

# Mining Heritage Trust of Ireland

**No.68 Spring 2015** 

The UCD Mineral Collection and Ireland's Mineral Heritage Special Feature by Patrick Roycroft

CONSERVATION MANAGEMENT PLANS FOR THE SLIABH AUGHTY FURNACES by Paul Rondelez

THE MINING MUSEUM PROJECT by Margaret O'Brien & Katy Goodhue

POLDARK: Aidan Turner thrills TV audiences and peaks interest in Cornish mining, by Ainsley Cocks

UPDATE

Remediation Works at the Avoca Mines

FORTHCOMING FIELD TRIPS

Clare/Galway

Wanlockhead/Leadhills District, Scotland

FIELD TRIP REPORTS
Crohy Head, Co. Donegal
Newtownards, Co. Down

## **DATES FOR YOUR DIARY**

June 1-3, NEW DATES for Archaeometallurgy in Europe IV conference, Spain. http://www.congresos.cchs.csic.es/aie4/

June 2, The Antrim Coast in the Age of Industry, 1750 to 1890 Lunchtime Lecture Series, *Iron and Stone: the Earls of Antrim as Victorian industrialists* (Ian Montgomery), 1.00pm PRONI. Admission is free, contact PRONI to secure your place: proni@dcalni.gov.uk

July 3-6, Prehistoric metallurgy course at Butser Ancient Farm, Hampshire, England. http://www.fingerbuster.com/

June 11-14, Mining History Association Conference, Virginia City NV, USA. http://www.mininghistoryassociation.org/VirginiaCity.htm

June 21-25, Australasian Mining History Association Conference, Darwin, Northern Territory, with a post-conference excursion to Pine Creek and the Golden Loop, 26th-27th June. http://www.mininghistory.asn.au/conference/

June 29-July 10, Institute for Archaeo-Metallurgical Studies Summer School. London, England. http://www.ucl.ac.uk/iams

#### **July 9 Board Meeting (Thursday)**

July 11-12, Field trip to the mines of County Clare with Paul Rondelez. See page 5 for more details

August 15-22, Allihies to Bunmahon Miners Trail. https://atobminerstrail.wordpress.com/

August 22-30 Heritage Week. From mill to forge, from mind to hand – discovering Ireland's industrial past. http://www.heritageweek.ie/ See page 11 for more details of relevant activities around the country.

September 6-11, The International Committee for the Conservation of Industrial Heritage (TICCIH) International Congress, Lille, France. http://ticcih.org/

September 8-11, 10th International Symposium on Knappable Materials, University of Barcelona, Spain. http://www.ub.edu/cherts-symp2015/

September 4-6, 'The Historic Metal Mines of Scotland', a field trip to visit mines in the Wanlockhead/Leadhills Mining District which have the same geology as the lead mines of Down, Armagh and Monaghan. See page 6. Full itinerary to be published in our summer newsletter. Note the change of dates so as not to clash with European Heritage Open Days.

September 12-13, European Heritage Open Days, Northern Ireland. http://www.discovernorthernireland.com/niea/ehod.aspx

October 21-23, The ERIH Annual Conference 2015: *How to attract new Audiences? New Ideas and Innovations for the Interpretation of Industrial Heritage*, Pilzen Brewery, Czech Republic. Call for papers, deadline 1 June 2015. Email abstracts of half a page including your contact details and a short CV to info@erih.net. Further details will be available on the ERIH Website http://www.erih.net/ from 1 August onwards.

November 13, Board meeting (Friday) November 14, Annual Members' Medley and Dinner

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 2014

At our Annual General Meeting (AGM) in April, Barry Flannery retired from the board. MHTI are grateful to him for his service since joining the board in July 2011. John Gibbons resigned from the board in November, and we thank him for his service since his election in May 2013. We held an Extraordinary General Meeting (EGM) in September, to present our accounts to members. In January 2014 Paul Rondelez took on the role of Bibliographer, and he will continue the great work started by Des Cowman. Stephen Callaghan became our Memorials Registrar: he will maintain a list of mining and quarrying memorials, and monitor their conditions.

During the year we issued four Newsletters, a total of 70 pages, and published an excellent four article Journal of 122 pages. Our website still needs to be replaced and a working group has been set up to tackle this. By the end of 2014 our Facebook page had 372 "Likes". Our page is regularly updated, and I would encourage members to view it from time to time.

On the 12th February 2014 MHTI was honoured to receive an award from the Industrial Heritage Association of Ireland "In recognition of the outstanding leadership of The Mining Heritage Trust of Ireland in promoting awareness and positive action to safeguard Industrial Heritage at both Local and National Level". This is a great tribute to past and present MHTI members who have volunteered their time and expertise over the years.

In March, twelve members and guests visited laterite (iron) and bauxite (aluminium) mines and limestone quarries in Co. Antrim. Kevin O'Hagan, the first Vice Chairman of the Mining History Society of Ireland, and members of the Glenravel Historical Society, provided great help in organising the field trip, for which MHTI are very grateful. At the end of April, 23 people attended our field trips, AGM, and seminar in Killarney that focussed on Bronze Age mining in Ireland and Britain, expertly organised by Martin Critchley and Sharron Schwartz. The MHTI is very grateful to Professor William O' Brien, Dr Simon Timberlake and Alan Williams for sharing their expertise with us, and making for a very successful and enjoyable weekend. In July, eight people toured the Connaught Coalfield, visiting sites such as iron mines by the Arigna River, the stone incline at Monesk Mine, and the Creevelea Furnace. There is much to be seen in the area, and the MHTI will return to the coalfield in the future.

Our EGM In September was held in Ballyknockan, Co. Wicklow. After the EGM seven people toured the village, quarry and stone workshops. The day ended with a visit to Cloghleagh Mine. MHTI are very grateful for the hospitality received at Ballyknockan and Cloghleagh, and to David McEvoy and George Reynolds for showing us the area. In November a dozen people attended our first *Members'* 

*Medley*, followed by a dinner. The Medley gave members the opportunity to present their research, and to display rocks and minerals. Afterwards, we enjoyed dinner at a nearby restaurant. The MHTI is very grateful for the contributions to the Medley, and will be organising a similar event annually.

During the year MHTI wrote to:

- Monaghan County Council regarding the Hope Engine House Chimney, Castleblayney.
- Irish Rail about their civil engineering works near White Bridge, Avoca, Co. Wicklow.

Also during the year we responded to various enquiries about:

- The history of health and safety in mining, new technological advances and the health implications of such work;
- Copper mines near Claremorris, Co. Mayo, and mining companies from the USA recruiting in Ireland;
- Tree felling around engine houses in East Avoca.

Looking forward, we have a good programme of events ahead of us, and plenty of ideas for the future. In the summer of 2016 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 the MHTI's 20th anniversary year. For making 2014 a successful year, I would like to thank our directors, contributors to the seminar, medley, newsletters and journal; corporate supporters; landowners; the Glenravel Historical Society; field trip coordinators, members and attendees at our events. Thank you all.

#### Alastair Lings

#### NAMHO 2016 update

The MHTI is hosting next year's NAMHO Conference on the 17th-19th June 2016 in the year of our 20th anniversary at Dublin City University. The theme of the conference is *Mining and Social Change* to reflect the national commemorative year, *Ireland 2016*. A programme of lectures will be held on the Saturday followed by an evening of music after the conference dinner, with field trips to the copper and lead mines of County Wicklow on the Sunday, where recent research and survey work has made major new discoveries. On Monday 20th there may be visits organised to working mines, but there will be a very limited number of spaces available.

Conference papers are invited including topics such as regional identities; migration; urbanisation; industrial housing; education; gender in the mining industry; sport; self-improvement societies; industrial action; mines and quarries during the Troubles, and changing attitudes in favour or against mining. For more information, please contact Alastair Lings on +44 1896 757861 / +44 7763 850087 or e-mail alastairlings@yahoo.co.uk

#### Current and Proposed Works, Avoca Mines, County Wicklow: An Update

In autumn 2014, the Department of Communications, Energy and Natural Resources (DCENR), in conjunction with Irish Rail, undertook safety works at Tigroney without planning permission. The MHTI made observations to Wicklow County Council in relation to these works and wrote to the DCENR raising our concerns and offering our help and collective expertise. Our observations noted damage to archaeological and geological heritage remains; lack of supervision during the works by an industrial archaeologist experienced in mining heritage and disturbance of waste tips which are listed in the Record of Protected Structures of the Wicklow County Development Plan. We also advised that the adit entrances should be reinstated in a manner commensurate with their contemporary form - this has not been done. We received no reply to our letter from the DCENR and Wicklow County Council was sufficiently concerned to place an enforcement order on DCENR and Irish Rail to stop the works.

Earlier this year DCENR applied for planning permission for shaft capping works at Ballygahan Mine and the MHTI made a submission to Wicklow County Council in relation to this planning application. Some of our observations included the lack of a detailed archaeological impact survey; a lack of a detailed ecological survey (including a bat survey); no industrial archaeologist experienced in mining heritage on site during the works and unsympathetic approach to shaft capping which does not follow best practice in mining heritage areas as adopted in other countries. The planning department of Wicklow County Council agreed with many of the MHTI's observations and suspended the planning application pending additional information from the Department in relation to industrial heritage, ecology and the design of the shaft capping.

Meanwhile, local concerns about the scale and scope of recent and proposed works at Avoca and the lack of transparency and community consultation by the DCENR, resulted in a well attended community meeting organised by the Avoca Heritage Committee in conjunction with Andrew Doyle T.D. in April. After being conducted around the mine sites by DCENR officers, Joe McHugh T.D., Minister of State at the Department of Arts, Heritage and Gaeltacht Affairs and the DCENR heard, first hand, the concerns of interested parties and local/parliamentary representatives.

Marie Merrigan (Avoca Heritage Committee), who called the meeting, spoke passionately about the work that her group has undertaken in seeking conservation for the mine sites over the last 20 years. MHTI directors Sharron Schwartz and Martin Critchley made presentations at the meeting. Sharron spoke about the heritage value of the Avoca mines in a global context, the need to consolidate and preserve the historic mining landscape and the importance of potential future links with the UNESCO Cornish Mining World Heritage Site. Martin expressed the views of the MHTI regarding the works on the deep adit at Tigroney and the dearth of consultation by DCENR. He also raised concerns about the lack of relevant archaeological and ecological surveys and the design of future works. The MHTI sought a reallocation of funds for works at

Avoca so that 50% of the funds are diverted to the conservation and protection of the mining remains.

Additonal speakers included the Wicklow County Heritage Officer, and delegates from the Wicklow Uplands Council, Wicklow Partnership, Wicklow IFA, Wicklow Tourism and several local Councillors and TDs. The speakers unanimously supported the conservation of the mining heritage, the future development of its tourism potential and sought assurances that the remediation of the historic mining landscape and its industrial monuments would be dealt with in a sympathetic manner in the future. The Minister of State appreciated the united voice of the community and said that he would consult with colleagues in other relevant Government Departments, but gave no promises on the protection of the site or the future conduct of his officials and consultants.

A new planning application for works at Tigroney was submitted by the DCENR in May 2015. This application includes works on the 850 adit (to rebuild the adit entrance to the bedrock, installation of piping to channel water, gating the entrance), conservation of the ore bins and 'landscaping'. In addition the Department seeks retrospective planning permission for the works undertaken in autumn 2014 which are currently subject to an enforcement order.

We are presently reviewing the new planning application and expect to make a submission to Wicklow County Council in relation to this. The MHTI wishes to see that the adit entrances are restored to their historic form and human access (with relevant permission) is retained for scientific research. We are also concerned about the proposed installation of the pipe in the 850 adit, as this could interfere with industrial heritage and the fragile secondary minerals whilst at the same time hinder any future tourist development. The twentieth century ore bins are iconic features of the site and although we welcome the fact that the DCENR now propose to conserve these (having previously suggested their removal from the site with no assurances regarding their future conservation), we are still concerned about the methodology of the proposed works.

#### Martin Critchley



Minister of State, Joe McHugh T.D., addressing the meeting called by the Avoca Heritage Committee

## **EVENTS AND NOTICES**

#### Clare/Galway Iron Mining and Smelting Field Trip Saturday 11 and Sunday 12 July, 2015

The aim of this field trip is to introduce MHTI members to the remains of the iron mining and smelting industry which flourished during the 17th and early 18th century on the western banks of the Lower Shannon. Further information on the history and significance of this activity can be found on page 17 of this Newsletter. As the details of the programme are subject to the consent of landowners and new discoveries in the intervening times these are liable to change.

#### Coordinator

Paul Rondelez

email: prondelez@yahoo.com

mobile: 085 1239550

#### Programme:

#### Saturday 11th of July

10.30 Meet on the large lakeside Parking Space at Ballycuggaran, 3km north of Killaloe on the R463 to Scarriff and just before the University of Limerick Adventure Centre (ING: 168722,176279)

- Hematite mines at Ballymalone: rather extensive open cast mines with a documented adit and local claims of deep shafts.
- (optional) Hematite mines at Bealkelly (Eyre).
- Ballyvannan blast furnace: likely the oldest upstanding blast furnace remains in Ireland. (1610s) and potentially worldwide! Furnace, extensive spoilheap, dam, charcoal production area.
- Bealkelly (Purdon) furnace: well preserved remains dating to c. 1700.

Evening: Illustrated talk in Feakle on the history and context of the iron mining and smelting industry in the area by P. Rondelez (c. 1h).

#### Sunday 12th of July

9.30 Meet at Peppers Bar in Feakle

- Iron mines at Glendree: opencast mines with a documented adit.
- Derryoober furnace: unusual small furnace in very good condition. 18th century?
- Whitegate furnace: remains of very large furnace with an enigmatic tunnel preserved within its structure. Early 18th century.

#### **Equipment**

Some of the sites are located in wet areas; appropriate footwear is strongly recommended. Please bring packed lunches.

#### **Bibliography**

Kinahan G. H. 1863. Explanation to accompany Sheet 124 and that Part of Sheet 125 that lies on the West of Lough Derg of the Maps of the Geological Survey of Ireland, illustrating Parts of the Counties of Galway and Clare. Dublin, Alexander Thom and Co.

#### Accommodation in and around Feakle

Loughnane's Hostel (Feakle)

Tel.: 061 924200

website: www.eastclarehostels.com email: loughnaneshostel@gmail.com

Laccaroe House B&B (Gurrane, Feakle)

Tel.: 061 924150 or 087 2258803 website: www.laccaroehouse.com email karenbreen1966@yahoo.ie

Clondanagh Cottage B&B (Clondanagh, Tulla) and Glendree

Self Catering Cottage (Glendree, Feakle)

Tel.: 086 8268862 website: www.clondanaghcottage.com/ email: info@clondanaghcottage.com

More accommodation is listed on the Feakle Festival website (www.feaklefestival.ie/accom.html), but some of these could only apply during the festival. Additional accommodation is also available through Airbnb (www.airbnb.ie)



Extant remains of the Whitegate Furnace

#### 'The Historic Metal Mines of Scotland': A field trip to the Wanlockhead/ Leadhills Mining District, 4-6 September 2015

This year's overseas field trip will be a visit to the historic lead mining district of Wanlockhead and Leadhills in south west Scotland. This region has an illustrious mining history and heritage that stretches back to Roman times and right up to the 1950s when the last mines closed. It shares the same geology as Counties Down, Armagh and Monaghan and the skill and expertise required to open the Whitespots Mine in the eighteenth century was probably drawn from this part of Scotland. Several of the historic lead mines of these Irish counties shared considerable links with their Scottish counterparts throughout the nineteenth century, with many of the shareholders being Scottish and the head offices were located in Scotland. The MHTI has never had a field trip to Scotland, so this will be an ideal opportunity to learn more about the fascinating industrial heritage of this important hard rock mining district.

#### 'God's Treasure House'

Wanlockhead, the highest village in Scotland, was known as Winlocke until 1566 and owes it existence to lead and other minerals located in the surrounding hills. These deposits were initially exploited by the Romans, and from the thirteenth century were worked on a seasonal basis (in the summer months). In 1680, Mineral Lord, the Duke of Buccleuch, built a lead smelting plant and workers' cottages, leading to a permanent settlement. Due to its impressive suite of metalliferous minerals, including some of the world's purest gold at 22.8 carats, used to make the Scottish crown, Wanlockhead was dubbed 'God's Treasure House'.

There is much to see and do in the village, including a visit to the excellent Museum of Lead Mining, accommodated in the old Mine Forge (1764-1842). There is also the Miners' Library, the second oldest subscription library in Europe, established in 1756 which now houses a collection of books which have been recognised to have 'Great National Importance' and can be seen as a symbol of the lead miners' culture and education. In addition, the museum also boasts the impressive Straitsteps Cottages, offering a glimpse of what it was like to live as a miner in the 18th and 19th centuries. One cottage has an interior furnished in the style of 1750, the second around 1850 with the third and final cottage dating to 1910. The artefacts on show illustrate how the people of Wanlockhead lived, worked and played and a tour guide further explains how the miners' families lived in the past. An underground experience is offered at the eighteenth century Lochnell Mine where visitors learn about the minerals found, the methods used in cutting the rock, winning the ore, ventilating the workings, and transporting men and materials to the surface.

Industrial archaeologists will be thrilled to see the Wanlockhead water pressure engine, a survivor of the beam engines and waterbucket pumps that were introduced in the area in 1745. This Beam Engine at the Straitsteps Mine is believed to date from the nineteenth century and drained this and other mines. In 1972, the Secretary of State for Scotland took on the guardianship of the beam engine, making it Scotland's

third Industrial Monument; Historic Scotland now owns and maintains it.

Railway enthusiasts will be pleased to learn that 2 ft (610 mm) narrow gauge Leadhills and Wanlockhead Railway is laid on the trackbed of the former Leadhills and Wanlockhead Branch of the Caledonian Railway which served the village from 1901 until 1939 by which time the mining industry had entered a terminal decline. The preserved section operates on weekends only in high season running diesel engines from Leadhills for about 1 kilometre (0.6 mi) towards Wanlockhead. It is the highest adhesion railway in the UK.

#### The UK's oldest subscription library

The Leadhills area is also believed to have been important for mining since the Roman period and is the site of the first discovery of many minerals, including lanarkite and leadhillite. By the 1660s the lead mines were owned by Sir John Hope, and profitable enough to justify building or improving roads the full 50 miles to Leith to allow the ore to be exported. The coming of the railway in 1900 was not enough to return the mines in the area to profitability, and mining activity in Leadhills ceased in 1928, though it continued on a commercial scale for another decade in Wanlockhead.

Not to be outdone by its neighbour, Leadhills, originally known as Waterhead, is home to The Leadhills Miners' Library, founded in 1741, the oldest subscription library in Europe, and of significant historical and geological importance. Also known as the Allan Ramsay Library, or The Leadhills Reading Society, it houses an extensive antiquarian book collection, local relics, mining records and minerals. A further building of interest is the Scots Mining Company House, an early 18th-century mansion house that was built for the manager of the Leadhill mines. Designed by William Adam, it is now a category A-listed building which has a coffee and gift shop. Leadhills graveyard is the final resting place of a miner named John Taylor, who died in the village in 1770. He was allegedly born in 1633, making him 117 years old when he retired as a miner in 1751, and 137 when he died. It is easy to dismiss this as a mason's typographical error on the gravestone, but it is said that he could remember seeing the eclipse of 1652...

Underground access is difficult due to the reluctance of local landowners to permit exploration, but there is a wealth of features to explore on foot in the historic mining landscape, including the Pate Knowes Smelter, originally built in 1746 and the the New Glencrieff Mine, giving the MHTI plenty of scope for field excursions. After exploring the incredible industrial archaeology of the area, members can satiate their thirst at the Wanlockhead Inn, the highest pub in Scotland!

A full itinerary, details of travel options and accommodation will be included in our summer newsletter. Expressions of interest are sought, so please contact either Martin Critchley or Alastair Lings if you would like to participate in this field trip.

## Report on the field trip to Crohy Head, County Donegal, 21st – 22nd March, 2015

The main purpose of this field trip was to make a plan of the surface remains of the soapstone mine and the small processing plant on the cliffs at Crohy Head, southwest of Dunglow. A second aim was to examine the sea cave beneath the old mine, to see if there were connections between the two.

MHTI members and guests met in Dunglow before travelling via Maghery Community Centre to Crohy Head. There we met up with local men John Bonner and Hugh Boyle who showed us around the minesite. After viewing the features on the top of the cliffs we descended to the beach, to look at more workings. After the tour it was time for work. Martin Critchley led the survey team, using Global Positioning System (GPS) equipment to map surface features to an accuracy of 10cm.

Meanwhile Alastair Lings and Matthew Parkes took advantage of a very low tide (0.19 metres at Burtonport) to wade and swim around the coast to gain access to a sea cave which the MHTI had visited in 2007 (see NL39, March 2008). The cave is up to 15 m high, about 180 m long, runs parallel to the line of the cliffs (NNW-SSE) and has side passages leading westwards to the Atlantic. The cave has been eroded from weaker layers of rock, and has the appearance of a stope in a mine. No connection with the mine workings was seen.

The next task was to explore the decline tunnel that originally ran from near the Soapstone Works at the top of the cliffs, down towards the small trial workings at the back of the beach. The tunnel is marked on the 3rd edition 6" map (c.1900-1905), and was probably driven by the North of Ireland Mining Company around 1896-1900. A report in 1942 says "An attempt was made to run a drift to connect with the workings... This drift is about 8' x 8' square and dips sharply to meet the workings... It has no timbering and is collapsed after 40 or 50 yards. It was intended to haul the soapstone up the drift



The underground workings were surveyed by Matthew Parkes, Alastair Lings and Hugh Gerard Boyle. The surface features were explored and surveyed by Martin Critchley and team using a GPS



MHTI members join local mining heritage enthusiasts at the Crohy Head soapstone mine, County Donegal



Presumed drying kilns at Crohy Head soapstone mine

in bogies". The tunnel has three short branches that lead out to the cliffs, and access can be gained by scrambling into the top or bottom windows. In the upper part of the tunnel the floor rises to meet the roof as the collapse is approached. In the middle section of the tunnel are marks in the floor made by bridge rails. Below the lowest window the tunnel is flooded, which suggests that the tunnel never reached the workings on the beach. The collapse of the tunnel near its portal probably led to its abandonment.

The survey work was finished and members headed over to Burtonport for an excellent meal at *The Lobster Pot* and fantastic accommodation at Foirnis, formerly *Sweeney's Hotel*. In 1918 John Sweeney, the owner of the hotel, was the agent at the mine for the Orchard Refinery Company of Belfast.

After a wonderful breakfast and a leisurely start on the Sunday morning we visited Donald Devenney at Roshine near Maghery. Donald worked at the soapstone mine from 1946 to 1947, during its final period of operation by the Templecrone Co-Operative Society. An article entitled 'Donegal Soapstone Mine' in the Irish press of the 26th November 1946 shows Donald at work in the mine, although he is wrongly named Danny. Donald recalled his experiences at the mine just as he had done in 2006, when he was interviewed by Patrick Boner for his book *The story of The Cope* (Boner). He told us that the workings below sea level, headed towards Arranmore Island and were not undersea workings. Also he told us that higher workings had broken through to the sea cave. The miners had found an old waistcoat in the cave with two pennies in its pockets, but the clothing fell apart when it was moved. They were uncertain if the cave had been mined in some earlier phase of mining. After a photograph with Donald we thanked our local guide, Hugh Gerard Boyle, and host, Patrick Boner, and headed southwards.

Another low tide provided us with the opportunity to visit coastal sites near Malin Beg, in the southwest of the county. At Buncrimlin Port we succeeded in finding a small lead mine that was worked by a Mr Williams (Legg *et al.*) before 1854. Unfortunately we did not find the iron oxide that was worked by Dr. Ritchie of Belfast "which occurred in the drift of the



Former miner, Donald Devenney, who shared some valuable oral history

sea-bank at Trabane Bay, Malin Beg" (Hull, p.57). It gives us a reason to return to this remote and lovely part of the country.

The MHTI is very grateful to John Bonner, Hugh Boyle and Patrick and Carrie Boner for their wonderful help and hospitality over the weekend. We felt privileged to meet Donald Devenney, and deeply appreciate him sharing his memories with us. It is intended to publish an article in this year's (2015) Journal about the history and industrial archaeology of the mine site. The MHTI thanks the landowners and the Department of Communications, Energy and Natural Resources for access to their property.

#### Alastair Lings

#### **Bibliography**

Anon, 1942. Report on steatite deposit at Crohy Head, Co. Donegal. Unpublished report to Mianrai Teo. Geological Survey of Ireland Mine Record MR000197.\*

Anon, 1946. *Donegal Soapstone Mine*. The Irish Press, 26th November 1946.\*

Boner, P., 2009. *The story of The Cope*. Templecrone Press, Dungloe. 604pp.

Hull, E., Kilroe, J.R., and Mitchell, W.F., 1891. *Explanatory memoir to accompany the maps of south-west Donegal*. H.M.S.O., Dublin. 71pp\*

Lings, A., 2008. 'Report on the Co. Donegal field trip (1-2 Sept 2007)'. *Mining Heritage Trust of Ireland Newsletter* No. 39, p5-7.

Legg, I.C., et al, 1985. Mineral localities in the dalradian and associated igneous rocks of County Donegal, Republic of Ireland, and of Northern Ireland. Report Series 85/3, Geological Survey of Ireland. 87pp.

\*Documents available on GSI online digital archive: https://secure.dcenr.gov.ie/goldmine/index.html

#### Lead Mining: Lives and Landscapes

#### Launch of the exhibition and seminar at The North Down Museum, Bangor, and a guided walk around the Newtownards Mines, 2-3 May 2015

Following the AGM at the Carrickdale Hotel in County Louth, members headed to the North Down Museum in Bangor where an exhibition about the history of the Newtownards Lead Mines and their legacy, collated by Sharron Schwartz and Martin Critchley, was to be launched. Covering ten panels, the *Lead Mining: Lives and Landscapes* exhibition traces the geology and the earliest history of the mines through their heyday and closure, explores their legacy and the history of the mineral lords, management and men who worked them. It also details the work done by the MHTI in conservation and preservation of Irish mining heritage. A good sized crowd assembled as Martin Critchley formerly opened the exhibition which will be on display until the end of May.

A well attended seminar then followed which included illustrated talks reflecting the content of the exhibition. Sharron Schwartz kicked off the evening with a presentation entitled *The Rise and Decline of the Newtownards Mines and the People who Owned, Managed and Worked Them* which brought to life the colourful social history of the mines.

Martin Critchley then introduced our special guest speaker for this year's post-AGM seminar, Dr Norman Moles of the University of Brighton. Norman, a geologist, has research interests in environmental geochemistry, soil geochemistry and metal transfer from abandoned mine sites and his illustrated lecture, entitled *The Environmental Legacy of Nineteenth Century Lead Mining and Mineral Processing at the Newtownards Lead Mines* reflected this. Attendees learnt about the levels of contamination at the former mines, particularly where the tailings were impounded. However, these pose little threat to the environment until surface disturbance facilitates erosion and water run off, allowing cerrusite rich material to migrate into nearby soil horizons where it undergoes chemical reactions, posing an environmental hazard to flora and fauna.

Martin Critchley then rounded off the evening by giving a presentation about the threats facing the industrial monuments and historic mining landscape and opened the floor to discussion. People from the Newtownards area expressed their frustration with the local authority that has not made much effort over the last two decades to protect the industrial monuments which are listed, the majority of which fall within the Whitespots Country Park. However, the recent local government restructuring that created the Ards and North Down Borough Council might present an opportunity to open a new dialogue to begin the process of promoting a greater awareness of the importance of preserving the valuable





Martin Critchley introducing our special guest speaker for this year's post-AGM seminar, Dr Norman Moles

heritage and local amenity asset offered by the historic mines. Several MHTI members then joined the speakers for a very convivial evening over dinner in Bangor.

The following day, a free guided walk of the Whitespots and Conlig Mines commenced at 10.30am from the Somme Heritage Centre car park. The day seemed to hold little promise with periodic heavy showers falling from leaden skies, but this did not deter the nine brave souls who turned up for the walk! The weather improved considerably as the walk proceeded from the mine windmill, the heart of the old Whitespots Mine, to the Conlig Engine Shaft, before visits to the North and South Engine Shaft areas and the Bog Shaft complex of Whitespots. Sharron and Martin pointed out the various industrial archaeological features of the mines and their significance, related stories about the mine's history and Norman drew attention to the geology and the stress to vegetation where contamination is at its most severe.

Some work has recently been done at the Whitespots Mine site by the Department of Trade, Enterprise and Investment under the aegis of health and safety, which includes placing green metal fencing around the shafts, and gating the entrance to the windmill. The fencing involved some cutting back of the vegetation and removal of soil in the immediate vicinity of the shafts, but we were saddened to see that rubbish removed from within or around the shafts had simply been piled up and left on site. The presence of trial bikers has caused significant erosion in the tailings area which is exacerbating the migration of heavy metal contaminants into the soil horizons of a field near Bog Shaft. Moreover, the interpretation panels erected around the site some 20 years ago, and now highly defaced, unreadable and unsightly, have not been removed and the industrial monuments and wider landscape has an overall aura of benign neglect. It has been suggested by some of the attendees of the weekend's events that the MHTI should make contact with other interested groups in Ulster in order to open a dialogue with the new local authority and to impress upon them the need to protect the rich industrial legacy of the mines.

The walk concluded in hot sunshine and was very well received. One local participant stated that he had been on guided walks of the mines before, but had never had things explained to him in such great detail and had heard many new things. We are also delighted to have received excellent feedback from the museum staff about the exhibition, and queries from a local historical society about the eighteenth smelting mill at Stricklands, details about a Cornish miner who worked at the mines and is buried in Newtownards and information about a local family who worked at Whitespots then migrated to Australia where they were involved in gold mining.

The MHTI would like to extend their grateful thanks to the GSI for an absolutely first class job of printing the exhibition panels; to ERA-Maptec for funding the design work; the cheerful and friendly staff at the North Down Museum for hosting the exhibition and to Dr Norman Moles for his fascinating lecture and the benefit of his deep knowledge of the effects of heavy metal contamination out in the field.

#### Sharron Schwartz



Guided walk of the Newtownards Mines with Drs. Critchley, Moles and Schwartz



Heritage Week Events, 22-30 August The theme for this year's Heritage Week is From mill to forge, from mind to hand – discovering Ireland's industrial past. http://www.heritageweek.ie/

National Heritage Week is a part of European Heritage Days which is celebrated in over 40 countries across Europe. In 2015, 23 countries have agreed to come together to share a common theme to help raise the profile and awareness of the value of industrial and design heritage to people across Europe. Our shared industrial past is a story of change, development and creativity and of the men and women who were a part of that story whether as mill worker, a dock worker or the proud owner of a motor car. Industrial heritage engages all of us and has left a legacy in the buildings, records and memories of people across Ireland, a legacy that paved the way for how we live today. At the time of press, these are the events listed:

**22nd** – **30th August.** *Discovering Slieveardagh's Mining Past*, an exhibition at the Old School Mining Museum, The Commons, Co. Tipperary, for the duration of Heritage Week. The local group will also be hosting tours of the local mining structures. oldschoolcommons@gmail.com

**22nd August 10:00am to 17:00 pm**. Final 25 km leg (Abbeyside to Tankardstown in Bunmahon) of an 8 day walk from Allihies Co. Cork to Bunmahon, Co. Waterford. Events include the 3.00pm finishing line at Tankardstown Engine House and a social history talk, followed by a 4.00pm Reception at the Copper Coast Geopark Visitors Centre. Events free, donations appreciated. atobminerstrail@gmail.com

**26th August 19:30 to 21:00pm**. *Dalkey Quarries: Source of Stone, Funicular Railway and Recreation Facility*, a lecture by well known industrial heritage author, Rob Goodbody, at Dalkey Castle and Heritage Centre. Admission is free, but booking is essential. info@dalkeycastle.com

27th August 15:00 to 16:00pm. Coming out of the dark, a talk by Bettina Norton, OPW, who will discuss the Castlecomer coalmines, Kilkenny, their connection with the Butler family and the influence of the mines and the Wandesforde family on the economy. Parade Tower, Kilkenny Castle. Free admission, no booking required, but as the numbers of places are limited, seats will be allocated on first come, first served basis. kilkennyguides@opw.ie

**29th August 10:30am to 16:30pm**. A free tour of the 17th and 18th century iron smelting furnaces and iron mines on the western shores of Lough Derg. Mountshannon Harbour, Co. Clare. No booking required. prondelez@yahoo.com

**29 August 11:00am to 14:00pm**. *Oceans of Time*, a geological tour, Ceathru Thaidhg, Co. Mayo, with Peadar McArdle, who

will lead a trip across Dún Chaocháin's stunning and ancient landscape, examining rock formations including china clay deposits. It was once thought possible that a ceramics industry might be established here, using local china clay as the main material. Peadar will explore the basis for that ambition. This is a free event and no booking is required. Robust footwear and warm, rainproof clothes are essential. Also bring a drink and a snack. Children must be accompanied by adults. dunchaochain1@eircom.net

**29 August 10:00am to 16:00 pm**. Copper Coast Kayak Trip, Annestown, Co. Waterford. Enjoy a leisurely paddle along the Copper Coast's impressive cliffs, visit sea caves and secluded beaches with Ardmore Adventures. Learn about the rich copper mining history of the area, unique geology and intriguing wild coastline. Wetsuits and all kayaking equipment and instruction is provided. Please bring your own swim wear, towel, footwear and a packed lunch and drink. Booking is required, adults only (ages 16+), €70.00 (10% discount for groups of 6 or more). info@ardmoreadventures.ie

**30** August 11:00am to 16:00pm. Free entry to Allihies Copper Mine Museum and a free guided walk the same day 11am - 2pm. info@acmm.ie

**30 August 14.:00-17:00pm**. The Silver-Lead Mines of Glenmalure: Their History and Archaeology. Ballinafunshoge Car Park. Sharron Schwartz and Martin Critchley will lead a guided walk exploring the history of the mines, the people associated with them and their rich archaeological legacy. Some of the earliest silver-lead mines and smelt sites currently documented in the Wicklow Uplands are in Glenmalure. Drawing on extensive documentary research and site surveying, the mining history and heritage of this valley will be brought to life on this guided walk. Robust footwear and warm, rainproof clothes are essential. The event is free, donations to the MHTI appreciated. mcritchley@era.ie

## SPECIAL FEATURE The UCD Mineral Collection and Ireland's Mineral Heritage By Patrick Roycroft

The severely endangered part of the University College Dublin mineral collection – comprising some 5,000 specimens, spanning 200 years of collation, and almost completely unknown and uncatalogued – has undergone a massive rescue operation and is now going to be used to tell the general public of Ireland's mineral heritage. How did this come about, what is happening now, and what is the interest for the MHTI?

Back in November 2013, I was on the hunt for specimens of cotterite (an ultra-rare form of quartz with a silvery metallic lustre discovered in Rockforest, Mallow, County Cork, in the 1870s; only about 20 specimens exist). I suspected that UCD might have one, and got permission from Professor J. Stephen Daly (UCD School of Geological Sciences) to look through their mineral collection. A large part of the collection was being housed in a shipping container on the grounds of UCD: there was no catalogue, only a crude order, and parts of the collection had hardly been seen in several generations.

While spending four, cold, but happy, hours hunting cotterite – and my suspicions were confirmed: there was one specimen hiding therein (unlabelled, but I recognised it immediately) – it was painfully obvious that the minerals and their precious labels were in severe distress. Damp, water leakage, high humidity, and wild variations in temperature over the seasons had taken a terrible toll, not to mention the disorder (Figure 1), abrasion damage from massive overcrowding in drawers, dissociation of specimens from their labels (and labels disintegrating), pyrite disease, alteration products forming, and some halides actively dissolving in their mould-engulfed card trays. With the help of Matthew Parkes (National Museum of Ireland-Natural History, and well-known MHTI member) and

with the permission of Stephen Daly (who was very supportive and wanted the collection saved), we formulated a rescue plan, and I applied for a grant from the Heritage Council.

I got the grant in early 2014 (M03895, "Conservation of University College Dublin's Mineral Collection"). With the help of fifteen volunteers (Irish and international, 'youngish' and young; Figure 2) working either in sequence or in parallel, we took the endangered minerals from the shipping container and into the National Museum of Ireland. We spent most of 2014 cleaning, rehousing in new trays and drawers, photographing, and trying to rejoin specimens with their labels. It was, of course, completely impossible to catalogue the collection in the time available – this could yet take several more years - but we did (provisionally) manage to find all the Irish material and make this manually/visually searchable. The final report that I submitted to the Heritage Council in late November 2014 was described as "triple A star quality" and this is a testimony to the immense amount of help I received from all the volunteers. Matthew Parkes got the Prosecco in!

The Heritage Council once again opened a brief window of opportunity in April 2015 to submit a grant proposal, this time on the theme of "Ireland's industrial heritage and community". Once again I pounced. I submitted a proposal to use the Irish material in the UCD mineral collection to tell the general public of Ireland's mineral heritage and how the minerals relate to aspects both of our past and of our present daily lives. And once again the Heritage Council came up trumps: I have been awarded a second grant to do just this (grant CBH05247; "Ireland's Mineral Heritage: Contributions from the UCD Mineral Collection"). At this point I want



Figure 1. Chaos in a drawer of quartz specimens. One of the many problems at the start of rescuing the UCD minerals



Figure 2. Volunteer Jessica Hanon (Transition Year, Drogheda) holding possibly the largest doubly terminated quartz crystal from Dublin yet found



Figure 3. The label "P.D." refers to one of the very few Irish mineral dealers of the 19th Century: Patrick Doran.
The mineral is cinnabar and unlikely to be Irish



Figure 4. A beautiful iridescent chalybite, made extra special by having been donated by William Lettsom, the noted 19th century mineralogist and co-author of the classic Manual of the Mineralogy of Great Britain and Ireland



Figure 5. A rare style of green Geological Survey of Ireland labels. What were GSI specimens doing in the UCD collection; and when were these rarely seen labels printed?

What is in the UCD collection? A complete answer is still some way off, but we can say much more now than previously

to express my thanks to the MHTI for writing a wonderful letter of support for this project, which undoubtedly helped get it funded. Stephen Daly also transferred ownership of the rescued collection to the NMI, so now the collection belongs to the nation and will be safe and ultimately a great resource. To throw in a statistic, incorporating the UCD collection into the NMI collection increases by over 50% the NMI's mineral collection – a massive sudden addition.

What is in the UCD collection? A complete answer is still some way off, but we can say much more now than previously (and there are the 'ghostly remains' of a subset of the collection organised on Dana's mineral classification system, so all is not total chaos). There are minerals from every continent, except Antarctica; minerals bought from commercial dealers and mineral collectors (e.g., the 19th century Irish mineral dealer Patrick Doran, Figure 3; the noted mineralogist William Lettsom, of 'Greg and Lettsom' mineralogy text fame, Figure 4); minerals donated from individuals, including 18th and 19th century Irish gentry and members of the public; minerals collected by former UCD students, mostly from the 1940s to 1970s; and minerals from other institutions and organisations, such as the NMI, the original Geological Survey of Ireland (1840s, but also possibly early 20th century; Figure 5) and the early 19th century Ordnance Survey of Ireland (1830s), that had evidently been borrowed but never returned (Shhh!). The majority of the collection, however, dates from the mid to late 19th century and the first few decades of the 20th century, though labels do go back to about 1780.

But this year, 2015, is all about the Irish material. And the MHTI would certainly have an interest. There are specimens



Figure 6. Labelled specimen of 'antimonite' (i.e. stibnite) from Clontibret mines, Monaghan. Specimen label says at the end "Dr Hall, Oct/88" i.e., 1888



Figure 7. One of the two native silver specimens from Luganure, County Wicklow. At last! Physical evidence supporting the written reports of silver having been worked here

of dendritic copper from Avoca (Wicklow), 'antimonite' from Clontibret (Monaghan) (Figure 6), K-feldspar pegmatite samples that were used to make Belleek pottery, galena from Carndonagh lead mine in Donegal (labelled from 1906), specimens from mines that have long ago ceased to exist (e.g., Contarf mines in north central Dublin), copper minerals from various copper mines in Waterford, and many more. Probably the most important finds, and ones that nobody knew were there, were two fabulous specimens of native silver from the Luganure lode in Glendalough (Wicklow) (one shown in Figure 7) and a large specimen of native silver and galena from the Ballycorus mine (Dublin). That specimens of native silver still exist is a revelation to many: some had thought that 19th century reports were possibly exaggerated, others had just never heard of it, and, certainly, nobody I have talked to had ever actually seen any specimens. But now, not only do we have some extant specimens, but they are, I think, the best specimens of native Irish silver to have been preserved to date.

And there is a good amount of what might be termed historically fascinating 'obsolete' minerals. There is, for example, an exceptional set of originally labelled 'killinite' specimens from Killiney (Dublin) (Figure 8). Killinite was a mineral first named back in 1818 and was, for a long time, quite the local mineral hero, appearing in many a 19th century geology and mineralogy texts, as well as many old guides to Dublin/Ireland. Sadly, killinite turned out not to be a valid species - it is just an altered form of spodumene.

However, one does not encounter original 'killinites' too often these days, and UCD has a good brace of them. And there are some specimens of 'kilmacooite', named after Kilmacoo in County Wicklow, which later turned out to be just a mix of galena and sphalerite, not a separate mineral. But things get dramatically better. There is a variety of beryl that is clearly labelled as 'walsonite'. And as far as minerals go, this name is so incredibly obscure and rare that not only does it not occur in the encyclopaedic Glossary of Obsolete Mineral Names (by

Peter Bayliss, and which lists some 33,000 now-discredited historical names), but it also does not give even one relevant mineral hit on Google or any other search engine. How rare is that nowadays? And speaking of such rare obsolete mineral names, I have also come across in the NMI's own catalogues 'donegalite' (named after County Donegal; specimen now located and awaiting analysis) and 'glandorite' (named after the Glandore mines in County Cork; specimen seemingly missing), both these latter being also absent from the Bayliss Glossary and for which 'Captain Google' can but shrug his shoulders in defeat. If anyone reading this has any information (at all) on walsonite, donegalite or glandorite, please do not hesitate to e-mail me.

And there are the 'spectaculars', e.g., the large emerald of Figure 9 and the large group of purple fluorites of Figure 10. The plan for the Irish minerals of the UCD collection now is to compile a county-by-county mineralogy, using the specimens from the UCD mineral collection as the foundation (which will be added to later), and make a series of downloadable handouts for the general public so that they can start to appreciate their – and our – local and national mineral heritage. This is an aspect of national heritage that is almost completely uncatered for and for which the general public are, I have discovered, singularly oblivious. It will be a major task to get the message out. But, one has to start somewhere, and that is what this 2015 phase of the UCD mineral project is all about. Volunteers are always welcome, by the way.

And you can still visit the public exhibition on the UCD mineral collection that is currently in the National Museum of Ireland-Natural History on Merrion Square (aka, the Dead Zoo). This is worth seeing for MHTI members because on display is one of the rare Glendalough native silver specimens. Enjoy!

E-mail: proycroft@museum.ie c/o National Museum of Ireland, Kildare Street, Dublin 2 (and UCD School of Geological Sciences, Belfield, Dublin 4)



Figure 8. A group of four originally labelled 'killinite' specimens (from Killiney, Dublin)



Figure 9. A large emerald, with my hand for scale.

Not from Ireland!



For current information and back story events, see (and 'Like') the Facebook page "UCD Mineral Collection" - https://www.facebook.com/pages/UCD-Mineral-Collection/738136006225828



Figure 10. A very large and (when properly displayed) dramatic group of fluorite crystals

## **IRISH NEWS AND PUBLICATIONS**

#### Sad Death of Richard Sharvin, Tullyratty Mine

It is with deep regret that we report the death of Richard Sharvin in an accident on the 20th March, at his farm near Strangford, Co. Down. The accident is believed to have involved a tractor, and it is being investigated by the Health and Safety Executive. MHTI visited Tullyratty Mine on Mr Sharvins farm in October 2010. Mr Sharvin had very kindly prepared for our visit by clearing the gorse thicket in front of the Powder House. MHTI were very grateful for this work as, without it, we would not have been able to get to the building, or photograph it. Mr Sharvin leaves behind his wife Nora, and daughters Catherine and Fionnuala.

http://www.irishnews.com/news/-lovely-farmer-dies-in-accident-1421128

#### Heritage Council funding (01/05/2015)

The Heritage Council has announced funding for 197 projects under its Community Based Grants Scheme. Included were the following:

County Clare, *The Sliabh Aughty Furnace Project*, Conservation Management Plans, Paul Rondelez, €3,500, County Cork, *Conservation and Restoration of the only known Sand-boat in Ireland*, West Cork Maritime Heritage Company, €3,500.

Dublin City, *Ireland's Mineral Heritage: Contributions from the UCD mineral collection*, Patrick Roycroft, €4,000. Tipperary, *The Mining Museum Project*, Old School, The Commons. €3,000.

We offer our warm congratualtions to those people associated with the above projects. http://www.heritagecouncil.ie/news-media/news-media/

## The End of an Era: Lisheen Mine, Thurles, Co. Tipperary (05/05/2015)

Lisheen mine is closing, with the production of lead and zinc concentrates finishing at the end of September, and backfilling operations due for completion by mid February 2016. Vedanta Resources PLC are inviting organisations to express their interest in assisting with the closure of the mine, and sale of equipment. http://www.lisheenassetsale.com/

## Curraghinalt Gold Project, Gortin, Co. Tyrone (06/05/2015)

Major Drilling Group International Inc. has been contracted to implement a 20,000 metre program of infill drilling both underground and at the surface. Drilling commenced on the 26th March and by the 31st, three drill bays had been constructed underground of the 11 bays planned. http://www.dalradian.com/news-and-events/news-releases/default.aspx

#### **Avoca Mines, Co. Wicklow (07/05/2015)**

On the 6th of February the Minister for Communications,

Energy and Natural Resources applied to Wicklow County Council for planning permission for "safety works to replace existing degraded caps on two mine shaft openings, known as 'Whelan's Shaft' and 'Air Shaft'", in Ballymurtagh townland, West Avoca. The County Council have requested further information from the developer. Planning application 15119.

On the 7th of May the Minister applied for permission for "Engineering and Public Health & Safety works on a site at East Avoca Mines in the townlands of Tigroney West and Cronebane" The proposals include "stabilisation, safety and drainage works at the '850 Adit'... restoration and stabilisation works to the "Ore Bins" and the adjacent crib wall to address existing structural and safety issues... minor protection works to the exposed portal of the "Upper Flat Rod Tunnel"... stabilization and re-grading of the spoil heaps and embankments, capping of the spoil heaps and landscaping works". Planning application 15473. See page 4 for more details. http://193.178.30.218/WicklowPlan/SearchTypes.aspx?sitemap=2

## Valentia Slate Ltd., Valentia Island, Co. Kerry (04/04/2015)

Due to their impending retirements, the joint owners of the company are offering to sell their business, with the rights to 130 acres of slate and processing equipment. The equipment includes a Fantini chain saw and a Pelligrini diamond saw. The present owners reopened the slate mine in 1998.

http://www.naturalstonespecialist.com/currentissue/ednewsarticle.php?id=6903

## Jordan's Quarry, Eskragh, Omagh, Co. Tyrone (09/03/2015)

Tragically Drew Jordan (57) died at the quarry that he had managed for 41 years. It is believed he fell while climbing a ladder. The Health & Safety Executive are investigating the incident. Councillor Glenn Campbell said "Drew was a valued and highly respected member of the local community. He brought a lot of employment to this area through his highly successful quarry business...People who I have spoken to were devastated to learn of his tragic death on Thursday night. Drew was well known and held in high regard locally – the word gentleman comes up again and again when local people speak of his loss". Mr Jordan leaves behind his wife Anne, and three children

http://ulsterherald.com/2015/03/09/tragic-death-of-popular-eskra-businessman/

## Knockcloghrim Quarry, Magherafelt, Co, Derry (14/03/2015)

Sadly Victor Nicholl (62) died at Knockcloghrim Quarry on the 13th March. The fatality is being investigated by the Health & Safety Executive. He had worked for FP McCann

Ltd for 19 years, and had been driving a 60 tonne dump truck shortly before his death. Councillor Martin Kearney said "Victor himself was rooted in the countryside and rural matters and he worked for many years at the quarry. He was a popular person and very highly respected in the community. His work colleagues also held him in very high esteem and I know this news has caused a great deal of shock and sadness." Mr Nicholl was married and lived in Fallahogy area south of Kilrea. http://www.belfasttelegraph.co.uk/news/northern-ireland/tributes-to-plant-operator-killed-in-quarry-accident-31068326.html

## Quarry safety initiative in Northern Ireland (18/05/2015)

Government ministers in Northern Ireland have launched a new quarry safety campaign: *Quarry water is a stone-cold killer. Stay out, stay alive* aimed at preventing deaths in disused quarries. These sites may be more accessible to young people than working quarries, which are regulated by the Health and Safety Executive Northern Ireland.

http://www.nidirect.gov.uk/staying-safe-around-quarries.htm

#### **Du Noyer Photography Competition**

Entries are now being accepted for this years Du Noyer competition. Entrants can submit up to four images showing field geology or geological landscapes, in Ireland or abroad. The total value of the prizes is €500. The images must not have been previously published. Please see the Geological Survey of Ireland website for further details. The closing date is the 16th October. http://www.gsi.ie/Education/Du+Noyer+Photog raphy+Competition.htm

#### Wicklow Uplands Council Photograph Competition

Wicklow Uplands Council in partnership with the Heritage Office of Wicklow County Council invites you to send them pictures of your favourite aspects of Wicklow's geological heritage. The total value of the prizes is €500. Please read the HOW TO ENTER page on the WUC website. Closing date 31st July. http://www.wicklowuplands.ie/

#### New Publication: Banner Rocks

MHTI members with an interest in geology might be interested to learn of a new book called *Banner Rocks* by Matthew Parkes. Arising out of an audit of geological heritage sites in County Clare done in 2004/5, the book is an attempt to make it accessible and digestible for the general public without any training in geology. Best of all it is free! Mining interest is limited but Kilbreckan and the phosphate mines at Doolin feature. Contact the Heritage Officer in Clare, Congella McGuire, for your copy. It is also available as a pdf download: http://www.clarecoco.ie/your-council/publications/default-2. html

#### Quarries, mines and life underground

Money from the carrier-bag levy in Northern Ireland has funded the production of a 30 page booklet by the Causeway Coast and Glens Heritage Trust entitled *Quarries, mines and life underground on the North Coast.* The free booklet will be available from tourist information centres in the area, and as a PDF on the Trust's website: http://ccght.org/

#### Journal of the Mining Heritage Trust of Ireland

Journal No.14 was published in March and contains the following articles:

Salt mines in the Carrickfergus area of County Antrim, by Caroline A. Nicholson (p1-22);

The silver-lead mines of Glenmalure, Co. Wicklow: a history and an archaeological survey of extant remains, by Sharron P. Schwartz and Martin F. Critchley (p23-86);

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 (p87-102);

Bronze age copper mines in Wales and a brief comparison with the evidence from Ireland, by Simon Timberlake (p103-123). Copies of the Journal are available from Matthew Parkes, e-mail mparkes@museum.ie

# Mining Archaeology: perspectives, conflicts, challenges, is the 8th volume of the IES annual proceedings of the 10th International Symposium on Archaeological Mining History held in May 2015 at Aichach, Germany. Hardcover, full-colour, appr. 200 pages. Contents:

- 1. The ancient sulphur mines in Sapigno, Sant'Agata Feltina.
- 2. Small water basins in high medieval mining in Dippoldiswalde, east of Freiburg in Saxony.
- 3. Iron ore mining in the eastern Odenwald area an overview.
- 4. Planning permission for tourist mines in Germany.
- 5. Kremsinger in the Ore Mountains a mining settlement or a town? Reflections on the urban character of mining settlements.
- 6. Chronology of the red and black/grey marble extraction techniques between the 18th and the 20th century in the Meuse area (B) archaeology, challenges and perpectives.
- 7. Resistance and vulnerability of relics of historical opencast mining persistence of historical funnel shaped pits in the tertiary hills.
- 8. Theoretical and practical aspects of iron smelting in a bloomery furnace.
- 9. The mining section of the "Deutsches Museum" in Münich. 10. Pre-colonial gold mining in Nyanga, Zimbabwe.
- 11. Early and high medieval iron production in the Grubet near Aichach.
- 12. Improvements in resistivity measurements for mining archaeological investigations.
- 13. Into the Darkness. A survey report of two medieval mines at Monte Calisio in Trento (I).
- 14. The mine under the bus station a description of the medieval workings beneath the main bus station in Dippoldiswalde Saxony.

Contact Matthew Parkes mparkes@museum.ie for details.

## **GOLDMINE:** the Geological Survey of Ireland online digital archive

Some 450,000 images of documents and maps previsouly available on their Document Management System at the Customer Centre. including Mine Record reports and maps, Mineral Locality reports, and the historic 6" to 1 mile scale geological maps are now available online. PDF files are available in addition to the original high resolution TIFF files. The information is now NOT available at the Customer Centre. https://secure.dcenr.gov.ie/goldmine/index.html

#### **Conservation Management Plans for the Sliabh Aughty Furnaces**

In the last Newsletter of the MHTI (no. 67, p. 18), the background and aims of the Sliabh Aughty Furnace Project were briefly addressed. Since then, The Project has been awarded a generous grant by the Heritage Council. This will be used to generate four Conservation Management Plans, one for each of the surviving remains of blast-furnaces in the Sliabh Aughty Mountains area on the western shores of Lough Derg in the counties Clare and Galway.

Each Conservation Management Plan will consist of two parts, a detailed measured survey of each of the furnace remains and a structural assessment of the same. The surveys will include ground plans, section and profile drawings and will be accompanied with the known information on each furnace's history. The assessment will consider the stability of the remains and advise on the measures to be taken to prevent further deterioration of the buildings. The Conservation Management Plans can then be used as a basis for further grant applications to conduct the actual conservation works on these buildings.

The work will be conducted under the supervision of Christie Cunniffe, Field Monuments Adviser for Co. Galway and the Heritage Officers for counties Clare and Galway. When finalised, the Plans will be submitted to the relevant authorities and also added in downloadable versions on the Project website (www.furnaceproject.org). On that same website you can find a link to our Facebook page where we will communicate any progress related to this and other aspects of the Project as they occur. The survey will also be used in future publications on the ironworking in the area.

The conservation of the furnaces is only one part of the aims of the Furnace Project. We also carry out archival research and field surveys to locate and understand not only the works themselves but also associated infrastructure, settlement, etc. Important is the spreading of the information and several talks on the subject have been held and guided tours of the remains undertaken.

Several publications are either under way or planned and further down the road we hope to establish a tourist trail connecting the mines and ironworks into one story. For more information you can contact Paul at prondelez@yahoo.com or join us on the MHTI Field-trip to the furnaces and their mines on the 11th and 12 of July next.

#### Paul Rondelez



Blast furnace remains at Ballyvannan, Co. Clare, Date: 1610s?

#### The Mining Museum Project

The Heritage Council of Ireland has awarded funding to the Old School Mining Museum, The Commons, in The Ballingarry coalfield area (Slieveardagh). 'THE MINING MUSEUM PROJECT' is intended to promote and record mining heritage of the Slieveardagh Hills in Co. Tipperary with a view to enhancing the collection of artefacts in the Mining Museum with images and information on the mining structures in the area.

The Old School Mining Museum houses a collection of mining artefacts loaned or donated by miners and their families from the area. On two occasions (2007 & 2013) members of the MHTI have hosted field trips to the area. On both occasions the MHTI members and ex-miners, their families and other interested locals visited and shared information on the still extant mining structures. Much of the local information was stories and folklore about the mining past, and the uses of most of the structures in living memory. The MHTI group fascinated us with the architectural and scientific significance of the mining structures.

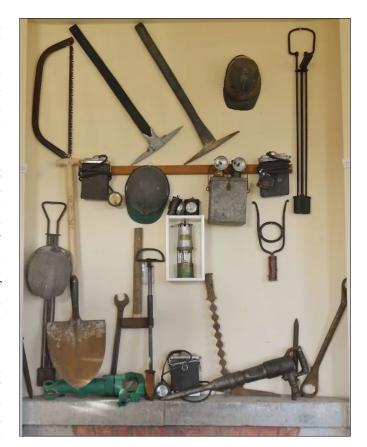
We read Martin Critchley and Sharron Schwartz's article in The MHTI newsletter no 67 about the deterioration of many of these structures in the six years between their two visits and the fact that none are listed in The Record of Protected Structures. Their open request to us to support the inclusion of these structures in the RPS and to help with the process of identifying what monuments should be included coincided with our plans to apply for funding to the Heritage Council to visually record these structures for inclusion in our collection.

We are now beginning our task of clearing vegetation from round these structures and will record what we see. We also want to include factual information on the build and use and uniqueness of the buildings in this area. We would be very grateful for any knowledge about these structures that MHTI members and enthusiasts could share with us. We hope that by amassing as much information as possible it will strengthen the MHTI request to include these structures in the RPS and enhance our information in our Mining Museum.

We will take over the whole Old School building for National Heritage Week (22nd – 30th August) with an exhibition 'Discovering Slieveardagh's Mining Past' and will also host tours of the local mining structures.

If you visited on either of the MHTI field trips (or especially if you are an interested expert) you might be able to tell us more about the history and significance of the engine houses, the powder house or any of the other structures. We can be contacted by email at oldschoolcommons@gmail.com

Please help us with our endeavours to record and promote Slieveardagh's mining past, and put us in your diary for National Heritage week.



Mining artefacts on display at the Old School Mining Museum



The Mardyke 50-inch pumping engine house, the largest extant Cornish-type engine house on an Irish coalfield

### **OTHER NEWS**

## Poldark: Aidan Turner thrills TV audiences and peaks interest in Cornish mining

The recent reboot of the 1970s BBC television series *Poldark*, based on the very popular novels by Winston Graham, has achieved major success and been the subject of rave reviews since it aired in March. Almost six million viewers tuned in for the final episode, helping BBC1 to its highest ratings share for the first quarter of the year in a decade.

The *Poldark* stories first enthralled readers in the 1940s, before being brought to a new audience as a serialised BBC television drama in 1975 and again in 1977. The books tell the romantic and swashbuckling tale of a British Army officer, Captain Ross Poldark, returning to his Cornish homeland from the American War of Independence in the 1780s. Upon his arrival, Poldark finds the life he knew utterly changed, with his home in ruins and his fiancée, Elizabeth Chynoweth, betrothed to his cousin, Francis. In order to rebuild his fortunes, Poldark toils to reopen one of his family's derelict tin mines and the scene is set for high drama as a long running feud ensues with his arch-enemy, the greedy banker, George Warleggan.

Poldark provides a window into the eighteenth century lives and landscapes of Cornwall, at a time when the local copper mining industry was in turmoil through the overwhelming competition from the Welsh Anglesey mines. Indeed, the *Poldark* stories draw heavily on Cornish history and heritage, which forms the backdrop to the characters' eventful and often turbulent lives. Like its predecessor, the current BBC adaption is shot in many stunning locations throughout Cornwall. Three former metalliferous mines owned by the National Trust in west Cornwall that now form part of the UNESCO Cornish Mining World Heritage Site, were selected for use in the series: Botallack Mine portrayed the fictional 'Grambler Mine' - with the aid of considerable computer graphics - while West Wheal Owles was set dressed as 'Wheal Leisure' - the tin mine which Poldark rehabilitates on his return to Cornwall. Levant Mine was also pressed into use as the setting for 'Tressider's Rolling Mill'.

The original 1970s programme made international stars of its principal leads Robin Ellis and Angharad Rees, who portrayed the brooding Ross Poldark and the striking Demelza Carne. The current series features two internationally prominent actors in the form of Irish born star Aidan Turner, who has appeared in *The Hobbit* and the series *Being Human*, and flame haired beauty, Eleanor Tomlinson, whose roles include the block-buster *Jack the Giant Slayer* and the BBC drama *The White Queen*. Both have proved a huge hit with viewers, in particular Turner, who has been the subject of many watercooler conversations since gracing our TV screens as the eponymous, sultry Cornish hero. Indeed, much attention has

'The opportunity is there to be seized. Poldark looks set to be a massive hit and with twelve novels in the series there is potential for it to run and run'

been given in the UK print media - no stranger to frivolity - to Turner's topless scything scenes outside *Nampara*, the Poldark ancestral home. Levant Mine has even considered introducing scything 'workshops' for volunteers to help manage its on-site vegetation!

While the Bristol based company Mammoth Productions had high hopes that their new interpretation of the stories would be a success, no one knew if the inevitable comparison with the original series, extremely popular in their own right, would serve to limit its appeal. There has been no such problem in this regard however, and interest in Cornwall as a tourist destination has increased notably in recent months.

Visit Cornwall, the tourism body for Cornwall, has noted a 65 per cent increase in web traffic to their site, and one of the mines depicted in the series, Levant, in West Penwith, has recorded a dramatic increase in public interest. Attendance figures for the Easter period were up by 90 per cent over the same period in 2014, with coach parties attending all eager to absorb the Poldark atmosphere. The Cornish Mining World Heritage website has similarly recorded a major web traffic increase, 341 per cent when comparing the figures for the months of February, before the series aired, and May, with the majority of these being new users. While this figure is indeed impressive, it is in part due to the publicity which has been garnered locally concerning the World Heritage Site commissioned feature film 'TIN', which went on general release in April. However, it is certain that the World Heritage website and its component attractions have significantly benefitted through the 'Poldark effect' at this time.

Malcolm Bell, head of the Cornish tourism body Visit Cornwall, welcomes the exposure *Poldark* has given: 'The opportunity is there to be seized. Poldark looks set to be a massive hit and with twelve novels in the series there is potential for it to run and run'. It has now been announced that the principal lead actors have signed for a five year production, so there is great scope for sustained interest.

In recognition of the considerable popularity of Poldark, the

World Heritage Site team are producing a free pictorial guide which sets out the various filming locations in Cornwall, including the mine sites used. Mammoth Productions have been very supportive of this and it is hoped that the lure of *Poldark* will bring new audiences to Cornwall and west Devon's internationally recognised mining heritage.

#### Ainsley Cocks

Ed's note: Aer Lingus now fly direct from Dublin to Newquay Cornwall Airport with up to five flights per week from late June, making it easy to visit Poldark country, so what are you waiting for?





Mammoth Productions scene from 'Poldark' at West Wheal Owles (below) © BBC / Mammoth Productions; Botallack mines (top left), in 2014. Right, the Poldark locations guide produced by the Cornish Mining World Heritage Site



## Cash for Killhope: Importance of Museum Sector Recognised (25/02/2015)

THE North of England Lead Mining Museum has received £81,327 from Arts Council England. The cash for the industrial museum in Weardale, County Durham – also known as Killhope – comes from a resilience fund established by the Arts Council specifically for museums. Sarah Maxfield, area director of Arts Council England North, said: 'Our museums resilience fund supports museums by enabling them to become more sustainable and robust, whatever their size, and helping them to offer improved experiences for both audiences and artists.'

Meanwhile, a newly published report by Arts Council England into the economic impact of the museum sector found that it generates £2.64bn in income and employs more than 38,000 people. The report gave the example of Beamish, the living museum of the North, based in Beamish, County Durham, which it said spent £2.35m in 2012/13 on goods and services, excluding staff costs. About 70 per cent of this spending is deemed to be local, including trade with small firms and employing contractors.

The Arts Council commented: 'With continued support from local authorities, Department for Culture, Media and Sport and other public and private funders, museums can play an ever more important role in our economy and communities.' http://www.thenorthernecho.co.uk/news/11828142.Arts\_council\_cash\_for\_NE\_museums\_as\_economic\_impact\_of\_sector\_is\_revealed/

## Modern Mining Threatens the World's Oldest Gold Mine (21/04/2015)

A recent court case in the Caucasian state of Georgia highlights the conflicts that are more likely to arise in the future, as Europe will be forced to open new mines in the search for minerals, particularly rare earths. Sakdrisi is thought to substantiate the story of *Jason and the Argonauts* and their quest to find the Golden Fleece, for this mine, dating to the Bronze Age, is acknowledged to be 5,000 years old and is thus the oldest known gold mine in the world. It was declared a cultural heritage site and archaeological and scientific excavations by German and Georgian experts began there in 2006.

However, its status was revoked in 2013 by the Georgian Ministry of Culture and Monument Protection in order to allow RMG Gold, a Russian-owned mining company, to exploit the site for the remaining gold, destroying vital archaeology and prompting widespread protest rallies. RMG Gold has been accused of exploiting the mine without regard to the environment or the historical treasures at the site and the Georgian government of putting profit before heritage. Detractors of the mine's cultural status claim there is no scientific evidence for its alleged antiquity which is strongly disputed. The Appeals Court recently upheld a decision by Tbilisi City Court that ruled invalid a decision by the Culture Ministry to lift Sakdrisi's protected heritage status. The mine's fate is closely tied up with that of the 3,000 men employed by the company. The protesters have vowed to fight on. http:// ellisoncenter.washington.edu/features/earth-day-georgianenvironment-heritage-at-risk-as-rmg-gold-exploits-sakdrisi/

#### MHTI CONTACT DETAILS

Registered Address: c/o Natural History Museum, Merrion Street, Dublin 2, Ireland

Registered in Ireland as Company 340387. Registered Charity Number 20047481

Chairman (matters of policy): Alastair Lings, alastairlings@yahoo.co.uk, home 'phone +44 1896 757861, mobile +44 7763 850087

Secretary (corporate matters, membership): Nigel Monaghan, c/o Natural History Museum, Merrion Street, Dublin 2, Ireland, email: <a href="mailto:nmonaghan@museum.ie">nmonaghan@museum.ie</a>, mobile 087 7985570

Editor – Newsletter/Journal: Sharron Schwartz, home 'phone, 0404-32580; sschwartz@era.ie

Treasurer (accounts, membership): post currently vacant – contact Nigel Monaghan

**Bibliographer (new entries): Paul Rondelez,** <u>prondelez@yahoo.com</u> **Archives: Matthew Parkes,** <u>mparkes@museum.ie,</u> mobile 087- 1221967

Memorials Registrar: Stephen Callaghan, 00447849054344, (from ROI), stecallaghan@gmail.com

Area Contacts:

Northern Ireland: Stephen Callaghan, (from ROI) +353860704000, stecallaghan@gmail.com

Sligo: Mick Carragher, mobile 086-3665423, <u>michaelcarragher11@eircom.net</u>
Galway & Clare: Barry Flannery, mobile 087-2930737, <u>barryflannery@gmail.com</u>

Wicklow mines (Glendalough etc) and Silvermines: Martin Critchley, home 'phone, 0404-32580; mobile, 086-8146956, mcritchley@era.ie

**Avoca & 20thC mines/exploration: Nick Coy**, home 'phone 045 866400, mobile 086 3706731 <u>nickcoy@eircom.net</u>, 16 Lakeside Park Naas Co Kildare. For Guided walks around Avoca contact me as above .

Castlecomer: Seamus Walsh, <a href="mailto:swalshminer@eircom.net">swalshminer@eircom.net</a>, 14 Maryville, Castlecomer Co. Kilkenny, 056-4441504 mobile 087-9619793

Slieve Ardagh: Margaret O'Brien, Kyle, The Commons, Thurles, Co. Tipperary, <u>muinteoirtipperary@gmail.com</u> or through the group at oldschoolcommons@gmail.com

Waterford & Wexford: Post currently vacant, contact Nigel Monaghan

Allihies: Theo Dahlke, 0863103744, theo.dahlke@gmail.com

[COUNTRY CODE FOR IRELAND IS +353, AND THE FIRST ZERO OF AREA/MOBILE CODE IS OMITTED]