










**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.**  
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**Treasurer:** Russell Fischer. Email: [rfischer@bigpond.net.au](mailto:rfischer@bigpond.net.au)  
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**Web Address:** <https://teatreegullygemandmineralclub.com>

**July  
Edition  
2019**

## "Rockzette" Tea Tree Gully Gem & Mineral Club News

President's Report	General Interest	Club Activities / Fees						
<p>Hi All,</p> <p>Only 21 days to go to our Biennial Exhibition...in the meantime everything appears to be falling in to shape. All we must do now is wish for good weather.</p> <p>Please take note of page 2 of this newsletter. Your contribution over the weekend will help the Exhibition run smoothly...</p> <p>Cheers, Ian.</p>	<p><b>Page 5:</b> MESA Journal...</p>  <p><b>Pages 6 &amp; 7:</b> Ian's July 2019 Biggenden Collection Selections ...</p>  <p><b>Pages 8 &amp; 9:</b> Augie's Mineral Matters – Obsidian ...</p>  <p><b>Pages 10 to 12:</b> Members Out and About – Janet &amp; Mel's Train Chase ...</p>  <p><b>Pages 13 to 18:</b> 'Newcastle and Rail – The Never-ending Story' ...</p>  <p><b>Page 19:</b> Members' Notices and Useful Internet Links...</p> 	<p><b>Meetings</b> Club meetings are held on the 1<sup>st</sup> 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><b>Library</b> <b>Librarian - Augie Gray</b> 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><b>Tuesday Faceting/Cabbing</b> Tuesdays - 10 am to 2 pm. All are welcome. Supervised by Doug Walker (7120 2221).</p> <p><b>Wednesday Silversmithing</b> Wednesdays - 7 pm to 9 pm. All are welcome. Supervised by Augie Gray (8265 4815 / 0433 571 887).</p> <p><b>Thursday Cabbing</b> Thursdays - 10 am to 2 pm. All are welcome. Supervised by Augie Gray (8265 4815 / 0433 571 887).</p> <p><b>Friday Silversmithing</b> Fridays - 9 am to 12 noon. All are welcome. Supervised by John Hill (8251 1118).</p> <p><b>Faceting/Cabbing/Silversmithing Fees:</b> A standard fee of \$3.00 per session applies – to be paid to the session supervisor.</p> <p>In the interest of providing a safe working environment, it is necessary to ensure everyone using the workshops follow the rules set out in <i>Policy No. 1 - 20/11/2006</i>.</p> <p>It is necessary that <i>Health and Safety</i> regulations are adhered to always.</p> <p>Everyone using the workshop must ensure:</p> <ul style="list-style-type: none"> <li>• that all club equipment (e.g. magnifying head pieces, faceting equipment, tools, etc.) used during the session, is cleaned, and returned to the workshop after usage.</li> <li>• that all workstations are left in a clean and tidy state;</li> <li>• that all rubbish is removed and placed in the appropriate bin;</li> <li>• and where applicable, machines are cleaned and oiled or dried.</li> </ul> <p><b>NOTE: The Tea Tree Gully Gem &amp; Mineral Club Inc. will not be held responsible or liable for any person injured while using the club machinery or equipment.</b></p> <p><b>Club Subscriptions:</b></p> <table style="width: 100%;"> <tr> <td>\$25.00 Family</td> <td>\$20.00 Family Pensioner</td> </tr> <tr> <td>\$15.00 Single</td> <td>\$12.50 Single Pensioner</td> </tr> <tr> <td colspan="2">\$10.00 Joining Fee</td> </tr> </table>	\$25.00 Family	\$20.00 Family Pensioner	\$15.00 Single	\$12.50 Single Pensioner	\$10.00 Joining Fee	
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\$10.00 Joining Fee								
Diary Dates / Notices								
<p><b>Happy Birthday</b> Members celebrating July birthdays: July 11<sup>th</sup> Raelene Jessop. July 27<sup>th</sup> Ron Lewis.</p> <p style="text-align: center;">***</p> <p style="text-align: center;"><b>TTGGMC 2019 Biennial Exhibition</b> Saturday July 20<sup>th</sup> and Sunday July 21<sup>st</sup>, 2019.</p> <p style="text-align: center;"><b>Items wanted for the Biennial Exhibition</b> <b>White Elephant Stall ... bring to clubrooms.</b></p> <p style="text-align: center;"><b>Also, helpers are needed...see page 2.</b></p> <p style="text-align: center;">***</p> <p style="text-align: center;"><i>More notices and links on page 19.</i></p> <p style="text-align: center;">***</p>								
General Interest								
<p><b>Pages 3 to 5:</b> Augie's July 2019 Agate and Mineral Selections ...</p> 								
<p>The Tea Tree Gully Gem &amp; 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>								

## \*\*\* Upcoming Club Exhibition \*\*\*

# Helpers needed

The Club's Exhibition is coming up fast – the weekend of the **20<sup>th</sup>** & **21<sup>st</sup>** of this month.

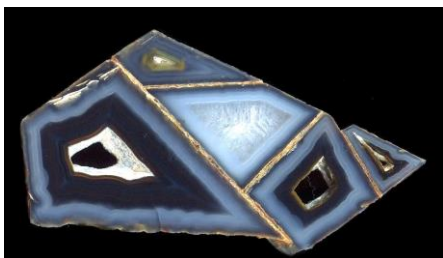
### **Helpers are needed in the following areas:**

- Making or donating food items for the canteen
- Unloading, setting up & dressing (putting skirts & top covers on) trestles on Friday morning
- Helping in the canteen or on Club stalls during the weekend
- Relieving on the door
- Security (circulating to keep an eye out for people with light fingers)
- Decommissioning trestles etc. after Sunday's close.
- Whatever else is needed

If you can assist **YOUR** Club for a few hours, it would be greatly appreciated.

Please let any Committee member know how & when you'd like to help.

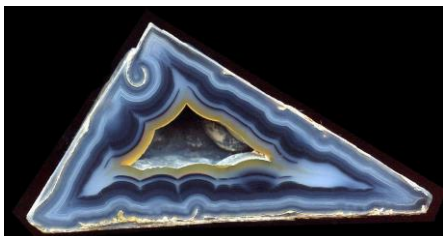
### Augie's July 2019 Agate Selections Polyhedroids



Polyhedroid 01.



Polyhedroid 02.



Polyhedroid 03.



Polyhedroid 04.



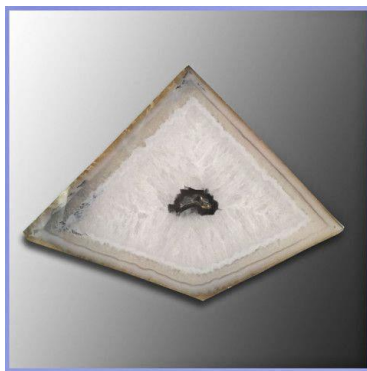
Polyhedroid 05.



Polyhedroid 06.



Polyhedroid 07.



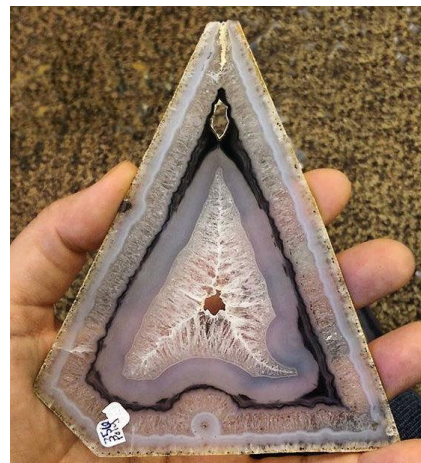
Polyhedroid 08.



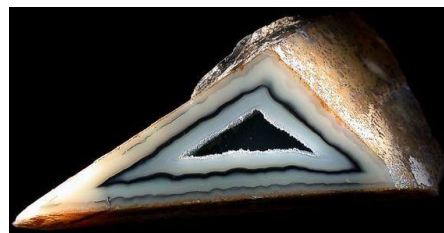
Polyhedroid 09.



Polyhedroid 10.



Polyhedroid 11.



Polyhedroid 12.



Polyhedroid 13.



Polyhedroid 14.



Polyhedroid 15.

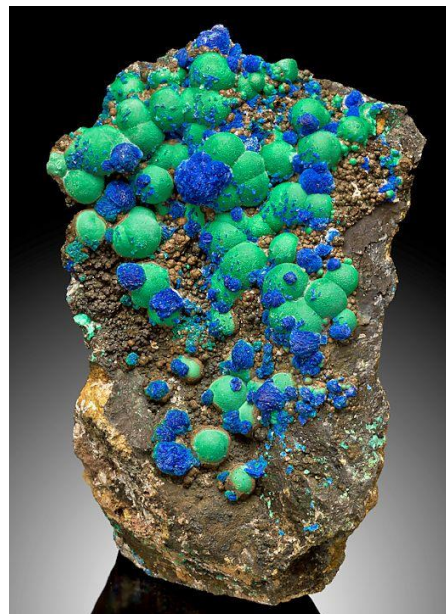
**Augie's July 2019 Mineral Selections...**



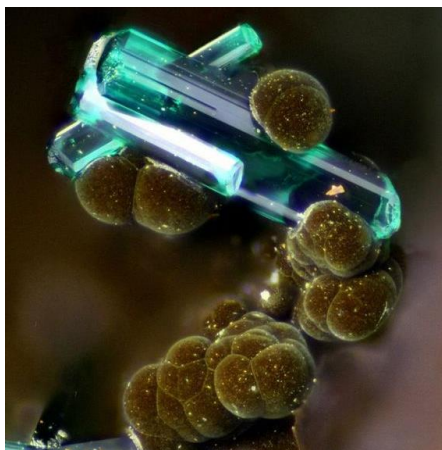
Amethyst on Quartz, Jackson Crossroads, Wilkes Co., GEORGIA.



Apophyllite on Scolecite - Nasik District, Maharashtra, INDIA.



Malachite & Azurite on Goethite.



Brochantite & Goethite.



Diopside on Dolomite.



Ametrine - BOLIVIA.



Calcite & Amethyst.



Moldavite - Besednice, CZECH REPUBLIC.



Ametrine - Brandberg, Goboboseb, NAMIBIA.



Chrysocolla stalactites - Ray Mine, Pinal Co., ARIZONA.

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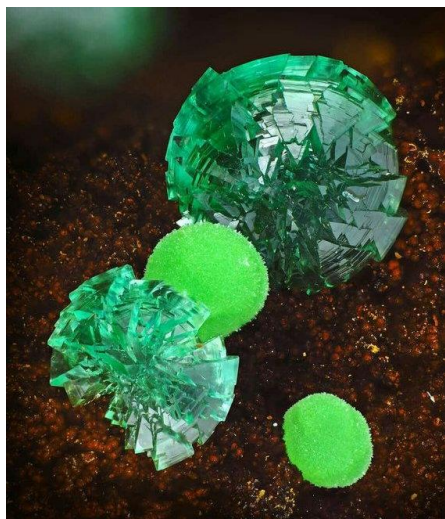
**Augie's July 2019 Mineral Selections.**  
Continued...



Hollandite in Quartz.



Opal var. Hyalite on Topaz - Tepetate, Mun. de Villa de Arriaga, San Luis Potosi, MEXICO.



Conicalcrite with Cuprian Adamite - Kamariza, Lavrio, GREECE.



Rutile on Haematite - Minas Gerais, BRAZIL.



Stewardite & Phosphosiderite.



Titanite - Caspar quarry, Bellerberg volcano, Ettringen, Mayen, Eifel, Rhineland-Palatinate, GERMANY.

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Latest advances in South Australian geoscience and resource sector news

**Features**

**Lindsay East Palaeovalley**



A sniff of the ocean in the Miocene at the foothills of the Musgrave Ranges – unravelling the evolution of the Lindsay East Palaeovalley

[Read more...](#)

Continued next column...

**Geoscience benefitting community**



Hidden water in remote areas – using innovative exploration to uncover the past in the APY Lands

[Read more...](#)

**News**

**Oil and gas bids open**

Exploration blocks released in the Cooper and Otway basins.

[Read more...](#)



**Andamooka Precious Stones Field**

ILUA sees new areas of land open for opal mining.

[Read more...](#)



**Upper Spencer Gulf in the spotlight**

Premier's Awards recognise excellence in local procurement.

[Read more...](#)

**SARIG open data catalogue**

Making spatial metadata discoverable.

[Read more...](#)



**Snapshot in time**

60th anniversary of Innamincka 1 drilling.

[Read more...](#)

**Convergence on the Coast**

Structural geology, tectonics and solid earth geophysics conference.

[Read more](#)

**Useful downloads...**

MESA Journal 89: a compilation of feature articles from the February and April 2019 online editions (PDF 20.6 MB) ...

[Click/tap on this link to download](#)

MESA Journal back issues...

[Click/tap on this link to select and download](#)

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Contributed by Ian Everard ...

**Ian's July 2019 Biggenden Collection Selections.**



0056 Quartz, Biggenden, QUEENSLAND.



0057 Quartz and Calcite, Biggenden, QUEENSLAND.



0218 Quartz, Biggenden, QUEENSLAND.



0219 Quartz and Pyrite, Biggenden, QUEENSLAND.



0220 Quartz, Biggenden, QUEENSLAND.



0334 Quartz, Biggenden, QUEENSLAND.



1206 Quartz, Biggenden, QUEENSLAND.



1277 Ankerite on Quartz and Calcite, Biggenden, QUEENSLAND.



1279 Calcite on Quartz, Biggenden, QUEENSLAND.



1282 Calcite on Quartz, Biggenden, QUEENSLAND.



1283 Calcite on Quartz, Biggenden, QUEENSLAND.



1284 Quartz and Calcite on Magnetite, Biggenden, QUEENSLAND.



1292 Calcite, Biggenden, QUEENSLAND.



1300 Calcite, Biggenden, QUEENSLAND.



1301 Calcite on Quartz, Biggenden, QUEENSLAND.

*Continued next page...*

Contributed by Ian Everard ...

**Ian's July 2019 Biggenden Collection Selections.**



1302 Calcite on Quartz, Biggenden, QUEENSLAND.



1309 Calcite on Quartz, Biggenden, QUEENSLAND.



1337 Calcite, Biggenden, QUEENSLAND.



1304 Calcite, Biggenden, QUEENSLAND.



1310 Calcite, Biggenden, QUEENSLAND.



1339 Calcite, Biggenden, QUEENSLAND.



1305A-side Calcite, Biggenden, QUEENSLAND.



1315 Calcite, Biggenden, QUEENSLAND.



1344 Quartz and Calcite on Magnetite, Biggenden, QUEENSLAND.



1322 Calcite, Biggenden, QUEENSLAND.



1698 Quartz, Biggenden, QUEENSLAND.



1305B-side Calcite, Biggenden, QUEENSLAND.



1326 Calcite, Biggenden, QUEENSLAND.

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Contributed by Augie Gray...

### Mineral Matters Obsidian

Obsidian is a volcanic glass. It forms when lava that contains large amounts of silica cools without forming crystals. This generally happens when a volcano extrudes lava, rather than deep within the magma chamber. Obsidian is usually black but can be many other colours. Some of the best-known varieties are Mahogany, Snowflake, Rainbow, Velvet, Gold sheen and Silver sheen, but several others are known, such as Flower (also known as Fireworks), Copper sheen, Spider, Fire and Damascus.



Apache Tears 1.



Apache Tears 2.



Black 1.

### Composition

Obsidian has a chemical composition that is very similar to other kinds of rock, such as Rhyolite and Granite, but its physical structure is very different. Because it has no crystalline structure, amorphous Obsidian is not classed as a true mineral, but as a mineraloid.



Copper sheen.

Why does obsidian cool without forming crystals? Partly because the lava that will become Obsidian is very sticky. This high viscosity combined with a lack of included seed crystals to form patterns for crystal formation may be part of the reason why this glass hardens without crystallizing. In addition, the temperature difference between liquid Obsidian and solid Obsidian is very slight. Therefore, Obsidian solidifies before crystals can form.



Damascus 1.



Damascus 2.



Flower 1.



Flower 2.



Gold sheen 1.



Gold sheen 2.

Snowflake Obsidian, however, is a type of obsidian that includes crystals of Cristobalite. Cristobalite is a white polymorph form of quartz created at high temperatures. It can form delicate patterns across the surface of some obsidian specimens. Sheen and Rainbow obsidian are two other varieties of volcanic glass with inclusions, but in this case, the inclusions are gas bubbles that were mixed into the stone during its formation.



Green 1.

Continued next page...



**Mineral Matters**  
**Obsidian - Continued...**

**Uses**

Many cultures have made knives, spear points, and arrowheads from obsidian. The lack of crystalline structure allowed each stone to be shaped to an edge of molecular thinness. Obsidian scalpels have found some uses in modern society, because of their sharp edges and lack of reaction to magnetism.



Green 2.



Mahogany 1.



Mahogany 2.



Rainbow 1.



Rainbow 2.



Rainbow 3.



Rainbow 4.



Silver sheen.



Snowflake 1.



Snowflake 2.



Spiderweb 1.



Spiderweb 2.



Velvet 1.



Velvet 2.



Velvet 3.  
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Contributed by Janet and Mel Jones...

**Janet and Mel’s Train Chasing Safari  
Saturday, June 1<sup>st</sup> and Sunday, June 2<sup>nd</sup>, 2019**

The Safari involved car-chasing Pichi Richi Railway’s ‘Afghan Express’ on Saturday and steam locomotive Yx141 on its return to service on Sunday.

On Saturday the Pichi Richi Railway ran their Afghan Express (narrow gauge passenger train hauled by their steam locomotive NM25) from Port Augusta to Quorn in the morning and returned to Port Augusta in the afternoon.

Janet and I car-chased the Afghan Express in both directions. And, along with other enthusiasts took video snippets at various locations of interest. Part of the challenge was to get to locations before the train and before ideal positions to video from were taken.

The video snippets were taken in 4K format using my Sony FDR-AX53 Digital 4K Camera Recorder.

The pictures featured here were extracted from the video.

Watch our ‘Afghan Express’ video on YouTube by clicking/tapping on the following hyperlink:

<https://www.youtube.com/watch?v=xenB3X2tg80&t=826s>

**Saturday June 1<sup>st</sup> – ‘Afghan Express’.**



01. Afghan Express - Port Augusta Railway Station.



02. Afghan Express - leaving Port Augusta heading for Quorn.



03. Ex-Commonwealth Railways steam locomotive 4-8-0 NM25.



04. Afghan Express - nearing road crossing at Stirling North.



05. Afghan Express.



06. Afghan Express.



07. Afghan Express - Entering the Woolshed Flat siding.



08. Afghan Express – Crossing the iron bridge at Woolshed Flat.



09. Afghan Express – the climb continues.



10. Afghan Express.



11. Afghan Express.



12. Afghan Express.



13. Afghan Express.



14. Afghan Express arriving at Quorn.



15. Afghan Express at Quorn Railway Station.



17. Leaving Quorn Railway Station and heading to Port Augusta.



18. Arriving at 'The Summit' - highest point on the journey.



19. A slight blockage being dislodged in the smokebox.

**Janet and Mel’s Train Chasing Safari Saturday June 1<sup>st</sup> – ‘Afghan Express’.**  
Continued...



20. Afghan Express at 'The Summit' - ready to move on.



21. Afghan Express - on the chase again.



22. Afghan Express - crossing the lattice-girder bridge.



23. Afghan Express - not far to go now.



24. Afghan Express - back at Port Augusta Railway Station.

Learn more about the Pichi Richi Railway Afghan Express by clicking/tapping on the following hyperlink:  
<https://www.pichirichirailway.org.au/train-services/afghan-express>

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**Sunday June 2<sup>nd</sup> – ‘locomotive Yx141 on its return to service’.**

Watch our video of ‘steam locomotive Yx141 on its return to service on Sunday’ on YouTube by clicking/tapping on the following hyperlink:

<https://www.youtube.com/watch?v=ggApFFXa9Bo>

On Sunday 2nd of June 2019, along with many fellow enthusiasts and tourists, we joined in with train activities of The Pichi Richi Railway (based at Quorn, in the lower Flinders Ranges region of South Australia).

The Pichi Richi Railway celebrated the return of steam locomotive Yx 141 to active service. (Yx 141 was withdrawn from service in 1963 and restored by Pichi Richi Railway volunteers). The return of YX 141 was officially blessed at 10am at the Quorn railway station. Then at 10.30am, Yx 141 hauled its first public passenger consist on a return trip from Quorn to Woolshed Flat.

Janet and I car chased Yx 141 on its return trip from Quorn to Woolshed Flat. And, along with other enthusiasts took video snippets at various locations of interest. Part of the challenge was to get to locations before the train and before ideal positions to video from were taken.

The train trip was well patronised by the public (and I was told that an extra carriage had been attached to accommodate extra bookings). This may have contributed to the restarting dilemma experienced at the ‘Summit’ on the outbound leg of the journey...captured on this video.

The pictures featured here were extracted from the video.



01. Official public blessing for Yx141 returning to service.



02. Yx141 ready to go



03. Yx141 already working hard.



04. Yx141 leaving Quorn Railway Yard heading for Woolshed Flat.



05. Yx141 chugging towards 'The Summit'



06. Yx141 almost to 'The Summit'



07. Yx141 made stationary before crossing 'The Summit'.



08. Yx141 made ready to proceed but fails to move.



09. After several more attempts Yx141 goes into a noisy wheel slip.



10. Yx141 eventually proceeds over 'The Summit'.

**Janet and Mel’s Train Chasing Safari  
Saturday June 2<sup>nd</sup> – ‘Steam locomotive  
Yx141 on its return to service’. Continued...**



11. Yx141 on a downhill run to Woolshed Flat.



12. In-car shot of Yx141 on its downhill run.



13. Yx141 close to Woolshed Flat.



14. Yx141 crossing iron bridge near Woolshed Flat.



15. Yx141 making slow progress back to 'The Summit'.



16. Yx141 making slow progress back to 'The Summit'.



17. Yx141 making slow progress back to 'The Summit'.



18. Yx141 making slow progress back to 'The Summit'.



19. Yx141 now getting close to 'The Summit'.



20. Yx141 Closer to 'The Summit'.



21. Yx141 given the flag to enter the Quorn Railway Yard.



22. Yx141 almost to the Quorn Station.



23. Yx141 almost to the Quorn Station.

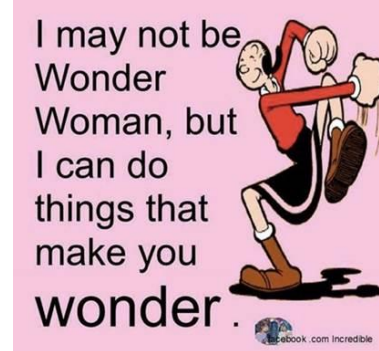
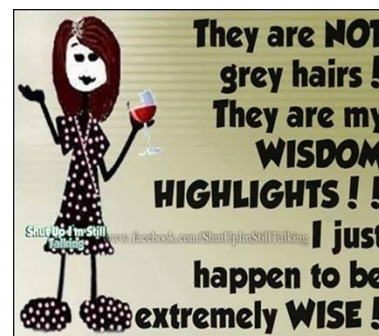


24. Yx141 returned to the Quorn Railway Station.

Learn more about steam locomotive Yx141 by clicking/tapping on the following hyperlink:  
<https://www.pichirichirailway.org.au/events/upcoming-events/yx141-returns-to-service>

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Contributed by Doug Walker...



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Contributed by Mel Jones...

# 'Newcastle and Rail – The Never-ending Story' by Garry Reynolds Part 10A of 24...



The Newcastle City waterfront today where Aborigines once fished from canoes, convicts hewed coal and a railway system developed and disappeared over a period of 160 years. Source: *Familypedia*.



The classic view from the Western Signal Box in the Newcastle Railway Precinct when steam was at its zenith. Source: *Newcastle Herald*.

## The Great Northern Railway reaches Newcastle

Newcastle was Australia's 7<sup>th</sup> largest city until 2015. It is approximately 167 kms by rail from Sydney Central Station to Newcastle Station.



Early railway-era train at Newcastle Station. Source: *Flickr*.



Newcastle Railway Yard c1880s. The pole with a round marker assists shipping channel navigation. Source: *Flinders*.



Newcastle Customs House and East End Railway Yard, the photo taken from a ship at Queens Wharf. Source: *Newcastle Herald*.



A busy Newcastle Railway Precinct c1870s with the passenger platforms on the mid-left and the East End Marshalling Yard in the centre and 'The Dyke' being constructed in the mid-right background. Source: *Newcastle Herald*.

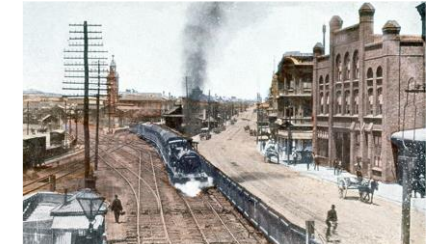


Late 1800s colourised photo of a ship at Queens Wharf at the Eastern end of Newcastle Station Precinct, Nobbys Head and signalling station and Dalgety's large wool store in the centre of the Yard. Source: *Newcastle Herald*.

The Newcastle Railway Line used to branch off the Main Northern Line at Hamilton Junction (from 1887) after leaving Broadmeadow Station and travel in an easterly direction through Wickham and Civic Stations to Newcastle Station.



The imposing Newcastle Station with Customs House clock tower adjacent. Source: *Flickr*.



Postcard from 1908 of a train gliding out of Newcastle Station. Source: *Newcastle Herald*.



Fettlers set off to inspect the line out of Newcastle Station. Source: *Uni of Newcastle*.



Newcastle Station with the Customs House in background and departing 30 class-hauled suburban train adding to the atmosphere with plenty of smoke and steam. Source: *Newcastle Herald*.



A locomotive trundles through traffic in the main street of Newcastle Post-WW2. Source: *Newcastle Herald*.

Continued next page...

**Newcastle and Rail – The Never-ending Story' Continued...**



Newcastle East End Yard in the 1970s full of end platform cars but after the arrival of the 600/700 class interurban diesel cars for Hunter region traffic. *Source: Newcastle Library.*

**The Great Northern Railway Extension into Newcastle**

From East Maitland, the opening stage of the Great Northern Railway carried coal, general goods and passenger traffic as far as Honeysuckle Point when it opened in 1857. Meagre maintenance facilities were established at Honeysuckle near what was much later Civic Station.



Newcastle Harbour with Kings Wharf in the foreground and The Dyke in the background with early railway facilities near Honeysuckle Station in the 1860s-70s. *Source: Newcastle Herald.*

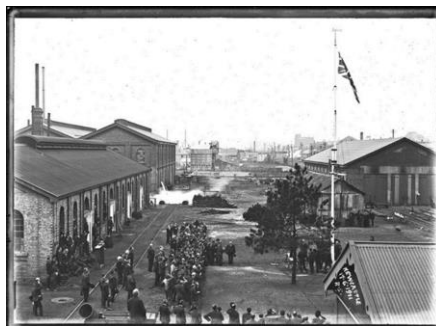


The well-dressed staff at Honeysuckle Station in 1908. *Source: Uni of Newcastle.*

The Honeysuckle Workshops grew as the isolated Great Northern Railway system developed. Even when the first Hawkesbury River Railway Bridge linked Newcastle with Sydney in 1889, a bright future for the Workshops seemed assured.



Honeysuckle Railway Workshops established in 1856 with the opening of the Great Northern Railway from Maitland. It included a loco shed, carriage repair shed, carriage painting shop, machine shop, carpenter's shop, blacksmith's shop, wheel shop, boiler house and foundry. *Source: Hidden Hamilton.*



Honeysuckle Railway Workshops in 1911. *Source: Flickr.*

However, in 1892, a locomotive depot was built in the triangular area of land formed by the line from: Newcastle toward Maitland; the line from Hamilton toward the Hawkesbury River; and the line between Waratah and Broadmeadow, which in effect joined the Great Northern Railway to the line to Sydney. The locomotive depot took over many of the functions of the first depot in the Newcastle area at Honeysuckle Point.



Hamilton Station in the days of steam, gaslight and semaphore signals. *Source: NSW Government Records.*

A ten-road engine shed, and workshops were built in the Hamilton Junction triangle. By the turn of the century, the site had become a very active depot with coaling facilities, a rest house for engine crews and busy locomotive workshops. However, the locomotive activities were eventually relocated to Broadmeadow in 1924, where two complete 42-road roundhouses were built. The Hamilton Depot was closed.



Coal stage at Broadmeadow. *Source: Bing Images.*



The impressive Broadmeadow Coal Stage. *Source: Major an Ray Collection.*



Broadmeadow locomotive roundhouses in the days of transition from steam to diesel. *Source: SwiftDSL.*



A Broadmeadow Roundhouse on a quiet Sunday afternoon. *Source: Graeme Reid.*



AD 60 class Beyer Garratts at Broadmeadow with early diesel 4003.

In 1925, it was also decided to abandon harbourside Honeysuckle as another locomotive centre and to build more modern facilities on a site where greater expansion could take place at Cardiff (more in the future).

Meanwhile, regarding Newcastle Station, back in 1858 the Great Northern Railway was extended a couple of kilometres into the heart of Newcastle from Honeysuckle. The original Newcastle Station building was erected a year later, and the line duplicated in 1864. Until its use ceased on Boxing Day 2014, the Station was one of the longest continually used railway places in NSW.



Newcastle Station Precinct in 1935 with Kings Wharf and the Boat Harbour and Market in the foreground and the Station terminus in the mid-ground and Queens Wharf and the spur into the East End Marshalling Yard in the background with the smoke from Zaara St Power Station in the top corner. *Source: Coal River.*

The adjacent, but now closed, Civic Station opened a lot later in 1935, as part of a foreshore city improvement scheme initiated in 1929, to replace Honeysuckle Station.

*Continued next page...*

**Newcastle and Rail – The Never-ending Story' Continued...**

The role of Civic Station was to service the administrative heart of the Central Business District. Its architecture was designed to complement the Civic Theatre, City Hall and Civic Arcade on the opposite side of Hunter Street.



The final touches being made for the opening of Civic Station in 1935. Source: History Notes.

Further back up the Branch Line, Wickham Station opened a year later to serve Newcastle West as a part of an upgrade to the Newcastle City Centre public transport system. It was convenient to the Newcastle Trades Hall, the Wickham School of Arts, the Store Cooperative Society, and the Castlemaine Brewery. Honeysuckle Station was demolished.

Now Wickham Station is being redesigned into a transport interchange as the end of the branch line and terminal for the new 2.7 km light rail system running towards Nobbys Beach.

However, the move has created ongoing controversy with one local whitt saying online:

*“Truncating the rail at Wickham makes as much sense as parking your car two blocks from your destination and then hailing a taxi for the remainder of the trip.”*



Protesters take to the trains during their failed campaign to save the rail service into Newcastle Station. Source: Newcastle Herald.



Artists impression of what Light Rail will look like in the former Newcastle Railway Precinct. Source: Newcastle Now.

**Architectural and rail status**

Quaintly, the technique of using architecture to delineate railway status in the NSWGR showed all along the Branch Line into Newcastle including the use of a slightly older design at Wickham Station compared to stylish Civic Station.

Both stations were significant showpieces and with their modern functionalist style served as a gateway to the City, with civic pride and renewal front and centre. Ironically, they have lost their rail role in the current waterfront and city renewal drive as the track through their platforms was removed after closure at the end of 2014.



Civic Station with track removed, 2017. Source: Rob Rouse.

**The Funeral Transport Package**

Another station which has long gone was the Mortuary Station which was added to the rail facilities at Honeysuckle in 1883. Two street tram hearses serviced it, conveying corpses to its departure platform. Tram hearses were used by the deceased’s family and mourners in Newcastle from 1896 until about 1948.

In 1881, a daily Funeral Train service was in operation leaving Newcastle at 3:20pm and stopping at intermediate stations on the way to the platform at Sandgate Cemetery. In the railway terminology of the day:

*“The corpse travelled free and friends of the corpse had a choice: two shillings first class return or one shilling second class return.”*

As an aside, in the early decades of Newcastle’s settlement, the Anglican Church’s graveyard was situated on the hill overlooking the town. During times of heavy rain, water seeped from the hill to the low ground where many of the people lived and obtained their drinking water from wells.

At times, these residents experienced epidemics of serious infectious diseases. A Newcastle doctor, Richard Bowker, realised that it was unhealthy to drink water that had seeped through a burial ground full of rotting corpses. In response, a major new multi-faith cemetery at Sandgate on the fringes of the then Newcastle boundaries was established and obtained rail connection.

Most funerals that emanated from the City of Newcastle used the combination of the dedicated Funeral Train and tram hearses. The demand arose from the working-class practice of arranging for a funeral procession to depart from the home of the deceased or a close relative rather than a funeral parlour, saving money in the process.

If the home was close to a tram route, the pallbearers carried the casket to the nearest tram stop and awaited the arrival of a regular service – perhaps a confronting sight to today’s sensibilities to see a coffin by the kerb.

Otherwise, a hearse was hired to carry the casket to the stop. On arrival of the tram at the stop, it was the responsibility of the pallbearers to place the coffin in the tram hearse attached to the rear of the passenger tram cars.

The mourners, minister and funeral director would travel in the passenger tramcars, initially steam powered, and later electric, on a scheduled service, usually with the funeral party separated from the other passengers going about their business.

On arrival at the Mortuary Railway Station, pallbearers removed the casket and transferred it to the Funeral Train destined for Sandgate Cemetery’s railway platform. After the Mortuary Station at Honeysuckle closed in 1933, the tram hearses met the Funeral Trains at Newcastle Station.



A steam tram trundles along Scott Street approaching Newcastle Station in the 19th century. Source: Newcastle Herald.



Alighting the Funeral Train in ‘Sunday Best’ clothes at Sandgate Cemetery. Source: Newcastle Herald.



The disused railway alignment and platform at Sandgate Cemetery. Source: Northern Cemeteries.

The Newcastle Museum, part of the former Honeysuckle Railway Workshops, owns one of the tram hearses. Quirkily, when it was decommissioned in 1949, it ended up at the Hamilton Tram Depot workshop where it was used as a toolbox!

*Continued next page...*

**Newcastle and Rail – The Never-ending Story' Continued...**



A Newcastle tram hearse. Source: Newcastle Museum.

Decades later, during restoration, a dried flower was found in a tram hearse recalling its original function from 1896. It is preserved for display with the vehicle.

After the Mortuary Station closed, the Funeral Train service continued until 1987. However, by the 1930s, new gravesites had to be excavated quite a distance from the Sandgate rail platform, which had been sited centrally in the original cemetery. At the same time, motor funerals were becoming more common and convenient. Yet, even as late as 1985, two trains ran into Sandgate Platform on a Sunday afternoon for people to visit graves - the last of the type of service in Australia.

**Features of the Newcastle Rail Precinct**

Regarding freight, the Newcastle Goods Yard was constructed just East of Newcastle Station in 1858 and linked to the wharf area, later with a spur onto Macquarie Pier joining the Nobbys Lighthouse. The Precinct catered for freight and passengers, but the main line and this branch would also be linked to privately-owned collieries; away from the centre of Newcastle shipping coal to the loading railway staithes and steam cranes at the wharves.



A coal train being shunted to make up a consist to depart East Greta Colliery for ship loading at the Port of Newcastle. Source: Newcastle Herald.

In the 1920s, up along the Hunter River the once thriving port of Morpeth saw its feeder line rail traffic from the East Greta Junction decline due to changes in the transportation of wool and improvements to wharf facilities at Newcastle. The Morpeth Branch Line closed in 1953. By the late 1980s, the Newcastle East End Yard's time was up too. It was removed to allow the area to be redeveloped as a bus station and park land.

While many additions and alterations were made to Newcastle Station over the years, perhaps the construction of two official

residences in 1884 reflected the important status of Newcastle and the pecking order within the arcane world of the New South Wales Government Railways (NSWGR) bureaucracy.

The house closest to the Station was provided initially for the Traffic Manager, who was the most senior officer on the entire Great Northern Railway. Its intricate ornamentation reflected his status. It was one of the grandest houses every built for a NSWGR officer.

Adjacent, is the more architecturally restrained Newcastle Station Master's residence. Combined with the Station Master's residence at Honeysuckle built in the same period, the status of the short Newcastle branch line from Broadmeadow was highlighted as it was the only location in the Colony where consecutive stations possessed two-storey residences for their respective Station Masters.

There is also an ornate Paymaster's Office near Newcastle Station. It was originally built by the NSWGR in 1900 for the Berthing Master when the Railways controlled all the wharves on the South side of Newcastle Harbour.

The residence is a well-proportioned building displaying Georgian characteristics and constructed to a high standard, reflecting the importance of Newcastle and the status of this financial role.

Security was imperative and all Paymasters carried pistols. After the 1950s, they were trained to shoot in the abandoned tramway tunnels designed by JJC Bradfield, Sydney Harbour Bridge Engineer, between Wynyard and the Bridge.

Newcastle Railway Station's status was also reinforced by it possessing a large carriage shed located in an area known as the Coaching Yard where the passenger cars were cleaned and kept cool during Summer.

The Newcastle Station precinct had a gas works to light its buildings plus platforms and also provide gas for the carriages' tanks to illuminate the passenger car interiors.

There is also a prosaic World War 2 brick building in the Newcastle Station Precinct. At its peak, it provided a staff facility for 42 porters working at the Station and 23 train guards. Even here, at the minutest level, the railway status-issue reared its head where the senior rank of guard was acknowledged by the allocation of full-length clothes lockers whereas the porters received only half-length lockers.



The Newcastle Railway Refreshment Room in 1909. Source: Newcastle Herald.

In the 1920s, with significant civic redevelopment of the Precinct, the status of the Newcastle Station had become an important

issue once again. There were ongoing demands for a new Station to be erected as part of scheme of foreshore redevelopment and to modernise the Central Business District – sounds like today. Plans for a new terminal serving a seven-track terminus were made. Nothing happened.



Newcastle Railway Goods Sheds looking East towards Newcastle Station and the Customs House Tower circa 1920. Source: Newcastle Herald.

Again, in the 1960s, the then Minister for Transport, Milton Morris, announced a new Newcastle Station would be built and detailed cost estimates were made. Nothing happened.

Now the Station's time has gone as a rail terminal with track removed and proposals to turn the gracious building into a fresh produce market.



The former Newcastle Station track alignments paved over in preparation for a new use perhaps as a fresh food market. Source: Renew.

**Zaara Street Power Station**

All traces have disappeared of another major building in the Newcastle Railway Precinct – the Zaara Street Coal-Fired Power Station. It was strategically located next to the East End Marshalling yard for the supply of coal to generate power for the NSWGR from 1915 onwards. Surplus capacity in the Railway Commissioner's power grid was sold to municipal councils and other bodies responsible for the supply of electricity to the general public. It provided much of Newcastle's electricity needs throughout the 1920s.



Fort Scratchley in the foreground with the Newcastle Station Precinct and Zaara Street Power Station in 1935. Source: Coal River.

Continued next page...



**Newcastle and Rail – The Never-ending Story' Continued...**



Newcastle East End Marshalling Yard dominated by steam, adjacent to Zaara St Power Station. Source: Flickr.



Zaara St Power Station overlooks the railway yard. Source: Newcastle Library.

The Zaara St Power Station operated until 1971 before being demolished in 1978. Its footprint and all Marshalling Yard railway facilities in the vicinity were redeveloped into what is now known as 'The Foreshore'.



Zaara St Newcastle after removal of the East End Railway Yard and the Power Station. The railway-style sheds are part of an historical memorial to the previous roles of the area. Source: Newcastle Herald.

Still, the 1930s Newcastle Signal Box remains intact and is likely to feature in future foreshore redesign.



Newcastle Signal Box and former track alignment, 2017. Source: Rob Rouse.



Newcastle Box signal frame, 1985. Source: Graeme Skeet.

**The rail development North**

In the mid-1800s, faced with growing commerce between Sydney and Newcastle and the difficult and often impassable road system or the longer sea voyage, the Colonial Government of New South Wales decided to build a railway joining its two largest cities.

The construction of the Great Northern Railway faced many challenges. The task was so big that it had to be built in isolated sections over several decades.

As part of the project, massive infrastructure spending and leading-edge technology would be required to drive Australia's longest rail tunnel and construct its longest rail bridge at the time.

What could go wrong?

Not a lot for decades but then things unravelled alarmingly at the worst possible time with massive risks of impending catastrophe – but more on that next week.

**The Route**

Everything was 'Great' in the 1800s - well at least the names of the railway trunk lines and roads in NSW. In convict times, the Great Northern Road was built. However, while a marvel of stone engineering and forced human effort, it was greatly underutilised. Alternatively, while shipping dominated the link between Sydney and Newcastle the new technology of steam railways beckoned.

The original Great Northern Railway branched off the Great Western Railway at Strathfield. Today, what is known more prosaically as the Main Northern Line, wends its way through dense suburbia as a four-track electrified path to Rhodes. It then shrinks to double track to traverse the Parramatta River expanding back to four tracks running from West Ryde to Epping.

The line is then largely double track through the northern suburbs of Sydney as it runs along the sandstone Hornsby Plateau and down the Cowan Bank to cross the Hawkesbury River Railway Bridge.

The line soon cuts a swathe through the Central Coast landscape, running spectacularly along waterways such as Mullet Creek. The railway then saunters across the sandstone plateau to Broadmeadow where electrification ends before the line proceeds to Brisbane.



Big steam at Broadmeadow in 1972 with Beyer Garratt AD 6029 passing 5914. Source: David Patterson.

Broadmeadow Yard was the principal traffic terminating and originating hub for the Hunter Valley Region. Most goods trains stopped or started here, only some fast fruit, perishables and fast stock trains passed straight through to

the major goods yards in Sydney.

Broadmeadow also had the main locomotive depot North of Sydney. It included two turntables, two roundhouses, a large elevated coal stage and servicing facilities for a big fleet of passenger locomotives. Meanwhile, all the coal traffic locomotives and many freight engines were based at the Port Waratah Depot.



Victorian-era classic rail architecture with the Broadmeadow Signal Box and Gates. Source: State Records.

Broadmeadow Station, itself was a major interchange point for northbound passenger and mail traffic. Most of the main Northern express and mail trains changed engines here, suited for the lesser main lines to the North e.g. changing a heavy 38 Class for a lighter 35 or 32 Class locomotive.

Leaving Broadmeadow, the line quadruples, with separate Up and Down Mains and Relief lines in parallel to Woodville Junction. Here the line divides, one line swinging North through Islington Junction, to Waratah (and points North) and the goods lines to Port Waratah and Bullock Island, and the other line swinging East towards Newcastle, via Hamilton and Wickham where it now terminates, where once it used to go on to Civic Station and Newcastle Station. Honeysuckle and Newcastle goods yards fed local goods traffic from Newcastle itself, and the Hunter River wharves, for onward forwarding from Broadmeadow Yard. However, many of the old colliery lines that used to feed into the Northern Line have been abandoned.



Newcastle Station featuring Inter-City electric traction. Source: Smart Money Guide.

**The Construction**

In the early years, development in the North of the Colony proceeded slowly as there were no gold discoveries to drive development nor rapid population growth.

Between the outer edges of Sydney and Newcastle, much of the land along the coast and sandstone plateau was very poor for agriculture leading to sparse settlement.

Continued next page...

**Newcastle and Rail – The Never-ending Story' Continued...**

Because of the 'rail gap' of the Hawkesbury River, Newcastle was connected by rail to Queensland before Sydney. The NSW Government pursued the political savvy option of appealing to the more northern rural electorates, especially as there had been simmering ambitions to secede from the capital and the South of New South Wales as the people felt ignored and short-changed.

As a result, after the completion of the Great Northern Railway from Maitland into Newcastle, the line was extended towards Brisbane, reaching Singleton in 1863, Muswellbrook in 1869 and Scone in 1871, before finally reaching the Queensland border at Wallangarra in 1888.

As a slight diversion from our focus on Newcastle, on the Northern border several demonstrations of intercolonial railway pig headedness were displayed by the rival colonial governments at their most spiteful. They made State of Origin Football look like child's play!

Of course, first there was the inevitable difference of gauges with Queensland's narrow and NSW's standard gauge misaligning.

Unable to agree on one town on the border to be the rail centre, there had to be two small towns separated by a rural log fence – Wallangarra in Queensland and Jennings in NSW. The railway station was in Wallangarra, but its marshalling yard was in Jennings.



Queensland/NSW State border between Wallangarra Railway Station and the Jennings Railway Yard. Source: Wikimedia.

But then taking the NSWGR's obsession with status architecture to the nth degree, when the Wallangarra Station had the typical Queensland curved awning erected on the narrow-gauge platform, NSW insisted that it had to have a NSWGR-style skillion awning on the opposite standard gauge platform.



Wallangarra Station with the narrow-gauge track on the left and the standard-gauge on the right with accompanying awnings. Source: Garry Reynolds.

Of course, with the differing gauges, when in World War 2 there were major threats in the North of Australia from the Japanese, transshipment facilities had to be massively expanded in the Jennings Yard with the time-consuming task of moving every bit of freight and military materiel from a standard-gauge wagon to a narrow-gauge Queensland Railway wagon.

An ammunition dump was established at Jennings in WW2 due to the break-of-gauge as was a general army store in Wallangarra. Of course, dual tracks had to be run to each military facility.

Again, even today, the NSW Jennings Public School is sited virtually opposite the Wallangarra School in Queensland when the NSW town only has a total population of 211.

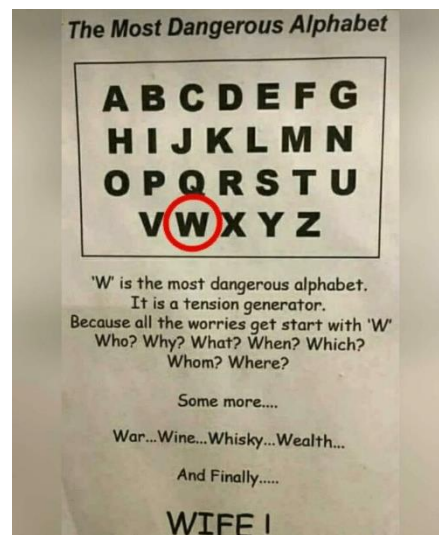
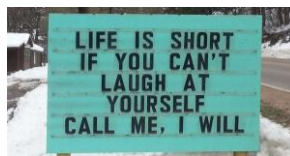
To finally illustrate the meaninglessness of all the interstate rail rivalry, a survey of the Queensland/New South Wales border conducted as a 'Centenary of Federation Project' in 2001, found an error of 200 metres in the original border survey, conducted between 1863–66. The modern study indicated that if the border was placed where originally intended, Jennings would be in Queensland rather than New South Wales!

*To be continued in the August edition...*

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*Contributed by Doug Hughes...*

**Signs at the Indian Hills Community Centre in Colorado**



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*Contributed by Allan Rudd...*

**“A, B, C, D, E, F, G, H, I, J, K.”**

After being married for thirty years, a wife asked her husband to describe her.

He looked at her for a while, then said, "You're an alphabet wife...A, B, C, D, E, F, G, H, I, J, K."

She asked, "What the hell does that mean?"

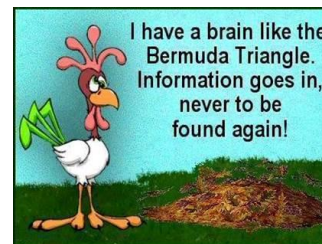
He said, "Adorable, Beautiful, Cute, Delightful, Elegant, Foxy, Gorgeous, and Hot"

She smiled happily and said, "Oh, that's so lovely ... but what about I, J, K?"

He said, "I'm Just Kidding!"

The swelling in his eye is going down, and the doctor is cautiously optimistic about saving his - - - icles.

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**Tea Tree Gully Gem and Mineral Club Inc.**


**2019 Biennial Exhibition**

Tea Tree Gully Primary School Memorial Drive, Tea Tree Gully  
 Saturday 20<sup>th</sup> July - 10am to 5pm  
 Sunday 21<sup>st</sup> July - 10am to 4pm





**Demonstrations**  
Bone Carving  
Gemstone Identification  
Light Meals and Refreshments  
Raffle




**Sales**  
Hand Crafted Jewellery  
Mineral Specimens  
Fossils  
Gemstone Rough  
Cut and Polished Gems  
Tools and Equipment  
Books

**Admission Prices**  
 All entry - \$5.00  
 Children under 12 with an Adult are Free

**For more information contact:**  
 Ian Everard 0417 859 443

We gratefully acknowledge Tea Tree Gully Council for its generosity in sponsoring this event.

**PLEASE NOTE: To preserve the floor, NO STILETTOS or STUDDED FOOTWEAR.**

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**\*\* URGENT \*\***

**Items wanted for Exhibition White Elephant Stall ... bring to clubrooms.**

\*\*\*

*Contributed by Wendy Purdie...*



**Tony Forsyth**  
15 May at 08:22

Passing on this message from Brian Boyle, manager at Gemcuts. Brian is now manufacturing Gemmasta, quality Australian made lapidary machines. Getting back into production in their new home in Ballina NSW.

This is the first batch of machines back from powder coating and ready for assembly.



Click/tap on the following hyperlink to access the Gemcuts website: <https://www.gemcuts.com.au/>

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**Mineral boxes and flats for sale**

Mineral box sizes

Sold in bundles of (10) or 100

3.5 x 3.3cm.....	(\$1.50)	\$12.00			
4 x 4cm.....	(\$1.50)	\$13.00			
5 x 5.2cm.....	(\$2.00)	\$15.00			
6.2 x 7.5cm.....	(\$2.50)	\$18.00			
7 x 7cm.....	(\$2.50)	\$19.00			
7 x 9.5cm.....	(\$2.50)	\$20.00			
8.5 x 9.5cm.....	(\$3.00)	\$22.00			
9.5 x 9.5cm.....	(\$3.50)	\$23.00			
13 x 9.5cm.....	(\$4.00)	\$25.00			
13 x 12.5cm.....	(\$4.50)	\$30.00			

Flats sizes

395 x 265 x 50mm....	\$2.50				
400 x 270 x 75mm....	\$3.50	<b>NEW SIZE</b>			
398 x 290 x 98mm....	\$4.00				

**Greg Vort-Ronald**  
 0413796279 or [luv2paint@iprimus.com.au](mailto:luv2paint@iprimus.com.au)  
 all boxes and flats are folded together, no staples required  
 (Prices subject to change)

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- 2019 Australian Gem & Mineral Calendar: [Click here...](#)
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