

Newsletter



Mining Heritage Trust of Ireland

No. 72 Spring 2016

SPECIAL FEATURE

PURE joy as Baravore Crusher House
Adopted by Local Community
By Sharron Schwartz

You've Got to be Kidding!
By Mick Carragher

UPDATE

Remediation Works at the Avoca Mines

FORTHCOMING EVENTS

NAMHO 2016 Dublin, **BOOK NOW!**
Post NAMHO field trips to working
and abandoned mines

ACTIVITY REPORTS

Field Trip to Derry/Londonderry

ISSN 1649-0894

Iontaobhas Oidhreachta Mianadóireachta na hEireann

Dates for your Diary

2016

May 6-11, A celebration of the tinworking landscape of Dartmoor in the European context – prehistory to the 20th century. Tavistock, Devon. <http://dtrg.org.uk/>

May 12-16, 9th International Flintknapping Symposium, Asparm an der Zaya, Austria. <http://exarc.net/events/9th-international-flintknapping-symposium>

May 13-15, 11th International Symposium on Archaeological Mining History, Nals, Italy. www.europa-subterranea.eu

June 9-12, Mining History Association Annual Conference, Telluride, Colorado, USA. <http://www.mininghistoryassociation.org/>

June 17th-19th, NAMHO 2016, 'Mining and Social Change', Dublin City University. Our AGM will be held during the NAMHO weekend. See pp. 5-8 for more details.

June 20, Post-conference visits to working mines (see p.8)

June 21-24, Field trips to the region around Sligo.

August 20-28, National Heritage Week. Please let us know of events planned in your area and we will advertise these in our summer newsletter (NL73).

13 Aug, Industrial Heritage in The Glens walk. 12 noon, Carnlough Harbour, Co. Antrim. Walk along old mineral railway, past lime kilns, to Gortin Limestone Quarry. Booking essential: e-mail tierna@ccght.org or phone 028 2075 2100. <http://www.heartoftheglens.org/events/>

13-20 Aug, Allihies to Bunmahon Miners Trail (250 km walk). <https://atobminerstrail.wordpress.com/>

September 6-11, 11th International Mining History Congress, 'Mines: History and Influence in Industrial and Social Development of Mining Communities', Linares, Andalusia, Spain.

September 10-11, European Heritage Open Days (Northern Ireland). <http://www.discovernorthernireland.com/niea/ehod.aspx>

16-21 Oct, Australasian Mining History Association conference, Australia. <http://www.mininghistory.asn.au/>

26-28 Oct, ERIH Annual Conference "European industrial heritage - how to tell the international story". <http://www.erih.net/>

November 12, MHTI Members' Medley, venue tba

2017

May 11th-13th, 1st International Early Engine Conference, The Ironworks, Elsecar, South Yorkshire, England. Call for papers issued; 300-word synopsis to be received before the end of May 2016. See <http://www.earlyengines.org/>

15-19 June, Mining History Association Annual Conference, Alaska, USA. <http://www.mininghistoryassociation.org/>

Check with organisers of meetings before making any travel bookings in case of change of dates or arrangements. MHTI lists events in good faith but is not responsible for errors or changes made. For MHTI field trips please register your interest, without commitment, so the organiser can keep you informed.

MHTI Members' Business

Chairman's Report for 2015

Our first event of the year was in March, when nine members and guests visited Crohy Head Mine in Co. Donegal with the aim of surveying the site. Patrick Boner provided great help in organising the field trip, for which MHTI are very grateful.

We held our Annual General Meeting (AGM) in May, at the Carrickdale Hotel between Dundalk and Newry. Mick Carragher, Nigel Monaghan and Matthew Parkes retired as directors on rotation as required by our Articles of Association. They were re-elected unopposed. In July Paul Rondelez joined the board of directors.

After the AGM we headed to the North Down Museum in Bangor, Co. Down for the launch of our exhibition on the history and heritage of the Newtownards Lead Mines which had been expertly collated by Sharron Schwartz and Martin Critchley. The MHTI is grateful to ERA-Maptec Ltd. for sponsoring the exhibition and to the Geological Survey of Ireland for facilitating the printing. The launch was followed by excellent lectures given by Sharron, Martin and Dr Norman Moles of the University of Brighton. The following day, ten members and guests visited the Whitespots and Conlig Mines nearby. Following on from this successful event, a working group consisting of the MHTI and the Geological Society of London (Northern Ireland Branch) has been set up to canvas the local council to develop a management plan to promote and consolidate the industrial heritage of the mine site, and to develop a future partnership of all interested parties.

In July fifteen people toured the iron mines and furnaces of East Clare and Southeast Galway, in a very well organised and highly enjoyable field trip coordinated by Paul Rondelez.

An elite group of three members enjoyed a visit to southwest Scotland in September. There are a huge number and variety of mines to visit in the region, and it is well worth returning to the country.

In November two dozen people attended the Members' Medley at the Collins Barracks site of the National Museum. The Medley gave members the opportunity to present their research, and to display mineral specimens, books and equipment. Afterwards we enjoyed drinks and dinner at the Nancy Hands Bar & Restaurant. MHTI are very grateful for the contributions to the Medley.

During the year we issued four Newsletters, a total of 80 pages, and published an excellent four-article Journal of 106 pages. Our website still needs to be replaced. By the end of 2015 our Facebook page had 492 "Likes". Our page is regularly updated, and it can still be viewed without signing up to Facebook (Click on the X on the right of the white blind as it starts to move up the screen).

During the year MHTI responded to the following planning applications:

- Application 15/119 made to Wicklow County Council for remediation work at West Avoca;
- Application 15/473 made to Wicklow Co. Co. for work at East Avoca;
- Application made to An Bord Pleanála for North-South Electricity Interconnector.

MHTI wrote to:

- Coillte, regarding the crusher houses at Baravore, Co. Wicklow;
- Wicklow County Council about the methodology of remediation works at West Avoca and East Avoca.

Also during the year we responded to enquiries about:

- James Skimming and the Tassan Mining Company Ltd. in Co. Monaghan;
- Stone cutters working in East Ulster in the 19th century.

Looking forward, in June we are hosting the (UK) National Association of Mining History Organisations Conference, and we would welcome help from members who are willing to assist with organising this prestigious event, which is being held in our 20th anniversary year.

For making 2015 a successful year, I would like to thank our directors, contributors to the seminar, medley, newsletters and journal; corporate supporters; landowners; field trip coordinators, members and attendees at our events. Thank you all.

Alastair Lings, 10 April 2016

Notice of 2016 Annual General Meeting

Notice is hereby given that an Annual General Meeting of the Mining Heritage Trust of Ireland Ltd. will be held on Saturday 18 June at the Dublin City University Campus from 18:00-19:00.

Agenda

- 1) Presentation of the accounts for 2015
- 2) To appoint auditors
- 3) To elect Directors

Signed: *Nigel Monaghan*, Company Secretary

If you are unable to attend but wish to have a proxy form, please contact Nigel Monaghan. Martin Critchley, Sharron Schwartz and Mick Carragher are retiring on rotation at the AGM, as required by the Memo and Articles of the MHTI. Martin and Sharron are willing to stand for re-election.

The Avoca Mines Remediation Works, County Wicklow: An Update



Tramway arch,
Ballymurtagh Mine
Image: Sharron Schwartz

The battle to retain the Avoca mine spoils and associated disturbed land in the County Wickow RPS continues, writes Martin Critchley

Works on shaft capping at Ballymurtagh, which had been suspended in late 2015 due to the discovery of an unexpected inclined shaft, have now been given the go ahead by Wicklow County Council (WCC).

This decision is based upon the fact that CDM Smith (the consultants for the Department of Communications, Energy and Natural Resources) will apply the same methodology as used on Air Shaft and Whelan's Shaft (and which the MHTI has previously challenged).

The MHTI recommended to WCC that an archaeological survey of the inclined shaft is undertaken prior to capping. It remains to be seen whether this will be carried out.

CDM Smith have also submitted a method statement for the conservation of the ore bins at Tigroney. This involves the removal of the ore bins, removal of the existing wooden crib supports and removal of the spoil wall behind the ore bins. The ore bin's steel work will be conserved or replaced with new steel. The restored ore bins will be reinstalled on a concrete base and the crib wall reconstructed using salvage and new larch timbers.

CDM-Smith recommended the ore bins be painted black, but WCC have insisted that the colour of the restored ore bins should match that of their present colour to retain their visual appearance.

The portal of the 850 level will be rebuilt, a plastic pipe will be

installed along the level to manage water flow, and the level will be double gated. The mine spoil around the 850 level and ore bins will be regraded, an orange coloured 'barleycorn gravel' aggregate laid down to simulate the removed mine spoil and the area sown with plants. The end result will greatly reduce the authenticity and integrity of the site. This methodology was challenged by the MHTI.

The MHTI has made a submission on the draft Wicklow County Development Plan 2016-2022 concerning the Avoca, and other, mine sites. The MHTI was particularly concerned about the proposal in the draft plan to remove the mine spoil at Avoca from the county list of the Record of Protected Structures (RPS) – something which had been sought by the Department of Communications, Energy and Natural Resources in their comments on the first draft of the plan.

The MHTI opposes the removal of the mine spoil from the RPS which flies in the face of best practice elsewhere, on the grounds that this would allow unregulated removal or vegetation of the spoil, and consequent severe reduction in the authenticity and integrity of the mine sites.

The MHTI has located all of the built mine structures in the county and provided comprehensive GIS based maps showing these and the surrounding associated mine spoil for inclusion in the revised RPS. This has been submitted to WCC. A decision on the county development plan, and any revisions to the RPS, will be made by county councillors later in the year.

Events and Notices

NAMHO 2016 Conference Dublin

The MHTI is hosting this year's National Association of Mining History Organisations (NAMHO) Conference at Dublin City University (DCU) on 17th-19th June 2016. This coincides with our 20th Anniversary year and we very much hope that members will turn out to support the programme of lectures and field trips we have organised.

Below is a programme of the events being held before, during and after the NAMHO Conference.

Those wishing to attend field trips in particular are urged to book these at their earliest convenience, as places on some of the visits to working mines are limited.

Those booking before 1st May will be able to avail of our Early Bird conference registration rate.

Please note that you are responsible for making your own transport arrangements to the conference venue and for booking your own accommodation, but if you wish to stay on campus, you must contact Nigel Mongahan to get your name placed onto a list to avail of the special conference fee being offered by DCU.

Bookings for the conference can be made via the NAMHO website:

http://www.namho.org/conference_2016

NAMHO 2016 CONFERENCE 'MINING AND SOCIAL CHANGE', DUBLIN CITY UNIVERSITY, 17th-19th JUNE 2016 Programme of Events

Friday 17th June

10:30-14:30

Trip to Drummond Mine, Kingscourt, Co. Cavan. Operated by Gypsum Industries (Ireland) Ltd, this is probably the largest man-made excavation in Ireland, and an economic mineral deposit of considerable importance. The large open-cast has numerous intersections into historic underground pillar and stall workings. Since 2006 underground mining has resumed. This underground tour has a maximum group size of eight. First come, first served. Attendees must organise their own travel. The location of a meeting up point will be provided. **Safety helmets, boots, goggles and overalls provided.**

17:00-19:00

Registration desk open

19:00-19:10

Welcome and opening remarks by Michael Starrett, Chief Executive of the Heritage Council

19:10-19:30

Dr Martin Critchley: *Celebrating 20 Years of the MHTI*

19:30-20:00

Keynote Lecture by Dr Colin Rynne, Senior Lecturer, University College Cork
Mining in Ireland from the earliest times to 1922: an archaeology

20:00

Drinks and Canapés

Saturday 18th June

09:00-18:00

Registration and information desk open

9:20-9:30

Welcome and opening remarks

MORNING CONFERENCE SESSIONS

First Panel: Chair, Dr Martin Critchley

9:30-10:00

Professor Jeannette Graulau: CUNY-Lehman College, New York
Mining corporations, 12th -14th centuries: a succinct global survey

10:00-10:30

Sharon J. Carter: University of Wales, Trinity St David's, Lampeter
In Search of a Journey: To what extent does the heritage of iron mining define the identity and culture of the local population of the communities of the Canigou, South Eastern Pyrenees

10:30-11:00

Dr Paul Rondelez: Independent Researcher
The ironworkers and miners in 17th-century Ireland



**National Association of
Mining History Organisations Conference**

'Mining and Social Change'
Dublin City University
17-19 June 2016

***Organised by the
Mining Heritage Trust of Ireland
in its 20th Anniversary year***

- Keynote lecture by Dr Colin Rynne, University College Cork
- Twelve lectures with the theme 'Mining and Social Change'
- Four course conference dinner
- Live music by Andy Irvine focussing on his mining themed songs
- Surface trips to the lead and copper mines of County Wicklow
- Visits to surface and underground working mines
- Visits to disused mines in NW Ireland



**For more information on conference fees, bookings
and accommodation,
visit the NAMHO Conference page:
www.namho.org/conference**

BOOK NOW TO AVAIL OF OUR EARLY BIRD CONFERENCE RATES
Offer ends 1st May 2016



11:00-11:30

Tea/Coffee

Second Panel: Chair, Dr Paul Rondelez

11:30-12:00

Terry Dunne: Independent Researcher
Social Conflict in the Castlecomer Colliery 1826-34

Professor Anne Boran: University of Chester
Nixie Boran, Mining and Social Change in Castlecomer

12:30-13:00

Dan Shields: Independent Researcher
A Sociological Perspective on the Local Impact of Tynagh

13:00-14:00

Buffet lunch in main restaurant

AFTERNOON CONFERENCE SESSIONS

Third Panel: Chair, Dr Sharron P. Schwartz

14:00-14:30

Professor Robert P. Wolensky, University of Wisconsin-Stevens Point and Madison and Kenneth C. Wolensky, Independent Researcher
Mining Tenancy Systems in Pennsylvania and the United Kingdom: A Comparative Study

14:30-15:00

Dr Alan Noonan: Independent Scholar
'The struggle you have here is the same you knew in Ireland': Butte's rising during the First World War

Fourth Panel: Chair, Dr Matthew Parkes

15:00-15:30

Niall Colfer: University College Dublin
'Turning Stone into Bread: The millstone quarries of post-medieval Ireland'

15:30-16:00

John Hussey: Independent Researcher
The migration of granite quarrying from Golden Hill to Ballyknockan, Co. Wicklow, around 1824

16:00-16:30

Tea and Coffee

Fifth Panel: Chair, Dr Peter Cloughton

16:30-17:00

Tom Backhouse, Terrafirma Mine Searches Ltd.
The Hidden Legacy of UK Mineral Extraction and its impact on the Built Environment

17:00 - 17:30

Dr Richard Clutterbuck: Independent Researcher
A landscape archaeology of coal mining in County Tipperary, Ireland

17:30

Concluding Remarks and Observations

18:00-19:00

MHTI AGM

19:30-21:00

Four Course Conference Dinner in the 1838 Club Restaurant

21:00-22:00

Live Entertainment by Andy Irvine, an Irish folk musician, singer-songwriter, and a founding member of popular bands, Sweeney's Men, Planxty, Patrick Street, Mozaik, LAPD and Usher's Island. Andy's repertoire for the night will have a mining related theme

Sunday 19th June

OPTION ONE:

10:00 - 17:00

Surface Field Trip to the Lead Mines of Glendalough and Glendasan, Wicklow Mountains

Trip leaders, Dr Sharron Schwartz and Dr Martin Critchley

The mines of Glendalough and Glendasan were worked by one of the biggest 19th century mining companies in Ireland and were the largest lead ore producers in the country. The mines closed in the late 1950s after nearly two centuries of working. A remarkable relict mining landscape survives in these two scenic valleys, which contain the finest examples of lead ore dressing floors and machinery in the country. **Difficulty: Moderate, with some uphill walking required. Sturdy footwear and waterproofs advisable. Maps and fact sheets will be provided.**

OPTION TWO:

10:00 - 17:00

Surface Field Trip to the Avoca Mines, County Wicklow*Trip Leader: Nick Coy*

For four centuries the polymetallic mines of Tigroney, Cronebane, Connary, Ballymurtagh and Ballygahan in the Avoca Valley were the most important group of metalliferous mines in Ireland, the exploitation of which resulted in rural-industrialisation on a scale not common here. Now closed, these mines form one of the most impressive historic mining landscapes in Britain and Ireland, with a panoply of industrial features unusual in an Irish context, including engine houses, open pits, tailings impoundments, spoil heaps, ochre pits, adits, shafts, leat channels and mineral railway tracks and bridges. This landscape is currently undergoing controversial remediation works. **Difficulty: Moderate, with some uphill walking required. Sturdy footwear and waterproofs advisable.**

Monday 20th June**POST CONFERENCE MINE TOURS**

Visits to working mines. Places will be allocated on a first come, first served basis. If your first choice is not available then you will be allocated your next choice and advised.

OPTION ONE

Morning (usually 8am start on site) to early afternoon

Tara Mine, Navan, Co. Meath

This lead-zinc deposit is mined underground and is the largest zinc mine in Europe, reaching close to 1km in depth. You will be conveyed by bus down into the workings followed by a surface tour of the mill. There is a maximum group size of eighteen and places will be allocated on a first come first served basis. Attendees must organise their own travel. The location of a meeting up point will be provided. Distance from Dublin is 60km. **Difficulty: Easy, but the underground workings are very hot, and this trip is not advisable for those who have heart or respiratory problems. Safety helmets, boots, goggles and overalls provided.**

OPTION TWO

Morning

Omagh Mine, Omagh Co. Tyrone, Northern Ireland

This surface mine for gold, which will be developed underground, is operated by Omagh Minerals (a subsidiary of Galantas Gold Corporation). Production is currently stalled as the company awaits planning permission for an extension. It is unlikely that we will limit numbers attending. Attendees must organise their own travel. The location of a meeting up point will be provided. Distance from Dublin is 180km (2.5 to 3hr drive). This visit could be combined with a trip to Curraghinalt Adit (30 km away) or Kilroot Mine (140 km away). **Difficulty: Easy, some walking required. Hgh-vis vests, hard hats and boots provided.**

OPTION THREE

Afternoon

Kilroot Salt Mine, Carrickfergus, Co. Antrim, Northern Ireland

One of only three salt mines operating in the UK, Irish Salt Mining and Exploration has been mining De-icing Rock Salt at its Kilroot Mine Near Carrickfergus since 1965 and can produce half a million tonnes of De-icing Rock Salt per annum. The trip includes an underground tour and has a maximum group size of seven. Attendees must organise their own travel. The location of a meeting up point will be provided. Distance from Dublin is 180km (2.5 to 3hr drive). **Difficulty: Easy, some walking required. Safety helmets, boots, goggles and overalls provided.**

OPTION FOUR

Afternoon

Curraghinalt Adit, Co. Tyrone, Northern Ireland

Canadian company, Dalradian Resources Inc., is currently developing this underground gold deposit. The trip, which offers a unique opportunity to see this mine in its development phase, has a maximum group size of ten. Attendees must organise their own travel. The location of a meeting up point will be provided. Distance from Dublin is 180km (2.5 to 3hr drive). **Difficulty: Easy, some walking required. Safety helmets, boots, goggles and overalls provided.**

FIELD TRIPS TO ABANDONED MINING SITES IN NW IRELAND

Trip leaders: Alastair Lings and Mick Carragher

Tuesday 21st June

Abbeystown Mine, Ballysodare, Co. Sligo (u/g Zn-Pb) and Arigna Mining Experience (admission fee), Arigna, Co. Roscommon (Visitor Mine, coal).

Weds 22nd June

Ballintrillick Mill and Gleniff Mine (u/g barite), and nearby mines and quarries.

Thursday 23rd June

Bencroy Mine, Aughacashel, Co. Leitrim (u/g coal); Other sites in the Connaught coalfield, to the east of Co. Sligo. Creevelea Blast Furnace TBC.

Friday 24th June

Drumkeelan Mine, Mountcharles, Co. Donegal (u/g sandstone), and nearby mines.

Report of the Field Trip to the area around Derry/Londonderry, 12-13th March



The crusher and wheelpit at Glentogher Mine, Carrowmore, Carndonagh, Co. Donegal
Image: Alastair Lings

This two day field trip in early spring explored the wealth of industrial archaeology and heritage within a 35 km radius of Derry, reports Alastair Lings

This field trip examined mines, quarries and related features within a 35 km radius of Derry.

On the Saturday morning we met by the former Foyle Valley Railway Museum, once one of the four railway termini in Derry, the Londonderry Foyle Road Station (1850-1965). Heading northwards we passed under the top deck of the Craigavon Bridge (1933), with the Maiden City on our left.

Derry has a long history which includes lime kilns. According to the Four Masters in 1163 "A lime-kiln, measuring seventy feet (21 metres) every way, was made by the successor of Colum-Cille, Flaithbheartach Ua Brolchain, and the clergy of Colum-Cille, in the space of twenty days". A cathedral was built the following year. Six hundred years later John McColgan, Roman Catholic Bishop of Derry (1752-1765) was hidden from British soldiers in a lime-kiln near Carndonagh by a Presbyterian farmer Joseph Campbell.

Our first visit was to the limestone quarry and kilns at Clonglash, 3km east of Bunrana. The quarry exploited the Culdaff Limestone Formation, roughly 600 million years old. Two pots of the lime kiln were built before 1848, with a further two added before 1900. The kilns used coal brought from ships that docked in Bunrana.

Next we drove east across the moors of Inishowen to visit Glentogher Mine. The mine was worked for lead around 1790, in the 1850s, and finally in 1905-1906. The ore was found to be gold-bearing in 1905. In February 2016 Connemara Mining PLC started drilling the first of three diamond drill holes in the area, and have reported that a 0.2 m part of one vein

contained 44.8 grams of gold per tonne.

There is one open adit at the mine, with workings above and below it. The adit is blocked by a fall, but this can be bypassed by dropping into the sub-level below, and then climbing back up in to the adit. It ends shortly afterwards in a 25 m long heading containing deep ochreous sludge.

About 50 m to the south of the open adit is the probable site of another adit which has a slight seepage of iron rich water from it. It would be interesting to identify the location of the four tips marked on the second edition Ordnance Survey map (1848), to see if more adits can be identified.

Between the road and the river is a crusher building from the 1850s which was powered by a waterwheel. A short distance further south is the blocked lower adit. Continuing eastwards we reached Drung Quarry which is attractively located on a mountain pass above Lough Inn. The quarry exploited a sandstone of the Inishowen Head Grits and Phyllite Formation, probably for road building. The quarry is very small and we managed to work out the locations of the hopper, crusher and conveyor.

Time was getting on, so we headed south via Quigley's Point towards Derry and crossed the impressive Foyle Bridge (1984), which has a central span of 234 m, the longest in Ireland. After a short detour due a road closure we arrived at Gortree Quarries near Drumahoe. The first thing you come to is the large storage and processing area from a concrete plant, but in the wood behind are some impressive concrete structures related to the quarrying. The quarries exploited



The Lime Kiln at Clonglash, Buncrana,
Co. Donegal
Image: Alastair Lings

grits of the Ballykelly Formation. During the 1920s the quarries formed part of an unemployment relief scheme, and in 1927 they were leased to Londonderry County Council. The older quarry closed about 1945, with the larger part to the north-east shutting about 1965.

Our final stop of the day was Prehen Quarry in Prehen Wood, Derry. The quarry was developed during World War 2 to provide stone and aggregate for military installations around Derry. A concrete magazine survives 200 m to the north-east of the quarry. After a long day we enjoyed an excellent meal at Bentleys Bar and drinks at Badgers Bar.

Our first visit on the Sunday was to Quarry Road in the Brandywell area of Derry. The old quarry produced much of the stone for the city. After we had enjoyed a view looking up the River Foyle we headed west towards Dooish Mountain. The ridge and flanks of the mountain (266 m) has been quarried for slate and metadolerite. Bog iron occurs on the north-east slopes of the mountain, as reported in 1821 by a Statistical Survey. Tober Quarry has worked intermittently since about 1770, initially producing slate. At the time of our visit it was closed, but it had recently been sold.

We had hoped to visit the quarries on the southern summit of Dooish, but due to pressure of time we made our way to Glentown Quarry. The quarry has produced slate and building stone intermittently from around 1786 to the present. By 1821 the slate had been sold in Omagh, Sligo, Galway, Great Britain and sometimes America. The present owners, Glentown Stone, have exported stone to similar destinations. During the famine the quarry owners, the Alexander family, fed indian meal porridge to the quarry workers and others. The porridge was cooked in a massive pot which survives in the garden of John Moody of Momeen, who kindly showed it to us.

About 1850 the Marquess of Abercorn gained direct control of the quarry. He had a 270 m long tunnel driven to drain the quarry and remove rock. We looked at the open eastern end of the tunnel and saw the railway embankment along which waste rock was taken to dumps in Treantagh townland, where there are other quarries.

At one time workable slate was winched up the south face of Glentown Quarry and processed nearby. We walked along the old road to the south of the quarry, and identified the site of one of the bridges over the road. Further along we looked in to the adjacent quarry owned by Tinney's Quarries which produces hard core.

Continuing our journey, we stopped to admire a derelict 1930s (?) bungalow on the outskirts of Saint Johnstown that was roofed with small slates from Glentown. Our next stop was Glenfad Quarry and lime-kiln near Porthall. The quarry exploited the Aghyaran & Killygordon Limestone Formation. It is now used as a fishing lake. Lime from the kilns was taken straight to "Lime Sheds" and a quay on a channel of the River Foyle, from where it was shipped to Derry. In 1871 a Hoffman Kiln was built near the quarry, for the Longvale Brick and Lime Works. A tramway linked brickfields to the works, and a siding connected the works to the Great Northern Railway at Porthall Station. The site of the brickworks was cleared in 1980. In the River Foyle at the "Lime Sheds" we found a length of light-weight rail, which may have been from the brickfield tramway. After looking at former brickfields to the west of Porthall House, we headed to our last site.

Strabane Lead Mine was probably first discovered in 1736, but it was only developed in 1768-1770. The Public Record Office of Northern Ireland holds extensive correspondence about the mine. There is a short upper trial, and a 15 m long adit with a backfilled working in its sole. Unfortunately the adit is no longer visible. In the past the Earth Science Conservation Review team proposed that "Clearance of vegetation and mud and perhaps laying a path to the adits would allow the site to be reached more easily. An information board should be considered". It would be good to see the adit entrance cleared out and information provided.

Strabane was the final stop of the weekend, so we said our goodbyes and headed homewards.

The MHTI is very grateful to the land and mineral owners for allowing access to their properties, and for other help during the field trip.

SPECIAL FEATURE

PURE joy as Baravore Crusher House Adopted by Local Community



New Crusher House, Baravore
Image: Sharron Schwartz

The New Crusher House at Baravore, Glenmalure, is selected in Ireland's first ever 'Adopt a Monument Scheme' national competition, writes Sharron Schwartz

A community team in Glenmalure, Co. Wicklow, faced strong competition from over 700 other applicants across the country that applied to the Adopt a Monument Scheme. This has been organised by the Heritage Council in conjunction with Abarta Heritage, to support public access to Ireland's archaeological monuments.

Shortlisted to the last eight, the Baravore New Crusher House is one of only five monuments that was finally selected, and is the only industrial heritage monument that has been chosen.

The other successful monuments are: Doon Fort, Donegal; Church of the Rath, Killeshandra, Co. Cavan; Gallowshill medieval fort, Dungarvan and Round Hill, Lismore, Co. Waterford and Ballintleva Handball Alley, Co. Roscommon.

Erected in 1859-60, the two storey building was used to crush lead ore at the Baravore Mine, a shortlived venture operated by the Baravore Silver-Lead Mining Company Ltd. The building is thought to have housed a multiple rolls crusher and is the finest example of its kind on a metalliferous mine in Ireland, and on a par with some of the best examples in neighbouring Britain. It been adopted by the Drumgoff,

Ballyboy and Ballinafunshogue PURE Mile community group.

'The PURE Mile' is an environmental initiative of the PURE (Protecting Uplands and Rural Environments) project which encourages people to work together to enhance and improve their environment, their heritage and community.

This can be achieved through keeping a mile stretch of road (approx. 1.6 km), and the immediate environment litter/rubbish free, while simultaneously considering the preservation and careful maintenance of the flora and fauna, ditches, hedge-rows, and any other natural or man made features of the area.

The Drumgoff, Ballyboy and Ballinafunshogue PURE Mile begins at Drumgoff Bridge and continues to the crossroads at Glenmalure Lodge; from there it turns left into the valley and continues as far as Carrawaystick Waterfall.

In 2015 the Drumgoff, Ballyboy and Ballinafunshogue Pure Mile won the Best PURE Mile Award. The group now plans to extend their project a mile further up the valley to take in the Baravore Mine site.

'Being part of this scheme is a dream come true as it provides national recognition of the significance of this historical building in our valley'

Pat Dunne, PURE Mile spokesperson

The group applied to seek assistance with the conservation of the New Crusher House and to help to promote the area for visitors.

'Being part of this scheme is a dream come true as it provides national recognition of the significance of this historical building in our valley. Our efforts to record and raise public awareness of the rich mining heritage of Glenmalure will be greatly enhanced', said spokesperson for the group, Pat Dunne.

Carmel O'Toole, author of *Glenmalure The Wild Heart of the Mountains* and a member of the Drumgoff, Ballyboy and Ballinafunshogue PURE Mile group added, 'There are only two sites in Leinster that made it into the Scheme. It is fantastic'.



The PURE Mile group's application was supported by the landowner, Coillte, the Glens of Lead Group, the Wicklow County Heritage Officer, and the MHTI, which wrote a letter of support. The PURE Mile group drew heavily on information contained within a paper on the mines of Glenmalure published by Sharron Schwartz and Martin Critchley in the 2014 MHTI Journal. The surveying component of this paper

was funded by the Interreg 4A funded *Metal Links: Forging Communities Together* project.

'Industrial heritage has a fairly low profile in Ireland, and it has been very difficult to obtain funding to protect and/or to consolidate important industrial monuments', said Martin Critchley.

'This successful application to the Adopt a Monument Scheme will be of immeasurable benefit in heightening public awareness of the largely unknown mining history of this valley', he added.

The PURE Mile Group's success comes on foot of the recent award of €10,000 to Coillte for conservation works to the New Crusher House. This was obtained from the Built Heritage Investment Scheme, an initiative of the Department of the Arts, Heritage and the Gaeltacht (DAHG) to help in the conservation of structures on the Record of Protected Structures (RPS) for each county.

Although the Baravore New Crusher House looks remarkably solid from the exterior, Schwartz and Critchley warned in their 2014 paper that this is deceptive. Granite lintels below the windows of the building are missing, a quantity of masonry has fallen from the inner face of the wall above the (north) gable end window, severely weakening its structural integrity, and the tops of the walls at the former roof

level have been colonised by conifer sapplings. These tree roots will severely damage the building's wall fabric by allowing increased water ingress to weaken the mortar and stonework.

They conclude that, 'The New Crusher House requires urgent remedial works if it is not to suffer the same fate as the Old Crusher House which experienced a partial collapse in the spring of 2013'.

An interpretation board designed under the aegis of the *Metal Links: Forging Communities Together* project will be

installed at the Baravore car park by the Glens of Lead group in the near future. This board will undoubtedly help the PURE Mile Group and Coillte's efforts to develop walking trails and to increase the tourism offer at Baravore. The MHTI congratulates both the PURE Mile Group and Coillte on their successful applications. We look forward to working closely with both organisations to ensure the conservation of this nationally important monument.

You've got to be kidding!



Mick Carragher treats us to an amusing story about the Avoca Mines in the 1970s

The Avoca Mines closed in 1962 after being in operation for a number of years, as the St Patrick's Copper mines were then on 'Care and Maintenance'. In 1969, Discovery Mines of Canada then took over the lease of the mine and formed a new company: Avoca Mines Limited.

The company extended the Knight Tunnel, which is the spiral roadway from the surface, down to the 2000 Level. The tunnel is named after the engineer in charge when the tunnel was first started by St Patrick's Copper Mines in 1955. This man was also responsible for the sinking of a shaft, also named after him, at Silvermines, Co Tipperary. Avoca Mines Ltd. employed the Swedish contracting company Skanska to drive the Knight Tunnel and to train local men as miners. The Conveyor Tunnel at Avoca was also extended at this time and a new 48" jaw crusher was installed below the 2000 Level. In addition, a new ventilation raise was driven upward to surface and can be still seen today, capped with concrete, in a field in Merrigan's Farm.

A fleet of new mining equipment was imported from Canada to Avoca and, as a result, Avoca was the first mine in Ireland to use LHD (Load Haul Dump) Loaders. LHDs are rubber-tired machines similar to loading shovels in quarries, but only about 6 feet high and with no cab for the driver. This allowed the machine to work in areas where the roof of the tunnel was low. The LHD could load 10 tonnes of broken ore and drive to the crusher and dump the load.

After being crushed, the ore was transported to surface on the new conveyor and discharged at the refurbished mill. The

milling process involved further crushing, then grinding the ore to a particle size like sand. The copper was recovered by a process known as flotation and the resulting copper concentrate was taken by truck to the Roadstone Parnell quarry at Arklow. The concentrate was loaded by conveyor to ships at the end of the jetty.

Mining continued from 1969 to 1982 when the mine closed. This was a big blow to the area with the loss of some 300 jobs. All the mining equipment, together with all other plant and machinery was auctioned off and the minesite fell silent once again. A great pity that these events happen, but this is the nature of the mining business.

There was a funny incident in the early 1970s. A herd of goats had established themselves on the mine property during the Care and Maintenance of 1962-69. The new Surface Foreman, who had come from Canada, decided they were a nuisance and arranged to have them shot! His excuse was that they might wander on to the 'highway' and get killed, the highway being the road from the Meetings of the Waters Pub to Avoca village.

There was uproar from the miners when they heard of the daft plan and he was equally gobsmacked that people would protest about a few goats! In the end a local man had the good sense to have the goats removed to the safety of the wild and rugged hills of Wicklow, where they lived in peace, far away from the gaze of the Foreman, and where their offspring still graze today.

Irish News and Publications

Curraghinalt Gold Project, Gortin, Co. Tyrone (24/03/2016)

Dalradian Resources report that at their Curraghinalt Project "Underground development other than test stopes has been completed, with 357 days working underground, 140 blasts and 690 m of 885 m of development completed. Test stoping on the V-75 vein will be completed during Q3". During 2015 the company spent £17M (€21M) on asset evaluation including development planning and permitting associated with the underground development.

<http://www.dalradian.com/news-and-events/news-releases/news-releases-details/2016/Dalradian-Reports-2015-Financial-Results-Completes-Infill-Drilling-and-On-Schedule-With-Feasibility-Study/default.aspx>

Metals in groundwater in mined areas of Ireland

In September Tiernan Henry and John Murray of NUIG will be starting an investigation of metal occurrence, sources and mobilisation processes in selected Irish groundwaters associated with mines. (Irish Groundwater Newsletter, issue 53, March 2016) <https://www.gsi.ie/Programmes/Groundwater/Groundwater+Newsletter.htm>

Wrecked Cars and Wreckless Off Road Driving

Wicklow County Council received the second highest number of reports of illegal dumping in 2015, noted a recent report in the Wicklowvoice.ie. However, rather than indicating that illegal dumping is on the increase, the report stated it proves the opposite. The Pure Project's efforts over the last 10 years to raise awareness of illegal dumping and fly-tipping have resulted in Wicklow residents being more conscious of the issue; they know the number to call to report any incidents.

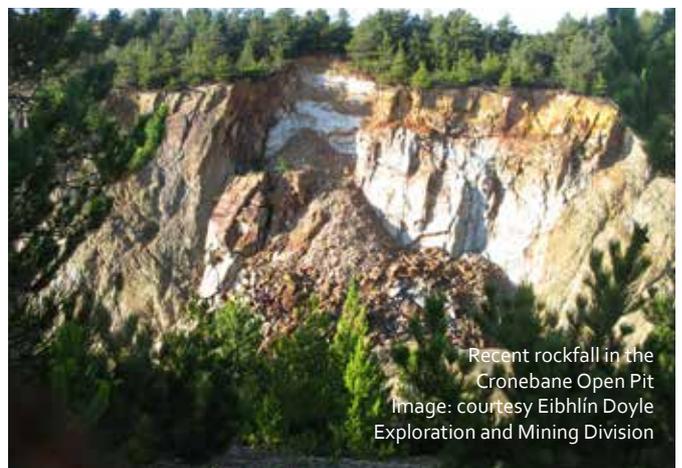
A vehicle has been abandoned and burnt out at the Ballinafunshoge Mine dressing floors, and a considerable volume of rubbish left behind by campers is littering the area behind the New Crusher House at the Baravore Mine. Both have been reported.



Image: Martin Critchley

Other illegal acts involve off road vehicle driving, and a jeep was spotted on the overburden and spoil heaps of the Cronebane Open Pit at Avoca in early April.

Quite apart from the fact that entry to the pit is forbidden and the DCENR has fenced off the area and erected signs to that effect (due to the dangers of slope instability and potential rock fall, see below), the spoil heaps are protected features, listed in the Wicklow County Record of Protected Structures. This jeep and its two male occupants was observed driving round the spoil heaps at the edge of the pit for some time. They had accessed the pit via the heathland close to the Mottee Stone, severely damaging the vegetation and cutting deep scars into the surface of the ground. The Wicklow County Heritage Officer has been made aware of these developments.



Recent rockfall in the Cronebane Open Pit
Image: courtesy Eibhlín Doyle
Exploration and Mining Division

Mining Landscapes of County Wicklow: Stunning Aerial Footage



County Wicklow has the finest mining heritage in Ireland. Seeing these features - dressing floors, crusher houses, Cornish-type engine houses, open pits, spoil heaps - from the air, allows us to appreciate just how stunning our historic mining landscapes actually are. Watch the film on YouTube: <https://www.youtube.com/watch?v=NV86VeJuRoY>

New Publications

Journal of the Mining Heritage Trust of Ireland

Journal No.15 has been published and contains four articles:

'The Caim(e) Rocks Lead Mine, County Wexford: Its History and Industrial Archaeology', by Sharron P. Schwartz and Martin Critchley (pp. 1-39);

'Environmental legacy of 19th lead mining and mineral processing at the Newtownards Lead Mines', by Norman R. Moles, Mark Kelly and Dermot Smyth (pp. 41-53);

'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 (pp. 55-92);

'The Lisheen Mine Co. Tipperary: Planning a World Class Closure', by Brendan Morris (pp. 93-103).

Copies of the Journal are available from Matthew Parkes, e-mail mparkes@museum.ie

Christopher Power, *Arklow's Industrial Revolution - The Kynochs' Munitions Works 1895 - 1920*

Christopher's book recounts the enormous Kynochs factory of Arklow, County Wicklow, which employed over 3,000 people from around the south east region and stretched over three kilometres along Arklow's north side. The factory was one of the largest industrial complexes in Ireland and was ahead of its time, as it employed both men and women. Copies are available from bookstores in Arklow, Wicklow and Gorey.

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Other News

New Life for Cornish Tin Mine?

BBC News 18/3/2016

The South Crofty tin mine, which was put into administration in 2013, has been bought by a Canadian company. Strongbow Exploration Inc. said it plans to bring the South Crofty tin mine in Cornwall out of administration in a deal thought to be worth about £1.4m.

The mine is located between the towns of Camborne and Redruth and has an active mine permit valid until 2071, subject to certain planning conditions being addressed. The permission area includes 26 former producing mines.

A number of companies have previously attempted to revive the mine between 2001 and 2013, but due to poor market conditions the assets were put into administration three years ago. The firm says South Crofty offers one of the best tin opportunities available globally. Commercial production ended at the mine in 1998 and Strongbow Exploration is the third company attempting to restart the business.

Richard Williams, president and chief executive of Strongbow, said: 'It is our opinion that South Crofty represents one of the best tin opportunities currently available. Cornwall is a world class tin district and South

Crofty is one of the best known mines in that district, with a mining history spanning over 400 years'. He further added, 'Support for new mine development in the UK is demonstrated by the recent start-up of Wolf Minerals' Drakelands tungsten and tin mine, located in the neighbouring county of Devon, the development of Dalradian Resources' Curraghinalt gold project in Northern Ireland, and Sirius Minerals' York Potash project in North Yorkshire.'

Western United Mines Ltd. (in administration) and Cornish Minerals Ltd. (Bermuda) hold the rights to the mine permission area, plus additional mineral rights over a further 18,500 acres located in various parts of Cornwall. The companies were placed into administration in 2013 to protect the assets. An agreement has now been signed between Strongbow, Galena Special Situations Fund (the only secured creditor,) and Tin Shield Production Ltd., a private company that will forego its option with Galena to acquire the project.

This third attempt is interestingly timed as commodities prices have been on a steep slide over the last few years. However, since January the tin price has rallied. The price of tin has risen from about £3,000 a tonne in 1998 to a current price of around £17,000 a tonne. What is certain is that South Crofty is a deep and flooded mine and nobody will get serious commercial mining going here without deep pockets to match. <http://www.bbc.com/news/uk-england-cornwall-35841803>

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