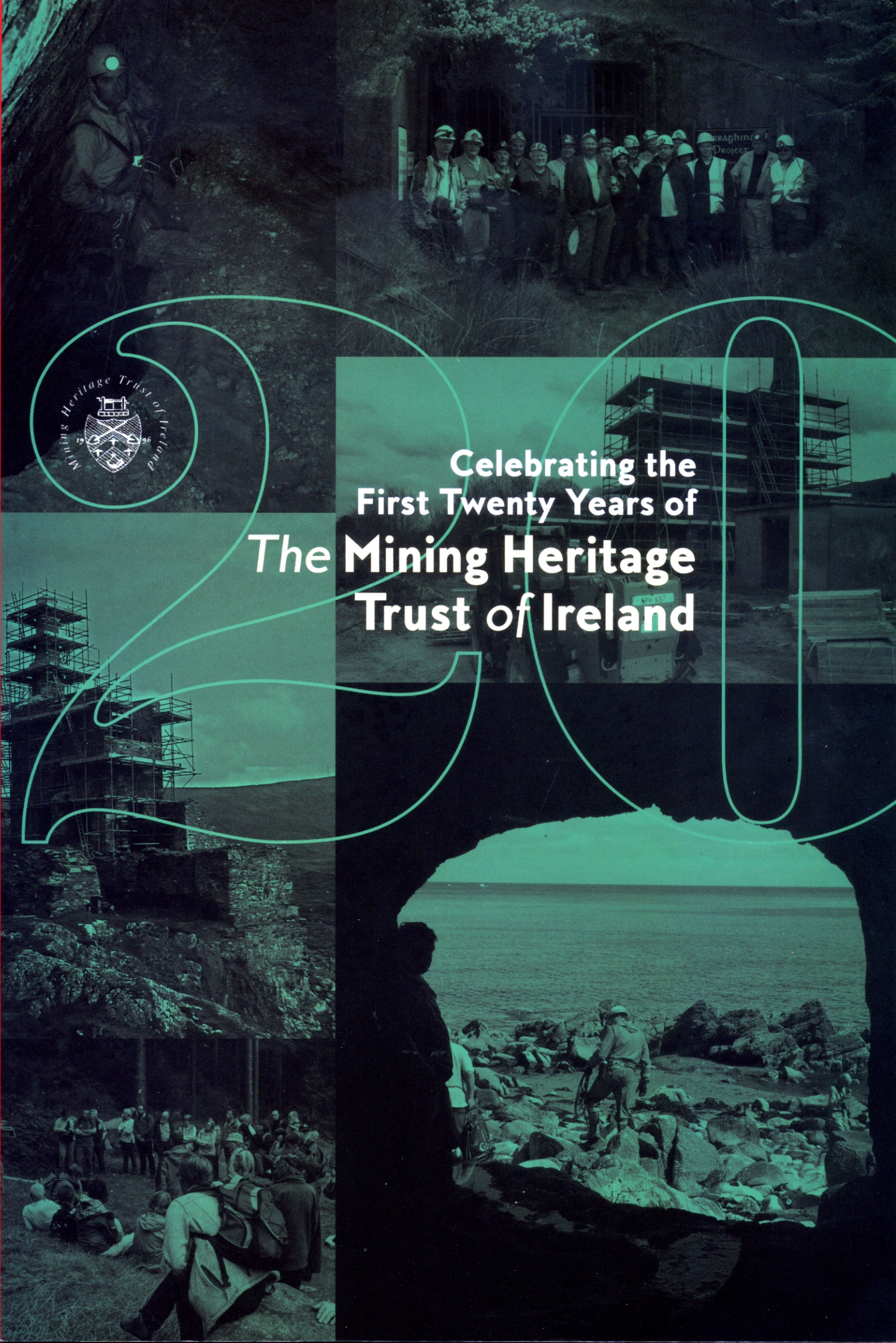
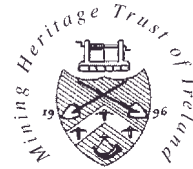




Celebrating the
First Twenty Years of
*The Mining Heritage
Trust of Ireland*





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Chairperson's Statement

The first industry in Ireland was the quarrying of flint and other stone for tool-making by early settlers over 12,000 years ago. In more recent times our mining and quarrying industry has produced a wealth of materials for our benefit such as metallic ores, industrial minerals, construction materials and fuels. Even the page you are now reading contains minerals such as kaolin, talc or calcium carbonate, which have all been produced in Ireland at one time or other. Today about 6,000 people work directly in the mining and quarrying industry on this island.

The provision of materials for our civilisation has left a physical legacy of mining and quarrying sites, processing sites and transport routes, and a cultural legacy of migration and settlement, historical records, personal memories, poetry and songs.

This heritage is now appreciated by archaeologists, historians, geologists, ecologists, engineers, people who work in mines or quarries, and people who live in areas where the industries have developed. However, this was not always the case, as the heritage was under-researched prior to the formation of the MHSI, while the development of mining heritage sites and facilities was virtually non-existent. The MHSI was formed to address these issues and to provide a focus for the varied interests noted above.

In the following pages you will find excellent personal perspectives on the development of the MHTI and impressive accounts of our activities and achievements. The publication ends with a look towards the future, and I hope that after reading this, you will feel inspired to support our aims and activities.

On behalf of the members of the MHTI, I thank everyone who has contributed towards this publication and who created, developed or otherwise assisted the organisation in its progress over the last twenty years.

Alastair Lings,
MHTI Chairperson

Foreword

It really is an honour to have been asked to provide the foreword for this wonderfully illustrated and informative publication. There are many ways in today's world in which we can have access to information and to share knowledge but, as is befitting of an organisation that is rooted in our industrial heritage, the printed word and publishing obviously still has a very important and valuable role to play. To say that the printed word delights me on both a professional and personal basis would be an understatement. My first introduction to industrial heritage was to Gray's Printing press in Strabane, the town where I was born. As a child the stories and significance of Grays was not lost on any child in Strabane and there is no doubt that the ink was indelible. The interest has remained ever since.

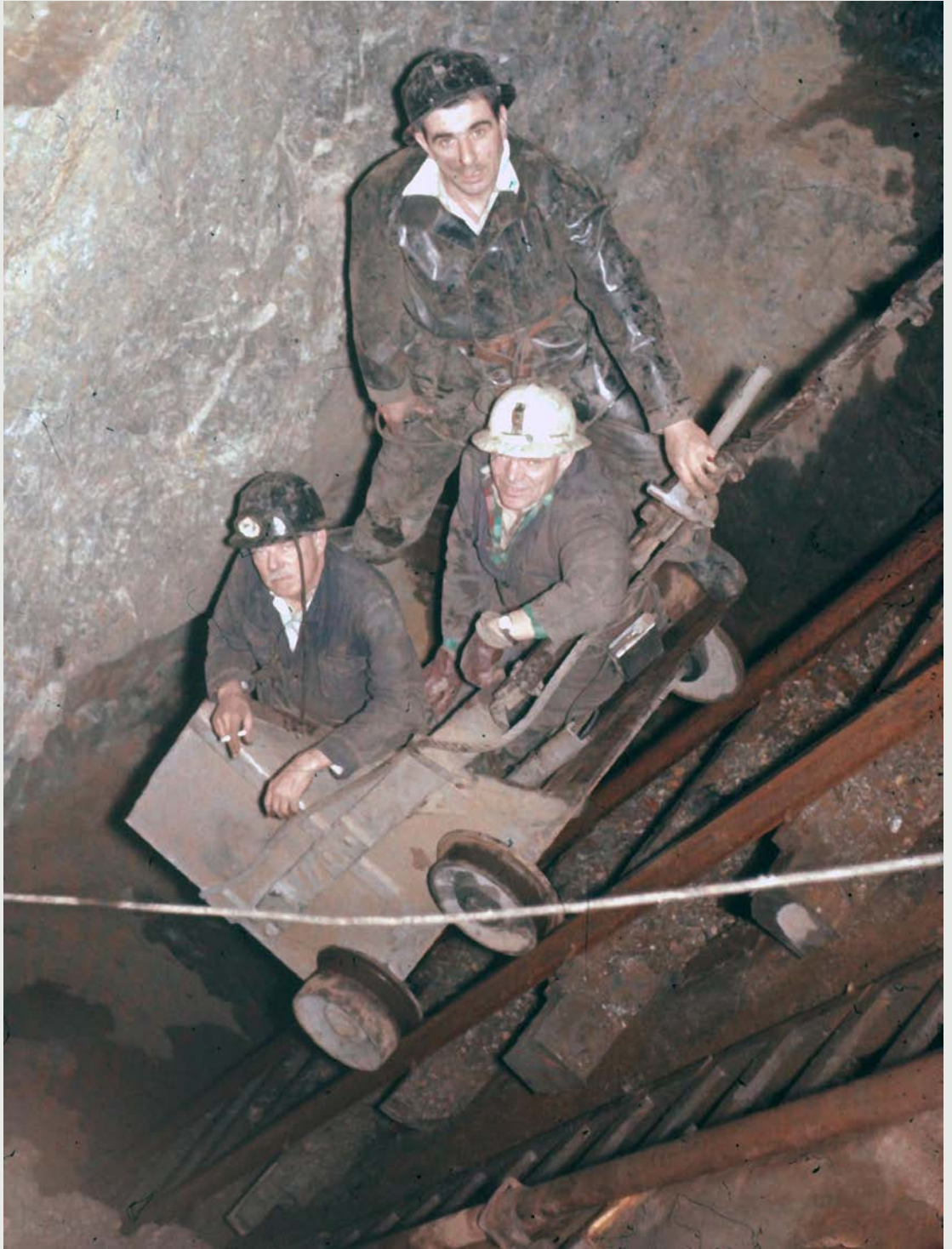
It is quite amazing how such childhood experiences shape us. I have no doubt whatsoever that the eloquence of the descriptions of our mining heritage that appear in the celebratory publication have their roots in a mine of youthful experiences and enjoyment. Clambering and exploring. Hammering and tapping and all with a view to find out more about what shaped not only the mines in a physical sense but also the people that shaped the mines. This is where the work of groups such as the Mining Heritage Trust of Ireland is so valuable. Their interest and expertise is inspiring and opens the imagination of new generations. Sometimes heritage expertise gets labelled as inherently selfish and inward looking.

Nothing could be further from the truth and this publication is further evidence of the openness and the willingness amongst the mining heritage community to share and inform others.

Of course mining communities in Ireland are rarer now than previously. You only have to think, Glendalough, Castlecomer, Allihies or Silvermines to see how local and widespread they were in the past. But they still exist today – even if the industrial scale on which they operated is different to the likes of Tara today. They too, however, show the significance of mining to local communities and, on the basis of my understanding, the closeness of the bond that exists within those communities. That is an important part of our living heritage and marries the enthusiasm and commitment of the modern day volunteer and enthusiast with those professionally involved in mining. Those links are important to keep as we create the heritage enthusiasts of the future.

Everyone associated is to be congratulated. We can all plan our future better with the knowledge that has been made available to us in this publication. The physical interventions that mining has brought to our landscapes have stood the test of time and captured our imagination. This publication adds even greater depth and will inspire even more people to become involved.

Michael Starrett
Chief Executive
The Heritage Council



Above; Skip descending the man engine shaft of the Mountain Mine, Allihies, Co. Cork, when it was dewatered in 1958 (Image courtesy of Jim McCannell)

Mining in Ireland: A Brief History

By Sharron P. Schwartz

The extraction and use of the Earth's resources has played a highly significant role long before the dawn of recorded time, shaping both the environment and the economies and societies of people worldwide. The island of Ireland has a long and varied history of both quarrying and mining. Before the mining and working of metals, man quarried stone for many thousands of years for use as microliths, axes and hammers. Two prehistoric opencast flint mines are recognised in Ireland: at Ballygalley Head and Ballycoos, both to the northwest of Larne, Co. Antrim. Notable sites of quarrying during the Neolithic for porcellanite, a very hard, blue-gray dense rock somewhat similar in appearance to unglazed porcelain, include the Brockley Plug on Rathlin Island and Tievebulliagh in Antrim. The axes manufactured from this stone were widely distributed within Ireland and also exported to neighbouring Britain. Also notable is the quarrying of andesite at Lambay Island off the coast of Co. Dublin. This quarry site is unusual in Ireland for being the only Neolithic stone axe quarry with evidence for all stages of production, from quarrying to final polishing.

The earliest evidence of metal mining in Ireland is provided by Bronze Age copper workings at Ross Island, Co. Kerry in southwest Ireland. Dating from between 2,400 and 2,000 BC, these workings constitute the oldest recognised copper mines in north-western Europe. Moreover, there is further evidence of primitive copper workings on the Iveragh, Beara and Mizen Head peninsulas, placing Irish copper mining at the very vanguard of exploitation in north-western Europe. It is possible that new sites await discovery in this island, as ground breaking scientific techniques in the fast moving field of Bronze Age archaeology uncover

the complexity of the temporal spread of mining interests from Ireland to neighbouring Britain. It is regrettable that there is no dedicated interpretation centre in SW Ireland to tell this truly remarkable story and to place on public display some of the incredible Bronze Age finds made by archaeologist, Professor William O'Brien, at Ross Island and Mount Gabriel.

Prior to the eighteenth century, records of mining in Ireland are sparse. But the occasional nineteenth century discovery of subterranean excavations point to there having been undocumented mining activity before and after the Anglo-Norman conquest of the twelfth century. Described in antiquarian literature as 'Dane's Workings' (after the Viking settlers thought to be responsible for them), these 'old men's workings' sometimes contained evidence of fire setting and mining implements of great antiquity (such as hammer stones and oak shovels).

Interest by the English Crown in identifying and exploiting silver resources in Ireland (from argentiferous galena deposits) is evident by the early 1200s. This interest continued into the fourteenth century and has been linked to workings in Counties Tipperary and Waterford. Moreover, it is highly likely that small-scale silver mining was also occurring in areas outside the influence of the Crown. Indeed, workings in Galway, Mayo, Cork and Limerick were recorded by sixteenth century Plantation settlers. Certainly during the sixteenth century, Clonmines in Co. Wexford was being reworked by the Crown for silver with the aid of immigrant German mineworkers, while other ventures were reported in Waterford.

Also of importance were small-scale iron workings, known to have flourished in the



Above; Cornish-type whim engine house at Coom Mine, Allihies, Co. Cork (Image Sharron Schwartz)

sixteenth and seventeenth centuries across Ireland, sometimes involving specialist immigrant labour (for example, smelters and iron founders). The iron ores exploited included carbonate ore (ironstones) from the coalfields and bog iron ore. Iron ore was also imported to Ireland from neighbouring Britain by operators availing of the extensive deciduous forests of the country, the timber of which was felled for charcoal production used in the smelting process. However, by the mid-1700's, the iron industry was much reduced in Ireland primarily due to the exhaustion of timber supplies.

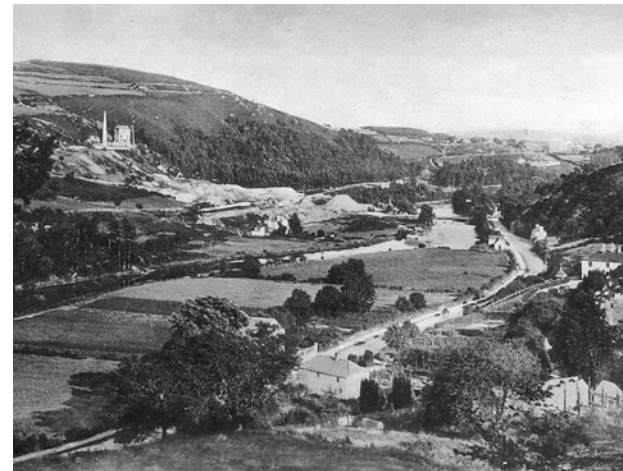
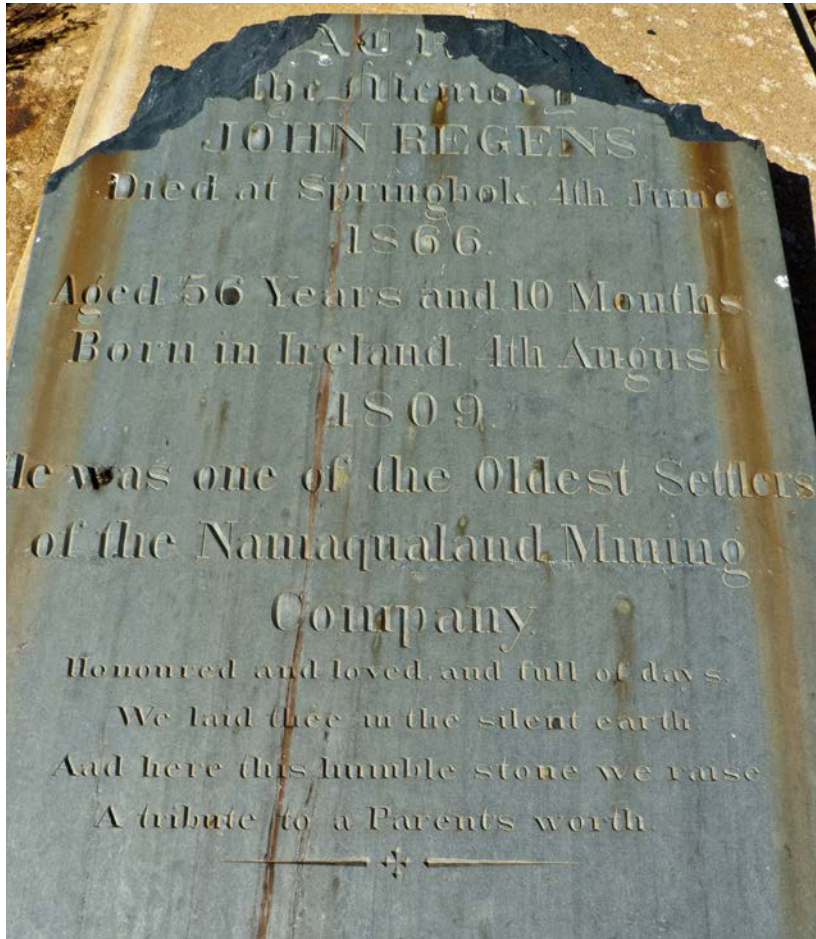
Although gold has played an important part in the cultural history of Ireland, notably in the wealth of recovered gold ornaments many of which are on view in the National Museum in Dublin, records of gold extraction or its occurrence are relatively sparse and poorly documented prior to the seventeenth century. Indeed, recent advances in the field of archaeometallurgy has thrown doubt on the Irish provenance of the metal used to create many of the ancient gold artefacts found here, suggesting that this was of Cornish, not Irish derivation.

However, well over half a century before the frenzied era of the 49ers in California, Co. Wicklow

experienced a much publicised gold rush. For a short period in 1795, some 80 kg of alluvial gold is estimated to have been recovered from what subsequently became known as the Gold Mines River near Avoca, by many hundreds of people who flocked to Wicklow to chance their luck with the wash pan and long tom. Following the inevitable state intervention and subsequent dispersal of the gold diggers during the Irish Rebellion of 1798, the exploitation of alluvial gold was carried out by the Government for some five years, after which the local populace and private companies continued to work the river. The total amount of gold recovered is calculated at some 300 kg, although the true figure may be much higher.

The Irish mining industry flourished in the late eighteenth and nineteenth centuries, triggered by the demand for minerals during the Industrial Revolution in Britain. During the febrile atmosphere of the mid-1820s 'mining boom', four Irish mining companies set up by parliamentary bills appeared on the London Stock Exchange. Numerous private companies were also organised as Ireland was turned over end to end in the search for minerals. Copper mining boomed in southwest Ireland, especially at Allihies, at Avoca in Wicklow, and at Knockmahon in Waterford, all embracing the cutting edge steam engine technology synonymous with Cornwall, which also provided a good number of highly skilled mineworkers to Irish mines at this time. Elsewhere in the country there was also significant exploitation of lead, silver, coal, baryte, manganese, limestone, slate and granite. However, much of the metal mining was sporadic and small-scale and there was a tendency to mine only the coarse-grained, metallurgically clean ores that could be manually dressed.

The fall in metal prices during the 1880s depressed the Irish mineral market, causing an inexorable decline that persisted well into the twentieth century. Many skilled mineworkers left Irish shores never to return, but they helped to lay the foundation of new mining ventures worldwide, and today their descendants form part of the thriving Irish Diaspora. From the 1880s up to the mid-1900s, the only mining of note was a period of iron, bauxite and rock salt production in Antrim, Northern Ireland (particularly during the First World War), pyrite at Avoca, phosphate from



Co. Clare, baryte from Benbulbin, and gypsum from the Kingscourt area. Mining of thin coal seams also continued from the Arigna, Rossmore and Ballingarry areas.

Coupled with the decline in mining was the post independence vision of Ireland as a bucolic haven, a rural arcadia free from the corrupting influences of industrialisation. This was arguably encapsulated in Irish president, Éamon de Valera's 1943 St Patrick's Day broadcast. Indeed, school text books of the mid-twentieth century categorically stated that there were no mines in Ireland.

However, the 1940 Minerals Development Act eventually led to the most intensive period of exploration and mining that has occurred in Ireland, spearheaded by return migrants from Canada dubbed 'The Wild Geese'. Their efforts resulted in the world-class discovery of some of the largest lead-zinc deposits in Europe of the 1960s. Mining for lead-zinc began at Tynagh in east Galway and at Silvermines Co. Tipperary, while Gortdrum, Co. Tipperary, and Avoca in Co. Wicklow, were mined by open cast methods for

copper, although production has since ceased at both. Later concerns included the Galmoy (Co. Kilkenny) and Lisheen Mines (Co. Tipperary), worked for lead-zinc and both now closed.

But the greatest development of all has been the Tara Mine at Navan, Co. Meath, the largest zinc-lead deposit in Europe and the ninth largest worldwide. Discovered in the autumn of 1970, production began here in 1977 and is currently running at approximately 2.6 million tonnes per annum. The discovery of this deposit in particular has finally banished the perception of Ireland as having no mines or mining industry of note.

The most widespread current mining activity in Ireland is the quarrying of sand, gravel and stone for the construction industry. Limestone is used as a soil improver and in cement manufacture. Other minerals extracted include rock salt in Antrim, gypsum in Co. Monaghan, and marble in west Galway. The discovery of significant gold deposits in counties Wicklow and Monaghan, and the commencement of gold mining in Co. Tyrone, signal a bright future for mining in this island.

Above Left; Headstone of an immigrant Irish miner in Springbok Cemetery, Namaqualand, South Africa (Image Sharron Schwartz)

Top Right; Scoop truck emerging from the underground workings at Tynagh Mine, Co. Galway in the 1970's (Image source unknown)

Bottom Right; Postcard of the Avoca Valley around the turn of the twentieth century, showing William's Engine House and the spoil tips of Tigroney Mine (Image the Critchley-Schwartz Collection)



Nick Coy leading a Heritage Day public event
at the Avoca Mines, Co. Wicklow, 2013
(Image Sharron Schwartz)

20 years of Mining Heritage

By Matthew Parkes

Those of us involved in the Mining Heritage Trust of Ireland today, and thinking how to mark this milestone birthday can be excused for forgetting that strictly speaking it is not 20 years of the Trust but 20 years of enjoyment of our mining heritage and efforts to preserve it. The organisation started out in 1996 as the Mining History Society of Ireland, but after two years changed to the Mining Heritage Society of Ireland, to better reflect the actions of the group. The conversion to a Trust came after 5 years, but more of that later. This account is not going to be a linear record of all the field trips, all the projects that have been undertaken and the changes in people that have come and gone in various roles. If you want that then a sequential read through the 72 newsletters to date, plus the journal will give you that history, and perhaps the minutes of the Committee or board meeting would clarify nuances and details if you were conducting in depth research into some aspect of our two decades in existence. No, by necessity this account will be a personal perspective from someone who was in at the beginning and whom has ended up holding a variety of roles in the group and so can write one narrative on our 20 years – but not the only one, and not a history by committee either.

Origins

The Mining History Society of Ireland (MHSI) was the brainchild of John Morris, kickstarted with the support and enthusiasm of the Shropshire Caving and Mining Club (SCMC). John Morris, who was a Principal Geologist at the time in the Geological Survey of Ireland (GSI) recalls a meeting with members of the SCMC

on an exploration visit to Ireland. The SCMC were a dynamic group with their own preserved mine at Snailbeach in Shropshire, showing how things could be done. Their interest extended far beyond the local and their visit to John Morris was to glean more information on historic mine sites across Ireland. John's notion that his geologist's interest and expertise in historic mine sites and their minerals was a rather obscure specialisation, was exploded. The SCMC enthusiasm and support provided germination for the seed of an idea John had been carrying with him. The underground exploration of the SCMC soon appeared in video form through Peter Eggleston's IA Recordings.

Although John's professional role in the GSI included setting up the Irish Geological Heritage Programme (on which I worked from 1998-2005), the idea of a mining heritage group fell outside the GSI priorities, although the GSI provided sustaining support in many ways from then on. John canvassed for support in many quarters, with Des Cowman being a pivotal partner. As a historian Des had a record of publishing his research on mining, and the history of many different mining ventures and communities. Tom Reilly, who had published with Des on *The Abandoned Mines of West Carbery*, exposing the nineteenth century bubble companies of West Cork, came on board. Martin Critchley, with a PhD on the Nenthead Mines behind him, was enthused. Eamonn Grennan, with a lifetime of mineral exploration work joined the gang. Kevin O'Hagan got involved with his background exploring the iron mines of Co. Antrim. As another caver, like Kevin, my own general geological interest was exceeded by the potential

Right; Logo of the Mining Heritage Society of Ireland. Designed by Nick Coy and based upon the reverse of the Cronebane token of 1789.

for exploring underground mines on the doorstep in Wicklow, when finding time for weekend trips to the Burren's caves was difficult. So John Morris cajoled enough individuals to come together and on February 10th 1996 the Inaugural General Meeting of the Mining History Society of Ireland took place, a committee was elected and a programme of activities developed. The attendance book records also Dermot Mooney, Nick Coy, Peter Eggleston, Edwin Thorpe, and Roger Gosling, though a line is through his name.

Newsletters

A first newsletter was published in the spring, with Des Cowman as Editor. As Secretary (a position I had somehow agreed to fill) I dealt with the production and distribution. This meant that I did the layout of files sent on by Des, and we quickly established that Des was badly afflicted by the malevolent deity Computheo! Nevertheless, newsletters came together and many hours of my time were spent nursing the GSI's photocopier into churning out A3 pages that when folded and stapled together, became a properly paginated read.

The earlier years of the newsletter contained many articles of substance, with detailed information on Irish mines that still are essential references. A new outlet gave members a means to publish all sorts of research they had been engaged in. Many of those compilations of records of output and listings of obscure mines are unattributed, but presumably were from the pen of Des Cowman. Ken Brown provided a series of articles of authoritative data on steam engines in Irish mines, with some data derived from measurement made of bed stones in obscure ruined engine houses, some from Cornish sales records. John Morris shared another of his passions – scripophily – recording mine history through the share certificates issued by the companies behind the mines. Gerry Stanley made clear the scope of the Historic Mine Records of the GSI and how to access them. Others covered a range of topics, many of which generated reactions with additional information forthcoming. Others flamed up debate on controversial topics like that of mineral collecting, with some strongly polarised views held by different members.



In essence the newsletter really functioned well, with 4 issues published in most years. It did the job of alerting members to forthcoming lectures, field meetings, events and activities that the Society was engaged in. It reported on those trips after the event as a documentary record. The formal business of any society, of AGMs, elections, officer reports, accounts and so on were all circulated in or with the newsletter. News within and from outside the MHSI was reported and book reviews, special offers and notices of publications remain as ever present elements of the newsletter. Another frequent item was the request for information from a third party, in relation to their own family tree or genealogy research. This topic is addressed later.

Des Cowman passed the editorial responsibility on to Matthew Parkes somewhere between newsletter 36 and 44 and more recently Sharron Schwartz has taken on the role. For all of them, the Editor has relied on members of the Board to provide material along with others.

Logo

In its first Newsletter MHSI proposed three logos for adoption by the society. The Committee duly selected the logo suggested by Nick Coy based on the Cronebane token, which was effective currency in Avoca when the mines were operating there in 1797-1811. The chosen logo first appeared on Newsletter 3. Refreshingly, the logo has remained a constant feature, despite the rebranding/reorganisations over the 20 years.

Governance

What started as the Mining History Society of Ireland (MHSI) changed its name to the Mining



Heritage Society of Ireland (same initials for the acronym!) in a short space of time, to better reflect what was being done and the focus of the group. However, it became apparent within a few years that a voluntary society was not going to have the necessary gravitas and legal status to secure the level of funding required for our ambitions in the conservation of significant mine buildings. An extended discussion at Committee and at an AGM eventually decided that we should become a limited company by guarantee, and seek charitable status. This had the benefit of protecting the Directors from liabilities that had potential to occur, even if most unlikely. The primary reason though was to have the legal status that enabled us to seek and receive a bigger scale of funding for projects such as conservation of engine houses, and to be partners in EU Interreg projects to develop the Copper Coast, and many others. There is no actual Trust (money) behind MHTI. The name was chosen to inspire trust.

The Trust has continued, although the downside to it is that audited accounts have had

to be submitted to the Companies Office every year, and there is a significant cost to this which is problematic if it is not justified or covered within large project budgets. And these have been such a drain on people's resources of energy that there is presently no appetite for taking on a major project without a new champion taking the lead. More recently there have been significant changes afoot in the rules for charities and for companies like our own. The full implications of these rule changes for MHTI have to be confirmed, but it would seem that we should be subject to a simpler and cheaper governance regime in future.

Membership

As was quite normal in those times, the membership of the MHSI was listed in the first and some subsequent newsletters, with contact details of phone and address included, and particular mining related interests noted to allow sharing and communication. A quick look reveals no mobile phone numbers! Not even Martin Critchley had one then, and his embracing of new technology was apparent from day one. He is

Above; Martin Critchley leading an underground trip at Avoca during NAMHO 2003 (Image Brian Jones)

The Early Years: The Formation of the Mining History Society of Ireland

By Alastair Lings

The earliest article about a potential mining history society in Ireland was in the UK-based cavers' magazine *Descent* of June/July 1995. The magazine's mining correspondent enthusiastically reported, 'The wealth of mining history in the emerald isle is at last to receive some long-awaited attention from local historians. Plans are afoot to form an Irish Mining History Society'. According to a 1995 article in *Below!* the quarterly newsletter of the Shropshire Caving and Mining Club (SCMC), the proposed mining history society was discussed at the (UK) National Association of Mining History Organisations (NAMHO) Conference hosted by the SCMC from 14th to 17th July 1995. Another article in *Descent* explained: 'There is a great deal of interest among mainland clubs in the mines of Ireland. Parties have been going over to explore the mines for many years, but they have operated separately and found it difficult to make contact with locals. Now all that is about to change'.

John Morris continues the story in the first newsletter of our organisation: 'At the time of the conception of such a Society, in late 1995, several individuals with an established profile in Mining History in Ireland, while very enthusiastic about the concept, equally considered that their interest was that of "a lone voice in the wilderness". I shall spare their blushes (!?) by preserving their anonymity, but they along with others, came together to form an ad hoc committee which steered the nascent Society to its formal inauguration'. Des Cowman recalls: 'The Shropshire people dropped into GSI [Geological Survey of Ireland] and talked to John Morris about forming a mining history society. He had my name from a GSI book I did in 1988 and so this strange voice on the phone put the proposition to me. While I had been ploughing contentedly a lonely mining furrow for years I was astonished and spontaneously responded with something like "Who on earth else would be interested?!". John said he had other people who possibly were and he'd get back to me. So he put together the first committee and that was the beginning'.

Kevin O'Hagan reported in a 1996 edition of *The Glynnis* that, 'The Society was formed on 14th October 1995 when a small group of mining enthusiasts from Ireland got together

to discuss its foundation. Prior to this few of us had any idea that there were others in the country who had similar interests. We had been looking at and recording sites as individuals in our own area for years yet in England and Wales mining societies had sprouted and flourished and even had an umbrella organisation (NAMHO) to represent them in conservation and site protection issues. A steering group was formed and after 3 informal meetings we had a list of objectives, a constitution, a provisional programme of events and 60 members'.

On the 10th February 1996 the Mining History Society of Ireland held its Inaugural General Meeting in the lecture theatre at the GSI premises at Beggars Bush, Dublin, adopting an amended constitution which included its Irish name Cumann Stair na Mianadoireachta. Kevin O'Hagan recorded, 'there was an excellent turnout of mining enthusiasts and other interested parties and among these were several representatives from official organisations with expertise in the field of archaeology, industrial history and conservation. Active members of the GB-based National Association of Mining History Organisations and the Shropshire Caving and Mining Club were also present'.

The Society elected its first committee: John Morris, Chair; Kevin O'Hagan, Vice-Chair; Matthew Parkes, Secretary; Martin Critchley, Treasurer; Des Cowman, Editor; Tom Reilly, member; Eamonn Grennan, member; Nick Coy, member. By the time the Society issued its first Newsletter the membership was about 75, noted as 'a remarkable achievement in so short a period of time'. Newsletter No. 1 (Spring 1996) invited ideas for a logo for the society, providing three examples. By December the committee had decided on an amended version of the design submitted by Nick Coy which is based on the Cronebane tokens issued by the Associated Irish Mining Company. The logo has appeared on all publications since then. At the Society's Annual General Meeting (AGM) in February 1998, it changed its name to the Mining Heritage Society of Ireland. In 2001 the Society was dissolved, reforming as the Mining Heritage Trust of Ireland, a company limited by guarantee.



one of very few people who had an email address at that time, for his own business of ERA Maptec Ltd., which also provided enduring support in kind, with an address for the Society and website hosting amongst other assistance.

The original membership about 2 months after inauguration stood at around 75. Some 3 years later, at the probable peak numbers, there were well over 130 individuals plus the various sustaining and corporate members. Since that time there has been a slight reduction each year to plateau at around 80+ members as the core membership, although that naturally includes many people who came and went, replaced by new enthusiasts. Today the Data Protection rules would not encourage the listing of names and addresses and members' details are kept confidentially and not shared, although of course the whole background of communication has changed so rapidly that even email is passé to a generation who use Facebook or Twitter or other platforms to communicate.

Email provided the MHTI with a delayed headache a few years ago. After a year or two of seriously declining membership numbers, it was realised that there had been a systemic failure of communication. The newsletter had long since been issued to most people by email, along with occasional notices of events and meetings, and for reasons still unknown, many members were not getting the emails. No notices of delivery failure were generated by the system, so naturally with the apparent moribund state of the MHTI, many people did not get their membership invoices and



newsletters and did not renew, but we did not realise this for an extended period. Although our membership has climbed back to its average level since, it did generate doubts amongst the Board of our sustainability.

A look at the names in those membership lists is a trip down memory lane, reminding me of people who played an active role for some years but then dropped away over time. Some of them served on Committee for spells, other ran field trips to their local area, or contributed articles on their research. To name some but not all may be invidious, but some people have had their contribution marked by Honorary Life Membership. John Morris was the first nominee to mark his visionary efforts in setting up the Society and then chairing the early years of development. Éamonn de Stafort was likewise

Top; Field trip to Baravore Mine, Glenmalure, Co. Wicklow with a contingent of members from Shropshire Caving and Mining Club, 2007 (Image Sharron Schwartz)

Above; John Morris in front of the gunpowder magazine at the Berehaven Mines, Allihies, Co. Cork, 1997 field trip (Image Matthew Parkes)



Above; Brian Jones descending a stope in the 3rd adit at Glendalough Mine during a pre-NAMHO 2003 recce (Image Martin Critchley)

Right; Martin Critchley rigging a rise in Hayes Adit, Glendasan, 2003 (Image Brian Jones)

nominated for his local championing of the mining heritage of Silvermines. Of course there were some who have departed life altogether and it is timely to record the loss of valued members here: Frank Hodnett, Conor MacDermot, Alan Thomas and William Morrissey.

In general, about one third of our members have been based in the UK, and many of them have been active participants and contributors to the meetings, field trips and publications. This support has been a consistent and encouraging aspect of the last 20 years, but especially when it was a fledgling society in the late 1990's. Mike Moore, Peter Eggleston, Kelvin Lake, Adrian Pearce, Edwin Thorpe, Roger Gosling and others from the SMC were stalwarts of many trips, giving great advice about what might work here, based on practical experience in the UK, where there is a much larger



and more active mining heritage community under the umbrella of NAMHO.

There are some members who never make it to meetings but value the publications and so a subscriber category was introduced for the individuals and libraries who will never need the third party liability insurance cover for exploring mine sites that members are required to have through the UK's British Caving Association (BCA).

Field trips

From the very first days, field trips to mine sites have been the mainstay of MHSI/MHTI activity. To list them all would be too difficult, but the newsletter archive reveals advance notices, detailed programmes and post-trip reports for nearly all of them. Many of the trips in the early years were novel, and often generated large crowds of people from the local community as well as members. A wide range of people led trips but some stalwarts crop up again and again, in relation to their favourite localities. Des Cowman at the Copper Coast, Nick Coy at Avoca, Martin Critchley at Glendasan, Billy O'Brien at Ross Island, Seamus Walsh at Castlecomer, John Morris at Glenmalure, Éamonn de Stafort at Silvermines, Mick Carragher at Ben Bulben and Rob Goodbody at Ballycorus have repeatedly led trips for the members, as well as leading public walks during the annual Heritage Week events. Too many others



Left; Early exploration at Glendalough, Co. Wicklow, outside the White Rocks Adit, mid-1990's. From left to right are Wayne Cox, unknown, unknown, Phelim Lally, Martin Critchley and Nick Coy (Image Matthew Parkes)

to name and thank have shared their knowledge and passion about mining heritage.

It is perhaps natural that after all the main mining areas had been visited a couple of times, that numbers might drop, but to the great credit of our Chairperson, Alastair Lings, he has developed well researched field trips to all manner of small, poorly known but still very interesting mine sites across the island. Whilst attendances may often have been modest, those who attended have had enjoyable explorations of many minor mine sites, as well as larger mines like Abbeytown in Sligo.

Inventory

The field based meetings over the years have included a number of inventory visits to mine sites, aimed at documenting, measuring, photographing and making as comprehensive a record as possible of the state of the mine site. Subtly different in emphasis from the visits to 'see' whatever is accessible at a site, these trips have still been good fun to participate in.

Whilst we don't currently have a means of making it publicly accessible, a GIS based inventory now exists that has migrated from one platform to another over 20 years as technological developments have occurred. Much data has been shared with the GSI and the Exploration and Mining Division (EMD), in their efforts to create an inventory of their own. Martin Critchley

provides a detailed paper on the whole topic of inventory elsewhere in this volume.

Going Abroad

A key feature of the MHTI approach to life over 20 years has been that there is much mining heritage to be seen **outside** of Ireland. There have been immense benefits to co-operation with like-minded organisations in other countries mainly through Interreg projects involving MHTI and a wide range of partners. Important too, has been raising the profile of the MHTI by presenting papers at international conferences. Examples include John Morris and Martin Critchley's quirky entitled presentation 'ARD work in Ireland: developing the National Mine Heritage Inventory' at the NAMHO conference held in Cornwall in 2000, and Martin's paper on Irish mining heritage at the 2012 International Mining History Congress in Johannesburg, South Africa.

Look-see type field trips to visit mines elsewhere, both 'wild' and 'tourist' ones, have been a regular feature. Whilst those who were able to commit the time and money to go was often a small contingent of members, many visits have provoked new ideas and approaches to what we do as an organisation in Ireland. In another chapter Martin Critchley and Sharron Schwartz look at the international projects that MHTI have been involved in. For me personally, the European trips

Right; Mick Carragher in the Nowa Ruda Mine control room, on an MHTI field visit to the mines of SW Poland, May 2005 (Image Ewan Duffy)

Below; John Morris and Ken Brown on a wet day outside the Man Engine house. Allihies, Co. Cork. They were surveying the engine house prior to launching a campaign for funds for its conservation, circa. 2000 (Image unsourced newspaper)



have been impossible, but closer to home, the Isle of Man trip in 1999 stands out as a particular highlight.

Representing mining heritage with ‘officialdom’

The MHTI has always sought to be an expert body that government and its agencies can liaise with on any matters of mining heritage interest. This has generally been the case, although not as routinely as could have been possible. Some interactions have been very successful. Our report for the National Roads Authority on Derrylea Mine in Co. Galway was very well received. Our engagement with the Silvermines rehabilitation project through the EMD, their consultants and Tipperary County Council was also most successful. By a detailed analysis of the plans and recommendations on the optimum preservation of mining heritage features, a great deal was achieved across the sprawling complex

20 years of Mining Heritage

of mining around Silvermines. A significant element of the overall spend was specifically on securing and conserving mine heritage buildings and features.

Modest success has been achieved with the Wicklow Mountains National Park, the management of which has proved to be a willing partner in the promotion and protection of the mining heritage within the park boundaries, funding and overseeing the 2014 consolidation of the Glendalough crusher house and the installation of several new interpretation boards designed by community group, the Glens of Lead, just recently.

The landowners of mine sites across the country have been enormously helpful in accommodating our requests for access and we hereby thank them wholeheartedly for that. For the majority of mines, the underground space is owned by the State and we would also like to thank all of the staff in EMD who have sanctioned our access requests and facilitated our long standing agreement with them regarding safe and responsible access for legitimate mining heritage purposes. In particular we thank Brian Breslin, Wayne Cox, Raphael Kelly and Eibhlin Doyle.

The Journal

By the turn of the Millennium, the Trust had established itself as a force that was doing things and with some confidence in its own future. The Newsletter was still publishing serious articles, but we felt it was time to commence a more durable journal that could attract more research material and also provide a better quality production and reproduction of images and plans. As with the Newsletter, Des Cowman acted as Editor for content, and I was responsible for design, layout and production, duly equipped with Quark Express software from Martin Critchley.

The first issue was launched in November 2001 at the 'Delving the records' meeting (see below). Each year since a volume has been published around the end of the year, and has, I believe, become a consistently high standard specialist journal with a wide mix of articles by different authors. The exception to the mix of articles was in 2005 when the journal costs were funded through Interreg funding for major work at Tankardstown

and Knockmahon. A substantial full colour thematic volume on the mining heritage of the Copper Coast resulted and stands up today as a key mining heritage resource for the UNESCO Global Geopark. For the MHTI, the delay in delivery resulting from a thematic set that could not be finished without particular contributions, meant that we agreed that thematic volumes would only be produced as occasional publications.

From volume 7 Matthew Parkes took over as Editor, with Des Cowman devoting more time to research projects, and in 2013 the baton passed to Sharron Schwartz, who with co-author Martin Critchley, has since produced volumes including highly detailed studies of key sites like Glendalough, Glendasan, Glenmalure and Newtownards.

Other publications

Elsewhere in this volume is a record of all the publications produced by MHTI in the last 20 years, but this commentary is a brief reflection on how some of those came into being. The first was a reissue of Cole's 1922 *Memoir of Minerals of Economic Importance and Metalliferous Mines in Ireland*. This was an excellent choice as it is still the first easy point of information for most mines in Ireland (except for coal). Fortunately the GSI's Director, Dr Peadar McArdle, saw the merit of this proposal and gave us permission to reprint, with a short biography of Cole and some photos of various mine sites today added to the original text.

One of the earliest proposed one-off publications was a large volume of *50 years of Irish Mining* aiming to collect anecdotal and personal views on the modern renaissance of Irish mining commencing with the discovery of Tynagh Mine. The hope was to get key players in the industry to record their history in person, whilst they were still alive, and to have stories captured rather than lost. Enough technical history was in existence, but what we wanted was the personal views. Sadly, despite canvassing and some effort, insufficient material was forthcoming and what there was eventually became a paper in Journal 3 (Naylor, Sample and Patterson 2003).

Other publications were published on the back of a project, where money was available to go to print with results of the project, or had been built into the project funding proposal as

one of the outcomes. The Proceedings of the MINET conference in 1999 and the Europamines handbooks published in 2005 on the *Conservation of Historic Mine Buildings* (Adam Sharpe) and on *Interpreting Cornish Engine Houses* (Kenneth Brown, John Morris, Antonio Ángel Pérez Sánchez and Martin Critchley) the latter two publications in English and Spanish, are all of this nature.

The National Roads Authority and Galway County Council funded the Proceedings of a conference on Galway's Mining Heritage in 2006, on the back of a study of the Derrylea historic mine site which was in the line of N59 road improvements. For another, the Royal Irish Academy saw merits in the proposal

to do a thematic issue of their journal *Biology and Environment*, arising from the meeting I pulled together on the *Ecology of Old Mine Sites*. At that time in 1998, there was much research going on in universities about using wetlands to reduce metal pollution in mine waste waters, and on the biology of reducing acid mine drainage by finding things that could grow on top of mine spoil heaps.

Conservation Projects

Elsewhere in this volume Martin Critchley documents the conservation and protection projects that in my view, have been an outstanding achievement of the MHTI. As my direct involvement has been minimal, other than as a Director on the Board, I can only really admire and commend the enormous success that has been the conservation interventions on the man engine house at Allihies, the Tankardstown Engine House on the Copper Coast, and several engine houses and structures at Silvermines. John Morris and Martin Critchley have driven these initiatives. The Allihies Man Engine House was identified as a priority for our first venture, due to international importance and rarity – only 20 or so in the world and this was one of the best remaining. The Heritage Council made a critical

grant that provided seed funding to go and get other sponsorship and grants.

The work involved in these conservation interventions was done to meet international best practice and aimed at stabilising structures from decay, collapse and loss from neglect. Many sleepless nights, long trips up and down from Dublin, and even personal gifts and loans to provide cash flow were a key feature of the commitment from both John and Martin on respective projects. Through their efforts the MHTI became quite successful at getting funding from various Interreg schemes through the European Union. For some of us it became the dreaded Interreg discussion at Board Meetings, and a labyrinthine task to comprehend the process and the reporting let alone navigating successfully to a payment arriving after the work had been done and expenditure made out to contractors.

Answering enquiries

An area of interest that I feel we have neglected, or perhaps even failed on so far, is that of genealogical research. As a small but consistent thread through the newsletters, in emails and correspondence there have been enquiries from individuals trying to follow up their own family history, where there has been some connection to mines or mining in Ireland. Aside from circulating requests for information we have been able to do very little to help, and it has been frustrating as this is a strong connection to the world outside our specialised interest. Reasons for this lie in the specialised nature of genealogical research, and, as outlined by Schwartz in this volume, past difficulty accessing the right source materials. Some local efforts have been made in communities with known migrations of entire generations of miners and strong links to mines abroad, such as Allihies miners who went to Keweenaw in Michigan (see Mulligan in Journal 1), but in general the effort for this kind of research is difficult to service from our small voluntary base, although the rapid advent of online datasets offers to improve the potential for research sharing in this area. Although we are unable to undertake genealogical research, we could certainly offer advice as to how to start research in this area, and what records are currently available here in Ireland.



Above; Press interest in the conserved Man Engine house at Allihies, Co. Cork, 2005 (Image unsourced newspaper)



Left; Alastair Lings exchanges journals with members of the Silvermines Historical Society at our 2013 AGM lecture evening held in Nenagh, Co. Tipperary (Image Martin Critchley)

Community involvement

In another chapter of this anniversary publication I look in some detail at our **successes** in community involvement, and the role of the MHTI as an umbrella body aiming to support local community groups working on their own mining heritage projects, so this commentary I will restrict to the negatives. For every positive engagement we have had, there are as many cases where the MHTI has not been seen as important or relevant to a local group. In Arigna, for example, the MHTI had no hand nor part in the great success in creating the Arigna Mining Experience and they did not need help from the MHTI.

For other areas, whether it was the failure of the MHTI to make it obvious to community groups the potential benefits they could gain from membership of a wider network, or the lack of vision amongst the local groupings is open to debate, but it sorrows me to scan through names of some very brief memberships who just didn't engage in the way we would have hoped or expected. In particular we never really gained any significant level of support or membership amongst Northern Ireland groups and mining related enterprises or associations. The reasons

for our lack of progress in many places is not easily analysed, but is perhaps simply a reflection of the wider society we operate within.

A summary view

This personal commentary on the ups and downs of the MHTI has avoided mention of some of the contentious issues that have arisen within the Board over the years, and the personality clashes that have developed. Despite mentioning some of the negative points, it is clear to me that 20 years of mining heritage effort has been incredibly worthwhile. The friends made and people met over the course of countless field trips and projects have only enriched the lives of those involved. So many people who deserve a mention for their contributions have been missed out for lack of space to record everything of importance. At the heart of it all has been a band of committed people who have devoted many hours and days for the benefit of mining heritage and the broader society who by and large still do not understand or value the industrial heritage on their doorsteps. I celebrate the first 20 years of the MHTI and hope that we can have another successful 20 years ahead.

Mining The Records: Archives And Historical Research

By Sharron Schwartz and Matthew Parkes

Since its inception, fostering the research and publication of articles related to Irish mining history has been one of the MHTI's core activities, evidenced in the original name of our organisation: the Mining History Society of Ireland. Over the years some truly groundbreaking material has found its way into both our newsletter and our Journal, which are referenced in the Publications section of this commemorative booklet. In the past there have been numerous lectures, talks and workshops on various aspects of how to use documentary and archival resources, and the recent addition to our calendar of events of an annual Members' Medley gives researchers the opportunity to share and present their research to the membership and receive feedback. In 2001 a special MHTI workshop '*Delving the records*' brought together a rich programme of practical examples of real research (see Newsletter 18).

Inevitably, such research has generated archival material in the form of notes, articles, press clippings and various other items produced by those engaged at the coal face of research, as well as occasional gifts to our organisation of original documents, maps and other material such as photographs and films. These need to be properly curated, a task that has fallen largely to Matthew.

The MHTI Archive

From the earliest years, once the MHSI was in being, and with an objective to 'to create and maintain a library of information to assist researchers' it became the obvious natural home for people to donate items of mining heritage importance that they had been holding, but which they wanted to find a better home for.

The newsletters record many donations over the years of items such as share certificates, medals, prospecti for company capitalisations, mine plans, books, videos and DVDs and even surveying equipment. The MHTI is grateful to all the donors for their gifts.

There was neither an active acquisition policy developed nor a spending spree to create the library, but nevertheless one evolved organically and spontaneously through the generous donations of many members, along with occasional serendipitous purchases by directors. The advantage of being employed in a large public service body like the Geological Survey of Ireland (MP - at first) and the National Museum of Ireland (MP - latterly) is that space can be found to store such an archive within the offices and workspaces.

However, after 14 years the physical issue of what to do with our archive was addressed through a seminar *Holding on to your history* in November 2010 (see Newsletter 53). The aim of this was to get members thinking seriously as to what they wanted to happen and to fully understand various options. The programme included professional archivists and others from outside our group who could ensure that definitions of archives and collections and libraries were clear to all and relate some practical realities of the tasks.

At that time, the Copper Coast Geopark had purchased the deconsecrated church at Bunmahon, and the plans being drawn up for its renovation and extension included ambitious spaces for research and archives, with John Morris and Des Cowman strongly advocating this option as a *de facto* National Mining Heritage Centre, where the MHTI archive could be securely homed.



In the event, capital funding was insufficient to meet the full desired specification, and the eventual new extension building did not have capacity to include an archival space.

Three other main options were explored. Doing nothing was not really an option when considered more closely. Donating it onwards to a larger, like-minded body was considered, which in our case effectively meant the Geological Survey of Ireland, or else donation to a recognised museum, which effectively meant to the National Museum of Ireland. The outcome did not involve a decision, but the matter remains open to discussion. At present, the collection of mining heritage materials is housed in the Natural History Museum store, looked after by Matthew Parkes, but only occasional time can be found for the required cataloguing work. The Museum may be the best long term host, as it is an organisation with a mission to look after collections. Other groups already have their archives looked after in the store (the Speleological Union of Ireland caving library, the Irish Naturalists' Journal archive

and shortly the Irish Geological Association archive will transfer over.

The changing nature of historical research

Twenty odd years ago, mining historians in Ireland were as rare as hen's teeth, and for years Des Cowman was one of the few people actively researching and publishing on Irish mines, providing numerous ground breaking articles on those mining enterprises for which records were available. Many of these appear in our newsletter and the early editions of our Journal. A true pioneer in the field, countless hours were spent by him painstakingly pouring over musty, sometimes barely legible documents, archived at places such as the National Library of Ireland in Dublin.

Our foremost archive also happens to hold most copies of the *Mining Journal*. Published weekly in London from 1835, it is a key dataset for mining historians, its importance highlighted by the fact that an index to entries of Irish mines and mining companies was collated by students under the tutelage of John Morris, then Principal Geologist at the Geological Survey of Ireland. This

Above; The Mountain Mine Office, Allihies, Co. Cork, Jim McCannell Principal Geologist and Evan Harris, Mine Manager, 15 April 1957 (Image one of a number of photographs donated to the MHTI by Jim McCannell of Canada)



Left; One of the former miners of the St Kevin's Lead and Zinc Mining Company being interviewed as part of the *Metal Links* Miners' Memories Project. (Image Keith Malone, courtesy of the Glens of Lead Group)

Right; Mining historian, Des Cowman, takes a break from documents to inspect some Bronze Age maul stones in the Parys Mountain Mine, 2009 (Image Alastair Lings)



index has proven to be indispensable to mining historians.

As noted by Alastair Lings elsewhere in this volume, the international dimension of the mining industry has always been acknowledged by the MHTI with visits overseas, and this is evidenced in our research too, through the forays of Des Cowman and John Morris into the archival holdings at the Public Record Office at Kew in London. Here they recorded and subsequently published in our first Journal, a list of mining companies operating in Ireland that were entered in the Board of Trade Records, drawing together the first record of modern mining activity in Ireland.

Likewise, Ken Brown and Roz Cundick painstakingly catalogued entries in the voluminous correspondence of one of Cornwall's most important engineering companies held at the Cornwall Record Office in Truro. These data were supplemented by other records compiled by Ken, an authority on Cornish steam engines, who made available to the MHTI his discoveries of machinery and other equipment exported from Cornish foundries to Ireland in the nineteenth century. This proved invaluable to the MHTI's field research and the consolidation projects we were involved with, which are outlined by Martin Critchley elsewhere in this volume. But the history of countless obscure mines and mining ventures

throughout Ireland remained largely unknown due to a paucity of records.

However, in recent years the advent of computerised catalogue files, virtual libraries, interactive maps and online databases have begun to eclipse traditional methods of research and have revolutionised the potential for discovering more about Irish mining history. Sites such as JSTOR (accessible from some public libraries and university campuses) and Google books, enable researchers to search for and download, in various formats, obscure or rare books, historical directories, periodicals and academic articles. The Ordnance Surveys of Ireland and Northern Ireland have scanned the 6-inch and 25-inch maps which are now accessible online, and similarly, the Geological Survey of Ireland has scanned many of its maps, plans, and other records. In addition, Griffith's Valuation, the primary source of land and property records for the middle of the nineteenth century, is also available through the Ask About Ireland website.

Previously unknown collections of papers of relevance to Irish mines have come to light through schemes such as the Access to Archives (A2A). This important initiative that operated from 2000-2008 provides a searchable online database containing details of catalogues held in a plethora of archive repositories across England

Mining The Records: Archives And Historical Research

and Wales. The National Register of Archives, the central point for the collection and circulation of information about the content and nature of archival manuscripts relating to British history, contains published and unpublished lists and catalogues describing archival collections in the UK and overseas. Some inevitably refer to Irish estates and have mining related content. Likewise, the computerisation of the records held by the Public Record Office of Northern Ireland (PRONI) and the National Library of Ireland, has proved to be a real boon to researchers.

Perhaps the most significant advance has been in the digitalisation of national and regional newspapers, in Ireland and beyond, which has opened up a rich new seam of research for mining historians, and permitted the revision and retelling of numerous mine histories. It once took many hours to read through each newspaper edition in unwieldy bound volumes or on sight-destroying scratchy microfilm in the (often vain) hope of a fortunate stroke of serendipity. Now the results of a keyword, or words, entered into a search engine are returned in mere minutes on computer screen. Gone are the days of laboriously copying out the relevant references into notebooks. The historian is free to browse through each 'hit' and download and print the article of interest. It is now possible to search for, and find, the precise information you are looking for from the comfort of your own home, saving years of effort and considerable expense.

Buried away within the pages of these historic newspapers is a record of the erstwhile and often forgotten activities of Irish mining companies, the individuals connected to these historic mines, and legal proceedings that are seldom, if ever, recorded elsewhere. The newspapers, above all else, have greatly elucidated the human history of Irish mining, a narrative that has been largely absent in the past.

Indeed, recent journal papers capitalise on the availability of online material. Obscure archival references have thrown new light on medieval silver mining in Ireland (see Peter Claughton and Paul Rondelez's paper in Journal 13), while Schwartz and Critchley provide unprecedented detail in their Journal articles from 2011-2015 about nineteenth century mining ventures across

the island. These range from relatively unknown lead mines in counties such as Offaly and Armagh, to the larger Newtownards, Luganure and Glenmalure mining ventures.

Another valuable avenue of research is offered by oral testimony, an important aspect of historical research, as it gives a voice to those who are sometimes overlooked or marginalised in mainstream historical narratives. Since the 1970's, oral history has emerged from its roots in folklore studies to become a key component in community histories, a powerful means of recording and preserving the unique memories and life experiences of people whose stories might otherwise have been lost. With the exception of Caroline Nicholson's paper on the salt mines of Antrim in Journal 14, oral testimony has not featured in our journal or been much in evidence in our community work.

However, the MHTI, through Martin and Sharron, has recently been involved in an oral history project with the Glens of Lead community group in Co. Wicklow. Under the aegis of the Interreg IVA *Metal Links: Forging Communities Together* project, a series of interviews with some of the people formerly employed at the local lead mines in the mid-twentieth century was commissioned and digitally recorded in both audio and visual format. These interviews will inform future research projects, interpretation material and publications. Similar projects in some of the coal mining areas of Ireland have been conducted, but without any involvement from the MHTI.

The successful period of mineral exploration from the 1960's which saw the subsequent development of important mineral deposits at Tynagh, Galmoy, Lisheen, Tara, Silvermines, Avoca and other mines, cries out for a properly conducted nationwide oral history project to capture the 'mining memories' of the many thousands of people who worked at those mines while they are still alive. The MHTI has always viewed mining history as far more than just ore production figures and profit and loss sheets. The stories of the people who worked for various twentieth century mining ventures have the capability to greatly enrich the history of each mine. Looking forward, the MHTI would certainly wish to support future initiatives to record the testimony of former mineworkers.



Left; Rob Goodbody speaking at the *Delving the Records* workshop in 2001 (Image Matthew Parkes)

Right; Donald Devenney in March 2015, holding a copy of the *Irish Press* dated 26th November 1946 describing his work at the Crohy Head Talc Mine, Co. Donegal. He was delighted to reminisce about old times with MHTI members (Image Patrick Boner)

As highlighted by Matthew Parkes elsewhere in this volume, another dimension yet to be fully capitalised on, is the history of the migration of mineworkers to and from Ireland. Migration is a central theme in Irish history, yet with a few exceptions, the migration of skilled miners into and out of Ireland has barely featured in our journal or in our work with local communities. Indeed, the absence of mining migration research is also reflected in mainstream academic literature, highlighting the difficulty of accessing useful and/or relevant records to take us beyond Irish surname recognition, particularly where attempting to determine the migrant's specific place of origin in Ireland is concerned.

The loss of the nineteenth century decennial census returns for Ireland, used as a baseline for the study of British mining communities, is inestimable. From 1851, each census return named entire households, their place of residence, each individual's parish of birth, age, occupation, and relationship to the head of the household. And the fragmentary nature of some rites of life registers (many Church of Ireland parish records were destroyed in the 1922 Four Courts fire in Dublin) and the paucity of Irish mining company records naming salaried workers, also confound the job of discovering who went where, from where, and when.

However, the astonishing advance in online collections such as Find My Past and Ancestry, some of them free and specifically related to genealogical research, has brought the possibility of being able to better research this topic one step closer. Millions of records from Ireland and



more importantly, from countries such as Britain, Canada, New Zealand, the USA and Australia, are being constantly updated and can now be accessed and cross referenced at the click of a mouse button.

The advent of these online datasets and the popularity of genealogy will hopefully stimulate interest in individual and family movements, but also those of whole communities, for it is well known that migration gives rise to networks between sending and receiving communities that results in distinct settlement patterns or 'clustering'. Indeed, preliminary research using nominal record linkage techniques undertaken as part of the *Metal Links: Forging Communities Together* project into the migration of mineworkers from the lead mines of the Wicklow Uplands, has begun to uncover discrete patterns of migration from Co. Wicklow to the iron mines of Cumberland (now Cumbria) in NW England, and then on to the coal and iron mines of Pennsylvania and New Jersey.

As we look forward to another 20 years of historical research, genealogy above all else holds the promise of truly globalising the appeal of Irish mining history and broadening and growing the membership of the MHTI. Despite our small voluntary base, it behoves us to seize the opportunity.

20 years of **community involvement** in mining heritage

By Matthew Parkes

In an earlier commentary on the history of the Mining Heritage Trust of Ireland (MHTI), the many cases where there was a lack of engagement with the MHSI/MHTI by numerous community groups with mining heritage interests were noted with some regret. However, in this section the numerous very positive engagements are explored. Links made and successes achieved in terms of raising the profile of mining heritage in public consciousness are covered, but for many of these major improvements in the security and conservation of physical features have also resulted. Some have shown that mining heritage can be a sustainable economic attraction for visitors. The objective to initiate and support mining heritage as tourist amenities, has always been through the local people who have a stake in the site. The MHTI never envisaged owning or running any facilities, but through its expertise and a national umbrella body approach, it could assist groups with projects on the ground where possible.

Allihies - County Cork

The MHTI's engagement with the Allihies community is one of the longest in our 20 years, since the start really. Even before the MHTI began John Morris had developed a geotourism project in the Geological Survey, focusing on three specific landscapes. One of these was the Allihies copper mining district on the tip of the Beara Peninsula, and as part of that project Dan Tietzsch-Tyler produced a superb fold out map leaflet guide, accessible to any visitor. The classic *Berehaven Copper Mines* book of Alan Williams was already on its second or third reprint and the whole area was a thriving artist's hotbed,

many looking at the mines with a different eye. At the same time, one engine house had already collapsed into the main stope and the timbers had rotted away in the Man Engine House at the Mountain Mine. There are 1000s of extant Cornish-type engine houses in the world, but only 20 odd of these were man engines, designed to carry men up and down the workings as opposed to pumping water or for crushing or bringing out the ore. This building became an obvious target for our first big project.

Although the technical conservation work to secure this iconic building well into the future is fully documented in the MHTI Journal, the heartbreak and effort that John Morris put into persuading all the parties who had a stake, to come together and allow the works, was phenomenal. Whilst John Terry O'Sullivan, a key business owner in Allihies, was fully supportive of developing the mining heritage for tourism reasons, there were many commonage landholders who had to be persuaded, and without the MHTI the project would not have succeeded.

Subsequently, work on trails in the area has been completed and some work has also been done on probable Bronze Age mines in the area, similar to those in Mount Gabriel sited on the Mizen Peninsula of Co. Cork. However, the most exciting development was the purchase and conversion of the former Protestant Chapel into a combined Allihies Copper Mine Museum (ACMM) and Art/Community space. The original building forms the museum and a modern addition provides superb facilities for the exhibition of local artists and events. The powerhouse behind this and the imaginative creator of superb displays was Theo Dahlke, although it is to be regretted that



Left; The talented Theo Dahlke seen here during the fitting out of the Allihies Copper Mine Museum in 2006. The following year it was opened by then-president Mary McAleese (Image Sharron Schwartz)

Right; Diane Hodnett, author of *The Metal Mines of West Cork*, outside the Dhurode Mine powder house, Co. Cork, 2006 (Image Sharron Schwartz)

he has resigned in relatively recent times, and the current website of the museum suggests his massive contribution has been written out of the story. During the last decade, an MHTI and Cornish champion for the ACMM has been Diane Hodnett and her late husband Frank, who were able to source many things from the Cornish mining heritage mafia! Her contribution will be remembered, along with the immense work the Hodnetts and Paddy O'Sullivan from Bandon put into their comprehensive book, *The Metal Mines of West Cork* published in 2010.

The sad chapter at Allihies concerns the ruin of the former Puxley family residence at Dunboy outside Castletownbere, built on the profits of Allihies miners' work. At some point during the 'Celtic Tiger' madness it was sold to be converted into an impossibly starred hotel, and I believe a lot of work was done. However the money ran out and the project remains unfinished.

Avoca - County Wicklow

Avoca is a central jewel in the mining heritage crown of Ireland, yet there is a widespread perception that this extensive site, which is of national significance, is distinctly undervalued by the Irish Government. In the early days of the MHTI *Ballykissangel* was a top comedy drama on BBC TV and the village of Avoca was crowded with visitors, yet did the mining landscape ever feature apart from one episode when someone was lost in the mines? Although Wicklow County



Council's Heritage Officer Deirdre Burns, and the GSI through John Morris, and the MHTI (originally John Morris and more recently Martin Critchley) have had many engagements with varied partners in projects to protect the mining heritage, it seems that a losing battle is being fought. Nick Coy, for more than 20 years a champion of Avoca, was sadly unable to raise sufficient investment to create an underground mining heritage centre based on the 850 level. Local residents, Marie and Andy Merrigan, have been fighting to protect and promote the extensive mining heritage for many years, firstly through VADA (the Vale of Avoca Development Association) and more recently via the Avoca Heritage Committee. Notable achievements in Avoca include the vital conservation work done by a key stakeholder group, the Avoca Mines Trust, between 2000 and 2006 to several of the Cornish-type engine houses, most notably the Williams Engine House chimney - which is a part of the most iconic and important engine house in the valley.

In 2008, the story of the Avoca Mines, and of the lead mines of the Wicklow Uplands, was published in a small booklet entitled *Exploring the Mining Heritage of County Wicklow*, under the aegis of Wicklow County's dedicated Heritage Officer, who is keen to raise the profile of the county's mining history and heritage. Edited by Martin Critchley, this was funded by the Heritage Council as part of the County Development Plan. However,



Top; Members of the Glens of Lead group at the *Forgotten State of Industry?* conference opened by Minister for the Arts, Heritage and the Gaeltacht, Jimmy Deenihan TD (fifth from right), in 2013 (Image Glens of Lead)



Bottom left; Marie Merrigan, a local champion and tireless campaigner for the preservation of the Avoca Mines as a heritage site, seen here at the Ballymurtagh Tramway Bridge in 2006 (Image Sharron Schwartz)



Bottom right; Consolidation works to the chimney of Williams' Engine House, Tigroney Mine, Avoca, Co. Wicklow. The work, carried out in 2003-04, was funded by grants from The Heritage Council and LEADER (Image Brian Jones)

despite the attempts to bring to wider attention the superlative heritage value of the Avoca mining landscape, many of its historic mine buildings languish in a state of benign neglect and are in urgent need of consolidation works.

For someone who was on the periphery of most of them, there seem to have been many different European funded projects looking at the Acid Mine Drainage (AMD), the pollution of the Avoca River from it and the technological feasibility of actually modifying such a massive and specific landscape. The mining heritage was recognised and documented as County Geological Sites in its entirety (described in separate sections) in a 2014 audit of County Wicklow. However, the phased plans of the Exploration and Mining Division (EMD), through its consultants, have generated most opposition as they propose to eradicate much of the character and integrity of the mining heritage by refilling East Avoca Open Pit and Cronebane Pit with spoil from Mount Platt and irreparably modifying key areas like Tigroney. The 850 level, among the best underground mine trips in Ireland, is now closed to all (Farmer's Shaft, a 200 foot abseil was already capped) and despite so

many examples of best practice in Britain **where access can be maintained and the essential character of historic mine sites retained**, it feels like the availability of money to 'fix' the 'environmental problems' will override any mining heritage concerns. The topic is addressed in detail by Sharron Schwartz, Martin Critchley, Marie Merrigan and Ainsley Cocks in the 2015 journal of the MHTI.

Ballintrillick/Gleniff - County Sligo

Hidden away in the woods beside the road at Ballintrillick on Gleniff's Horseshoe road, is a mining heritage asset that would be largely lost and forgotten were it not for the efforts of Gerry Foley and colleagues in the Ballintrillick Environmental Group. Whilst many people know of the baryte mines which form a gash through the mountain above at Glencarbury, the fate of the mineral is less well known. Much of the mineral from earlier phases of mining went through a processing works at Ballintrillick, which is now mostly only the footprint of buildings. However the local efforts have made it accessible, with some interpretation and an interesting feature for any



Above; Former coal miner, Seamus Walsh, a guiding light in the setting up of the Castlecomer Discovery Park, treats MHTI members to one of many stories about the coal mining heritage of the area during a 2012 field trip (Image Sharron Schwartz)

tourist to stop at on the way around the Gleniff Horseshoe, whether on foot, bike or car. The dam upriver in the woods held the water that powered the mill, and the whole complex is a complement to the underground and opencast workings on the top of the hill.

Whilst the MHTI can take no credit for the actual work on the ground, we have had several visits to Sligo, both to the mines themselves and the Ballintrillick Mill, and were hopefully encouraging and supportive in our engagements, and in providing imagery and material from Dublin records for Gerry Foley's publishing about the baryte mines of Sligo. Most important in any of our relations with landowners and local enthusiasts has been the steady head of Mick Carragher. Mick worked in the mines here as Foreman in the 1970s and provides a widely respected link between the MHTI and the community.

Ballycorus - County Dublin

Whilst nothing substantial that I know of has yet happened, there are the stirrings of a local group formed by Joe Walsh, and some consultation with the MHTI has taken place. It is hoped that local care will help ensure the fine lead works, smelter chimneys and other remaining features are protected.

Ballyknockan - County Wicklow

The granite quarrying at Ballyknockan now overlooking Blessington Reservoir has a long history and provided the stone for many of Dublin's finest public buildings. The village itself is a memorial to the skills of the stone cutters with quirky and impressive reminders scattered everywhere, and the large quarry dominating the higher parts of the village. The cheap labour in China has meant that large contracts for supply are a thing of the past but Dave McEvoy carries on the stonemason family traditions still, mostly conservation work on historic buildings or one-off artistic commissions.

Whilst the MHTI has had a few visits to the area, more recently we have been attempting to support the heroic efforts of Terry O'Flaherty and Dave McEvoy to raise the profile of the industry there, but the resources of people to help significantly are in short supply. Terry lives in the *Ballyknockan Inn*, which was the main quarry owner's house and he has displayed many stories about the stone cutting tradition on the walls of the pub.

Castlecomer - County Kilkenny

Seamus Walsh has been a nearly permanent fixture in the MHTI from the earliest days. Anyone who has heard him talk about his and other miners' lives in the Deerpark Colliery near

Castlecomer cannot fail to have been touched by his passionate storytelling, his poetry and songs about the tough life the miners had and the camaraderie amongst them, as a whole community. Seamus was a guiding light in the setting up of the Castlecomer Discovery Park, as it is known today. With a dual themed exhibition at the centre of the Park, covering mining history in Comer and the even older story of the fossils from the coal, the Park is today a thriving sustainable centre offering a massive range of educational, fun and sporting activities to visitors. It is locally managed and run, with Errol Delaney a key player in keeping it on a sound business footing, even through tough times of closure in his own brick making business.

What role did the MHTI play in it? As a participant and as a detached observer, I would say that whilst the initiative and drive was entirely locally driven, with Seamus Walsh winning hearts and minds in local council and other quarters, the backing of the MHTI Board and some notable AGM field visits gave the community a degree of confidence in their own visions, and the 'central' support helped push some funding applications over the line, in backing up what the community was arguing – that Comer's mining heritage has a genuine social value.

Copper Coast – County Waterford

The engagement of the MHTI with the Community in the Copper Coast Geopark has all been based primarily on the rich history of copper mining documented so well by Des Cowman in his book *The Making and Breaking of a mining community: The Copper Coast, County Waterford 1825-1875+*, and on the extensive physical evidence

in several communities along the coast. Of course the fantastic Ordovician volcanic geology is also critical and the role of geology in shaping people's lives is a story the Geopark aims to tell. The disused Protestant Church in Bunmahon has been purchased and renovated and is now the Geopark Centre with an exhibition (partly put together by the author), a coffee shop and space for events. Major conservation work on the Tankardstown Engine House and many other projects have all been achieved and documented in the MHTI Journal (No 5 was a special issue devoted to the Copper Coast).

It is impossible to do justice in a paragraph or two to the extent of the involvement in the Copper Coast of the MHTI, which has provided constant support and financial assistance at a crucial juncture, with many people such as Des Cowman, John Morris, Martin Critchley and Nigel Monaghan heavily committed. The balance has now shifted to much more locally driven leadership from John Galloway and then Mike Sweeney. Too many individuals to name have played important roles in getting to this point. The big ambition for the future is to get the Tankardstown Mine opened as an underground visitor attraction, and a feasibility study has been done.

As I write this piece, another step has taken place in the Copper Coast Geopark, in that the old company structure has been replaced by a new company structure, responding to requirements of law. The MHTI is no longer one of the nominating bodies for directors (with GSI and Waterford County Council) and so a new independent chapter begins. Of more importance is the achievement of the Copper Coast UNESCO Geopark status in 2015, of equivalent status to



Above; MHTI members join local mining heritage enthusiasts at the Crohy Head soapstone mine, Co. Donegal, March 2015 (Image Patrick Boner)

a World Heritage Site. However, despite the UNESCO endorsement of the Geopark and all the progress to date, Waterford Council have not yet embraced it in the same way that Clare County Council and Fermanagh Council have supported the Burren and Cliffs of Moher Geopark and the Marble Arch Caves Geopark respectively. Hopefully this will change and the Geopark will be able to really deliver the tourist visitors and help sustainable development in this little known corner of Ireland. The MHTI will continue to support the Copper Coast UNESCO Geopark in the future.

Crohy Head Talc Mines – County Donegal

Crohy Head is a special place in Donegal, where the MHTI has been twice now, for field visits. The second time was an inventory type of trip where surveying and recording were the order of the weekend. Our local ally, Patrick Boner and his colleagues provided a memorable trip, and he even managed to fix a meeting with a surviving miner, Donald Devenney, from the 1940s working, who was generous with his time answering questions for us.

The mines in the headland extracted talc and although some are accessible still, others are not, with cliff collapses and loose rock. Some of us went swimming here, for Alastair Lings

had calculated the timing of the trips on both occasions to allow an hour or two at very low spring tide when an offshore rock barrier makes it possible to swim safely around a headland and into a warren of tunnels through the headland. Were these mines or sea caves? Hopefully you will be able to find out in a future issue of the journal!

Whilst there are no long term outcomes for the physical mining heritage, the engagement with the local folks that cared about it was richly rewarding for both sides, with MHTI members learning much that could never have been discovered acting alone, and I believe that Patrick Boner and the local people took pleasure in revealing their treasures to us.

East Clare iron works – County Clare

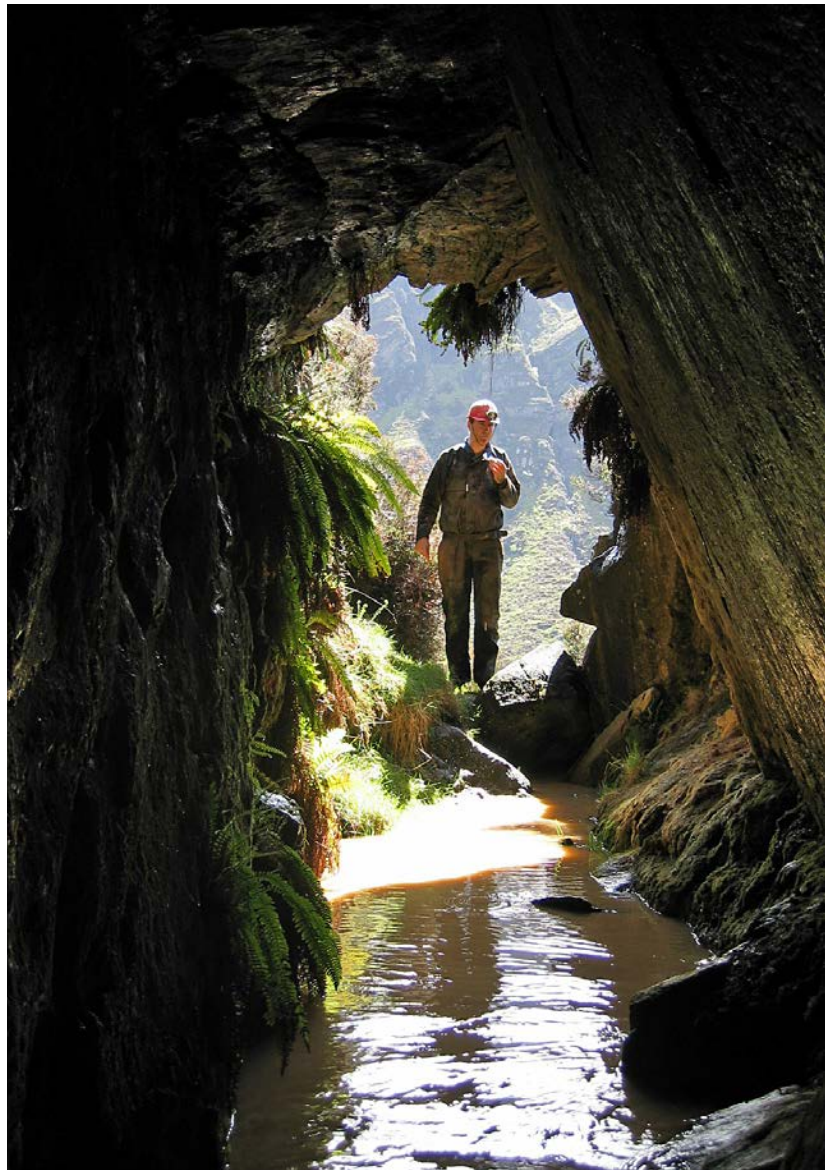
The efforts of Paul Rondelez and colleagues in the Slieve Aughty Furnace Project have revealed a range of 17th- and 18th-century blast furnaces on the west shore of Lough Derg, and efforts to conserve these structures are now their focus. Paul has only become a member and Director of MHTI in recent years, but had contributed to the Journal previously. Whether the MHTI has helped with the project other than by publicising it is debateable, but bringing Paul's energy into MHTI has been a great addition for us.

Glendalough/Glendasan/Glenmalure - County Wicklow

Lead mining has been a feature of the Wicklow Uplands for hundreds of years, with the last phase only ending in the 1950's. For many years the output was transported to Ballycorus where the Mining Company of Ireland that operated the Lunganure Mines had invested in a smelting works. Some of the finest historic mining buildings are situated in the 'Miner's Village' in Glendalough and prominently beside the road in Glendasan. These iconic sites, and the two nineteenth century crusher houses in Glenmalure, the finest extant remains of such buildings in Ireland, were all water powered processing works.

The Glendalough Mining Heritage Project, a local group inspired by the plea of former miner, Robbie Carter, to preserve and promote the mining heritage of the area, received significant assistance from the MHTI, primarily from Martin and Sharron. They were invited to join its committee when the group became involved in the Interreg IVA *Metal Links - Forging Communities Together* project. Since then, the Glendalough Mining Heritage Project has expanded the focus of its interest to include the neighbouring glens of Lough Dan and Glenmalure, becoming the Glens of Lead.

The *Metal Links* funding enabled the digital recording and subsequent transcriptions of the memories of the remaining former miners, a scoping project on the migration of nineteenth century mineworkers, a palaeo-botanical study of an ombrotrophic bog sample; an audit and survey undertaken by Martin and Sharron of the historic mining landscape in all three valleys, published



in recent MHTI Journals, and the hosting of an important international conference - *The Forgotten State of Industry? Irish Industrial Landscapes and Heritage in a Global Context* - opened by the then Minister for the Arts, Heritage and the Gaeltacht, Jimmy Deenihan TD.

The MHTI's input has helped to ensure that the crusher house at Glendalough was consolidated in the autumn of 2014 by the Wicklow Mountains National Park, and our suggestions to mitigate the flooding risk to the remaining buildings and other features have been taken on board. Very recently, the MHTI has supported the Glenmalure PURE Mile group's successful application to the Heritage Council's *Adopt a Monument Scheme*, to preserve the New Crusher House at the Baravore Mine and to promote the mining heritage of the area. Along with funding secured by the landowner, Coillte,

Above; Matthew Parkes peering into the 2nd Adit of the Glendalough Lead Mine during a pre-NAMHO recce in 2003 (Image Brian Jones)



Top; 2015 Heritage Week field trip to the lead mines of Glenmalure, Co. Wicklow, organised by Sharron Schwartz and Martin Critchley (Image Sharron Schwartz)

Bottom; Keith Geoghegan outside the reconstructed nineteenth century powder house at the Glengowla Mine, near Oughterard, Co. Galway, in 2008 (Image Sharron Schwartz)

this iconic building will finally be consolidated later this year. Another recent success is the installation of three interpretative signboards, rather surprisingly, the first related solely to metal mining ever to be erected in County Wicklow, Ireland's foremost historic mining county. Designed by the Glens of Lead group, they can be seen at key sites in Glendalough and Glendasan, with two more to be erected in the near future.

Glengowla Mine - County Galway

The Geoghegan Family own and operate Glengowla Mine, near Oughterard, as a show mine for tourists to come and learn about life in a 19th century small lead and silver mine. It is a fantastic place to visit and although not a large mine, it packs a real punch in terms of an authentic visitor experience and boasts

some stunning fluorite exposures. Paddy and Pat Geoghegan and their son Keith, with his own family, have farmed the old mine site for generations. With a bit of inspiration from Stephen Moreton, a mineral expert and collector who was visiting them, the vision to do something with the mine coincided with the setting up of the MHSI and they became some of the earliest members and were ever-present on trips in the earlier years as they soaked up knowledge from other people and places.

Digging out the rusting cars and other rubbish dumped in the mine shaft by hand by themselves, they have developed what is the most significant tourist attraction between Galway and Clifden, aside from the very landscape itself. Now in its 18th year as a public show mine, they have been successful in gaining more and more visitors, digging further down into the old workings and making a safe but authentic feeling experience, with the personal touch that makes it memorable for visitors.

Whilst all the hard work has been done by the Geoghegan's themselves, the backing of the MHTI members and the organisation has helped promote the whole venture and provided knowledge in the development of the mine. In particular the backing of the expertise from the Shropshire Caving and Mining Club has been essential in delivering projects such as a DVD film promoting the mine. The mine and property are currently the filming location for TG4's *An Klondike*, substituting for the Yukon in Canada!

Newtownards - County Down

Over the years, the MHTI has engaged with several partners in relation to the former significant lead mining area at Conlig and Whitespots near Newtownards, one of the finest mining heritage sites in Northern Ireland. Norman Moles and Dermot Smyth have previously conducted site visits explaining their research into the geochemical nature and distribution of metal enriched soils at the mines, and published on this in the 2015 Journal. Norman was invited to be the keynote speaker at our 2015 AGM lecture programme, which also featured talks by Sharron and



Martin covering aspects of the detailed article on the history of the Newtownards Mines which they had published in our 2013 Journal. As part of our 2015 AGM activities, they also put together an exhibition, *Lead Mining Lives and Landscapes*, which was launched and then exhibited in the North Down Museum to public acclaim for a month that summer.

The lectures, a post AGM site visit and the exhibition has sparked interest in trying to better promote and protect the mining heritage of the Newtownards Mines. Discussions have been held with the Geological Society of London (Northern Ireland branch) about the status of the mine site, with the intention of eventually bringing together all interested stakeholders to explore a way forward.

Silvermines - County Tipperary

The Silvermines area has such a long recorded history of mining going back to around 1289, with the famous Mogul Mine closing in 1982, and the Magcobar baryte open pit closing only in 1992. Éamonn de Stafort was a leading light in the Silvermines Community and a member of the MHTI from the beginning. His input was critical to the success of many building conservation projects (mostly reported in detail in our Journal), in partnership with Tipperary County Council, and funded by Interreg through the *Green Mines* project.

Interestingly, Martin Critchley was involved with an earlier proposal, the first in Ireland, to create a National Mining Heritage Centre at Shallee briefly outlined by Martin in the

section on conservation, which sadly didn't happen. Later, the MINET project discussed by Martin and Sharron elsewhere in this volume, had a focus in Silvermines, with an international meeting there, and with many of our AGMs were also held in the *Abbeycourt Hotel* nearby in Nenagh.

Slieveardagh - County Tipperary

A committed group from the community have been making valiant efforts to preserve and value the coal mining heritage at Slieveardagh. They have been active in raising awareness, enthusiasm and support in their whole community and have developed a small mining museum (opened in 2012) and collection of mining related artefacts and ephemera within their local community centre at the renovated Old Commons Schoolhouse. MHTI has twice visited and been treated with great hospitality and courtesy, being fed and watered as well as seeing the main extant buildings and adits. Phelim Lally was the key contact and liaison for the field visits. The group have since become MHTI members and some members have made it to other events and trips. The MHTI, especially Sharron Schwartz, Alastair Lings and Martin Critchley, have since been in regular contact with the group and provide them with advice on methods for inventory, oral recording and historical data collection. It is too early to measure the MHTI's impact, but the Old School Mining Museum Group have project work ongoing, aimed at preserving many sites and buildings which we heartily support.

Left; Martin Critchley and Éamonn de Stafort (first and second front right) leading a NAMHO 2003 field trip to Silvermines (Image Fergal Shanahan)

Right; Alastair Lings thanks Margaret O'Brien of the Old School Mining Museum, The Commons, for hosting our field trip to Slieveardagh, Co. Tipperary, in March 2013 (Image Martin Critchley)

Right; MHTI members underground in the Kilroot Salt Mine, Carrickfergus, Co. Antrim, in 2004 (Image Martin Critchley)



Thematic communities:

Industrial partners

Throughout our 20 years the working mines at Tara, Lisheen, Galmoy, Kilroot and Knocknacran have been very hospitable and helpful in accommodating us on visits to the sites on many occasions, and the MHTI is most grateful for their support. Similarly the newer gold mines of Dalradian at Curraghinalt and Galantas at Cavanacaw have also opened their operations to our interest. Many others have been equally generous with access to their operations for our visits, such as Harrington Concrete at Abbeytown Mine in Sligo, Ambrose Joyce (Senior and Junior) at the Streamstown Connemara Marble Quarry near Clifden and the Valentia Slate Ltd for the fantastic Slate Mine at Dohilla on Valentia Island.

Whilst the ways of working the modern mines have changed much in comparison to those of a couple of centuries ago, the visits have been fascinating and much appreciated. It is believed in the MHTI that our general raising of awareness about the importance of mining to past society can only assist the understanding of present mining and the important role it plays in sustaining our economic society.

Heritage Partners

NAMHO

From the original foundation of the MHSI, the importance of NAMHO as an umbrella body for like-minded organisations was fully appreciated and understood. Various members have been to most NAMHO annual meetings, our subs have been paid and reports sent to committee meetings when there was something to report. NAMHO stalwarts have been stalwart MHTI members in return and although always in the background, the relationship has been a rewarding one.

In 2001 we ambitiously offered to host the annual meeting in Ireland. The massive eruption of a Foot and Mouth Disease crisis in Britain and then in Ireland meant that we could not in conscience promote travel that was not necessary, and we suspended our own field trips to reduce risk of transmission, so we could not offer a field programme. Our commitment had to be postponed, and instead we hosted the 2003 meeting at *Avondale House* in Wicklow.

My memories are scattered as there were so many different activities going on and I couldn't be doing the things others were leading as I had my own group somewhere or other. I think that it went down well, and was enjoyed by everybody.

20 years of community involvement in mining heritage

For me personally the best part was the months before, when myself, Linda Heidkamp, Martin Critchley, Brian Jones and others spent days exploring every hole in the ground we could get into, preparing potential underground trips for NAMHO 2003. The breakthrough into Glendasan's Hayes Adit after an hour of digging a collapse was a real treat. The hosting of NAMHO 2016 is a measure of how far we have come, and we hope that it will also be a memorable occasion for those who join us in Dublin in June.

Industrial Heritage Association of Ireland (IHAI)

On the 12th February 2014 the MHTI received a framed certificate from the IHAI for Outstanding Leadership. The award was presented to MHTI secretary, Nigel Monaghan, by Oisín Quinn, Lord Mayor of Dublin, along with Jim Dollard, Executive Director of ESB. Fellow MHTI Directors, Ewan Duffy, John Gibbons and Matthew Parkes, were present at the award ceremony which was held at the ESB offices, Merrion Square, Dublin. This award, for which the MHTI was most grateful, marked a milestone in the lifetime of our organisation and was welcome recognition from another important Irish heritage organisation for the hard work and dedication of our group to mining heritage in Ireland over the last two decades.

Historical Metallurgy Society

It can be surprising when you discover another bunch of enthusiasts with a shared interest that you did not know about, but the approach of the UK based Historical Metallurgy Society (HMS) to visit Ireland was a really pleasant surprise. The MHTI hosted their annual meeting in 2007 and provided a venue for the day of talks and a field trip on the Sunday to Ballycorus and the lead mines of the Wicklow Uplands. Despite the cross-over of interests there has been little direct engagement since, which may be remedied in the future with the involvement of Paul Rondelez, an MHTI Director and an expert in historical iron working, with his role as a Director of HMS.



Heritage Week – the ‘general public’

This intense week of activities organised locally, but advertised and promoted nationally, run by the Heritage Council, has long been a focus of outreach to a broader public. A number of MHTI members have regularly provided guided walks for the public around their historic mine sites. For some, like Des Cowman on the Copper Coast and Nick Coy at Avoca, this was a labour of love before the MHSI was founded. Very large numbers of over 100 people have often been recorded attending these individual events.

Conclusion

When I started compiling this article, I had no clear idea what it would turn out like. However, despite the many places where so much more could be done if we only had the committed people available to engage with a project or a community, the range of positive developments mentioned here is truly encouraging, and again a testament to the efforts of a small dedicated band. I still have not mentioned facets like exhibitions we put together such as ‘Mining through the Millennia’ which was on display in GSI or ‘Mining heritage of Wicklow’ in the council offices. I am sure there are other sites which could have featured, but the story of 20 years of engagements described here certainly shows we tried to fulfil the relevant MHSI/MHTI objectives in our original Mission and then the Memorandum and Articles of the Trust.

Above; MHTI Secretary, Nigel Monaghan, holding the Industrial Heritage Association of Ireland’s award for Outstanding Leadership with MHTI Directors Ewan Duffy, John Gibbons and Matthew Parkes (Image Alan Murphy)



Above; Martin Critchey in the Gortavallig Mine,
Co. Cork, 30 April 2006 (Image Kelvin Lake)

Twenty Years of Field Visits (1996–2016)

By Alastair Lings, Martin Critchley and Sharron Schwartz

Over the last two decades, field trips have been a mainstay of our activities, as was envisaged in the original objectives of the Mining History Society of Ireland (hereafter referred to as the MHTI). Three types of field visits were visualised: guided tours, inventory days and the surveying of buildings and sites. These events, often eagerly awaited and well attended, enable members to meet up on a fairly regular basis, and are ideal opportunities to foster the practical sharing of knowledge or to hone skills in site surveying or SRT (single rope technique). But above all else, they are a way to simply enjoy the company of kindred spirits.

Looking back through our newsletters, it's apparent that our field trips have taken us to virtually every corner of our island, and where possible, we have endeavoured to explore the well-known as well as the most obscure Irish mines and quarries, both above and below ground if feasible. Many of our early trips drew on the knowledge of local groups and individuals that had in depth knowledge of a specific area. We also made numerous forays into neighbouring Britain, as outlined by Matthew Parkes and Martin Critchley elsewhere in this booklet, and we are grateful for those exchanges of knowledge with our friends and colleagues in Shropshire, Wales, Derbyshire and Cornwall. Indeed, one of the great things about mining heritage is the feeling of being part of one big family, characterised by an enthusiasm and willingness to share knowledge. This has shone through in our field visits and contacts with likeminded organisations and individuals at home and abroad.

As our organisation grew and interest in mining heritage across Ireland flourished, our

field events in turn reflected the cosmopolitan nature of mining. Inspirational visits were organised to the lead mines of the Isle of Man; to the medieval silver mines of the Hartz Mountains of Germany; to the lead mines of Linares in Spain and to the gold mine of Złoty Stok and the mines of the Sudeten Mountains in South West Poland. These visits, which necessitated a tremendous degree of organisation, were coordinated by the likes of John Morris, Karen Toebbe and Martin Critchley. At home, we continued to organise trips that appealed to surface enthusiasts, as well as the more adventurous. Coaststeering in wetsuits to reach cliff face workings, exploring muddy, partially flooded abandoned workings (sometimes involving digging) and abseiling into shafts ten of metres deep, isn't everyone's cup of tea! Others certainly enjoyed availing of the opportunity to visit working mines, often organised by former mine foreman, Mick Carragher, which included the likes of Kilroot, Galmoy, Lisheen and Tara.

Indeed, organising field trips is far more involved than at first appears. Irish weather is always a factor, and one of our earliest field trips - to Ross Island - was in the aftermath of flooding, while a visit to Lough Dan in the Wicklow Uplands had to be cancelled due to heavy snow! Indeed, even the best laid plans can go awry, as occurred with our preparations to host NAMHO 2001, scuppered by a massive outbreak of Foot and Mouth Disease.

As we pore over the newsletters of the last twenty years, more might have been done to fulfil our aspirations to undertake the detailed surveying of buildings and sites, such as were held at the Monaghan Mines back in 2000, and more recently at the Avoca Mines in 2013 using a new inventory



Top; Glendasan Lead Mine, Co. Wickow, 26 May 1996 (Image Matthew Parkes)

Right; The smelter flue at Ballycorus Lead Mine, Co. Dublin, 25 May 1996. The organisation's first field trip led by Rob Goodbody (Image Matthew Parkes)



system described by Martin Critchley in the chapter on surveying in this booklet. But what characterises our trips overall, are the elements of continuity. The desire to reach out, learn and connect with communities and individuals both at home and further afield, have always been apparent. They are emphasised by our recent AGM themed events: medieval silver mining with a special guest lecture by Peter Claughton, an authority on this subject, followed by a surface mine tour led by John Morris, held in conjunction with the local history group at Silvermines. Bronze Age mining in SW Ireland, with a revisit to the Ross Island Mines with Professor William O'Brien, with complimentary lectures by leading British archaeologists and archeometallurgists, Simon Timberlake and Alan Williams. Lead mining in County Down, with a special community exhibition and a keynote lecture by renowned geologist and environmental geochemist, Norman Moles, on the Newtownards Mines.

Twenty years, and 180 field trips later, the programme of the Mining Heritage Trust of Ireland is similar to what was planned in 1996. We now invite the reader to share our field trip portfolio with a look back through some of our newsletters and photographs. A full list of our field trips is given at the end of this chapter.

Early Days

The Editorial in Newsletter 6 (December 1997) comments: 'This issue catches up on the Summer's field meets. These are possibly the most important activity the society has to offer; reports such as

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these are pale shadows of the actual experience. The point has been made, though, that the number of sites in Ireland is very finite. However, there are a great number of aspects to each site as Ken Brown's article on Avoca indicates. There is also the enlightenment that is to be had from visiting overseas sites. And, most importantly, there is the revisiting that must take place as a result of the site inventory'.

The Editorial in Newsletter 11 (July 1999) records: '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 some of the more exotic mining sites, so do come along!'

Collaboration is one of the themes covered in the Editorial of Newsletter 12 (December 1999): 'As is apparent from the summary contents of this Newsletter above, a great deal of activity has been generated in relation to our mining heritage. Most of it would not have taken place here were it not for the existence of the MHSI. Since February 1996 an enormous amount has been achieved not least of which is the hosting of the MINET Conference in Ireland. This emphasised what we already knew – the future is collaborative rather than isolationist. We are therefore actively considering hosting the (British) National Association of Mining History Organisations (NAMHO) conference in 2001'.

A New Millennium, a new name and international links

On the 10th February 2001 the MHSI changed its corporate status and name to become the Mining Heritage Trust of Ireland (MHTI). Events should have continued as before, but later in the month there was a massive outbreak in the UK of Food and Mouth Disease (FMD), which affects cloven hoofed animals, such as cattle, sheep and pigs. The disease spread to Ireland, and there were severe restrictions on entering farmland. Newsletter 16 (May 2001) contained the following statement from the Chairman: 'In light of the foot and mouth crisis, and after discussions with the MHTI committee, NAMHO and the Department of Agriculture, we have decided to cancel the NAMHO 2001 event... The proposed venue and all access to land containing animals (this includes most mine sites in Ireland) have been closed. The Irish

Top Left; William Dick by the rolls crusher at the Glendalough Lead Mine, 26 May 1996 (Image Martin Critchley)

Top Right; MHTI members walking on water! Flooding at the Muckross Mine, Co. Kerry, October 1996 (Image Matthew Parkes)

Above; Allihies Copper Mines, Co. Cork, 12 April 1997. Alan Williams, author of *The Berehaven Copper Mines*, centre (Image Martin Critchley)



Above; Petra Coffey gets her hands dirty making culm balls, Castlecomer, Co. Kilkenny 13 February 2000 (Image Martin Critchley)



Right; Exploring the Benbulbin Baryte Mine, 21 April 2002 (Image Martin Critchley)

Department of Agriculture has indicated that restrictions will stay in place until at least 30 days after the last UK case of FMD. This would make it impossible to organise, let alone operate the NAMHO conference'. The conference here was therefore deferred and was held in Bradford, Yorkshire, instead. Newsletter 17 (October 2001) continues the theme: 'Because of the continued threat of foot and mouth disease field activities were cancelled during the Summer/Autumn of 2001... It is expected that outdoor activities can be resumed again from the Spring of 2002'.

A major development in access to mines in the Republic was reported in Newsletter 19 (March 2002). 'All abandoned underground mine workings in Ireland belong to the State. We have just been given permission by the Exploration and Mining Division of the Department of Marine and Natural Resources to access these workings for official MHTI business. Access is conditional upon following the NAMHO guidelines for the leisure use of abandoned mines, the MHTI safety policy, insurance in the name of the Minister to indemnify liability, prior notice of access and permission of the landowner. We are extremely grateful for this permission, as it will allow us to extend our activities and prepare underground trips for the forthcoming NAMHO 2003 event. However it must be stressed that this permission only extends to trips sanctioned by the MHTI committee and the procedures outlined above must be followed. All underground visitors must

be MHTI members and this rule will also apply to NAMHO 2003. Our thanks go to Raphael Kelly and staff of the Exploration and Mining Division for assistance with this most welcome development'.

Underground exploration in Wicklow was proposed in Newsletter 20 (May 2002), with the aim of assessing the suitability of mines for future NAMHO visits. It was a busy time for the MHTI as Newsletter 23 (May 2003) explained: 'much of the energy of the Trust has gone into re-organising the NAMHO conference deferred by the foot-and-mouth outbreak of 2001. Details have already been circulated to members of the programme, plus optional site visits over the following five days. MHTI welcomes our UK colleagues to their first ever conference outside the "mainland". For us, of course, the "mainland" is Europe and it is to the Harz-land of that we will be heading in September to visit the origins of early modern mining'.

Newsletter 24 (October 2003) contained summaries of the surface and underground visits made as part of the NAMHO conference and noted that 'this massive job of organisation fell on the usual efficient few shoulders and everything ran smoothly'.

Moving on with surveying and inventories

The Editorial of Newsletter 26 (June 2004) described the development of the Trust mentioning: 'In the early years of MHSI (as it then was) simple visits to Irish mining sites had

Twenty Years of Field Visits (1996-2016)



a priority as there were many that only a few had seen. It quickly became evident that recording such sites while we were there added to the value of such visits and thus was born the Mines Inventory. That many important buildings were in need of conservation and preservation led to the next logical step... Thus much of the energies of MHTI have gone into... organising field trips such as to the Harz in 2003 and to Linares in 2004. Some may regret the virtual demise of the “day out” approach to mine heritage and anybody who is willing to organise one is welcome and will be featured here’. In Newsletter 27 (August 2004) the Editorial declared ‘we need more active members to lead field trips and visits to mine sites, to research individual sites... and so on’.

According to Newsletter 29 (March 2005), ‘Any vibrant organisation keeps changing and this is true of MHTI. The first objective was to visit and record Irish mining sites with visible remains. Substantially this has been done. The next step was to put them in the context of wider European mining and this has been done with visits to Cornwall, the Harz Mountains, Linares and currently to south west Poland’

A notable achievement in field research was recorded in Newsletter 31 (September 2005) which commented that ‘the MHTI’s expertise has been given formal recognition in that it has been consulted by Galway County Council in relation



Top Left; Dalkey Lead Mine adit, Co. Dublin. Known locally as ‘Decco’s Cave’ (Image Martin Critchley)

Top Right; Martin Critchley prusicking up Farmer’s Shaft, Avoca, Co. Wicklow (Image Brian Jones)

Middle; Richard Shaw in an adit at Baravore Mine, Co. Wicklow, during the NAMHO Conference, June 2003 (Image Brian Jones)

Bottom; Abseiling down Man Engine Shaft during the post NAMHO Conference visit to Mountain Mine, Allihies, Co. Cork, 11 June 2003 (Image Martin Critchley)



Above; Group at the San Andres Bull Engine House on the Linares Field Trip, 19 April 2004 (Image Roger Gosling)



Top Right; Alastair Lings coasteering at the Crohy Head talc mine, Co. Donegal, 01 September 2007. At extremely low tides, for a short time, it is possible to gain access to extensive sea caves which the mine had intersected (Image Brian Jones)



Middle; Steve Holding in the 850 level at the Avoca Mines, Co. Wicklow, 13 May 2007 (Image Sharron Schwartz)

Bottom Left; Teatime at Benbulbin Baryte Mine, Co. Sligo, 19 May 2008 (Image Martin Critchley)



Bottom Right; Curraghinalt Gold Mine, Co. Tyrone, 18 May 2008 (Image Martin Critchley)



Twenty Years of Field Visits (1996-2016)



Above; Brian Jones in a very memorable flooded section of the Dyffryn Adda deep drainage level, Parys-Mona Copper Mines, Isle of Anglesey, 26 September 2009 (Image Martin Critchley)

Bottom; Alastair Lings at South Bradda Lead Mine on the Isle of Man, 08 May 2009 (Image Sharron Schwartz)



Above; Exploring Maenofferen slate mine decline with Roy Fellows, Merionethshire, Wales, 27 September 2009 (Image Martin Critchley)

Top Right; MHTI and Silvermines Historical Society members near the Waelz Plant, Ballygowan. Co. Tipperary, 26 May 2013 (Image Alastair Lings)



Middle; Matthew Parkes emerging from the Lickfin Adit in the Slieveardagh Coalfield, Co. Tipperary, 09 March 2013 (Image Alastair Lings)

Bottom Left; Cornish-type engine house for a 55-inch cylinder engine, Mardyke Colliery, Slieveardagh Coalfield, Co. Tipperary, 09 March 2013 (Image Alastair Lings)



Bottom Right; Galmoy Zinc-Lead Mine, Co. Kilkenny, 02 March 2012 (Image Martin Critchley)





to a road scheme that potentially impinged on the remains of Derrylea Mine’.

Another example of the value of MHTI field work was given in the Editorial of Newsletter 32 (December 2005). ‘For instance, your current editor’s co-edited book on the mines of West Carbery contained single paragraph dismissals of various mining operations there. Major field work, involving abseiling, inflatable dinghies, cliff-scaling and wet-suited flooded mine horrors by Paddy O’Sullivan of Bandon has indicated that these were, in fact, quite major operations’ (and details of some of Paddy’s research was published in the MHTI Journal for 2006). However, Newsletter 36 (April 2007) contained details of ‘several traditional style field visits’!

An article on *MHTI at a Crossroads* in Newsletter 43 (April 2009) contained a ‘proposed events plan, for discussion’. The plan outlined event types, aims, a strategy and a proposed annual programme. One of the aims was to hold a NAMHO conference, once every 20 years, for example in 2022. The programme envisaged an event every two months, with indoor events in January and November, and four weekend tours or work parties between March and September. The MHTI is still working towards achieving this frequency of events. The following Newsletter (August 2009) contained an even more ambitious ‘Proposed annual events programme template’.

A new decade, social media in support of field activities, themed events

Newsletter 47 (May 2010) outlined the trials and tribulations of an event organiser. ‘Organising field visits or events is always difficult to do with certainty. The organizer is usually someone very busy, trying to squeeze an event into their other activities. Sometimes, we have an event scheduled that no-one is able to satisfactorily take a lead on. Sometimes Icelandic volcanoes throw ash in the air and stop all air traffic’. This was followed by a request for people to register their interest in attending events, in case of changes. A similar request was made in Newsletter 51 (April 2011) following the cancellation of a trip to Lough Dan due to heavy snow.

In August 2011 MHTI set up a page on Facebook to promote the organisation and its events to the public. Managed primarily by Alastair Lings, this has proven to be a valuable method of sharing and disseminating information and photographs, particularly relating to field trips.

In November 2011 MHTI held a meeting about its future direction. Newsletter 55 (April 2012) reported on the deliberations about the nature of future field trips. ‘Members welcomed the variety and regularity of field trips. It was suggested that themed visits be organised, EG Bronze Age mining, perhaps with a visit to Wales after our visits to Cork. Excursions could be organised jointly with the IAEG, IGA, IHAI and academic bodies, and we must ensure that there are no

Left; Tramway at Carrs Face Granite Quarry, Mourne Mountains, Co. Down, 17 October 2010 (Image Stephen Callaghan)

Above; Visit to Drumkeelan Sandstone Mine, Co. Donegal, 15 September 2012 (Image Alastair Lings)

Right; Ballyknockan Granite Quarries, Co. Wicklow, 26 September 2014 (Image source unknown)

Top Right; Simon Timberlake in discussion with William O'Brien near the Ross Island Bronze Age Copper Mines, Co. Kerry, 26 April 2014 (Image Ainsley Cocks)

Middle; MHTI members with the Parys Underground Group, Parys Mountain Mine, Isle of Anglesey, 28 September 2013 (Image Alastair Lings)

Lower Middle; The MHTI and Glenravel Historical Society members at Ballynahavla Iron Mine, Co. Antrim, 08 March 2014 (Image Stephen Callaghan)

Bottom; Edric Roberts showing the MHTI the Great Orme Bronze Age Copper Mines, Caernarvonshire, Wales, 29 September 2013 (Image Sharron Schwartz)



clashes in the dates of meetings'. Henceforth, a themed annual event to coincide with our AGM, have become the norm. Newsletter 62 (October 2013) included a request for people to give a talk or lead a field trip.

In January 2012 the MHTI offered to host the NAMHO Conference in 2016. In September 2013 we agreed that the theme of the conference would be *Mining and Social Change* to resonate with the themes of Ireland 2016, the State Centenary Programme to remember 1916. This was announced to members in Newsletter 64 (Spring 2014).

Postscript

One hundred and eighty field trips over twenty years take a tremendous amount of organising, and we are greatly indebted to all those who have led, helped to arrange and attended these. The MHTI also owes a tremendous debt of thanks to land and mineral owners for allowing access to their properties, and to staff of the Exploration and Mining Division (DCENR) and the Geological Surveys of Ireland and Northern Ireland for providing information about the mines and quarries. All have helped our organisation in its mission 'to develop the informed public awareness, appreciation, conservation and enjoyment of all facets of mining heritage throughout Ireland'.



Field Trip List

Date	Location	Mine / Quarry	Leaders (where known)
25/05/1996	Wicklow	Ballycorus	Rob Goodbody
26/05/1996	Wicklow	Glendasan, Glendalough	William Dick
15/06/1996	Antrim	Glenarriff, Cromellin, Glenravel, Ballynahavla, Evisnacrow	Kevin O'Hagan
16/06/1996	Antrim	Lyles Hill	Kevin O'Hagan
08/09/1996	Galway	Glengowla	Paddy and Pat Geoghegan
08/09/1996	Dublin	Ballycorus	Rob Goodbody
08/09/1996	Wicklow	Avoca	Nick Coy
08/09/1996	Cork	Cappagh, Ballycumisk	Tom Reilly
08/09/1996	Tipperary	Silvermines	Martin Critchley
08/09/1996	Waterford	Knockmahon	Des Cowman
08/09/1996	Antrim	Glenravel	Kevin O'Hagan
08/09/1996	Monaghan	Annaglogh, Tassan,	John Morris
12/10/1996	Kerry	Valentia Island	Eamonn Grennan, Michael Lyne
13/10/1996	Kerry	Ross Island, Muckross	William O'Brien
08/03/1997	Tipperary	Ahenny Slate Quarries	John Colthurst
12/04/1997	Cork	Allihies	Alan Williams, Dan Tietzsch-Tyler
13/04/1997	Cork	Kealogue	Alan Williams, Dan Tietzsch-Tyler
03/05/1997	Galway	Glengowla	
04/05/1997	Galway	Glengowla	
16/05/1997	Down	Newtownards	Norman Moles
21/09/1997	Galway	Glengowla	
21/09/1997	Wicklow	Avoca	Nick Coy
21/09/1997	Kerry	Kenmare	John Hamilton
21/09/1997	Tipperary	Ahenny Slate Quarries	John Colthurst
21/09/1997	Tipperary	Glendalough	Martin Critchley
21/09/1997	Waterford	Knockmahon	
04/10/1997	Waterford	Knockmahon	Des Cowman, Ken Brown, Dan Tietzsch-Tyler
05/10/1997	Tipperary	Slieveardagh	Des Cowman, Ken Brown
19/10/1997	Wicklow	Avoca	Vincent Gallagher, Pat O'Connor, Jervis Good
15/02/1998	Wicklow	Glendasan	Rob Goodbody
28/05/1998	Cornwall	Parkandillick, Wheal Martyn	Ken Brown, Philip Saundry, Kingsley Rickard

Field Trip List continued

Date	Location	Mine / Quarry	Leaders (where known)
29/05/1998	Cornwall	Botallack, Levant, Hayle	Ken Brown, Philip Saundry, Kingsley Rickard
30/05/1998	Cornwall	Grenville United, Dolcoath, East Pool, Wheal Basset	Ken Brown, Philip Saundry, Kingsley Rickard
06/09/1998	Dublin	Ballycorus	Rob Goodbody
06/09/1998	Wicklow	Avoca	Nick Coy
06/09/1998	Tipperary	Silvermines	Éamonn de Stafort, Martin Critchley
06/09/1998	Waterford	Bunmahon	Des Cowman
19/09/1998	Sligo	Benbulbin, Ballintrillick Mill	Eamonn Grennan
20/09/1998	Sligo, Leitrim, Roscommon	Abbeytown, Creevelea Furnace, Arigna	Eamonn Grennan, Pat Hughes, Michael Leyden
10/10/1998	Tipperary, Clare	Killaloe, Liscannor	Aubrey Flegg, Michael Joy
11/10/1998	Clare	Kilbricken, Ballyhickey, Carrahin, Milltown, Ballyvergin	John Morris
14/02/1999	Wicklow	Glenmalure	Shropshire Caving & Mining Club
13/03/1999	Tipperary	Silvermines	Éamonn de Stafort
14/03/1999	Tipperary	Silvermines	Éamonn de Stafort
30/04/1999		Peel Slate Quarries, Mona Erin, Niarbyl, South Barrule Quarry	
01/05/1999		Laxey	John Morris and Laxey Mines Research Group
02/05/1999		North Bradda, South Bradda	John Morris and Laxey Mines Research Group
03/05/1999		Manx Museum, Foxdale Mines, Langness	John Morris
05/09/1999	Wicklow	Avoca	Nick Coy
05/09/1999	Clare	Tulla	John Morris
05/09/1999	Waterford	Bunmahon	Des Cowman
11/09/1999	Wicklow	Ballycorus	Rob Goodbody
11/09/1999	Tipperary	Ahenny Slate Quarries	John Colthurst
16/10/1999	Mayo	Sheeffrey Mine and others	Nick Coy
17/10/1999	Galway	Glengowla and others	Nick Coy
12/12/1999	Wicklow	Glendasan	

Twenty Years of Field Visits (1996–2016)

Date	Location	Mine / Quarry	Leaders (where known)
13/02/2000	Kilkenny	Castlecomer	Seamus Walsh
12/03/2000	Monaghan	Tassan	John Morris
30/07/2000	Wicklow	Glendalough	
19/08/2000	Monaghan	Tassan	John Morris
20/08/2000	Monaghan	Annaglogh, Coolartra, Hope	John Morris
03/09/2000	Wicklow	Avoca	Nick Coy
03/09/2000	Waterford	Bunmahon	Des Cowman
04/11/2000	Waterford	Bunmahon	Kevin Barton
05/11/2000	Waterford	Bunmahon	Kevin Barton
11/02/2001	Wicklow	Ballyknockan	Seamas O'Maitiu
17/02/2002	Waterford	Bunmahon	
20/04/2002	Sligo	Gleniff, Glencarbury	John Anderson, Eamonn Grennan
21/04/2002	Sligo	Glencarbury	John Anderson, Eamonn Grennan, Mick Carragher
15/05/2002	Cork	Glandore	Rosscarbery & District Historical Society
16/05/2002	Cork	Modrana, Cooladrean, Benduff	Rosscarbery & District Historical Society
23/03/2003	Tipperary	Silvermines	
07/06/2003	Wicklow	Avoca, Goldmines River	Nick Coy, Martin Critchley
08/06/2003	Wicklow	Glendasan, Glendalough, Glenmalure	Martin Critchley, John Morris, Richard Shaw
09/06/2003	Meath	Tara	John Ashton
09/06/2003	Kilkenny	Castlecomer, Coolbaun	Seamus Walsh
10/06/2003	Tipperary	Silvermines	Éamonn de Stafort, Martin Critchley
11/06/2003	Cork	Allihies	John Morris
12/06/2003	Waterford	Bunmahon	
12/06/2003	Sligo	Benbulbin	Matthew Parkes, Mick Carragher
22/09/2003	Harz Mountains	Clausthal-Zellerfeld	Martin Critchley, Karen Toebe
23/09/2003	Harz Mountains	Sankt Andreasberg	Martin Critchley, Karen Toebe
24/09/2003	Harz Mountains	Wettelrode	Martin Critchley, Karen Toebe
25/09/2003	Harz Mountains	Rammelsberg	Martin Critchley, Karen Toebe

Field Trip List continued

Date	Location	Mine / Quarry	Leaders (where known)
26/09/2003	Harz Mountains	Goslar	Martin Critchley, Karen Toebbe
02/04/2004	Antrim	Kilroot	Tony Bazley Matthew Parkes
03/04/2004	Down	Newtownards	Dermot Smyth
04/04/2004	Antrim	Mid Antrim iron mines	Kevin O'Hagan
18/04/2004	Linares	La Carolina	John Morris, Martin Critchley, Ewan Duffy, Colectivo Proyecto Arrayanes
19/04/2004	Linares	Tortilla, Arrayanes, San Ignacio	John Morris, Martin Critchley, Ewan Duffy, Colectivo Proyecto Arrayanes
20/04/2004	Linares	Antonita, Rivero, La Esmeralda, San Francisco	John Morris, Martin Critchley, Ewan Duffy, Colectivo Proyecto Arrayanes
21/04/2004	Linares	Córdoba, Alcaracejos	John Morris, Martin Critchley, Ewan Duffy, Colectivo Proyecto Arrayanes
22/04/2004	Linares	La Cruz, Peñalosa, El Poligono	John Morris, Martin Critchley, Ewan Duffy, Colectivo Proyecto Arrayanes
23/04/2004	Linares	Linares	John Morris, Martin Critchley, Ewan Duffy, Colectivo Proyecto Arrayanes
17/07/2004	Wicklow	Avoca	Matthew Parkes
11/09/2004	Waterford	Bunmahon	John Morris
16/04/2005	Kilkenny	Coolbawn	
01/07/2005	Galway	Derrylea	Matthew Parkes
28/05/2005	Waterford	Bunmahon	
20/08/2005	Cork	Gortavallig	
21/08/2005	Cork	Ballycummisk	
18/09/2005	Waterford	Bunmahon	
24/09/2005	Flintshire	Halkyn Mine	Richard Shaw
25/09/2005	Flintshire	Halkyn Mine	Richard Shaw

Twenty Years of Field Visits (1996–2016)

Date	Location	Mine / Quarry	Leaders (where known)
28/04/2006	Cork	Brow Head, Dhurode	Paddy O'Sullivan
29/04/2006	Cork	Rooska, Derreenalomane	Paddy O'Sullivan
30/04/2006	Cork	Gortavallig	Paddy O'Sullivan
27/08/2006	Galway	Glengowla, Derrylea, Streamstown	Matthew Parkes
14/04/2007	Tipperary	Slieveardagh	Phelim Lally
15/04/2007	Tipperary	Slieveardagh	Phelim Lally
13/05/2007	Wicklow	Glendasan	Martin Critchley
01/09/2007	Donegal	Churchill & Dunglow talc mines	Alastair Lings
02/09/2007	Donegal	Muckish	Alastair Lings
19/04/2008	Kilkenny	Castlecomer Exhibition, Dunmore Cave	Susan Pyne, Angela Casey
17/05/2008	Tyrone	Cavanacaw, Coalisland	Alastair Lings
18/05/2008	Tyrone	Lissan House, Curraghinalt	Alastair Lings
19/05/2008	Sligo	Benbulbin	Mick Carragher
20/05/2008	Sligo	Abbeytown	Mick Carragher, John Kelly
10/10/2008	Tipperary	Lisheen	Mick Carragher
08/05/2009	Isle of Man	South Bradda	John Morris
09/05/2009	Isle of Man	Foxdale, Traie Dullish	John Morris
10/05/2009	Isle of Man	Laxey	John Morris
11/05/2009	Isle of Man	Close-ny-Chollagh, Langness, Scarlett Point	John Morris
23/05/2009	Waterford	Bunmahon	
17/07/2009	Antrim	Belfast, Ballygalley, Ballycoos, Tievebulliagh	Alastair Lings
18/07/2009	Antrim	Rathlin Island	Alastair Lings
19/07/2009	Antrim	Murlough Bay	Alastair Lings
22/08/2009	Clare	Quin	Des Cowman
25/09/2009	Caernarvonshire	Dorothea Engine	Martin Critchley
26/09/2009	Anglesey	Parys Mountain	Martin Critchley
27/09/2009	Merionethshire	Blaenau Ffestiniog	Martin Critchley, Roy Fellows
18/10/2009	Wicklow	Glendasan (Luganure)	Martin Critchley
17/04/2010	Cork	Allihies	Theo Dahlke
18/04/2010	Cork	Allihies	Theo Dahlke
15/05/2010	Sligo	Abbeytown	John Kelly

Field Trip List continued

Date	Location	Mine / Quarry	Leaders (where known)
15/05/2010	Roscommon	Arigna	Alastair Lings
16/05/2010	Roscommon	Arigna	Alastair Lings
16/10/2010	Down	Newtownards	Alastair Lings
17/10/2010	Down	Newcastle	Alastair Lings
14/05/2011	Wicklow	Lough Dan	Stephen Callaghan
19/06/2011	Wicklow	Avoca (Peripheral mines)	Des Cowman
09/09/2011	Monaghan	Drummond	Mick Carragher
10/09/2011	Fermanagh	Belleek	Alastair Lings
11/09/2011	Cavan	Monesk	Alastair Lings
12/11/2011	Dublin	Ballycorus, Killiney	Rob Goodbody, Stephen Callaghan
02/03/2012	Kilkenny	Galmoy	Mick Carragher
02/03/2012	Tipperary	Lisheen	Mick Carragher
04/03/2012	Wicklow	Avoca	Nick Coy
19/05/2012	Kilkenny	Deerpark, Castlecomer Discovery Centre	Seamus Walsh
20/05/2012	Kilkenny	Castlecomer area, Monegore Bog	John Ryan, Patsy Egan, Seamus Walsh
14/07/2012	Cork	Reentrusk, Urhin, Mountain Mine	Theo Dahlke
15/07/2012	Cork	Castletownbere	Theo Dahlke
15/09/2012	Donegal	Drumkeelan, Kilrean, Glenaboghil, Welchtown	Alastair Lings
16/09/2012	Donegal	Ballyshannon	Alastair Lings
09/03/2013	Tipperary	Slieveardagh	Phelim Lally
10/03/2013	Tipperary	Slieveardagh	Phelim Lally
26/05/2013	Tipperary	Silvermines	Martin Critchley
08/06/2013	Wicklow	Avoca	Nick Coy
09/06/2013	Wicklow	Avoca	Nick Coy
10/08/2013	Wexford	Caime, Barrystown	Des Cowman
28/09/2013	Anglesey	Parys Mountain	Martin Critchley, Sharron Schwartz
29/09/2013	Caernarvonshire	Great Orme	Martin Critchley, Sharron Schwartz
08/03/2014	Antrim	Cargan	Alastair Lings
09/03/2014	Antrim	Carnlough	Alastair Lings
26/04/2014	Kerry	Ross Island	William O'Brien

Twenty Years of Field Visits (1996–2016)

Date	Location	Mine / Quarry	Leaders (where known)
27/04/2014	Kerry	Castlecove, Tooreen	Alastair Lings
12/07/2014	Roscommon	Arigna	Alastair Lings
13/07/2014	Roscommon	Arigna	Alastair Lings
06/09/2014	Wicklow	Ballyknockan, Cloghleagh	Matthew Parkes
21/03/2015	Donegal	Crohy Head	Alastair Lings
22/03/2015	Donegal	Malin Beg	Alastair Lings
03/05/2015	Down	Newtownards	Martin Critchley, Sharron Schwartz
11/07/2015	Clare	Feakle	Paul Rondelez
12/07/2015	Galway	Woodford	Paul Rondelez
30/08/2015	Wicklow	Glenmalure	Sharron Schwartz, Martin Critchley
05/09/2015	Dumfriesshire	Wanlockhead	Alastair Lings
06/09/2015	Dumfriesshire	Sanquhar	Alastair Lings
12/03/2016	Derry	Derry/Londonderry area	Alastair Lings
13/03/2016	Derry	Derry/Londonderry area	Alastair Lings



Left; Field trip with Norman Moles (second from left) near the Bog Shaft and Engine House at the Newtownards Lead Mines, Co. Down, 03 May 2015 (Image Ainsley Cocks)

Below; Ballyvannan Blast Furnace, Co. Clare, 11 July 2015. This is probably the oldest standing blast furnace in Ireland (Image Martin Critchley)





The precarious state, prior to conservation works, of the Man Engine house at the Mountain Mine, Allihies, Co. Cork . The hole in the wing wall seen here in 2000, was probably made when removing the engine cylinder after the mine closed (Image Martin Critchley)

MHTI Conservation Projects

By Martin Critchley

One of the founding aims of the Mining Heritage Trust of Ireland was to seek the conservation of the extant physical remains of historical mining. At the outset, the extent and condition of the mining remains in Ireland was largely unknown, but a preliminary document-based inventory coupled with the personal knowledge of many members allowed a rough estimate to be made of what remained. During subsequent field visits to many mine sites across the country, it soon became clear that there had been no detailed surveys or condition assessments on any former mine site in Ireland and more importantly, the majority of the built remains were decayed and in danger of collapse. At that time there had been no known conservation of any of the historical mine sites, in contrast to areas such as Cornwall and Derbyshire. There were many reasons for this, but it stemmed primarily from a lack of awareness and concern for mining heritage within national and local Government, but also due to a lack of knowledge and expertise about how to secure funding to promote and protect mining heritage within most local communities. Moreover, the artificial cut-off date of 1700 for the inclusion of historical remains in the Archaeological Survey of Ireland (ASI) records and the Sites and Monuments Record (SMR) did not help the case for the protection and conservation of mining remains, which were not seen as very important.

With the exception of a few of our members, there was a general lack of knowledge about the form and function of the built mining remains in Ireland, of the wider historic mining landscape or of the best practice methods for the conservation of historic mine buildings. However, we were fortunate to benefit from the experience of

those from other countries, particularly in the UK, where mining heritage conservation was far more developed. Indeed, elsewhere in this booklet Matthew Parkes has acknowledged the tremendous contribution of the Shropshire Caving and Mining Club in the setting up of the MHSI, and of individuals like Ken Brown, doyen of Cornish steam engine technology, who readily shared expert advice in the early days, visiting mine sites across Ireland with us.

Visits to mining sites in Derbyshire, Shropshire, Wales and Cornwall allowed us to gain a better insight in how to protect and present our mining heritage in Ireland. On the back of a number of EU funded projects (*MINET*, *Europamines*, *Geoparks*, *Green Mines*, and *Celtic Copper Heritage*) we were able to effectively network across Europe to gain vital expertise in mining heritage conservation as well as in interpretation, marketing, and how to source funding; in some cases being able to fund works on a selected number of important buildings. In one case, at Allihies, the MHTI funded the works directly. More recently we have used the collective skills within the MHTI to instil knowledge and promote best practice in the conservation of mining heritage within Irish national and local Government and their associated agencies.

Mountain Mine, Berehaven copper mines, Allihies, Co. Cork (2002-2003)

The MHTI first cut its teeth on a consolidation project in one of the remotest corners of this island, Allihies in Co. Cork, about as far away from Dublin as you can get. The Berehaven copper mines were some of the most important mines in Ireland and produced nearly 40%



Above; Edward Byrne (left) of the Traditional Lime Company along with John Morris assessing the lime mortar requirements for the conservation works on the Man Engine house at Allihies. 2000 (Image Martin Critchley)



Top Centre; Some of the staff who worked on the conservation of the Man Engine house at Allihies. From left to right; Pete Merrifield, Wayne Aldridge, Shane Seedell, Peter Wherry, Ger Tim O'Sullivan and Arthur Britton. All, except Ger, were from the Cornish company of Darrock and Brown. Ger is a resident of Allihies. 2003 (Image John Morris)

Middle; Phase 2 of the conservation works on the Man Engine house at Allihies. This was the largest of three phases of work and saw the conservation of the upper walls and the rebuilding of the chimney. 2003 (Image John Morris)

of the pre-1913 copper raised in Ireland. The most important mine was the Mountain Mine, situated high on the hillside above the picturesque village of Allihies. The land in which the Mountain Mine is situated was part owned by the Puxley family who worked the mine themselves (with partners at first) from 1812 until 1870 when the lease was sold. The mine continued to work until 1881 and then sporadically in the early twentieth century, with the last phase of working between 1956 and 1962.

By Irish standards, the Mountain Mine was a deep one, working to a maximum depth of 248 fathoms (450m) below the adit level. Such depths required the miners to spend several hours climbing ladders to gain access to the lowest workings. In Cornwall, mines of this depth or greater were common and efforts were made in the middle of the nineteenth century to relieve the miner of the arduous labour of climbing



ladders, not only for the benefit of the miner but also for increased productivity (and profit for the company). In 1839 Michael Loam invented the Man Engine, a mechanism of reciprocating ladders and stationary platforms to assist the miners' journeys to and from the working levels, which was first installed at a Cornish mine in 1842.

The technology soon found its way to Ireland, where the apparatus, allegedly designed by Loam himself, was installed at the Mountain Mine in about 1862, powered by a steam engine that was accommodated in the iconic engine house on the hillside above Allihies village. The engine was also capable of driving a winder used for hoisting ore when it was not being used to power the Man Engine. The steam engine operated until 1882 when it was sold. The removal of the engine resulted in the partial demolition of one of the wing walls of the engine house which left a gaping hole in the building.



By the end of the twentieth century, the damaged masonry coupled with the decay of wooden lintels began to severely compromise the structural stability of the building. The additional decay of wooden shock absorbers in the masonry plinths that supported the Man Engine and winding machinery also threatened to pull down the front of the engine house. Indeed, a Cornish-type pumping engine house nearby had already fallen into the workings. The Man Engine at the Mountain Mine was one of 21 known Cornish-type Man Engines in the world and its engine house was the only substantial surviving purpose-built Man Engine house in the world, giving it significant national and international heritage value. Its parlous condition was therefore cause for great concern.

Fortunately, the value of the iconic engine house perched above their village which had braved the wrath of countless Atlantic storms, was recognised

by the local community. They established a group to set about the conservation of the mines and their promotion as a heritage and tourism resource. One of the first actions of the group was their chairman, Charlie Tyrrell, making contact with John Morris of the MHTI and Geological Survey of Ireland (GSI) to seek advice regarding the conservation of the Man Engine house and the development of mining related tourism. Following these contacts, John and Ken Brown undertook a survey of the Man Engine house which highlighted the parlous condition of the building as well as its unique heritage value. Their findings were published in the MHTI Journal for 2001.

Based upon their study, the board of the MHTI agreed to seek donations for conservation works. We were fortunate in receiving donations and grants from a number of sources, including the Ireland Fund, Atlantic Philanthropies, the Heritage Council, Cork County Council, West Cork LEADER



Across centre; The Man Engine house at Allihies after the conservation works costing over €225,000. 2012 (Image Sharron Schwartz)

Top; John Morris being interviewed for the RTÉ production of “Beyond the Dark Mountain”, Allihies, Co. Cork. 2005 (Image Brian Jones)

Above; Unveiling of a commemorative plaque at the consolidated Man Engine House, Allihies by local ex-miners, the late Paddy Harrington and the late Willie Hodges. Willie, who passed away in 2014, was the grandson of Dick Hodges who came to Allihies from Cornwall to work in the mines (Image Martin Critchley)

and private donations. However, the sporadic nature of the funding meant that the conservation works had to take place in three phases, which served to increase the overall cost due to the repeated mobilisation and erection of scaffolding.

Prior to the commencement of the conservation works, a detailed structural survey was undertaken by the John Kneivitt Practice and specifications for the work were drawn up by John Morris and the author. Permission to undertake the works was given by the Exploration and Mining Division on behalf of the State as de facto owners of the abandoned mine site. However, approval was also required from the commonage shareholders for access to the building, which was no easy task as there were about a dozen of them, some of whom lived overseas. On top of this were personality clashes within and without the community; at times it was touch and go whether the works would even proceed. All these shenanigans proved to be quite testing and required level heads among the board of the MHTI, and often necessitated long round trip journeys to and from Dublin by John and myself to iron out difficulties.

The Cornish based specialist conservation builders, Darrick and Brown (now called Heritage Cornwall Ltd.), were appointed to undertake the works. Lime mortar was sourced from the Irish based Traditional Lime Company and oak timbers (cut to length) were supplied by the Graiguecullen Sawmills in Carlow. The first phase of the works took place in November 2002 and were comprised mainly of works at the ground floor level and also the rebuilding of the missing masonry up to the first floor on the NW wing wall. The works included the replacement of wooden lintels and beams, rebuilding collapsed

stonework and general repointing. The second, and most extensive phase of the works, took place in June-July 2003, and included the stabilisation of the upper part of the engine house and the chimney stack (including reconstruction of the missing upper brick section and installation of a lightning conductor). The third and final phase in October 2003 concentrated on the boiler house, coal bunker and winder and machinery plinths. The total cost of the works, executed to the highest standards, was over €220,000.

A public presentation of the conservation works was made in May 2005 when a plaque was unveiled by local men, Paddy Harrington and Willie Hodges, with an inscription in the English, Irish and Cornish languages. Both men had worked in the Mountain Mine when it was last dewatered in the late 1950's/early 1960's. The unveiling was also attended by Jim McCannell from Canada, who was the mine geologist during the last phase of the working of the mines. On the back of the consolidation work, a well-received film was made for broadcast on RTE entitled *Beyond the Dark Mountain* which included cameos from locals and a number of MHTI members.

For the MHTI, the consolidation of this internationally important mine heritage building was a very gratifying experience, one from which we drew much new knowledge which was to stand us in good stead on future projects. More importantly, the conservation of this iconic building served as a catalyst for mining heritage activities in the local community which culminated in the opening of the Copper Mine Museum and the development of numerous heritage trails with interpretive signage, a great achievement for a small rural community on the very edge of Western Europe.

Tankardstown, Copper Coast, Co. Waterford (2004-2005)

During the nineteenth century the Knockmahon copper mines in County Waterford were on a par with the Berehaven mines of county Cork in terms of their output of copper ores and their embracing of innovative steam engine technology. The first extensive working of the mineral veins was by the Hibernian Mining Company but the lease soon passed to the Mining Company of Ireland with the first recorded ore production in 1826. In 1850, a new mineral vein was discovered to the east of Knockmahon at Tankardstown, where separate pumping and winding engines were installed. An inclined mineral tramway was also constructed to take the raised ore to the Knockmahon dressing floors.

The Tankardstown Mine closed in 1879 and the machines were removed from the engine houses, which resulted in structural damage to the buildings (including the large hole in the east wing wall of the pumping engine house). Despite the damage, the pumping engine house was largely intact, but the internal ground floor appeared to have been robbed of material and the cataract pit was infilled. By the present century there were no visible surface remains of the boiler house and the chimney (shared with the winding engine house) was missing its upper brick section. The winding engine house was not in as good a condition, and only the rear wall and parts of the side walls remained, while its interior was infilled with fallen masonry. However, the winding drum plinth was still present.

The Tankardstown mine site was purchased by the MHTI on behalf of the Copper Coast Geopark



in 2004 under the auspices of the Interreg IIIB Geoparks project. Prior to any conservation works, a detailed geophysical survey (by Kevin Barton of LGS) and archaeological excavations of the engine houses and the site of the boiler house (Flor Hurley) were undertaken. These investigations revealed potential buried archaeology and re-exposed built features such as the footprint of the boiler house and flues. Myself and John Morris undertook a detailed survey of the buildings and produced specifications for conservations works. Waterford County Council issued a tender for the works, awarded to the Cobh based company of Cornerstone Construction Ltd.

The conservation works commenced in the autumn of 2004 and were completed in late 2005. The use of matching stones, lime mortar and oak timber were some of the materials specified for the works. Oak timbers were supplied by Coillte and hydraulic lime by the Traditional

Above; Pumping engine house at Tankardstown, Co. Waterford showing damage to rear cylinder doorway and window lintels. 2004 (Image Martin Critchley)



Right; The buildings at Tankardstown following conservation. These structures are now part of the Copper Coast Geopark. 2006 (Image Sharron Schwartz)

Lime Company. The Cornish-based company of Darrick and Brown sourced and supplied bricks for the chimney which matched the originals. Works on the pumping engine house comprised rebuilding damaged walls, restoration of the cataract pit, replacement of all wooden lintels and the repointing and installation of iron grilles. Works on the winding engine house consisted of rebuilding the cylinder plinth and the rear wall, the partial rebuilding of the wing walls and repointing of the winding plinth. The works were hampered at one stage by the overnight theft of most of the builders' equipment, and post-works, the scaffolding which had been brought by the MHTI was also stolen, which has deprived our organisation of scaffolding for use in any future projects. A full description of the works was given in the MHTI special edition Journal for 2005.

In addition to the conservation works on the buildings, landscaping was undertaken at the site and a small visitor car park was constructed. Safety fences were installed around all openings and a replica shaft collar was put in place. An original plan to install a viewing platform within the pumping engine house did not proceed, as it was decided that a better use of the funding would be for the purchase of the disused Church of

Ireland at Monksland, Bunmahon, and its ultimate development as a Geopark centre and community resource. The estimated total costs of the works at Tankardstown was about €200,000 of which about €120,000 was spent on the building conservation works. A total of €1.7m was spent in the Copper Coast Geopark under the Interreg IIIB project.

Since the end of the Interreg project, the Tankardstown site has been used as an educational resource and as a site for hosting for numerous community activities. The Monksland church has been fully renovated with a sympathetic extension to develop a multi-functional building. Some of these works were funded by grant aid, but bank loans were also needed and these have to be repaid from earnings. There are aspirations to open some of the underground workings to visitors. However, with the spectacular collapse of the 'Celtic Tiger' economy in 2008, and the constrained economy thereafter, support from Governmental agencies and others has diminished and now the viability of the Copper Coast Geopark very much depends upon attracting paying visitors, or on a significant increase in support from Waterford County Council, in recognising the tourism value of the UNESCO Geopark to the county. We wish it well.

MHTI Conservation Projects

Silvermines (2008)

Silvermines is now a sleepy village in County Tipperary, but the name belies over 700 years of mining for silver, lead and zinc in this region, the legacy of which can be seen across the surrounding landscape. Although the first confirmed documented record of mining dates from the 1630s there are records of silver mining in County Tipperary from the late thirteenth century, although these do not specifically name Silvermines. The local landowner, the Prittie family, leased the mines to a succession of operators in eighteenth century, but the main period of working was by the General Mining Company of Ireland between 1846 and 1874. Some working of the mines took place during the First World War and extensive underground/surface working at Shallee by the Silvermines Lead and Zinc Company between 1948 and 1953. All of the surface mining heritage at Silvermines dates from either the nineteenth or mid-twentieth century period of workings of mineral veins and near surface gossans. In 1963 extensive stratiform lead-zinc-baryte deposits were discovered at Silvermines. Baryte was extracted at the Magcobar open cast baryte mine between 1963 and 1993 at Ballinoe, just south of Silvermines village. Mogul of Ireland opened an underground lead and zinc mine at Gorteenadiha, Garryard West in 1968 which was then the largest lead zinc mine in Europe. The Mogul mine closed in 1982.

Following the end of active mining, Éamonn de Stafort, a Silvermines resident and a member of the MHTI, sought to preserve the mining heritage at Silvermines by promoting the idea of



Top; Badly deteriorated stonework of the crusher house at Shallee Mine, Silvermines, Co. Tipperary. 2007 (Image Martin Critchley)

Middle; Conservation works being undertaken by Interclean Ltd. on the engine house at Shallee Mine, Silvermines. 2008 (Image Martin Critchley)

Bottom; The engine house and crusher house at Shallee Mine after the conservation works. 2009 (Image Martin Critchley)



Above; Launch of plans for a National Mining Heritage Centre at Shallee, Silvermines, Co. Tipperary. For various reasons the centre never came about. From left to right: Paul Adams - Chief Executive of Shannon Heritage, Michael Smith T.D. - Minister for Defence, Senator Kathleen O'Meara, local resident Pat O'Brien and the late Parish Priest of Silvermines Rev. Manus Rodgers. 1998 (Photo: Martin Critchley)

a mining heritage centre and a visitor attraction. At this time Éamonn was employed by Shannon Development Ltd. (a State agency) and he managed to get the company to investigate the possibilities for a centre. In 1989, Environmental Resources Analysis Ltd. was engaged to produce an evaluation document for an Irish Mining Interpretative Centre at Silvermines. Much of this document was produced by the renowned naturalist and geologist John Feehan, along with my help and input.

The results were presented at a conference in Nenagh organised by Shannon Development to celebrate 700 years of recorded mining at Silvermines, where the idea of an underground attraction at Shallee mine was made public. Further studies were undertaken, including a market assessment study, an underground survey, a geotechnical study, a building conservation plan, design and costings. The plan was deemed to be viable and in 1998 the Irish Government, through the help of local TD Michael Smith, made available IR£1,000,000 to Shannon Development to initiate the development. Unfortunately the centre never materialised and Shannon Development withdrew from the plan. This was probably for two reasons: firstly the plan to use the abandoned Magcobar open pit as a landfill site (which did not happen), and secondly the growing realisation of the negative environmental legacy at Silvermines. When the Mogul mine was in operation there were frequent dust blows from the tailings and these increased after its closure. High lead values (and other heavy metals) were

discovered in the Mogul tailings, in the Shallee tailings, at the Mogul mine site, on parts of the Magcobar tips and most worryingly, at the school playing field at Silvermines.

An Inter-Agency study characterised the contamination and in 2000 recommended remediation. In 2005, the Government decided that the State would undertake the remediation of the former mining sites in the area, with North Tipperary County Council acting as agents for the Department of Communications, Energy and Natural Resources. The Government made available €10m (later reduced to €6m) for remediation works, and SRK Consulting was engaged to design and manage the works (and were later replaced by Golder Associates). Included in the budget, mainly due to the efforts of MHTI members, John Morris, Loreto Farrell and myself, was an element of conservation works on the nineteenth century buildings.

In 2006, the MHTI was engaged to undertake a survey and provide a report of the mining heritage features at Silvermines. The main justification for the works was that the parlous condition of the buildings were a health and safety hazard. Soon after this, the MHTI and the GSI were asked to join a consortium bidding for EU funds from the Interreg IIIB Atlantic Area in a project called *Green Mines* led by the Deputación de Huelva (a region in Andalucía, Spain, which contains the famous mines at Rio Tinto). Other partners included a group of mining heritage sites in Portugal and two local authorities in Wales. John foresaw that *Green Mines* might be a means to fund some of the conservation works at Silvermines and he managed to get North Tipperary County Council (NTCC) to join the *Green Mines* group. The application to Interreg was successful and the 18 month project started in May 2007. For Silvermines this meant that Interreg funds could be used to top up the Irish Government funding for the conservation works by €150,000. But cut backs by the Government drastically reduced their contribution to the works, and the *Green Mines* contribution was renegotiated upwards with Interreg to €316,323. The final plan was for conservation works at three sites: (1) Shallee engine and crusher houses (2) Ballygown calamine works and engine house (3) Ballygown winding engine house.



Specification for the conservation works were drawn up by Golders Associates with the help of the MHTI, and the tender for the works was awarded by NTCC to the Dublin-based specialist building conservation company, Interclean Ltd. The works took place over a four month period between April and July 2008. At Shallee Mine the engine house was in a reasonable state, as it had been used as an ore storage bin in the 1950's, but the adjacent crusher house was in a poor condition. This engine house is of particular interest, in that its rotative engine drove a crusher, a stamps battery and a set of flat rods for pumping (via a back bob), something of a rare example in an Irish context. Works on the engine house included the removal of vegetation, repair of stonework, rebuilding of the chimney top, the installation of a lightning conductor, and the repointing and sealing of wall tops. The crusher house at Shallee needed extensive rebuilding of its damaged front wall and the replacement of wooden lintels.

At the Ballygown calamine works, the walls of the furnace building were repointed and wall tops capped. The engine house adjacent to the calamine works is thought to have originally powered a crusher, but was later adapted to operate machinery associated with the calamine works. The crusher engine house required extensive cleaning to remove fallen masonry from its interior (mostly from the demolished chimney), repointing, sealing of wall tops and stabilisation of its engine bed plinth. The rotative engine house at Ballygown had housed a steam engine which operated pumps in the nearby shaft via flat rods. Prior to the works, the engine house was heavily colonised by ivy, the roots of which had penetrated some of the stonework causing damage. The brick arches of most of



the doorways and window openings were badly cracked. The works required the removal of the ivy, repairs to stonework, sealing of wall tops, repairs to the chimney, installation of a lightning conductor, the replacement of wooden lintels and the installation of iron grilles at ground floor openings. The final cost of all the conservation works was about €347,000.

Following on from the conservation works, fencing was erected in several areas. At Shallee the opencast was protected by a high chain-link fence and at Ballygown low wooden fencing was erected to keep visitors away from sensitive buried archaeology and land deemed to be contaminated. Today the Ballygown site provides a recreational resource for the local community and includes interpretative boards describing the mines and features. There had been a plan to demolish the concrete 1950's Waelz building as part of the environmental remediation. Fortunately this has not happened, partly because of objections from the MHTI and local community, and also because of the lack of funds. Presently there are no plans to develop the Shallee site any further and other valuable mining heritage remains at Shallee continue to slowly decay (such as Captain King's House and the core storage sheds).

Underground

It is also necessary to bear in mind that the extant remains of buildings and other features that can be seen at the surface of a mine site represent only a fraction of its heritage, much of which remains hidden from sight underground. Some workings

Left; Engine house at Ballygown Mine, Silvermines, Co. Tipperary which was badly covered in ivy before conservation. 2007 (Image Sharron Schwartz)

Right; The Ballygown engine house seen here in 2012 following conservation works (Image Ainsley Cocks)



Left; The underground laboratory in the 850 level at Avoca Mine which has deteriorated in recent years along with other underground features, 2009 (Image Sharron Schwartz)

Right; The New Crusher House at Baravore Mine, Glenmalure, Co. Wicklow. Probably one of the best preserved two storey crusher houses in Ireland and Britain, soon to be conserved by Coillte. 2015 (Image Martin Critchley)

above the water table are accessible, depending on the competency of the rock. Due to issues of access and the small body of active underground explorers in the MHTI, we have not undertaken some of the large scale projects that characterise many British mining heritage organisations. Our digs have been modest affairs, such as reopening access to Hayes Adit in Glendasan, Co. Wicklow, ahead of NAMHO 2003.

However, the MHTI is fully committed to the retention of underground access and the conservation of artefacts found in underground workings. The 850 level at Avoca, although a modern adit, is of great importance as it gives access to nineteenth century workings and a variety of features which clearly demonstrate the progression of mining methods over two centuries. These include nineteenth century ladderways, copper precipitation experiments, a chemical laboratory, and most impressive of all, an in situ pump rod in Farmer's Shaft dating from the 1800s. We feel that the preservation and protection of all of these features should be viewed by the State as essential.

Advisory Roles

The Mining Heritage Trust of Ireland has assisted a number of mining heritage conservation works in an advisory role, chiefly, and most recently, in County Wicklow. Briefly these include:

Glendalough: Advising the Wicklow Mountains National Park (WMNP) on conservation works to the crusher house at Glendalough. In addition the Park has benefited from the surveys of the dressing floors at Glendasan and Glendalough undertaken by Sharron Schwartz and myself through the Interreg IVA *Metal Links* project and published in the 2012 issue of the MHTI Journal.

It is hoped that these surveys will be used to drive further conservation works.

Baravore: Advising the local PURE Mile group and Coillte on the conservation issues concerning the Old and New Crusher Houses which featured in the detailed survey funded under the Interreg IVA *Metal Links* project, again by Sharron and myself, and published in the 2014 edition of the MHTI Journal. Coillte has now secured some limited funding for works on the New Crusher House which are due to commence later this year.

The Record of Protected Structures: In the Republic a record of protected structures (RPS) is held by each local authority as part of its multiannual development plan. The MHTI has made submissions concerning mining features on the RPS, especially during drawing up of new development plans. The most extensive submission relates to County Wicklow, where built mining features and associated curtilages were comprehensively described and mapped in a GIS and supplied to council planners.

Postscript

I think all MHTI members, past and present, would agree that the consolidation projects with which we have been involved have been the most high-profile, successful and gratifying of our activities to date. So far, our work has mainly focused on iconic nineteenth-century mine buildings, especially Cornish-type engine houses, but there are other equally important mine buildings also worthy of consolidation. Throughout Ireland there is still a tremendous amount of work to be done to save extant mining remains from the threat of destruction and decay. Sites that spring to mind are the Glendalough/ Glendasan dressing floors; the Avoca engine



Above; Colliery ventilation chimney at Copper, Slieveardagh, Co. Tipperary, although never linked to underground workings it is unique in Ireland and in need of conservation. 2007 (Image Martin Critchley)

houses; the Slieveardagh engine houses, mine offices and powder house; the Waelz plant at Silvermines; the engine house at North Tankardstown; the Glandore engine house; the Dhurode, Coosheen, Crookhaven and Berehaven gunpowder houses; other engine houses at Allihies; the Barrystown engine house; buildings at the Quin mines; the Caim mine chimneys and the Newtownards engine houses and chimneys.

Whether some of the above are conserved or not depends upon many factors. Getting our Governments to see the value of industrial heritage is crucial. The task of listing extant mining remains in the Record of Protected Structures for each county can at times seem like an uphill task. If the buildings are not listed, there is less chance that they will be considered for serious consolidation purposes. Funding of course is critical (the average cost of full conservation on a building is at least €100,000), but just as important is cash flow. In the past we have been fortunate that several Government bodies have helped to buffer the cash. But the collapse of the 'Tiger Economy' in 2008 and the



Left; The powder house at Earlishill Colliery, Slieveardagh, Co. Tipperary. This is the only powder house on any mining site in Ireland which still has an original roof and is worthy of preservation. 2007 (Image Sharron Schwartz)



subsequent significant Government cutbacks to local authorities and the Heritage Council, both financially and in terms of staff numbers, means that their ability to help is undoubtedly curtailed. Short-term and bridging loans from organisations such as Clann Credo might be a solution. Doubtless the economic wheel of fortune will turn and a more favourable financial climate will return sometime in the future.

But of equal importance, is raising awareness of mining heritage and engendering community interest and involvement. The MHTI's objective has always been to support local people and communities who have a stake in the site, and then to assist these with projects on the ground where possible. Hopefully over the next twenty years we will be celebrating the successful consolidation of more of Ireland's mining heritage features with local community partners.

Above; The Whitespots and Conlig mines near Newtownards in Co. Down seen here in 2013, contain a number of important mine-related structures including engine houses and a windmill stump, one of only two extant examples in Britain or Ireland on a metal mine. Unfortunately the site is rapidly being overgrown by rampant vegetation putting many buildings at threat of collapse (Image Sharron Schwartz)



Inventory field day at the Avoca Mines, Co. Wicklow, 2012. MHTI members inspect the cylinder doorway of Williams' engine house on the Tigroney Mine. This splendid building accommodated the largest engine ever set to work on an Irish mine, a 60-inch cylinder vertical engine manufactured at the Perran Foundry, Cornwall, in the late 1850's. A listed structure, this building is in urgent need of consolidation (Image Ainsley Cocks)

Mining Heritage Inventory

By Martin Critchley

Background

At the outset, the Mining Heritage Trust of Ireland tasked itself with surveying and recording the extant remains of the mining industry throughout Ireland. At that time there had never been a systematic field study of extant mining remains conducted across Ireland (north and south). In addition, the artificial cut-off date of 1700 for the designation of archaeological sites as National Monuments precluded the inclusion of most historical mine remains and diminished awareness of them to archaeologists. Mining heritage was not unique in this lack of attention, as Fred Hamond and Mary McMahon pointed out in 2002 that less than five per cent of the industrial heritage sites in Ireland had been systematically surveyed, and made a plea for this task to begin as a matter of urgency. In our own modest way, through the creation of a digital mining related inventory, the MHTI is trying to enhance the recorded knowledge of one aspect of Ireland's industrial history and heritage.

In order to do this we needed to know the location of mines, or at least have a base to start from. A variety of sources were mustered to allow us to do this. Fortunately in 1922 the Geological Survey of Ireland (GSI) published a memoir and map of the location of metalliferous mines in Ireland which was authored by Grenville Cole. In 1998, with the permission of the Director of the GSI the MHTI produced a reprint of this memoir without the map. Cole's memoir built upon a number of previous inventories published in the nineteenth century, foremost among which was Richard Griffith's *Catalogue of the several localities in Ireland where mines or metalliferous indications have hitherto been discovered arranged in*

counties and under their respective post towns. This catalogue was first printed in 1853 (2 editions) with a major revision in 1854 and a slightly updated version in 1861/62. Patrick Wyse Jackson in the MHTI Journal of 2002 gives more details of the various editions of Griffith's catalogue. Like Cole's memoir, the Griffith's catalogues only listed metalliferous mines.

In 1878, Kinahan published his book on the *Geology of Ireland* which updated Griffith's list and added coalfields (but not individual collieries). Kinahan's list of metalliferous mines was updated in his series of papers on the *Economic Geology of Ireland* published in 1889. Another valuable source is the annual *Mineral Statistics of the United Kingdom* which listed Irish metalliferous mines with production returns (copper mines from 1806, lead mines from 1845 and a list of collieries without individual production returns from 1854). A *Memoir on the Coalfields of Ireland* published in 1921 by the Commission of Inquiry into the Resources and Industry of Ireland, lists collieries working at that time. In 1952 with the appointment of Murrough O'Brien as the Director of the GSI, there began a comprehensive collection of mining records, including mineral localities. In the 1980s and 1990s, Aubrey Flegg and GSI colleagues also garnered all records of exploitation of industrial resources i.e. non-metallic mines and quarries. More recently the GSI (in conjunction with the Environmental Protection Agency) has undertaken a survey of waste at historical mine sites, and more detailed surveys have been done at Silvermines and Avoca which includes inventories of mining remains. Today, the majority of these records



Left; ERA Maptec employee, Anita Dolan, demonstrating surveying at the Glengowla Mine, Co. Galway, 1997 (Image Martin Critchley)

Right; Martin Critchley using the MHTI's Total Station surveying equipment at the Hero Dressing Floors, Glendasan, Co. Wicklow, 2008 (Image Sharron Schwartz)

have been scanned or digitised and are available on-line via the GSI website. Similar efforts have also taken place in Northern Ireland. All of these sources have been utilised to help to build the MHTI inventory.

We are also keen to embrace and support the latest advances in technology to enable us to record features in the field. A laser cloud scanner has been employed by the Copper Coast Geopark to produce digital 3D surveys of the Tankardstown buildings and the accessible underground workings as part of the Interreg IIIA *Metal Links* project. A UAV (Unmanned Aerial Vehicle), otherwise known as a drone, was deployed to provide aerial images of the Caim Mine site Co. Wexford, and to capture close up images of its extant buildings by Sharron Schwartz and myself for our Caim Mine paper in *Journal 15*. We also produced a short aerial film of the Wicklow Mines shot in April 2016, and member Barry Flannery has also been flying his drone at mine sites in County Cork. These films have been shared on YouTube.

The MHTI Inventory

Returning to the foundation of the MHTI in 1996 we did not, at that time, have the luxury

of today's instant access to digital records, outlined by Sharron Schwartz elsewhere in this booklet. The published works listed above and the GSI paper records recorded the majority of historical mine sites in Ireland, but there was no comprehensive digital database. It was decided that the MHTI would develop a digital database of metalliferous mine sites and Griffith's catalogue of 1854 formed the basis of the first records. I set up the initial database in Microsoft Excel by entering the basic mine site information from Griffith's catalogue (site name, commodity worked, county, nearest Post Office and six inch sheet number). Additional data were added for the Mining District and synonyms.

This initial database then transferred to the Geological Survey of Ireland where John Morris engaged temporary field assistants (geology undergraduates working during their summer holidays) to locate each mine site on historical six inch to the mile Ordnance Survey maps. Additional information added during this work included townland name, grid reference (derived from 1:25,000 reduced scale versions of the six inch maps), a description of the feature used for the grid reference and a brief history of each mine (from sources such as Kane's and



Cole's publications and GSI records). The revised database was then given to the Exploration and Mining Division (EMD) where Wayne Cox cross checked with their records and added some additional sites before returning the completed database back to the MHTI.

Subsequently the database has been updated, mainly during historical research and field based surveys. However many gaps remain in our inventory. There are limited site records for Northern Ireland (except for counties Armagh and Down which were input by Sharron Schwartz and Martin Critchley as part of their research on the mines in those counties). The Geological Survey of Northern Ireland has made available online their database of mine sites and features on the Geoindex website. The MHTI database also does not contain any records for coal mining sites, although these are shown on the EMD's data web viewer. The mines in Northern Ireland and the coal mining sites in the Republic should be input into our database.

At present the inventory has been converted by me into a spatial database using ArcGIS (a Geographical Information System). The conversion to a GIS allows for the production of maps and comparison with other digital

data sets, such as mineral localities, archaeological sites and monuments and historical maps etc. The storage in a GIS can also facilitate public access to the inventory through web based mapping which we plan to make available in the future.

The next level down from the inventory is a database of features. Features are individual structures or elements on a mine site, and include buildings, leats, shafts, adits and many other discrete elements. The features database is only held within a GIS as it contains the boundaries of the features as digital vectors (either points, lines or polygons). Features are linked to the site database using a unique site identifier and are only available for a limited number of mines; mainly those which have been surveyed in detail by Martin Critchley and Sharron Schwartz (including the Glendalough, Glendasan, Glenmalure, and Newtownards mines). In the case of metalliferous mines in County Wicklow, the curtilage of mine features have also been digitised and these have been used to produce maps and a listing for suggested inclusion of mining features in the Record of Protected Structures for the county on foot of the most recent Draft Wicklow County Development Plan (2016-2022).

Left; Martin Critchley using a Trimble GeoXT to record the location of the primary dressing floor at the Glendalough Lead Mine 2012 (Image Sharron Schwartz)

Right; Des Cowman manning the base station during the Tankardstown Mine Site survey, September 2005 (Image Martin Critchley)



Left; Martin Critchley admiring the spectacular 'copper waterfall' formed of secondary copper minerals in the Tankardstown Mine, Co. Waterford (Image Sharron Schwartz)

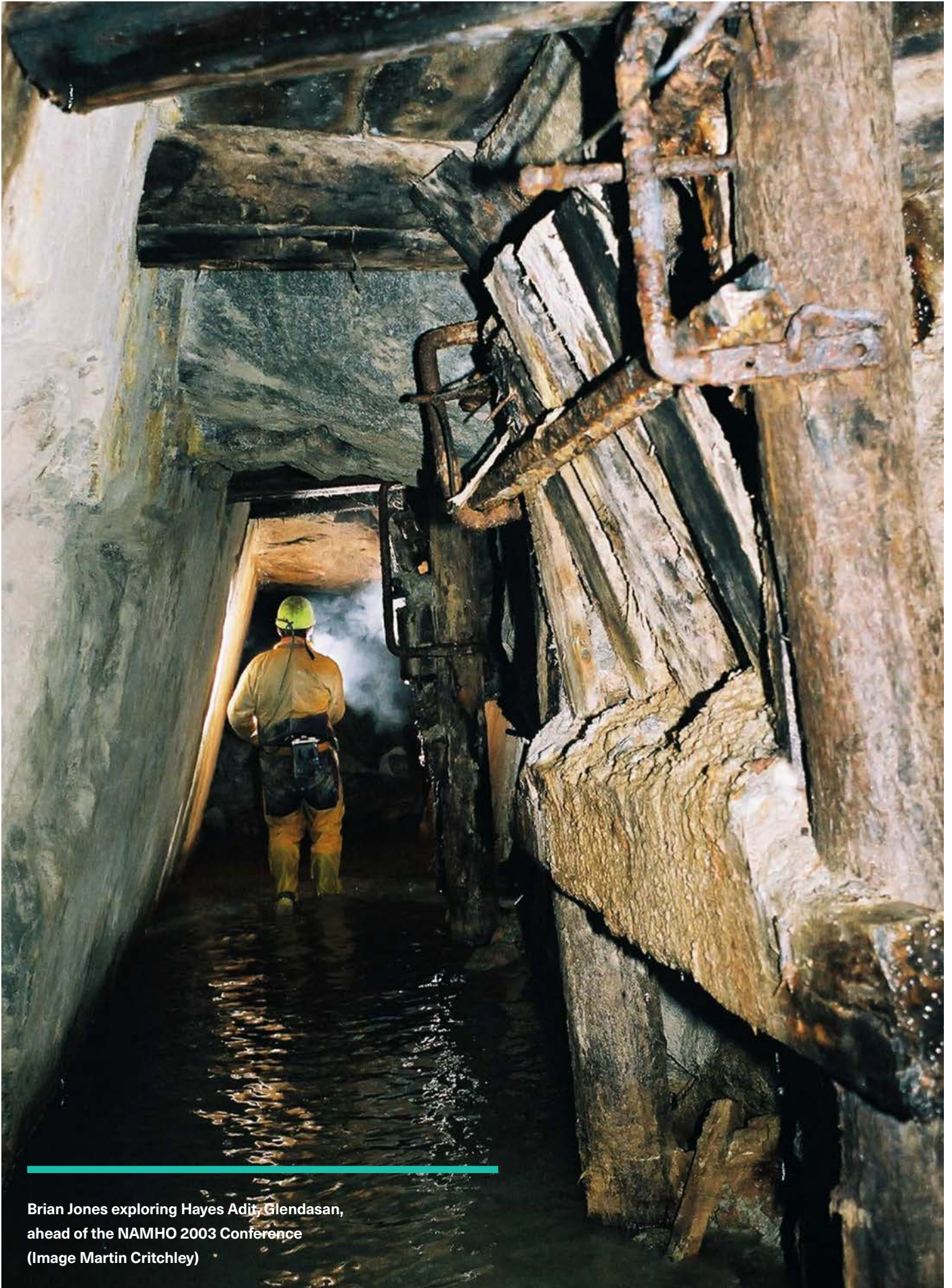
Right; Sharron Schwartz inspects a field find at the Ballymurtagh Mine, Avoca, Co. Wicklow: a granite mellior stone. The wooden upright shaft of a horse whim slotted into the hole (Image Martin Critchley)

Site Surveying

The recording of features on a mine site generally entails measurement and surveying in the field; although some features can be mapped from aerial photographs and historical maps. Field surveying can be a very time consuming process. Simple surveys can be undertaken with consumer grade GPS receivers, but generally these are not very accurate (5m or so accuracy). Survey grade GPS, such a Trimble GeoXH, can record locations to an accuracy of 10cm when post-processed using Ordnance Survey fixed stations. Most of the features recorded to date have been measured with a Trimble GeoXH or its predecessor a GeoXT (accurate to 50cm). In some cases, where the features are complicated and are close together (or where contouring is required), then we have mapped these using a Total Station, a theodolite with electronic recording and built-in electronic distance measuring, which was purchased by the MHTI during the Geoparks Project (outlined in the international collaborative projects in this volume).

Underground Surveying

The MHTI has only done a limited amount of underground surveying, due mainly to the lack of suitably qualified 'rope swingers' (primarily myself, Matthew Parkes, Brian Jones, Richard Shaw, Paddy O'Sullivan, Gerry Clear and Sharron Schwartz) and avid underground explorers including Alastair Lings and ex-mine foreman, Mick Carragher, among our small society. Additionally, there have been access issues to contend with in recent years and we always endeavour to seek permission from the State or relevant landowner before venturing underground. The underground surveys have been undertaken using a SUUNTO compass and clinometer and a metal or fibron tape measure (see MHTI Journal 5 for the survey of the Tankardstown workings, Co. Waterford, undertaken by myself and Richard Shaw). The use of a waterproof notebook to record the measurements is essential!



Brian Jones exploring Hayes Adit, Glendasan,
ahead of the NAMHO 2003 Conference
(Image Martin Critchley)



Above; Martin Critchley surveying the collapsed workings of Blundell's lead mine at Edenderry, Co. Offaly. These workings had been all but forgotten until a hole appeared in a park pathway on 28 September 2011 (Image, Sharron Schwartz)

Condition and Conservation Assessments

Detailed condition and conservation surveys have been undertaken for mining features which were the subject of conservation works. The results of these surveys were included as specifications made available to bidders tendering for the works, and these are outlined in the consolidation chapter of this book. More general condition and conservation assessments have only been done for the Avoca mine site in March 2012 and June 2013, using a form I initially devised in 1999 following consultation with the Heritage Council, and later modified by Alastair Lings. The aim of such surveys is:

- (1) To review the condition and status of the many mining features both natural and man-made
- (2) To evaluate the threats that those features currently face or are likely to face in the near future
- (3) To decide if these features are worth saving

The form has entries for condition, threats and significance and these were scored in accordance with the following scheme:

Condition: bad (0.5), poor (0.75), fair (1), good (1.5) and excellent (2).

Threats: rapid decay/collapse (2), slow decay/filling (1.5), stable (1), in-use/maintained (0.75) and restoration underway/completed (0.5).

Significance: (considered to result from one or more of the following characteristics: biological, geological, archaeological/historical, technological, or other reasons). The significance of each character was scored as: commonplace (1), locally significant (2), regionally (4), nationally (8) and internationally significant (16). An Action Factor was calculated by dividing the threat score by the condition score, the highest value being for the structure in the worst condition with the greatest threats and is probably a good indication of its vulnerability. Multiplying the significance score by the Action



Factor gave an overall priority score for each feature. In the case of Avoca, the Williams' engine house had the highest priority score. We have discussed making at least one of our annual field trips a condition and conservation survey, as this is an ideal opportunity to get local groups involved in our efforts to record our mining heritage with a view to securing listed status for the most significant and/or vulnerable features.

Future Developments

There is still much work to be done on the recording of mining heritage in Ireland. The mine site inventory needs to be expanded to include coal mine sites in the Republic of Ireland and all mine sites in Northern Ireland (except for those already entered for County Down). We will seek cooperation with local community groups, the EMD (Republic of Ireland) and the GSNI (Northern Ireland) to help to fill these gaps. We need to write and enter condensed

histories for each site in the database, and to include photographs. The site database needs to be cross-referenced with the MHTI bibliographic database created by Des Cowman and now ably managed by Paul Rondelez. A lot more survey work is needed on individual mine sites to map and record features. This should include the mapping for the curtilage of features for possible production of maps for submission to the Record of Protected Structures. And finally, we need to move with the times and ensure improved public access to the database. It is planned to have a map based interface to the site database in the forthcoming new MHTI website. Exciting times lie ahead!

Above; Inventory field day at the Avoca Mines, Co. Wicklow, 2013. Martin Critchley by one of several concrete stanchions at Sroughmore erected by the Ovoca Mineral Company Ltd. in the early 1880's. These supported an endless wire rope system powered by a turbine to pump water from Connary Engine Shaft (Image Sharron Schwartz)



Above; Europamines' members donning old chemical warfare suits, Kopalnia Złoty Stok, SW Poland, May 2005 (Image Sharron Schwartz)

MHTI International Collaborative Projects

By Martin Critchley and Sharron Schwartz

Since the inception of the then Mining History Society of Ireland in 1996, our organisation has sought to collaborate with likeminded groups and individuals outside this country. Initially this cooperation grew out of long established personal links with UK based members, many of whom had been instrumental in promoting the establishment of the Society. These early links mainly focused on visits to mine sites in the UK and corresponding visits from UK members to mine sites in Ireland. The primary aim of these visits was for the MHSI (hereafter referred to as the MHTI) to advance our knowledge of how to interpret the various features of the historic mining landscape and to discuss best practice methods in the conservation and presentation of industrial heritage as used in the UK. The help and advice of experts such as Ken Brown, a giant in the field of Cornish steam engine technology, are inestimable, whilst visits to sites in Derbyshire, Wrexham, Shropshire and Cornwall

were particularly beneficial. A number of these visits were organised in conjunction with the Shropshire Caving and Mining Club, to whom we are grateful for their expertise, encouragement and many years of friendship.

From these early contacts it became apparent to our Board that collaboration with likeminded organisations in Europe would be of great benefit to the conservation of Ireland's extant mining remains and a potential source of much needed funding. Hence our involvement with several collaborative international projects which are outlined below. Through these activities, the MHTI has greatly expanded its knowledge and expertise in mining heritage. However, involvement in these activities has often not been easy for a small organisation like ours. Indeed, the change in our status to a charitable Trust (a legal corporate entity) reflects this issue. In particular, large EU funded projects require monies to be spent and then claimed back (often

6 to 12 months after expenditure). Inevitably this can create serious cash flow issues and we were fortunate that State agencies (such as the GSI, Wicklow County Council and North Tipperary County Council) were able to buffer the cash flow on various projects, for which we are very appreciative. Another aspect of EU funded projects is that they only fund between 50% and 75% of most projects. The remaining money has to be made up of match funding, or more often by voluntary staff time, which necessitates

field event which is managed by one or more of its member organisations. The MHTI hosted the annual conference in 2003 and is doing so again in 2016, to mark our twentieth anniversary year. Joining NAMHO gave us access to a wide base of experienced experts in mining heritage interpretation and conservation and access to British Caving Association (BCA) insurance which insures members and our organisation against litigation claims. Over the last two decades, MHTI members have derived

Clockwise from left;

Ken Brown, authority on Cornish steam engines, driving the Levant Mine Whim Engine, Cornwall (Image John Morris)



MINET conference 1999, Abbey Court Hotel, Nenagh. L-R Tomás O'Domhnaill, Shannon Development; Peadar McArdle, Director, GSI; Michael Smith TD, Minister for Defence; Alan Kilday, ECTARC; Martin Critchley, MHTI; the late Stuart Smith, Trevithick Trust (Image Shannon Development)



MINET Conference 1999 at the Abbey Court Hotel, Nenagh. L-R John Morris; Máire Hocht, Mayor of Nenagh; the late Stuart Smith of the Trevithick Trust, lead partner; and Éamonn de Stafort (Image Shannon Development)



a significant commitment, and the hard work of many MHTI Directors over the years in this respect is gratefully acknowledged, in particular Éamonn de Stafort, John Morris, Martin Critchley, Des Cowman and Ewan Duffy.

NAMHO

One of our first initiatives was to join the UK based National Association of Mining History Organisations (NAMHO) around about 1997. NAMHO, founded in 1979, is an umbrella organisation which represents the interests of individual organisations, clubs, mining heritage sites and associated commercial operators, and at present there are over 70 member organisations. A highlight of the NAMHO calendar is its annual conference or

great pleasure in attending and occasionally presenting at the annual NAMHO conferences, which are very much 'gathering of the clans' events, and, perhaps even more so, enjoyed the hospitality of the host organisations.

MINET (1999)

The first significant pan-European project to involve the MHTI was MINET, conceived and managed by the European Centre for Training and Regional Co-operation (ECTARC) based in North Wales. The Trevithick Trust (Cornwall) under the management of the late Stuart Smith OBE, acted as Lead Partner, with Alan Kilday of ECTARC as the Project Manager. The Irish partners were the GSI (representing and co-ordinating a number of participating Irish mining heritage sites including Avoca Heritage, Bunmahon Heritage, Shannon Development/Heritage and the MHTI). The North of England Lead Mining Museum (Killhope,

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UK); Scopriminiera (Perosa Argentina, Italy); Le Centre de Culture ScientificTechnique et Industrielle (L'Argentiere, France) and the Arrayanes Project (Linares, Spain), made up the remaining contingent.

The work of this one year pilot project was to develop a network of cooperation on mining heritage in Europe with the aim of creating a prototype for a major European initiative to develop mining heritage as a cultural itinerary. MINET was an abbreviation of 'Mining Network',

jointly by the Geological Survey of Ireland, Shannon Development and the MHTI, co-convened by John Morris and Éamonn de Stafort, and opened by Minister for Defence, Michael Smith TD. This groundbreaking two day conference entitled *Mine Heritage as a Tourism Resource* took place in Nenagh, Co. Tipperary on the 4th and 5th November 1999. Presentations were made by a number of invited speakers in five different sessions (MHTI members who presented talks included John Morris, Éamonn



but unfortunately the name, when pronounced in certain European languages, can have unexpected meanings of a sexual nature – all that can be said is that it is best to pronounce it as 'MINE NET' to avoid any embarrassing moments!

The actions and objectives of the project included:

- Facilitation of visits between partners, exchange knowledge and explore the use of new technologies in heritage centres;
- Fostering of cooperation between partners to produce development plans for mining heritage centres;
- Formation of an association of mining heritage centres and secure recognition from the Council of Europe;
- Informing civic, local and national authorities of the importance and value of their mining heritage from an international perspective.

One major initiative of the project was to organise an international conference hosted

de Stafort, Ken Brown, Des Cowman, Nick Coy, Marie Merrigan, William O'Brien and Martin Critchley). Session 1 was devoted to mining heritage interpretation concepts. Session 2 looked at individual partner sites and how they were being developed. Session 3 explored international comparisons from sites outside the MINET group. Session 4 dealt with mining archaeology and Session 5 focussed upon an open forum of developing a way forward for mining heritage tourism.

One of the outcomes of the conference was an agreement to establish MINET as a permanent and charitable organisation, to extend the membership base and to facilitate publications, conferences and assemble a pool of experts. EU funding was to be sought for the first three years to cover the running of the organisation. Great friendships were formed, which almost two decades later are still going strong. Enduring memories were also made during the lifetime

Left; MINET field meeting in Linares, Spain December 2004. John Morris far right (Image, Cornwall Council)

Above; Europamines' field visit to Scopriminiera, the Regional Ecomuseum of Mines and of Val Germanasca (Prali), Italy. Ewan Duffy representing the MHTI, centre (Image Ewan Duffy)



Top; Europamines field visit to the tin and wolfram mines of Fundão, Portugal. John Morris third from left (Image Martin Critchley)

Bottom; Europamines' first AGM at Killhope, the North of England Mining Museum. John Morris of the Geological Survey of Ireland, lead partner, far left; Alan Kilday, project manager, fifth from right (Image Sharron Schwartz)

of this project, with site visits to Italy, France, Cornwall, and especially Linares in Spain, dubbed 'Europe's best kept secret' for the astonishing breadth and preservation of features in its historic mining landscape, including dozens of Cornish-type engine houses which made Ken Brown literally drool! Our Spanish colleagues still split their sides laughing when they recall how Ken was forced to run through a field near one of these engine houses in order to escape an angry bull! The place has since been dubbed 'Kenny's bull field'. Memorable too, was the medieval banquet held at Bunratty Castle in Co. Clare, unlikely to be forgotten by one of our Italian friends who found himself in the dungeon!

The proceedings of the Nenagh meeting were published by the MHTI in 2003. Despite having taken place 17 years ago, the presentations and results of this seminal conference are still very relevant today. Interestingly, more than 10 years after the conference, we received a request to supply a copy of the proceedings to the Ministry of Tourism in Botswana who were looking at developing mining tourism in that country, and the authors duly handed over a copy when meeting with staff at the Ministry in Gaborone in 2012.



Culture 2000 - Europamines (2004-2005)

Subsequent to the completion of the MINET project, the founder members met at Dolaucothi, Wales, in 2000 to discuss the future development of the project, and between 2001-2002 a draft Charter and Operational Programme were produced and revised. A successful application was made to the Culture 2000 programme of the EU to fund the initial development of a European wide mining heritage network. Because of the potentially embarrassing pronunciation of MINET in some languages, the new name of Europamines was chosen for the network. Although Europamines was not funded for the three years desired, the aims of the one year project were:

- The establishment of a not-for-profit legal entity to control and develop the Network;
- The construction of a Website as a powerful tool to promote the Network;
- A series of training programmes concerning



strategies, business plans, marketing, technical skills, heritage research, education and social inclusion initiatives and from this produce a manual of good practice and principles for the Network;

- The production of a touring exhibition to promote the Network and European mining heritage;
- To gain representation for the Network at international events and within other organisations;

The GSI represented by John Morris, was the Lead Partner for the Europamines project, with funded partners the MHTI, The Colectivo Proyecto Arrayanes (Spain), the Comunita Montana Valli Chisone e Germanasca (Italy), the North of England Lead Mining Museum (UK) and the Fundão Municipality (Portugal). Associate partners were the Kopalnia Złoty Stok (Poland), L'Argentiere-La Bessee (France) and Cornwall County Council (UK). Alan Kilday from ECTARC acted as Project Manager, as he had done for the precursor MINET project, and became as renowned for his jokes as for his ability to keep the project running smoothly! The MHTI is grateful to have received a grant of €5,000 from the Heritage Council as match funding to allow it to

participate in the Europamines project.

During 2005, site visits and workshops were held at the Valli Chisone e Germanasca, Italy; Złoty Stok, Poland and Fundão, Portugal, with the MHTI being represented by either Martin or Ewan Duffy. Many amusing incidents occurred during these visits which always seemed to involve much fun and revelry. Abiding memories are many, but the workshop which took place at the Kopalnia Złoty Stok in South West Poland stands out. Here we had to squeeze ourselves into old rubber chemical warfare suits to enter some of the underground workings, and we were also treated to a boat ride up a flooded adit in pitch darkness to the strains of *O Solo Mio* from our Spanish and Italian friends! The miners' mugs with phallus-shaped handles at a show mine near Kletno also caused much jollity, while at the Nowa Ruda Mine we had our faces blackened by coal dust and were put to work shovelling coal by our guide! People seemed to acquire as much of a liking for Polish beer as they did for the mining heritage, although it was the Irish and Cornish contingent who were chiefly responsible for the Złoty Stok bar running dry! The MHTI organized a field visit on the back of this workshop and we all met up to enjoy a fabulous hog roast dinner.

Left; Europamines' field visit to the Horní Slavkov tin mine in the Krušné hory (Ore Mountains) region of the Czech Republic, September 2007. Martin Critchley, MHTI, centre (Image Sharron Schwartz)

Right; Europamines' visit to the Nowa Ruda Coal Mine, SW Poland, May 2005. John Morris fifth from right, Martin Critchley MHTI back left (Image Sharron Schwartz)



Europamines held its first AGM at Killhope, the North of England Mining Museum, in the autumn of 2005, where it was agreed to continue with the organisation and seek to expand its activities and engage with new members. Over the next three years, members from Ireland (the Copper Coast), Poland, Norway, Cornwall, Spain and the Czech Republic, including organisations from the public and private sector, as well as voluntary groups and academic institutions, joined up. Further official meetings and some stunning field visits were held during 2006 in Llangollen, Wales, and at Wrocław in South West Poland; in Bohemia and Prague in the Czech Republic in 2007 and at La Union, Murcia, Spain, in 2008. Additionally, many informal visits were conducted between associated mining heritage sites such as Kopalnia Złoty Stok and Poldark Mine (Cornwall) and academic partnerships forged between universities in Poland and Spain.

Several of the key aims of the Europamines project were accomplished, notably the establishment under UK law of a charitable company (Europamines Ltd.) by the founding partners and the associated partners who had joined during the lifetime of the project. In addition to the workshops and site visits noted above, a website was established and two books published in Spanish and English in 2005 (*Interpretation of the ruins of Cornish design engine houses* and *The conservation of historic mine buildings in Cornwall: practical guidelines to assist conservation of similar buildings internationally*), copies of which are still available from Matthew Parkes who would dearly like to reduce the stock under his bed! MHTI members (Ken Brown, John Morris, Martin Critchley and Adam

Sharpe) contributed to these publications. The cooperation and financial assistance of Cornwall County Council with the second publication (authored by principal archaeologist, Adam Sharpe) was much appreciated.

Despite the initial enthusiasm for the network, the growth in membership was far less than anticipated and in 2007 discussions and presentations by MHTI member and Europamines President, Sharron Schwartz, took place at Saltaire and Ironbridge in the UK with a much larger organisation, the European Routes of Industrial Heritage (ERIH), that had been set up in 2003 through Interreg IIIB - North West Europe funding. ERIH, which had ambitious plans to grow throughout Europe, had approached Europamines, keen for it to become the mining section of its rapidly expanding network.

However, the 2008 AGM of Europamines in Murcia, Spain, was not particularly well-attended and several options were discussed for the organisation's future (including collaboration with ERIH as outlined above, or a NAMHO style network). Ultimately nothing came of these suggestions as engagement with the network rapidly dwindled, momentum was lost and the company was dissolved in 2009. The demise of Europamines was to a degree precipitated by the expansion of the much larger ERIH network. Some saw Europamines as a duplication of effort and were amenable to the organisation joining ERIH, while others wished to retain Europamines' independence. Additionally, the lack of time or commitment from publically funded members once the cushion of EU funding had gone, coupled with little appetite to apply for a new round of funding, were factors. However,

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the friendships and contacts forged during the four years of Europamines have endured, to say nothing of the knowledge the MHTI gained through its involvement.

Interreg IIIB - Geoparks (2004-2008)

This project was probably the most ambitious and challenging EU project that the MHTI has been involved in to date, requiring a tremendous degree of commitment from Board members well beyond its lifetime.

Geoparks are single, unified geographical areas where sites and landscapes of international geological significance are managed with an holistic concept of protection, education and sustainable development. The first Geoparks were established by four founding members (including Marble Arch Caves in Northern Ireland) in 2000. The Geoparks network came to the attention of MHTI member John Morris and his employer (the Geological Survey of Ireland). Working with the local community in the Copper Coast, Co. Waterford, they conceived and promoted the candidacy of the Copper Coast for inclusion in to the Geoparks network. The Copper Coast comprises a strip of land along the County Waterford coast between Fenor (near Tramore) and Stradbally (near Dungarvan) that boasts a stunning variety of geological features. Among the most recognisable are the extant remains of the Bunmahon/Knockmahon copper mines which were worked extensively in the nineteenth century and contain visible remains such as Cornish-type engine houses, mineral tramways and dressing floors. John was supported in his endeavours by MHTI stalwart and mining historian, Des Cowman, a local resident. The Copper Coast was admitted as a European Geopark in 2004.

The Copper Coast Geopark differed from most of the other Geoparks in Europe in that it was community led (rather than by a State agency or a local authority). For this reason, it lacked the expertise and financial resources to fully develop into a successful entity. Fortunately at this time, Dr. Patrick McKeever at the Geological Survey of Northern Ireland saw the opportunity to bring together a number of Geoparks in NW Europe, including the Copper Coast, and to seek funding for their development through the Interreg IIIB



(NW Europe Programme). Patrick, along with John Morris, submitted a successful application for a three year project (subsequently extended to four years under the coordination of Martin Critchley) with the theme of 'Fire, Water and Ice' which included the following partners:

- UK - Natural Environment Research Council through its component body, the British Geological Survey (Geological Survey of Northern Ireland) – Lead Partner
- UK - Fermanagh District Council (Marble Arch Caves and Cuilcagh Mountain Park European Geopark)
- UK - Fermanagh Lakeland Tourism Limited
- IRE - Geological Survey of Ireland
- IRE - Waterford County Council
- IRE - Mining Heritage Trust of Ireland Limited on behalf of the Copper Coast European Geopark
- IRE - National University of Ireland, Cork. Department of Archaeology
- DE - Vulkaneifel Geopark GmbH
- DE - Geopark Gerolstein
- DE - Eifel Tourismus (ET) GmbH

The main thrust of the project was to develop joint products and services for the promotion of the partner Geoparks, whilst at the same time bringing newly approved Geoparks (such as the Copper Coast) up to the standard of the other partners. Field visits to established sites in

Above; Des Cowman at the deconsecrated Church of Ireland at Monksland, Knockmahon, May 2009. This has been renovated to serve as the Copper Coast Geopark's Visitor Centre (Image Martin Critchley)



Above; Welsh and Irish delegates at the Interreg IIIA *Celtic Copper Heritage* meeting held at Avoca, Co. Wicklow, 23 October 2007. Project Manager, Aidan Doyle, with hands crossed centre front (Image Martin Critchley)

Germany proved to be particularly informative. In the case of the Copper Coast, there was a vast amount of work to be done as they were starting from a standing still position. At the start of the project there was no infrastructure in place at the Copper Coast, no publicity material, no educational resources and no owned assets.

One of the first initiatives was to establish the Copper Coast Geopark as a legal entity, because without this the organisation could not apply for funding in its own name, and this was one of the reasons why the MHTI had taken responsibility of managing its involvement in the Interreg project. Key to the development of the Copper Coast was the employment of administrative and geological staff. Paula McCarthy was appointed as administrator and continued in the role for a number of years after the end of the Interreg funding, and always gave her utmost to the Geopark, often above and beyond the call of duty. Sophie Preteseille was appointed as resident geologist and did a fantastic job in developing geological information and educational outreach. In parallel, the local community, and especially locally based MHTI Board member, Des Cowman, worked tirelessly to foster links between the Geopark and the community.

One of the key concerns at the Copper Coast was the lack of physical assets which could be used to develop the Geopark. To address these concerns, the Interreg project enabled the purchase of the

land and mine buildings at the Tankardstown mine site and the deconsecrated Church of Ireland at Monksland, Knockmahon, which would serve as a Visitor Centre. At Tankardstown, considerable funds were used to consolidate and partly restore the mine buildings, to put in place interpretation and to create a visitor car park, described in more detail in the chapter on conservation works. In parallel, University College Cork (UCC) undertook archaeological digs and geophysical surveys, whilst at the same time MHTI members surveyed the buildings, associated tramways and the accessible underground workings. The results of these actions were published in the special thematic edition of the 2005 Journal of the MHTI. Immediate works to restore the roof were also undertaken on the Monksland church.

The total expenditure for all partners in the Interreg project was over €4m, of which €1.8m was spent at the Copper Coast. The European Union did not fully fund all of this work and about €0.5m was contributed by the Irish partners (GSI, MHTI, UCC and Waterford County Council), either as direct funding or mostly as staff contributions in kind. The Irish Government, through the support of Martin Cullen TD, contributed €170,000 to the project. The MHTI for its part supplied nearly €100,000 in voluntary staff time, mostly attributed to Martin Critchley, who acted as the Project Manager on behalf of the Copper Coast.



Although the Interreg project ended in 2008, this was by no means the end of the MHTI's involvement in the Copper Coast. We remained as a shareholder in the organisation and provided two Directors (Matthew Parkes and Nigel Monaghan), and also stepped in with a donation of €5,000 at a critical time to help towards the development of the Monksland church into a heritage and community resource.

The development of the Copper Coast Geopark has been fraught with many challenges over the last 12 years. Although it gained the prestigious UNESCO Global Geopark status in 2015 and now has an established infrastructure, it still lacks sufficient financial resources which threatens its long term viability. A new company structure, responding to requirements of law, has recently been put in place, resulting in the MHTI no longer being one of the nominating bodies for Directors. This marks a decisive shift towards the increased local community input and ownership of the Geopark. However, some doubts remain as to whether a community based initiative is the best model for a Geopark.

Interreg IIIA - Celtic Copper Heritage (2004 - 2008)

Celtic Copper Heritage was an EU funded Interreg IIIA project between the historic mining areas of Avoca in Co. Wicklow and Amlwch on the

island of Anglesey in Wales, managed by Dr Aiden Doyle of Newcastle University. It built upon the earlier Celtic Copper Project, a one year LEADER funded venture in 1999 that had also included west Cornwall. In Ireland, the Celtic Copper Heritage project partners were the Eastern Regional Fisheries Board (ERFB), Wicklow County Council, the GSI, the Vale of Avoca Development Association (VADA), the MHTI and East Coast and Midlands Tourism. The ERFB were the lead organisation for the Avoca part of the project, while local engagement and support from the community was provided through VADA. The aim of the Celtic Copper Heritage project was to harness the historical copper mining heritage in Avoca and Amlwch as a means of generating positive economic, social, cultural, and environmental impacts in both regions.

The basis for this international collaboration were the features common to both areas: similar ore deposits; an associated 200 years of mining history with significant technology transfer and human movement between the two areas; comparable geology with the host rocks being volcano-sedimentary piles of 'Lower Palaeozoic' age, and pollution in the form of 'acid mine drainage' (AMD) which posed issues related to future development planning. Site visits were made to each area, and in 2008 the MHTI participated in a tour of the Parys Mountain mining landscape

Above; A group of Irish art students visit Parys Mountain Mine with the MHTI as part of the *Celtic Copper Heritage* project, June 2008. Project Manager, Aiden Doyle, far right (Image Sharron Schwartz)

with a group of Irish art students that included an inspirational surface and underground tour with the Parys Underground Group, which was, for all but the authors, their first time down a mine. Their reactions to the mine's famous 'snottites' were highly amusing!

There were two main work packages to the project in Ireland: addressing the AMD pollution to the Avoca River and highlighting and developing the heritage aspects of the historic mining landscape. It's fair to say the former was probably seen as the most important of the two elements as there had been considerable pressure from environmental groups to clean up the river for fishery purposes. The AMD issue was addressed through the commission of a pilot active water treatment plant to remediate the waters in the river, which successfully demonstrated that AMD emanating from the two main adits could be treated by this method. However, a large scale version of the plant has not been installed and the AMD problem remains currently unresolved.

The heritage aspect of the project was addressed by a website, the development of walking trails across the site with explanatory text in leaflet form, and through the use of signage along the walking routes. Unfortunately, whilst the walks were defined and leaflets produced, the State (as the de facto landowner of the Avoca mine site) was reluctant to permit unregulated public access, mainly because of perceived threats to public health and worries about public liability. For the same reasons, whilst interpretation boards were designed they were never manufactured. More recently, access to virtually all of the site, including underground, has been prohibited and controversial large scale remediation works commissioned by the State under the aegis of health and safety have been put in train. The MHTI has vociferously voiced its opposition to many elements of this plan. While Anglesey has forged ahead with the development of its historic mining landscape as a sustainable tourism amenity without recourse to drastic interventionist works such as are earmarked for the Avoca Valley, Avoca's mining heritage languishes in a state of almost total neglect.

Indeed, it is fair to say that over the years, the situation at Avoca has given the MHTI the most cause for concern, angst and disappointment.

Despite an excellent working relationship and understanding with local community groups and with Wicklow County Council, we have been something of a blunt instrument where some national State agencies are concerned. Not through any lack of effort from the local community or the MHTI, the *Celtic Copper Heritage Project*, along with its precursor, the *Celtic Copper Project*, failed in their ultimate aims of protecting and making accessible the mining heritage at Avoca and developing it as a tourism resource. This undesirable state of affairs will only be resolved if there is a commitment in the very highest corridors of power to adopt a more positive perception of mining heritage and see the bigger picture. If not, then the Avoca Valley which contains some of Ireland's finest mining heritage that is of national and international significance, will be tragically degraded and rendered a mere shadow of what it once was.

Interreg IIIB – Green Mines (2007-2008)

Green Mines was a consortium of partners from Spain, Portugal, Wales and Ireland collaborating to advance environmental remediation of abandoned mine areas and their conversion into economically sustainable heritage resources. The project ran for 18 months between 2007 and 2008 and was funded by the Interreg IIIB Atlantic Area. The partners involved were the Diputación Provincial de Huelva (acting as the Lead Partner) Spain; the Agencia de Desenvolvimento Regional do Alentejo (ADRAL) Portugal; Blaenau Gwent County Borough Council and Cadwyn Clwyd Rural Development Agency, Wales, and from Ireland, the Geological Survey of Ireland, the Mining Heritage Trust of Ireland and Tipperary North County Council.

The main initiatives consisted of exchange visits and an international conference organised by John Morris, assisted by MHTI members, which was held at Nenagh, Co. Tipperary. This focused on the environmental remediation of former mining areas for tourism, with a keynote presentation delivered by Caroline Digby of the Eden Project, Cornwall and the Post Mining Alliance. A number of issues were highlighted, including the environmental remediation of abandoned mine sites, abandoned mines sites as a source of renewable energy and the conservation and development of historic mine sites as a



sustainable tourism resource.

Besides the highly memorable visit to the surreal landscape and historic buildings of the world famous Rio Tinto Mines in Andalucía, Spain, now being run as a mining heritage park, from an MHTI perspective the most important outcome of the project was that it co-funded the conservation work undertaken by Tipperary County Council on the Cornish-type engine houses and associated structures at Silvermines. This proved to be particularly gratifying to MHTI member, Éamonn de Stafort, who had campaigned tirelessly for decades for the conservation and preservation of Silvermines's historic mining landscape. More details of this work is given in the Conservation chapter in this anniversary publication.

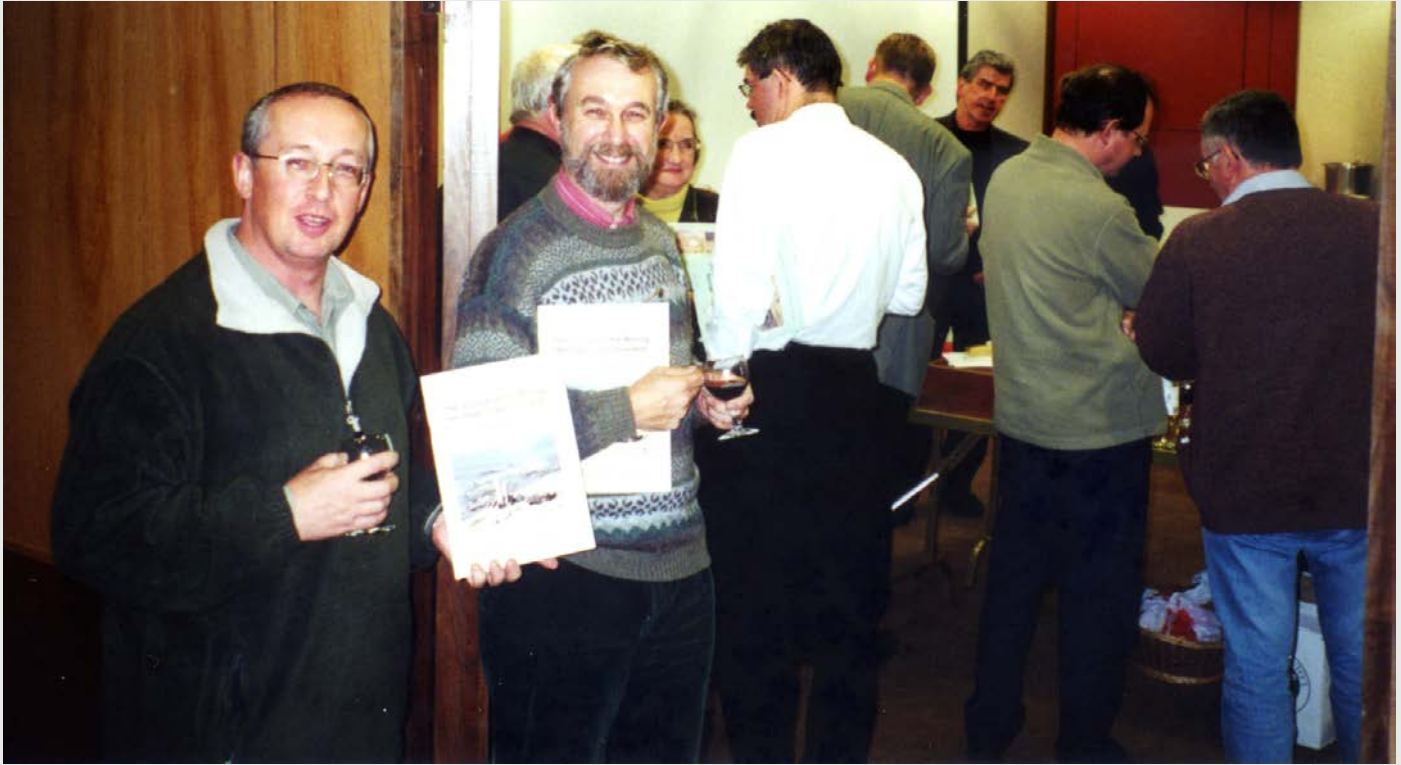
Conclusions

It's fair to say that the collaborative projects with which the MHTI has been involved over the last 20 years have been something of a double edged sword at times. Certainly, the red tape and bureaucracy that inevitably stems from involvement in multi-million euro projects involving numerous partners, necessitates almost constant monitoring, reporting and meeting various milestones, to say nothing of

the issues of cash flow. Discussion around these factors often dominated Board meetings. Over the years this work too often fell on the shoulders of a mere handful of stalwarts with the time, energy and interest to devote to such large projects. As outlined above, some projects have seen more success than others. Our future participation in such projects very much depends on whether Board members are willing to apply for EU and other sources of funding, to either write or co-author the proposals, and then to commit many hours of unpaid time to projects successful in receiving funding.

Conversely, these projects have also been some of the most gratifying activities for the MHTI, allowing us to avail of funded travel to many other mining areas throughout Europe, to improve and deepen our collective knowledge and skills base, to forge lasting networks and partnerships and to improve the physical remains at mine sites in Counties Cork, Waterford and Tipperary. But most importantly of all, over the last 20 years the MHTI has been in the vanguard of helping to put Ireland firmly on the map as a country that has some significant mining heritage assets. No mean achievement for a small voluntary group such as ours.

Above; John Morris on the heritage train at the Parque Minero de Riotinto during a *Green Mines* visit to Andalucía, Spain, June 2008 (Image Martin Critchley)



Top; Nigel Monaghan holding the MHTI's first Journal at a well attended launch evening (Image Matthew Parkes)

Bottom; MHTI members holding copies of our annual journal at NAMHO 2015 held in Nenthead, Cumbria (Image John Hopkinson)

Twenty Years of MHTI Publications

By Matthew Parkes

Introduction

All members receive the Journal as part of their annual membership benefits for the year since 2001. For the record, this short chapter highlights the contents of each issue of the Journal along with the occasional publications that we have produced in the last 20 years. The range of topics and the depth of treatment are a testament to the serious efforts of the MHTI in taking a professional approach to our passion. Without all of the authors who have crafted and laboured at their papers or books, none of this body of work would have been achieved.

MHTI JOURNAL No. 1 (2001) 76pp

Editorial by Des Cowman

The Sandstone Mines of Mountcharles, Co.

Donegal by M. A. Parkes, G. Carville, J.G. Kelly and S. Dowds

Catalogue of Board of Trade Records of English based companies in Ireland 1856-1920 by John.

H. Morris and Des Cowman

From the Beara to the Keweenaw: the migration of Irish miners from Allihies, County Cork to the Keweenaw Peninsula, Michigan, USA, 1845-1880 by William Mulligan

An 1854 Catalogue of Mines and Mineral occurrences in Ireland by John. H. Morris

Man Engine House, Mountain Mine, Allihies, Co. Cork by John. H. Morris

The Mining Boom of 1824-'25. PART 1 by Des Cowman

The Iron Mines of Co. Laois by Geraldine Carville

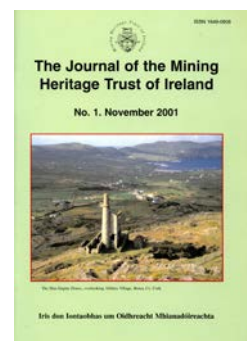
Survey of historic mine workings exposed in McQuaid's Quarry, Lemgare, Clontibret, Co.

Monaghan by John. H. Morris and Matthew Parkes

The metal mines of Dublin by Des Cowman

The Mines of Baravore, Glenmalure, Co.

Wicklow by Stuart Chester and Nigel Burns (with mineralogical note by Richard Unitt)



MHTI Journal No. 1



MHTI JOURNAL No. 2 (2002) 76pp

Editorial by Des Cowman

Salvaging minesites – the case of Keel by Phelim Lally

Sir Richard Griffith's Catalogue of Mines and Mineral Occurrences in Ireland : Notes on various editions published between 1853 and 1862 by Patrick Wyse Jackson

Harvey's of Hayle by Roz Cundick

A unique Cornish engine house – Williams' in Avoca by Ken Brown

A survey of Tankardstown Mine, Bunmahon, Co. Waterford by Martin Critchley

The mining Boom of 1824-'25. PART 2 – Aftermath by Des Cowman

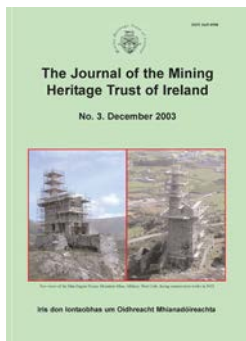
The Man Engine House, Allihies, Co. Cork : a pictorial record of conservation works completed in November 2002 by John Morris

A history and survey of mine buildings at the Tassan Mine, Co. Monaghan by John Morris, Phelim Lally and Des Cowman

Glandore Mines, County Cork: history and survey by Paddy O'Sullivan

Cistercians, geology and their medieval quarries by Geraldine Carville

A compendium of illustrations and descriptions of some Irish historic mine workings from rare, out-of-print publications and other sources by Petra Coffey and John Morris



MHTI JOURNAL No. 3 (2003) 64pp

Editorial by Des Cowman

Further illustrations of mining activities in Ireland : Knockmahon, County Waterford and Avoca, County Wicklow by Petra Coffey, Des Cowman and John H. Morris

Mining Scams ? Three examples from Wicklow by Des Cowman

The Wicklow Gold Rush by Peadar McArdle

In search of Hodgson's Tramway by Ewan Duffy

An history of quarrying and mining in Ireland up to 1700 by Des Cowman and John H. Morris

Man Engine House, Allihies, Co. Cork : a pictorial record of conservation works in 2003 by John Morris

The Battle of the Tokens, 1789-1799 : The Hibernian Mining Company v. The Associated Irish Mine Company by John Morris

Charles Stewart Parnell and his mining interests by Pat Power

Memories of 1960-'70s exploration and the founding of the IAEG by Dave Naylor, Jeff Sample and James M. Patterson

Silvermines engine houses by Ken Brown

MHTI JOURNAL No. 4 (2004) 48pp

Editorial by Des Cowman

Hibernia, Shamrock, Erin : William Thomas Mulvany and the 'Irish mines' in the Ruhr by Olaf Schmidt-Rutsch

A Preliminary Report on Crookhaven Mine, County Cork by Paddy O'Sullivan

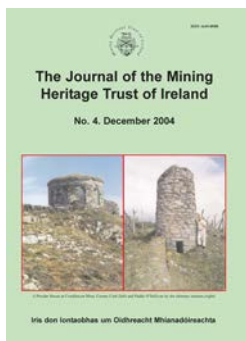
Historic records of mining on Mount Gabriel by Stephen Briggs

Mellifont – An Abbey in a Quarry by Geraldine Carville

The Avoca Mineral Tramway – A further look into an early County Wicklow mineral tramway by Andrew Waldron, Danny Sheehan and Andrew Wilson

Documents on Mining History by Des Cowman

A new survey of Crookhaven Mine by Martin Critchley and Richard Shaw



MHTI JOURNAL No. 5 (2005) 80pp, full colour throughout.

Special Thematic Volume: The Bunmahon Copper Mines, Co. Waterford, Copper Coast European and Global Geopark

Editorial by Des Cowman

A history of Tankardstown Mine, 1850-c.1875 by Des Cowman

The mineralogy of the Bunmahon copper mines, Co. Waterford by Stephen Moreton

Topographical and Geophysical Surveys at Tankardstown Mine, Bunmahon, County Waterford by Kevin Barton

A preliminary account of an archaeological excavation at Tankardstown (Knockmahon) Copper Mine, Bunmahon, Co. Waterford by Flor Hurley

Historical Reconstruction Drawings of the Copper Coast Mines, Co. Waterford by Dr Daniel Tietzsch-Tyler, pp 29-46.

The fates of the Tankardstown miners: some examples by Des Cowman

The Knockmahon - Tankardstown Mineral



MHTI Journal No.s 2 – 5

Twenty years of MHTI Publications

Tramway, Bunmahon, Co. Waterford. by John H. Morris, Daniel Tietzsch-Tyler and Ray Scanlon
Conservation works at Tankardstown Mine, Bunmahon, Co. Waterford by Martin Critchley and John Morris

MHTI JOURNAL No. 6 (2006) 40pp, full colour

Editorial by Des Cowman

Gurtavallig Mine, Co. Cork by Diane Hodnett
Kilcarray Adit, County Carlow by Matthew Parkes
The Ballycorus Leadworks Quarries, mines and railways of Dalkey by John Barnett

The mines of Sheeps Head and Mizen Head Peninsulas, County Cork by Paddy O'Sullivan
The Camac Brothers and late 18th century mining in Avoca by William Chatterton Dickson

MHTI JOURNAL No. 7 (2007) 54pp

Editorial by Matthew Parkes

Geological setting of the lead-bearing veins in the Glendalough-Glendasan district, County Wicklow by Peadar McArdle
A history of Zn-Pb-Ag mining at Abbeytown, Co. Sligo by John Kelly

The mineralogy of the Wicklow lead mines by Stephen Moreton and David I. Green
Galway's mining heritage: interactive maps on the Web by Ronán Hennessy and Martin Feely
The Mining Company of Ireland and the collieries of Slieveardagh, County Tipperary by Des Cowman

The Mining Company of Ireland's operations at Glendasan-Glendalough 1825-1895 by Des Cowman
Photographs of Irish mines from the archives of the Royal Institution of Cornwall by Diane Hodnett

MHTI JOURNAL No. 8 (2008) 46pp

Editorial by Matthew Parkes

MCI's leases, trials and developments by Des Cowman
Silica Sand Quarrying on Muckish Mountain, County Donegal by Alastair Lings
An introduction to some of the historic mines of Glenmalure, Co. Wicklow by John Morris
Two Kerry lead-silver mines: Kenmare and

Castlemaine by Des Cowman

MHTI JOURNAL No. 9 (2009) 56pp

Editorial by Matthew Parkes

A bibliography by county of writings on Irish mines by Des Cowman

An history of the Caherglassaun silver-lead mine, near Gort, Co. Galway, with a particular emphasis upon the operations of the Connemara Mining Company of Ireland, 1852 - 1855. by John H. Morris

Mesolithic chert extraction at Lough Derravaragh, County Westmeath by Matthew Parkes and Aimée Little

Derrylea Mine, Co. Galway: new features exposed during roadworks by Jerry O'Sullivan, Barry Flannery and Matthew Parkes

The Cashel Silver Lead Mine, County Monaghan by Alastair Lings

The mining boom c.1905-'08 by Des Cowman

The internet: a mine of information by Paul Rondelez

Irish miners and the road to Leadville by James Patrick Walsh

MHTI JOURNAL No. 10 (2010) 73pp

Editorial by Matthew Parkes

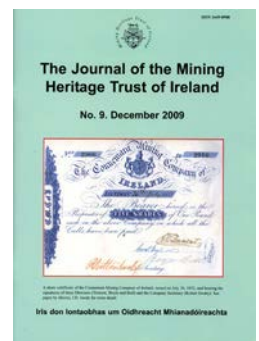
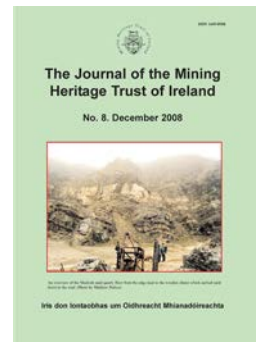
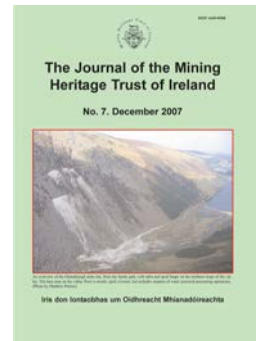
The baryte mines of West Cork by Des Cowman
Re-assessing a "scam": Connaree Mining Company 1859-1872 by Des Cowman

Irish miners in the USA: social backgrounds by Des Cowman

Douglas Wallace Bishop - seventh Director of the Geological Survey of Ireland: his appointment 1940 and resignation 1950 by Colin B. Wilson

Evidence for early Bronze Age tin and gold extraction in the Mourne Mountains, County Down by Richard Warner, Norman Moles and Rob Chapman

A Register of share certificiates, and other fiscal ephemera, of mining companies which operated in Ireland during the 19th and early 20th centuries by John H. Morris



MHTI Journal No.s 6 – 10



MHTI JOURNAL No. 11 (2011) 112pp

Editorial by Matthew Parkes

A survey of bryophytes and metallophyte vegetation of metalliferous mine spoil in Ireland by David T. Holyoak and Neil Lockhart

The Cappagh Mine share certificate vignette by Peter Eggleston

Copper mining near Belderrig, County Mayo, with a note on Martin Boundy by Alastair Lings
Ballymurtagh Mine, Avoca: a history by Des Cowman

Unearthing the past: the rediscovery of Blundell's Mine(s), Edenderry, County Offaly by Martin F. Critchley and Sharron P. Schwartz

Philip Henry Argall (1854-1922): the remarkable life and career of a Cornish-Irish mining manager, engineer and metallurgist by Sharron P. Schwartz and Martin F. Critchley

Mining and mineral working in the Belleek area, in County Fermanagh by Alastair Lings

Ringing the blews: the Avoca 'mine bell' by Sharron P. Schwartz and Martin F. Critchley

Conservation of the 19th Century mine heritage buildings at Silvermines, Co. Tipperary by John H. Morris



MHTI JOURNAL No. 12 (2012) 106pp

Editorial by Matthew Parkes

The Duhalla Coalfield, Co. Cork: A Preliminary History by Des Cowman

The Slate Quarrying Industry on Sherkin Island, Co. Cork by Dolly O'Reilly

The Lead Ore Dressing Floors at Glendalough and Glendasan, County Wicklow 1825-1923: A History, Survey and Interpretation of Extant Remains by Sharron P. Schwartz and Martin F. Critchley

Creggan and the History of the Silver-Lead Mines of the Marches of Armagh and Monaghan by Sharron P. Schwartz and Martin F. Critchley

Mining Heritage and Tourism in South Australia and Victoria: Observations and Impressions. by Sharron P. Schwartz and Martin F. Critchley



MHTI JOURNAL No. 13 (2013) 96pp

Editorial by Sharron Schwartz

Early silver mining in Western Europe: an Irish perspective by Peter Claughton and Paul Rondelez

A palaeoecological assessment of the impact of former metal mining at Glendalough, County Wicklow, Ireland by Tim Mighall, Scott Timpany, Martin F. Critchley, Antonio Martínez Cortizas and Noemí Silva Sánchez

A history of the silver-lead mines of County Down, Northern Ireland by Sharron P. Schwartz and Martin F. Critchley

MHTI JOURNAL No. 14 (2014) 124pp

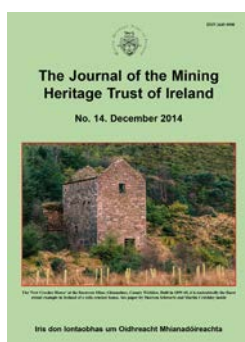
Editorial by Sharron Schwartz

Salt Mines in the Carrickfergus area of County Antrim by Caroline A. Nicholson

The silver-lead mines of Glenmalure, County Wicklow: a history and an archaeological survey of extant remains by Sharron P. Schwartz and Martin F. Critchley

A comparison of the sedimentary record of the Upper Lake Glendalough, County Wicklow, with the historic lead mining records of the area by Stephen Callaghan

Bronze Age copper mines in Wales and a brief comparison with the evidence from Ireland by Simon Timberlake



MHTI JOURNAL No. 15 (2015) 103pp

Editorial by Sharron Schwartz

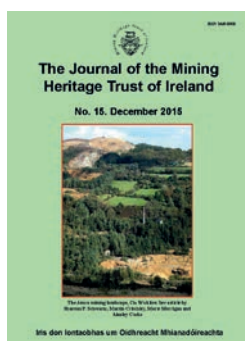
The Caim(e) Rocks Lead Mine, County Wexford: Its History and Industrial Archaeology by Sharron P. Schwartz and Martin F. Critchley

Environmental Legacy of C19th lead mining and mineral processing at the Newtownards Lead Mines by Norman Moles, Mark Kelly and Dermot Smyth

'Contested Spaces': Imaginings of Post-Industrial Mining Landscapes, the Case of Avoca, County Wicklow by Sharron P. Schwartz, Martin Critchley, Marie Merrigan and Ainsley Cocks

The Lisheen Mine Co. Tipperary: Planning a World Class Closure

Brendan Morris



Twenty years of MHTI Publications

BOOKS

Memoir of Localities of Minerals of Economic Importance and Metalliferous Mines in Ireland (1922)

Grenville A.J. Cole

A facsimile edition of the original, reprinted by the Mining Heritage Society of Ireland, 1998. The memoir lists all known metallic mineral occurrences in Ireland, as of 1922. The original report was reprinted by the Geological Survey in 1956 and remained a popular publication. Each locality is listed with Name, Mineral types, 6" and 1" Sheet number, a basic grid reference and an historical description including relevant references. In addition to the original text, this edition contains a biography of Cole and 22 figures in black and white. The front cover depicts the Man-Engine House at the Mountain Mine, Allihies, Co. Cork. It was erected in 1862 and had an operational depth of 1,494 feet.

The Making and Breaking of a mining community: The Copper Coast, County Waterford 1825-1875+ (2006)

Des Cowman

This book tells the story of the Copper Coast mining communities in well researched detail, but in a highly readable text. Published by MHTI, ISBN 0-9534538-3-9/ 978-0-9534538-3-2, 188pp.

CONFERENCE PROCEEDINGS

Mine Heritage and Tourism : A hidden resource Proceedings of a conference held on November 3-6th 1999 at Nenagh, Co. Tipperary, Ireland.

This publication records a conference convened under the European Mine Heritage Network, MINET, and is a valuable reflection (as extended abstracts, with illustrations) and summary of developments in this relatively new area. Irish, British and European partners from Italy, France and Spain are all represented.

Published by MHTI for the MINET Project, ISBN 0-9534538-1-2, 72pp.

The Ecology of Old Mine Sites.

Proceedings of a workshop on the ecology of old mine sites organised by the Mining Heritage Society of Ireland 18-19 October 1997 at the Geological Survey of Ireland. Special Issue of Biology and Environment.

Proceedings of the Royal of Irish Academy. Vol. 99B. No. 1. ISSN 0791-7945

Introduction by Matthew A. Parkes

Wetland plant effects on the biogeochemistry of metals beyond the rhizosphere by

Donna J. Wright and Marinus L. Otte

Wetlands for rehabilitation of metal mine wastes

by Aisling D. O'Sullivan, Olive M. McCabe,

Declan A. Murray and Marinus L. Otte

A preliminary study on the mycorrhizal

associations of tree seedlings growing on old

mine spoil at Avoca, Co. Wicklow by Deirdre A.

Fay and Derek T. Mitchell

Recolonisation by Staphylinidae (Coleoptera)

of old metalliferous tailings and mine soils in

Ireland by Jervis A. Good

Heavy metals in soil and vegetation at Shallee

Mine, Silvermines, Co. Tipperary, Ireland. by

Maria Steinborn and John Breen

Review Article-The Avoca Mine Site by Vincent

Gallagher and Pat O'Connor

Short communication-The use of wetlands to

prevent environmental pollution from acid

mine drainage by Paula Treacy and Pat Timpson

Short communication-Mines as roosting sites

for bats, their potential and protection by

Kate McAney

Short communication-Lichens of three mine

sites in Co. Wicklow, Ireland by Howard Fox

Short communication-The Mining Heritage

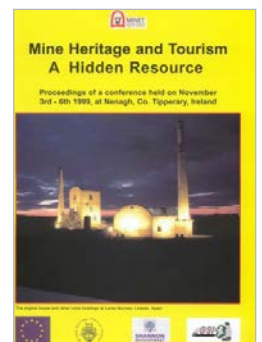
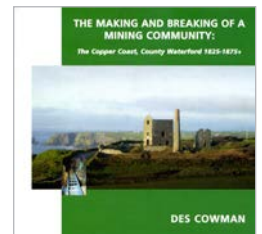
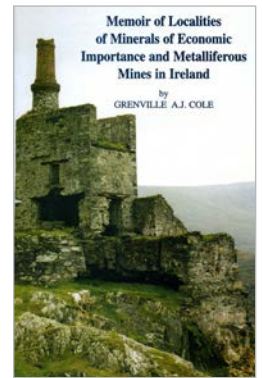
Society of Ireland Mine Site Inventory by

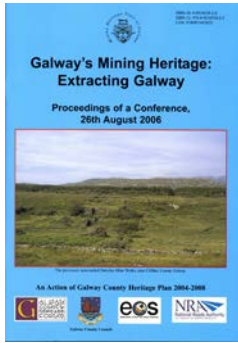
Martin Critchley

Opinion-The aesthetics of restoring old mine

workings by Matthew A. Parkes

Abstracts presented at the Ecology of Old Mine Sites Workshop, 18-19 October 1997





***Galway's Mining Heritage : Extracting Galway
Proceedings of a conference held on 26th August
2006***

Editorial by Matthew Parkes

Abstracting the Extractive History of County Galway by Paul Duffy

Connemara Marble by Ambrose Joyce

Derrylea Mine by Matthew Parkes, Paul Duffy and Martin Critchley

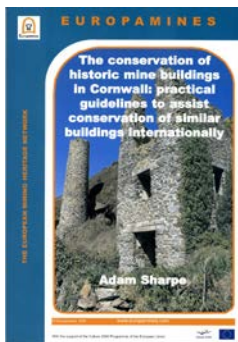
Galway Rocks!: An introduction to the geology of County Galway by Martin Feely

Tynagh Mines by Éamonn Grennan and John Clifford

The Use of Soapstone by the Early Irish - the Archaeological evidence by Michael Gibbons

Glengowla Mines by Keith Geoghegan

The Mines of County Galway - a record of all known mining heritage sites by MHTI

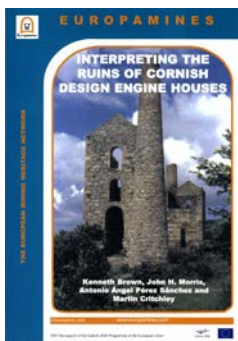


The conservation of historic mine buildings in Cornwall: practical guidelines to assist conservation of similar buildings internationally

Adam Sharpe

Produced by the Historic Environment Service, Cornwall County Council on behalf of the Cornwall and west Devon World Heritage Site Bid Office and Europamines, the European Mining Heritage Network.

Published by Europamines, full colour throughout, 56 pages in English, 56pp in Spanish ISBN0-9551301-1-5



Interpreting the ruins of Cornish design engine houses

Kenneth Brown, John Morris, Antonio Angel Perez Sanchez and Martin Critchley

A guide to measuring, recording and interpreting the ruins of Cornish design engine houses, compiled and published as part of a Culture 2000 funded project to establish Europamines, the European Mining Heritage Network. Published by Europamines, full colour throughout, 48 pages in English, 48 pages in Spanish ISBN0-9551301-0-7

Reflections

For any organisation, chalking up twenty years of existence is a time not just for celebration, but also reflection and looking forward. It seems fitting to close this anniversary booklet with some thoughts about how we envisage the future direction for the MHTI, as outlined in our aims and objectives (printed in the inside rear cover of this publication) which are derived from the Constitution of the Mining History Society of Ireland. For a small voluntary organisation such as ours, much has been achieved to raise the profile of Ireland's mining history and heritage, but much undoubtedly remains to be done in terms of protecting and promoting what is still a vulnerable and often underpublicized and underappreciated heritage.

To promote awareness, appreciation, and conservation of the mining heritage of Ireland

Most of our activities encourage awareness and appreciation of mining heritage and the description of our conservation work shows the efforts made at three major metal mining sites. Efforts with local community groups working to protect mining heritage, like the Glens of Lead, has begun to bear fruit and the MHTI has recently opened discussions with a group in Northern Ireland to explore ways in which to enhance knowledge and awareness of the Newtownards Mines in County Down. Another obvious area for work is the Slieveardagh Coalfield in County Tipperary. Here are the only extant examples on an Irish coalfield of Cornish-type engine houses, in addition to the excellent survival of other industrial buildings in a landscape of superlative heritage value.

Going forward, we anticipate working closely with the local mining heritage group to support their efforts to raise the profile of this important aspect of Ireland's industrial heritage.

On a smaller scale, the visual and structural integrity of many of our mine sites is already being adversely affected by vegetation growth which ranges from ivy on buildings, to trees, gorse and brambles growing in the vicinity of historic mine buildings. The pathway up from the Ballycorus Mine lode back workings to the smelter flue chimney is now choked with head high gorse, where less than a decade ago it was relatively free of this shrub, whilst the centre of the Caim Mine site in Wexford is now covered in impenetrable gorse, brambles and tree saplings. Clearing vegetation to maintain access to sites is not a priority for landowners, whether the land is in State or private ownership. Whilst we wouldn't advocate the cutting back or removal of ivy from buildings, which can cause damage to their stone or brickwork, the MHTI could offer to organise vegetation clearance days, in conjunction with landowners and local groups, to keep open pathways around the important features of the most affected sites.

To create and maintain an inventory of surface and underground mining remains

The scope and development of our inventory has been described by Martin Critchley in this publication and we very much hope to continue this valuable work, and to include smaller and recently re-discovered mines, for example prehistoric mines. The scope of the inventory could, given adequate resources, be expanded to include significant quarries. Our ultimate goal

is to make this inventory publically available. However, this work is dependent on continued access both to surface and underground workings, and the restriction of access at some sites, such as Avoca, on the grounds of health and safety is therefore a cause for concern.

To actively participate in, facilitate and promote the surveying and documentation of extant mining heritage

These activities are on-going, as demonstrated by recent articles in our Journal. We have indicated to Donegal County Council that we would like to see surveys made of Carrowtrasna and Crohy Head Talc Mines. This work has been started, and we aim to complete the surveys. Ideally, we should include survey work in our annual events programme. Again, this is highly dependent on continuing access to the surface and underground features of sites. In recent years, health and safety issues have resulted in the fencing off of mining heritage buildings and features at some sites (for example, the tailings dumps at Caim, the Cornish-type engine houses at Tigroney Mine in Avoca), and our work in this area could be severely curtailed if the landowner withdraws or denies access. In future, remote technologies, such as drones and other remotely controlled vehicles, could become more important for surveying, although at the moment these systems are expensive and require skilled operators and they do not alleviate access issues, as the landowner's permission could in theory still be needed.

To create and maintain a library of information to assist researchers

The MHTI has a modest library and a more extensive archive, which is described in this publication. Whilst information may be gradually added to the library and the archive, the MHTI should actively source material from mines before they close. In recent times Galmoy (2012) and Lisheen (2015) have closed and we have no records of their operations. In the absence of surface remains of these mines such records are vital. It is also of great importance to ensure that the documents collected by individuals, built up over a number of years and often relevant to a specific site or a specific subject, are kept intact and not hived off. We urge people to deposit relevant documents and other material with the MHTI for safekeeping. For our part we are developing policies for the donation and curation of such materials and hope, in future, to have a catalogue of these available online.

We are building a comprehensive bibliography on Irish mines which at present contains over 1,300 entries. We plan to make this publically available via a new website. The possibility of participating in academic research projects is also an avenue worth exploring. We need to be more proactive in collaborating with universities and colleges and in attracting students to become MHTI members. Young people are, after all, the future of the MHTI.

To provide an active programme of lectures, field meetings, publications and a newsletter

In the past the MHTI has held evening lectures, which appeal to those perhaps less inclined to participate in field trips. More recently, we have tried to revive the importance of such lectures by having invited speakers to our AGM and by instituting a Members' Medley day in early November. Looking forward, we hope to include another keynote lecture each year by someone who is actively engaged in research or the heritage sector, perhaps in January where there is a current gap in the programme of bi-monthly events.

In the twenty years up to May 2016, our organisation has issued 72 Newsletters, 15 Journals and other publications which are listed in this booklet. In the same period, our members have organised 180 field meetings and a list of these is also given. The publications, to a large extent, depend on members' interests and field meetings, and we have always endeavoured to publish a variety of papers in our Journal reflecting the myriad elements that constitute mining heritage. The MHTI has a temporary website and a Facebook page. The website will shortly be updated to include news, our mine inventory and bibliography. The Facebook page will be maintained as it is an excellent method of quickly disseminating and sharing news.

We anticipate that the field meetings will continue to evolve and could encompass new ideas such as a rubbish removal and vegetation clearance at sites, or even new interests such as exploratory gas wells, diatomite and peat processing sites. We could, where possible, try

to organise some of our field trips in association with related groups such as the Industrial Heritage Association of Ireland, or the Irish Association for Economic Geology, and we should always try to engage local communities in these events by inviting local historical societies to join in, particularly in Northern Ireland. We need to avoid being perceived as a 'Dublin-centric' group.

We should also seek to extend the number of those skilled in Single Rope Technique (SRT) by running training days, perhaps in conjunction with caving groups and mountaineering clubs, as the challenge of underground exploration may attract younger people.

To undertake general mining heritage educational activities

In the Republic, the MHTI has run events during Heritage Week which are an ideal way of bringing the knowledge of mining history and heritage to a wider audience. With free publicity through its nationwide website, Heritage Week is an opportunity we must continue to capitalise on. Likewise with the European Heritage Open Days in Northern Ireland. Certainly the knowledge and skills base of seasoned and respected academics is always of great value to voluntary groups such as ours, and the sharing of that knowledge through lectures, field events and publications can only enhance our activities by lending them an extra degree of gravitas.

To support mining heritage as tourist amenities

In this publication, we have detailed our involvement with communities in developing mining heritage sites as tourist amenities in the provinces of Connaught, Leinster and Munster. There may be scope for a developing a mining heritage attraction in Ulster, and we would be pleased to share our expertise with any group or organisation that seeks to do this.

To promote a “Code of Practice” for sites

The MHTI has issued no guidance of its own, but generally recommends that people follow that which is issued by the (UK) National Association of Mining History Organisations (NAMHO). Any guidance that we do produce will be shared with NAMHO.

To provide representation on mining heritage to relevant statutory authorities

Among all of our activities as an organisation, this objective is perhaps one of the thorniest. As an organisation set up to ‘develop the informed public awareness, appreciation, conservation and enjoyment of all facets of mining heritage throughout Ireland’, it behoves us to comment on actions that we think might adversely affect mining heritage sites, or to support planning applications where we feel a site could benefit from development. None of these decisions are taken lightly and some have proven to be more controversial than others. The recent remediation works at Avoca have caused a considerable

degree of angst among current Board members, as our opposition to the consultants’ plans for the site has inevitably brought us into conflict with the Exploration and Mining Division of the Department of Communications, Energy and Natural Resources (recently renamed the Department of Communications, Climate Change and Natural Resources). This government department has always been tremendously supportive of us as an organisation, permitting and facilitating access to surface and underground sites, and supporting the MHTI with gifts of money for projects such as this booklet. However, as a mining heritage organisation it is incumbent upon us to seek, above all else, the protection of mine buildings and the wider historic mining landscape within which these are set. We feel we would be remiss in not striving to maintain one of our core objectives.

Indeed, we have supported, opposed, or otherwise commented on numerous planning applications, and also responded to consultations by Councils on their Heritage Plans. The MHTI has written to Councils requesting that mining structures are included in their Records of Protected Structures, and this lobbying will continue as required. Going forward, we need to improve upon the way in which we learn about planning applications, probably by working in conjunction with Heritage Officers, or with industrial heritage and geological groups.

One of our main priorities must be to convince the appropriate authorities of both the Republic and Northern Ireland to take mining heritage more

Reflections

seriously, and to ensure that historic mine buildings and mining landscapes are conferred adequate protection by being listed as protected structures. This should be done in tandem with supportive agencies such as the Heritage Council, An Taisce and the Department for Communities (Northern Ireland). The tragedy of the remediation of the historic mining landscape at Avoca should not mark the beginning of a trend to devalue, sanitise and ultimately erase our mining heritage.

Postscript

Our membership has remained of modest size, reaching over 100 in the early days but averaging around 80 for the past two decades. In common with many other industrial heritage organisations in countries with far larger populations, such as the UK, our membership is mainly middle aged or older, and predominantly male. Younger people, by and large, do not appear to be attracted by events such as lectures and field trips. How we go about trying to appeal to a younger audience is something we must tackle over the next twenty years if we are to continue to exist as an organisation.

Certainly, the nature of our governance has been under discussion in recent years, with respect to whether we continue on as a Charitable Trust or revert to a mining heritage society. The primary reason for becoming a Trust was to have the legal status that enabled us to seek and receive a bigger scale of funding for projects such as conservation of engine houses, and to be partners in EU Interreg projects. This involves having

annual audits which incur a considerable expense. Currently, we are not involved in any large scale EU projects that require us to have a Trust status, and to feasibly be able to do so, we really need to attract dynamic new Directors onto our Board who are willing to be actively involved in seeking to chase funding for projects and to give up a considerable amount of their time. However, the significant changes afoot in the rules for charities and for companies like our own means that the annual audit might be simplified and made cheaper, resulting in a more manageable governance regime in future, thus making any decision about our future direction less pressing.

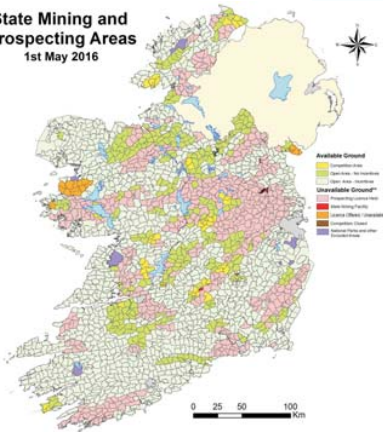
Overall, we certainly need to be more adept at publicity in order to beef up our presence nationally and internationally. There are still many people across Ireland who have never heard of the MHTI. The development of a strong online presence and the use of social media is vital to retain membership numbers, to reach new audiences and to maintain forward momentum. We feel we have much to contribute to mining heritage over the next twenty years. We entreat you to join us in making this happen.



**Roinn Cumarsáide,
Fuinnimh & Acmhainní Nádúrtha**
Department of Communications,
Energy & Natural Resources



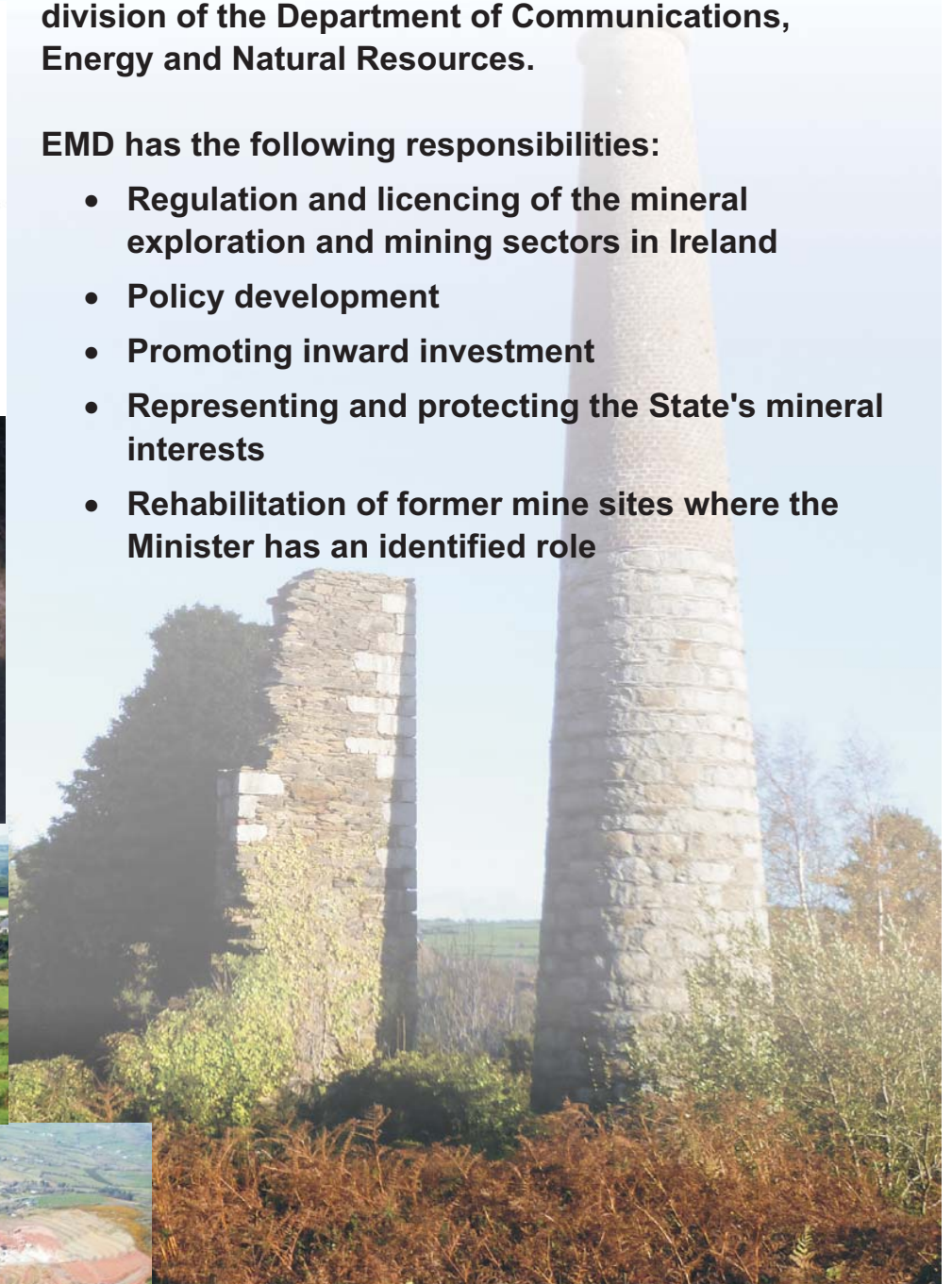
State Mining and
Prospecting Areas
1st May 2016



The Exploration and Mining Division (EMD) is a line division of the Department of Communications, Energy and Natural Resources.

EMD has the following responsibilities:

- Regulation and licencing of the mineral exploration and mining sectors in Ireland
- Policy development
- Promoting inward investment
- Representing and protecting the State's mineral interests
- Rehabilitation of former mine sites where the Minister has an identified role



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- quarry planning & design
- review of NI mineral permissions (ROMPS)
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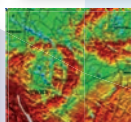
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