EDITORIAL
Once more, we who were fortunate enough to attend experienced an excellent 18th Annual Conference, this time in Waihi, New Zealand. It says much for the progress of our organization that despite the overseas venue, a large contingent of Aussies were among the 80 plus who attended the sessions and who went on to enjoy the spectacular scenic tours around the Coromandel Peninsula. What surprised those who were cognizant of the extent of gold mining in the South Island, was the impact that gold discoveries in the area have had on the economy of New Zealand as a whole. The Waihi Gold Mine currently run by Newmont is a case-in-point, for the large open-cut mine in operation lies on the site of the underground mine established in 1893. It, and recent underground deposits in the adjacent areas were a revelation to the visitors at the conference.

One of the highlights of the conference was the welcome at the Marae by the local Maori hosts who ‘challenged’ and then welcomed us to their meeting-house where we enjoyed a hangi meal and convivial evening. Recipient of the challenge was our Vice-President Ross Both who bravely stared down the ‘warrior’ who met us at the portal before the welcome ceremony. A wonderful evening of song, good food, and cementing of relationships with the local Maori community put us off to a good start. What’s more the weather was extremely kind with almost persistent sunshine, as we were told that it can get somewhat damp in the area.

Perhaps the welcome we received (as well as our other New Zealand experience in Greymouth) was one reason why there was an overwhelming vote at the AGM to change our title from ‘Australian’ to ‘Australasian Mining History Association’, a move that was welcomed almost (but not entirely) unanimously by those present and those who posted their votes.

Thanks go to the work of the local committee, especially Philip & Sylvia Hart, Jim & Mary Crawford, Doreen McLeod and Sue Baker Wilson for the effort they put into planning a full and successful week of activities. We are always extremely fortunate to have such industrious and conscientious local committees, and this proved no different in Waihi.

ANNUAL GENERAL MEETING
As already noted, one decision taken at the AGM was to change the name of our organization to ‘Australasia’ so as to embrace other geographic spheres in our locality. This, as with other changes to the constitution that were circulated to all members before the AGM was passed overwhelmingly – the name change was ratified by the Commissioner for Consumer...
Protection, Western Australia on 17th December. This makes no difference to our functioning but it does recognise our wider geographical field of interests.

Another decision was to change the membership fee categories. Over the years we have seen our membership become top heavy with those who have reached retirement age. This persuaded the meeting to vote to remove the ‘unwaged’ category. From the beginning of 2013 all members who previously paid the unwaged fee of $25 will be asked to pay the full membership fee of $35 – still, the lowest rate for memberships of similar type organisations in either Australia or NZ. (A revised membership form is being prepared. Please don’t pay your subs until this is received, or it appears on the web).

Note too, the **new registration form will contain a privacy clause** that will enable those who tick the appropriate box to access other members of the organization and to change their details on the Association’s web page. In addition, it’s the intention to allow members to renew their memberships on-line through ‘Register Now’, the portal used to allow people attending the Waihi conference to transfer funds by Credit card (this will also be available for the Beechworth conference in 2013). This should be particularly useful for our international members, as sending foreign cheques, or sending money through an electronic transfer via a bank is getting less and less attractive – indeed charges are tending to become exorbitant. The direct electronic transfer of funds from your to our bank will no longer be available as it has caused too many problems over the last couple of years leading to frustration by both some members and the Treasurer. The changes to the Constitution are now available on the web page.

Yet another decision was to restrict state reps on the ‘Advisory Committee’ to 2 members per State/Territory and New Zealand, as it was felt that anything larger was too unwieldy. Of course, this doesn’t prevent those with ideas to contact their state reps. See the details of these representatives at the end of this newsletter.

**JOURNAL**

You should now have received your 2012, Volume 10 copy of the journal. Sorry for the delay but gremlins got into the printer’s workshop but all was well in the end. A big thanks again to Newcrest Mining Limited for sponsoring the Journal.

NOTE: this is a never-ending process and I’m anxious to receive your articles for Vol. 11, asap. Just one plea: If submitting illustrations, but especially diagrams, do ensure that they are sharp and printable.

Also while footnotes are a must, please don’t overdo their use, especially when exactly the same point is referenced in a number of newspaper sources.

*The Ed.*

**FORTHCOMING CONFERENCES**

**AMHA 19th Annual Conference**

29 September – 4 October 2013

Beechworth, Victoria

**Call for Papers**

The 2013 conference will be held in the Memorial Hall, Ford Street, Beechworth. The theme of the conference is *Diversity in Mining*, a theme driven by the diverse range of minerals and mining processes from the hey-day of mining in the modern Shire of Indigo. However, papers covering all aspects of mining history will be welcome.

Presentations should be no longer than 20 to 25 minutes duration, allowing a minimum question time of five minutes for question time. If interested in presenting a paper please include a title and a brief outline (approximately 100 words) accompanied by brief autobiographic details. These should be sent to Nicola Williams at nicola.williams@monash.edu.

All those presenting papers must register for the conference; one-day registrations will be available. See our webpage for Registration forms, sometime in February.

Remember to book your accommodation early. Beechworth has a diverse range of accommodation but you will need to get in early to ensure you have somewhere local to stay. See our web page for an accommodation list, cost per night, facilities, etc.
Rust, Regeneration and Romance: Iron and Steel Landscapes and Cultures, 10-14 July 2013, Ironbridge, UK

Some of our members may be interested in the above conference, to be hosted by the Ironbridge International Institute for Cultural Heritage, University of Birmingham and The Ironbridge Gorge Museum Trust.

For centuries iron and steel have been the fundamental building blocks of modernity. These metals and the technologies, societies and cultures surrounding them have revolutionised the lives of billions of people. From the earliest functional usage of iron in domestic life, to decorative cast iron, from weapons to knives and forks and from the use of high tensile steels in buildings around the world to the stainless steels of space exploration, the transformative power of iron and steel is undeniable. This capacity to transform extends to the landscapes and cultures which have themselves been transformed through the mining, production, processing and consumption of iron and steel. As China and India race to modernise their economies with imported iron and steel, many cities across Europe and North America are still struggling with the decline in production and manufacture. In many parts of Europe former centres of iron and steel production have undergone regeneration and now form part of the tourism economy. Rust has gained currency as part of industrial heritage. Still, in many parts of the developing world, ideas of heritage lie very much in the future, as communities continue to work in the mining of iron ore and the production and fabrication of steel.

This conference seeks to engage in an open multi-disciplinary analysis of iron and steel landscapes and cultures, from the ancient to the modern. The conference will explore the relationships that communities, regions, nations share with iron and steel through its functional use, creative and artistic use and its symbolic use.

The conference welcomes academics from the widest range of disciplines and wishes to act as a forum for exchange between the sciences, social sciences and the humanities. The conference will draw from anthropology, archaeology, art history, architecture, engineering, ethnology, heritage studies, history, geography, landscape studies, linguistics, metallurgy, museum studies, sociology, tourism studies etc. The conference will take place at the Ironbridge Gorge World Heritage Site. If interested see further information on the conference website at: http://ironandsteel2013.wordpress.com/

Abstracts of 300 words should be sent as soon as possible but no later than 31 January 2013 by those presenting papers, to: toironbridge@contacts.bham.ac.uk

PUBLICATIONS

Some of those present at the Waihi Conference will have already seen and even purchased copies of member, Barry Sykes’ tome (for there’s no other way of describing this large and well presented publication). It presents an encyclopaedic history of the south Gippsland area, covering all aspects of social and economic activity in the area. Our readers will be interested in particular in the 40% plus of the book that’s devoted to mining. A review will appear in the journal, Vol. 11.

BITS & PIECES
Abandoned mines and the flood report
Have you wondered what happens to all those tailings, acids and other toxic materials associated with mining when hit by a flood? Member, Corrine Unger recently discussed this in relation to the 2012 Queensland floods, where she asked why we don’t have a national strategy to set minimum standards for mine rehabilitation. When noted that there are literally hundreds and thousands of abandoned mines around the country then
this is a topic well worth serious consideration. Yu can hear what Corrine has to say by listening to her report, and by looking at other information at the Centre for Mined land Rehabilitation (CMLR) newsletter put out by Queensland University at:  

Presentation to David Branagan
The presenting of the Tom Vallance medal was announced in letter No. 69. But below we reproduce a photograph of David just after receiving the medal from prof. Bernie Joyce (in the background). Congrats again to David on his achievements.

Prof. David Branagan receives the inaugural Tom Vallance medal for services to researching and documenting the history of earth Sciences in Australia. Presentation made at the International Geological Congress, Brisbane

Waihi Conference photos
See the following Link for photos from the AMHA Marae visit in Waihi – see how our Vice-President bravely, without flinching, took up the Maori challenge!
http://www.flickr.com/photos/gold_fm_nz/sets/72157631958147971/show/

TICCIH
Folk might be interested to know that Dr Stephen Hughes who specialises in industrial heritage with the RCAM in Wales, and who recently attended the Copperopolis Workshop at Burra, has been appointed as Secretary of The International Committee for the Conservation of the Industrial Heritage (TICCIH). For those who have no knowledge of TICCH, it a body dedicated to the study of industrial archaeology and the protection and interpretation of industrial archaeology. It is pertinent that the committee of the organisation revived the mining section of the organisation at their Congress, which was held in Taipei, Taiwan, in November.

Thanks to Iain Stewart for the information.

Prospecting by the termite method
The ever-alert Peter Bell spotted this one recently, and wishes to share this prospecting certainty with all members of the Association:

“CSIRO entomologists are looking at termite mounds as potential indicators of mineralisation. The technique has a long history of application in Africa, but has not seriously been investigated in Australia. Some species of termite gather fine clay and silt from underground to build their incubation mounds, and in the process sometimes bring soil to the surface from several metres down, below the depths where human prospectors usually focus their efforts. This material can contain traces or "fingerprints" from deeper mineral deposits. Termites sometimes also have minute pellets of metal secreted in their bodies, analogous to human kidney stones. Soil geochemistry has been of interest for some decades - David Branagan described Vladimir Sokoloff's studies in the Moonta area in the 1940s in his 2007 journal article - but the termite technique has the potential to extend the soil zone available for sampling to much greater depth. Current research has already succeeded in identifying gold residues in termite mounds, and is moving on to base metals such as zinc. See the following:
Irish Connections
Carol Moores and Chrissie O'Sullivan are asking for information on Irish miners from their community who may have migrated to Australia. They write:

‘We are a small community at the end of the Beara Peninsula in West Cork, Ireland, with a large copper mining history; in fact one of our mines was the largest in Ireland. Towards the end of the 19th century our miners emigrated all over the world to work in new mines and we are now trying to trace their descendants. We would be very happy to establish a working relationship with yourselves and hope to facilitate some of your members in tracing their Irish roots.

Many miners who worked in the Irish mines originally came from Cornwall, so some of your members with Cornish ancestry may also have a connection to Ireland, and might benefit from our research.

We are planning a large mining diaspora resource for people to access online, and we also hope to be opening a mining heritage centre to complement our existing mining museum. We hope to open our largest mine to visitors and we would be very interested to hear from any of your members with experience in similar ventures in Australia.

You may also have heard of An Taoiseach’s Gathering Ireland initiative for 2013, when we expect to welcome many descendants of Irish immigrants from all over the world, including, we hope, a good many from Down Under! We hope to hear from some of you. Please contact Carol or Chrissie at:

Allihies Copper Mines Museum, Allihies Beara, Co. Cork, Ireland.
chrissie.osullivan@acmm.ie

CONGRATULATIONS
We are pleased to announce that the effervescent Wendy Carter was recently made a Fellow of the Federation of Australian Societies (FAHS) at the Federation’s AGM at Darwin. Wendy was jointly nominated by Royal Western Australian Historical Society, the Historical Society of the Northern Territory and the Royal Historical Society of Queensland for her outstanding contribution to the historical society movement in Australia. Wendy was presented with the award by our own President, Ruth Kerr, who was acting in her capacity as FAHS President.

The only other award announced at the meeting was to another of our members, Dr. Michael Pearson who was elected as a fellow for his contribution to heritage and historiography in Australia. His award will be presented later in the year.

INFORMATION WANTED
Coober Pedy Centenary
Sue Britt of the Coober Pedy Historical Society has informed that 2015 sees the centenary of the opal mining town. As part of the celebration she is hoping to compile an oral history of the town’s development and to focus on the unique mining machinery built there. If any of our members has an interest in opal mining and especially on the machinery used on the opal fields could they please contact Sue at:
sue.britt@westnet.com.au

Coal mines in hauling both empty and loaded cars to and from the mine. The inspector on one visit observed the following incident.

‘The driver and his dog returned from the bottom of the shaft drawing an empty car. On arriving at the summit of the hill, the dog alighted and then, without any instruction, leaped into the car again. It rode with the driver down the incline to the level below. Arriving at the bottom the dog jumped out of the car and pulled it up the grade on the opposite side to the working face’.

A Shaggy Dog Story?
Member Clive Beauchamp sends this doggy excerpt from the pages of the Australian Town and Country Journal (NSW) 2 January 1906.

Dogs in Mines
An Illinois (USA) mines inspector reported that thirty-one dogs (breed not mentioned) were employed at the McDonough County
The Importance and Future of Mining History: an Australian Perspective
Member, Prof. Ken McQueen, provides this thoughtful article on mining that was recently published in *Earth Sciences History*. It’s recorded below with permission from the editor of that journal:

‘Mining is a pillar of civilisation, providing many of the materials needed for technologies. It has a long history dating back to the first use of surface stone to make simple hand tools. This history even predates the appearance of our own species and is dated to at least 2.6 million years BP when *Homo habilis* developed the earliest Oldowan tools in Africa (McCarthy and Rubidge 2005). Our Stone Age ancestors improved and continued this technology for most of the history of *Homo sapiens*. They also adopted the use of mineral pigments for decoration and art. Following the use of stone, the discovery and utilization of precious metals, particularly gold, as well as copper, lead, tin and iron played a major role in transforming the human condition (Raymond 1984). The production, consumption and coveting of gold shaped and influenced many cultures. In Australia, the gold rushes and gold mining history are a central part of the Australian psyche and national mythology. This is the mining history most familiar to most Australians.

The extraction of metals and other useful elements from the Earth’s crust by mining and metallurgical processing is now so well established and widespread that the products of mining are more or less taken for granted and most people have only a vague or incomplete knowledge of the origin of many of these components that make up modern ‘everyday’ items and technological devices. Due to this knowledge disconnect between source and end product contemporary mining activity is probably not considered of heritage importance or future historical interest by the general public or even those in the mining industry. Despite the best efforts of the industry to indicate otherwise, mining is still widely perceived as a ‘dirty and dangerous’ industry, and the cause of significant human misery and environmental degradation. Much of the history of mining in fact underpins this perception. As the human population and related appetite for non-renewable mineral resources continue to increase exponentially there is also a moral dilemma associated with mining, related to concern for the supply of mineral products to future generations and the potential environmental impact of their increased extraction.

Australians have typically had an ambivalent attitude to mining. Mining has provided the nation with much wealth, frequently when other economic activity has been in a precarious state. The discovery of payable gold in 1851 helped transform an initial convict dumping ground and pastoral backwater into a liberated new nation. Gold mining provided the wealth and population to industrialise and modernise the entire country. Since the gold rushes, the Australian public has been fascinated by the numerous mineral booms and busts — benefiting directly and indirectly from the booms and losing national income from the busts (Raggatt 1968; Blainey 1969, 1970). Despite the benefits there has often been concern about the negative effects of mining on aspects of the economy, society and social structures, as well as the environment. Concern for environmental impacts has increased significantly since the 1970s with the rise of the environmental movement. Most recently, unease about societal impacts has returned, for example with the current debate about the detrimental effects on local communities of ‘fly in–fly out’ mine employment practices. While the current mining boom has helped insulate Australians from the recent global financial crisis, contributing around A$121 billion *per annum* to the economy (Australian Bureau of Statistics 2012), there is concern about the uneven distributions of the benefits and the problems of a ‘two-speed’ economy.

During the peak of the environmental movement in the 1980s–1990s many in the community viewed mining at worst as a form of ‘rape and pillage’ of the land to at
best as a necessary evil or dark activity tolerable if it was in remote, unseen regions. During this period, interest in mining history or any celebration of mining was not widely popular. Extreme attitudes appear to be waning, although there is still an active anti-mining lobby, presently focused on coal and unconventional fossil fuel mining/extraction. There is a growing interest in pre-21st century mining history by amateur historians and mining-related professionals driven by an increasing fascination with the narrative or ‘story’ in mining history, as well as a revival in history in general. There may even be a ‘re-awakening’ in mining history amongst academic historians (Claughton and Mills 2011).

Mining history is closely intertwined with industrial, technological, economic, social and labour histories. In an academic context it has traditionally been considered a sub-discipline of industrial history or archaeology, although recent trends are towards a broader spectrum of topics and fields (Claughton and Mills 2011). As mining is critical to so many aspects of technological, economic and social activity and development and as its past, present and future environmental impacts become of greater concern, mining history would appear fundamental to all these areas of historical enquiry. Mining history in its broadest sense can inform much of history in general.

Mining history is important to the mining industry. Historical records such as plans, assays and reports are essential for establishing the full pre-mining nature of ore deposits and for the re-development of historic mines or even the extension of current mining. Preserved infrastructure such as shafts and other underground openings allow access for sampling or the re-development of a mine. As well as providing practical benefits, maintaining good records and archives at mine sites contributes to the bigger picture of mining history. Historic records can be used to document and understand the best and worst practices in mining, particularly related to engineering and environmental aspects. Miners can learn much to their benefit from the history of mining.

A key issue for mining history is the ongoing preservation of its multiple information and evidential sources. Mining history is built on a range of records including:

1. archaeological evidence of mining activities and practice preserved at mining sites;
2. portable artefacts such as mining tools, equipment and machinery stored in museums (this could also include rock and mineral collections from particular mines as well as drill core and cuttings);
3. written records such as those compiled and preserved by the miners and mining organisations, as well as contemporary reports in the press;
4. oral records from miners and people associated with or affected by mining activity;
5. pictorial records, including drawings, paintings, photographs and films.

Conserving the physical evidence of past and present mining activities is becoming a significant challenge. Increased awareness and justifiable concern for the natural environment by community and government is leading to stricter legislative requirements to rehabilitate mine sites. This has driven a trend towards total restoration and obliteration of the physical evidence of mining. There are also pressures related to alternative land uses, such as agricultural, forestry, industrial and urban development. These pressures are much greater as mines become larger, for example open-cast coal mines and open-pit metalliferous mines, where the expansive areas of disturbance need to be restored for alternative uses after mining. Most infrastructure from recent mining is commonly removed, particularly the portable components or recyclable materials. Mullock and tailings deposits are required to be stabilised, covered and vegetated to resemble the natural landscape. Shafts and pits are generally infilled or capped. At older historic sites,
mine openings and mullock heaps were commonly left ‘as is’ on abandonment, with stone, concrete and heavy unsalvageable equipment also left behind, particularly where the mines were in remote areas. However, more recently many of these sites have also undergone rehabilitation by government agencies to ameliorate any environmental or public safety hazards. Preserving mining heritage features at mine sites comes with public liability risk and such features must be rendered as safe as possible with appropriate stabilization, fencing and signage. This can be expensive and it may be much cheaper and more convenient to completely infill or remove all physical evidence of mining.

New mining commonly, and in many cases inevitably, destroys the evidence of earlier mining activities, particularly where old underground mines are re-developed into open-pit operations. The ‘Super Pit’ at Kalgoorlie, which has taken out the surface infrastructure and most of the historic underground gold workings in the top 360 metres is a prime example. In some cases the juxtaposition of different mining periods presents a fascinating, if confusing, challenge to mining archaeologists. A small example would be the recently restored Gubur Dhaura site in the northern suburbs of Canberra. This site was worked for ochre and clay by aboriginal people, probably from 5,000 years ago and then highly disturbed by nineteenth-century gold prospecting and twentieth-century quarrying for kaolin and road metal.

Many artefacts from historic mining were commonly left on site to decay or to be rescued by local enthusiasts for preservation in collections and museums. There is typically little interest in preserving more modern mining artefacts and equipment, although some mining companies do make donations of their obsolete items to museums. In many cases mine operators may not be fully aware of the historic importance of some of their items of equipment. For example, parts of the first carbon-in-pulp gold extraction plant built in Australia (and one of the first in the world) were still being used at the revived Mount Boppy gold mine in western NSW until 2006 when the current operator ceased mining (McQueen 2005). The entire plant was to be auctioned for scrap, apparently without knowledge of its significance, before the company was advised of its historical importance.

Modern large scale and mechanised mining methods also mean that fewer mineral and ore specimens are collected and preserved, unlike some of the spectacular collections previously built up by miners working at the face, as well as by avid collectors who had ready access to active mine sites (the Chapman Collection of mineral specimens from Broken Hill is a classic example).

Written and pictorial records can be more easily conserved as long as the will exists to do so. Mining companies recognise the importance of historic records and mine plans to future development or re-development. Despite this, many appear to lack interest in maintaining archival material once their operations have ceased and some may even deliberately destroy records to avoid potential future liability. The cost of safe storage for archival material has been a determining factor in the past, but with digital storage this should not be so significant, although there is still a cost and rapid changes in information technology can result in compatibility problems. The recent trend to corporate ‘unbundling’ of mining companies (i.e. large companies breaking up into smaller companies) also makes it difficult to maintain archival records and corporate knowledge.

The future of mining history will depend largely on the level of interest by historians, the public and the mining industry. The Australian Mining History Association, founded in 1995, is successfully promoting and providing a focus for this interest amongst academic historians and sections of the general community, particularly retiring professionals linked to the mining industry. However, the field lacks ‘new blood’ (cf. Claughton and Mills, 2011). Younger
Historians need to be encouraged into the study of mining history, for example by providing them with incentives and support to select mining history topics for their higher degree studies. Geoffrey Blainey, one of Australia’s leading scholars and the country’s pre-eminent mining historian, chose the history of the Mount Lyell copper mine in Tasmania for his PhD thesis and went on to tell much of the Australian mining story in a series of popular books including *The Peaks of Lyell, Mines in the Spinifex, The Rush that Never Ended, The Rise of Broken Hill* and *The Golden Mile* (Blainey 1954, 1960, 1968, 1969, 1993). Indeed his work has shown how much of Australia’s general history can usefully be seen through the prism of its mining history. But there is still much to uncover and interpret.

The mining industry needs to increase its interest and support for mining history and historians need to promote and encourage this interest. Not only is this history of practical use, as outlined above, but also it provides an important public relations link to the general community. The need for greater interest and support for mining history and heritage has been highlighted by the recent demise of the ‘Australian Prospectors and Miners Hall of Fame’ in Kalgoorlie. Some companies do actively support aspects of mining history and many take steps to preserve heritage items on their leases. However, others consider mining heritage unimportant or even a costly liability if attention is drawn to it. Mining heritage is seen as adding an extra layer of complexity to environmental protection and compliance requirements. Preserving items of mining heritage can also be inconvenient for modern operations and may add expense if projects need to be designed around them. Some sites of extreme environmental devastation have developed into tourist attractions, for example the denuded hills or so called ‘moonscape’ around the historic Mt Lyell copper mine at Queenstown in Tasmania. Mining companies are keen to distance themselves from such forms of mining heritage and in the process perhaps tend to play down mining heritage in general. Certainly greater interest by the industry will assist in preserving key physical and documentary evidence. A way to enhance greater understanding and interest by the mining industry would be to include a mining history component in the undergraduate training of future mining professionals, such as mining engineers, metallurgists and geologists.

In a country such as Australia, with active on-going mining it is important to develop the right balance between heritage preservation and environmental management so that there is a good record of this activity for future generations of mining historians and the public. Currently the balance is probably more towards environmental restoration and there is a need to strengthen awareness and the requirements for mining heritage preservation at mine closure. Even with the best intentions and resources to preserve our physical mining heritage modern rehabilitation practice will inevitably result in much less preservation of primary evidence. It is critical therefore to preserve the sites and features that retain the most important information and particularly aspects that cannot be reconstructed from other evidence. Once the sites go, so does the potential for historical and archaeological research. For example, to this end Pearson and McGowan (2009) have recently proposed guidelines for preservation at mining sites, particularly non-listed sites, as part of a survey of abandoned mining sites in New South Wales. Careful and well-informed preservation of physical evidence at mining sites can provide useful community and economic benefits into the future. The growing interest in mining history is driving a rising interest in mining history tourism, which can bring financial benefits to local communities and an appreciation of the positive contribution of mining to society. Tourist mines such as those at Sovereign Hill near Ballarat, the Dalprats and Day Dream mines at Broken Hill and the mining heritage sites at Gympie in Queensland and in the ‘Copper Triangle’ at...
Moonta–Wallaroo–Kadina and at Burra in South Australia are examples.

Mining will remain a fundamental activity for as long as our technologies and life styles require mineral products. Continued supply of these products in an environmentally sustainable way will be a huge challenge demanding exploitation of new and lower grade ores, major technological innovations in exploration, extraction and processing, much more efficient patterns of use and a high level of recycling. The mining history being forged today and in the near future will be of immense interest to the next generation of mining historians.

Acknowledgements
I would like to thank Warren Dym for his invitation to prepare this short contribution to a symposium on Mining History. I also thank David Oldroyd for his editorial advice and comments. The article has benefitted from the comments and suggestions of several colleagues including Mel Davies, Barry McGowan and Don Perkin.

References

Ken McQueen,
University of Canberra

AMHA OFFICERS & ADVISORY COMMITTEE: 2013
The following officers and advisory committee for 2013 were elected at the Waihi Conference AGM:
Patron: Prof. Geoffrey Blainey, AC
President: Dr. Ruth Kerr, OAM
Vice-President: Dr. Ross Both
Secretary/Treas: Mr Mel Davies, OAM

Committee Members:
ACT – Dr. Barry McGowan,
Dr. Ken McQueen
SA – Dr. Peter Bell, Graham Hancock
NSW: Dr. Adrian Hutton, Greg Knapman
NT – Dr. David Carment, Dr. Bev Phelts
QLD – Dr. Kett Kennedy; Dr. Jan Wegner
VIC – Dr. Mike Williams, Nick Williams
TAS – Greg Dickens, Dr. Nic Haygarth
WA – Wendy Carter, Howard Tew
NZ – Dr. Philip Hart, Dr. Brian Hill

Journal Editor: Mel Davies
Assistant Journal Editor: Nick Williams
Webmaster: Greg Drew

SEASON’S GREETINGS
Our usual Seasons Greetings to all our members. If you don’t believe in Father Christmas you should – I can vouch for it – many years ago on a visit to Wales with the family we actually met him underground at the ‘Big Pit’. If memory serves me correctly he presented the kids with a present and a lump of coal – they were most impressed - a never to be forgotten moment. A couple of weeks ago at the awards night at my granddaughter’s Ballet School a very young performer asked me if I was Father Christmas? She obviously sized up my red nose and grey hair – I had to inform her that while I was old enough I hadn’t yet grown a beard, but that I’d put in a good word for her to the real Santa with the proviso that she remained good for the next few days before Christmas. Her mother nodded in approval! Good deed done for the day.

MJD/Dec’12