



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. 0417 859 443 Email: ieverard@bigpond.net.au
Secretary: Claudia Gill. 0419 841 473 Email: cjrgill@adam.com.au
Treasurer: Russell Fischer. Email: rfischer@bigpond.net.au
Membership Officer: Augie Gray: 0433 571 887 Email: teatreegullygmc@gmail.com
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Web Address: <https://teatreegullygemandmineralclub.com>

**August
Edition
2019**

"Rockzette" Tea Tree Gully Gem & Mineral Club News

President's Report	General Interest	Club Activities / Fees
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Hi All,

The Club ran a very successful Biennial Exhibition (which from now on will just be called a Show) on the weekend of 20-21 July. See the full report on page 2.

We welcomed 4 new members last month – Inta & Neal Chambers, Kelly Morrison and Delaney Lawrance, all of whom have joined the Wednesday night silversmithing group.

Tuesdays see up to 14 members attending for faceting and cabbing, which is the maximum number of people we can reasonably accommodate, given our limited space.

Wednesday evening silver class now has 10 members attending regularly, so this class also is at maximum capacity.

Thursday cabbing/faceting days see fewer members attend, but no instructors, so it's a DIY day for those who don't need mentoring.

Friday silversmithing sees 3-5 members attending most weeks.

Our President is now on his way to his annual 2-3-month long Agate Creek fossick. This year he will be digging for mineral crystals – Quartz and others, as a priority, but says he will probably bring home a 'few' Agates as well, if he happens across some "good" ones.

The Committee has approved capital expenditure of \$1,700 for the purchase of a defibrillator, which will be acquired later this month. Being a not-for-profit community group, we have been offered a very generous discount from the normal retail price of \$2,000, for which we are most grateful.

That's all the news for this month. Stay warm, Winter will be over soon.

Ian's Ghost Writer.

Diary Dates / Notices

Happy Birthday

Members celebrating August birthdays:
 1st – Vaughan Sage. 16th – Tony Bailey.
 6th – Gerry Dillon. 27th – Jean Hickman.
 27th – Terry Mabbitt.

Pages 2 to 6:
TTGGMC 2019 Biennial Exhibition...



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Augie's Agate & Mineral Selections & Mineral Matters...



Pages 12 to 16:
'Newcastle and Rail – The Never-ending Story' ...



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General Interest, humour, etc...



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Members' Noticeboard and Links...

RIVERLAND GEM & MINERAL CLUB
SHOW & SALES
JANUARY 25th & 26th 2020
 Loxton Lutheran School
 Luthor Rd Loxton
AIRCONDITIONED BASKETBALL STADIUM
 10am - 5pm
DEMONSTRATIONS
 Faceting
 Cutting & Grinding Stone

Refreshments & Snacks Available
 Address: Loxton Bldg (Corner Luthor & Fife)
 0800 999 999
 0800 999 999
 0800 999 999
 Email: riverlandgemandmineralclub.com.au
 #RiverlandGem
 Facebook

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.

Tea Tree Gully Gem and Mineral Club Incorporated, Old Tea Tree Gully School, Dowding Terrace, Tea Tree Gully, South Australia, 5091.

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.

Library
Librarian - Augie Gray
 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.

Tuesday Faceting/Cabbing
 Tuesdays - 10 am to 2 pm.
 All are welcome. Supervised by Doug Walker (7120 2221).

Wednesday Silversmithing
 Wednesdays - 7 pm to 9 pm.
 All are welcome. Supervised by Augie Gray (8265 4815 / 0433 571 887).

Thursday Cabbing
 Thursdays - 10 am to 2 pm.
 All are welcome. Supervised by Augie Gray (8265 4815 / 0433 571 887).

Friday Silversmithing
 Fridays - 9 am to 12 noon.
 All are welcome. Supervised by John Hill (8251 1118).

Faceting/Cabbing/Silversmithing Fees:
 A standard fee of \$3.00 per session applies – to be paid to the session supervisor.

In the interest of providing a safe working environment, it is necessary to ensure everyone using the workshops follow the rules set out in *Policy No. 1 - 20/11/2006*.

It is necessary that *Health and Safety* regulations are adhered to always.

Everyone using the workshop must ensure:

- 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.
- 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 or dried.

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.

Club Subscriptions:
 \$25.00 Family \$20.00 Family Pensioner
 \$15.00 Single \$12.50 Single Pensioner
 \$10.00 Joining Fee



Cr Lucas Jones, Ian Everard, Claudia Gill and Cr Jessica Lintvelt.



Claudia Gill, Tea Tree Gully Mayor Kevin Knight, & Ian Everard.



Group of Grant Recipients.

Contributed by Augie Gray

Show Report

The weekend of July 20-21 saw the Club stage its Biennial Exhibition in the Tea Tree Gully Primary School gymnasium.

The show was deemed an overwhelming success, the funds generated being sufficient to pay our rent for the next two years, with a bit left over. It was our best result in recent years.

With the assistance of retired accountant Tony Holloway, we applied for a Community Grant from Tea Tree Gully Council to assist with the running of the show. This Grant was approved, and we were the grateful recipients of a cheque for \$1,350. Our sincere thanks go to Tony, for his invaluable assistance in the preparation of the Grant application, and to Tea Tree Gully Council for approving our application.

A huge shout-out must go to the many Club members who gave of their time and expertise in preparing goods for sale on the Club stalls – both general and mineral, loading and transporting equipment and goods to the venue, setting up and dressing trestles, manning the canteen and club stalls, and then pulling everything down late on

Sunday afternoon and loading and transporting equipment back to the Clubrooms.

- During the running of the Show, we had:
 - On the door - Gerry, Ken, Cheryl & Peter
 - Club Stall - Wendy, Sue, Jean, Blue and John
 - Tumbled Stone Competition - Mary
 - Club Mineral Stall - Mel, Allan, Trevor & Raelene
 - Raffle - Granton & Denise
 - Micromounts - Graham
 - Bone Carving Demo - Mike
 - Engraving Demo - Tom
 - Canteen - Pat M, Pat Z, Ellen, Janet, Claudia & Betty
 - Roving Security - Ian & Peter
- Twelve dealers bought trading space, 3 of whom were from interstate. They provided a good range of jewellery, cut stones, mineral specimens, fossils, lapidary tools, equipment and books.

See the 'Show Video' on the following link:
<https://youtu.be/n7XlqFr8L8Q>



Claudia Gill, Tea Tree Gully Mayor, Kevin Knight, and Granton Edwards chatting before the official opening of the Tea Tree Gully 2019 Biennial Exhibition.



Claudia thanking the Mayor for the Council grant to cover some of the costs involved in running the 2019 Biennial Exhibition.



"Welcome, once again. Thankyou for being here. I won't take up anymore of your time. I declare the Tea Tree Gully Gem and Mineral Club's Biennial Show open. Thankyou!"



Claudia preparing to introduce the public to Mayor Kevin Knight but was initially frustrated working the public address system.



Microphone handover to facilitate the Mayor officially opening the Tea Tree Gully Gem and Mineral Club's 2019 Biennial Exhibition.



"That's it...you can have this mike back again."



Introduction of the Tea Tree Gully Council Mayor.



The Mayor highlighted features of interest in the hall including a humorous warning about the person engaged in bone carving.



"Thanks Kevin...very much appreciated!"

Saturday 20th July 2019.



Ken Jewell and Gerry Dillon managed the collection of entry money at the front entrance (backed up by Allan Rudd [absent]). Cherryl Rudd recorded how people were alerted and informed about the club's 2019 Biennial Exhibition. Janet Jones (wearing red apron) was engaged in servicing food sales...seen here chatting to the club's Treasurer, Russell Fischer.



Ed and Yvonne Richard at their table with Mark Willoughby.



Janice Cruz and Chris Ah Yee at their trading table.



Mike Grosso at his trading table.



Simon Barbour at his trading table.



Vince Peisley's trading tables.



Vince Peisley at his trading tables.



Kym Loechel at his trading tables.



Greg and Petra Vort-Ronald at their trading tables.



Allan Rudd, Trevor Jessop (absent), Raelene Jessop (absent) and Mel Jones (absent) serviced the club's mineral sales and trading tables over the weekend.



Augie Gray at her trading tables.



Potential customers at Mel's succulent plants table...part of the club's "White Elephant Stall". The stall's sales and tables were serviced by Jean Hickman, Blue Higgins, Wendy Purdie (back view) Sue Beaucaris (absent) and John Hill (absent).



The club's "White Elephant Stall" with John Hill ready to serve potential buyers. The dome in the foreground showcases examples of John's silver craft.



Ron Lewis at his trading table.



(L – R) Ellen Dillon, Janet Jones, and Claudia Gill. Also involved in catering, kitchen duties and food sales (absent in this picture) were Betty Anderson, Pat Mabbit, and Pat Zoyke.



(L – R) Tom Afford - Metal Engraving, and Mike Mabbit – Bone Carving.



Examples of Michael's bone carving.



Chris Ah Yee looking over Vince Peisley's trading table.

Sunday 21st July 2019.

Before opening to the public (at 10am) traders can socialise and look at fellow traders' products for sale.



Augie trading tables including examples of her handcrafted jewellery on the second table.



More of Augie's trading tables.



Kym Loechel's trading tables. (L – R) Augie, Greg, and Janice.



Kym looking over Chris and Janice's Fossils.



Jean, on the club's 'White Elephant Stall', promotes the sale of this succulent plant to Mel and sells it to him despite his table-full of succulent plants on sale to the public right next to her.



Mel's succulent plants on sale @ \$5 each or buy 6 or more in the one sale to gain a 20% discount (each plant then costs \$4 each).



Club's 'White Elephant Stall': (L – R) Cheryll Rudd, Alan Rudd, Augie Gray, Gerry Dillon, Jean Hickman, and Wendy Purdie.



(L- R) Ian Everard (Club President), Russell Fischer (Club Treasurer) and Janet Jones (servicing food sales).



Ed Richard and Yvonne Richard's trading stall.



Club's demonstration and raffle table. (L – R) Tom Afford - Metal engraving (hidden); Mike Mabbitt – Bone Carving; Granton Edwards and Mary Warner – Raffle Ticket sales; and Graham Gill – Mineral Micromount Display.



TTGGMC Exhibition Raffle 2019 being drawn. (L – R) Denise Edwards, Granton Edwards, Ian Everard, and Mary Warner. Note: the five raffle prizes on the centre of the table.

Prize Winners for the Exhibition Raffle 2019 Tea Tree Gully Gem & Mineral Club Inc.	
1st Prize: -	Amethyst Geode - value \$250 Spencer Winkler.
2nd Prize: -	Sterling Silver Bracelet - value \$200 Kym Loechel.
3rd Prize: -	Lavender FW Pearl Necklace - value \$150 Trevor Jessop.
4th Prize: -	Sterling Silver Handcrafted Spoon - value \$100 Alan Stewart.
5th Prize: -	2 Bottles of Wine - value \$50 M Underwood.

**Part 1 of
Amy's Art School Display
at the TTGGMC Biennial Exhibition**
*(NB. Part 2 of the display will be presented in the
September 2019 Newsletter)*

Dry Pastel (Soft)

Students were asked to create a piece of art-work using the dry pastel technique. Pastel is a soft pigment (a bit like chalk) which has a higher portion of pigment and less binder resulting in bright colours. They can be smudged and blended easily using blending tools such as tissue, brushes and paper blenders and your fingers.

The children were asked to recreate an image using the pastels, learning how to blend colours. Choosing colours they thought represented Sunsets and Sunrises in different settings.



Alana.



Alex.



Angelina 1.



Angelina 2.



Angelina 3.



Denisia 1.



Denisia 2.



Ella.



Kayla.

**Part 1 of
Amy's Art School Display
at the TTGGMC Biennial**

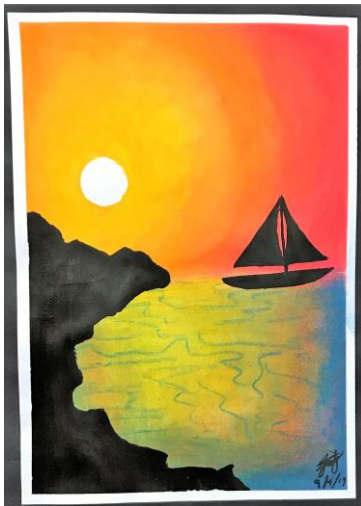
*(NB. Part 2 of the display will be presented in the
September 2019 Newsletter) – Part 1 Continued...*



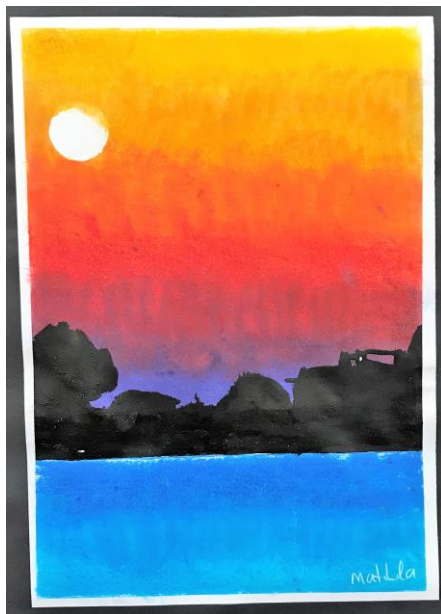
Krystina.



Sam.



Trinity.



Matilda 2.



Lucy 2.



Zoe 1.



Lucy 1.



Matilda 1.



Zoe 2.



Amy's Art School Display occupied the western end of the hall and was quite extensive in content; seen here from the centre of the hall.

Part 2 (September Newsletter) will contain themes: Collage, Drawing, Lino Cuts, Painting, Scratch Board, Still Life, and Zen Tangle.



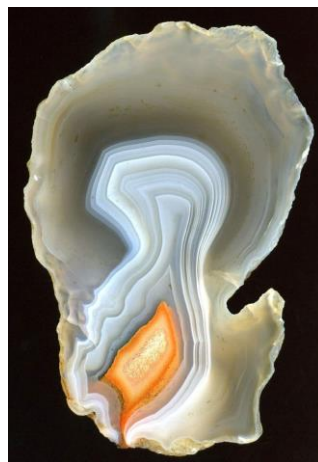
**Augie's August 2019 Agate Selections
– Argentina 1.**



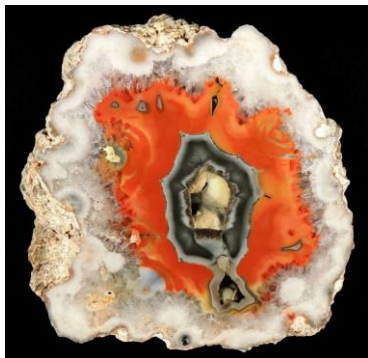
Argentina 01.



Argentina 06.



Argentina 10.



Argentina 02.



Argentina 07.



Argentina 11.



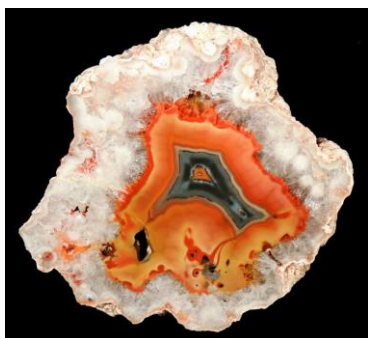
Argentina 03.



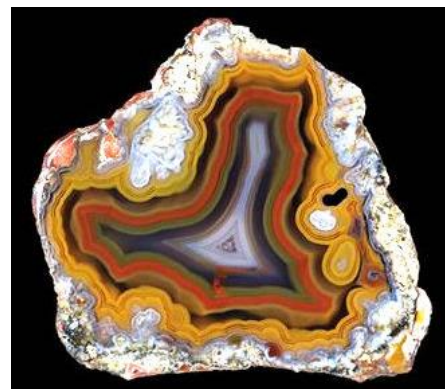
Argentina 08.



Argentina 12.



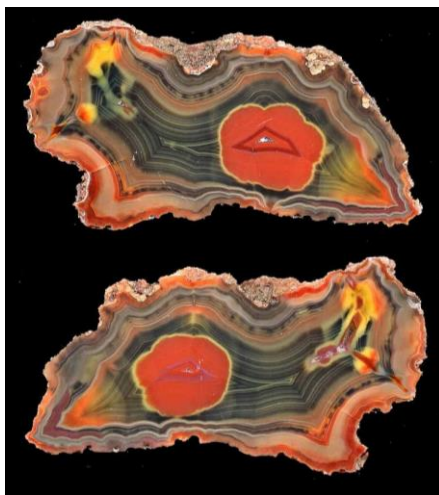
Argentina 04.



Argentina 13.



Argentina 05.



Argentina 09.



Argentina 14.

Augie's August 2019 Agate Selections.
Continued...



Argentina 15.



Apophyllite on Stilbite - Poona, INDIA.



Cuprite - Herault, FRANCE.



Argentina 16.

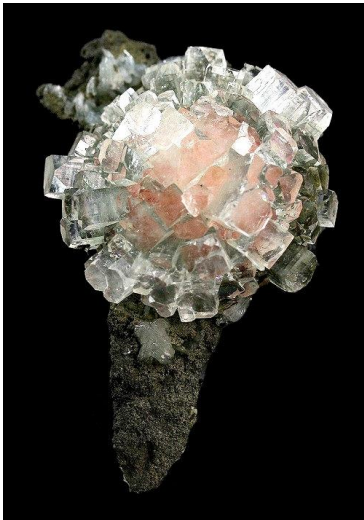


Barite on Malachite.



Geode with Quartz & Chalcedony.

Augie's August 2019 Mineral Selections



Apophyllite - Poona, INDIA.



Botryoidal Rhodochrosite - Conselheiro Lafaiete, Minas Gerais, BRAZIL.



Kunzite - PAKISTAN.



Aquamarine & pink Apatite on Muscovite – PAKISTAN.



Chalcedony – MOROCCO.

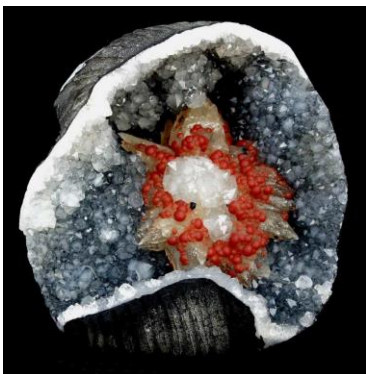


Quartz TRAPICHE - Huanggang Mine, Inner Mongolia, China.

Augie's August 2019 Mineral Selections.
Continued...



Quartz – MONGOLIA.



Red Fluorite ball on Calcite flower in Quartz Geode - Mahodari Mine, Nasik, Maharashtra, INDIA.



Rutile in Quartz.



Smithsonite in Azurite - Touissit Mine, MOROCCO.



Smoky Quartz - Mooralla, VICTORIA.



Tourmaline on Quartz - Pederneira Mine, Minas Gerais, BRAZIL.

Augie's Mineral Matters
Rare "Trapiche" Gemstones

The name "Trapiche" (pronounced trap-ee-sh) comes from the Spanish for a spoked wheel used to grind sugar cane.

The first stone to be identified as a Trapiche was a Colombian Emerald, in 1879. In 1995, over a century later, Trapiche Rubies were reported, with Sapphires following a year later.



Emerald 1.

In the two decades since then, specimens have been identified in Quartz, Tourmaline, Garnet, Spinel and Aquamarine, but the occurrence of Trapiches in these other gemstones is extremely rare.



Emerald 2.



Emerald 3.



Emerald 4.



Emerald 5.

Augie's Mineral Matters - Rare "Trapiche" Gemstones: Continued...



Emerald 6.



Emerald 7.



Emerald 8.



Emerald 9.



Emerald 10.



Emerald 11.



Emerald ring.

Emerald accounts for approximately 80% of known Trapiche stones, Ruby 10%, with Sapphire, Quartz and others making up the remaining 10%. For a reason not yet understood, Emerald Trapiches occur almost exclusively in stones from Muzo, Colombia.



Ruby 1.



Ruby 2.



Ruby 3.



Ruby 4.

Trapiche Rubies were first identified in Burma, but have also been found in Sierra Leone, Pakistan, Kashmir, Nepal, Guinea and Tajikistan.

In contrast, Trapiche Sapphires have been discovered in Australia, Tanzania, Sri Lanka, Kenya, Madagascar, Cambodia, China, Nepal and France.



Sapphire 1.



Sapphire 2.



Sapphire 3.

Ruby and Sapphire are both Corundums in the hexagonal crystal system, whereas Emerald is also hexagonal but belonging to the Beryl family. Trapiches have recently been described in Aquamarine, another member of the Beryl family, but not (as yet) in the remaining members – Morganite, Heliodor or Goshenite. Why? Nobody knows.

Garnet and Spinel are not hexagonal gemstones – they belong to the Cubic (a.k.a. Isometric) crystal system, showing that the phenomenon is not one belonging solely to the hexagonal crystal system. *Continued next page...*

Augie's Mineral Matters - Rare "Trapiche" Gemstones: *Continued...*

Not to be confused with star stones, Trapiche gems are minerals that form with a radiating star of inclusions between growth sectors. Some form with a core or hub with spokes radiating outward from the core, while others form spokes from the centre of the gem. Only minerals with a highly symmetric crystal habit are known to form the "spokes" or "arms" that define a Trapiche gem. Additionally, all true Trapiche gems contain inclusions of organic matter.



Sapphire 4.



Sapphire 5.

The arms of Trapiche gems remain fixed when the gem material or light source is moved. Its six arms can intersect in the middle or radiate from a central hexagonal core. The central core of a Trapiche can be open or closed and taper from small to large within a single crystal, depending on how it formed.

The six-spoke pattern in Trapiche is not asterism, which refers to a gemstone phenomenon brought about by the way light interacts with oriented needle-like inclusions in the gem. The arms of asteriated gems appear to glide across the surface when the light source or gem material is moved, but the arms of Trapiche gems stay in place.

Type A and Type B

When the gem material grows on the mineral faces, with arms of carbonaceous inclusions, the Trapiche gem is "type A" or "standard." Exceptionally rare specimens of "type B" or "reverse" Trapiches can also occur. In these specimens, the gem material itself forms the arms.



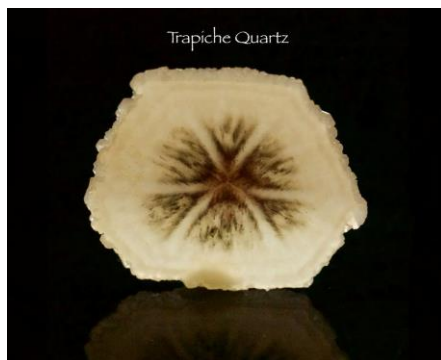
Quartz 1.



Quartz 2.



Quartz 3.



Quartz 4.

Trapiche Emerald Jewellery



Rings featuring Trapiche Emeralds. Sourced from Pinterest.



Trapiche emerald necklace. [Trapiche gems: An IGS online introduction...](#)



Trapiche emerald ring. Sourced from [Pinterest](#).



Alice Fournier pendant necklaces with trapiche emeralds, emeralds and diamonds in gold. [Online Jewellery Insights by Katerina Perez...](#)



Colombian Trapiche Emerald Ring - [M. S. Rau Antiques...](#)

Contributed by Mel Jones...

‘Newcastle and Rail – The Never-ending Story’ by Garry Reynolds Part 11a 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*.



Loco 4714 shunts the carriage set from the recently arrived Newcastle Express (Flyer) at Newcastle Station in 1985. Source: *David Patterson*.

The Long Delay

It was nearly three decades since the isolated section of the Great Northern Railway, which had joined Maitland and Newcastle, before a serious attempt was made to extend it from the Sydney Metropolitan area to the second largest city in NSW only 160 kilometres North. Yet ironically, the Great Northern Railway had already reached the Queensland border 600kms away from Newcastle.

It wasn't until 1886, that the line from the Sydney end to Newcastle finally reached even outer suburban Hornsby.

The incentive to build it had been moderated by the viability of the sea route. It was only just over 100kms from Sydney to Newcastle by ship and there was a competitive maritime freight and passenger service on what was called the 'Sixty Milers'.

The faster steamships generally took three hours to complete the journey. There seemed little sense of urgency, so completing the rail link between the Colony's two largest cities was postponed for decades.



A 60-class Garratt Locomotive assisted by a purposeful-looking 3803 hauls a mixed goods train through Awaba on the Main Northern Line (formerly called the Great Northern Railway) in 1964. Source: *David Patterson*.

Eventually, public pressure became so great to have NSW's two biggest cities joined by rail, that a major initiative was launched in the

1880s with the completion of a 24km section of line from Hornsby to the Southern shore of the Hawkesbury River at Brooklyn. This required heavy earthworks and tunnels on the steep 1 in 40 Cowan Bank. The steepness necessitated the attachment of banking engines to help heavy trains up from the River onto the Hornsby Plateau on their passage to Sydney.



3801 in Battleship Grey wartime colours leading to the label for the locomotive - 'Grey Nurse Shark' - hauls a heritage train up the Cowan Bank past the abandoned Boronia Tunnel No.5 in 2006. Source: *Wikipedia*.

In the same year, the isolated Great Northern Railway was pushed 80km South from the Newcastle industrial suburb of Waratah to Gosford on the Central Coast. However, there was still the critical gap in the middle blocking direct rail communication between Sydney and Newcastle. Nevertheless, the pieces of the Great Northern Railway jigsaw were all coming together as the lengthy inland line north of Newcastle finally reached the Queensland border at Wallangarra after 31 years of construction from the first section of line to Maitland.



The 'Brisbane Express' climbing up from Hawkesbury River. Source: *NSW State Records*.

A shorter route along the North Coast would wait completion in 1932 when a lifting road/rail bridge was built over the Clarence River at Grafton to replace a train ferry which transported carriages across the River.



A non-airconditioned heritage train departs Newcastle Station hauled by 3526. Source: *Don Jones*.

The Longest Tunnel

Back South and well back in time, the opening of the 1.7 km Woy Woy Tunnel in 1888 was a key milestone in closing the rail gap between Sydney and Newcastle. The line was extended through the new tunnel 16km from Gosford down to Mullet Creek on the Northern side of the Hawkesbury River.

Construction of the Tunnel was a massive undertaking for the Colony of New South Wales, even though it was riding the peak of a long economic boom. Resources were stretched as the Government was also building the innovative Hawkesbury River Railway Bridge.



Construction of the Woy Woy Railway Tunnel in the 1880s. Source: *State Records*.

Before the Tunnel was opened, a picturesque but tortuous ferry trip was required to fill the rail gap. Passengers and goods heading North from Sydney unloaded at the River Wharf platform at what became known as 'Brooklyn' and then transferred to a double-deck, rear-paddled steamer named 'General Gordon'. They faced a three-hour trip out to Broken Bay and up through Brisbane Water to Gosford where the train service North recommenced. Such was the desire to complete the line, that construction continued in the Woy Woy Tunnel night and day for four years excepting on Sundays. The 300 men employed in blasting the tunnel and deep access cuttings used over 100 tonnes of gunpowder and 10 tonnes of dynamite. *Continued next page...*

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

They lay over 10 million bricks to line what was, at the time, the longest railway tunnel in Australia.

As the paddle-steamer was subject to open ocean weather for part of the route to Gosford, the extension of the railway through the new long tunnel to a temporary station on the banks of Mullet Creek enabled a shorter, faster and more protected voyage for the 'General Gordon' but still with a lot of transshipping involved. People couldn't wait until the massive new railway bridge was completed over the Hawkesbury.

Expectations were high once the Tunnel was opened as the railway bridge under construction was to be the last link in a network that would sort of join up Adelaide, Melbourne, Sydney and Brisbane by rail, but it would require a major engineering feat.

The first Hawkesbury River Railway Bridge sets world records

At the conceptual stage of completing the missing link over the Hawkesbury River, John Whitton, Engineer-in-Chief of the New South Wales Government Railways (NSWGR), had campaigned to take the line across the Hawkesbury by bridge. Others opposed him claiming a large train ferry would be enough. There was no doubt that a bridge would be ambitious. It would have to be the largest in the Southern Hemisphere.

To make matters more challenging, Whitton's professional credibility was constantly being undermined by the Railway Commissioner, Charles Goodchap, who acted contrary to his surname and initiated a long-running feud with the Engineer-in-Chief and constantly 'white-anted' him at the political level.

This all came to a head at the crucial decision-making time for the Government regarding crossing the Hawkesbury. Although he had designed and built most of the Great Northern Railway, Whitton was attracting considerable political flak from a mid-1880s Royal Commission into railway bridges spurred on by Goodchap who supported other officers in the Railways Department offering the Government advice against Whitton's.

Even though Whitton was exonerated of the charges of faulty design and of using inferior materials in a range of bridges, as it was evident that he had supervised the laying of 3,494 km of track on which no accident had occurred attributable to defective design or construction, his image was still tarnished in some quarters and he was subject to constant political sniping.

The outcome was that Whitton was not invited to design the Hawkesbury River Railway Bridge even though he was working on a design for a suspension bridge to cross Sydney Harbour. To rub salt into his wounds, the NSW Government also rejected his unsolicited proposal for a traditional lattice girder design for the Hawkesbury.

There was a real urge to make an extravagant

political statement about the Colony's growing place on the world stage atop an economic boom. The ageing public servant did not fit the new mould – he was 'yesterday's man' and expendable in the eyes of many who he had put offside over decades with his straight-shooting blunt style.

Whitton had accumulated too many political enemies over the years in railway route battles against vested interests and political chicanery. Decades earlier, he and his brother had been set up and accused of fraud, but both were completely exonerated.

After being shut out of the Hawkesbury River Railway Bridge project, even though he was Engineer-in-Chief of the NSWGR, Whitton took 12 months leave and retired in 1890, aged seventy.

In this power vacuum of managing the biggest industrial enterprise in Australia (the NSWGR), a new American system of tendering was adopted. Companies from around the world were invited to submit designs for the construction of the Bridge. In April 1886, a tender from the Union Bridge Company of New York was accepted ahead of thirteen others. It was much cheaper than Whitton's unsolicited proposal of a proven English lattice design.

The Union Bridge Company's tender incorporated a typical US design. It would be the longest bridge to be built in Australia at the time and remained so until completion of the Sydney Harbour Bridge in 1932.

The American roots of the Bridge were reflected in the term given to the construction camp, which was named after the famous Brooklyn Suspension Bridge opened just a few years prior in 1883. The village name of 'Brooklyn' survives to the present day adjacent to the similarly derived 'Long Island' construction site and Hawkesbury River Station.

Once construction began, not only was the high bridge work inherently dangerous but the exposed site made it particularly so. Blustery local conditions contributed to several incidents where spans being floated into place were nearly lost during bad weather. Workers faced constant risks and almost certain death if they fell into the deep cold depths.

Still, when the Hawkesbury River Railway Bridge was being constructed there was an enormous sense of optimism and progress in the Colony. The construction of new railways and completion of a massive infrastructure program was a key part of the political drive behind NSW regaining its reputation as the premier colony which had been usurped by Victoria. Little did anyone realise that just around the corner awaited an enormous economic depression triggered by a land bust in Melbourne and 30 banks going broke, worsened by the record 'Sahara Drought' which lasted into the 20th century.

Ironically, although it was driven partly by parochial political posturing, the building of the Hawkesbury River Railway Bridge in the calm before the economic storm would become a

powerful symbol of a move towards Federation of the colonies to create the Commonwealth of Australia in 1901. It would link the railways running from South Australia, through Victoria and up via New South Wales to Queensland even if the gauges chopped and changed through the journey reflecting a legacy of colonial division and rivalry. At this time too, Western Australia was demanding a transcontinental rail link across the Nullarbor as part of any Federation agreement.

In 1889, when Sir Henry Parkes gave the address at the opening of the Hawkesbury River Railway Bridge (perhaps as his first Federation speech) all was wonder and self-congratulation at the dawn of this world-leading technology let alone a new nation on the horizon. He saw it not only as an exciting physical communication structure but a metaphorical bridge:

"We are, without any exaggeration of language, assembled here to celebrate an occurrence which has more interest, especially in anticipation of the future, than anything else that has taken place in our history. We have formed a communication by railway which may be said to bind the whole population of Australia in one chain..."

Immediately, the railway became a powerful rival of the shipping companies, forcing them to amalgamate.

The Union Bridge Company of New York had taken over three years to build the Bridge. Meanwhile, 8 kms of track with tunnels and cuttings and a causeway was constructed on the dual approaches by the NSWGR.

The Bridge's spans were assembled on Dangar Island and floated across to the site on barges. Five of the piers were sunk to then record depths of 49 metres below high-water mark using caissons. However, problems lurked which would soon come home to roost.

The Bridge was a major technical achievement and attracted world-wide acclaim. Aside from being the longest bridge in Australia, it was the fourth longest bridge in the world with the deepest bridge footing on the planet but unknowingly it would not be enough. The engineers from America were pushing innovative lightweight bridge design and construction techniques to the limit in the Colony.

Meanwhile, the traditionalists' noses were well and truly put out of joint by the invasion of these 'carpet bagging' Americans into this Southern bastion of the British Empire. The winning of the contract by an American firm was evidence of the change in engineering technology from British to American and the decline of John Whitton's British-based design influence on the NSWGR system even though Whitton had fought hard to secure adequate finance to construct the massive bridge.

While there was an American prime contractor, it was in reality a multinational effort.

Continued next page....

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

Preparation of the stonework for the piers was undertaken by a local sub-contractor, the cement was imported all the way from the UK, and the steel purchased from the British Company which supplied similar types for the construction of the massive Forth Railway Bridge in Scotland.

Grand problems appear with the Grand Bridge

New South Wales Government Railway executives eager to please their political masters often had to focus on the 'sizzle rather than the sausage'. To create the extravagant statement with an iconic leading-edge world class structure, cost-cutting went on elsewhere on the massive railway project. The short cuts and penny pinching in the twilight of the 19th century would come back to haunt the politicians and engineers into the next century when the Great Northern Railway appeared not so great.

Insidiously, the first Hawkesbury River Railway Bridge became undermined over decades of use. Going against Whitton's recommendations yet again, the Government only funded single-line construction leading on to either end and across the Bridge to save money. However, learning its lesson from the single-line fiasco with the Como Bridge on the Great Southern Railway, the NSW Government ensured that the Hawkesbury River Railway Bridge was constructed with provision for double track with an eye to the future duplication of the line. All good – or was it? Ironically this arrangement led to the Bridge being used as a crossing point for trains - an undesirable practice which imposed maximum stress loads which eventually would contribute to its own destruction. It wasn't until 1910, that the stresses would be alleviated with all sections of the line from Hawkesbury River through to Woy Woy becoming double track, but the damage had been done.

In fact, the grand bridge showed signs of problems within 12 months of the grand opening and the US contractors were called back to repair some faults with the piers. Whitton would have been nodding sagely but extremely worried!

It became apparent that there were no routine processes of inspection as work proceeded as would have occurred under Whitton.



A 32-class locomotive with a passenger car consist gets cautionary clearance from the signal as the train rumbles across the first Hawkesbury River Railway Bridge. Source: David Patterson.

In the corrupt atmosphere of Commissioner Goodchap's railway administration, the piers were poorly built.

The Sydney Morning Herald of 11 May 1946 reported that:

"A railway engineer, reading an American textbook, found a statement that the interior of the piers of the Hawkesbury bridge comprised rubble. The Chief Railway Constructional Engineer, Major-General Fewtrell, pointed out that this did not check with original specifications, which provided for metal casing on the outside and concrete on the inside, so that when the metal rusted the concrete would remain.

But the bridge had already developed an ugly pier crack, and in view of the textbook statement no time was lost in scouring Australia for men who had worked on the concrete mixing board. One was found, and the information he supplied worried the engineers. They promptly set a diamond drill to work on the cracked pier. The drill made slow progress through the stone, but once below the water level it dropped into a soft substance.

Scientific tests showed that the steel casing would have crumbled completely away in 1939, and the interior would have quickly washed out. Below water level, the pier was several feet out of alignment on one side. Once daily, two express trains passed each other on the bridge, often at this pier."

This could not just be another case of an extra repair job on the Bridge in a series that had been going on for years. There was real catastrophe potential. Something major had to be done and soon. One thing for sure was it would not be cheap, and the NSW Government had just barely escaped 'bankruptcy' in the early thirties.

The engineers discovered that even though record drilling depths were set in the construction during the 1880s, the depth of sediment had made it impossible to reach bedrock with the foundations on the Southernmost pier and it seems that this was the cause of the structural faults. The Bridge was in such a precarious state that barely out of the Great Depression, the NSW Government was faced with having to spend a fortune to replace the entire iconic structure.

The demands of World War 2 put the Hawkesbury River Railway Bridge under unrelenting pressure

With the Bridge integrity a marginal day-to-day proposition, the situation plummeted from bad to worse. Before they knew it, the NSW Government was suddenly facing the enormous demands of World War 2.



Crowds swarm in the Newcastle Station Precinct in 1899, farewelling troops boarding a listing ship commencing their journey off to the Boer War. Source: Newcastle Herald.



Large crowds surround Broadmeadow Station and Signal Box farewelling soldiers embarking for the Great War in 1914. Source: ABC.

In the critical Hunter coal industry, which had both private and public rail networks and the coal companies owning ships as well, there was a crying need for better collaboration between government and the companies and their aggressive labour force borne of decades of conflict in the mines, the railways, the ships and on the docks.

With the War worsening, even before Japan had entered it, there was a need for close coordination between work at the coal pits, the movement of trains and the availability of ships at the coal loading wharves, where there was very limited provision for storage.

This situation had been created by: the mine owners not wanting to lay out large amounts of infrastructure capital and incurring double handling costs at the mine site; the NSW Government not wanting to spend large amounts on storage facilities at the Port, seeing it as the companies' business; and the miners wanting to keep stocks low so any industrial action could impact quickly. If ships were not available, coal remained in the wagons, which could not be returned to the mines. The mines, lacking large storage facilities could be forced to cease production as bottlenecks occurred.

From Newcastle, until the War created shipping problems, the coal moved mostly to Sydney by coastal shipping because the ships' freight costs were so much lower than those of the Railways. Elsewhere in NSW, however, the Railways were large carriers of coal.

Despite the War and calls for collaboration between employers, employees and government in the coal industry, between March and May 1940, coal miners conducted a 10-week strike on the crucial Hunter coalfields. About 900,000 tons of coal production was lost, severely reducing coal stocks around the country. Industrial disputes were frequent from 1939 to 1942 with working days lost in the coalmining industry amounting to 64 per cent of the total for all industries in Australia. They represented 91 per cent of the total for 1940.

A forty-hour week was a long-standing objective of the coal mining union and persistence in a campaign at this stage of the War highlighted the way in which several unions continued to think in pre-war terms and were disposed to see the conditions of war as strengthening their bargaining position. They negotiated as well for war loadings on top of normal pay increases approved by the industrial courts.

Continued next page....

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

Meanwhile, trains were trying to steam North to aid the desperate effort to stop the Japanese streaming South through Asia under a domino effect of countries falling fast. The amount of traffic being carried on the flawed Hawkesbury River Railway Bridge while construction of a new one commenced in 1940 alongside the existing crossing, reached up to a hundred trains a day!

As ships were being requisitioned by the Navy and the U-boat menace was incurring major Allied losses, the accumulation of reserves of coal in cities and industry was now demanded to cover shortfalls and delays. Enemy raider vessels and mine-laying were ever-present threats to the ships carrying coal outward and iron ore inward around the coast to the vital Newcastle Steel Works.

In August 1940, two general cargo ships had been torpedoed off the Australian coast, and in November and December raiders and the mines they laid, claimed eleven more ships, three of them in the coastal sea lanes which the colliers and the ore ships used. With petrol and diesel fuel short and rationed, there was even more emphasis on relying on coal railed from Newcastle and Lithgow by the Blayney-Demondrille single cross-country line to Victoria.

Meanwhile, pressure was building on the Hawkesbury River Railway Bridge with increasing amounts of coal, troops and war materiel rolling over it. Tensions were rising too in the minds of the military and political leaders seeing the over-stretched NSWGR trying to cope with this worsening situation. These tensions increased further when Pearl Harbour was attacked and the 'invincible' British military bastion of Singapore, that was supposed to protect Australia, fell with our troops surrendering in tens of thousands. Darwin and coastal settlements in Northern Australia were then being regularly bombed. The Japanese had started pouring into New Guinea. A plan to abandon the country down to the Brisbane Line was being secretly floated. It sounded like an overwrought movie script, but it was frighteningly real and the Great Northern Railway between Sydney and Newcastle and a fragile Hawkesbury River Railway Bridge was now spiralling down into a worsening crisis.

To make matters worse, British intelligence agencies had informed Australia years before that the Japanese knew the Great Northern Railway's and the Bridge's vulnerabilities intimately. For decades, their military planners had been planting spies amongst Japanese merchant ship crews visiting the Port of Newcastle with the sole focus of reconnoitring the region while posing as casual tourists. So, what more could go wrong? Plenty. It would be a catastrophe militarily if the Bridge collapsed and the doomsday threat to the lives of rail passengers and crew realised although the dire predicament was hushed up. It would take six long years to remove the heightening risk.

The NSWGR was on tenterhooks as it first reduced the Hawkesbury River Railway Bridge's speed limit to 23 km/h and then as the engineering situation worsened and the impending threat of disaster grew, the limit was reduced to a crawl of 6 km/h!

Even this wasn't enough. To concentrate the weight of the trains on the western side of the Bridge away from a faulty pier and minimise the pounding effect of the big steam locomotives' wheels, a gauntlet configuration with overlapping lines was installed like Como Bridge to ensure trains could not pass. The situation became so dangerous that drivers were banned from applying their brakes on the Bridge!

By shrinking the track effectively from double to single line led to an even greater strangling bottleneck on the War effort. Fully manned 24-hour signal boxes were placed on both ends of the Bridge in a desperate attempt to push more trainloads of soldiers, military hardware and munitions across the Hawkesbury for the fight up North.

Meanwhile, the War was going so poorly that on the Northern side of the River, a demolition shaft was constructed to blow up the Woy Woy Tunnel if necessary. Tank traps, mine fields and barbed wire entanglements shielding gun emplacements were being prepared in the areas surrounding the rail link between Sydney and Newcastle to protect access to the vital Newcastle Steelworks and the State Capital. Guards were mounted 24 hours a day on the Woy Woy Tunnel and the wavering Hawkesbury River Railway Bridge to prevent sabotage and submarine nets were hung from the Bridge. There was a genuine fear by the military analysts of a submarine-based enemy commando attack on the Bridge in particular. They knew the Japanese had the capacity, incentive and local knowledge.

To protect the vital crossing, defensive gun emplacements were built on Broken Bay's West Head. The River was also patrolled by boats of the RAN Reserve armed with depth charges. Above, anti-aircraft guns were placed at each end of the Bridge. An army encampment was established at Brooklyn with anti-aircraft guns and searchlights on the headland and mines were laid across the River. After the fall of Singapore in February 1942, Australia's Naval Control Board set in motion 'Operation Little Boat'. All private craft in the Hawkesbury Region had to be taken to Berowra Waters for destruction, if it became necessary to keep them out of enemy hands. As things turned out, a flood did the job for them, sweeping much of the collected fleet downriver, turning it into widely scattered boat-bits along the way.

Will the Bridge Last?

The big question for the NSWGR, the Government and the military was: "Would the Bridge last?"

It just had to.

The Hawkesbury River Railway Bridge was critical in Australia's desperate struggle to repel the Japanese with assistance from the Americans.

They were aghast to discover the perilous Hawkesbury chokepoint situation building on their earlier frustration with the interstate gauges issue. What were we Australians thinking when we built our railways?

When Japanese submarines attacked Sydney and Newcastle, near-panic set in amongst sectors of the population most exposed on the East Coast. Suddenly the War was on their suburban doorstep. What they didn't know, was that when two midget Japanese submarines were sunk in Sydney Harbour in 1942 a map of the Hawkesbury River and its vulnerable railway bridge was found on the body of one of the dead captains, with the site being outlined in red!

The Japanese submarine attack on Newcastle

Out to sea, crews of naval and merchant ships had long contended with threats to their ships and lives as during 1942 and 1943 large Imperial Japanese Navy (IJN) submarines conducted several aggressive patrols along the East Coast.

The main threat to shipping in Australian waters came in 1942 when the Japanese launched a submarine campaign off Australia's East Coast. In the two months after the midget submarine attack on Sydney Harbour at the end of May 1942, 14 Allied merchant ships were attacked and 6 of those were sunk. Some 60 merchant seamen died in these attacks, with 29,000 tons of shipping lost. More merchant ships and the hospital ship 'Centaur' were sunk in a second campaign in 1943.

Off the coast of Newcastle, on 16 May 1942, the submarine I-29 attacked the Soviet freighter 'Wellen' 80 km south-east of the Port but did not cause any damage. In response, a naval force was dispatched from Sydney to attempt to locate the submarine and ships were not permitted to sail between Newcastle and Sydney for 24 hours. A week later, the captain of I-29 launched its floatplane which flew over Newcastle and Sydney searching for shipping which could be attacked by midget submarines launched from 'Mother Subs'.

On 8 June 1942, the Japanese submarine I-24 fired ten rounds at Sydney Harbour installations in a five-minute period. Only one of the shells exploded, in Bellevue Hill.

On the same evening, there was a 20-minute bombardment of Newcastle by another Japanese submarine, I-21, commanded by Captain Kanji Matsumura. It had traversed Stockton Bight and positioned itself about 9 kms north East of Newcastle. The Captain's orders were to attack the BHP Steelworks and the Newcastle shipyards. There was also a general intent to generate alarm and disquiet among the Australian population.

From about 2.15 am, Captain Kanji fired 34 shells, with 8 being 'illuminators' or 'start shells'. The rounds landed over a wide area within the vicinity of the Customs House containing sections of the local Defence control and the Zaara Street Power Station – both adjacent to Newcastle Railway Station.

Continued next page....

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

All but one shell failed to explode, but there was still some damage to a house on Parnell Place behind Fort Scratchley. Another shell damaged the nearby tram depot but did not explode. The Fortress's gunners fired four shells in reply with no result.



Firing one of Fort Scratchley's guns. Source: Visit Newcastle.

The Japanese captain's object of shaking up the population and the Australian military succeeded. It gradually came to light that the Japanese submarines were not attacked in turn by Allied ships during or after their bombardments as no anti-submarine warfare-capable vessels were immediately available in either Sydney or Newcastle! Members of the Newcastle citizenry were also irate because during the bombardment, when people were desperately seeking refuge in the public air raid shelters, they found a number locked by the Council to prevent them from being 'misused'. The community was not amused!



A model of the Japanese Submarine. The type of Japanese submarine with float plane that shelled Newcastle. *SousMarin*.

In response to the shelling of Newcastle, less than two weeks later, a field of 12 mines controlled electrically from the shore was installed in Newcastle Harbour. Two months later, a three-legged Indicator Loop was installed on the floor of the Harbour from Nobby's Head back towards Stockton. Through electrical conductivity, it was designed to detect a submerged submarine trying to enter the Port. However, the only action experienced was when several mines were set off accidentally early the following year! To add to the growing alarm, two days after the attacks on Sydney and Newcastle, a Japanese submarine fired on the 'Age', an Australian coastal steamer travelling from Melbourne to Newcastle. While it headed off to dock in Newcastle, the merchant ship, 'Iron Chieftain', signalled that she had been torpedoed about 43 kilometres north-east of Sydney, in the same area.



The Port of Newcastle's strengthened defences after the submarine attack in 1942. Source: *Ozatwar*.



A shell fired by a Japanese submarine into the BHP Steel works in Newcastle. Source: *Heritage Hunter*.



The 'Iron Chieftain'. Source: *Newcastle Herald*.

The 'Age' reached Newcastle safely but the 'Iron Chieftain', loaded with coke from Newcastle for ship building in Whyalla, sank in about five minutes. Twelve of the crew, including the captain, went down with their vulnerable vessel while another 25-crew abandoned ship. They crouched in pyjamas on rafts fearing that they would be machine-gunned as the Japanese submarine cruised among them, its decks awash, before vanishing into the dark. The survivors finally came ashore at The Entrance.

After these attacks, the ports of Sydney and Newcastle were temporarily closed to outward traffic. The Naval Board suspended almost all merchant ship sailings from ports between Brisbane and Adelaide.



Erosion exposes remnants of WW2 defences along Newcastle's Stockton Beach. Source: *Reddit*.

Convoys were introduced in an attempt to protect shipping from attacks. There were surface and air searches for enemy submarines, and ships at sea were warned to zigzag widely. More cargoes were placed on the overstretched Railways.

Citizens and some of the military located in coastal areas like Newcastle, now considered the threat of Japanese invasion to be very real. Barbed wire defences were strung out along beaches; air raid trenches were dug; and 'blackout' precautions introduced. Heavy gun emplacements were set up at various points around Newcastle Harbour supported by anti-aircraft guns and searchlights with garrison troops allocated to guarding important installations of which Newcastle had a number. Now, the vulnerability of the Great Northern Railway link between Sydney and Newcastle was stark. Not only was it wide open to sea attack but dependence on a main line with a perilously flawed railway bridge and the road from Sydney to Gosford only having a ferry crossing and no bridge until 1945, meant there were few transport alternatives. A new Hawkesbury River Railway Bridge was needed desperately.

To be continued next month with Part 11b of 24...

Contributed by Doug Walker...

Always Ask, Never Assume!!!



His request approved; the CNN News photographer quickly used a cell phone to call the local airport to charter a flight. He was told a twin-engine plane would be waiting for him at the airport

Arriving at the airfield, he spotted a plane warming up outside a hanger. He jumped in with his bag, slammed the door shut, and shouted, 'Let's go!' The pilot taxied out, swung the plane into the wind and took off.

Once in the air, the photographer instructed the pilot, 'Fly over the valley and make low passes so I can take pictures of the fires on the hillsides.'

'Why?' asked the pilot. 'Because I'm a photographer for CNN', he responded, 'and I need to get some close-up shots.'

The pilot was strangely silent for a moment, finally he stammered, 'So, what you're telling me, is... You're NOT my flight instructor???'

Contributed by Allan Rudd...



Surprising the Taxi Driver

Last Wednesday a passenger in a taxi heading for the airport leaned over to ask the driver a question and gently tapped him on the shoulder to get his attention.

The driver screamed, lost control of the cab, nearly hit a bus, drove up over the curb and stopped just inches from a large plate glass window. For a few moments, everything was silent in the cab. Then, the shaking driver said "Are you OK? I'm so sorry, but you scared the living daylights out of me."

The badly shaken passenger apologized to the driver and said, "I didn't realize that a mere tap on the shoulder would startle someone so badly."

The driver replied, "No, no, I'm the one who is sorry, it's entirely my fault. Today is my very first day driving a cab. I've been driving a hearse for 25 years."



Contributed by Doug Walker...

Been there—
done that. Then,
been there
several more
times, because
apparently I
never learn.

NEVER MAKE A WOMAN MAD.
THEY CAN REMEMBER STUFF
THAT HASN'T EVEN
HAPPENED YET.

Contributed by Doug Walker...



Kids responses to questions about Dating and Marriage

How Do You Decide Who to Marry?

You got to find somebody who likes the same stuff. Like, if you like sports, she should like it that you like sports, and she should keep the chips and dip coming – **Alan, aged 10.**

No person really decides before they grow up who they're going to marry. God decides it all way before, and you get to find out later who you're stuck with – **Kristen, aged 10.**

What Is the Right Age to Get Married?

Twenty-three is the best age because you know the person FOREVER by then – **Camille, aged 10.**

How Can a Stranger Tell If Two People Are Married?

You might have to guess, based on whether they seem to be yelling at the same kids – **Derrick, aged 8.**

What Do You Think Your Mum and Dad Have in Common?

Both don't want any more kids – **Lori, aged 8.**

What Do Most People Do on A Date?

Dates are for having fun, and people should use them to get to know each other. Even boys have something to say if you listen long enough – **Lynnette, aged 8.**

On the first date, they just tell each other lies and that usually gets them interested enough to go for a second date – **Martin, aged 10.**

When Is It Okay to Kiss Someone?

When they're rich – **Pam, aged 7.**

The law says you must be eighteen, so I wouldn't want to mess with that – **Curt, aged 7.**

The rule goes like this: If you kiss someone, then you should marry them and have kids with them. It's the right thing to do – **Howard, aged 8.**

Is It Better to Be Single or Married?

It's better for girls to be single but not for boys. Boys need someone to clean up after them – **Anita, aged 9.**

How Would the World Be Different If People Didn't Get Married?

There sure would be a lot of kids to explain, wouldn't there? – **Kelvin, aged 8.**

How Would You Make A Marriage Work?

Tell your wife that she looks pretty, even if she looks like a dump truck – **Ricky, aged 10.**

Contributed by Doug Walker...

Brain Teasers and Lateral Thinking Puzzles

Compiled by David Koutsoukis

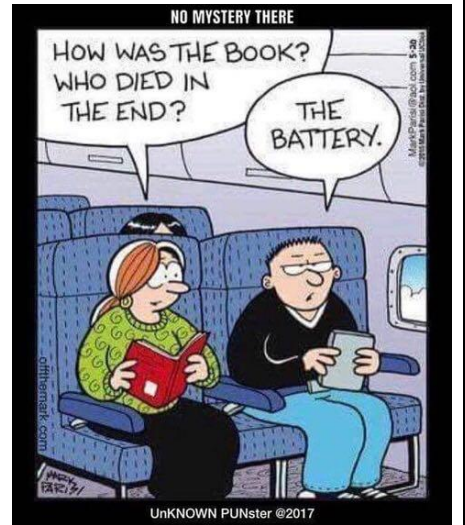
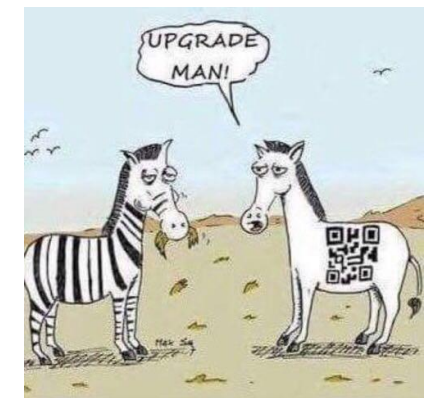
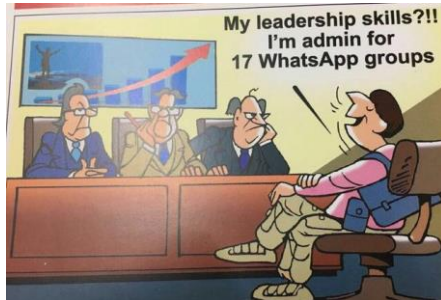
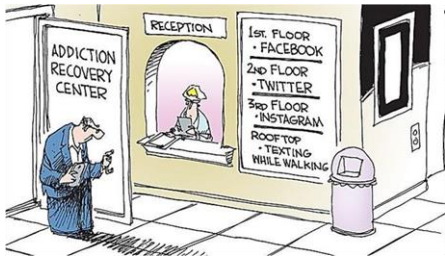
1. What happens only in the middle of each month, in all the seasons, except summer and happens only in the night, never in the day? The letter N.
2. If there are forty cups on the table and one cup breaks, how many teacups are left? Three - we started with 4 teacups (forty cups) and one broke.
3. "This is an unusual paragraph. I'm curious how quickly you can find out what is so unusual about it? It looks so plain you would think nothing was wrong with it! In fact, nothing is wrong with it! It is unusual though. Study it, and think about it, but you still may not find anything odd. But if you work at it a bit, you might find out! Try to do so without any coaching!" Answer: There is no letter E anywhere in it!
4. In which sport do winners move backwards and losers move forwards? Tug---of---war.
5. What common word has 4 vowels, one after the other? Queue!
6. Can you name three consecutive days without using the words Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, or Sunday? Yesterday, Today, and Tomorrow!
7. Why are 1998-dollar coins worth more than 1997-dollar coins? Because there are more of them!
8. Kevin's mother has three children. The first was called Alpha, the second was called Beta. What was the name of the third? Kevin, since it was Kevin's mother and Kevin's brothers were Alpha and Beta.
9. What word is the same backwards and upside down? NOON.
10. What can go up a chimney down, but can't go down a chimney up? An umbrella.
11. There's one sport in which neither the spectators nor the participants know the score or the leader until the contest ends. What is it? Boxing
12. What has roads but no cars, rivers but no water and hills but no trees? A map!
13. I have a large money box, 10 inches square and 12 inches tall. Roughly how many coins can I place in my empty money box? Just one, after which it will no longer be empty!

My friend says to me:
"What rhymes with
orange"

I said: "No it doesn't"

Contributed by Mike Mabbitt...

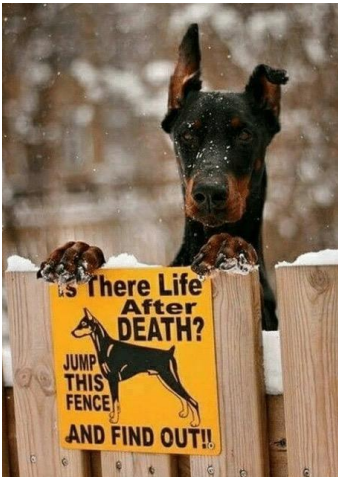
Signs of The Times, So Buckle Up Your Seat Belt and Get Ready for This Generation!



Tasteless Joke -So I'm holding the door for this Japanese guy... And he looks over to me and says, "Sank you!" I can't believe he brought up Pearl Harbor like that...

Contributed by Doug Walker...

Intellectual Readings



What do we learn from cow, buffaloes & elephants?



It's impossible to reduce weight by eating green grass and salads and walking



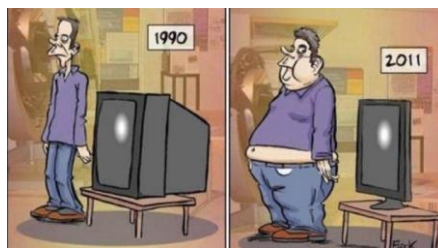
DON'T LIE,
DON'T STEAL,
DON'T CHEAT,
DON'T SELL DRUGS...



THE GOVERNMENT
HATES COMPETITION



Every family has one weird relative.
If you don't know who it is, then it's probably you.



We'll be friends until we are old and senile. Then, we'll be NEW friends.

Words of Wisdom from Bill Gates

(A must read)

Love him or hate him, he sure hits the nail on the head with this!

Bill Gates gave a speech at a High School about eleven things they did not and will not learn in school. He talks about how feel-good, politically correct teachings created a generation of kids with no concept of reality and how this concept set them up for failure in the real world.

Rule 1:
Life is not fair - get used to it!

Rule 2:
The world doesn't care about your self-esteem. The world will expect you to accomplish something BEFORE you feel good about yourself.

Rule 3:
You will NOT make \$60,000 a year right out of high school. You won't be a vice-president with a car phone until you earn both.

Rule 4:
If you think your teacher is tough, wait till you get a boss.

Rule 5:
Flipping burgers is not beneath your dignity. Your Grandparents had a different word for burger flipping: They called it opportunity.

Rule 6:
If you mess up, it's not your parents' fault, so don't whine about your mistakes, learn from them.

Rule 7:
Before you were born, your parents weren't as boring as they are now. They got that way from paying your bills, cleaning your clothes and listening to you talk about how cool you thought you were: So before you save the rain-forest from the parasites of your parent's generation, try delousing the closet in your own room.

Rule 8:
Your school may have done away with winners and losers, but life HAS NOT. In some schools, they have abolished failing grades and they'll give you as MANY TIMES as you want to get the right answer. *This doesn't bear the slightest resemblance to ANYTHING in real life.

Rule 9:
Life is not divided into semesters. You don't get summers off and very few employers are interested in helping you FIND YOURSELF. (Do that in your own time.)

Rule 10:
Television is NOT real life. In real life, people actually have to leave the coffee shop and go to jobs.

Rule 11:
Be nice to nerds. Chances are you'll end up working for one.

Members' Noticeboard

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MINERAL CLUB**

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Luther Rd Loxton**

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Faceting
Cutting & Polishing Stone

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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 NEW SIZE
398 x 290 x 98mm.....	\$4.00

Greg Vort-Ronald

0413796279 or luv2paint@iprimus.com.au

all boxes and flats are folded together, no staples required
(Prices subject to change)

Contributed by Doug Walker...



This photo was taken by a soldier in Afghanistan of a helicopter rescue mission. The pilot is a PA National Guard guy who flies EMS choppers in civilian life. Now how many people on the planet you reckon could set the ass end of a chopper down on the roof top of a shack, on a steep mountain cliff, and hold it there while soldiers load wounded men in the rear. If this does not impress you... nothing ever will.

Useful Internet Links

- 2019 Australian Gem & Mineral Calendar: [Click here...](#)
- Adelaide Gem and Mineral Club: [Click here...](#)
- AFLACA-GMCASA: [Click here...](#)
- Australian Federation of Lapidary and Allied Crafts Association (AFLACA): [Click here...](#)
- Australian Lapidary Club Directory: [Click here...](#)
- Australian Lapidary Forum: [Click here...](#)
- Broken Hill Mineral Club: [Click here...](#)
- Enfield Gem and Mineral Club Inc: [Click here...](#)
- Flinders Gem, Geology, and Mineral Club Inc: [Click here...](#)
- Gem and Mineral Clubs Association of South Australia: [Click here...](#)
- Gemcuts: [Click here...](#)
- Lapidary World: [Click here...](#)
- Metal Detectors - Garrett Australia: [Click here...](#)
- Metal Detectors - Miners Den Adelaide: [Click here...](#)
- Metal Detectors - Adelaide Agent for Garrett Australia: [Click here...](#)
- Mineralogical Society of SA Inc: [Click here...](#)
- Murraylands Gem and Mineral Club Inc: [Click here...](#)
- NQ Explorers: [Click here...](#)
- Prospecting Australia: [Click here...](#)
- Southern Rockhounds: [Click here...](#)
- Tea Tree Gully Gem and Mineral Club: [Click here...](#)
- The Australian Mineral Collector: [Click here...](#)