the MHTI Journal, on the "Copper Coast", and, consequently, will not be summarised here. Instead, this report presents just a brief summary of what we did surveying the tramway route, on a glorious day in the sunny south-east!

It had become increasingly evident that the analysis would necessitate a reasonably accurate survey of the route, elevations, gradients and so on. While some of this information might be gleaned from existing OS maps, it was obvious that we would have to undertake a much more detailed survey ourselves. And so, after a brief tutorial from Oisín Ó Briain of the Seabed Survey, GSI (to whom I extend my gratitude for trying to teach an old dog some new tricks, and not least for

undertaking post-survey data processing) we set forth with some rather valuable electronic gizmos – a differential GPS system – to do our thing on the tramway.



Des: hard at work. Old dog, new trick =??

Well now: practising with gizmos with somebody who knows which buttons to press, and, more importantly, in which order, is one thing. Doing it for real, even with Martin hovering in proximity, is another thing altogether: I just hope we got it right, otherwise! But after a false start, we eventually got into the swing of things. Des worked extremely hard minding the base GPS station close to the Copper Yard at Stage Cove, while Ewan, Martin and I plodded through gorse, nettles and goodness knows what else, trying to follow the route with the mobile GPS: uphill, and eastward to Tankardstown, and then, downhill, and westwards to the dressing floor complex in Knockmahon. Emboldened by our sense of victory over the electronics, we then, for good measure, threw in a survey of the dressing floor area, the Copper Yard at Stage Cove, and, not least, the shipping jetty. Whether or not all this effort was worth it, and assuming we operated the gizmos correctly, you will see in the Journal in due course.



Tramway route truncated by cliff erosion. Part backfilled tramway cutting, with course readily discernible up towards the skyline

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INTERNET SOURCES FOR TRACING YOUR FAMILY

Irish genealogy and family history resources

http://www.bc.edu/bc_org/avp/ulib/ref/guides/lit/irishgenealogy.html

Irish Marriages – an index to the marriages in Walker's Hibernian Magazine, 1771-1812, by Henry Farrar; London, England; 1890

http://home.att.net/~labaths/irish_marriages2.htm

The National Archives (UK)

<http://www.nationalarchives.gov.uk/default.htm>

The National Archives (Ireland)

<http://www.nationalarchives.ie/>

Cornwall Online's Genealogy Pages

<http://www.cornwall-online.co.uk/genealogy.htm>

Cornish Mining Index

<http://www.cornwall-online.co.uk/jumppage-cmi.htm>

The National Library (Ireland)

<http://www.nli.ie/>

Genuki – UK and Ireland Genealogy

<http://www.genuki.org.uk/>

Cornwall Family History Society

<http://www.cornwallfhs.com/>

Cyndi's List of Genealogical Sites

<http://www.cyndislist.com/>

Mining History Network

<http://www.ex.ac.uk/~RBurt/MinHistNet/>

Andy Sleeman

DERRYLEA MINE, Co. GALWAY

The survey of this site proved most interesting and the report for Galway County Council is being finalised at the moment. The substance of the findings may be published as a paper in the Journal of the Mining Heritage Trust of Ireland, or possibly as a stand-alone publication.