



Tea Tree Gully Gem & Mineral Club Inc. (TTGGMC)
Clubrooms: Old Tea Tree Gully School, Dowding Terrace, Tea Tree Gully, SA 5091.

Postal Address: Po Box 40, St Agnes, SA 5097.

President: Ian Everard. H: 8251 1830 M: 0417 859 443 Email: ieverard@bigpond.net.au

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Treasurer: Russell Fischer. Email: rfischer@bigpond.net.au

**April
Edition
2017**

"Rockzette"

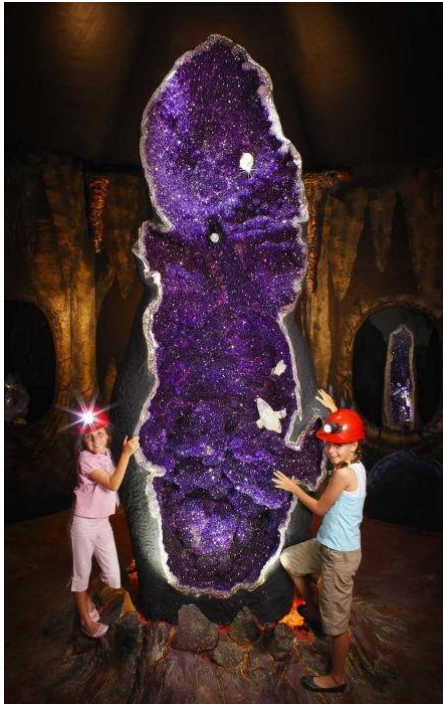
Tea Tree Gully Gem & Mineral Club News

President's Report	Club Activities	Courses & Fees.
<p>Hi All, The school hall has been booked for our Exhibition, and the dealers have been contacted. NOTE: April's speaker is Don McColl... talking on Mt Isa. Cheers, Ian.</p>	<p>Meetings Club meetings are held on the 1st Thursday of each month except January. Committee meetings start at 7 pm. General meetings - arrive at 7.30 pm for 8 pm start.</p>	<p>Faceting/Cabbing <i>Course 10 weeks x 2 hours Cost \$20.00. Use of equipment \$1.00 per hour.</i></p> <p>Silversmithing <i>Course 5 weeks x 2 hours Cost \$20.00. Use of equipment \$1.00 per hour.</i></p>
<p>Diary Dates/Notices</p>	<p>Library Librarian - Augie Gray</p>	<p>While some consumable materials are supplied by the club, trainees must supply any additional requirements.</p>
<p>2017</p>	<p>There is a 2-month limit on borrowed items. When borrowing from the lending library, fill out the card at the back of the item, then place the card in the box on the shelf. When returning items, fill in the return date on the card, then place the card at the back of the item.</p>	<p>Trainees who use the club equipment (for example, magnifying head pieces, faceting equipment, tools, etc.) must return them to the workshop after usage. Trainees are also encouraged to purchase and use their own equipment.</p>
<p><u>Fri 14th – Mon 17th April 2017</u></p>	<p><u>Tuesday Faceting/Cabbing</u> Tuesdays - 10 am to 2 pm. All are welcome. Contact Doug Walker (08 7120 2221) if you would like to learn faceting.</p>	<p>In the interest of providing a safe working environment, it is necessary to ensure individuals using the workshops follow the rules set out in <i>Policy No. 1 - 20/11/2006</i>.</p>
<p>GEMBOREE 2017. The 53rd National Gem & Mineral Show, GEMBOREE 2017 will be held in Lithgow, NSW. For Newsletters and full details visit http://aflaca.org.au/gemboree/</p>	<p><u>Wednesday Silversmithing</u> Wednesdays - 7 pm to 9 pm. All are welcome. Contact Augie Gray (08 8265 4815 / 0433 571 887) if you would like to learn silversmithing.</p>	<p>It is necessary that <i>Health and Safety</i> regulations <u>are</u> adhered to at all times.</p>
<p><u>Fri 5th – Sun 7th May 2017</u></p>	<p><u>Thursday Cabbing</u> Thursdays - 10 am to 2 pm. All are welcome. Contact Augie Gray (08 8265 4815 / 0433 571 887) if you would like to learn cabbing.</p>	<p>Trainees must ensure:</p> <ul style="list-style-type: none"> • that all work stations are left in a clean and tidy state; • that all rubbish is removed and placed in the appropriate bin; • and where applicable, machines are cleaned and oiled.
<p>Murraylands Gem and Mineral Club Crystal and Craft Fair 'Rockarama', Palmer Oval, Palmers, SA. MGMC Website</p>	<p><u>Friday Silversmithing</u> Fridays - 9 am to 12 md. All are welcome. Contact John Hill if you would like to learn silversmithing on a Friday.</p>	<p><i>NOTE: The Tea Tree Gully Gem & Mineral Club Inc. will not be held responsible or liable for any person injured while using the club machinery or equipment.</i></p>
<p><u>Sat 17th – Sun 18th June 2017</u></p>	<p>***</p>	<p>Club Subscriptions \$25.00 Family. \$20.00 Family/Pensioner. \$15.00 Single. \$12.50 Single/Pensioner. \$10.00 Joining Fee.</p>
<p>Tea Tree Gully Gem and Mineral Club Show. Tea Tree Gully Primary School Gymnasium, Corner of Memorial Drive and Neale Street, Tea Tree Gully.</p>	<p><u>Friday Silversmithing</u> Fridays - 9 am to 12 md. All are welcome. Contact John Hill if you would like to learn silversmithing on a Friday.</p>	<p><u>In This Edition</u></p>
	<p><u>Friday Silversmithing</u> Fridays - 9 am to 12 md. All are welcome. Contact John Hill if you would like to learn silversmithing on a Friday.</p>	<ul style="list-style-type: none"> • President's Report / Diary Dates/Notices / Club Activities / Courses & Fees. • Augie's Mineral and Agate Selections. • Opals – Types and Shows. • Members Out and About at Mineral Shows & a chance encounter leads to 'Railways to Heaven'. • General Interest - SAR Train Driver's Tale & caves in more detail. • Member's Noticeboard & link to MESA journal.
<p>The Tea Tree Gully Gem & Mineral Club Inc. is not and cannot be held responsible or liable for any personal injuries, loss or damage to property at any club activity, including, but not limited to, meetings, field trips, all crafts and club shows. An indemnity is to be signed by all participants before each and every field trip activity they attend.</p>		

Augie's April Mineral Selections
(Showcasing minerals from around the world.)



Amazonite and Quartz Var. Smoky.



"Amethyst Cathedral – Empress of Uruguay".



Amethyst Geode – Uruguay.



Arizona Petrified Wood.



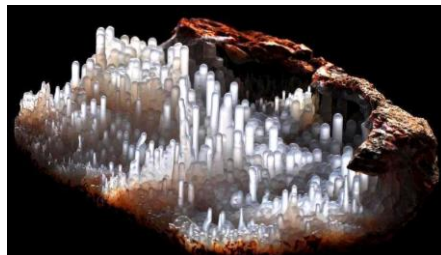
Amethyst on Calcite.



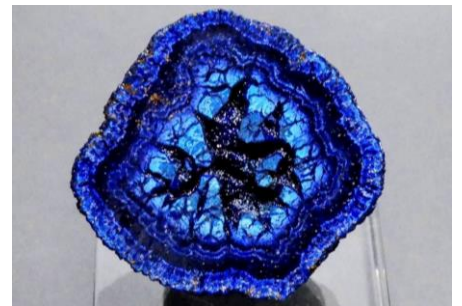
Aquamarine with Schorl and Albite – Skardu, Pakistan.



Argentinian Rhodocrosite Stalactite cluster.



Chalcedony Pseudo-stalactites, Sidi Rahhal, Morocco.



Azurite nodule.



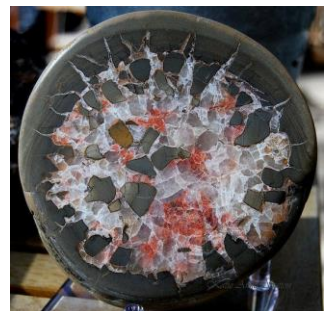
Bumble Bee Jasper.



Garnet var. Spessartine on Quartz Var. Smoky.



Seraphinite – Russia.



Moroccan Septarian Geode.

Augie's April Agate Selections

(Showcasing agates from around the world.)

I've deviated slightly from the "normal" agates. This month, we have a selection of "gembone" - Agatized Dinosaur Bone. Some pics & a brief write-up on where it's found.

'Gembone'

Agatized fossilised dinosaur bones are petrified with Silica or Quartz crystals which gives them their colourful, glassy appearance. This process preserves the actual cell structure of the once living dinosaur. Non-gem grade fossilized dinosaur bones are found in many places around the world but the highly agatized and beautifully coloured & patterned dinosaur bone known as "gem bone" is almost exclusively found in the Four Corners region of the Colorado Plateau in the USA (where the states of Arizona, New Mexico, Utah, and Colorado join). The wide variety of colours in agatized dinosaur bone are caused by minerals such as chlorite, chromium, iron-oxide, and manganese that enter the cells during formation.



Dino Bone 13.



Dino Bone 25.



Dino Bone 37.



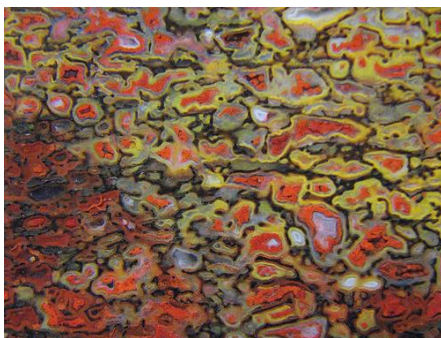
Belt Buckle.



Dino Bone 14 (Pyritized).



Dino Bone 43.



Dino Bone 1.



Dino Bone 48.



Dino Bone 7.



Dino Bone 14 (Pyritized).

Augie's April Agate Selections
(Showcasing agates from around the world.)

'Gembone' *Continued...*



Dino Bone 52.



Dino Bone 86.



Dino Bone 93A.



Dino Bone 90.



Dino Bone – Gembone.



Dino Bone 76.



Dino Bone 91.



Dino Bone – Gembone.



Dino Bone 76A.



Dino Bone 92.



Dino Bone 85



Dino Bone – Gembone.

Article Details: Accessed via Facebook & Geology Page (<https://www.facebook.com/geologypage/>).



Opal is a hydrated amorphous form of silica; its water content may range from 3 to 21% by weight, but usually between 6 and 10%. Because of its amorphous character, it is classed as a mineraloid, unlike other crystalline forms of silica, which are classed as minerals. It is deposited at a relatively low temperature and may occur in the fissures of almost any kind of rock, being most commonly found with limonite, sandstone, rhyolite, marl, or basalt.

Opal is the national gemstone of Australia. Australian opal has often been cited as accounting for 95-97% of the world's supply of precious opal, with the state of South Australia accounting for 80% of the world's supply. Recent data suggests that the world supply of precious opal may have changed. In 2012, Ethiopian opal production was estimated to be 14,000 kg by the United States Geological Survey. USGS data from the same period (2012) reveals that Australian opal production to be \$41 million. Because of the units of measurement, it is not possible to directly compare Australian and Ethiopian opal production, but these data and others suggest that traditional percentages given for Australian opal production may be overstated. Yet, the validity of data in the USGS report appears to conflict with that of Laurs and others and Mefflin, who estimated the 2012 Ethiopian opal output (from Wegal Tena) to be only 750 Kg.

The internal structure of precious opal makes it diffract light; depending on the conditions in which it is formed, it can take on many colours. Precious opal ranges from clear through white, grey, red, orange, yellow, green, blue, magenta, rose, pink, slate, olive, brown, and black. Of these hues, the reds against black are the rarest, whereas white and greens are the most common. It varies in optical density from opaque to semi-transparent.

Common opal, called "potch" by miners, does not show the display of colour exhibited in precious opal.

Black Opal

Black opal is characterized by a dark body tone causing brightness of colour which is unmatched by lighter opals. Black opals are usually mined in Lightning Ridge, New South Wales, and are the most famous, and sought-after type of opal.

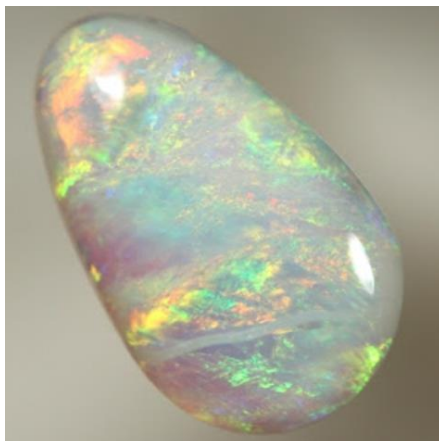
The term 'black opal' does not mean that the stone is completely black (a common mistake) it simply means the stone has a dark body tone in comparison to white opal.



Locality: Grawin & Glengarry Opal Fields, Lightning Ridge, New South Wales, Australia. Dimensions: 23mm x 10mm x 3.8mm
Copyright © Miklos Brezansky.

Australian black opals are the most valuable and widely known type of opal. Black opal is characterized by a dark body tone which can range from dark grey to jet black. However, this refers only to the general body tone of the stone, and is not related to the rainbow or spectral colours present in the opal. Some people expect a black opal to be completely black (in which case it would be completely worthless).

White Opal



11.0 x 7.0 x 2.5 mm.

Also, known as a 'milky opal' white opal features light white body tones, and is mined in South Australia. White opal is more common and because of its body tone, generally does not show the colour as well as black opal. Nevertheless, white opals can still be magnificent in colour if a good quality stone is found.

Boulder Opal



Locality: Queensland, Australia. Dimensions 123 x 65 x 45 mm.
Copyright © Lopatkin Oleg.

Boulder opal forms on ironstone boulders in Queensland. This type of opal is often cut with the ironstone left on the back, as the opal seam is usually quite thin. Leaving the ironstone on the back means the boulder opal can be very dark and beautiful in colour. The opal forms within the cavities of the boulders in both vertical and horizontal cracks. Boulders vary in shape and size, from as small as a pea, to as big as a family car. Boulder opal has a tendency to cleave; when cleaved the "split" leaves two faces of opal, with a naturally polished face.

Crystal Opal



7.75 ct. Lightning Ridge Crystal Opal. Credit: Mardon Jewelers.

Crystal opal is any of the above kind of opal which has a transparent or semi-transparent body tone – i.e. you can see through the stone. Crystal opal can have a dark or light body tone, leading to the terms, "black crystal opal" and "white crystal opal."

Fire Opal



Locality: Opal Butte, Morrow Co., Oregon, USA. 3 cm wide specimen. Copyright © Peter Cristofono.

Fire opal is a transparent to translucent opal, with warm body colours of yellow to orange to red. Although it does not usually show any play of colour, occasionally a stone will exhibit bright green flashes. The most famous source of fire opals is the state of Querétaro in Mexico; these opals are commonly called Mexican Fire Opals. Fire opals that do not show play of colour are sometimes referred to as jelly opals. Mexican opals are sometimes cut in their rhyolitic host material if it is hard enough to allow cutting and polishing. This type of Mexican opal is referred to as a Cantera opal. Also, a type of opal from Mexico, referred to as Mexican water opal, is a colourless opal which exhibits either a bluish or golden internal sheen.

Types of Opal continued...
Girasol Opal



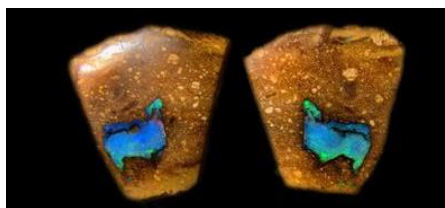
Girasol opal is a term sometimes mistakenly and improperly used to refer to fire opals, as well as a type of transparent to semitransparent type of milky quartz from Madagascar which displays an asterism, or star effect, when cut properly.

However, the true girasol opal is a type of hyalite opal that exhibits a bluish glow or sheen that follows the light source around. It is not a play of colour as seen in precious opal, but rather an effect from microscopic inclusions. It is also sometimes referred to as water opal, too, when it is from Mexico. The two most notable locations of this type of opal are Oregon and Mexico.

Peruvian Opal (also called Blue Opal)



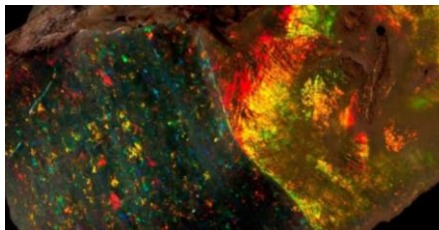
Peruvian opal is a semi-opaque blue-green stone found in Peru, which is often cut to include the matrix in the opaquer stones. It does not display pleochroism (an optical phenomenon in which a substance appears to be different colours when observed at different angles, especially with polarized light). Blue opal also comes from Oregon in the Owhyee region, as well as from Nevada around Virgin Valley.



Opal 'pair of sheep'.

Article Details: Accessed via Facebook & Amazing Geologist (<http://www.geologyin.com/2017/02/worlds-finest-piece-of-opal-worth.html#oz1igabvRlKhAvdv.99>)

World's finest piece of opal finds a new home at the South Australian Museum.



'Fire of Australia' Glitters at South Australian Museum – National Geographic.

The finest uncut opal in existence, the Fire of Australia, has joined the South Australian Museum's collection through the vision of a private donor and funding from the Federal Government's National Cultural Heritage Account.

Valued at nearly \$900,000 Australian and weighing 998 grams, the Fire of Australia is the world's finest piece of opal of its kind on public display.

The director of the South Australian Museum, Brian Oldman said the rarity of this piece of opal cannot be underestimated.

"Opal of this quality can only be created under certain climate conditions," Mr Oldman said.

"90% of the world's most precious opals are found in South Australia."

"When our state's inland sea evaporated millions of years ago, it provided a unique silica-rich environment for the creation of precious opal. It is these exceptional conditions that created the Fire of Australia."

Minister for the Arts the Honorable Senator Mitch Fifield announced \$455,000 in federal funding for the Museum to secure the significant piece.

The Turnbull Government understands the importance of preserving and displaying Australia's unique artefacts locally for current and future generations.

The funding helps Australia's cultural institutions, such as the South Australian Museum, acquire significant objects for public display.

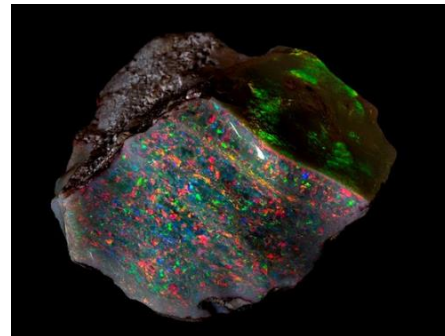
Walter Bartram's son, Alan, said that the Fire of Australia was mined in 1946 by Walter Bartram at the Eight Mile field in Coober Pedy, South Australia, and has been in his family for over 60 years.

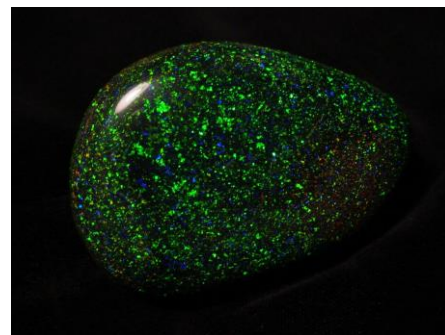
"After loaning the Fire of Australia to the South Australian Museum for its Opals Exhibition, we made the decision to place this family heirloom in safe hands."

"We've been long term supporters of the

South Australian Museum and it seems fitting that it should be passed onto the people of South Australia to enjoy.", Mr. Bartram said.

Opals was the most visited paid for exhibition in the Museum's history, resulting in donations of precious opals of more than \$3 million, which includes the Fire of Australia.





Opal Matrix from Andamooka, Australia. Forum: Facebook - Crystals Minerals Gemstones Fossils Rocks. Credit: Irena Bondarska.



Opal (7 gr each) from Gichuchu, Ethiopia. Forum: Facebook - Crystals Minerals Gemstones Fossils Rocks. Credit: Jose Bonifacio.



Phantom Opal – 216.62 ct Museum Investment Phantom from Delanta, Welo, Ethiopia. Forum: Facebook - Crystals Minerals Gemstones Fossils Rocks. Credit: WWW.opalauctions.com Rosa Valdez.

Contributed by Ian...

[Opal Association Incorporated 15th March 2017](#)

Australian Opal Circuit a Must-Do for Rock Hounds

Every year some of the most remote and quirky Australian outback towns come alive for a few days of fun and fortune, when the local miners and townsfolk put on a gem fair bash like no other! Whilst for most of the year the hard work goes on well behind the scenes on sun-scorched mining claims, this collection of opal festivals brings an opportunity for each town to showcase the very best that opal has to offer.

The Australia Opal Show Circuit is a series of shows (mostly open to the public) that are run from April until August every year. The weather is beautifully mild at this time of the year, so you can enjoy a real outback adventure without the harsh summer temperatures. It's a great way for people from all walks of life to travel around the country and see some of the most amazing opals and gemstones that Australia has to offer.

There are six fabulous opal and gemstone festivals to see each year and together they make up the Australian Opal Show Circuit.

So, what are you waiting for? Plan and book your Aussie Outback adventure now!

Coober Pedy Gem Trade Show

The 2017 Coober Pedy Gem Trade Show, specialising in rough and cut opal, will be held on the 15th and 16th April. The trade show, located in outback South Australia coincides with the Opal Festival, offering visitors a vast array of entertainment over the Easter long weekend.

The Croatian Club hosts the Gem Trade Show, providing a professional and air-conditioned environment for the numerous local and national exhibitors who will showcase high quality opals at trade prices to international and domestic buyers.

The Coober Pedy Gem Trade Show continues to strengthen its reputation as one of Australia's pre-eminent opal trade shows. Organisers will be continuing the tradition of holding a welcoming dinner on the Saturday night, 15th April so that exhibitors and buyers can meet in a relaxed environment with the aim of establishing and strengthening business networks.

Winton Opal Trade Show

The Queensland Boulder Opal Association holds an annual Opal Trade Show in Winton at the beginning of July. The Winton Opal Trade Show is held at the North Gregory Hotel

in the centre of the main street, with the Beer Garden being the area for cut and polished stones and Jewellery, and the adjoining Car Park is for tailgating.

In 2017, trading will be held there for two full days on 7th and 8th July and this wonderful outback opal event is open to the general public.

Boulder Opal Jewellery Design Awards and Opal Inspired Dress Design Awards are held each year with the judging carried out at the time of the Opal Trade Show.

Yowah Opal Festival

Yowah is an absolute gem of a place! This little four block town in Outback Queensland celebrates their uniqueness with an annual festival – The Yowah Opal Festival. Yowah opal celebrations occur on the third weekend of July each year and is located two hours' drive from Cunnamulla on a sealed road.

World class museum specimens of Yowah Nut Opal, Ironstone Matrix Opal, Opalized Wood Opal, Yowah Boulder Opal and Boulder Opal are on display as the locals share their prize collections with all. The Yowah Opal festival is fully catered and licensed for the festival weekend. Morning and afternoon tea, and three meals a day are cooked on the premises. Fresh food is provided including pit roasts, bar-b-ques, and smorgasbord to offer variety over the three days. And music and dancing is also very much part of the festivities.

The townspeople encourage everyone to talk to a miner. Yowah is billed as the 'friendly opal field' and local people gather to prove to you why!

Lightning Ridge Opal Festival

In the 1980's the Lightning Ridge Opal Festival became a hallmark event with locals, attracting hundreds of people to the social activities. Aspiring locals provided their version of 'celebrity' entertainment such as tributes to Michael Jackson, Cindy Lauper and even Dr Who! Around this time, the Opal & Gem Expo was first launched. An opal and gem trade show was set up in the car park of the Lightning Ridge Bowling Club and the event attracted hundreds of miners, jewellers, wholesalers and opal trade from all over Australia.

Today the Lightning Ridge Opal Festival is a 4-day event on the last weekend of July, and in 2017 will run from 27th to 30th July. The Opal Festival includes the Opal Queen Ball and the Opal and Gem Expo. The Lightning Ridge opal festival, in outback New South Wales attracts around 4000 people over the four days, and the event is billed as the largest on the Australian opal events circuit. And in 2017 there is an extra bonus to enjoy... the International Opal Jewellery Design Awards!

This is a biennial event that runs concurrently with the Lightning Ridge opal festival to promote freeform and or undulating opal, and showcases the stunning and innovative use of opal by jewellery designers around the world.

Australian Opal Exhibition Gold Coast

The Australian Opal Exhibition on Queensland's Gold Coast allows mine owners, wholesalers and manufacturers of opal jewellery to present a huge selection of opals and opal jewellery in a pleasant fair ambience.

Different types of opals, collectibles, polished stones, plus fine and fashion jewellery opals are seen at the show. The fair is aimed exclusively at professionals who can build on their new collections for their needs.

The Australian Opal Exhibition Gold Coast will be held at the landmark Surfers Paradise QT resort on 3rd and 4th August 2017.

Anakie Gemfest

Gemfest – Festival of Gems is an annual 4-day exhibition providing a unique gemstone and jewellery experience including offerings from respected local, national and international gemstone traders, quality entertainment and food, and some of the finest Australian Sapphires you will ever see.

Held every August at the Allan King Memorial Park in Anakie, Gemfest is a showcase for Australian and International gemstones. Each year thousands of visitors come from far and wide to share the excitement, enjoy the gem fields and marvel at the gems on display.

The festival enjoys a high industry profile as one of Australia's premier gem shows and this year promises to be another huge success. In 2017, Anakie Gemfest will be held on 10th to 13th August and affords an ideal opportunity to enjoy the Central Queensland Sapphire Fields.

The Australia Opal Show Circuit



MEDIA CONTACT

All enquiries and requests for photographs may be directed to: Paul Sedawie, President Opal Association Incorporated. Email: info@opal.asn.au - Opal Association Inc., PO Box 323 Mermaid Beach, QLD 4218

ABOUT OPAL ASSOCIATION INCORPORATED

The Opal Association was incorporated in 2000 and has subsequently attracted a diverse membership of opal miners, cutters, manufacturers, wholesalers and retailers of many years' experience. The Association is based in Australia and has industry members from around the world. We always welcome opal companies and enthusiasts who would like to become members. The Opal Association is administered by an executive committee that meets quarterly. Members/visitors welcome to attend.

Canberra touring before the 'Rock Swap - Thursday 16th March 2017 – Ian, Janet & Mel.



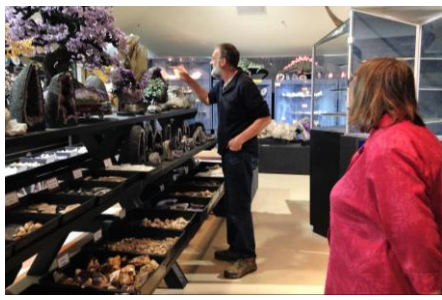
THE NATIONAL DINOSAUR MUSEUM
AUSTRALIA'S LARGEST DINOSAUR DISPLAY
ADMISSION

Adult	\$16.00	Senior	\$12.00
Child (4-16)	\$9.90	Concession	\$12.00
Family	\$45.00	Audio Guide	\$6.00
<small>2 Adult + 2 Child OR 1 Adult + 3 Child</small>			

OPEN 7 DAYS 10AM - 5PM
 PH: 02 6230 2655 (LAST ADMISSION 4.30PM)



Canberra Rock Swap 2017 at EPIC.
 Friday 17th March 2017



Setting up trading sites on Friday.

From (L): Carol, Terry, Norm, and Ian.

Early sales usually involve fellow traders and keen collectors.
 Continued next page...

Canberra Rock Swap 2017 at EPIC.
Friday 17th March 2017 Continued...



Carol is a trader and keen collector with a trayful of selections.



From (L): Lynne, Terry, and Ian.



Traders trading. 'And it has these jet black inclusions'.



'It's about 3 cm long and full of illusions.'



Friday Bar-B-Cue tea and get together for traders and club members. From (L) Mike, Coralie, Ian, Carol, Phil, and Janet.



After tea wine and yarns.

Canberra Rock Swap 2017 at EPIC.
Saturday 18th March 2017



Not a boudoir, but a well prepared and presented trading site by a lady selling necklaces.



Lots of activity in the pavilions at EPIC which brought a good steady flow to the 'Rock Swap' too.



Steady flow of interest in both directions.



Ian and Gary.



Keen interest at Ian's site.



Ian's Snapshots taken while trading at the 2017 Gemkhana, Shepparton, VIC.



Ian's Specimen Purchases at the Canberra Rock Swap 2017 and the Shepparton Gemkhana 2017.



Quartz var. Amethyst, Mt Elliott Mine, QLD



Calcite, Quartz, and Pyrite, Dalnagorsk Mine, Russia.



Quartz, Saratoga, New York, USA.



Chalcedony (Quartz), Sidi Rahal, El Kelaa des Sraghna, Marrakech-Safi Region, Morocco.



Quartz, Ilvaite, and Apophyllite, Second Soviet Mine, Dal'negorsk, Primorskiy Krai, Far East Russia.



Quartz var. Tangerine, Minas Gerais, Brazil.



Prehnite and Epidote on Quartz, Meigu Quartz Quarry, Sichuan Province, CHINA.



Quartz, Taxco, Guerrero, MEXICO.



Quartz and Hematite, Huanggang Mine, Chifeng, Inner Mongolia, CHINA.



Quartz var. Amethyst, Mt Elliott Mine, QLD



Quartz var. Smoky, Tibet (CHINA).



Quartz var. Smoky, Tibet (CHINA).



Quartz var. Smoky, Mimosa do Sul Mine, Mimosa do Sul, Espirito Santo, BRAZIL.



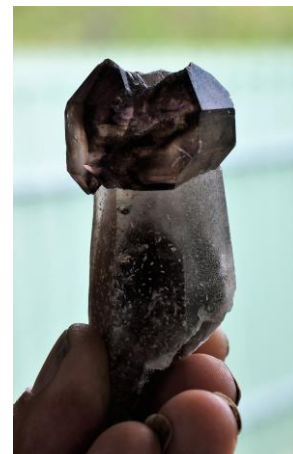
Quartz var. Smoky, Mimosa do Sul Mine, Mimosa do Sul, Espirito Santo, BRAZIL.



Rhodochrosite, Quartz, and Calcite, Baia-Sprie, ROMANIA.



Quartz var. Amethyst, La Sirena Mine, Guanajuato, MEXICO.



Quartz var. Smoky and Amethyst, Espirito Santo, BRAZIL

Wire Wrapping with a Difference



Lynne Webb displays her wire wrapping talent, which she developed in a matter of weeks following instructions, guidance and tutorials found on the Pinterest Website.



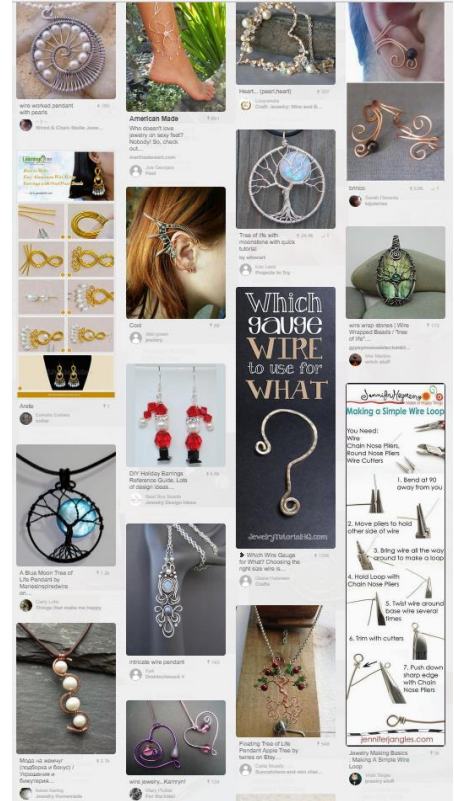
Some of Lynne's wire wrapping craft items that she had for sale at the Canberra Rock Swap.



Lynne showing one of her wire wrapping craft projects in progress.

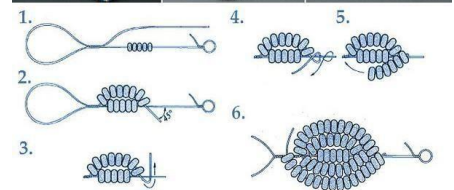
Learn Wire Wrapping Jewellery via: [Pinterest Tutorials.](#)

Example snippet taken from Pinterest...



Another craft site linked via Pinterest:

<http://www.lovethispic.com/image/129193/how-to-make-bead-earring-that-look-like-leaves>



Mel's introduction to an article, 'Railway to Heaven', by Garry Reynolds...

A Strange Outcome from a Chance Encounter.

Recently, Janet and I travelled to Canberra to attend my brother's eldest daughter's wedding which was held at the *All Saints' Anglican Church*, Ainslie, Canberra, ACT, on Saturday 4th of March 2017.



The church looked grand, both inside and outside, but appeared to be a rather old structure for Canberra. Someone in our group did mention that the church was originally a railway station building in Sydney, which we thought was a bit unusual if not a bit bizarre.



After the wedding service, when most people had left the church, I happened to spot a person in the church car park whom I had met several years ago, on our four-day steam train venture on the 'Garrett Special' train excursion from Canberra to Wagga Wagga and return. He was the train trip concierge.

He (Garry Reynolds) was not part of the wedding contingent, but was there visiting his son's memorial plot in the churchyard. During our brief, unexpected encounter, he asked me if I was aware of the church's history. Garry, has in fact researched and written an article, 'Railway to Heaven', about the church and the activities that were part of its history.

I have included the article here, with Garry's permission, for members' "general interest". It's a good read; a little macabre in nature as it reveals some bizarre history of how the deceased were handled in the past, and there are historical pictures of the church building included.

This surely is a strange outcome from a chance encounter when engaged in unrelated activities in the same church yard far, far from home.

Railway to Heaven

Garry Reynolds

The All Saints Anglican Church in the Canberra suburb of Ainslie stands out because it is so different from buildings in the rest of the suburb – to some visitors it seems out of place and it is in a way.

The story behind the church and how it got there has a strong connection with early railway building in New South Wales.

Back in Victorian times corpses were a real problem for cities. In London, there was so little space that graveyards were regularly mined. Old bones were retrieved from the soil and ground up into fertiliser. Grave robbers dug up caskets and turned them into cheap furniture – yes it was called coffin furniture. The decaying bodies also polluted the water table of families who relied on wells. Massive cholera outbreaks and plagues spread through poor burial practices and by rats and mice eating the bodies.

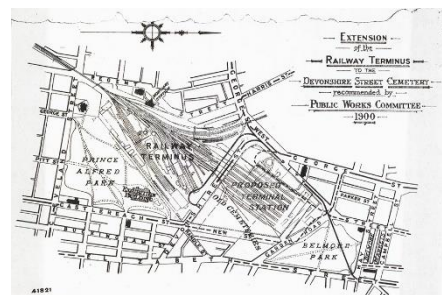
For England, glorying in its superpower status and Empire, this situation became untenable. It was decided to establish a massive cemetery on the fringes of the capital. The site was initially named 'The London Necropolis' as a marketing brand used by the private company who created the cemetery. An access railway line and special departure and receiving stations and rolling stock for the mourners and the coffins were constructed.

The word necropolis was used as a dignifying term derived from the Greeks. It referred to a large cemetery belonging to an ancient city. The London site eventually became known as 'Brookwood Necropolis'.

In the 1860's the authorities in New South Wales faced a similar problem with cemeteries filling up in the City of Sydney. They followed the lead of London but in the Colony's case the Government opened a site. It was located near the Great Western Railway Line at Haslem's Creek 17 kilometres from the Sydney Town Hall which sits on a former cemetery.

Construction commenced on a 1 km spur line in November 1864 and from 1 January 1865 trains began their run into the cemetery. Mourners were conveyed in six car sets of uncomfortable carriages known as 'Unimproved Redferns'. Adults travelled on the funeral train for the cost of one shilling. Paupers could ride free and coffins also travelled for free. By 1927, the price for adults would increase to four shillings. Taking the link with London further, Sydney's main cemetery eventually covered 314 hectares and became known as 'Rookwood Necropolis'.

It was the largest in the Southern Hemisphere and today is the largest Victorian-era cemetery still in operation in the world even having its own postcode. Over 915,000 bodies are buried or cremated there. In time, the Necropolis became so well-known across Australia that the slang term for someone who looked very sick was "You're as crook as Rookwood."



Sydney Mortuary Station is located on Regent St north of the marshalling yard Source: Sydney Architecture.

Meanwhile in inner Sydney, there were several imperatives governing the siting of a departure station for the funeral trains. Part of the strategy of the 1860s to ease the burden on the Sydney rail terminus at Redfern was to remove what traffic could be transferred to other nearby sites. The first element was to shift a fair proportion of the goods traffic to the Darling Harbour area and the second was to relocate funeral trains to a site near the Cleveland Street road overbridge.

To provide status and dignity, an impressive sandstone departure railway station was built at Regent Street in 1869 near where Central Station was erected at the turn of the 19th century, again on another former cemetery.



The Sydney Mortuary Station at Regent Street. Source: NSW Government Printer.

At the Rookwood end the short spur line costing 5,000 pounds left the Great Western Railway near today's Lidcombe. It was decided that funeral processions would be more dignified if something more substantial than the corrugated iron and timber structures which greeted the mourners in the early days of the service.

Continued next page...

Railway to Heaven Continued...

In 1869, an ornate sandstone Receiving House No1. was opened on New Year's Day with the line terminating inside the building at a set of buffers. There were platforms on both sides for the mourners and offloading of the coffins. Originally there was a waiting room and a fireplace at one end. In later years, the waiting room was pulled down and relocated to become part of Receiving Station No.3.



The funeral train at Receiving House No1 Rookwood Necropolis in the late 1860s. Source: ABC Canberra.

This new Rookwood Receiving Station No1. and the Regent Street departure building were designed by the Colonial Architect, James Barnett, one of the finest architects in Australia.

Senior Railway officials were unhappy that they lacked control over the design of the expensive Mortuary departure station and Receiving Station No1. They did not see them as the Colony's highest priority nor did many citizens who thought the money could be spent on less elaborate more urgent transport challenges. They complained that there was over-expenditure on buildings designed for dead people, especially when contrasted with the poor conditions for live travellers at the main Sydney terminus at Redfern. However, over several decades the line was extended in stages reaching 5 kilometres and three more receiving stations were built but none as ornate as the first.

While the main departure and receiving, stations may have looked like churches, nothing relating to creeds or denominations were incorporated in either building. The religious aspects commenced elsewhere in Sydney with a church service. Then the caskets and mourners were conducted to the Sydney Central Mortuary Station. Many passengers also brought cases of beer and cartons of spirits to be loaded onto the train as well copious amounts of food for the graveside wake. In some cases, the mourners had already become charged up in their grief and continued the premature wake on the journey out to Rookwood before the body had been buried!

There were two types of hearse carriages attached to the rear of the trains. One was a four-wheeled van which carried up to ten

coffins on upper and lower shelves with each shelf opening out onto the platform. The other was a larger eight-wheeler van which could carry up to thirty coffins. When the caskets were loaded, the mourners retired to their appointed carriages.

A sign saying 'Funeral' was mounted on the front of the steam locomotive which drifted along at a crawl not only to add to the dour decorum of the journey but to enable the driver to be prepared to stop should a red flag be displayed to pick up coffins, mourners, or clergymen at any station along the line. Stations such as Newtown even had their own small mortuary building.

On the slow journey a longer stop was made at Homebush for a discreet ticket clipping of the passengers' tickets. On the return journey tickets were again checked at Homebush. At Strathfield, conductors compiled a list of stops to be made for setting down at suburban stations. For several years, the grieving passengers had to endure the indignity of long distance train passengers crowding in with their baggage at this major station to make the trip to the city in a carriage shared with mourners overcome by the occasion or the wake.

On its procession to Rookwood, the funeral train slowed as the driver approached each station while ringing a bell. In response, male citizens and railway and mortuary staff acknowledged the passing of the train by doffing their hats to the passengers alive and dead.



The entrance to Rookwood Receiving Station No1. with two angels framing the train opening prior to the extension of the line. Source: Past Lives of the Near Future

When the funeral trains, which departed Sydney at 9.30am and 3pm, reached Lidcombe it ran from a kick-back terminal loop line adjacent to the station into a terminal line at Rookwood Cemetery, and then slowly reversed into the ornate Receiving Station No.1. As the cemetery expanded, the line was extended to include the three other small stations within the grounds.

Once the funeral party alighted, the train would draw forward again to Lidcombe, and the locomotive run-around the carriages. The train would then draw forward to the respective platforms to embark the funeral

parties, reverse back to Lidcombe and depart for the Regent Street Mortuary Station.

During all this shunting, once the passengers alighted with their provisions, the coffins were loaded onto wheeled hand carts pushed by Rookwood staff. When the spur line was extended, the other three stations had standard side platforms but followed the same practices.

Once all passengers, the corpses and wake requisites had departed the train, it would proceed to a shunting loop while the mourners walked in a procession to the gravesides while some later sought solace in a selection of chapels dotted through the Necropolis.

After a coffin was lowered into the grave and the ceremony completed the wake commenced with the Minister and the gravediggers participating with the mourners. Many times, leftover food and chicken bones and oyster shells were thrown on top of the coffin both as a form of waste disposal and in notional sharing of the refreshments with the dear departed.

The mourners were alerted that the train would be leaving Rookwood Necropolis by the ringing of a bell in the tower of Receiving Station No1. thirty minutes before departure. At times Necropolis staff and rail officers found their hands full with mourners – some overcome by grief and others overcome by the wake. On occasions, the hand carts had to be used to convey those who had over-imbibed back to the train. On other occasions, the intense religious bigotry that existed in some quarters exploded on the platforms with the incendiary effects of the alcohol resulting in unseemly religious stoushes!

The peak operation of the Rookwood railway facilities occurred around the early 1900s. Electric signalling was installed in 1918 to enable three trains to operate on the line at the same time and the loop meant that four trains could be squeezed in during particularly busy times like Mothers' Day visits. On weekends, a trip on the Rookwood steam train was regarded as an ideal outing for families to enjoy the parkland environment.

Over the years, well-known railway officers were buried at Rookwood including: William Sixsmith the first train driver in NSW; Samuel Twiss driver of the first paying passenger train from Sydney to Parramatta; and James Robinson the first guard on the NSW Railways.

Unfortunately, the funeral rail services lived up to their name with several mourners being killed by trains departing from the Mortuary Station or at the Receiving Stations on the Rookwood spur.

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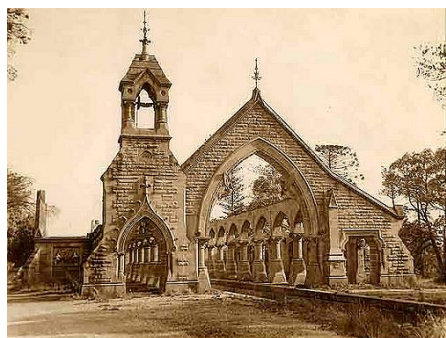
Railway to Heaven Continued...

The successful funeral train concept was extended to Woronora Cemetery at Sutherland (line opened 1900 and closed 1947) and to Newcastle’s Sandgate Cemetery (line opened 1881 – closed 1985) with their own railway branch lines. However, by the 1920s improved roads and cars with pneumatic tyres saw the rise of motorised funerals and buses carried increasing numbers of visitors on weekend pilgrimages saw the gradual decline of the Rookwood rail operation.

By the late 1930s the Rookwood funeral train service had almost ceased although there was a slight return of traffic during the war owing to the rationing of motor fuel. Interestingly, the bodies of four Japanese Imperial Navy crewmen who died in two of the three midget submarines which attacked in Sydney Harbour during World War 2 were cremated at Rookwood Necropolis with naval honours and the ashes returned to Japan in the middle of the War.

The spur line closed and the trains to Rookwood Necropolis ceased in 1948 but the tracks remained until the 1980s while the line was used to transport stonework. The stations were offered to the Joint Committee of Necropolis Trustees for the price of only one pound but the offer was rejected as the Trustees thought the maintenance costs would be too high.

The three smaller side platform-receiving stations were demolished while the No1. Receiving Station fell into disrepair and was severely damaged when a bush fire burnt out the roof.



The burnt out Receiving Station No. 1 at Rookwood. Source: *Past Lives of the Near Future*.

In the early 1950s there were several unsuccessful attempts to dispose of the building but it was not until 1957 that it was sold to Reverend Buckle of Ainslie Anglican Church who at that time was using a hall for services.

His tender of 100 pounds was accepted prior to the building being transported to Canberra in 1958 by 83 semi-trailers carting 728 tonnes of stone to be rebuilt stone by stone by numbered stone and become the All Saints Anglican Church.

Many Canberrans and All Saints parishioners thought the idea was crazy but among the congregation was master builder Stan Taunton who had erected the church hall. He and his son drove to Rookwood Cemetery and camped there for almost four months.



During the demolition in 1958 each stone was marked and added to the architectural plans. Source: *ABC Canberra*.

They slowly demolished and labelled the stonework from the Receiving Station No1. As well, stone from Receiving Station No3 was used to create the sanctuary, the altar, and the pulpit. Nothing was overlooked. Even the baptismal font is a sandstone chimney turned upside down.



Ceremony to bless the foundation site at Ainslie on Nov. 2nd 1958. Source: *ABC Canberra*.

The current roof was added and the bell tower was moved from the left side of the entrance to the right. It contains a bell which replaced the original that was stolen when the Rookwood line closed.

The replacement bell has a strong railway connection. It was originally mounted on the first Shay geared locomotive, built in the United States, and brought to Australia by the Commonwealth Oil Corporation to run on the former Wolgan Valley Railway near Cullen Bullen. The spectacular railway ran from the Corporation’s mine at Newnes 52 kms to link with New South Wales Government Railway line at Newnes Junction. Long after the railway and mine closed, Emirates constructed a luxury resort in the Valley.

After the shay locomotive went out of service in 1925, the bell was used for some time as a fire alarm at the Shell Oil Depot in Sydney. Eventually it was obtained by the NSW Steam Tram and Train Preservations Society which then presented it to the Ainslie Church with its tower as an appropriate resting place.

At the end of the rebuilding process, while it only cost 100 pounds to purchase the sandstone building, it cost 8,000 pounds to move it to Canberra and over 6,000 pounds to modify and erect it.



Appropriately the former Rookwood Necropolis Receiving Station No1, was consecrated in its new guise on All Saints Day November 1959. Source: *ABC Canberra*.



All Saints Ainslie Church viewed from the chorister’s pews with the angels opening to the altar. Source: *Penny Travers ABC Canberra*.

Meanwhile the Mortuary Station at Regent Street was converted for use for dog traffic and loading horses and poultry. In 1950, it was converted again, this time into a parcels station for suburban electric parcel vans.

After the building was classified by the National Trust and the Australian Heritage Commission and made part of Permanent Conservation by the Heritage Council of NSW, it was restored by the State Rail Authority in 1981.

In 1985 the sandstone building opened as ‘Magic Mortuary’, a pancake parlour that used railway carriages as its restaurant in the former corpse loading platform siding. Not surprisingly, the venture failed and the railway carriages were removed in 1989. Since then, the Mortuary Station has been used to conduct special train services and public displays of trains as well as a venue for city festival events, weddings, and dance parties.



The former Sydney Mortuary Station July 2016. Source: *Images for Sydney Mortuary Station*

Contributed by Mel...

**Tales from a former SAR Train Driver.
“Relay Trains and Cars”**
written by Norm Hann 1999.

Over on the coast (Eyre Peninsula), we fellows had to work a lot of relay trains. The train consists were made up of large trucks or stock wagons next to the locomotive, with the smaller wagons towards the rear of the train. Between the last truck and the brakevan was placed the relay van.



This map provides an overview of the distances and extent of the railway service maintained by the Eyre Peninsula Division of the South Australian Railways (S.A.R.).

Most of the relay trains were worked over long distance by two crews. One crew worked a nine-hour shift whilst the other crew travelled and rested in the relay van. The first crew would prepare the locomotive for traffic and then work the train until their nine-hours on duty were up. At the same time, the second crew would travel along on the train, but remain in the relay van; a large carriage fitted out in three sections for crew comfort.



12-Wheeler Relay Van No. 114. Forum: Facebook – South Australian Railways Group. Photo Credit: Peter Bruce.

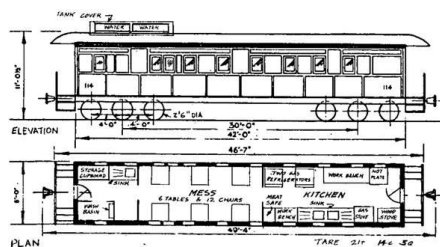
The first section, occupying the front half of the car, was the kitchen entered by the door from the platform on the end of the car. Inside the door on the right was an old black stove for cooking. Around the top of this stove was a welded steel bar, some two inches high, to stop the kettle or cooking utensils from falling off whilst the train was travelling or shunting. On the same side was a cupboard with a drain board and sink and at the opposite end, an ice-chest. Between the cupboard and the stove was a wood box filled with Mallee wood.

Along the opposite side of the car were three tables and chairs and an old styled, round backed, office chair which sufficed as a lounge chair.

Through a door at the back of the kitchen was the sleeping quarters, a compartment which had four bunk beds, two on each side of the car. Each had a heavy curtain on the passage side of the bunk, which could be opened or closed at will.

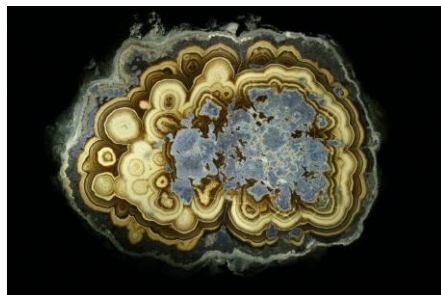
The last compartment contained a toilet and shower recess. An overhead tank in the roof of the car serviced the car with water.

It was in these vans that the travelling crews made their temporary home.



The configuration seen in the plan layout above is like the relay van described by Norm Hann, but as needs changed so did the internal structure of these vehicles. The van depicted here was named “Vanilla” from 1935 to 1953 when it was an officer’s sleeping car. It was then downgraded to an employees’ sleeping van and hence the name was removed. The diagram above shows its configuration when last used, on the Port Lincoln Division. Picture Forum: Facebook – South Australian Railways Group. Photo Credit: Simon Thompson.

**Mel’s Facebook Sourced
Mineral Selections for April.**



Schalenblende, Galena and Marcasite from Pomorzany Mine, Olkusz, Olkusz District, Malopolskie, Poland. Forum: Geology Page. Credit: Photo © Eligiusz Szeleg.



Rhodochrosite, Chalcopyrite, Quartz, Sphalerite, and Pyrite from Bulgaria. Forum: Amazing Geologist. Credit: Photo © QuebulfineMinerals.



Bariopharmacosiderite from Clara Mine, Oberwolfach, Black Forest, Germany. Forum: Amazing Geologist. Credit: Photo by Matteo Chinellato.



Fluorite, Baryte and Quartz. Locality: Clara Mine, Rankach Valley, Oberwolfach, Wolfach, Blackforest, Baden-Wurttemberg, Germany. Forum: Geology Page. Photo Credit: © Andreas Schmid.



Beryl var. Aquamarine on Feldspar with Muscovite. Forum: Geology Page. Photo Credit: © Rudolf Watzki.



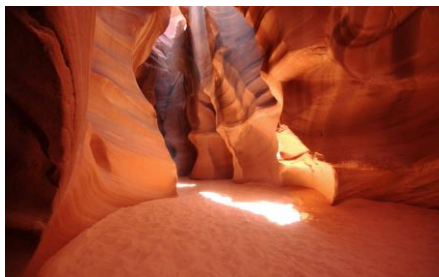
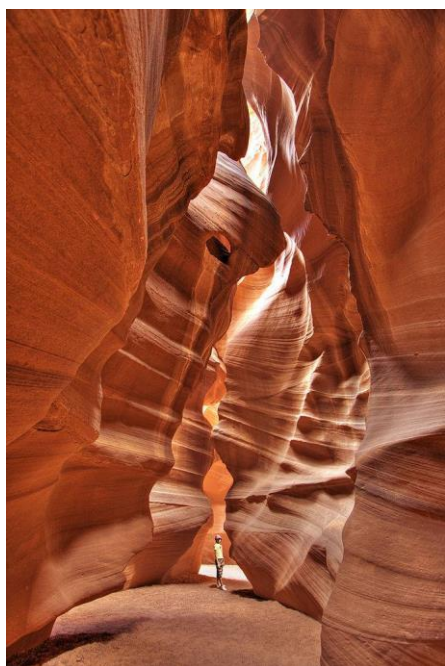
Sparkly azurite crystals in dark blue colour on green-blue botryoidal from Oujda-Angad Province, Morocco. Forum: Amazing Geologist. Credit: SpiriferMinerals.

From 52 Breathtaking Caves from Around the World - Two In more detail...

No. 4. Antelope Canyon, Arizona, USA

Antelope Canyon, formed out of the erosion of sandstone from flash flooding and rain water, is truly awe inspiring. The rich colour of the Navajo sandstone and the flowing feeling of the cave walls attract visitors and photographers from all over the world to escape into this natural wonder.

[See more about Antelope Canyon - click here.](#)



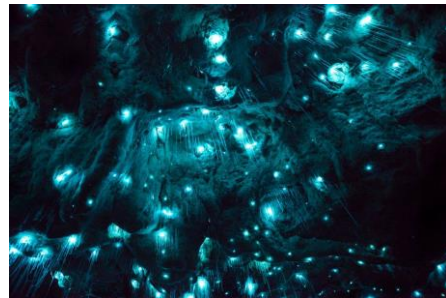
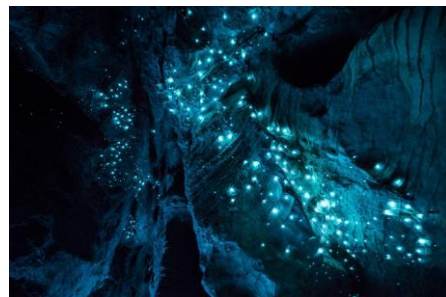
No. 5. Waitomo Glow Worm Cave, New Zealand

There are hardly words enough to describe this wonder the Waitomo Glow Worm Cave sparks in visitors. With thousands of glow worms native to New Zealand, the cave walls and ceilings are naturally illuminated, creating a magical experience.

More than 30 million years ago, the legend of Waitomo began with the creation of limestone at the bottom of the ocean. Now these limestone formations stand as one of New Zealand's most inspiring natural wonders and a must-see destination.

[See more about the Waitomo Caves - click here.](#)

Janet and I have visited the Waitomo caves – a must do if in the area.



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