



THE MINERALOGICAL SOCIETY OF NEW SOUTH WALES INC

Website: www.minsocnsw.org.au

Please address all correspondence to :-
The Secretary, 58 Amazon Road, Seven Hills, NSW 2147

NEWSLETTER JULY 2018

The July Meeting will be held on Friday the 6th of July at 7.30 pm in the clubrooms of the Parramatta and Holroyd Lapidary Club at 73 Fullagar Road, Wentworthville.

The program will commence with a talk to be given by John Chapman on :-

The Growth of Filiform Pyrite.

The talk will be followed by a lecture to be given by Keith Compton on –

‘What’s New in Mindat’.

FORTHCOMING MEETINGS AND PROGRAMS

August 3rd: **Society A.G.M.** and the Betty Mayne, Edna and Harold Walker Memorial Lecture.
The Memorial lecture this year will be given by Professor Patrick De Decker on :-
‘The First Geological Map of England and Wales’

September 7th: There will be a talk to be given by Angela Lay on **‘World Class Linarite from Drake’.**

The talk will be followed by a lecture by Jeff Davis on : - **‘Elements That Make Up Minerals’.**

October 5th: The program will include talk a by Professor Peter Williams on :- **‘Misleading Mineral Locations’**

The talk will be followed a lecture to be given by Ross Pogson on : -**‘The Molong Pallasite Meteorite’**

November 2nd: Lecture to be given by Glen Cathers on : - **‘The Sepon Copper Mine, Laos’.**

December 7th: **Christmas Social and ‘Swap n’ Sell’.**

FIELD TRIPS

To register for any of the following field trips:
Contact Edward Zbik by e-mail: ecjz@optusnet.com.au
Stating in which Field Trip you want to participate.
Any questions, call 0401 538 480 until 10:00pm.

Date	Locality:	Leader
Check MinView, DIGS and Mindat for minerals and site information		
21 st July	CANNBERRA Weekend	GeoScience Canberra Visit, limit 10, afternoon Open to all Members. Arrange your own accommodation
22 nd July		Paddy's River, Corrin locality, Canberra. Pending approval ACT Heritage Council Open to all Members. Camping or Canberra Accommodation
25 th & 26 th August		Native Dog Ck, Hopes Ck, Sapphire Bend Open to all Members. State Forest Licence Required Camping or Oberon Accommodation. - RSL Optional
15 th & 16 th September		McAlpine Mine Tumut Open to all members State Forest Fossicking Licence required. Tumut Hotel Dinner option
27 th & 28 th October		Duckmaloi Bi & Garnet occurrences Lowes Mount SF. Open to all Members. Camping or Oberon Accommodation. State Forest Fossicking Licence required, RSL Optional
FUTURE FIELD TRIPS		Your choice, Mineral or locality. Small Groups 2-4 members to evaluate sites found on MINVIEW, MINDAT, DIGS, AJM and other Mineral Publications articles on sites within NSW, Australia, etc.

AGM NOTICE

Friday 3rd of August 2018. The ANNUAL GENERAL MEETING

Members are hereby duly notified that the Meeting on Friday the 3rd of August 2018 will be the Society Annual General Meeting which will commence at 7.30 p.m. in the Parramatta and Holroyd Lapidary Club room.

The A.G.M. will present the President's report for 2017/2018, the Treasurer's report and presentation of the annual financial accounts for 2017/2018 and the election of the Society Committee and office-bearers for 2018/2019. In accordance with the Society Constitution the entire current Committee retires at the commencement of the A.G.M. and all positions are open for nomination and election. Any other business may also be raised and discussed. The minutes of the previous 2017 A.G.M. were circulated in the September 2017 Newsletter. Copies will be available at the 2018 A.G.M. or may be obtained from the Secretary.

Nomination forms for election to the 2018/2019 Committee are being circulated with this Newsletter. Further copies may be obtained from the Secretary if required. According to the Society Constitution nominations should be received seven days before the commencement of the A.G.M. If insufficient nominations are received before the commencement of the A.G.M. they can be accepted at the Meeting.

Only financial and Honorary Life members of the Society are eligible for nomination or allowed to participate in any voting. Any members who feel able to serve on the Committee are urged to discuss this with any of the current Committee members and then to arrange for another member to propose them and provide the nomination form. A member can be nominated for but cannot hold more than one position.

Nomination forms may be sent to the Secretary electronically but given any possible computer/internet delays, members sending forms should ask for a confirmation that they have been received.

Members sending hard copy nomination forms by post are reminded to address all correspondence to :-

The Secretary, Mineralogical Society of NSW Inc,
58 Amazon Road, Seven Hills, NSW 2147

The SOCIETY COMMITTEE

PRESIDENT:	Dieter Mylius	Tel: (02) 9477 1060
	E-mail:	<i>dieterm@internode.on.net</i>
VICE-PRESIDENT:	John Chapman	Tel: (02) 9808 3481
	E-mail:	<i>chapmanjr@optusnet.com.au</i>
SECRETARY:	George Laking	Tel: (02) 9636 7145
	E-mail:	<i>bglaking@tech2u.com.au</i>
TREASURER:	Graham Ogle	Tel: (02) 9869 1416.
	E-mail:	<i>quartzandsirius@hotmail.com.</i>
COMMITTEE MEMBERS:	Peter Beddow	Tel: (02) 8810 8446
	David Colchester	Tel: (02) 9449 3862
	Geoff Parsons	Tel: (02) 9548 3289
	Simon Tanner	
	Edward Zbik	Tel: (02) 9638 6586
	E-mail:	<i>ecjz@optusnet.com.au</i>

SALES OF MINERALS AT SOCIETY MEETINGS

Members are reminded that it is quite satisfactory for anyone to bring in minerals or mineralogical material, magazines or books for sale at the General Meetings. Quite often a tray of someone's surplus minerals has been brought as a 'Dollar Box' with a label indicating that the specimens are a donation to the Society and are for sale for \$1 - \$5 each etc with the money to be placed in the refreshment collection box. By all means keep those donations coming !

Alternatively however a member may wish to bring in a specimen or a tray of specimens to sell for themselves. In order to avoid such specimens becoming mixed or confused with any material being donated members are recommended to clearly label the specimens or trays with their name and the statement that money for any purchases must be paid to that person and not the Society. (Commission is not expected for such sales which are regarded as a private matter between members).

THE JUNE MEETING

At the commencement of the June General Meeting the President, Dieter Mylius, drew member's attention to the extensive **Field Trip program** compiled by Ed Zbik for the next few months and detailed in the Newsletter. Trips were planned for the end of June to Tolwong, then in July to the Canberra GeoScience museum and other sites in the Canberra area, in August to the Native Dog Creek and Hopes Creek at Sapphire Bend in the Oberon area, in September to the McAlpine mine at Tumut and in October to the bismuth and garnet localities at Duckmaloi.

For the members prepared to travel a considerable distance there was the bi-annual Broken Hill Gem and Mineral Show '**ROCK ON**' being held in Broken Hill over the October long weekend from Friday the 28th of September to Tuesday the 2nd of October, and for the much less adventurous there was the Gem & Lapidary Council's **GEMKHANA** at Clarendon near Richmond, also being held over the October long weekend.

Several of the regular attendees at the **Micro-Mineral Group** meetings were travelling to Ballarat over the June long weekend to attend the Joint Mineralogical Societies Seminar but the meeting would still be held this month at Jeanette Munsell's house. The Group would probably hold an informal general discussion.

'Broken Hill Rock On – A Review'

Simon Tanner

The 'Rock On' Gem and Mineral Show is organised by the Broken Hill Mineral Club and is held every second year at Broken Hill. Eighteen months ago Simon Tanner was able to visit the 2016 show and described his experience there for the evening's talk. He had travelled to Broken Hill by train taking his bicycle and a tent with him to spend a week in in the area, camping and getting around quite well by bicycle. A large number of photographs of views at the Show, then around Broken Hill and the countryside had been taken, many of these projected on the screen at the Meeting and described during the talk.

At the 2016 Show the speaker was surprised to find a much larger number of visitors than he had expected with many of them having travelled a considerable distance from all over Australia as well as NSW to attend the event. That year the show was held in the Memorial Oval Showground on William and Garnet Streets in Broken Hill, in other years it has been held on the Racecourse and at Silverton. There were over 35 dealers, a large number of tailgaters and an impressive amount of minerals on show and for sale. There had been very pleasant weather for the first four days of Simon Tanner's visit but then the area was subjected to a substantial storm and became more uncomfortable for the campers. In retrospect the speaker advised that members intending to visit anywhere with the intention of camping should first obtain a weather forecast!

A few field trips to sites about fifteen kilometers outside the town had been organised for the Monday and Tuesday immediately after the Show and views were shown of an impressive convoy of cars lining up to visit the sites. These included the Copper King and Iron Clad mines. The images of minerals and displays at the Show prompted a number of questions from members, Simon Tanner noting that there was clearly a substantial amount of local, i.e. Broken Hill area, minerals on display and for sale but also much material from elsewhere.

The speaker concluded his talk by describing catching a train to return to Sydney and referring to the forthcoming 2018 Rock On Show in September and October which he recommended would be quite worthwhile to visit.

‘The Fluorescent Minerals of Sterling Hill’

Graham Ogle

Graham Ogle has to travel to New York in the U.S. every year and on occasion has taken the opportunity to visit the mineral locations of Franklin and Sterling Hill near to the town of Ogdensburg in New Jersey. The mines are some 2-3 kilometers apart and about an hour's drive from the central New York/Manhattan area. Both have been extensively transformed as major tourist attractions with old buildings preserved, museums on both sites and visitors allowed to fossick on dumps within the sites. During his latest trip to the U.S. there were time restrictions and the speaker was only able to visit Sterling Hill but on this occasion had been joined by his son Toby. Both were to spend most of a day on the site and in the museum taking many photographs to describe the mine, its minerals and the tourist facilities.

The significance of the two sites is partly because of the considerable number of rare minerals found there including many type-locality minerals and partly because of the extremely brilliant fluorescence exhibited by many of them. Ninety-six Franklin/Sterling Hill minerals fluoresce and some are phosphorescent also. The two sites have produced the most, and possibly among the brightest, fluorescent minerals in the World. A list of the Franklin minerals was displayed, Graham Ogle noting that in terms of a site having produced the most mineral species, the top locations were Långban in Sweden followed by Tsumeb, Mt St Hilaire, Vesuvius/Mt Somma and Franklin/Sterling Hill with 376 species, 73 type-locality minerals and 19 which have only been found there. Referring to the list the speaker noted the variety of unfamiliar names of the minerals, many derived from local sources, of the mines, of nearby towns, of the people who established the museums, names of collectors and of notable mineralogists etc.

The geology of the Franklin/Sterling Hill deposits is very complex and to the speaker's mind no-one understands the story completely. The country rock is the Franklin Marble originally deposited by a pre-Cambrian ocean with ore-bodies intruding followed by a period of extensive metamorphism a billion years ago. Then later there was deposition of carbonate-rich muds and infiltration with metalliferous hydrothermal fluids, another period of metamorphism and folding leading to the production of a complicated deposit with extreme mineralogical complexity. A much later and more recent period of glaciation occurred which moved an amount of Franklin material some distance away from the sites with boulders of Franklin rock and minerals being found in various places in New Jersey such as near the town of Hackensack which is just outside New York.

The mining history of the area began in the 1530s with the presumption that there was a copper deposit after the observation that there were blue and green minerals on the surface. The copper turned out to be very little because the majority metal in the Franklin deposit is zinc and one of the supposed copper minerals seen on the surface was red zincite which was initially mistaken for cuprite. Pits were later opened up in 1739 as an iron ore source to process the magnetite in the deposit. At about that time King George III granted the property to William Alexander Stirling, - Lord Stirling, who sold it to Robert Ogden in 1765. (At some time later the spelling of Stirling was changed to Sterling).

Thomas Edison who was based in New York at the time opened a nearby iron ore mine also to process magnetite. This was not too successful since unfortunately a similar-appearing mineral in the deposit was franklinite which is an iron manganese oxide. Incorporating this into furnaces with the magnetite disrupted the smelting process but eventually lessons were learned in dealing with iron ore in the presence of manganese. In 1848 operators started to mine hemimorphite to recover zinc and in 1897 the companies operating the two adjacent mines, Franklin and Sterling Hill, combined to form the one New Jersey Zinc Co.

The extraordinary degree of fluorescence of many of the Franklin/Sterling Hill minerals was first noticed in the early 1900s after the installation of an electrical supply to provide lighting and power. There would sometimes be arcing between cables or terminals of the early equipment which would briefly generate a flash of UV light. The feature was initially made use of to identify the locations of amounts of willemite by deliberately causing electrical equipment to arc, apparently as safely as possible but no doubt carefully.

Mining continued for some time until the low price of zinc caused a reduction in operations with the Franklin mine closing in 1954 and the Sterling in 1986. By that time the Sterling had mined a total of about 11 million tons of zinc ore, the Franklin a little more. In 1989 the property was auctioned and bought by Richard and Robert Hauck for US\$750,000. The brothers promptly assembled an army of volunteers and set about a commendably large amount of work converting both mines into major tourist attractions which are now visited by 40,000 visitors annually. The old mining buildings were renovated and opened to the public; museums were built on both sites and in 2005 an astronomical observatory equipped with an 8-inch and 12¹/₂-inch reflector and a solar telescope also set up.

The Sterling Hill tourist facilities include access to some of the old underground workings and images showed Graham and Toby Ogle wearing hard hats to take part in the underground tour. Notably in the underground workings is the 'Rainbow Room' or tunnel, where short-wave ultra-violet lights are switched on to illustrate the fluorescent minerals in the walls. As might be expected the museum featured many displays of Sterling Hill minerals illuminated alternatively with natural or UV light contrasting the drab appearance of the specimens under natural light compared to their spectacular appearance under UV. The museum also featured comprehensive exhibits of old mining equipment.

At the end of his lecture Graham Ogle urged members to come to the front of the room in groups to observe the appearance under ultra-violet light of a selection of fluorescent minerals which had been brought in to display. These included a few Franklin/Sterling Hill specimens which were clearly among the brightest.

Photographing the Geological Survey of NSW Mineral Collection

Kevin Capnerhurst, Society member and Senior Geologist with the Geological Survey of NSW in Orange has asked if any members would be interested in helping to photograph the Survey's extensive mineral collection at Londonderry in western Sydney. He has asked that the following notice be circulated to members.

Expression of Interest

The Geological Survey of New South Wales will be undertaking a program to photograph minerals in its Economic Rock and Mineral Collection (ERMC) and is seeking a suitably qualified/experienced photographer to undertake the work. The collection is currently housed at the W B Clarke Geoscience Centre located at Londonderry and all photographs will be taken on-site. The Survey has recently purchased the following equipment to undertake this task:

Kaiser photo copy stand RSD 5602 and lighting. We have also purchased a Nikon camera with 60mm & 105mm Nikon macro lens and a standard colour reference.

The work is to be completed in two stages; the first stage will be to take a standard set of photos of all mineral specimens in the collection from NSW (~14,000 specimens) to be accessed via our MinView application. The second stage will involve taking high quality photos of selected specimens in the collection. If you would be interested in undertaking this work, please contact Kevin Capnerhurst or Paul Meszaros to discuss your availability. Depending on the successful applicant this work can either be on a per sample basis or hourly rate.

Contacts:

Kevin Capnerhurst: Phone (02) 6360 9531, Mobile 0428 641725,

Email: kevin.capnerhurst@planning.nsw.gov.au

Paul Meszaros: Phone (02) 4777 7806, Mobile 0408 484776,

Email: paul.meszaros@planning.nsw.gov.au

FORTHCOMING EVENTS

GEM, MINERAL AND JEWELLERY SHOW

The Campbelltown Lapidary Club's annual exhibition is being held in the Greg Percival Community Centre on the corner of Oxford Rd & Cumberland Rd, Ingleburn over Saturday and Sunday the 14th and 15th of July. The exhibition will feature handmade jewellery made from gems and minerals, as well as rough and polished stones and more.
For more information contact Margaret on 02 9618 3206.

BLAXLAND GEM & MINERAL CLUB GEM SHOW

Saturday and Sunday, August 18th and 19th in the Glenbrook Community Hall, Great Western Highway, Glenbrook, NSW. (Next to Glenbrook Theatre), just west of the Information Centre.
From 8 am to 4 pm daily. Entry: Adults: \$3 Children \$1
Displays of lapidary work and gem, mineral and crystal sales. Refreshments available.
<http://www.freewebs.com/blaxlandgemmineralclub/BGMCshow.htm>

The CARLINGFORD GEM and MINERAL FAIR

Being held in the Roselea Community Centre, 645 Pennant Hills Road, Carlingford,
over Saturday & Sunday the 25th and 26th of August
from 9.30 am to 5 pm on Saturday and 9.30 am to 4 pm on Sunday

Sales And Displays Of Jewellery, Gemstones, Beads, Opals, Gem Rough, Carvings,
Fossils, Mineral Specimens, and Crystals from all over the World.
Admission fee \$7. Refreshments available.

Inquiries to Peter Beckwith at raregems@optusnet.com.au or by mobile 0412 233 150

The PARRAMATTA & HOLROYD LAPIDARY CLUB'S 57th GEM, JEWELLERY & MINERAL SHOW EXHIBITION & SALE

From Friday to Sunday 14th, 15th & 16th September 2018 in the clubrooms at
73 Fullagar Rd, Wentworthville from 9am to 4pm each day.

FEATURING : Gem Faceting, Cabochon Cutting, Silvercrafts, Copper enamelling, Jewellery making,
Rock and Mineral Specimens and Slabs, Club and Fossicking Information,
BBQ & Refreshments, Raffle, Plants, Kids' Craft. Free Entry

Inquiries :- Website <http://www.parramattaholroydlapidaryclub.weebly.com>

The CENTRAL COAST LAPIDARY CLUB INC. ANNUAL GEM FESTIVAL

will be held in the Mingara Recreational Club, Mingara Drive, off Wyong Road, Tumbi Umbi Central Coast over Saturday & Sunday the 13th and 14th of October, on Sat from 9am-5pm and Sunday from 9am to 4pm.

'Dealers from across the state will be attending selling everything from jewellery, gemstones, fossils, specimen stones and stones polished and rough. There will be displays of the club members' work and our own club tables selling Minerals and also a large table of beading.'

The 2018 NORTHERN DISTRICTS LAPIDARY CLUB GEM SHOW – GEMS, JEWELLERY AND MINERALS EXHIBITION

'Our Gem show and exhibition, lapidary competition and display, will be held from Friday 26th to Sunday 28th October at the Beecroft Community Centre, on the corner of Beecroft and Copeland Roads, Beecroft, Sydney.

The opening times are as follows:-

Friday 26th – 9am to 7pm; Saturday 27th – 9am to 5pm and Sunday 28th – 10am to 4pm

The Northern Districts Lapidary Club holds its Exhibition and sale of Gemstones and Rings, Faceted Gems, Pendants and Earrings which are handcrafted by club members. There will be something for the whole family with a fossicking fun area for children and demonstrations of craft working.

There will also be refreshments available as well as books and a range of plants.'

GEMKHANA 2018

'The Annual Gem & Mineral Show and Competition of lapidaries from all over NSW will be presented by the Gem and Lapidary Council of NSW Inc, at the Hawkesbury Showground, Racecourse Road at Clarendon outside Richmond over the Labour Day Weekend from Saturday 29th September to Monday 1st October.'

For further details email gemkhana@gemlapidarycouncilnsw.org.au

'ROCK-ON' - Broken Hill Gem and Mineral Show 2018

The 2018 "Rock-On" Gem and Mineral Show will be held over the Labour Day long weekend from Friday the 28th, to Sunday the 30th of September from 11:00 am – 5:00 pm Friday, 9:00 am – 5:00 pm Saturday and 9:00 am – 2:00 pm Sunday in the Memorial Oval Showgrounds and the Adkins Pavilion in Broken Hill. Field Trips will be organised as part of the program and will be held on the Monday and Tuesday, 1st and 2nd of October. Visitors should allow two days to get to Broken Hill and return.

Quoted from the Rock-On website

'Traders can contact the club to reserve a site within the Pavilion. There will be ample room for outdoor trading sites available where you can camp on site and sell from the front of your caravan annex or tent. The show site will have all facilities including toilets, hot showers, limited powered sites and plenty of shade. The city of Broken Hill offers many other attractions that are worth a visit for anyone attending the show. Shopping includes four supermarkets, all major banks, Target and many other speciality stores in three different shopping areas. Fuel and car mechanical servicing are also available in Broken Hill.

The mineralogically diverse Willyama Complex also offers opportunities to go fossicking for minerals at various locations in the Broken Hill district. As a part of the Rock-On experience, the club will be organising tag-a-long field trips on both the Monday and Tuesday following the main show to mineral fossicking locations. Registration for the field trips requires attendance at the show on either Saturday or Sunday.'

<http://brokenhillmineralclub.wikispaces.com/Rock-On+Gem+and+Mineral+Show>

GEMBOREE 2019

The 55th National Gem & Mineral Show will be held at the Rockhampton Showgrounds,
Rockhampton, QLD from 19th to the 22nd of April 2019.

For full details and competition schedule, visit the Gemboree 2019 website at : - <http://aflaca.org.au/gemboree>

THE MINERALOGICAL SOCIETY OF N.S.W. INC

NOMINATION FORM FOR ELECTION OF OFFICE-BEARERS

AND COMMITTEE MEMBERS FOR 2018/2019

POSITION	Name of Nominee (Please print)	Signature of Nominee
OFFICE-BEARERS		
PRESIDENT
VICE-PRESIDENT
SECRETARY
TREASURER
COMMITTEE MEMBERS		
MEMBER
MEMBER
MEMBER
MEMBER
MEMBER

PROPOSER:

Name (Please print):

Signature:

Date: