Mineralogical Society of Western Australia Inc.

NEWSLETTER
October 2021

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Cover page: A photograph from the Mineralogical Society of WA, Perth Gem and Mineral Fair, hosted at Curtin University Stadium in September 2021.

Mineralogical Society of WA Inc.
Meetings held at the WA Lapidary & Rockhunting Club rooms
31 Gladstone Road, Rivervale (corner of Newey Street)
Registered Society No. A1009304P

To encourage mineralogical study by amateur and professional alike and, in so doing, discover, document and preserve the Earth's and in particular Western Australia's natural history.

EDITORIAL

Who would have ever imagined that Perth would or could host a gem and mineral show to rival the eastern states? Like many of you, I have very fond memories of visiting gem and mineral shows with my dad as a child.

It is really a testament to the PGMS organising committee and The Mineralogical Society of Western Australia for pulling it off, in such a spectacular manner. And everyone is chanting *bring on the next one in 2022!*

This is the last newsletter for 2021, with Christmas very fast approaching. This is the second newsletter I have put together, and I would like to get some feedback — from you, the members — on what you like and what you don't like.

Should you have any questions, comments, or concerns – please get in touch.

Happy collecting
Rodney

Some of the fare for sale at the PGMS
Images courtesy of Allan Hart

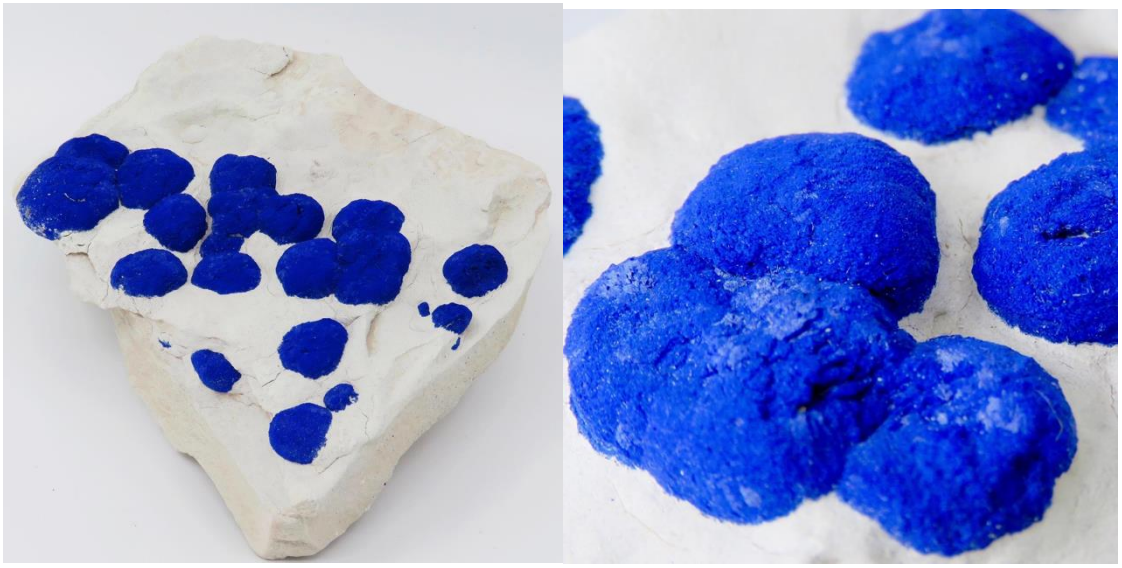
SCHOOL OF ROCK - DR ROBERT MADDEN

Dr Robert Madden is an avid science communicator writing small geology vignettes, geology stories and educational resources on his social media account "School of Rock".

This segment of our newsletter shares some of Dr Madden's incredibly interestingarticles and photos.

You can follow Robert's 'School of Rock' for more geoscience content onInstagram @drrhcmadden.

Dr Madden only writes about specimens he has personally seen and takes all his own specimen photos.



Malbunka blue suns

Amongst the Ltalatuma Aboriginal Land Trust estate in the Australian Northern Territory, about 220 km west of Alice Springs is the Malbunka copper mine, home to one of the most distinctive mineral deposits in the world. These bright blue 'suns' are formed by the mineral azurite, a copper carbonate mineral. Although azurite is a common mineral, it forms as these suns nowhere else on Earth. Each blue sun is a discoidal plate of multiple fine crystals of azurite arranged in a radial and concentric pattern. Try making a 360° fan of pens and you should get the idea of the fine structure of these azurite suns.

Found nowhere else, the geology and circumstances at Malbunka are necessarily unique. The azurite formations are found within an early Cambrian section of a Precambrian to Devonian marine and terrestrial sedimentary basin that was uplifted, folded and faulted around 300–400 million years ago during the Alice Springs Orogeny. Importantly, somewhere along the way circulating basinal brines introduced copper to the sedimentary rocks. The azurite suns are almost exclusively located in a 2.5-meter-thick kaolinite (white clay) lens that forms the crest of an anticline fold. The azurite has grown along bedding planes or faults in the kaolinite resulting in the discoidal shapes. The blue of the azurite varies from dark through to light blues and is controlled by the concentration of kaolinite clay within the precipitating discs.

CLUB ACTIVITIES
TALKS

Green ‘n Gold

Following the General Meeting held on 14 July, Murray Thompson delivered a lavishly illustrated presentation entitled “Green ‘n Gold” in which he discussed the geology of the Marshall Pool chrysoprase (Green) and Beta Hunt (Gold) deposits and showed us some of the end product fashioned items and jewellery from both deposits.

Chrysoprase, from the Greek *chrysos* (gold) and *prason* (leek), is a light bluish-green chalcedony that has long been prized as an ornamental gem material. It develops in weathered nickeliferous mafic to ultramafic rocks such as those found in the Norseman–Wiluna greenstone belt and is generally associated with considerably larger amounts of magnesite.

Chrysoprase generally shows a non-homogeneous texture made up of cryptocrystalline quartz with patches of imbedded quartz microcrystals and inclusions of amphibole, chlorite and clay minerals from the host rock. The green colour is caused by nickel in relatively small amounts, but there is no apparent relationship between intensity of colour and nickel content. SEM analyses produced a range of nickel values from 0.78 to 0.94 weight % with the higher value from a patch of whiter material that also showed a high magnesium value (2.92 wt %). Although the green colour is considered stable, Murray also contended that some chalcedony material could naturally bleach.

Boulders from one of the pits at Marshall Pool showing the lateritized surfaces with white magnesite

A typical boulder of chrysoprase and host matrix from Marshall Pool

There are numerous chrysoprase deposits in Australia, with the ones at Marlborough in Queensland the most well-known and those from Yerilla and Wingellina the best known of the Western Australian occurrences.

The Marshall Pool deposit lies some 70 km north-northwest of Leonora, Western Australia, and is currently producing some excellent translucent quality chrysoprase of an intense apple-green colour that Murray is currently working into unique sculptured items incorporating colour nuances and adhering host matrix material. Fashioning select pieces is done to enhance the natural appearance of the material. Chrysoprase is a hard material and takes an excellent polish.

Sorting chrysoprase rough from the magnesite

Fashioning interpretations using mixed media

Gold from Beta Hunt

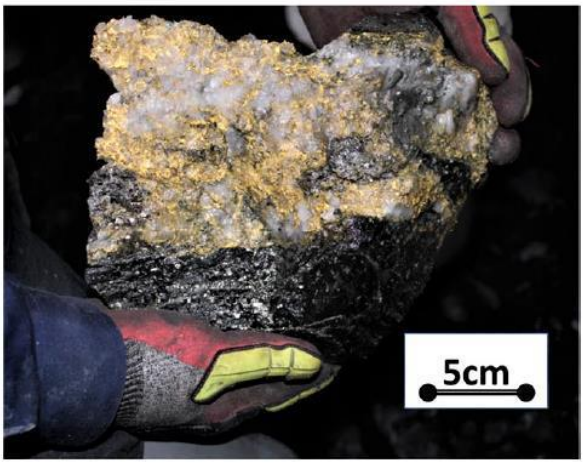
The Beta Hunt mine is located on the shores of Lake Lefroy immediately south of the town of Kambalda within the central portion of the Norseman–Wiluna greenstone belt that comprises a sequence of mafic/ultramafic and felsic rocks.

The mine was initially developed in 1973 to produce nickel from primary sulfides found along the floor of a komatiite flow within lava channels developed in the high Mg-O Kambalda Komatiite. The nickel mineralization is hosted by talc–carbonates and serpentinized ultramafic rocks and consists of ribbon-like bodies of massive to disseminated sulphides.

It was placed under care and maintenance from 2008 until 2013 and mining for nickel recommenced in 2014.

Gold mineralization occurs mainly in three broad subvertical shear zones in the Lunnon Basalt which lies immediately below the Kambalda Komatiite. Within these shears coarse gold sometimes occurs where the shear zones intersect iron-rich sulfidic metasediments within the Lunnon Basalt.

Spectacular coarse specimen native gold has been mined from Beta Hunt in the past, mostly from near the basalt-ultramafic contact. In 2018 the largest occurrence of this type, referred to as the Father's Day Vein, was discovered. It contained a staggering 25,000 oz. of gold.



Part of the Father's Day Vein showing the coarse gold.

Specimens of Beta Hunt coarse native gold have been available in the recent past, but current management has decided to discontinue this and to process all material.

Murray has been fortunate to obtain some remarkable and rare specimens which he will continue to fashion.

Four matching slices – a project to be completed and Interpretations in cutting: Gold in quartz.

Mary Kathleen uranium deposit in the Mount Isa Inlier

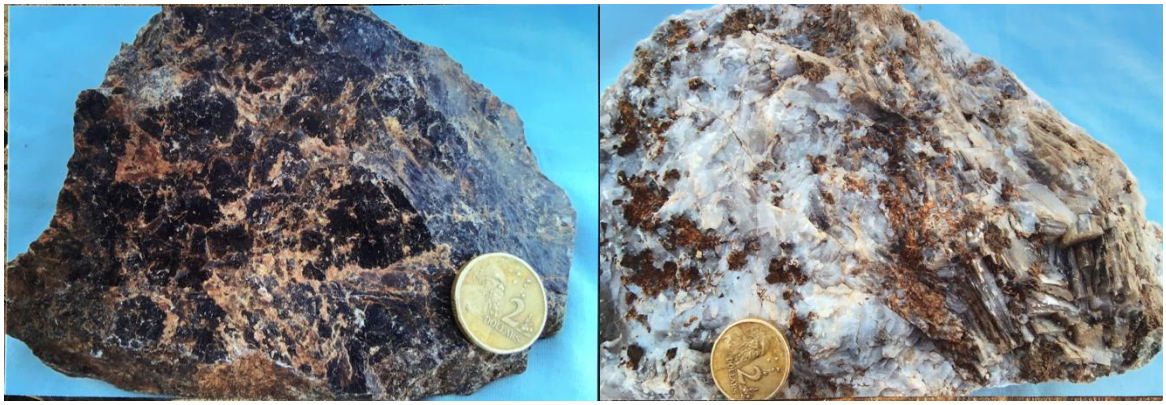
The Mary Kathleen Mine, Queensland. Image provided by Niels Dahl.

On Wednesday 8th September, Niels Dahl discussed samples he had collected from the Mary Kathleen uranium deposit in the Mount Isa Inlier of northwest Queensland with an audience of over 30 members. The samples told a story which Niels wanted to convey to us.

Two years ago, Niels and his wife Lyn visited the abandoned Mary Kathleen uranium deposit while caravanning around Australia. They stayed for a few days to collect mineral samples from the mullock heaps and to visit the open pit — helped along by a large snake which John Mill kindly identified as a northwest Queensland taipan. Niels believed that what they saw could tell a story about the origin of the deposit which clashed with that told to tourists at the old townsite.

The orebody (some still in the ground) consists of a solid body of very coarse-grained garnet and pyroxene rock with allanite carrying uraninite in a very irregular pattern. The orebody formed in dominantly clastic supracrustal metasediments in the upper part of the Corella Formation (1780–1760 Ma). The Corella Formation was later intruded by the Burstall Granite (1737±15 Ma). In literature, the deposit has been classified as a contact-metamorphosed, hydrothermal, uranium deposit, with the uranium sourced from the Burstall Granite. The Mary Kathleen uranium deposit is unique in Australia and possibly in the world. The uraninite is dated at 1550 Ma, which is also believed to be the age of formation of the syncline in which the ore is located.

Many skarn samples with garnet and pyroxene, garnet and calcite, pyroxene with calcite and amphiboles with feldspar were found. Samples of very coarse-grained calcite veins and calcite as matrix in matrix-supported breccia were also collected. The samples of very coarse-grained garnet with pyroxene from the orebody caught Niels' special attention because they reminded him not of skarn, as he knew skarn, but of eclogite. This, together with the fact that the contact with mafic rock in the pit showed no alteration across the contact, suggested it indeed could have been an intrusive body rather than skarn formed by hydrothermal fluids.



Images: Left, solid garnet and right, coarse-grained calcite with garnets.

After returning home and reading about Mary Kathleen in preparation for this presentation, Niels found support for his idea that the Mary Kathleen uranium deposit formed from fluids originating deep in the crust or from the mantle. The entire district around the orebody shows development of carbonates in pressure minima in fold structures and in fractures, most likely caused by the action of fluids which originated from the mantle and not from the carbonate members of the metasedimentary rocks. It seems that the carbonate fluids diffused into the country rocks instead of forming a solid carbonatite intrusion with a garnet–pyroxene body. This changes the classification of the Mary Kathleen uranium deposit to be carbonatite-associated, which is not unusual for the range of trace elements we find at the deposit — U, REE (Ce, La, Nd, Y), Cu, Pb, W, Zn.

The deposit is now being explored for its REE potential. A beautiful plant, *Calotropis procera*, which only grows in REE-enriched soils, can be seen all around the open pit and the mullock heaps.

Compiled by Niels Dahl (edited by Susan & Vernon Stocklmayer and Angela Riganti)

FIELD TRIP

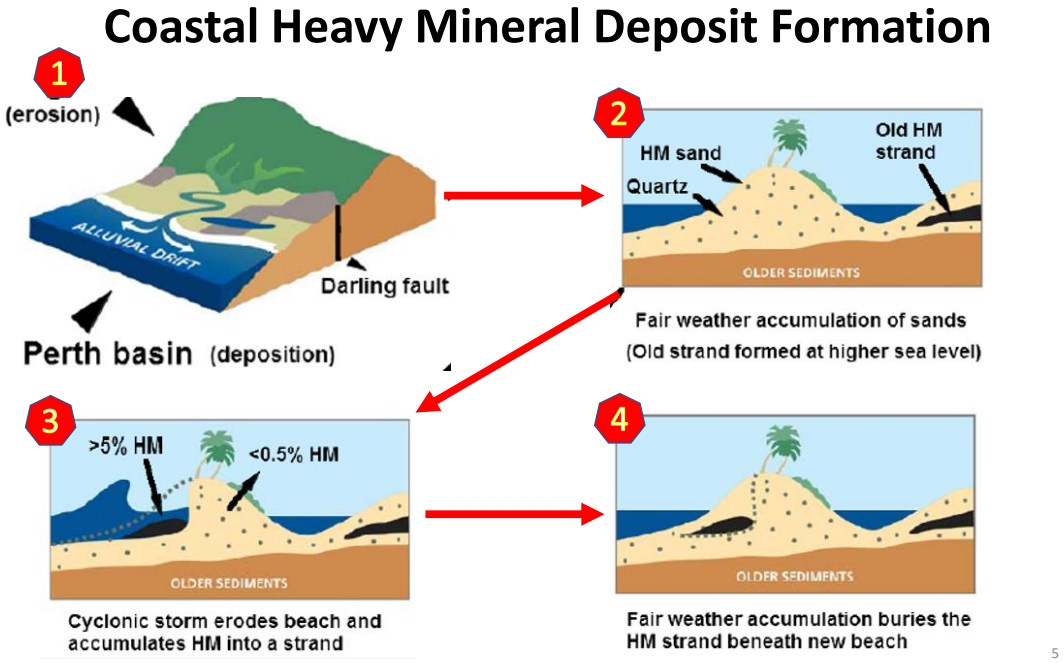
Image Resources NL's Boonanarring Mineral Sands Mine

A field trip was made to Image Resources' Boonanarring Mineral Sands mine near Gingin on Friday 27th August 2021. Attendees were Ida Newton, Mike Wort, John Mill, Sue Koepke, Susan and Vernon Stocklmayer, James Sherborne, Allan Hart and Barbara Donati.

We were welcomed to site by Brendon Ladner (HSet Superintendent), Rajesh Shah (Plant Metallurgist), Terry Tye (Operations Manager), Ivan Van Rooyen (Mining Superintendent) and David Ridgeway (Geologist).

Brendon gave us a comprehensive explanation of the geology of the site and the history of Image Resources involvement in the area. He also explained the mining and extraction processes as well as Image's philosophy on site rehabilitation after mining is finished and their firm commitment to be a good corporate citizen.

Geology and depositional environment (Refer to attached diagram, below)



The Boonanarring deposit consist of two main mineralised strandlines that are interpreted to have been deposited in the Perth Basin, in an ancient shoreline environment along the Gingin Scarp. The latter was active during the Pleistocene period (2.6 Ma) when sea levels were higher than today.

The strands of accumulated heavy minerals are situated along the edge on an ancient sea cliff. The base of the deposit is at an elevation of about 66 m RL.

Image Resources has interpreted the stratigraphy of the deposit to consist of four main units that are always present and should be easily recognised by their different colours:

1. Surface Sands – yellow, low clay (1m to 10m depth)
2. Red Cover Sands – red, iron rich, clayey at base
3. Host Sands (Yoganup) - grey

1. High Grade Eastern Strand – base between 65m to 69m, steep dip
2. Lower Grade Western Strand – base between 64m to 66m, shallow dip
3. Base is very coarse sand to pebbles

4. Basement – grey to black, carbonaceous clays

Exploration history

The area was originally identified by Iluka Resources Ltd, but the deposits were considered too small to fit into their economic model. Later, Image Resources established a substantial holding extending for some 20 km along the line of lode. Image Resources used sensitive airborne magnetic techniques to broadly define mineralised zones which were then drilled out on a 100m × 20m pattern by angled RC holes. Closer spaced drill holes further defined areas to be mined and establisher final grades.

Mining and metallurgical practices

The Boonanarring mine comprises a high grade, zircon-rich open pit mine and wet concentrate plant (WCP). The project produces a high-quality and zircon-rich heavy mineral concentrate (HMC) which is exported to international markets through the port of Bunbury.

The mine utilises traditional truck and shovel mining techniques. The WCP has a processing capacity of 3.6 mtpa and is forecast to produce between 300 and 330 ktpa HMC during both CY 2020 and 2021.

Mineralogy consists mainly of ilmenite with a subordinate but substantial zircon. Monazite, xenotime and leucoxene make up a very minor portion of the mineralogy and are not economically important. There are also trace amounts of metamorphic minerals such as staurolite, kyanite and garnet. The economics of the deposit are enhanced due to the high percentage of zircon.

We visited a working open pit where we were able to observe the top-of-ore from a bench (refer to image below). Stockpiled overburden can be seen in the distance.

Operating heavy mineral pit at Boonanarring

The project has a resource of 30.3 Mt at 6.0% heavy mineral with a mineral assemblage including 20.4% zircon. The reserve is 10.7 Mt at 8.9% heavy mineral with a mineral assemblage including 27.5% zircon.

It is estimated that the mine will be depleted by 2023 with rehabilitation continuing into 2024. After mining, the pit is backfilled to the original surface and the ground returned to pasture. The flow chart below shows the mining process from start to finish.

Mining and rehabilitation flow chart.

Heavy mineral concentrates

Left: Ilmenite concentrate. Right: Zircon concentrate: well rounded and with mixed frosted and lustrous surfaces, some prismatic habit grains; dominantly colourless with smaller fraction of pink coloured zircon grains. The ilmenite concentrate includes a small percentage of leucoxene, and other minerals identified from various (HDC) concentrates are rutile, staurolite, kyanite, green spinel and tourmaline. (Grain sizes less than 1 mm screened). *[Identifications by Mike Wort and Susan Stocklmayer].*

ALLAN HART'S IMAGE GALLERY FROM THE FIELD TRIP

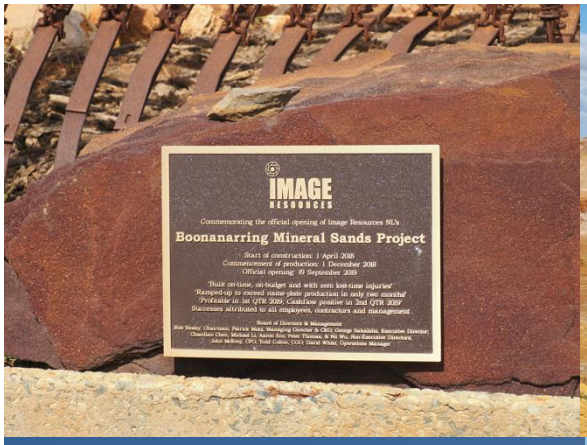
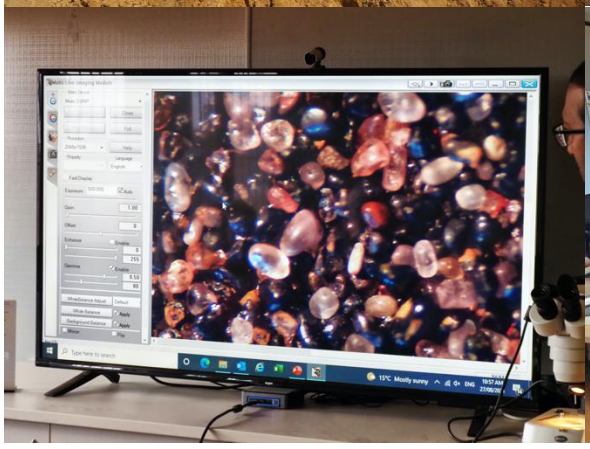


IMAGE
RESOURCES
Commemorating the official opening of Image Resources NL's
Boonanarring Mineral Sands Project
Start of construction: 1 April 2008
Commencement of production: 1 December 2008
Official opening: 19 September 2009
'Built on-time, on-budget and with zero lost-time injuries'
'Ramped-up to exceed name plate production in only two months'
'Profitable in its QTR 2009, Cashflow positive in 2nd QTR 2009'
Successes attributed to all employees, contractors and management
Board of Directors & Management:




MOST SAND / MINERALISED YOGANUP
RED COVER SANDS
WASTE
HOLE IM0139 TRAY 1

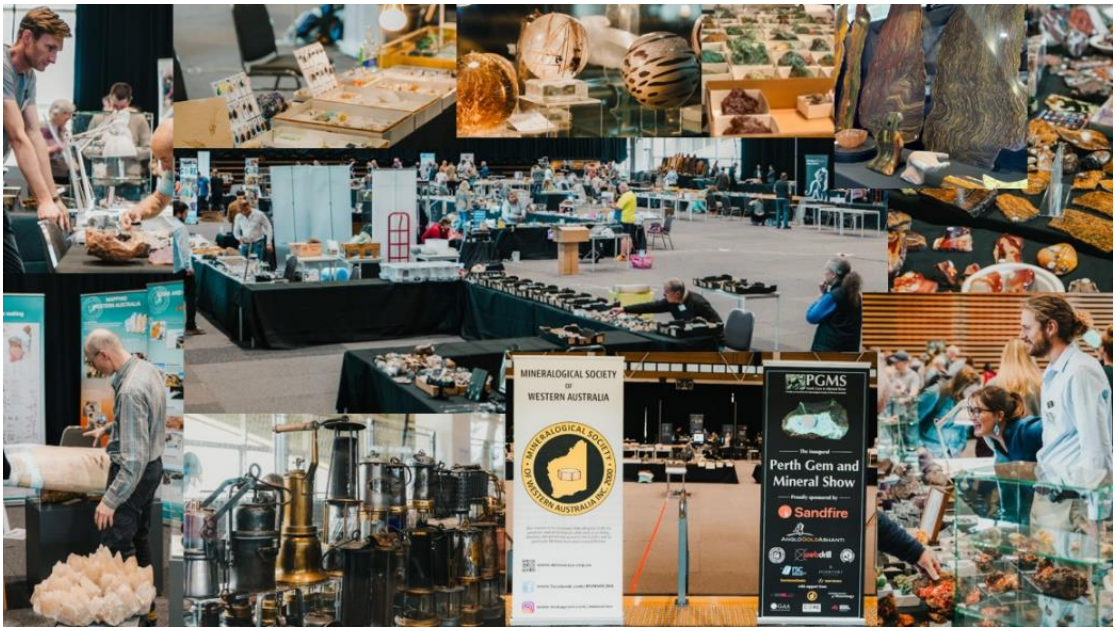
PERTH GEM AND MINERAL SHOW

PGMS
Perth Gem & Mineral Show
Proudly presented by the Mineralogical Society of Western Australia

Thank you to all who contributed to the organizing and running of the inaugural Perth Gem and Mineral Show (PGMS), which was held at the Curtin Stadium from Friday 17 to Sunday 19 September.

The 2021 PGMS was the first of its kind in Western Australia. It offered the opportunity to members of the resources sector to come together and showcase the amazing mineral wealth and mineral heritage we have in the great state of Western Australia, and it allowed government and other organisations to publicize their mineral-related initiatives and products. Mineral dealers and collectors were given the chance to trade some of the great mineral specimens from the State and beyond.

To say we were blown away by the event and the public interest is an understatement.



Although predicting the number of people expected to come through the door was a nearly impossible task for the first year of the event, our conservative estimates of a few hundred people per day was blown out of the water. More than 3000 people came through the doors over the three days of the Show.

More than 50 vendors and exhibitors filled the Stadium with an absolute plethora of items on display and for sale. While it is impractical to detail everything on display at the Show, a few examples include mineral specimens from across WA and the world, polished samples and slabs, spectral mineralogy services, gems and hand-crafted jewellery, mineral heritage displays, interactive displays, and parts of the famous Creasy Collection.

To kick-off the Show, we were honoured to host the public unveiling of a set of spoons donated to the Perth Mint, emblazoned with gold from the Welcome Stranger gold nugget. Mrs. Leonie Ackley inherited the spoons as a descendant of Mr. John Deason — discoverer of the Welcome Stranger nugget. Mrs. Ackley donated the spoons to the Perth Mint earlier this year and graciously unveiled them at the opening of the Perth Gem and Mineral Show on Friday 17th September.

ABC Perth visited the Show on Friday morning during the bumping in, and PGMS was given airtime on both Friday and Saturday. Prior to the show, an interview was aired on RTR FM radio — listen to some of the organisers talking about the PGMS and the rationale behind it at https://www.youtube.com/watch?v=QzQgGIeuTtQ.

In line with the aim of the PGMS to showcase the mineral heritage of Western Australia, ten talks were presented on Saturday and Sunday, on a variety of mineral related topics.

The ‘Charity Rocks’ Sundowner, held at the Arts Rubicon on Saturday 18th, was a wonderful networking opportunity and over 40 items were generously donated for auction. Over $16,000 were raised for charity and MinSocWA during the event. Some very animated and competitive bidding raised money for many good causes. Funds raised have gone to the Royal Flying Doctors Service (almost $5000), Beyond Blue (over $3600), Indigenous Literacy Foundation (almost $4500) and MinSocWA (over $3000).

At the show, one vendor said he was as busy on Saturday as he was at the Munich Show (aka Mineralientage) — an international trade fair for minerals, gemstones, jewellery, and fossils that has firmly established itself as the largest of its kind in Europe. Feedback in general has been very positive, particularly regarding engagement with children. A few quotes from the weekend:

“I was utterly blown away by each stallholders’ willingness to engage with my daughters in a meaningful and positive way”

“Children were never dismissed and able to engage in intelligent, interesting conversations”

"I have not experienced that level of acceptance of children at an event before – huge credit to you and all stall holders"

"Absolutely nailed it"

"Went for the rocks but the highlight was seeing young ones and their excited faces"

We would like to thank our sponsors: Sandfire Resources (major sponsor), AngloGold Ashanti (sundowner sponsor), Webdrill (videography sponsor), Portable Spectral Services, Geological Survey of Western Australia (GSWA), Desert Fire Designs, RSC Consultants, GemstoneGeeks, and Westernex. It is worth mentioning that Sandfire raised almost $11,000 selling material from their DeGrussa operations, and all money raised will go toward the local communities around the DeGrussa operations.

We would also like to thank the Perth Mint, Western Australian Museum, Australian Journal of Mineralogy, Gemmological Association of Australia, Core Security, Gold Industry Group, CoRE Learning and the WASM Wallabies for their support. And thanks to Webdrill, Patsy Rebecah Dunstan, Patsy Sperring and Jared Thomas for their photos, which have been used in this report.

To our volunteers from near and far — from the door teams, floaters and those who presented at the seminars — your generosity has not gone unnoticed. You all jumped in and hit the ground running. Your can-do-attitude and ability to think on your feet to ensure the event ran smoothly are greatly appreciated.

Finally, thanks to the Mineralogical Society of WA for allowing us to hold this event in their name. The support and guidance from the committee, patron and members has been exceptional.

We look forward to an even bigger and better year next year. Bring on 2022!

Peter Willems, Kylie Matonia, Nicolas Hébert, Casey Clifton, Norton Kalleske, Mitch Helphick
PGMS Organising Committee

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SIMPSON PROJECT UPDATE

Simpson Project Meeting held at 10am-1pm on Sunday, August 1st, 2021

Twelve MinSocWA members who had expressed an interest in contributing towards the joint Simpson Project congregated at the home of Susan and Vernon Stocklmayer to discuss and debate the progress of the Project and to encourage active participation.

Angela and Susan had produced a short PowerPoint presentation to include useful web links and a draft example of a write up, which was connected from a laptop to a suitably large TV screen by a HTML cable — this enabled access to the web and to bring-up relevant data whenever required.

The meeting commenced with a quick overview of the progress of the Project which was not particularly spectacular — of the 325-odd minerals identified as being new to WA since the third Simpson volume, some 50 write-ups of various stages of completeness had been finished in 13 months. In fact, over the last few months, new minerals were discovered at a far greater rate than they were written-up! The overall, inevitable conclusion was that, taking an editorial period of at least 12 months, the project would not be completed within the two possible time frames allocated.

The PowerPoint presentation promoted much active participation and discussion and, hopefully, those attending who were reticent as to how to start and where to obtain their information from, realized that compiling material for their chosen mineral was not difficult and, in fact, could be interesting and fun.

Throughout the session it was emphasised that whilst MINDAT is an excellent source of information, it does have limitations and should not be totally relied upon; search engines such as Google Scholar and Research Gate often provide access to copies of original published material. Numerous databases are available, and we were briefly shown how to navigate the Geological Survey's MINEDEX and GeoVIEW.WA databases.

Problems that are continually being identified as work progresses were debated but the overall mantra was to work your way through the references and record the data and sources — tidying up will come later.

It was suggested that an interim compilation of 100 minerals was brought to completion before continuing with the full number, but this was not well received. Attendees thought it should be “all-or-nothing”.

At the completion of the session, it was apparent that enthusiasm had been rekindled and several members requested minerals to write-up.

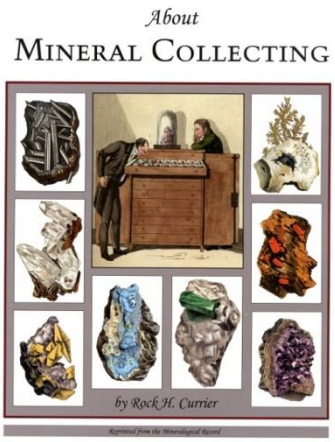
It was also suggested that more similar meetings were held at regular intervals to monitor progress, discus problems that have arisen and provide ongoing assistance and encouragement.

Vernon & Susan Stocklmayer

FEATURED BOOK — MINERAL COLLECTING

The MinSocWA library has two books specifically devoted to mineral collecting: *The History of Mineral Collecting 1530-1799* and *About Mineral Collecting*, both published by the Mineralogical Record.

The books document a fascinating insight into ancient mineral collecting and the famous mineral collections of individuals and institutions. They are illustrated with diagrams of many important and beautiful specimens and also portraits of the more famous collectors.



So why do people collect minerals? Perhaps for many of us, it starts as a small child with a fascination for natural things. These days minerals, for a child, are relatively easy to obtain from family field trips, auctions, lapidary club exhibitions, mineral fairs etc. Serious collectors build up the quality and quantity of their collections by buying and selling specimens and swapping obsolete specimens for ones more relevant to their collection.

Collections can be focused on a particular mineral or suite of minerals, a mine or mining district, a country of origin, colour or the collection might just be undisciplined, with minerals from all over the world.

Specimens can cost as little as a few dollars to millions, depending on size, quality and rarity. The price rises exponentially with each of these parameters.

Over the years, collections are accumulated, dispersed, sold, gifted and some are even abandoned or destroyed. They are rarely, if ever static. The best minerals end up with institutions such as museums and wealthy individuals. Many collections are available for public or private viewing.

Both books are available on loan from the Mineralogical Society of Western Australia Library.

UPCOMING EVENTS

The Department of Mines, Industry Regulation and Safety offers FREE training in the use of GeoMap.WA, GeoVIEW.WA and TENGRAPH Web online systems. The presentations allow hands-on interaction.

Attendees should have proficient computer skills and know how to do the following in GeoVIEW.WA and TENGRAPH Web:

- Identify
- Zoom in/out
- Turn on layers
- Add drawings and measurements on the map
- Do a simple search
- Create a printout of the map
- Add coordinate readouts

A desktop computer will be available for each participant. There is no need to bring anything. However, you are welcome to bring your own laptop if you want to run through specific examples.

Book online at https://www.dmp.wa.gov.au/Geological-Survey/Training-1462.aspx

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Registration is open for the two-day online workshop of The Clay Minerals Society: '**Clay Minerals in Healthcare Applications**'.
Registration and further information is available at https://www.clays.org/2021-workshop/.
There is no charge to register, but joining instructions will only be available to those who do so.
The programme is based on two special issues of *Clays and Clay Minerals*: 'Clay Minerals in Health Applications' and 'Clay Minerals in Healthcare' to be published in 2021 and 2022 and incorporating contributions by colleagues from Qing Yang Institute for Industrial Minerals, China.

The session convenors are Eduardo Ruiz-Hitzky and Chun-Hui Zhou.

NEW MEMBERS, MEMBERSHIPS AND MEETINGS

The Mineralogical Society of WA would like to welcome the following new members:

- Michael Santos
- Aisha Ludowyk
- Peter Pring
- Wes Landwher
- Jawid (Robert) Najafi
- Krishna Ghose
- Chamila Kuruppullage
- Viviana Gorlato
- Anthony (Tony) Ahmat
- Mauricio Castillo Saldias
- The McQuire family
- Karen Garn-Jones

All members are asked to ensure that all your contact details are up to date with the Secretary. If you change your email address or phone number, please let us know so that you continue to receiveall MinSocWA communications. Membership forms can be downloaded from the MinSocWA web page here: www.minsocwa.org.au/membership.

Meetings

Meetings of the Mineralogical Society of Western Australia Incorporated are usually held at **7.30pm on the second Wednesday of every odd month** at the WA Lapidary & Rock hunting Club rooms at 31 Gladstone Road, Rivervale (corner of Newey Street). The venue will be open from 7pm for refreshments and socialising.

At all meetings the Society's microscopes,
UV lamp and refractometer are available for use by members.

COMMITTEE MEMBERS FOR 2021/2022

At the AGM on 9 September, a new MinSocWA committee was elected, with some new and old faces. Welcome to all and thanks for stepping up to help run the Society for 2021–22.

A big thank you to Sue Koepke (past President) and to Susan Stocklmayer (vice President) for their contribution and time on the committee. Sue's report and I&E summary for the past financial year are presented below.

President	Peter Willems	president@minsocwa.org.au
Vice President	Craig Bosel	
Secretary	Angela Riganti	secretary@minsocwa.org.au
Treasurer	John Mill	treasurer@minsocwa.org.au
Field Trip Leader	Vacant	fieldtrips@minsocwa.org.au
Newsletter Editor	Rodney Berrell	newsletter@minsocwa.org.au
Committee Member	Kylie Matonia	
Committee Member	Niels Dahl	stormpfan@gmail.com
Committee Member	James Sherborne	jamessherborne@hotmail.com

Patron - *Mark Creasy*

President report

Thank you for coming to our 21st Annual General Meeting. We have been fortunate to have experienced very few COVID-19 restrictions in WA over the past year, and have been able to continue meetings, activities and field trips with only minor adjustments and the occasional re-scheduling.

The three field trips and mine site visits took participants to the Koolyanobbing iron

ore mine (specular hematite) in November, Gingin quarry (Late Cretaceous fossils) in June, and the Boonanarring Project (heavy mineral sand) last month. We are grateful for Mineral Resources Limited's and Image Resources' hospitality.

Last year's Annual General meeting was followed by a celebration of MinSocWA's 20-year anniversary, with fun activities and entertainment provided by the Stocklmayers and Tom Bateman.

Our bi-monthly general meetings were held during the year as usual. At two meetings, silent auctions of surplus books and donated items, for which we thank Ken Ireland and Ben Van der Klip, took place.

Our speakers on the meeting nights were:

- Ben Nicolson on A Namibian Odyssey: Mineral Specimen Mining from 2000 until September 11, 2001;
- Milo Barham on Detrital mineralogy and the Australia-Antarctica connection: Exploring distant times and lands through a closer look at beach sand minerals;
- Mike Freeman on Ellendale: The 'Fancy Yellow' diamond story;
- Sarah Martin on Standing on the shoulders of giants: Mesozoic insects of Australia;
- Murray Thompson on Green 'n Gold.

Sincere thanks to all our speakers who so generously gave their time and energy to educate and entertain us.

Due to COVID-19 restrictions, the 43rd Joint Mineralogical Societies seminar scheduled to be held in Sydney in October 2020 had been postponed to this year. MinSoc NSW hosted a virtual seminar via Zoom instead, and a group of members and visitors met at the ChemCentre to participate thanks to Kari Pitts, who organised the venue.

In addition to meetings, MinSocWA facilitated two mineral markets over the past year, one in December and the second in May. These events are so popular with sellers that tables are in short supply and rationed.

Other activities during the year include work on the collaborative Simpson WA Update Project, which is progressing steadily under Susan Stocklmayer's leadership.

In February, MinSocWA members were treated to a guided visit of the E. de C. Clarke Museum at UWA, followed by a microscopy demonstration by Susan Stocklmayer and Jason Bennett. We thank curator Kailah Thorn for her time and effort.

In March, Murray Thompson hosted an afternoon visit at his Desert Fire Designs workshop where he crafts and displays beautiful one-off pieces.

The redesign of the dynamic MinSocWA website has finally been completed under Angela Riganti's leadership.

Last but not least, the PGMS subcommittee is only a few days away from launching the inaugural Perth Gem & Mineral Show, and I look forward to seeing you there as vendors, speakers, helpers or visitors.

During the 2020/2021 financial year, our membership reached a new record of 78, and I thank the various committees for their dedication and great work over many years in getting the Mineralogical Society of Western Australia to where we are today.

After 15 years of continuously serving MinSocWA initially as secretary/treasurer, then secretary, vice president and president, I have decided not to re-nominate, but hand the baton to Peter Willems who has demonstrated great vision and leadership, to take MinSocWA to the next level.

I thank you all for your ongoing support of the Mineralogical Society of Western Australia.

Sue Koepke

Income and Expenditure Report 2020–21

Income and Expenditure Statement 1/7/2020 - 30/6/2021				
Opening Balance 1/7/2020			$41,265.49	
Income				
	Auction Takings		$855.37	
	Donations		$45.00	
	Door Takings		$850.20	
	Field Trip Income		$9.00	
	Membership Fees		$2,955.00	
	PGMS Income		$26,777.50	
	Sale Day 16/5/2021		$247.20	
	Seminar Income		$68.00	
		TOTAL	**$31,807.27**	
Expenditure				
	Book Purchase		$28.00	
	Bank Fees and Charges		$10.73	
	Catering		$532.53	
	Hall/Cupboard Hire		$840.00	
	Instruments and Supplies		$1,107.61	
	Insurance		$1,281.71	
	PGMS Expenditure		$4,878.00	
	Photocopy/Postage/Mail/ Stationery etc		$316.55	
	Repairs		$807.35	
	Speaker's Gifts		$65.00	
	Website and Domain		$836.95	
		TOTAL	**$10,704.43**	
Closing Balance 30/6/2021			$62,368.33	

MinSoc WA LINKS

Web: http://www.minsocwa.org.au
Facebook Group: https://www.facebook.com/groups/minsocwa
Facebook Page: https://www.facebook.com/MINSOCWA
Instagram: https://www.instagram.com/MINSOCWA
YouTube Channel: https://www.youtube.com/channel/UC0S2TFVFIBLU-2zlEzE5VNA

ADVERTISING

The Australian Journal of Mineralogy

https://www.ajmin.org.au

The Australian Journal of Mineralogy now has its own website. It lists all the issues of the journal, and visitors can use the site to pay for subscriptions or purchase past issues. There is a free index,and a PDF of the now out-of-print V1.1, also free of charge. It has photo galleries, a mineral eventscalendar, handy links, and more.

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