



AUSTRALIAN MINING HISTORY ASSOCIATION

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Editorial

Sadly we have recorded yet another bereavement from among our ranks (see below). While not wishing to sound alarmist we must take cognisance that our membership is aging, something that is noticeable when the membership profile is studied, for every year the proportion of retirees to members who are employed increases. This is also a phenomenon shared with other organizations and it is difficult to see what can be done. Perhaps the only answer would be for our current members to canvas younger acquaintances, employees or students, in a bid to generate interest, so as to enable us to change the profile. Any bright ideas welcome!

Forthcoming Conferences

8th International Mining History Congress, Redruth, Cornwall, 12-15 June 2009

Nearly 50 papers that deal with mining activity around the world have been presented to the conference organizers. It gives pleasure to note that the largest country contingent is from Australia and that the vast majority of these are current members of the association - so it should be a home-from-home meeting for many of us when we meet on the soil from which much of our mining heritage originates. For details, including conference tours see:.

www.huss.ex.ac.uk/history/imhc/index.htm

NAMHO Mining History Conference 19-22 June 2009

Also in June, NAMHO's conference that focuses on mining landscapes will attract many of those attending the international meeting. A relatively short journey to Matlock in Derbyshire should see them in lead-mining country where a number of underground and mining site trips have been organised. Details of the programme are available on the PDHMS website, www.pdmhs.com For accommodation see website: www.visitderbyshire.co.uk

AMHA 15th Annual Conference, Lithgow, NSW, 24-30th October '09.

Leonie Knapman has set her shoulders to the wheel to ensure this will be another memorable conference. Registration forms will be available when final costings become available. If wishing to present a paper, please forward title and abstract to the Secretary. **Abstracts not to exceed 250 words and to be submitted by 31 July** (though note that last year we had too many submissions for the allotted spots – luckily there were a couple of withdrawals that helped save the day. So, the earlier your submission, the greater your chances of having it accepted.

The following information will help you to plan:

2-day tour – Sat 24th & Sunday 25th October. Hill End - Safala - Visit Gold mine tunnel and alluvial sites. Bathurst area - visit Sommerville Collection and Museum - Portland

26th, 27th, 28th, 29th October – conference Lithgow with local visits to museums, mine sites etc.

Friday 30th October day tour – Visit Glen Davis work site – and Delta Power Station.

There will be an overnight stay at Bathurst during the 2-day tour. Arrangements have been made at the Bathurst Explorers Motel, 357 Stewart Street, Bathurst, NSW 2795. Tel. 02-63312966. Email to:

explorer@lisp.com.au for reduced rates.

There are five family rooms containing a double bed in one room and single beds in another – cost \$110. Double rooms at \$86 per couple; Twin Rooms at \$86 per couple, and singles at \$80.

Other alternatives can be found by searching the web for accommodation at Bathurst.

Warning: Leonie has stressed that accommodation may be difficult to find in both Lithgow and Bathurst if left to the last minute – so get in early to ensure you have a bed.

Dragon Tails: Re-interpreting Chinese-Australian Heritage 9-11 October 2009.

Supported by Monash University, the conference will be located at Sovereign Hill Museums, Ballarat. One of the major aims of this conference is to bring together these new historical understandings about early Chinese-Australians, and to consider their place within broader histories of Australia and the Chinese Diaspora.

Papers are welcomed from a wide range of disciplines, including history, archaeology, tourism, cultural studies, education, and museum/heritage studies. Abstracts to be a maximum of 200 words and accompanied by your contact details, etc. Enquiries and

Submissions to Keir Reeves at keirreeves@primus.com.au

Themes include:

- Chinese goldseekers and their legacy
- Developments and issues for Chinese-Australian heritage tourism (regional and urban)
- Everyday life and culture for early Chinese-Australians
- Communicating Chinese-Australian heritage (e.g. education, multimedia, internet technology)
- Early Chinese-Australian formations of politics, identity and citizenship
- Interrogating Chinese-Australian historiography and material culture
- Perspectives on heritage Chinese precincts
- Mapping historical connections between Asia and Australia
- Biographies and oral histories of Chinese-Australian ‘pioneers’
- Creative work that re-interprets Chinese-Australian history

Bits and Pieces

Australian Mining QUIZ

For those avid readers of the newsletter who have spent sleepless nights over the questions posed by our good President in the December edition, the following answer(s) should help you overcome your insomnia:

Answer: KAPUNDA. Yes, eight times Kapunda.

1. What was Australia's first commercially profitable mine? The Kapunda mine began exporting enriched copper carbonate ores in January 1844, and was profitable for most of the next 20 years.

2. Where was the first Cornish pumping engine installed in Australia? A 30" pumping engine from Cornwall arrived at Port Adelaide in September 1847 and was in service at the Kapunda mine in July 1848.

3. What was the first place in Australia where acid leaching was used? A Henderson Process copper chloride leaching plant was installed at Kapunda in 1867 and operated for ten years, although it was never really successful.

4 & 5. Where is the oldest surviving mining building on the Australian mainland, and where were Australia's first mining company houses built? Same answer - two row houses called the Mine Square Cottages were built at the Kapunda mine before July 1845 to house the workforce. Part of one building still stands.

6 At which Australian mine was the first horse whim used? Kapunda in 1845.

7 Where was the first viable copper discovery made in Australia? Copper ore was discovered at Kapunda in 1842. Assays were done in Swansea the following year before copper production commenced in 1844.

8 What was the first Australian mining field to be served by a railway? The Great Northern Railway from Adelaide opened to Kapunda on 13 August 1860.

So now you know!

PS – it's only a rumour that Peter has a handsome retainer from the Kapunda Tourist Board.

Gold! Gold! Gold!

No, not the Olympic kind but a warning piece on the subject that attracted the eye of our keen sighted regular contributor Ruth Kerr. The following is taken from an article by Robin Bromby in *The Outcrop*, 12 March 2009:

‘EVEN your resident gold bull – me – is worried about the headlong rush to explore for the yellow metal.

Apologies for mangling Shakespeare, but the warnings of the three witches in Macbeth – those representing darkness,

chaos and conflict, all three signalling impending doom – are apposite when looking at the present gold scene. We've all been writing about how well the gold stocks have been doing. We've all seen how – comparatively – easy it has been for gold companies to raise money, even in this climate. But isn't this starting to look like a bubble, just like the uranium and phosphate ones before it?

There have been growing concerns about a gold bubble in recent weeks, but these have been mainly concerning exchange-traded funds, futures and other derivatives. But there seems, in parallel, to have been enthusiasm by traders and analysts for gold stocks. What seems to be happening now is that everyone is jumping aboard the gold train, and investors are only too anxious to buy tickets. The producers and near producers are in one category, but now there's a mob of unruly juniors crawling over any gold story they can find. The dip below \$US900 an ounce this week is a sign of the investment perils surrounding gold. Not the physical metal, which some of us believe should be owned by every serious investor – not in great quantities, but just enough to act like an insurance policy.

You really don't want to buy physical gold for investment returns; gold stocks/ETFs and derivatives do that job much more effectively. Rather, see a gold bar or coin as something like your house insurance policy. You don't mark to market your insurance policy on a daily or weekly basis, nor should you with physical gold. It's there should the worst happen.

The other advantage with physical metal is that it's the one – the only – gold investment that cannot be affected by a bubble. You can expand the derivatives plays and you can, as we are seeing, get into the gold exploration business without too much trouble. But you cannot suddenly expand the amount of physical gold in existence.

The danger with the current dash to gold by a growing number of companies is that we will end up with the same mess when suddenly the number of uranium plays went well into the three figures – the sector will eventually be tarnished in investors' eyes by the inevitable failures and go-nowhere juniors.

There's nothing mining investors like more than a good gold rush. We had them in spades in the 19th century throughout the country, and there was a big surge of interest in gold plays in the 1980s until the crash in '87. They always end in tears for most of those involved. One incident that seems largely to have been forgotten was the Northern Territory gold rush of 1930 when the metal was just getting back into favour with the start of the depression and the federal government had instituted a gold bounty (which was soon dropped as Canberra ran out of money).**

The rush centred on The Granites, 600km from Alice Springs, later the name of the large gold mine to be worked by Normandy Mining more than 60 years later. Word got around over Christmas 1929 about a gold find and the rush was on. The Ghan train from Adelaide to Alice Springs, which normally ran with a handful or no passengers, was now fully booked for every trip as prospectors headed for The Granites. This gold rush received wide publicity internationally and was followed by many US newspapers.

The *Herald* in Melbourne and the *Sydney Sun* jointly financed a geological expedition to check out how much gold was there. Two years later, according to a report in the *Chicago Tribune* of January 6, 1932, it was a different story. "Australian gold rush turns into tragic fiasco" shouted the top deck of the headline. "Thirsty, hungry, hundreds start trek home" added the next deck.

Professor CT Madigan of the University of Adelaide was sent by the Australian newspapers and he described the gold rush

as "a tragedy". "Nothing has been found of any value at all," he said.

Several companies were also established to mine gold. They all went bust, taking £300,000 in investors' money with them.

That sum was roughly equal to the revenue in 1930 of the Commonwealth Railways, or the excise on petrol earned that year by the commonwealth, so it wasn't peanuts.

The history of gold in Australia is one long tale of woe, punctuated by some brilliant successes. Keep this mind, too, before we get too excited, that it is now a full decade since the last large and new gold mine – Thunderbox – was brought into production.

Other mines have started or been revived, but our batting average for large new discoveries is worse than that of the Bangladeshi tail enders.

Caveat investire! (That's "let the investor beware" to you.)'

** Ed's note: think there's a misreading of history here, for the gold bonus ceased to function when the price of gold increased because of the devaluation against the Pound, the shift of Britain from the Gold Standard, and depreciation of the US dollar. All these forces pushed up the price of gold – from £4.11s.6d per ounce in 1930 to £8.5.11 in May 1935. This increase in price made redundant the rationale of stimulating the gold mining industry with a bonus.

Congratulations

Wendy Carter recently travelled to Darwin to receive a gong for 'Excellence in Customer Service' in the Australia Day Centrelink Awards. The award which was for her work in the North Australia Area, has also appeared in lights on a board that has been installed in some deep recess in darkest Canberra.

Many Thanks

Just by coincidence there were two of us who received mention in the Australia Day

Honours list: Keith Johns received the OAM for 'service to the minerals and energy resources sector', while yours truly received the award for 'services to veteran cycling and mining history'.

I greatly appreciate the honour and would like to thank everyone who has supported me over the years. The award reflects the contribution of everyone to the discipline and hopefully it will help bring to the attention of the public to the fact that the AMHA exists and is making a positive contribution to mining related topics. So again, many thanks to everyone for your support.

Incidentally, despite the protestations by Keith Johns that the medals were awarded to us both for bravery when facing the hazards of the Duke of Cornwall Hotel, Moonta (see articles 'Coat Hangers' and 'Response' in Newsletter 50, No. 3, 2007) there appears to be no substance to support his conclusion.

Mel Davies

The Bush Geologist

Ken McQueen forwarded the following poem written by A.E. (Darky) Wallace from Meekatharra, WA, in the early 1930s. As Ken points out, 'those were the days when geologists really were "bush" geologists. Some say they haven't changed much but at least back then they went into the bush'. The sentiment and rhyme are much in the tradition of 'The Sydney Geologist – A Tale', submitted by Ross Both in our Issue 51, December 2007 edition of the Newsletter.

When your tucker's nearly ended,
And your prospects up to mud,
Your boots won't stand mending,
And the 'roo won't stir your blood.

When you've tried a crosscut east and west,
And drove both north and south,
And disappointments not impressed
The beauty of your mouth.

There's a real good slap-up tonic,
For that feeling when you've missed,
That's the up-to-date opinion,
Of a Bush Geologist.

Though he's never found a mine himself,
Of that he'll never think,
But he'll tell you how she's dipping,
And the proper place to sink.

There's been a breakdown in the Country,
'Twirt the diorite and the schist,
Where the reef is That's according
To the Bush Geologist.

He's always got a get-away,
For reefs that can't be found.
He can always tell you after,
By the nature of the ground.

There's been a big disturbance,
And it's pushed her further west.
It's nice to hear these blowhards,
When they get it off their chest.

If she's not where she's been pushed to,
Then she must have took a twist.
The reef was never formed to dodge,
A Bush Geologist.

Sometimes when one bloke loses,
Another fellow gains.
So I've turned it up and left it,
For them chaps with all the brains.

I've chased those fancy floaters,
'Till I'm "Stoney" stiff and stumped.
And you'll find my final landmark,
Where my bit of gear was dumped.

And the reef that shed those floaters,
Still on the missing list,
If it's not Well someone's found it,
Perhaps the BUSH GEOLOGIST.

Information Wanted

Our good friend Philip Hart from across the Tasman is keen to again resurrect the dead and seeks information on a man described as a 'Pakeha/Maori by the name of Joseph Harris Smallman, who before arriving in New Zealand in the mid-1860s was an

alluvial miner in Australia. If you have any information on this gentleman could you please contact Philip at:
<prhart@waikato.ac.nz>

Journal

Just to note that we are still calling for papers and that it would be appreciated if contributions could be received by mid July at the latest. Our refereed contributions are looking a bit thin at the moment and any submissions in this category would be especially appreciated.

New Publications

Those wishing to familiarise themselves with of the history of our Lithgow conference location might care to purchase the following publication that will be launched in April 2009. Proceeds of the book will go to a good cause, the maintenance of the NSW State Mine Museum. The book will retail at \$29.95 but there is a special pre-publication offer of \$24 (add \$10 postage & packing per book) that can be obtained by downloading an order form before the end of March at www.statemine.org.au

Details as follows:

Ray Christison, *A pictorial history of the Lithgow State Coal Mine*, A4, 124 pp, over 110 images in black & white and colour.

Coal seems to be the flavour of the month for yet another excellent publication, this time on the Victorian coal industry has been produced by Jack Vines, *Coal Mining Heritage Study in Victoria*, The Heritage Council of Victoria, 2008, A4, 288 pp, (also in CD). This is a sterling work that not only chronologically outlines major developments in the coal industry throughout Australia but which predominantly contains a wealth of detail on the industry in regional Victoria. Jack Vines, has not only provided brief historical detail of mining developments and sites from the early discoveries in the 19th century up to 2005, but has augmented the information with geological detail, cross-

sections of various mines, information on transport, production data, social conditions, a plethora of photographs and summaries of the heritage value of surviving sites. The publication is well backed up with bibliographical information and copious footnoting to support his work and will prove a boon to all those interested in researching the industry.

Bereavements

Vale Jim Besleme (1937-2009)

Following the news of his illness as reported in the December newsletter, it is our sad duty to report the death of member Jim Besleme. In fact his death on 7th January coincided with the mailing of the newsletter reporting his illness. The following obituary is written by Brian Hill who enjoyed a close friendship with Jim:

‘Many at our 2005 conference in Bendigo will recall the Yank who attended. This was Jim Besleme, who made many friends during his stay. His keen interest in the conference, breezy good nature, infectious grin, and Brooklyn accent delivered in a gravelly voice, endeared Jim to all.

Jim enjoyed the conference and his time in Australia so much that he booked to attend our 2008 conference in Tasmania. Two weeks before he was to depart USA he was diagnosed with lung cancer, causing him to cancel his trip and commence urgent treatment. Jim's battle ended in January.

My wife Nola and I first met Jim and his lovely wife Rita at the 2001 American mining history conference in Butte, Montana, and we soon became warm friends. Sadly Rita predeceased Jim in 2003.

Every year when we attended the American mining history conferences Jim arranged a wonderful tour for us of various historic mining fields, chauffeuring us through the Arizonan copper camps where he had worked, the historic mining towns in the spectacular San Juan mountains, and the Michigan copper belt on the Keweenaw

Peninsula, the cradle of copper mining in USA, where copper mining started in the same year as Burra - but lasted 100 years longer.

Like many members of the MHA, Jim came from the mining industry. He had a BSc in mining engineering and an MSc in engineering administration from the University of Missouri. Initially he pursued a career as a hard rock miner, working as a mining engineer in copper mines in Arizona and Bute, and a bauxite mine in Greece but later he switched to mining machinery sales, working as an engineer for the renowned Joy Manufacturing and Sullivan Machinery company. He was later employed by Knopke Brothers Contractors Supply for 14 years, and then Hertz Equipment Rental which acquired this firm, until his retirement in 2001.

His main activity in mining history involved working on the preservation of the historic White Knob copper mine site in Idaho. As a volunteer researcher for the US Department of the Interior he collected oral histories of the mining community of Mackay, Idaho.

In addition to his interest in mining and mining history, Jim was a railroad enthusiast and very keen on logging railroads and narrow gauge railroads, and as a researcher he contributed to the logging journal *Tall Timbers Short Lines*. He was president of a train enthusiasts' group, Mid-West Missouri Railfans, and he organised numerous activities to promote a wider appreciation of trains and railroading.

Jim is recalled by his many friends as a fine person, and a considerate man who never said an unkind thing to, or about, anyone. He will be sadly missed."

Brian R. Hill

And the following tribute to Jim was written and presented to members of the American Mining History Association by our member and President of the American Association, Ron Limbaugh.

'One of our great friends and colleagues has gone to the golden hills. Jim was an outstanding member of our organization and a boon travel companion. He willingly stepped forward when the call came for staff volunteers. For three years he served on the Nominating Committee, and recently worked with Jay Fell on the new Budget and Finance Committee.

Voluble, witty and warm-hearted, he was generous and considerate to the needs of others, an engaging personality in conversation but also an active listener. The 40 emails I received from him in the last 2 years attest to his active involvement in the organization and his conscientious participation in the decision-making process.

Here's to Jim: a good man who will be sorely missed and long remembered'.

Jim Besleme and the winder at the Soudan mine, Minnesota, during the 2008 MHA conference in the Mesabi Range iron ore region.



Photo provided by Brian Hill

Eds Note:

Jim leaves daughters, Katherine Besleme and Irene Lobstein, and a son Harry

Besleme, who are scattered around the world, living respectively in Bangkok, Moscow and Missouri. Our condolences go out to them and the wider family.

Nola Hill and Jim Besleme on the road to the Camp Bird mine in the San Juan Mountains, Colorado.



Photo: Brian Hill

Raymond Leslie Whitmore (1920-2008)

The contribution of Raymond Whitmore to mining history and heritage is deserving of an obituary. This contribution has been kindly presented by our President:

‘Emeritus Professor Ray Whitmore died in Brisbane on 20 December 2008. He was for many years Professor of Mining and Metallurgical Engineering at the University of Queensland, and developed an enthusiasm for the history and heritage of engineering which at the time was unusual within the discipline. Although never a member of the AMHA, his published works made a distinguished contribution to Australian mining history. Inspired by the work that was being done in Industrial Archaeology in Britain from the 1960s onward, he sought to foster professional research into mining, industrial and

engineering works, and the conservation of notable examples. His persuasion contributed to the conservation of the Chillagoe smelters and the coke ovens at Tivoli near Ipswich, as well as the reservation of the historic minesites of the Palmer Goldfield from mining operations. He used his membership of the Institution of Engineers Australia and the Australian Institution of Mining and Metallurgy to create an ongoing interest in engineering heritage within both organisations. He was a Councillor of the Royal Historical Society of Queensland, an early member of the Queensland Heritage Council, and wrote a great number of conference papers and professional journal articles on aspects of industrial heritage conservation. His most substantial historical work was the three-volume *Coal in Queensland*, a history of the Queensland coal mining industry to 1925, published between 1981 and 1991’.

Peter Bell

Newsletter Delivery

Following the message in the previous newsletter there appears to have been some misunderstanding by those members who responded regarding the delivery of newsletters. A few people stated they would be happy to receive newsletters by email, when the message was that members if they wished could elect to look up the **newsletter on the web**. Past experience has shown that because email addresses are frequently changed this system of communication leads to problems, not least of which is the one whereby bouncing messages clog up the sender’s works! A matter of web constipation that makes it less painful for the Secretary to use the time-honoured snail mail form of delivery! But many thanks to the few who did respond.

NOTICE

Have you paid your 2009 dues?

MJD/March’09



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Editorial

With the global recession playing havoc even as I type this missive - with General Motors facing bankruptcy - an impossible scenario even a few months ago - and with world trade and finances in chaos, is there any wonder that the mining world is also caught up in the downward spiral of events? Not since the 1930s have world economies taken such a thumping, and with the greatly accelerated rate of communication since the last Great Depression, the effects have been more rapidly transmitted. The one salving thought is that the mining industry has always experienced fluctuations in fortune and every decline is followed by an upward shift. It is also true that no matter what, the value is still in the ground, and while that might not be of great comfort to current investors and owners, the day will most certainly come when fortune will again shine on the industry. As historians of the industry, the current climate should come as no great surprise!

But to show that every cloud has a silver lining, even in these dark times, the following excerpt from the *Mining News* of 27 May 2009, sent in by Ruth Kerr, will no doubt gladden despondent hearts:

‘CHINA is taking a long-term view with the Sino Iron magnetite project in Western

Australia’s Pilbara, with exports expected to begin next year. Kate Haycock reports from Cape Preston.

When CITIC Pacific Mining exports its first tonne of magnetite concentrate from the Sino Iron project at Cape Preston, it will change both the nature of Australia’s iron ore industry and the Pilbara. Few new projects in Australia come close to matching the size, expense and technically challenging nature of the project.

From the ultra-class mining fleet utilising the biggest trucks and shovels in the world, the huge in-pit crushers, six of the world’s biggest AG mills and ball mills, the highly efficient gas-fired power station and the plan to build a 2.6km breakwater at Cape Preston, to the new port infrastructure and 25km slurry pipeline, the development will end up costing around \$US3.85 billion (\$A4.9 billion). And while magnetite is more expensive to produce than the mainstay of the Pilbara - haematite or direct shipping ore - the vagaries of the iron ore price do not concern CITIC Pacific Mining’s chief executive officer, Barry Fitzgerald.

“Surety of supply is key,” he told journalists yesterday on a tour of the project. “This is a 25-year project and we have the rights to an additional 4 billion tonnes, and this means

this project is a long-term, stable supply of quality iron ore. "I think we need to look beyond the next year or so and see this as a long-term production."

Fitzgerald also said he believed the Chinese iron ore market would continue to grow and be stable in the long term.

CITIC – owned by a Hong Kong-listed trading house and miner, which is in turn owned by a Chinese state-backed firm – is looking to export around 27.7 million tonnes of magnetite product each year from the operation over a 25-year mine life. ...

The project will mine a massive magnetite pit some 3.5km long, which in size terms is nothing new in the Pilbara. However, the district has traditionally exported higher-grade DSO, not magnetite. Magnetite generally grades around 30% iron while haematite, in some parts of the Pilbara, can grade up to 63% iron. As a result, magnetite ore needs additional processing to create a product that can be used in steel mills.

At Sino Iron, the magnetite ore will go through a multi-stage process of crushing, grinding and concentration. Some of the concentrate will then be transported via a slurry pipeline to the port facilities and shipped directly to China. CITIC also plans to build a 6Mt per annum capacity pellet plant at Cape Preston, which will create direct reduction pellets that can be used directly in steel mills. ...

"The magnetite, while it has to be processed, ends up as a consistent high-quality product, so we have a stable, long-term, high-quality supply," Fitzgerald said.

Carbon savings

CITIC's CEO was also keen to point out that while it takes more power domestically to produce the magnetite, the power savings for the end user are significant – a factor which will become increasingly important in a carbon-constrained world. ... "Magnetite actually has a lower carbon footprint on a worldwide basis between

production and the mining of iron ore and production of the first tonne of steel," Fitzgerald said.

...Also impressive has been the project's timeline – first earth was turned around a year ago, and Fitzgerald said yesterday the company was still planning on first production in the third quarter of next year.

... Even with production expected to start next year, it will take some time for the Sino Iron project to reach full completion, with the pellet plant not coming into production until 2011-12.

... CITIC paid \$US215 million for the rights to mine an initial 1 billion tonnes from the project, and then another \$200 million for the next 1Bt.'

So readers, keep smiling, where there's life, there's hope, and in mining that may mean waiting for the medium or long term for fortunes to turn around.

Forthcoming Conferences

8th International Mining History Congress, Redruth, Cornwall, 12-15 June 2009

With pre-conference tours starting on 8th June, the dozen or so of our members will now be immersed in the cultural milieu of the Duchy. Hopefully we shall have reports of the proceedings to present in the September edition of this newsletter.

AMHA 15th Annual Conference, Lithgow, NSW, 24-30th October '09.

Leonie Knapman has set her shoulders to the wheel to ensure this will be another memorable conference. Registration forms are now available (see enclosed) and with some good sponsorship we are able to provide members with bargain prices. Please return the forms sooner rather than later so that we can more thoroughly plan.

If wishing to present a paper, forward the title and abstract to the Secretary. **Abstracts not to exceed 250 words and to be submitted by 31 July** (though note that last year we had too many submissions for the

allotted spots – luckily there were a couple of withdrawals that helped save the day. We have already received a dozen abstracts, so, the earlier your submission, the greater your chances of having your paper accepted.

Also, book early for the pre-conference two-day tour and get in early if you want convenient accommodation.

Bits and Pieces

Australian Mining QUIZ

In the last newsletter we received the definitive answer to the quiz questions posed by our good President in the December 2008 newsletter. The answer to all questions was **KAPUNDA**. But are there dangers in being so confident? One of our alert members, Ralph Birrell, thinks so, and with State pride at stake has forwarded his thoughts on the findings. As Bart Simpson would say ‘eat your shorts Peter Bell’ for the true answers should all relate to the NSW coalfield. Below are posed the questions and Ralph’s and the ed’s comments in italics.

1. What was Australia's first commercially profitable mine? KAPUNDA.

R.B. - The first commercially profitable mine in Australia was the coal mine operated by the Australian Agricultural Company at Newcastle in New South Wales. The A Pit at this mine commenced production in early 1832 and during that year the mine produced 6812 tons of coal which the company sold to the Sydney market at monopoly prices.

2. Where was the first Cornish pumping engine installed in Australia? A 30" pumping engine from Cornwall arrived at Port Adelaide in September 1847 and was in service at the Kapunda mine in July 1848.

R.B. - The pumping engine installed at the Kapunda copper mine was probably the first pumping engine made in Cornwall, to be installed in an Australian mine, but it

was not the first plunger pump, driven by a steam engine of the beam type, installed in an Australian mine. Such a combination was installed by the Australian Agricultural Company at the A Pit at its Newcastle, New South Wales mine, in mid 1832. This engine, made by R & W Hawthorne of Newcastle, England, operated at 25 psig to produce 24 HP. It was an early design of beam pump with cast iron columns to support the beam, and with a vertical cylinder. The machine could drive a pump and raise or lower a cage/cages simultaneously or separately.

3. What was the first place in Australia where acid leaching was used? A Henderson Process copper chloride leaching plant was installed at Kapunda in 1867 and operated for ten years, although it was never really successful.

Sec's note: – The process was previously mooted for use at the Burra Burra mines in 1858 but following investigation in 1861 it was decided the process would prove unsuccessful when used on the red oxide and ores mixed with lime which were abundant at the mine. It is not certain whether the process was applied and failed or whether it was a paper decision on the costings that determined the directors to reject the process. If the former, then the Burra Burra mine would have preceded Kapunda by some 6 years in being the first place in Australia where leaching was used!

4 & 5. Where is the oldest surviving mining building on the Australian mainland, and where were Australia's first mining company houses built? Same answer - two row houses called the Mine Square Cottages were built at the Kapunda mine before July 1845 to house the workforce. Part of one building still stands.

R.B. - I doubt the correctness of this statement and unable to comment further

until I unpack my notes following a house move!

6. At which Australian mine was the first horse whim used? Kapunda in 1845.

Eds note: Any advances on this folks?

7. Where was the first viable copper discovery made in Australia? Copper ore was discovered at Kapunda in 1842. Assays were done in Swansea the following year before copper production commenced in 1844.

Eds note: What is viable? What is the time period involved? Am I being pedantic or just stirring the pot?

8. What was the first Australian mining field to be served by a railway? The Great Northern Railway from Adelaide opened to Kapunda on 13 August 1860.

R.B. - The validity of this answer depends on the definition of a railway. An inclined plane railway was built by the Australian Agricultural Company in 1832 between the A Pit and the staith (wharf) on the Hunter River. Gravity moved the loaded trucks from the pit to the staith. A horse rode the rails with each loaded train and was then harnessed to pull the empty trucks back to the pit. A steam locomotive was installed in the 1850s to pull the trucks in each direction, by which time additional pits were in operation.

Ralph points out that more information on technical developments at this coal mine and at the copper mine at Kapunda is given in his PhD thesis 'The Development of Mining Technology In Australia 1851-1945', University of Melbourne, 2006. Much of the coalmining info comes from 'Papers of the Australian Agricultural Company' held in the Butlin Archives at the ANU, Canberra.

Are there any more claims to 'firsts' in Australian mining? Who will be prepared to

stick out their neck and face possible correction or cutting words of doubt? Will there be a response from the President? Watch this space in the next newsletter.

Information Wanted

Our good friend Philip Hart from across the Tasman is keen to again resurrect the dead and seeks information on a man described as a 'Pakeha/Maori by the name of Joseph Harris Smallman, who before arriving in New Zealand in the mid-1860s was an alluvial miner in Australia. If you have any information on this gentleman could you please contact Philip at: <prhart@waikato.ac.nz>

Quarrying

We have a request from Celia Pavri of the Institute of Quarrying for information on the clothing worn and the equipment used by quarriers through the ages. If anyone has any information or sources as to the types of tools used, the clothes worn by various workers in the industry, or other information relating to changes in methods used over time then please contact Celia at: "Institute of Quarrying WA Branch" <wa-admin@quarry.com.au>

Journal

Just to note that we are still calling for papers for Volume 7 of the journal, and that it would be appreciated if contributions could be received by **mid July** at the latest. Our refereed contributions are looking a bit thin at the moment and any submissions in this category will be especially appreciated. But before submitting please read and try to follow the stylesheet. This can be found on our web page or can be e.mailed or mailed upon request from the Secretary.

New Publications

Kristin Weidenbach, *Rock Star: the story of Reg Sprigg-an outback legend*, East Street Publications, Glenside, SA, 2008, 333p., \$32.95 (plus \$10 postage). For a signed copy contact the publishers at <www.eaststreet.com.au>

'Rock Star' tells the story of Reg Sprigg in an easy-to-read narrative style suitable for geologists and general readers alike. Reg was once Australia's most knowledgeable uranium geologist. During World War II he worked at Australia's first two uranium mines (Mt Painter and Radium Hill), when Australia was requested by Britain to survey her resources for uranium to produce the world's first atomic bomb. After the war he continued investigations at both sites and helped establish the Radium Hill township and mine.

When he launched his private geological consulting company, Geosurveys, he consulted for Uranium Development and Prospecting which supplied uranium ore from the Adelaide River mine 100km south of Darwin, to the processing facility at Rum Jungle.

Reg was also a pioneer of the petroleum industry. He discovered the great Cooper Basin oil and gas fields and helped set up Santos, and also founded the Australian Petroleum Production and Exploration Association and the Adelaide company Beach Petroleum.

Other career highlights include the first vehicle crossing of the Simpson Desert while doing gravity surveys for Beach in 1962; discovery of submarine canyons the size of the Grand Canyon off the coast of Australia and the world's oldest animal fossils (the Ediacaran worms and jellyfish); and conducting ground-breaking scuba diving surveys of the ecology of South Australian waters.

Reg Sprigg was always at the forefront of his field and only now is the rest of the world coming to appreciate the extent of his endeavours.

Climate Change – a sceptics view

Ian Plimer, *Heaven + Earth; Global Warming: the Missing Science* (Connor Court Publishing, Vic.), 2009.

Our esteemed member Prof. Ian Plimer has recently published a book that will most definitely prove controversial. For the mining minded Ian brings geology into his argument, which is to refute the idea that man's contribution to climate change is of any significance. As Ian states, there is certainly climate change but that has been with us for 4,567 million years! Ian states that he uses history, archaeology, geology and our understanding of the sun, oceans, ice and atmosphere to show that climates always change, the past changes have been far greater and quicker than anything measured at present and that the changes that really create havoc with humans are the periods of global cooling.

Although the book is 503 pages long, has 55 diagrams and 2311 scientific references, it is written for the average person. Each chapter poses fundamental questions about climate, the questions we take for granted. As Ian states, 'I answer these questions. Then I have a chapter summary. This is then followed by a fully referenced chapter text. This makes the book readable at three levels. It is in essence a validated compendium of all that is needed to be known about climate change, past and present'.

Dr Vaclav Klaus (EU President), Lord Lawson (Thatcher's Chancellor of the Exchequer) and Professor Geoffrey Blainey have written cover notes. The book will ruffle feathers because as Ian says 'I stick to the science and ignore ideology, ignore the popular paradigm and ignore politics. However, I use science and those that will attack me will use ideology'. The retail cost is \$39.95 (paperback) and hardback is \$49.95 Ian offered to personally sign any pre-ordered copies. However, this newsletter missed the deadline but as Ian states, if you do get a signed copy, it might prove a valuable last signature, as he is expecting a green fatwah! We leave it to readers to decide the merits of the case.

MJD/June'09



AUSTRALIAN MINING HISTORY ASSOCIATION

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Patron: Professor Geoffrey Blainey, AC

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Editorial

Time flies, and it seems only yesterday that Australia saw one of the greatest booms in its history – for 40 years ago this month occurred the Poseidon boom when fortunes were made (and quickly lost) with the onset of the nickel boom. The discovery of nickel by Western Mining Corporation at Kambalda in early January 1966 saw a rise in exploration activity but it was the discovery of nickel at Windarra in Western Australia by a little known Adelaide based company that caused the stock market to go crazy, causing a hectic and wild spate of speculation which snowballed into even more exploration and attracted the interest of investors from around the world.

The discovery coincided with soaring metal prices because of the Vietnam war and disruption of Canadian nickel stocks due to industrial problems. While not surprising that the price rise for nickel would cause a rise in investor interest, the response was mind boggling, as Poseidon shares surged from \$1.85 in September 1969 to reach a peak of \$280 in February 1970. Paper millionaires were made overnight, and some 'real' millionaires emerged, but those who hung on to their scrip were to face the inevitable rapid plunge in value as questions were asked about the true value of Poseidon's assets. In the short run the discovery had attracted

vast wealth to Western Australia, and to Australia in general. In the long run the residue was seen in an increased interest in Australian mining development, though at a more sedate and realistic level than during the boom.

One positive came out of the saga, for in 1974 the Rae Committee set up to investigate the phenomenon, reported that unsubstantiated rumour linked to unbridled speculation had triggered the boom, rather than the actual value of the finds. As a result the Australian Securities Exchange was established which led to benefits for investors through the setting up of a system to regulate the way that mining companies were to report their results.

Today, we have just gone through another mining boom (and inevitable bust!), though even in the West, the magic levels of the Poseidon Nickel Boom were never exceeded by what is recognised as 'the China led Boom' of the 'naughties'. But history has a tendency to repeat itself, as all informed mining historians are aware.

Forthcoming Conferences

AMHA 15th Annual Conference, Lithgow, NSW, 24-30th October '09.

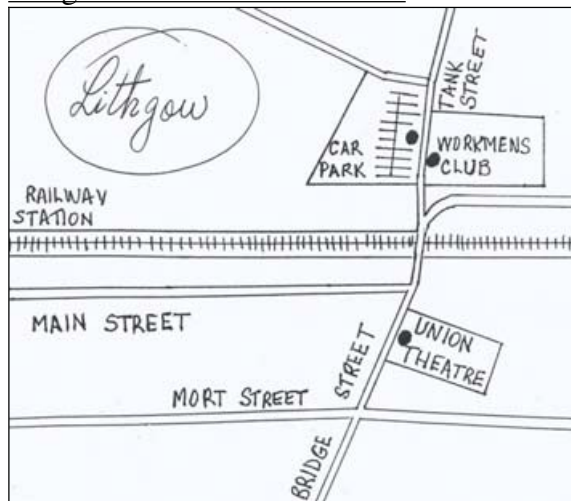
Leonie Knapman has organized the forthcoming Lithgow conference down to the final cup of tea. All that she now requires is for all you budding conference

attendees to commit yourselves by putting pen to paper, to sign your cheques, and to return the registration forms. Please don't leave the task to the last minute, as there are still bookings to be made and we need firm figures to finalize arrangements.

For your information the following housekeeping information needs to be digested:

- 8.00am Sat 24 Oct – 2-day tour participants congregate at Lithgow Workmens Club (Or 8.15am at Caravan Park).
- 6.30pm Sun 25 Oct – Reception and registrations at Union Theatre, Bridge Street.
- 9.00-9.30am Mon 26 Oct – Registrations followed by Conference at the Workmens Club.
- If you have a problem getting to the venues please ring Leonie Knapman at: 02-48711804, or e.mail leonieknapman@bigpond.com
- Would all those presenting papers and using power point please send their illustrations by e.mail or on disc to Greg Drew at: 25 Rokewood Ave, Belair, SA 5052; e.mail: gldrew@bigpond.net.au

Lithgow Conference Locations



NOTE: We still have a few spaces left on the programme for paper presentations. If you have an offering it will be gratefully accepted. If you'd like to contribute to the

proceedings, please e.mail the Secretary with an abstract (no longer than 250 words).

ANNUAL GENERAL MEETING

As noted in the Lithgow conference registration form, the AGM will take place at 5.45pm on Wednesday 28 October at the Lithgow Workers Club. Please note the following special items for discussion:

- 1) From the Treasurer for consideration – *'that the financial year be changed to 30th June after the current financial year ends on 31 December 2009'* (this is to conform with the directive of Business Affairs that the audited accounts shall be presented to the members within three months of the end of the financial year. As most of our AGMs take place from July to the end of September this will save us from paying to seek permission for a late presentation of the accounts).
- 2) From the President: *'That item 8.4a of the Constitution be changed so as to add a Vice-President to the list of members included in the Executive'*. The clause to now read *'The Executive Committee shall be composed of: (a) A President, a Vice-President, a Secretary and a Treasurer'*.
- 3) Would those wishing to **re-nominate for a place on the committee, or who wish to nominate for a position**, inform the Secretary in writing or by e.mail. Nominations may also be taken from the floor for those who are present at the meeting.

New Publications

Geoffrey Russell, *Water for Gold: The fight to quench Central Victoria's goldfields*, Coliban Water, Australian Scholarly Publishing, North Melbourne, 2009, 288pp, \$44.00.

This is an excellent account of the problems faced by miners and agriculturalists in central Victoria during the 19th century and beyond. The author looks and describes the difficulties brought on by limited water supplies and the efforts made by various individuals and bodies to

resolve the problems. The book will be reviewed in our forthcoming journal.

Brief report on 9th International Mining History Congress, Cornwall, and NAMHO Conference, Derbyshire, June'09

This is a much-abridged report on the recent International Congress held in Cornwall and of the Matlock Conference held a few days later, from our roving jet-setting correspondent, Nick Williams. Afraid that space dictated that a very interesting and indeed poetic work had to be cut, especially all the bits about the flowers (!). But see Nick if you want a full version.

“The two conferences were very different, but we enjoyed them both very much, especially the pre-conference tours from Redruth, which took place between the 9th and 12th June. Many delegates stayed in the Penventon Hotel, and there was a touch of Fawltly Towers about the Penventon, especially in the maze of corners and corridors, and the mysterious workings of the showers, as Brian Hill and Criena Fitzgerald can attest. But the gardens were beautiful with lush green lawns, often occupied by several squirrels and a small flock of jackdaws, who behaved like overgrown apostle birds.

Before the pre-conference tour, Roger Burt and Mick Atkinson gave us an overview of Cornish history, geology and mining, emphasizing the way the production of important minerals varied: tin was the earliest mined, giving way to copper, the main earner till the mid C19th, when the US and Chile became dominant. Lead was also important, and some mines produced valuable by-products of arsenic, wolfram, cobalt, bismuth and uranium. Cornwall also led in technological advances, particularly in the development of efficient steam engines.

For the next three days we were taken around in buses, which did improve visibility over the rampant hedges. The tours were enhanced by the weather, bright and sunny most of the time, with one half

day of rain and a few drizzly patches – we were very lucky. Highlights include:

- Walk up **Carn Brea**, a rugged granite viewpoint, to look out over chimneys, mine buildings, spoil heaps and railways, which mark the dozens of mining leases in this small area. The valley to the north has been intensively mined for >1000y, and the **Great Flat Lode** (Cu, Sn) runs to the south. At the far end of Carn Brae ridge is a privately owned castle, now a restaurant, which may date from Norman times. Some of had a meal there on Tuesday night, with candles, good food, buckets of atmosphere and a stunning view.

- **Wheal Coates** (Sn, 1690's – 1890's), ‘the second most photographed mine site in Cornwall’, with it's engine house half way down the cliff, silhouetted against blue water and lines of surf. Arsenic calciner.

- **East Pool Engines and the Cornish Mines and Engines Discovery Centre.** The Centre opened specially for us, and we had a first-class guide. The magnificent pumping engine, almost complete, was built in 1892 by Harvey & Co. Ltd., of Hayle, and we climbed to the top floor of the engine house for a close inspection of the 52.5t beam – amazing. East pool was one of the greatest of the Cornish mines, producing a wide range on minerals. Then across the road to see **F W Michell's** 1887 beam engine working. It was a truly awesome experience to be close to such silent but massive power – quite hypnotic just gazing at the beam, moving majestically and almost silently.

- Wednesday's trip in east Cornwall/west Devon took us past the vast St Austell china clay deposits and the south border of Bodmin Moor to **Devon Great Consols** (Cu, As; 1844-1903). This mine made a fortune for it's owner, the Duke of Bedford, and was the biggest copper mine in the world in the 1840's – 50's. We explored the vast tailings dumps, finding some good specimens, and entertained by hair-raising stories from Rick and Mick of exploring the workings years before.

- Down to **Morwellham Quay** on the river Tamar, once a major port and transport node, especially for Cu and As from Devon Great Consols. Began with a train trip into the George III and Charlotte Cu mine, which dates from ~1700. The train runs along the fourth of eight levels, the lowest for natural drainage, the lower eight extending underground into Cornwall. Unfortunately there wasn't time to explore the entire site, but most of us went aboard, and admired, the small ore ketch *Garlandstone*, found at another site, and now beautifully restored.
- Afternoon visit to **Minions**, highest village in Cornwall, in the **Caradon Mining Area**, led by local expert Peter Stanier, who supplied us with excellent notes. It happened to be the centenary of the start-up of a new Holman steam pumping engine in Caradon, and to celebrate, the Puffing Devil *Janet*, a replica of Trevithic's original machine, was trundling round the celebrating village. Caradon mines produced Sn, Cu and granite; we walked down the valley incline of the **Liskeard & Caradon** railway (horse-drawn and gravity controlled), past many mining remains – **Joep's** Shaft engine house, **Gonamena** tin mine tailings, cobbled ore dressing floors. Unfortunately, this was one of the half days of rain, and we were all rather wet by the time we rejoined the bus at the bottom.
- Thursday was very full, beginning with a brief stop in **Hayle**, site of **Harvey's** steam engine building company, and once a port handling ships up to 250t. The succeeding comfort stop stimulated a flurry of photography: sign on the Gents reading 'NO BALL GAMES'. Then on down the coast to **Botallack** (Sn, Cu, Pb), 'the most photographed mine site in Cornwall'. It's certainly spectacular, with the winding engine over the cliff top, the pump house even further down, and a jagged black rock across a narrow channel marking the portal to the undersea workings. Complicated calciner on the cliff top, series of buddles and ore floors.
- Quick wander through **St Just** to see the well-preserved rows of miners' cottages. Some memorials in the churchyard to local family members who died as miners in South Africa.
- Lunch and exploring in beautiful **Penzance**; gazed at **St Michael's Mount**, point of departure of tin for Europe since Phoenician times.
- Back to Redruth via **Gwennap Pit**, John Wesley's amphitheatre. Formed by the collapse of old mine workings, it is now grassed and lined with rows of seats. Wesley preached there many times, the last time, in 1789, when aged 86.
- It was Murdock weekend in Redruth, and that evening some of us attended a lecture to commemorate the bicentenary of **William Murdock** receiving the Rumford Medal from the Royal Society for his invention of coal gas.
- Friday evening, conference proper began with three introductory talks on Cornish heritage and mining history. The next 21/2 ran parallel sessions of talks, always a potential problem, broken by excursions on the first two afternoons. I found all the talks I attended extremely interesting, and covering a wide range of topics. Those given by our own delegates: Barry McGowan, Ken McQueen, Criena Fitzgerald, Greg Drew, Nic Haygarth, Ross Both, & Alan Murray, were well received.
- Visit to **King Edward Mine**, the oldest complete mine site left in Cornwall, and including an interesting museum: Holman twin horizontal winder; many shaking tables, one working; rag frames (tended by girls for ~100y, till replaced by automatic frames); all types of shakers, stirrers and bubbles, from different eras; and the last **Frue Vanner** left in the world!
- Visit to **Levant** (Cu, Sn, As) and **Geevor** (Sn) mines on a perfect day; chimneys silhouetted against blue sea, wildflower studded green grass, red-brown rocks, and a far view of **Peneen** lighthouse. The surface structures of the two mines are only about 400m apart, both part of the extensive **Cornish Mining World Heritage**

Site. Geevor is the largest mining history site in the UK, and unfortunately there wasn't time to explore both sites properly, though there was a welcome break for a cream tea in the café, with its wonderful views. **Levant** (a very complex site): Michell's 1840 beam winding engine, the oldest in Cornwall. It ran continuously for 90 years, and is the only one still working in its original position; The elderly engineer raised steam, and again we were mesmerized by the quiet power of a massive beam; rivulet-filled engine pond on the edge of the cliff, overlooking **Zawn**. This is a steep, narrow cleft eroded by sea action along the mineralized lode, with a narrow flight of rock steps leading down to the adit portal; complex calciners, ore dressing floors, buddles...

Geevor: the mill gave a very Heath Robinson impression, but much of it still worked – dozens of riffle tables, floatation cells, crushers, ball mills, races; very old calciner, in use till 1955, the last one in Cornwall; small room filled by a 3D model of the incredibly complex underground and undersea workings in the Geevor area; short underground tour in Wheal Mexico, which preceded Geevor. Then back in the bus for our last conference drive through the sunny green Cornish countryside, littered with mining remains.

Then on to Matlock and Matlock Bath, Derbyshire, for the **NAMHO** (National Association of Mining History Organisations) **Conference**, organised by **PDMHS** (Peak District Mines Historical Society Ltd). Fri 19th – Sun 21st June.

Only Wendy Carter, Nic Haygarth, Mike Williams and I from the AMHA went on to Derbyshire from Redruth, but it was well worth the effort. Matlock and Matlock Bath are two small towns in the narrow limestone valley of the **Derwent** river, site of the **Heritage Mill Trail**, which includes **Arkwright's Cromford** mill, where he developed his 'spinning jenny', a forerunner of the Industrial Revolution. The

surrounding limestone is honeycombed with caves and mines, which produced galena, barite, calcite and fluorite, including the famous Blue John.

The main disadvantage of this conference was that lectures, surface trips and underground trips ran concurrently for most of the program; Mike and I went for the surface trips, as we wanted to explore as much of the country as possible, so we missed most of the lectures (The Proceedings are expected to be published before Christmas). Meals and entertainment were organised for each evening, so there was plenty of social mixing, which we all enjoyed.

Friday. Registration - Peak District Mining Museum (Wonderful!), then a site visit to **Magpie Mine**, now the PDMHS field centre, with Tony Wood and Mick Roberts.

- Well preserved site which includes a large Cornish engine pumping house, miners dry and chimney, powder house, small dressing floor, engine dam, buddles, reconstructed horse gin, lime kiln...A cold buffet at **County Hall** in Matlock, followed by official welcome and short talks:

- Eddie Tennant, the local **Barmaster**, deals with all disputes and problems involving underground matters, and gave a fascinating insight into the history and regulation of mining in the area;

- Jim Rieuwerts on 50y of NAMHO;

- John Barnatt, on 'The Lead Legacy', showed an interesting set of slides of special sites for archaeological conservation, including Magpie;

- an illustrated overview of mining archaeological history and practice in various countries.

Saturday. Mines and Soughs near Castleton with Phil Shaw. Our one drizzly Derbyshire day, but the right introduction to this famous lead-mining and Blue John region.

- Oden Mine (probably <C13th) surface opencut, Knowlegate engine shaft with horse gin circle and ore crusher, Treak Cliff, Speedwell Mine (late C18th



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Editorial

Always keen to use someone other than myself to write the editorial, I have taken the liberty of quoting Robin Bromby's 'Dirt Column', in *The Australian* of 17 August, p.27, c.1. Under the heading 'Gold investors take heart', he expounds on the relative value of gold and silver over time, something that mining historians and those hit by the recent misfortunes of speculating in financial markets might take note!

"Casey research, based in Arizona, has been peddling financial advice for 30 years, and it's one of the more authoritative commentators found on precious metals websites. We liked their latest take on gold, triggered by a newspaper business editor lecturing one of their analysts on what she saw as the foolishness of investing in the yellow metal. Gold is not a good investment, she argued. That misses the point, replied the Casey people, because it's not meant to be an investment; rather, it is a way to preserve your purchasing power.

A few examples. In 1919, gold averaged \$US306/oz. That bought an average full-sized bed. Thirty years later, an ounce of gold (about \$US950/oz) would still buy such a bed. Take a longer timeframe: in 1000BC, King Solomon paid 150 shekels (or 55oz) of silver for each army horse he bought. Today a riding horse can be bought for about \$US800, or roughly

Friday's value of 55oz of silver. In addition, the argument continues, gold can't be counterfeited, it takes 1062C to melt, doesn't need to be fed, it's portable and it's beautiful (just ask an Indian bride). So shareholders in gold producers should feel reassured. ..."

However, as mining historians will be well aware, this is a grand message of hope to producers *if the gold is there*, but not so good when promising ventures turn out to be 'duffers', an altogether common situation illustrated widely in the annals of mining. Robin Bromby might also consider that currency values do not these days reflect shifts in gold supplies. Again, as a speculator, if you buy gold at \$1,000 today and the economy miraculously recovers next month, then folk will tend to sell off their gold to buy shares – those who are late in liquidating their asset will find they have lost hundreds of dollars per ounce. True they will still hold the same quantity of gold but may have to wait until the next big loss in business confidence many years down the track before speculators again turn to the metal and drive up the price to the level at which the speculator first bought the metal. The message is, that risk is always with us and whatever your faith in precious metals, the economy is likely to let you down – or is this scenario just too pessimistic? Is gold the magic 'constant'?

Forthcoming Conferences

ICOMOS, Broken Hill, April 2010

ICOMOS Australia and TICCIH Australia are cooperating to run a conference on historic towns and industrial heritage in Broken Hill between 22-25 April 2010. Some of our members might be interested in attending. See the link to the conference at www.icomos.org/australia

AMHA 16th Annual Conference

New Zealand, 7-10 July 2010

The 16th annual conference of the AMHA, scheduled for Greymouth, New Zealand during July, will be the first conference the Association has staged out of Australia.

Greymouth was selected as the most appropriate venue for the conference because the West Coast region of the South Island of New Zealand has a rich and varied mining heritage that includes gold rushes, coal mining, gold dredging, mining industrial history, and mine disasters, *etc.*

Conference attendees will be able to see much of the fascinating mining history of this region. There will be a two-day pre-conference mining history tour on the Monday and Tuesday, 5 and 6 July 2010, and on Sunday 11 July there will be a one day post-conference tour. Conference attendees must make their own travel and accommodation arrangements.

The business sessions will take place from Wednesday 7 July to Saturday 10 July, at the Kingsgate Hotel in Greymouth. The Hotel is centrally located at 32 Mawhera Quay.

Conference attendees who wish to stay at the Kingsgate Hotel should quote the 'AMHA conference booking reference number' 24000272306 to the Hotel when booking. The Kingsgate Hotel phone number from Australia is: 0011 64 3 768 5085. Email kingsgate.greymouth@milleniumhotels.co.nz

Superior rooms cost \$NZ136 a night and standard rooms \$NZ116. The Australian dollar currently buys \$NZ1.26, but the exchange rate fluctuates. There is a wide range of accommodation

available and bookings, accommodation advice and costs can be obtained from the Greymouth District Council Events and Promotions office at info@greydc.govt.nz

Conference attendees without own transport should ensure that they stay in proximity to the conference venue.

Christchurch is the closest international airport to Greymouth and air travel to New Zealand is competitive with several airlines - including Air New Zealand, Qantas, Emirates, Jetstar, Virgin Pacific *etc* - flying direct to Christchurch from most Australian airports.

Some might wish to travel from Christchurch to Greymouth on the spectacular TranzAlpine train. (email bookings@tranzscenic.co.nz) The train goes daily, but conference attendees wishing to go on the pre-conference tour should book to get to Greymouth by Sunday, 4 July.

The Kingsgate Hotel has a courtesy transfer service from the Greymouth train station to the hotel but you'll need to pre-book.

Those wishing to see more of the South Island after the conference should consider touring down the West Coast to see the glaciers, the rain forests, the alpine lakes, the ski fields, and the fiords *etc.* Queenstown is a good tourist location to see many of these attractions. At least four airlines have direct flights from Queenstown to several Australian cities, but flights are not available every day.

South Island is colder than Australia, and it will be wintertime, so conference attendees should dress appropriately. However they can be assured of a warm welcome.

AMHA - Call for Papers

Proposals for papers on any aspect of mining history should be sent to Dr. Philip Hart, University of Waikato by **the end of February 2010** and abstracts not exceeding 200 words, plus brief biographical details on the presenter, by **31 May**. Submit to: e.mail: prhart@waikato.ac.nz along with requests for other conference information.

Earth Sciences History Group, GSA

The ESHG committee are contemplating holding a 2–3 day conference in 2011 that will include a combination of presentations and half day and full day excursions. They are currently considering the following times and venues and invite our members to participate and to respond to that invite:

1) Kalgoorlie conference around April 2011 that will focus on the rich heritage of the “Eastern Goldfields” of Western Australia) and will probably be held at the Joe Lord Core Library of the Geological Survey of WA (venue suitable for 30 people). Excursions under considerations include visits to the Kambalda nickel gossan discovery site and to Coolgardie. Kalgoorlie Super-Pit; Miners Hall of Fame; WA Museum. Small sections of the Golden Quest Discovery Trail (a 965km self-drive trail through the Kalgoorlie–Coolgardie–Leonora area), including the Anthony Gormley statues in Lake Ballard salt lake (one day)

2) Perth around September 2011 that will focus on Earth Science historical aspects of the Perth area and surroundings. A possible venue is the GSWA Core Library at Carlisle (suitable for 20 people, and close to the WA Museum's Welshpool rock, mineral and fossil display). Alternatively, a venue may be found at the University of WA.

Excursions under consideration to include: Collie coalfield, about 200 km southeast of Perth, operating since 1898 (one day); or a two-day excursion taking in Collie Greenbushes (tin discovered in 1888) and a mineral sands operation.

Irwin River Permian sedimentation and fossils, nice exposures (one day). This was the site of WA's first coal discovery by Gregory Brothers in 1846.

Northampton Pb mining district. NB: This excursion will require 2 days and will accordingly incur a higher cost for transport and accommodation.

All excursions around Perth will take in sightseeing of the Spring wildflowers for which WA is renowned.

Before proceeding with any decision, the organizers wish to have an idea of the numbers who would be likely to attend, and their favoured location for the conference. If interested, please indicate your preference next to the options highlighted below or by deleting the lines with the options you are not interested in.

1a – I am likely to attend an ESHG conference in WA in 2011.

1b – I will not attend an ESHG conference in WA in 2011.

2a – I am likely to present a talk.

2b – I will not present a talk.

(If you are considering giving a talk, and already have something in mind, please give us an idea of the topic).

3a – I would prefer the conference to be held in Kalgoorlie in April 2011.

3b – I would prefer the conference to be held in Perth in September 2011.

4a – I would be interested to attend a full day excursion.

4b – Should the conference be held in Perth, I would be interested in attending a 2-day excursion to the Northampton district, or

4c – I would be interested in taking part in a two-day excursion to Collie, Greenbushes and a mineral sands operation.

If interested, please contact John Blockley, Secretary ESHG,
e.mail: tiger-eye@iinet.net.au

ANNUAL GENERAL MEETING

The AMHA meeting that took place on 28th October at Lithgow attracted 39 members. It was decided to add a Vice-President to the officers of the Association and Dr. Ruth Kerr was subsequently appointed. There were a few changes to the committee (see current members below) and Greg Drew was appointed to take over the web page (probably in the New Year) and has promised a new format that will allow some inter-active activity.

The Treasurer reported that we were still in a healthy financial position and therefore the decision by the AGM to retain membership fees at the 2009 level.

However, there was an appeal for members with contacts to try to seek out sponsorships for the journal, with sponsors being given advertising space in return.

There were reports provided by Philip Hart, Brian Hill and John Barry on the forthcoming conference at Greymouth, New Zealand in July 2010. It was also agreed that in 2011 the conference would be held in South Australia.

Thanks were extended to Leonie and Greg Knapman for organizing a memorable and successful Conference at Lithgow and a vote of thanks passed for their great effort.

The following officers and committee members were appointed:

Patron: Prof. Geoffrey Blainey

President: Dr. Peter Bell

Vice-President: Dr. Ruth Kerr

Secretary/Treasurer: Mr Mel Davies

Auditor: Dr. Glenda Scully

Committee members:

ACT: Dr Barry McGowan; Dr. Ken McQueen.

SA: Dr. Ross Both; Mr. Greg Drew; Mr. Graham Hancock.

NSW: Dr. Graydon Henning, Mrs Leonie Knapman, Mr. Ross Mainwaring; Mr. Graham Wilson.

NT: Prof. David Carment.

QLD: Dr. Jan Wegner.

VIC: Mrs Sandra Kippen; Dr. Mike Williams; Mrs Nick Williams.

WA: Ms Wendy Carter; Ass. Prof. Charlie Fox; Dr. Richard Hartley; Mr. Gerry McGill.

TAS: Mr Greg Dickens; Dr Nick Haygarth; Mr. Chris Boron.

NZ: Dr Brian Hill; Dr Philip Hart.

Journal Editor: Mr. Mel Davies.

Assistant Editor: Mrs Nick Williams;

Webmaster: Mr. Greg Drew (**note new web address: <http://www.mininghistory.asn.au>**)

Lithgow Conference Report

The Conference kicked off with a well-organised and interesting two-day tour to Bathurst, Hill End and other well-known historic mining venues in the Blue Mountains. delegates and partners being

towed around in hired buses and a night spent in Bathurst. There were visits to various museums and tea and dinner stops galore with everyone sopping up the atmosphere of by-gone gold-fever days at places like Hill End and Sofala.

The Conference itself was held at the well-endowed and excellent 'Workmens' Club in Lithgow – acoustics were good, and the quality of papers and presentations high – in fact, everyone remarked on the excellence of the presentations and the wide variety of topics that saw the close attention of delegates throughout the proceedings (not one snore was heard!). The four days of the presentations were interspersed with some interesting forays into the Blue Mountains to visit and ride on the Zig Zag Railway; to visit Scenic World (though the scenic part was hidden in a thick mist!), the fascinating Small Arms Factory and Museum at Lithgow, the Centennial Colliery Lithgow, and other equally interesting venues, all arranged by Leonie and Greg Knapman.

On the final day, Greg and Leonie sped us off to view the spectacular Oil-Shale processing plant remains in the picturesque surroundings of Glen Davis, to visit various Power Stations, and to even stand on the very spot where Charles Darwin spotted his first Platypus – quite a memorable occasion, especially as this was the year of the 150th anniversary of Darwin's publication of the *Origin Of Species*.

Thanks to the efforts of Leonie who worked wonders in finding sponsors, the event proved a financial bargain as far as those attending were concerned, and it was undoubtedly another very successful event in our itinerary of 15 conferences.

Coat Hanger Award

Following the Annual General Meeting, the usual solemn awarding of the prestigious 'Duke of Cornwall Coat Hanger Award' took place. Those present were informed that it had been a close contest between

three of our members: (1) **Adrian Hutton** (known henceforth as Dr. Leadfoot) who had been a close contestant after losing his brakes on the bus hired to convey members to the various tour locations on the precipitous roads of the Blue Mountains, evidence being presented to the meeting in the form of worn out brake discs. (2) The previous award winner **Greg Dickens** who had again been shortlisted, this time for maintaining accommodation standards by choosing the Grand Central Hotel as his choice, a move that had been taken up on his recommendation by a dozen or so delegates. The Hotel was favourably compared to the Duke of Cornwall in Moonta from whence the award emanated, in this case occupants being kept awake until 4.00am by loud music, screams, the sound of breaking bottles and a door being torn off its hinges. However, the award, after much careful thought and consideration was awarded to **Wendy Carter** who had been seen leaving the men's toilet at the Lithgow public swimming pool. She claimed there was no water to shower in the ladies section and that she had ventured into the adjacent male premises to carry out her ablutions. This explanation had been met with disbelief by the coat-hanger adjudicators and was judged to be slightly more dubious than the protestations of the heavy footed Adrian Hutton. Wendy humbly accepted the trophy that she will hold until the next much maligned winner of the award appears at Greymouth.

New Publications & Releases

Portrait of a Miner. 2-disc CD, National Coalboard, UK, September 2009.

The attention of members is drawn to a CD release on coalmining in Britain from about 1947 to the mid 1980s. In the words of Ken Russell of *The Times*, 'It's a tour de force collection of unusual and recently archived documentaries about the industry...All the films in this five-hour collection are so good they ache for repeated viewing'.

Furthermore, 'This collection showcases and celebrates the extraordinary work of the National Coal Board Film Unit - operating between 1947-1984 - producing films to inform, entertain and galvanise working people across the country.

From intimate drama-documentaries and sublime cartoons to the sheer pleasure of topical tales from the *Mining Review Cinemazine*, this collection is a beguiling invitation into the domestic, community and working life of miners and their families.

With stories from coal-fields across Scotland, Wales and England - from pit ponies to brass bands, cutter loaders to the five-day week - this set presents over 5 hours of remastered material, and contains an extensive booklet featuring newly commissioned contributions from Lee Hall (writer of *Billy Elliott*), the BFI's curators and other researchers'.

Price is £24.46 and can be ordered from BFI, on the web at: www.bfi.org.uk/kingcoal

Alan Murray (edited by Paddy Gorman), *Holding The Line: A narrative history of Australian coal miners and their union in the 1980s*, Breakout Design, 2009; 340 pp, 54 photos. HB. ISBN 9780980326468

The publication clearly identifies the turmoil surrounding the changes that took place in the coal mining industry during and following the 1980s when globalisation and deregulation saw a marked shift in policies that both threatened but also enhanced the strength of the coal mining unions. A must for anyone interested in the industry, the vital role of trade unionism, the politics and effects of developments leading into the first decade of the 21st century.

Book Review

David Jehan, *Shays, Crabs and Phosphate: A History of the Railways of Christmas Island, Indian Ocean*, Light Railway Research Society of Australia Inc, Melbourne, 2008, 136pp. Quarto, PB, 17 maps & diagrams; 154 photographs, ISBN 978 0 909340 45 2. Available from the

author at special price of \$30 per autographed copy, from 69 Myall Street, Oatley, NSW 2223. Price includes postage.

This is a welcome addition to the relatively small bibliography on Christmas Island and while the major emphasis is on railways there is sufficient detail on the mining of phosphate and enough social comment to keep members of the Association interested in the content. In addition, the publication is very nicely printed on high quality paper and contains high definition photographs, maps and diagrams that lucidly augment the dialogue. While the railway buff will find the accounts of various locomotives, rail systems and methods of loading, fascinating, the mining historians among us will be enlightened with the means and methods adopted to exploit the phosphate resource that was used, in particular, to enhance the farming communities of the world and Australia.

The book commences with a lucid explanation of the geology of the island and this is followed by an account of the British administration that existed from 1888 following the exhortation of Scottish naturalist John Murray who realized the potential of the phosphate deposits as a source of fertiliser for the Empire's farmers. Murray in partnership with the Clunies-Ross family formed the long-enduring Christmas Island Phosphate Company (CIP Co.) in January 1897, though the latter family took little active role, merely, according to the author, being interested in receiving their share of dividends.

Labour on the island was supplied by indentured Cantonese coolies, while the administration consisted of a District Officer and British members of staff who kept exclusively to themselves, leaving the physical work and much of the supervision to a Singapore based contractor who employed a network of foremen to look after his interests. With a distinct pecking order when it came to allocation of food, supplied mainly from Singapore, those at the bottom of the order received the

crumbs, a situation that saw a quarter of the exploited 2,400 contracted workers die of beri beri by 1904. To keep order, a strong detachment of Seik police were employed, though unrest was kept to a minimum with the help of opium supplied by the District Officer "at a reduced rate, as compared with the mainland...".

Early development saw hand excavation using pick and shovel methods by the Chinese who worked the various small quarries. The phosphate rock was then shovelled into baskets and skips before being lowered down hillsides on gravity inclines into lighters that fed the waiting ships. All this was accompanied by a certain element of danger to the workers. Inimical to later success of the project was the development of systems to improve the movement of the phosphate rock across the island and onto the ships that conveyed the product overseas, therefore the development of a complex web of railways that crisscrossed the island.

The author explains in detail how the railway network was constructed between 1914 and 1919, with major feats of excavation still being carried out by hand. New driers and other equipment were also brought in from overseas to enhance the production process and some major feats of engineering were applied to make for a more efficient transportation system from quarry to ship. All the developments are clearly shown in the publication through the magnificent set of photos chosen by the author from the extensive archive kept at the National Archive of Australia. Of interest was the note explaining that the company photographed every ship that loaded phosphate, as this could be used as evidence "as it was not uncommon for shipping companies to deny that their vessel had called at the island and taken delivery of phosphate". The photographs could then be used as evidence when invoices were in dispute.

It was business as usual until the island was taken over by the Japanese from 31 March 1942 to 24 August 1945.

Japanese bombing, sabotage by the European staff and neglect by the Japanese saw the eventual need for large capitalisation and reorganisation, a situation that led CIP. Co. at the end of 1948 to sell its interests to the Governments of Australia and New Zealand for £2.75million. The Christmas Island Phosphate Commission (CIPC) in turn appointed the British Phosphate Commissioners (BPC) as their managing agent, and with pressure from the CIPC to increase production, modern work practices and improved equipment and transport and loading systems were introduced. Further efficiencies were introduced in the 1960s with a restructuring of the management, the introduction of enhanced conveyor belt systems, new railway stock and more thorough geological surveys. Also aiding efficiency was the standardisation of the railway system to the 4ft 8 1/2inch following a shift to 4ft 9inch in the 1930s to accommodate the 'Peckett locomotive'.

The book contains substantial technical details that will especially appeal to the railway enthusiast but the author also explains in clear terms the merits or demerits of various technologies. For example, the 'Shay' locomotives that appear in the title of the book and which remained in service from the 1930s to 1955 were American imports designed to haul large loads at low speed over rough tracks with steep gradients and tight curves, while the Peckett locomotive previously mentioned, proved problematic in that it caused high wear and tear to rolling stock and rails. There are descriptions and photographs galore of various light engines of various national denominations, from the Montania Internal-combustion engine from Germany that burned petrol, benzol, alcohol, paraffin, etc., to the English-made Hudson Fordson 4wPM rail tractor capable of hauling an 8 ton load up a 1 in 20 gradient, and the powerful Canadian built diesel-electric locomotives. In contrast to the great variety of locomotives, it is of note that from 1914 to 1987 only one basic

design was used for the phosphate hopper wagon, although the railcars and trolleys used were as varied as the locomotives.

Also illustrated with an interesting selection of photographs are the varied and relatively primitive passenger carriages used to convey workers, or schoolchildren or even Saturday-night cinema-goers around the island – sometimes towed as an appendage to a train of phosphate wagons.

Overall there was an amazing variety of rolling stock and because of the isolation of Christmas Island all this had to be maintained at the island's maintenance depot with a large degree of improvisation and resourcefulness that says much for the ingenuity of the engineers in charge. Such resourcefulness led among other things to development of the relatively unsuccessful rail mounted weed burner, in an attempt to control the prolific growth that occurred in the fertile terrain.

No mention of Christmas Island is complete without mention of red crabs. Fortunately says the author, they proved of little problem to the railway system except for the fact that their burrowing sometimes undermined the lines.

As a postscript the author notes that by the early 1980s, as disclosed by the Sweetman Commission, the "framework by which Christmas Island operates [was] outmoded, discredited and in many ways repugnant". It was still run like a colonial possession and with the rise of trade unionism change was inevitable. In 1981 operations were handed over to a government-owned public company, the Phosphate Mining Company of Christmas Island Limited, but in 1987 the Company went into voluntary liquidation and the railways that feature in this book were closed and the rolling stock sold off for scrap.

This is a fascinating story of a little known aspect of Christmas Island and its phosphate mining. Although railway buffs will take delight, those among us without any technical finesse will also find a lot to cherish in this excellent publication, both

for the literary content and also for the excellent range of high quality photographs and illustrations that will make it an attractive addition to any shelf.

Mel Davies

University of Western Australia

Information Wanted

Papua New Guinea

Professor Suzanne Mentzer of Rice University, Houston, Texas is making enquiries about an ancestor by the name of George Wishart Bowman who wrote to a relation of his from 175 Spring Street, Melbourne in February 1874. He stated he was setting out in April to organize a 'mining colony on the Island of Papua ... supposed to be very rich in gold'. That was the last the family heard of him, though family legend has it that he was 'eaten by cannibals'!

Prof. Mentzer is anxious to find out any details of her ancestor or of the expedition that he led to Papua. If you have any clues, or suggestions as to sources, please contact her at <smm2@rice.edu>

Bits and Pieces

Heritage Loss

Ruth Kerr writes:

'Another fire in the eastern region of Victoria has resulted in the loss of more local history. The Miner's Cottage near the Ringwood Lake was destroyed by fire early on 20th November. The cottage was opened to the public regularly and manned by volunteers from the Croydon and Ringwood Historical Societies. This loss comes on top of the Feb 7 fires which destroyed the Marysville Historical Society Museum as well as countless colonial buildings in the Kangaroo Ground, St Andrews and Yarra Glen districts.

Further information about the fire and the cottage can be read on these web-sites:

<http://www.heraldsun.com.au/news/fire-destroys-a-replica-miners-cottage-in-ringwood/story-e6frf7jo-1225799981999>

<http://leader->

news.whereilive.com.au/photos/gallery/ring

[wood-lakes-miners-cottage/](#)

Hopefully, the staff of the Croydon and Ringwood Historical Societies will give a full report later, particularly if items can be recovered from the ashes.

This Miner's Cottage was similar to the ones used to house miners in the Antimony industry at Ringwood in the 1880s and 1890s.

Queenstown, Tasmania

A note from Greg Dickens to report the following info for all those who visited the establishments at the 2008 conference:

The **Lake Margaret Power Station**, has just been **recommissioned** (November 12th). The main building & machinery has been restored to full functioning capacity, while the original wood-stave pipeline has been completely replaced with similar materials. The power station (**1914**) remains the oldest operating hydro-electric power station in Australia.

The **Mt Lyell Mine**, which had suspended underground operations on **24th August**, recommenced activities on **1st November** and will progressively ramp back to full production over the next few months. A '**mud rush**' entered a section of the underground levels from the West Lyell open pit above, after an extended period of torrential rain during August. During the 10-week shutdown period, the mine continued to produce copper concentrate from stockpiled ore. None of the CMT staff had been laid off, only some of the mining contractors.

Membership Fees

Note that fees are now due and it would be appreciated if they could be sent to the Secretary asap. Forms available on the web.

A few Lithgow Photos

We present below a few photos of Lithgow contributed by Greg Dickens, Robert Ashley, Leonie Knapman and the Ed. See them in glorious technicolour by viewing our web page. The banner display at the Centennial Mine was magnificent!

MJD/Dec.'09

underground canal), Peakshole Sough (1770) in Peak Cavern gorge.

- Quick wander through the Blue John displays, which are as lovely and unusual as ever – the small bowl I blew a month's salary on in 1973 is now very valuable! An enjoyable social session and hot evening buffet back at the County Hall was followed by a film on the mining archaeology/history inside Ecton Hill, which we visit on Monday.

- **Sunday. High Rake Mine, Tideslow Rake and Silence Mine** with Dave Williams. Beautiful day, good company, lots of wildflowers including metallophytes, colourful sails of hang gliders to watch.

- High Rake was resurrected by the PDMH team 2000-2008, working on the first Saturday of each month. It's an amazing effort, including excavating the surviving lower part of a large 1843 Sims pumping engine house and condenser pit 8m deep. Dave gave us a 3D drawing of the working engine house which is the clearest interpretation I have seen of this type of site – an excellent site to visit;

- A short walk west led to a view up the Tideswell Rake ridge – earth work remains obvious all the way up the line of the lode;

- Silence Mine on the eastern end of the same major vein, is an ongoing archaeological project; view across the valley showed remains of workings where shafts were driven to prospect 'the random of the vein'.

Monday. Ecton Copper Mine, just over the Staffordshire border, with John Barnatt. Network of mines under this hill, which produced Cu, Pb and Zn. One of the richest Cu mines in Britain in the C18th; Very complex geology, such that the ore pipes are ~vertical; One of the first mines to use gunpowder technology for blasting; Bolton & Watt winding engine on Deep Ecton shaft, late 1780's, one of the oldest surviving anywhere, and the original drawings survive. Before the engine was

installed, the shaft used a huge horse gin powered by 4 horses.

Lunch at the bottom of the hill, then the rest of the party donned caving gear and disappeared into a wet, partly grated hole beside the road, while Mike and I explored more of the surface.

N.B. We found another Oertling scale in the Cromford Mill museum, one that my UK collaborator had missed! Three cheers for mining conferences! [Those who know Nick will be aware of her great quest for the illusive Oertling – see her article in our Association's Journal, Vol. 2, September 2004, pp. 222-230, Ed.].

Nick Williams, 11.07.2009.

Journal

Early submissions for the 2010 edition would be very welcome. Most folk will know there are both refereed and unrefereed sections, with the former being more rigorously scrutinised than the latter. We use two referees to look at the refereed papers and these are not advised as to the author(s). It's usually academics who have their papers refereed, as this is expected if they are to earn brownie points from their employers. However, there is nothing stopping non-academics to ask for this more rigorous scrutiny of their papers.

One favour is asked for by the editor, before submitting, **please consult the style sheet instructions** on our web page or contact me for a copy before submitting. If you don't conform to the instructions – and this even goes down to the size of the page (A4), then the load is transferred to the editor and sub-editor. Little things such as 'don't place two spaces after the end of a sentence' might seem trivial but in a paper of 8,000 words (plus the footnotes) it's a bit of a burden to have to examine and alter every sentence in the paper. Also, please don't provide strange and alien formats that can't easily be unscrambled. Use a simple word format and don't place spaces between footnotes.

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