



Gem & Lapidary News

May

2024

Print Post Approved PP243352/00002
ISSN 2208-5556

Vol 50

No. 4

Gem & Lapidary News is the official publication of the Gem and Lapidary Council of NSW Inc, PO Box 188 Orange 2800. 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). **Life Councillors:** Joan Ball (dec), Ron Beattie, Arthur Roffey (dec), Frank Hall (dec), Dot Caladine (dec), Maurya Hutton (dec), Marie Jenkins (dec), Dick Moppett (dec) & Bob Wright (dec).

EXECUTIVE

President	Barbara Try O.A.M. (Northern Districts) 0417 676 435
Senior Vice President	Tony Offord (Port Hacking)
Vice president	Tony Try (Central Coast)
Secretary	Kathy Selwood (Orange) 6362 7917 secretary@gemlapidarycouncilnsw.org.au
Minutes Secretary	Mick Lane (Blue Mountains)
Treasurer	Vacant
Assistant Treasurer	Tony Offord (Port Hacking)
Committee:	Sue O'Neil (Goulburn) Joe O'Neil (Goulburn) Marcia Hill (Western Suburbs)

APPOINTMENTS

Public Officer	Paul Sabolta
Auditor	Colin Russell
Editor	David Wilson editor@gemlapidarycouncilnsw.org.au
Webmaster	Alex Maitland (Temporary Webmaster) webmaster@gemlapidarycouncilnsw.org.au
Equipment Officer	Mick Lane
G&L News Mailman	Sue O'Neil
Education Officer	Paul Sabolta
GEMBOREE Coordinator	Tony Offord
State Gem & Mineral Show Coordinator	Tony Offord with Robert Porter
AFLACA delegates	Barbara Try (voting) and Tony Try (non-voting)
Social Media Officer	Kim Cooke
AFLACA J&R delegates	Barbara Try (voting) and Kathy Selwood (non-voting)
Archivist	Barbara Try

COUNCIL MEETINGS**Visitors welcome to attend**

Executive - meet Monthly, fourth Wednesday of the month , 1pm, at Clubrooms, Parramatta-Holroyd Lapidary Club, 73 Fullager Rd, Wentworthville, NSW

NEXT COUNCIL MEETING: May 22, 2024

EDITOR'S NOTES

I hope you enjoy the April Newsletter from Willunga SA.

If you have an article, or a show you wish to advertise in future newsletters, please send them in.

Due to increased cost for postage and printing please let the Council know if you can receive the newsletter via email only.

ADDRESSES

for the **Gem & Lapidary Council NSW**

Website : <http://gemlapidarycouncilnsw.org.au/>

The website has links to the **secretary, editor & webmaster**

Online edition of the newsletter is in colour.

Post : Gem & Lapidary Council NSW, PO Box 188, Orange NSW, 2800

Meeting rooms: Parramatta-Holroyd Lapidary Club,
73 Fullagar Rd, Wentworthville, NSW

DEADLINES:

Fourth Friday of the month—a few days grace is allowed.

CONTACT THE G&L EDITOR TO INCLUDE YOUR CLUB'S NEWS
editor@gemlapidarycouncilnsw.org.au

ADVERTISING RATES

per *G&L News* edition

(NB: printed in black & white)

Full page - \$40 1/2 page - \$25 1/3 page - \$20

Please send payment with advertising booking and copy

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.

Contents	Page(s)
G & L Council Information	2
Editor's Notes and Council contact information.	3
Message from the President	4
Committee Meeting Minutes—April. Titanite -Pakistan	5-6
Competitors	7
So, what determines a Mineral is a Gemstone?	8
OBSERVATION - What do you See	9
Colour—Lustre—Opacity/Transparency (Diaphaneity)	11-14
Illawarra Lapidary Club Inc – Open Day—Flyer	15
Events	16



Message from the President

Holidays are all over and it is time to get back to work.

The State Gem and Mineral Show is currently our priority along with the education courses that have yet to be completed.

The Gem Council would like to offer member Clubs the opportunity to have a table at the State Gem and Mineral Show at no charge. If any Club is interested please make contact with the council through the secretary. We would like those that do take the offer to assist the council at the conclusion of the show stacking the tables for collection the following morning. The committee is not as young as it was and this assistance will be greatly appreciated.

Please consider this offer as this is a great way to promote your Club.

Barbara J Try OAM

President

Minutes of the COMMITTEE MEETING of 24th April 2024 Held at Parramatta Holroyd Club Fullagar Rd Wentworthville

The meeting was opened at 1:00pm by President Barbara Try (Northern Districts) who welcomed delegates from the following clubs: Central Coast (Tony Try), Parramatta/Holroyd (Ray Powell), Port Hacking (Tony Offord), Blue Mountain (Mick Lane), AFG (Paul Sabolta), Illawarra (Joan Zealy), Goulburn (Sue & Joe O'Neil) Western Suburbs (Marcia Hill & Ainsley Flynn) Blaxland (Robert Kneale). Late Arrival Approx 2.00pm Hawksbury Delegate (Peter Beckwith). **Apologies:** Blue Mountains (Kim Cooke), Orange (Kathy Selwood) Bathurst (Robert Porter), Fairfield Karen and Jim Waghorn. **Moved:** Goulburn seconded Central Coast that apologies be accepted.

Minutes of the Previous Meeting: 28th February 2024: Moved Western Suburbs seconded, AFG that minutes be accepted.

Business Arising:

- 1/Insurance Blaxland to investigate value for money - Held over
- 2/Gemboree 2024 Trophies AT01 & AT03-were not awarded at Gemboree so no fee due.

Business arising from minutes: moved AFG seconded Port Hacking

Correspondence: See attached list

Business Arising from correspondence.

1/ Canberra club asked for advice re taxation reporting for not-for-profit clubs – Gem Council cannot advise on Taxation matters clubs are advised to talk to a Tax Accountant.

Moved Blaxland seconded Port Hacking that Inward Correspondence be received, Outward Correspondence be endorsed, and business arising be approved.

Treasurer's Report: Moved Blue Mountains seconded Central Coast that the report be accepted and accounts for payment be paid.

J&R Report:

- 1/Hawksbury show judging completed April 15th.
- 2/ Central Coast judging to be Sunday 4th August – Schedule to hand
- 3/ All Judges have been notified of the change to the J&R Manual. This change will also be Published in the G&L newsletter for all competitors.
- 4/Judging for State Gem & Mineral show 7th September.

Webmaster: No report

G&L NEWS Editor: No Report

GENERAL BUSINESS:

1/ AFLACA-Committee Meeting Point 1 all associations to submit suggestions how AFLACA can assist with education programs - Council suggests 2 nights' accommodation at \$175.0 per night.

2/ AFLACA-Committee Meeting Point 2 all associations to submit suggestions on how to keep Fossicking areas open. Council suggests each association appoint a member to look after their own State etc. Council to respond to both items by 30th June Barbara Try to respond on our behalf.

General Business Moved Parramatta/Holroyd, Seconded Illawarra

Meeting closed 2:52pm

Next meeting: 22nd May at Parramatta/Holroyd rooms Fullagar Rd Wentworthville.

Meeting dates for 2024: 22nd May, 26th June, 24th July, 28th August, 25th September, 23rd October, 27th November, 11 December & AGM.

**Titanite**

CaTi(SiO₄)O

Specimen Locality: Haramosh Mt., Skardu district, Baltistan, Pakistan, 35mm/16mm / 10mm

Crystal System: Monoclinic

Competitors

Each year at the GEMBOREE all the Member Associations of AFLACA meet to discuss the Competitor & Judging Manual.

It is at this time, recommendations are made from the associations to update or improve the rules we compete by. The current Manual Issue No. 8 was printed in April 2015 and there have been a number of changes made to the “Blue Book” otherwise known as the “bible”. If you have not updated your manual you are not cutting or competing to the current rules.

These rules can be found on the AFLACA website : <https://aflaca.org.au/judging-rules/>

<https://aflaca.org.au/wp-content/uploads/2024/04/All-Changes-to-the-Manual-Issue-No.-8-April-2015-since-June-2016-updated-5-April-2024.docx>

The link above will give you all the changes that have been made – this enable us to keep abreast of what is happening in our crafts.

The Manual is a living document and all competitors should have one so that they are aware of what is required for them to compete.

There was a very small change made on the 30th March 2024 at Willunga SA which is shown below:

⇒ The addition of a new definition has been added - While it is known in the J & R Manual that coatings are not allow there is not a specific ruling hence that under definition the word Coating is now added.

- **D2.6 Coatings** - must not be used in any way, this includes any lacquer, resins and any other coatings that are available. (page 19)

Barbara J Try OAM

AFLACA J & R Chairperson



Vol. 50



No. 4

7

So, what determines a Mineral is a Gemstone?

Well, we look for three basic properties:

1. Beauty – Beauty is a rather intangible property to define easily, as what is beautiful to one person it may not be to another person. Most people agree beauty of a gem lies in the colour, clarity and their light reflecting or refracting properties.
2. Durability – Durability is an essential property for a gem material, as a stone that costs a great deal of money would want to resist some wear and tear and maintain it's colour. You would want it to resist things like the abrasive influence of dust and knocking or rubbing against other material.
3. Rarity – Rarity plays a very important part in the value of gem material and may have a far greater influence than either durability or beauty. Some minerals or good specimen can be quite rare. A flawless natural Emerald with good colour is exceedingly rare and can fetch a greater price than a diamond of the same size.

Ornamental stones, minerals, rocks and organic material generally lacks transparency and are valued for the colour and pattern e.g. jade, turquoise, lapis lazuli, pearl, shells, mammoth ivory, bone, malachite, agates. Although these have beauty some are not rare or possess durability.

Robilt Lapidary Supplies

167 Endeavour Drive, North Cranbourne 3977

P.O. Box 179 Doveton, Victoria 3177

Ph: (03) 5996 0750 Fax: (03) 5995 7505 Mob: 0414 469 203

ABN 37 856 874 788

Email: robiltlapidary@gmail.com

Manufacturers of Lapidary Machines for over 45 years

Tumblers – Trimsaws – Slabsaws – Grinders - Polishers

Vibro Laps – Flat Laps – Faceting & Combination Machines

Suppliers of Grits – Laps – Wheels – Blades – Dops – Discs.

Service – Repairs – Spare Parts - Rough – Cut – Polished Stones

OBSERVATION - What do you See

When trying to determine what the specimen is, it's all about observation and noting down what you see. It's easy to say the specimen is sky blue and opaque so it's a turquoise, well it may be, but how do I know for sure that it is and not a dyed quartz or howlite? It is through observation and performing some easy tests that we assemble enough information that we can say it is a piece of turquoise.

Properties that you should try and observe when looking at your specimen.

COLOUR – Main colour with any other modifying tones, evenness of colour, zoning.

LUSTRE – (light reflected from the surface) Vitreous, adamantine, dull, waxy, resinous, metallic etc.

OPACITY/TRANSPARENCY (DIAPHANEITY) – transparent, translucent, opaque.

FRACTURE – Conchoidal, uneven, hackly, splintery etc.

CLEAVAGE – Basal, octahedral, prismatic, rhombohedral: perfect imperfect etc.

INCLUSIONS – Shape, colour, size.

SHAPE & MEASUREMENT – faceted (style), cabochon, rough, crystal, and size in mm.

OTHER OBSERVATIONS – Abrasions, scratches, rounded facet edges, asterism, chatoyancy etc.



For 50 years we have been manufacturing and supplying quality base metal Findings and Mountings to Lapidary and Craft enthusiasts.

Shop online for a large range of:

Findings

Chains – Neck chains and Bulk chain

Mountings: Rings, Pendants, Brooches, Bracelets etc.

Snap –Tite™ Settings – Sterling Silver and Gold Filled

Discounted and close-out Specials

www.australianlapidarysupplies.com.au

Phone: 02 95318922 Email: sales@australianlapidarysupplies.com.au

Discount for Lapidary Clubs and Members

Simply order online and type in coupon code: **lapidary** at checkout.

Gemcuts

*Lapidary * Fossicking
* Jewellery Making Tools



Cabbing



Tumbling



Jewellery Tools



Carving



Sawing



Ultrasonic Cleaners

We stock an extensive range of our own diamond tools, faceting accessories, rough and products.

We are Authorised dealers for:

Diamond Pacific Tool Corp – Nova, Genie, Bigfoot, Galaxy
Barranca - MK Diamond Saw Blades

Lortone - Cabbing Machines, Saws, Rotary Tumblers

Saeshin - "Strong" Micro Motors

Cratex - Rubberised Abrasives

Crystalite - Diamond Laps, Crystal Pads, Poly Pads, Flexo Pads

Klingspor - Industrial Grade Sanding Sheets, Belts & Disks

GemPro - Flex Wheels, Resin Bonded Diamond Products

Jersey Instruments – Faceting Machines

36A Smith Drive
Ballina NSW 2478
Ph. 02 66811686
A/H 0427 012 014
Brian & Liz

MAIL
PHONE &
INTERNET
ORDERS

<https://www.gemcuts.com.au/>

Note: You should develop your own pattern for observation and describing any mineral, gemstone or crystal that you handle. You may like to use the pattern shown above but the order shown here is not necessary the best order. Just be aware that the terminologies that you will be shown (and mentioned above) are the standard used for Gemmology.

COLOUR

The principal sources of colour may be considered as:

1. Selective absorption of light - due to the chemical composition of the material; and

2. Structural colouring - due to the internal structure of the material e.g. layering, particle size, etc.

SELECTIVE ABSORPTION:

Some are fixed, but most are variable

Idochromatic : ("self-coloured"), (Fixed):

- Malachite (Cu), Azurite (Cu), Peridot (Fe), Rhodonite (Mn), Magnetite (Fe 2+ Fe 3+2 O 4)

Allochromatic : ("other-coloured"), (Variable):

(a) Colour due to trace active ions of the transitional elements – emerald, ruby, sapphire, tourmaline, chrysoberyl, spinel, zircon and so on.

The main transitional elements from the periodic table that we are Interested in are:

Transition Element	Symbol	Atomic Number
Scandium	Sc	21
Titanium	Ti	22
Vanadium	V	23
Chromium	Cr	24
Manganese	Mn	25
Iron	Fe	26
Cobalt	Co	27
Nickel	Ni	28
Copper	Cu	29
Zinc	Zn	30

(b) Colour due to coloured inclusions

- Quartz – Colourless (rock Crystal), Purple (amethyst), Pink (rose Quartz), Yellow (citrine), Brown (Smokey quartz)

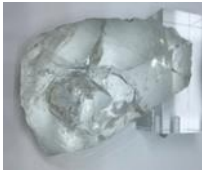
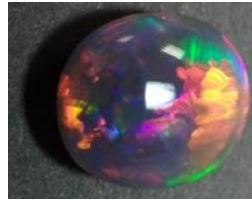
- Fluorite – Colourless, purple, Green, yellow
- Garnet - red, pink, yellow, brown, green, orange, purple, colourless
- Sphalerite – black (Black Jack), but rare – vivid yellowish orange
- Zircon – Colourless, red, brown, green, blue

Most Gems are most colours!!!

STRUCTURAL COLOURING

Interference and diffraction effects

a. Play of colour in opal



b. Iridescence



c. Schiller in labradorite



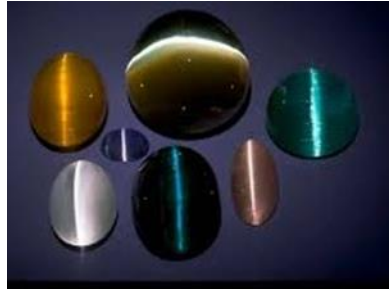
d. Sheen of moonstone

e. Orient of pearl



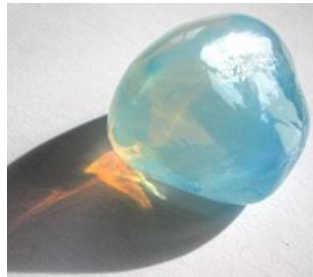
Selective scattering

a. Chatoyancy – Cats Eye



b. Asterism - Star

c. Tyndall effect*



*The Tyndall effect is the scattering of light as a light beam passes through a colloid. Opalescent glass displays the Tyndall effect. The glass appears blue, yet the light that shines through it appears orange.

LUSTRE

Shine, Polish – External – off the surface

Vitreous – Glassy, most silicates – quartz, topaz, beryl



Adamantine – hard brilliant – diamond, CZ, Cassiterite



Metallic – pyrite, hematite, chalcopryrite, magnetite, galena

Dull (earthy) – limonite, Talc, Hematite, galena, poorly polished surfaces – scratches



Pearly – moonstone, selenite (gypsum), Natrolite



Resinous – zircon, (amber)



Greasy – talc, some turquoise



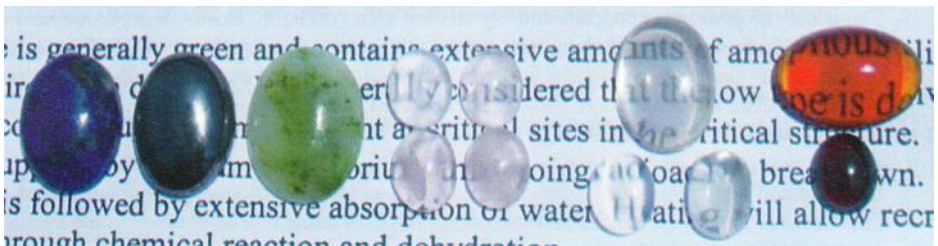
OPACITY/TRANSPARENCY (DIAPHANEITY)

Transparent – can you clearly see an object through it – Quartz, topaz

Translucent – some light passes through but indistinct – chalcedony, opal

Opaque – No light passes through – galena, pyrite, hematite

May use semitransparent and semi-translucent





The Illawarra Lapidary Club Inc.

OPEN DAY

SUNDAY 5th May, 2024

At our Club House
51 Meadow Street, Tarrawanna
9am—2pm

Stalls selling – Gemstones, fossils, rough, minerals, handcrafted jewellery, books and more.

Morning Tea – Homemade cakes and goodies. Tea and coffee also available.

Lunch – Sausage sizzle and drinks available

**Proceeds of the Morning Tea go to the
CANCER COUNCIL'S BIGGEST MORNING TEA**



You can find us at our website www.illawarralapidaryclub.com.au or like and follow us on  Facebook: <https://www.facebook.com/illawarraLC>



EVENTS

General information on which events are going ahead and which have been cancelled, can be found on the following link:

<https://gemlapidarycouncilnsw.org.au/events/>

- ◇ **5 May 2024** Illawarra Lapidary Club Inc – Open Day 51 Meadow Street, Tarrawanna
- ◇ **18-19 May 24** Lismore Gemfest Lismore Showgrounds, 116 Alexandra Rd, Lismore
- ◇ **25-26 May 24** Canberra Winter Gemcraft & Mineral Show Mallee Pavilion EPIC Canberra Showgrounds ACT. Norm-0407 718 347, nmena-due@optusnet.com.au
- ◇ **1 June 2024** Nambucca Macleay Gem and Mineral Club, Annual Gem, Mineral and Lapidary Auction, Macksville Showgrounds. 9am viewing for 10 am start
- ◇ **13-14 July 2024**, 44th Annual Gem Show & Exhibition, Campbelltown and Districts Lapidary Club, Greg Percival Centre, Ingleburn
- ◇ **21 July 2024** Christmas in July “Open Day” – Illawarra Lapidary Club Inc, 51 Meadow Street, Tarrawanna
- ◇ **28-29 September 2024** State Gem and Mineral Show—(Gemkarna Competition), Hawkesbury Agricultural Showground. <https://gemlapidarycouncilnsw.org.au/state-gem-and-mineral-show/>
- ◇ **11-12 October 2024**, Gem & Craft Show, Inverell & District Lapidary Club Inc
- ◇ **2-3 November 2024** Jewellery Gems and Minerals Festival – Illawarra Lapidary Club Inc. – 62nd Anniversary, At Heining Hall, Ribbonwood Centre, 109 Princes Hwy, Dapto. <https://www.illawarralapidaryclub.com.au>
- ◇ **2-3 November 2024** Canberra Spring Gemcraft & Mineral Show, Exhibition Park (EPIC) – Mallee Pavilion, Norm-0407 718 347, nmena-due@optusnet.com.au
- ◇ **8-10 November 2024** Club Exhibition 2024, Parramatta-Holroyd Lapidary Club.
- ◇ **24 November 2024** “Open Day” Christmas Market – Illawarra Lapidary Club Inc 51 Meadow Street, Tarrawanna. You can find us at our website <https://www.illawarralapidaryclub.com.au> or like and follow us on Facebook: <https://www.facebook.com/illawarraLC>