



# Mineralogical Society of Western Australia Inc.

*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.*

## Newsletter - January 2021

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#### **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

## **EDITORIAL**

Welcome to the 2021 New Year to all our members and friends. 2020 was challenging for many and full of change, some good and some not so good. Your committee has worked behind the scenes during this time to try to continue to bring mineralogical news and events to you, whilst complying with the restrictions and are continuing to make plans for more events in what we hope will be an easier year for all.

This edition of the newsletter doesn't contain the regular article, School of Rock - By Dr Robert Madden. I know many members enjoy his section as they have told me. School of Rock will be back in our next newsletter in March and Dr Robert Madden sends his apologies.

Members are invited to make submissions to this newsletter of articles they have written and would like to share with our members and readers. The articles can be from a couple of paragraphs to a couple of pages. If you find it interesting then I'm sure there will be other members who also do, so please share. Send submissions to the Newsletter Editor.

## **PAST EVENTS**

### **GENERAL MEETING - Wed 11 Nov 2020**

The November General Meeting was held at 7.30pm at the WA Lapidary & Rockhunting Club rooms. See the Minutes of this meeting for details.

Following the meeting there was a talk by Ben Nicholson.

### **TALK - Wed 11 Nov 2020**

#### **Ben Nicholson - A Namibian Odyssey: Mineral Specimen Mining from 2000 until September 11, 2001**

Ben Nicholson entertained us with anecdotes on the trials and tribulations of commercial mineral collecting in Namibia during 2001.

Namibia, situated on the west coast of southern Africa was a former German Colony and was known as South West Africa. The country gained independence in 1990. Namibia is of similar size to NSW, has a low population, spectacular geology and is well known as a tourist destination for its many wild animal reserves. It is also an important source of interesting and rare minerals.

The story commenced with Tsumeb, a classical collecting location for its mineral wealth, both in variety and crystal form. Tsumeb was discovered in 1893 and mining commenced in 1907. The steep pipe-like body, extending for a vertical distance of some 1700 metres and cross-cutting various carbonate units, is a high temperature Mississippi Valley type deposit and contained economic amounts of copper, lead and zinc sulphides that were subjected to three zones of oxidation. The resultant vast array of secondary minerals, associated with the oxidation zones, contained rare elements such as Ge and Cd in addition to Cu, Pb and Zn and, often formed spectacular crystals within the numerous druses developed in the carbonates. Tsumeb is known especially for its azurite crystals.

Unfortunately, the mine was forced to close during a strike and was flooded by 1998. Mineral collecting was then restricted to the upper levels which are steadily being completely worked out contributing to the list of dangers. Ben discussed some of the dewatering operations and problems he faced in his efforts to collect good mineral specimens in the mine. Museum standard specimens are now a rarity.

During periods of shutdown at Tsumeb, Ben visited sites in the Erongo where the Erongo Volcanic Complex, a sequence of lava and pyroclastic flows, was intruded by granite. The miarolitic cavities formed within the granites have been the source of many typical pegmatitic minerals, particularly aquamarine, feldspars and fluorite, as well as more exotic minerals, such as jeremejevite. Boron-rich fluids resulted in the formation of tourmalines and include nests of impressive-size schorl crystals. Also black in colour is the tourmaline variety foitite which is considered rare in the Erongo.

Ben had several impressive black schorl tourmaline crystals, some on matrix, and showing a variety of habits and several with complex multiple growth terminations.







*Photos by Lesley Daniels*



*Photo by Susan Stocklmayer*

## MINERAL MARKET - Sun 6 Dec 2020 (10:00am - 3:00pm)

Another successful MinSocWA Mineral Market Day was held at the WA Lapidary & Rockhunting Club rooms on Sunday 6 December 2020 from 10:00am to 3:00pm.

Lots of sales tables full of a wide variety of specimens attracted a good number of members and the public.

Susan Stockmayer was on hand with the petrological microscope and a suite of RI oils and the refractometer to help identify minerals. Quite a number of requests for identification were made. It was a great addition to our Mineral Market.

Thank you to everyone who helped to organise the event and to those who helped on the day making it another success.



*All photos by Allan Hart*





## FIELD TRIP - KOOLYANOBING IRON ORE MINE - 28 Nov 2020

### Field trip report - by Marcus (Maciej) Napieraj

I am fairly certain that my hobby is collecting hobbies. It doesn't have a name as far as I know but maybe it should. We could call it a *hobbyism* or being a hobby enthusiast. All of these hobbies relate to making art in one way or another and I find it quite funny following the chain of events that lead to me being in a place like the Koolyanobbing iron mine with a group of people I have just met.

About one thousand days ago I was gathering ideas for making a mask when I stumbled upon a photo of *The Mask of Xiuhtecuhtli*; an ancient Aztec mask made with turquoise. It was so beautiful that I felt very inspired and just had to try something like this. Of course, I like to do things the hard way, so I joined the lapidary club, enrolled in a geology degree, collected about 400Kg of good-looking rocks, and eventually discovered the Mineral Society of Western Australia.

I joined the club a few months back but due to my studies I had not been to any meetings, but when the call out for a field trip came up, I couldn't resist.

Let's meet in Southern Cross at 10 they said. OK, I can make that. I left early in morning but got stuck behind a **very** slow moving, wide load truck going up the Greenmount hill. It blocked both lanes and added about 30 minutes to my commute which was not great. This meant I was now running late for my first meeting and mine site induction. Oh boy, was a feeling a little silly. What a way to make a good first impression.

The phone rang. Peter asked how far away I was. Too far for them to wait. Ooooh boy, this was getting embarrassing. I was going to have to meet them on site at a much later time. I thought at this point that maybe the best choice was to just not go. The shame would be too great. Just turn around and go home and never show your face again. Fortunately, I didn't let these thoughts stop me. I managed to make it to the mine just 15 minutes behind everybody else and didn't even miss the induction. Sometimes things aren't as dire as they seem.

After some quick introductions, explanations, and inductions we started our guided tour of the mine site. The company geologist showed us around, answered many questions and was very hospitable and friendly. Koolyanobbing is an iron ore mine that is famous for its specular hematite. It really is quite spectacular too. We were allowed to collect many beautiful specimens and we did. It was so nice to be around people that are enthusiastic about collecting rocks and minerals. Most of my friends don't get very excited when I show them my collection. Maybe I need better specimens.

We spent the evening with some MRL staff at the wet mess, then we retired. Nothing weird happened at all. I have got to say, it was very kind and generous of MRL (Mineral Resources Ltd.) to show us around, feed us and house us too. I did not expect that. I thought we were going to be camping!

The next day we spent exploring the area and looking for treasure. I'd go into more detail but think that might be a story for another time. I'm sure you know what fun it is and if you don't then you should come to the next field trip. As a new member, I found everybody to be warm, welcoming, and very passionate about mineral collecting. The combined knowledge and experience of the group was great, and equally great, was their willingness to share it. So, thank you folks, I had a blast and I think I will be a lifelong member.

A few more years and I might get started on making that mask.

Cheers!

Marcus N



### ***The Mask of Xiuhtecuhtli***

Xiuhtecuhtli or 'Turquoise Lord' was the Aztec god of fire and also closely associated with young warriors and rulers.

*Original photo by Mark Cartwright published 22 August 2013.*

Reference: <https://www.ancient.eu/Xiuhtecuhtli/>  
(Ancient History Encyclopedia)



Walking along K Deposit ramp (Photo by Peter Willems)





K Deposit group photo (*Photo by Peter Willems*)



Fossicking at K Deposit (*Photo by Peter Willems*)





Granite Quarry group photo (*Photo by Peter Willems*)

*Photos by Peter Willems*



Specular Hematite with Goethite



Specular Hematite with Pyrite





Specular Hematite



Specular Hematite



Specular Hematite with Quartz  
(Photo by Peter Willems)

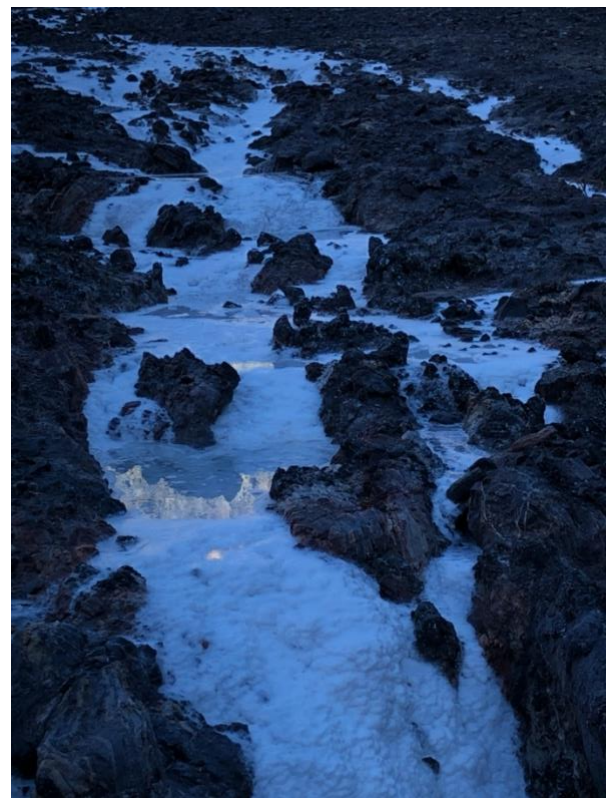


Pyrite (Photo by Ida Newton)





Although not collected on this trip, this specimen of Koolyanobbing specularite with cut faces from Susan and Vernon Stocklmayer's collection is a very good example.  
*(Photo by Susan & Vernon Stocklmayer)*



Bottom of K Deposit pit showing halite crystallised out of the evaporating salty groundwater.  
*(Photos by Angela Riganti)*

## INTERESTING ARTICLES & OTHER NEWS

**Title:** St Petersburg University scientists discover a new mineral that looks promising for producing batteries.

**Reference:** St. Petersburg University

**Link:** <https://english.spbu.ru/news/4037-st-petersburg-university-scientists-discover-a-new-mineral-that-looks-promising-for-producing-batteries>

**Mineral talks on YouTube:**

[https://www.youtube.com/channel/UCSIGYON34E\\_XN97bJAPqYuA](https://www.youtube.com/channel/UCSIGYON34E_XN97bJAPqYuA)

*If any members have interesting articles, reports or links they would like to share with other members through the newsletter please email your suggestion to the Newsletter Editor.*

## SIMPSON WA UPDATE PROJECT

Thank you to all members who have already shown keen interest in the proposed collaborative MinSocWA Simpson WA Update Project. This section has been added to the newsletter to keep you up to date with progress along the way.

Please contact Susan Stockmayer at [simpsonwa@minsocwa.org.au](mailto:simpsonwa@minsocwa.org.au) for information on what minerals are still available for members to participate in writing descriptions.

### Simpson WA Project report - by Susan Stockmayer

Work continues, albeit at a slow pace. To date, preliminary write-ups have been completed for 18 minerals with a further four in progress by the same authors. However, during this time a further 10 to 12 new minerals have been identified and added to the list, so we are really no further forward. Total number of minerals reserved is 60. In January Steve Turner selected 12 minerals to write up. Eight members have now indicated that they are actively working on the project, keep it up.

Minerals that have had a first-pass write up are: acanthite, bertrandite, collinsite, euclase, ferroholmquistite, foggite, gillardite, haggertyite, holmquistite, jeppeite, kaersutite, kimrobinsonite, moganite, natrowalentaite, pollucite, priderite, russellite and widgiemoolthalite.

John Haupt has forwarded copies of some wonderful photographs of WA minerals that we can use if we wish; Steve Sorrell has listed his images of WA minerals; Dermot Henry has sent a list of all the WA minerals in the collection in Museums Victoria and we are liaising to find out whether there may be any additional data and images on those; Ralph Bottrill has offered to contribute in any way he can. Two photographs from John Haupt's collection have already been used in completed writeups.

Susan Stockmayer has had discussions with Peter Bridge of Hesperian Press, Kailah Thorn at the Edward de Courcy Clarke Earth Science Museum and Jason Bennett and outlined the scope of this project to all.



## MINERALOGICAL SOCIETY OF WA LIBRARY



The Mineralogical Society of WA library currently owns over 150 publications housed in a lockable cupboard in the WA Lapidary & Rockhunters Club premises comprising numerous books, reports and journals that have been donated by members. To access the books please see the Librarian, John Mill. Members are encouraged to borrow books from our library to keep it viable to continue maintaining.

Donations of books and other relevant publications are also appreciated. Please see John Mill if you have any publications you would like to donate to the library or email John at [millrock@iinet.net.au](mailto:millrock@iinet.net.au).

The Mineralogical Society of WA receives complimentary copies of the Australian Journal of Mineralogy (AJM) which are available for members to borrow. These journals cover a wide spectrum of articles on mineralogy, ranging from descriptions of new minerals to book reviews, museum news and items of general interest to mineral collectors. MinSocWA members are regular contributors to the AJM.

### **Librarian's Report - by John Mill**

As recorded in the March 2020 Newsletter, MinSocWA received a generous donation of old text books from Mr. Ben van der Klip, whose father was a geologist. Your committee has been discussing ways of selling the books, but at time of writing no decision has been made. Your committee has sought help from Lars Kremers, Mark Creasy's librarian to value the collection. During this process, Lars identified 3 books which might be of interest to Mark and has offered \$370.00 for these books. He estimates that the remaining seventeen books are worth \$10.00 to \$20.00 each. Your committee will consider all options at the January committee meeting and present a recommendation to the general meeting on 20<sup>th</sup> January.

Ken Ireland has generously donated over 48 periodical publications including 'The Mineralogical Record' and 'Rocks and Minerals' for the years 2019 and 2020. Also included are books on collections from Australia (including our own Craig Bosel's collection), Arizona, Pacific North-West, California, American North-East, Texas and Colorado amongst others. The books are stunningly illustrated with beautiful glossy photographs. Your committee will discuss whether to dispose of these items or whether another course of action should be considered. Recommendations will be presented at the January general meeting.

## **UPCOMING EVENTS - MEETINGS & ACTIVITIES**

### **GENERAL MEETING - Wed 20 Jan 2021**

**Due to the closure of the Lapidary Club for maintenance from 13/12/20 to 16/01/21, the MinSocWA General Meeting has been postponed to 20 January 2021.**

This General Meeting will be held at 7.30pm at the WA Lapidary & Rockhunting Club rooms located at 31 Gladstone Road, Rivervale (corner of Newey Street).

Following the meeting there will be a talk by Milo Barham.

### Exploring distant times and lands through a closer look at beach sand minerals



Every grain of sand has an almost impossibly complex history to tell us. In recent decades we've begun to develop increasingly sophisticated tools to access and decipher the geochemical records that have been faithfully stored over billions of years in certain robust minerals like zircon ( $\text{ZrSiO}_4$ ). Understanding the crystallisation, erosion, transport and ultimate deposition of mineral grains not only can increase our appreciation of the sheer majesty of geological processes on our planet, but also inform the fundamental geological processes of mineral systems underpinning the WA economy. Although our planet is constantly being reworked, evidence of past geological events may be retained in the weathered/eroded remains of rocks from that time and place. So, while you may not be able to get blood from a stone, you can track the configuration of continents, the development of the habitable crust we live on, and even the location of resources that society depends on from the isotopic records in detrital minerals.

In this talk we will look at how beaches are effectively goldmines of Earth history and how isotope geology can be used to fingerprint the source and transport history of heavy minerals. I will describe some specific examples of our recent work around southwest Western Australia that have helped us understand Australia's connections with Antarctica and how giant river systems trucked Antarctic minerals over Australia and onward across our ancient continent.

#### Bio

Milo is a Senior Lecturer at Curtin University, working as a sedimentologist with an interest in sediment provenance and use of the sediment record to reconstruct Earth history. He arrived in Australia at the start of the 2012 from the wild West of Ireland having completed his studies at the

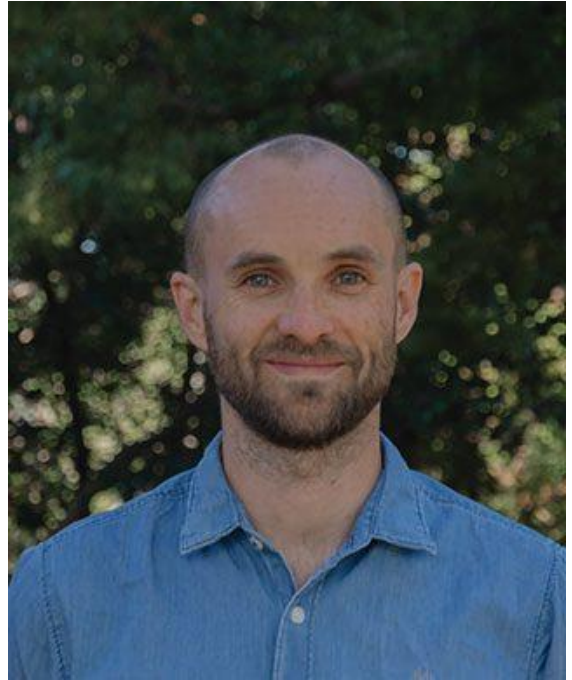


National University of Ireland, Galway. He is currently leading a project looking at coastal heavy mineral sand systems around WA from the Eucla Basin to Broome.

**Milo Barham**  
**Timescales of Mineral Systems**  
**Earth and Planetary Sciences**  
**Curtin University**



*Beach Science with Milo*



*Milo Barham*

### **GENERAL MEETING - Wed 10 Mar 2021**

This General Meeting will be held at 7.30pm at the WA Lapidary & Rockhunting Club rooms located at 31 Gladstone Road, Rivervale (corner of Newey Street).

Following the meeting there will be a talk by Mike Freeman.

### **TALK - Wed 10 Mar 2021**

**Mike Freeman - Ellendale: The 'Fancy Yellow' diamond story**

## NEW MEMBERS, MEMBERSHIP & MEETINGS

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

- Kimberley Nettle
- Mercedes Roberts
- Kate Foley
- Graham Sweetman
- Michael Scharf and Sandy Robertson
- Kylie Matonia

*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 receive all MinSocWA communications.*

### 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 & Rockhunting Club rooms at 31 Gladstone Road, Rivervale (corner of Newey Street).

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

## COMMITTEE MEMBERS FOR 2020/2021

<b>President</b>	Sue Koepke	0417 990 688	<a href="mailto:minsocwa@hotmail.com">minsocwa@hotmail.com</a>
<b>Vice President</b>	Susan Stocklmayer	9291 9043	<a href="mailto:baobab46@dodo.com.au">baobab46@dodo.com.au</a>
<b>Secretary</b>	Angela Riganti	9243 7472	<a href="mailto:tormalina@bigpond.com">tormalina@bigpond.com</a>
<b>Treasurer</b>	John Mill	0411 420 921	<a href="mailto:millrock@iinet.net.au">millrock@iinet.net.au</a>
<b>Field Trip Leader</b>	Peter Willems	0467 040 409	<a href="mailto:pjwillems90@gmail.com">pjwillems90@gmail.com</a>
<b>Newsletter Editor</b>	Lesley Daniels	0432 322 659	<a href="mailto:lesleydaniels777@gmail.com">lesleydaniels777@gmail.com</a>
<b>Committee Member</b>	Niels Dahl		<a href="mailto:imd53@icloud.com">imd53@icloud.com</a>
<b>Committee Member</b>	James Sherborne		<a href="mailto:jamessherborne@hotmail.com">jamessherborne@hotmail.com</a>

**Patron - Mark Creasy**

## MinSocWA LINKS

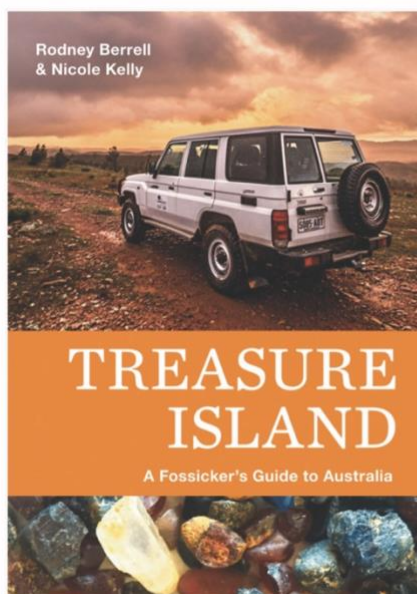
Web: <http://www.minsocwa.org.au>  
Facebook Group: <https://www.facebook.com/groups/minsocwa>  
Facebook Page: <https://www.facebook.com/MINSOCWA>  
Instagram: <https://www.instagram.com/MINSOCWA>  
YouTube Channel: <https://www.youtube.com/channel/UC0S2TFVFIBLU-2ziEzE5VNA>



## ADVERTISING

*Members may submit adverts free of charge. Commercial adverts will be accepted for a nominal charge. If you are interested in submitting an advert to the newsletter contact the Newsletter Editor.*

### **Treasure Island: A Fossicker's Guide to Australia, is a new book by Rodney Berrell and Nicole Kelly**



Go forth  
and discover

Start Here...

Available as a soft  
cover and E-Book

The book is a treasure trove for anyone keen to learn more about geology, minerals, gems and fossils. Through inspirational commentary, marvellously illustrated maps and photography, it explores over eight different areas across Australia including over 50 gemstone, mineral or fossil locations. Whether you are a professional or just starting out, this book will set you on an incredible journey – the history and formation of Australia and its geology.

**Contact Rod Berrell at [rodneyberrell@yahoo.com](mailto:rodneyberrell@yahoo.com)  
to order your copy.**

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### **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 events calendar, handy links, and more.

<p><b>Australian Journal of Mineralogy</b></p> <p>Volume 21   Number 2   2020   A\$17.50</p>  <p>A joint publication of the State Mineralogical Societies in Australia</p>	<p><b>Australian Journal of Mineralogy</b></p> <p>Volume 21   Number 2   2020   A\$17.50</p> <p><b>Contents</b></p> <p><b>Featured articles</b></p> <p>James Dwight Dana in Australia and the glendonite connection .....5 <i>Paul F Carr, Brian G Jones and Robert G Middleton</i></p> <p>The Mount Lyell mines, Tasmania .....13 <i>Ralph Bottrill, Mathew Latham, Steve Sorrell and Peter Olubas</i></p> <p>New Australian type locality minerals, 2000 to 2020 .....33 <i>Ian E Grey, William D Birch and Peter Elliott</i></p> <p><b>Other items</b></p> <p>The Australian Journal of Mineralogy: a 25-year history .....64 <i>John Haupt</i></p> <p>Australian mineral and gem club enamelled badges .....69 <i>Trevor Dart</i></p> <p><b>Society news</b></p> <p>Report on the virtual seminar of the Mineralogical Societies of Australasia .....77</p>
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