

Gem and Lapidary

News

December 2014

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The **Gem & Lapidary News** is the official publication of the GEM AND LAPIDARY COUNCIL OF NEW SOUTH WALES, INC, PO Box 4233, Londonderry 2753. The executive and workforce of the Council are entirely composed of delegates from member clubs. Council is NOT an autonomous body. The Gem & Lapidary Council is a member of AFLACA (Australian Federation of Lapidary and Allied Crafts Association).

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crystalhabit@bigpond.com
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HOT LINE TO THE COUNCIL - 0427 993 903

Website: <http://www.gemlapidarycouncilnsw.org.au/> webmaster@gemlapidarycouncilnsw.org.au
 Webmaster Alex Maitland (please send updated information)

COUNCIL MEETINGS

EXECUTIVE: 4th Wednesday in the month
 MONTHLY: 4th Wednesday in the month, at 1.00pm
 The venue, unless otherwise stated,
 is at the Clubrooms of Parramatta-Holroyd Lapidary Club,
 73 Fullagar Rd, Wentworthville

Visitors are welcome to attend Monthly Meetings

SUBSCRIPTIONS TO THE GEM & LAPIDARY NEWS

\$20 if posted bulk to your club
 \$25 if posted to members private address
 \$30 for non-members of the G&L Council

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Please send payment with advertising booking and copy.

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NEXT COUNCIL MEETING

Wednesday January 28th at the clubrooms of the Parramatta-Holroyd Lapidary Club
73 Fullagar Rd, Wentworthville

Please do come, you will be made very welcome

*** DEADLINE FOR COPY for
February, 2015 issue *
Friday January 30th 2015**

Club Editors; please add me to your mailing list to receive your Club newsletters. Ed.

Disclaimer:

Opinions expressed are those of the original authors and do not necessarily reflect those of the Editor, Gem & Lapidary Council or its members. Persons acting on any opinion, advice, fact or advertisement published in this issue does so at their own risk

Extract and Reports from Council Minutes 26/11/2014

J&R Report:

1. Rod Powell's resignation
2. Will be sending the 2017 GMB competition schedule to AFLACA next week.

Education Report: The proposed cabochon judging course will now be the 1st week in February. Applicants please contact Barbara Try on 4393 6168 or email twotrys@bigpond.com.au to arrange a date and venue.

Nelson will phone all who were interested in the faceting judges course last year, but were unable to attend. Planned to hold this course in the 2nd half of February. Applicants contact Nelson on 43854495 or email nelsonrobertson1@gmail.com to arrange a date and venue. The cuttlefish casting day at Central Coast was fantastic (95% success rate), even on an extraordinarily hot day.

GEMKHANA Report

Plans are underway. The Clarendon Showground at Richmond is being booked for next year.

GEMBOREE 2017: Lithgow – Easter

Some roles have been filled, but there are still more. It is vital we find a Registrar very soon, and he/she will need the support of a club or clubs.

1. Committee members need to go to Lithgow and plan areas for the different activities: Camping, tailgating, etc. Alan McRae is to be invited. Planned for early February – date to be set at the December meeting.
2. Arthur has given Marilyn details for the dealers papers. The meeting agreed to set dealer fees at \$90/m.
3. The competition committee plans to use rhodonite for keeper trophies and has committee approval to ... ask if any clubs or members have suitable stone they are willing to sell (at reasonable price) to make 35 trophies 100mm x 80mm x 10mm thick. It would be appreciated if clubs would cut the pieces to size (that way they can keep offcuts for their own use).
If anyone has such rhodonite, please contact Barbara as soon as possible (as above).
4. Marilyn has a quote for the plastic name tags (that use inserts) \$21.57 for 50 from Officeworks.
5. The meeting agreed to buy shirts for committee members to wear when manning the promotion desk at the Ulverstone GMB. They will be mid-blue and have the 2017 GMB logo on the pocket, with GEMBOREE curved above the pocket and 2017 in the curve.

GEMBOREE 2016 Ulverstone, Tas, asked if we were willing to judge their entries. That had already been agreed, but Barbara will urge them to have their own judges attend to the novice sections. They have new judges who need practice.

Moved Minsoc, seconded Parramatta-Holroyd that reports be received.

Extract from Minutes Cont.

GENERAL BUSINESS:

Marilyn was thanked for sending out last month's minutes while Arthur was without power after a storm.

Following some concerns at the GMK, a couple of paragraphs will be added to the dealers contract, regarding

- relocating tables after set up is complete without reference to the organisers
- the style and location of advertising signs
- the safety of electrical equipment used

Dates for next year's meetings are:

January 28, February 25, March 18 (a week early because of GMB), April 22, May 27, June, 24, July 22, August 26,

September 23, October 28, November 25, December 8 (AGM and Christmas cheer).

AGM is next month and very few nominations have been received.

Returning officer for the AGM will be Joan Ball OAM.

The meeting closed at 2.20pm

Next meeting: the AGM and Christmas Cheer - December 10, 2014 at 73 Fullagar Rd, Wentworthville

**Special Note
Judges Course.**

Barbara Try and Nelson Roberts are holding judging courses in cabochon and faceting in January and February. Please contact them if you are interested. It is important that we have qualified judges at all levels.

Merry Merry Christmas and a Happy New Year.

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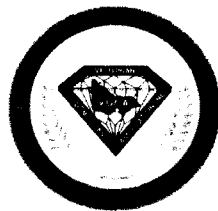
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GEMBOREE 2015 MATTERS

This month has seen another new innovation for the Horsham 2015 GEMBOREE with arrangements to have an ATM on site being finalised by our Treasurer Peter Day. This ATM will dispense \$50 notes with the usual fees applying. We hope that it will be a service to those people "on-site", visitors and of course benefit our Traders.



- Accommodation: please note, if your club members wish to camp on-site as a group, get your group booking into Ray & Joy early please; our Camp Site Managers will not have the flexibility to make too many adjustments to campsite locations after Christmas. Campers please ensure that your power lead has a current Test & Tag label.
- "Off-site" accommodation. I am receiving reports that Caravan Parks and Motels are filling up – book early.
- Contact List:

Exhibition Hall Manager Keith Billing 0413 435 899
 GEMBOREE Secretary Des McKiernan 0428 303 160
 Treasurer Peter Day 0430 488 442
 Competition Manager Peter Krake 03 5825 2778
 Campsite Managers Ray, Joy Medew 0400 105 461
 Tailgating Co-ordinator Joan Barrows 02 6021 5043
 " " Shirley McMahan 0427 535 470
 Field Trip Co-ordinator Kathleen Brocket 0417 032 408
 Publicity Bill Gordon 0402 695 214
 Metal Detecting Competition Toby Decker 0427 840 984
 Popular Showcase entries Mica Rosenberg 03 5857 2644

If in any doubt please make contact with the relevant person above to clarify any issues. Major Raffle: Cathy Piesley has distributed Major Raffle Booklets to all VGCA Member Clubs; may we thank the clubs in anticipation of their assistance in selling the raffle tickets. I cannot remember ever seeing such quality prizes. Special thanks go to Cliff Watters and the Shepparton & District Gem Club for the very generous donation of a sterling silver cuff bracelet set with seven gold nuggets. **A truly magnificent first prize.**

We ask clubs to observe the deadlines outlined by Cathy as this will ensure that all tickets sold get into the draw. Tickets will also be on sale at the GEMBOREE.

Looking forward to meeting you there.

Des McKiernan

GEMBOREE Secretary 2015.

Some Club Activities.

Illawarra Lapidary Club's exhibition went well. 17 members of the mineral group attended an interesting talk by Peter Stanley on his visit to various museums in USA. A workshop was also held on mineral identification that members greatly appreciated. Their open day was successful and brought in several new members.

Northern Districts held a very successful competition with 32 participants requiring ten judges as well as numerous helpers.

New South Wales Lapidary enjoyed a financially successful exhibition as well although it was a little quieter than past years.

Lismore Lapidary Club held a very enjoyable Christmas/ 50 year celebration lunch where 75 members and guests renewed some old acquaintances and looked back on past successes and interesting moments.

Casino Lapidary Club did a nicely laid back "picnic in the park" for their Christmas function. It was well attended by all members and their families at scenic Evans Heads.

Parramatta Holroyd Club also had a successful exhibition with lots of compliments from the viewing public particularly about the friendliness of club members in sharing information about their exhibits and club activities.

Editor's Request.

For the February 2015 edition, I would like to include a "Novice or Junior Page". Could all clubs wherever possible email me some photos and a few lines about what your juniors or new members are working on so I can include it for all clubs to show off their activities? I will assume that the people in any photos I receive, have given permission for their photo to be published remembering that it will be included in the on line issue as well as paper copy. Like all editors, it is difficult to find material that hasn't been "done to death" so if you have a topic you would like to know more about, email it to me. I am happy to do the research and write the article.

Special Note.

Illawarra Lapidary Club has held their rock swap on the last Sunday of February for the past 20 years. This year they have been forced to change the date to **Sunday 1st March** at Stuart Park as usual. Please make note of this change.

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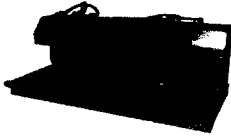
The Council is pleased to offer clubs a range of interesting courses in the craft of lapidary. The minimum number in a class will depend on the type of class and complexity of the class.

Course	Max People per class
1. Cabbing	Max 10
2. Carving	Max 10
3. Enamelling	Max 10
4. Faceting	Max 10
5. Mineral Appreciation	Max 10
6. Opal	Max 10
7. Silver Jewellery and Smithing	Max 10
8. Casting Lost Wax	Max 10
9. Casting Cuttlefish	Max 10
10. Wire Wrapping	Max 10

If you would like to see some photos from some of our courses please visit our gallery here <http://gemlapidarycouncilnsw.org.au/galleries/education-courses/>

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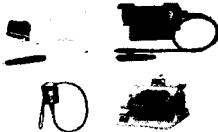
Cabbing



Tumbling



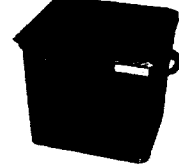
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3D Printing and a Changing World.

In the past before the industrial revolution, utensils and objects were made using hand held tools. Then, we had the large machines mass producing goods offering an economy of scale. Now we are changing back to making individual customised goods using small machines, 3D printers. Goods can be made locally by lots of small producers within their existing businesses.

The cost of the 3D printing materials is offset by reduction in freight costs and unsold inventory. No longer will Australia or other countries need to purchase cheap products from places like China. Those items could be made locally using 3D printing technology. The internet gave us global access to greater purchasing power and variety. Now 3D printing is capable of bringing us back to the local market and more customisation of goods at a much cheaper price.

3D printing saves lives and will possibly aid longevity. At present, it is possible to 3D print new limbs, knees or other body parts that enable a greater quality of life as we age. In disaster or war torn areas, 3D printing is providing cheap access to prostheses for many people. One of the most extraordinary uses of 3D printing is in the construction of printed skin. Skin cells and polymers are loaded into the 3D printer producing artificial skin that can replace all those painful skin graft operations. The advantage is that the quicker the wound can be covered the less possibility of infection. Scientists are developing a portable bioprinting system to use in countries like Afghanistan and Iraq where injuries involving the skin are common. The skin can be printed straight on to the wound saving time, discomfort to the patient and the risk of infection. It is expected that it will soon be possible to 3D print organs and the necessary blood vessels needed to complete the transplant of a customised 3D organ.



The technology of 3D printing is being used widely for prototypes. Surgeons build a 3D prototype or mapping to plan an operation particularly on babies and small children. By using MRI

scanning, a customised organ can be produced and a map of the necessary steps to take are all 3D printed reducing operating time and making for more exact procedures. Scientists believe they now have the technology to 3D print customized drugs to suit individual patient's needs.

Drugs like antibiotics or cancer treatments will be more effective by only using the strength that the patient requires rather than adjusting a general medication. We have probably all read of the NASA team using 3D printing to make food for the astronauts to take into space.

But 3D printing is also fun. It is being used in art, sculpture, fashion, movie special effects and in particular, beautiful customised jewellery. The cost of 3D printers will reduce just like other technologies have done and will soon be available for home use at an affordable price. Just think, if you want a pair of shoes to match a particular outfit, you will just 3D print them and off you go.

Image 3Dshoes.



Couples are now purchasing wedding or engagement rings that are uniquely customised according to any design they like and similar jewellery is also being made using 3D printing methods.



Printing objects or jewellery out of steel, copper, titanium, gold or silver is already happening. Soon 3D printers will be able to print a variety of gemstones from glass once more colours and materials become adapted to 3D printing.

Image 3ders.org.

Our world is changing, a quote from Chris Anderson, former editor of Wired Magazine says – “It will be bigger than the Web” and further that instead of that print icon we are all used to, it will soon say “make”.



<https://plus.google.com/+GeeksfunBlogspot/posts/SaacfYh8Dh>

Droning On.

New Drone technology is changing many traditional ways of doing things. Businesses like Amazon have been trialing drones to deliver their parcels right to the customer's door. Dominos Pizza's have put out a video on YouTube showing a drone delivering a pizza. In agriculture, drones are used successfully to monitor a property reporting on cattle movements or crop health or checking that gates are closed and fences are not down. A drone can also send back information about the level of food or water available to stock. Farmers can now keep a closer eye on their properties right from the farm office without needing to drive around unless there is a problem.



In the mining industry, drones are used to survey or map a site, check on reserves or monitor remote infrastructure. Drones are particularly useful in reporting back from places that might be too dangerous for a personal inspection either because of locality or some disaster that may have occurred.

In the Yukon, one enterprising prospector is using a drone to find gold. Using a small eBee drone, the area is surveyed and mapped and soil composition analysed. From this data, the prospector decides the most likely place to explore further. Using a small drone instead of some other aerial craft means that areas that would normally be inaccessible can now be surveyed. Using the drone in combination with other technology like a geoprobe has proven very successful in finding gold.

Perhaps in the future, we may see our lapidary club member out there with a metal detector attached to a drone looking for that elusive big nugget. In the meantime, Grant Watson from the Casino Club has great fun using his metal detector in the old fashioned way.



Ice is a mineral too.

Ice, (hydrogen oxide) is not usually thought of as a mineral, but it meets the definition of one. Unique in many ways, it is one of the few compounds that expand on freezing. This is fortunate for otherwise ice would not float but would sink to the bottom, where it would tend not to melt. Under such conditions it is doubtful that life could have developed in the seas and ultimately give rise to life on land. Because it is solid below 0°C at atmospheric pressures, it is abundant on the surface of the earth. As is well known, water has a high vapour pressure under normal atmospheric conditions and thus evaporates readily. Ice also has an appreciable vapour pressure and will change to the vapour by sublimation even well below 0°C.

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Spinel

Fine spinels are now rarer than the rubies they used to imitate. Spinel is generally highly sought after by gem connoisseurs, and well-formed spinel crystals are in high demand among collectors.



Blackjack Spinel can be found in most of the sapphire fields in Australia. Spinel occurs in octahedral crystals, often in perfectly shaped octahedrons. Crystals often have parallel layer growths or heavy etchings. Crystals can also be distorted as well as have complex faces. Crystal clusters and twinned octahedrons are very common, especially spinel twinning, which this mineral is famous for. An interesting habit occasionally observed in Spinel is the macle, which is a triangular form of two flattened crystal twins.



Now treasured for its own sake, spinel is a favourite of gem dealers and collectors on account of its brilliance, hardness and wide range of spectacular colours. In addition to beautiful rich reds, spinel can be found in a range of gorgeous pastel shades of pink and purple. Of particular interest is a vivid hot pink with a tinge of orange mined in Burma. It is one of the most spectacular gemstone colours seen in any species at all.



Spinel also comes in beautiful blue tones called cobalt spinel, but these are very, very rare. In addition to Burma, spinel is mined in Sri Lanka, Tanzania, and Tadjhikistan, part of the former Soviet Union.

Spinel is the great impostor of gemstone history: many famous rubies in crown jewels around the world are actually spinels. The most famous is the Black Prince's ruby, a magnificent 170-carat red spinel that now adorns the Imperial State Crown of England. It is reputed that Henry V even wore it on his battle helmet! The Timur ruby, a 361-carat red spinel now owned by Queen Elizabeth, has the names of some of the Mughal emperors who previously owned it engraved on its face.

***You can't believe in math. You have to understand it.
You can't understand religion. You have to believe in it.***

Prehnite

Hundreds of minerals have been named after individuals, including a number of gemstones. The gemstones include hiddenite (W.E. Hidden), kunzite (George Frederic Kunz), morganite (J.P. Morgan) and zoisite (Sigmund Zois).

But there is one gemstone that has the distinction of being the very first mineral ever named after an individual. The gemstone prehnite was named after its discoverer, Colonel Hendrik von Prehn (1733-1785), a Dutch mineralogist and an early governor of the Cape of Good Hope Colony. Prehnite was also the very first mineral to be named and described from South Africa, long before South Africa became an important source for precious gems.

Prehnite is composed of hydrated calcium aluminum silicate and occurs in a soft yellow-green to apple-green color. Many specimens have an intriguing luminous quality. It has a vitreous to pearly luster. Prehnite is a medium-hard gem with a rating of 6 to 6.5 on the Mohs scale. Most prehnite is translucent but transparent specimens are sometimes found. Prehnite has a density or specific gravity of 2.82 to 2.94 and a refractive index of 1.611 to 1.669.

Prehnite is usually cut as cabochons or carved. Specimens displaying the cat's-eye effect are known but rare. Some translucent to transparent material is faceted, producing an interesting look that has become popular for jewelry.

Prehnite can often be found in large sizes, sometimes as large as 100 carats. It is a relatively inexpensive gem, though higher quality faceted material may sell for prices approximating those of amethyst or citrine. Generally the faceted material is found only in smaller sizes.

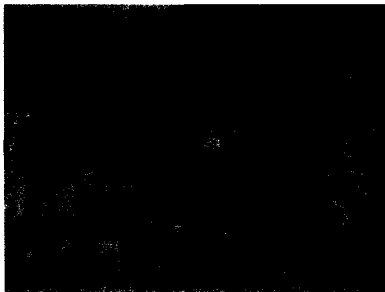
Until recently, prehnite was a rare gemstone, but new deposits have made it more available. While you are unlikely to find it in your local jewelry store, gemstone dealers often supply it. Deposits are found in places including South Africa, Australia, China, Scotland and the United States.

Prehnite is said to encourage composure, forgiveness and acceptance, and is excellent for meditation. Some people also believe that prehnite helps sufferers of claustrophobia.

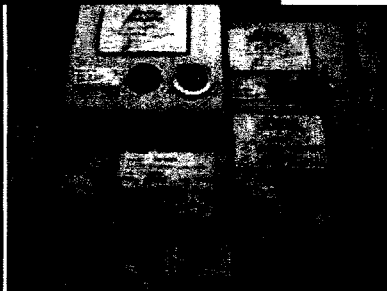
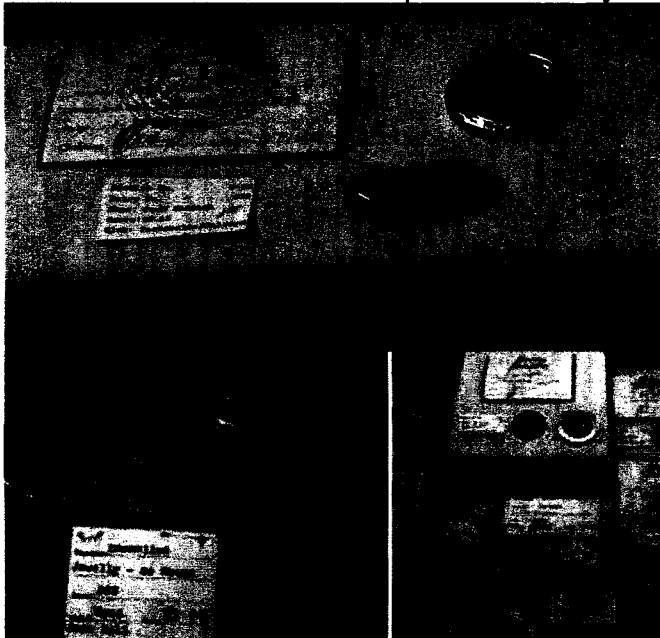


Prehnite Pear Facet

Some of our gallery items from Gem and Lapidary Website



GEMKHANA 2014 and some past exhibits by clever people



When	What	Where
Feb		
14th & 15th	Orange Lapidary 50th Anniversary Celebration	Senior Citizens Centre Kite St Orange.
March		
1st	Illawarra Rock Swap	Stuart Park North Wollongong.
21st & 22nd	New England Lapidary & Fossicking Club 24th Annual Gem and Craft Show	Armidale Showground Armidale NSW
21st & 22nd	Canberra Lapidary Rock Swap	Wagtail Way EPIC Canberra
April		
3rd	GEMBOREE	Horsham VIC
May		
16th & 17th	Lismore Gemfest	Showground Lismore NSW
30th & 31st	Canberra Winter Show	Pavilion EPIC Canberra
Nov		
7th & 8th	Spring Gemcraft & Mineral Show Canberra Lapidary Club	EPIC – Mallee Pavilion

Competition Closing Dates.

GEMBOREE 2015 HORSHAM VIC

Entry Forms for **ALL** must be received at P.O. Box 500, Mooroopna, Vic 3629 by **Sat 31st January, 2015.**

Costs \$6 plus sufficient postage amount for entry return and a stamped self addressed envelope for receipt.

GEMBOREE DATES

2015	-VIC	APRIL 3
2016	-TAS	MAR 25
2017	-NSW	APRIL 14



National Gem and Mineral Show.

3rd-6th April 2015

Horsham Vic.