
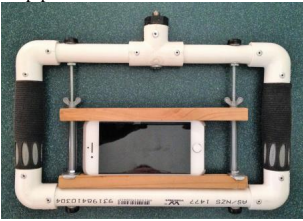



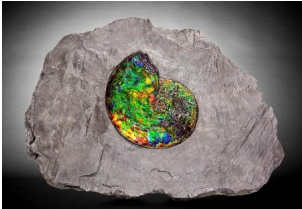





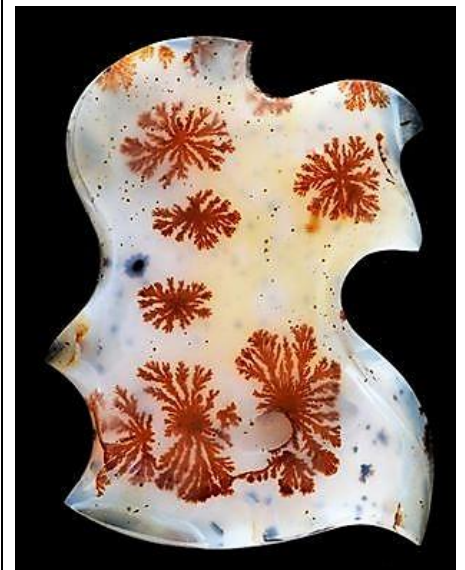
Tea Tree Gully Gem & Mineral Club Inc. (TTGGMC)
Clubrooms: Old Tea Tree Gully School, Dowding Terrace, Tea Tree Gully, SA 5091.
Postal Address: Po Box 40, St Agnes, SA 5097.
President: Ian Everard. 0417 859 443 Email: ieverard@bigpond.net.au
Secretary: Claudia Gill. 0419 841 473 Email: cjrgill@adam.com.au
Treasurer: Russell Fischer. Email: rfischer@bigpond.net.au
Membership Officer: Augie Gray: 0433 571 887 Email: teatreegullygmc@gmail.com
Newsletter/Web Site: Mel Jones. 0428 395 179 Email: teatreegullygmc@gmail.com
Web Address: <https://teatreegullygemandmineralclub.com>

**February
Edition
2019**

"Rockzette" Tea Tree Gully Gem & Mineral Club News

President's Report	General Interest	Club Activities / Fees						
<p>Hi All, I hope you all survived the heat without too much discomfort.</p> <p>NOTE: We have only six months to go 'til our Exhibition July 20th and 21st 2019. Please keep these dates free. Cheers, Ian.</p>	<p>Pages 7 & 8: TTGGMC Christmas Lunch, December 9th 2018...</p>  <p>Pages 9 & 10: DIY – PVC pipe craft...</p>  <p>Pages 11 to 13: 'Newcastle and Rail – The Never-ending Story'...</p>  <p>Pages 14 to 16: Karoonda – Peebinga Railway Line Re-visited...</p>  <p>Pages 17 to 20: General Interest, humour, and Members' Noticeboard ...</p>  <p style="text-align: center;">***</p>	<p>Meetings Club meetings are held on the 1st Thursday of each month except January. Committee meetings start at 7 pm. General meetings - arrive at 7.30 pm for 8 pm start.</p> <p>Library <i>Librarian - Augie Gray</i> 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>Tuesday Faceting/Cabbing Tuesdays - 10 am to 2 pm. All are welcome. Supervised by Doug Walker (7120 2221).</p> <p>Wednesday Silversmithing Wednesdays - 7 pm to 9 pm. All are welcome. Supervised by Augie Gray (8265 4815 / 0433 571 887).</p> <p>Thursday Cabbing Thursdays - 10 am to 2 pm. All are welcome. Supervised by Augie Gray (8265 4815 / 0433 571 887).</p> <p>Friday Silversmithing Fridays - 9 am to 12 noon. All are welcome. Supervised by John Hill (8251 1118).</p> <p>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 <i>Policy No. 1 - 20/11/2006</i>. It is necessary that <i>Health and Safety</i> regulations are adhered to always. Everyone using the workshop must ensure:</p> <ul style="list-style-type: none"> • 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. <p><i>NOTE: The Tea Tree Gully Gem & Mineral Club Inc. will not be held responsible or liable for any person injured while using the club machinery or equipment.</i></p> <p>Club Subscriptions:</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>\$10.00 Joining Fee</td> <td></td> </tr> </table>	\$25.00 Family	\$20.00 Family Pensioner	\$15.00 Single	\$12.50 Single Pensioner	\$10.00 Joining Fee	
\$25.00 Family	\$20.00 Family Pensioner							
\$15.00 Single	\$12.50 Single Pensioner							
\$10.00 Joining Fee								
Diary Dates / Notices								
<p style="text-align: center;">Happy Birthday</p> <p>Members celebrating February birthdays: 9th – Bev Freeman. 10th – Ellen Dillon. 15th – Ken Jewell. 28th – Kevin Selfe.</p> <p style="text-align: center;">***</p> <p style="text-align: center;">NB. TTGGMC 2019 Biennial Exhibition Saturday July 20th and Sunday July 21st, 2019.</p> <p style="text-align: center;">***</p>								
General Interest								
<p>Pages 2 to 4: Augie's February 2019 Agate and Mineral Selections ...</p>  <p>Pages 5 & 6: Ian's February 2019 Quartz Collection Selections ...</p> 								
<p>The Tea Tree Gully Gem & Mineral Club Inc. is not and cannot be held responsible or liable for any personal injuries, loss or damage to property at any club activity, including, but not limited to, meetings, field trips, all crafts and club shows. An indemnity is to be signed by all participants before each and every field trip activity they attend.</p>								

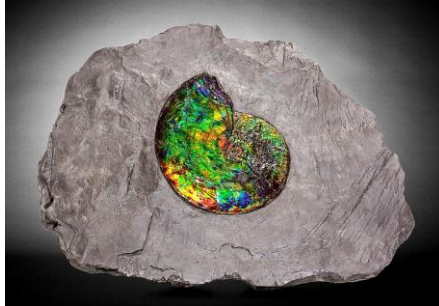
Augie's February 2019 Agate Selections – Montana.



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



Augie's February 2019 Mineral Selections.



Ammonite (*Platoniceras costatum*, Late Cretaceous) in Matrix - Bearpaw Formation, Alberta, CANADA.



Azurite - El Cobra Mine, MEXICO.



Chrysocolla stalactites.



Heliodor.



Cuprian Smithsonite - Tsumeb Mine, Tsumeb, Otjikoto Region, NAMIBIA.



Malachite - Mapimi, Durango, MEXICO.



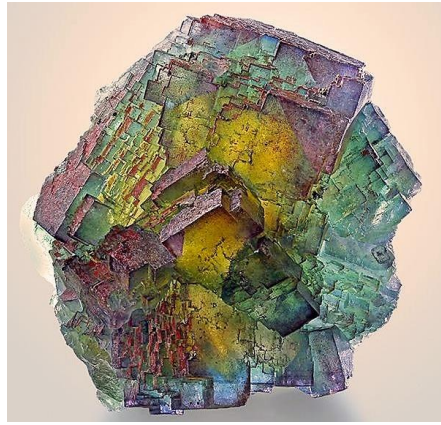
Native Silver on Calcite - Kongsberg, NORWAY.

Continued next page...

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



Plume Agate.x



Rainbow Fluorite - Bergmännisch Glück Mine, Frohnau, Erzgebirge, Saxony, GERMANY.



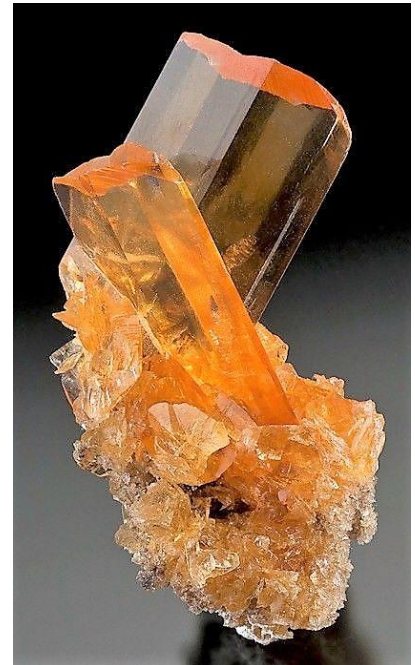
Rutile.



Quartz Scepter with Amethyst tip - Goboboseb Mts., Brandberg Area, Erongo Region, NAMIBIA.



Rainbow Lattice Sunstone - Harts Range, NT.



Selenite - Las Salinas, Otume Village, Pisco Province, Ica Department, PERU.



Rutile & Haematite in Quartz.



Quartz stalactite.



Tourmaline - Pederneira Mine, São José da Safira, Doce Valley, Minas Gerais, BRAZIL.



Thomsonite.

Contributed by Ian Everard...

Ian's February 2019 Quartz Collection Selections.

More Agate Creek Crystal Hill agates from my 2018 trip. NOTE: These specimens are sawn only; not polished.



Ian's February 2019 Quartz Collection Selections - continued.



0075 Quartz with Ankerite & Sphalerite & Pyrite, Trepcia, YUGOSLAVIA.



0684 Pyrite on Quartz, ROMANIA.



0864 Quartz, MEXICO.



0654 Calcite on Quartz, Cavnic, ROMANIA.



0693 Quartz on Stibnite, ROMANIA.



0853A Calcite on Quartz, Trepcia, BOSNIA.



0679 Calcite on Quartz, ROMANIA.



0697 Calcite on Quartz, ROMANIA.



0853B Calcite on Quartz, Trepcia, BOSNIA.



0683 Pyrite on Calcite on Quartz, ROMANIA.



0945 Chalcopyrite on Quartz, Kushov Madan, BULGARIA.



0698 Quartz, ROMANIA.



0854 Quartz on Pyrite, Cavnic, Maramures Co, ROMANIA



0698 Quartz, ROMANIA.

TTGGMC 2018 Christmas Lunch

(Held in the clubrooms)

The Christmas lunch on December 9th, 2018 was well attended by 32 people, and the weather was perfect. The glazed ham was a hit as usual, and there was no shortage of tucker. Three quizzes courtesy of Janet Harris and Augie Gray proved a challenge, and the 2 large raffle hampers were won by Pat Mabbitt (1st draw) and Janet Jones (2nd draw). Many thanks to all who contributed items. Ian.



Augie, Claudia and Graeme busy buttering slices of French Sticks (bread rolls)?



Graeme, Ian and Gerry.



'Salads in there and desserts out here!'



Who complained, 'How can a man have a drink when there ain't no glasses?'



"Here we go, we're going to get a photo!" L>R Augie and Chris.



Glazed ham prepared by Ian.



Two Christmas Raffle Prizes...contents donated by members.



(Background L>R – Gerri, Tony, Graeme and Russel). R foreground...Ian slicing the traditional glazed ham.



Settling down for a pre-lunch chat and drinks.



Ian is well into slicing the glazed ham.



Come and get it!



Glazed Ham (provided by the club) and Salads. (provided by members). L>R – Russel, Chris, Helen, Janet, Mary, Ellen, Tony, Pat and Jean.



L>R Janet, Ian, John.



Mel's Main.



Ian distributing, 'Name the Christmas Carols' puzzle to table 1.



Ian distributing, 'Name the Christmas Carols' puzzle to table 2.



Ian distributing, 'Name the Christmas Carols' puzzle to table 3.

Continued next page...

TTGGMC 2018 Christmas Lunch
Continued...



Dessert. L>R: Allan, Cheryl, Mary, Ken, Augie and Brenda.



Working on Puzzles x 3. Table 1. L-F>B: Ellen, Augie, Janet and John. R-F>B: Jean, Mal, Tony, Wendy, Tom and Wife.



Working on Puzzles x 3. Table 2. L-F>B: Doug, Russell, Chris, Helen, and Claudia. R-F>B: Mary, Pat, and Ken.



Working on Puzzles x 3. Table 3. L-F>B: Janet, Gerri, and Allan. R: Pat.



Who got the most correct answers?

Ian making it quite clear that answers must be compliant with the master answer sheet...variations not accepted.



Mike making an impromptu speech about why people shouldn't have a hip replacement, because it's bloody painful!



Ian rewarding the winners on table 1.



Ian rewarding the winners on table 2.



Ian rewarding the winners on table 3.



Raffle Draw 1 winner – Pat and Mike.



Raffle Draw 2 winner – Janet.

Contributed by Mel...

Sign On...



Not quite the same as: “*You scream, I scream, we all scream for ice-cream! AMSCOL ice-cream, that is!*”

AMSCOL ICECREAM

Click/tap on the hyperlinks below to see Ernie Sigley & Angela Stacey advertising AMSCOL products in 1965.

[TV advertising AMSCOL 1965 A](#)

[TV advertising AMSCOL 1965 B](#)



...Sign Off!

Contributed by Mel...



'The Runner' made with PVC pipes

DIY – PVC Pipe Craft

What is PVC pipe and what is its common use?

It's the white **plastic pipe** commonly used for **plumbing** and drainage. PVC stands for **polyvinyl chloride**, and it's a common replacement for **metal** piping. PVC's strength, durability, easy installation, and low cost have made it one of the most widely used plastics in the world.

NOTE: PVC pipe should not be used for any projects involving high temperatures as it softens with high temperatures and its capacity to maintain shape and support pressure or weight is compromised; very dangerous!

So, what is PVC Pipe Craft then?

To my mind, it's the non-traditional/non-industrial use, for example, in-house and backyard furniture, backyard structures such as hot house frames, décor, play pens, pet beds, storage organisers, ice cube trays, garden irrigation, children's play equipment, tool and desktop tidies, stools, tables, fishing rod holders, and the list goes on.

Why did I develop an interest in PVC Pipe Craft?

When I swapped from using a traditional video camera to an iPhone (with 4K video resolution) I had a fear of dropping the iPhone out of a train window when hanging out the window to video the train's steam locomotive ahead. I needed something that I could clamp the iPhone in and have handles that I could grip without fear of dropping, and still maintain control of the iPhone's video camera.

Well, here it is (and it's my own design) ...



The bolt at the top is spring loaded to allow an external microphone or traditional camera to be mounted. Pop-rivets were used instead of PVC cement to hold this frame together. Why? PVC cement is messy and permanent. Whereas, I wanted the option to dismantle the frame if required. It can be done, as I found out with another frame that I made for traditional cameras, which was reconstructed three times to accommodate various cameras.



Sony 4K video camera – frame suitable for out-of-window shots, for example, when in a car running parallel to a moving train.



T-shaped portable frame... can be handheld from the top pipe, gripped by both grips and pulled back to the chest to gain three-way support, or placed on the ground or table as a portable tripod. This is the unit that was reconstructed x 3. (The apparent frame distortion is caused by the angle of my iPhone when taking the picture.)

Expanding my PVC Pipe Craft Interests!

With some leftover pvc pipe and fittings I have made a power cable hand-winder. It works well when winding the cable in, providing I keep the winder in-line with the cable, but unwinding works without any issues.



What's next?

I intend to build an 8-person-sized outdoor table around the perma-pine pole that the cable winder is leaning against. The table will be stool height. Despite basic stools being available from Bunnings at a reasonable price, I've had a go at a pvc pipe stool based on a design shown in a YouTube video. All materials except the seat were purchased from Bunnings. The seat is an unused cutting board. All up cost was expensive at \$83.00.



This is my finished stool based on the stool created in the following video. I have used pop-rivets rather than pvc cement. The design could be improved by using pvc Tees with a side outlet rather than so many pvc Tees. This option may remove some flexing when getting on and off. This stool may end up as a multi-storied pot plant stand with the cutting-board seat replaced by several shelves.

How to make a stool out of PVC pipe

Click/Tap on the following hyperlink to watch video on YouTube...

[How to make a stool out of pvc pipe.](#)

Sourcing PVC pipe and fittings

Stratco and Bunnings are handy for pvc pipe and basic fittings in 15mm, 20mm and 25mm sizes.



PVC Tee and PVC 90° Elbow (Not to scale)

However, other fitting combinations, such as crosses, elbow with outlet, and tee with outlet, to my knowledge are not available from these two sources.



PVC Tee with side outlet and elbow with side outlet.

There is an abundance of sites on the internet to source quite complex combinations of fittings, however, these are overseas.

I have not, yet, checked out local plumbing suppliers.

PipeOnline, is a West Australian source for crossovers in 20mm and 25mm sizes as well as the fittings already mentioned.



PVC Crossover.

Click/Tap on the following hyperlink to access...

[PipeOnline - Pipe Supplies](#)

Continued next page...

Sourcing PVC pipe and fittings

Continued...

Another Australian website of interest...



Click/Tap on the following hyperlink to access...

[KlevertCages](#)



Some KlevertCages Videos

List of PVC projects from PVC pipes and connectors - KlevertCages

Click/Tap on the following hyperlink to access...

[List of PVC projects](#)

Garden protection frames made from PVC pipe and connectors - KlevertCages

Click/Tap on the following hyperlink to access...

[Garden protection frames](#)

3 Way PVC Connector video - KlevertCages

Click/Tap on the following hyperlink to access...

[3 Way PVC Connector](#)

Mini greenhouse / shade house - KlevertCages

Click/Tap on the following hyperlink to access...

[Mini greenhouse / shade house](#)



Other Video Sources About PVC Pipe Craft

Beginner Tutorial Cut and Assemble PVC Pipe

Click/Tap on the following hyperlink to access...

[Beginner Tutorial Cut and Assemble PVC Pipe](#)

Proper Technique for Gluing PVC Joints (Solvent Cement)

Click/Tap on the following hyperlink to access...

[Proper Technique for Gluing PVC Joints](#)

How to Cut and Glue PVC Pipe Beginners Guide

Click/Tap on the following hyperlink to access...

[How to Cut and Glue PVC Pipe Beginners Guide](#)

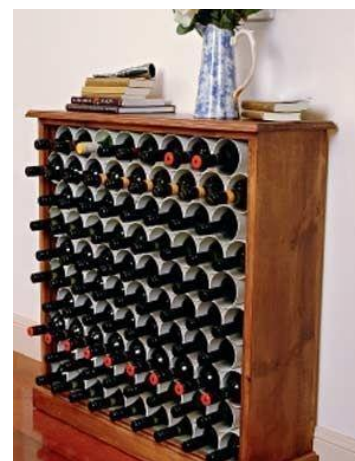
Skillbuilder: 4 Tips for Working with PVC Pipe

Click/Tap on the following hyperlink to access...

[4 Tips for Working with PVC Pipe](#)

PVC Pipe Craft Ideas

There are hundreds if not thousands of ideas on PVC pipe craft on the internet – Pinterest is a good starting point...



1012 Best PVC Pipe Craft Images in 2019
Click/Tap on the following hyperlink to access...

[1012 Best PVC Pipe Craft Images in 2019](#)

C.R.A.F.T.

CREATING REALLY AWESOME fun THINGS

Click/Tap on the following hyperlink to access...

[Creating really awesome fun things](#)

Contributed by Mel Jones...

'Newcastle and Rail – The Never-ending Story'

by Garry Reynolds

Part 6 of 20+...



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 vulnerability of the coal, rail and shipping industries in the Hunter to severe weather has always been a challenge. A goods train tiptoes through the waters in the 1995 Maitland Floods. Source: *Hiveminer*.



The 'Sea Train' to Newcastle in the 1955 Maitland Floods. Source: *Locofonic*.

We have been following the exploits and behind-the-scenes power plays of the dominant Australian Agricultural Company (AA Co) and its influence on the development of the coal industry, shipping and Newcastle's railway system. The three have been intimately linked in a chain that eventually spanned the world.



While a growing trading port for coal, the treacherous nature of the Newcastle Coast and Harbour Entrance saw viewing ship wrecks become part of regular social outings. Source: *Find Boat Pics*.

Through the 1830s-1840s, the AA Co with its well-connected wealthy backers in London, was making good profits with a Government-granted 30-year monopoly in coal mining in Newcastle.

Through the 1830s-1840s, the AA Co with its well-connected wealthy backers in London, was making good profits with a Government-granted 30-year monopoly in coal mining in Newcastle.

Aside from the enterprising Dr James Mitchell, one of the challengers to the AA Co was James Brown who leased 32 hectares at a place called Four Mile Creek near Maitland in 1843.

The Browns got off to a good start selling their coal illegally, ignoring the monopoly law and undercutting the AA Co's price in the growing district of Maitland and the inland port of Morpeth alongside the Hunter River upstream from Newcastle. Later, they expanded their operation by purchasing a neighbouring illegal mine with a horse-drawn railway at Four Mile Creek.

While only small family-run operations, the AA Co directors in London set out to crush the Browns in case any other potential competitors got ambitious ideas. Pent-up corporate and political pressure from London, eventually forced the NSW Colonial Government to take the Browns to court over breaching the AA Co's monopoly – expending taxpayers' money rather than the AA Co's.

In 1847, the Browns were ordered to cease mining. Following extensive court cases and the Government's desire to extend mining, the monopoly legislation was repealed in 1850 due to the Brown's and Dr Mitchell's persistence and determination.

In 1852, after ten years of small-scale mining in the East Maitland area and with the freeing up of mining areas after the A.A. Co. lost its monopoly, James and Alexander Brown moved to Dr Mitchell's 'Burwood Estate' south of Newcastle and built a new mine. This mine was so successful that in 1856 it merged with the neighbouring mines on the estate to form the 'Newcastle Coal & Copper Co'.

Ironically, despite the persistently heated court action and personal attacks over the years, Dr Mitchell's eldest daughter married Edward Christopher Merewether who had arrived in Newcastle as the General Superintendent of the A.A. Company!



'Hillcrest Hospital' circa 1950, formerly 'The Ridge' on Merewether Estate. Source: Newcastle City Library.

The couple built and dwelt in a mansion called

'The Ridge'. In the process, the area's name was changed from 'Burwood', after Dr Mitchell's wife's home in England, to 'Merewether'.

Meanwhile, by 1857, J & A Brown owned extensive property assets and businesses in Newcastle including a ship-chandlery, an import-export business, and at least one ocean-going ship. The Browns would eventually become railway barons as well as coal and shipping kings.

The family went on to acquire and develop mines close to Newcastle, including a valuable lease around Minmi. In a way, they spearheaded the industrial and transport revolution in Australia and were at the forefront of colonial steam and rail technology, and made the Minmi mines the most modern in the Colony.

Growth of Maitland and Morpeth

In the Maitland District, aside from the Brown's initial illegal coal developments, timber and agricultural industries combined with the fertile soils of the rich floodplain 30kms to the North West of Newcastle, were increasingly open to market access via the Hunter River. The nearest port to Maitland with reasonably deep water for shallow draught vessels was Morpeth.

It was a prime port for loading corn, wheat (until affected by rust) and alternative crops such as sugar cane. Sometimes, flour processed at Morpeth's Mill, as well as wool from an expanding pastoral industry further up the Hunter Valley, were despatched from Morpeth but its capacity was always limited by shallower waters than the Hunter's opening to the sea at Newcastle.

However, in the early decades of the 19th century, Newcastle was focused on coal exports and had no port facilities for general cargoes. The road between Maitland and Newcastle was practically impassable. While there were some very short pieces of railway built in Newcastle from mine to port, there was no full-scale railway. The time for a railway between Maitland and Newcastle would come, but not for several decades.

The Great Northern Road

In any case, prior to a substantial railway being considered, one of the most ambitious engineering projects of nineteenth-century Australia, the construction of the 264 km Great Northern Road from Sydney to the Hunter Valley by convict labour, was underway.

Continued next page...

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

Sadly, despite years of sweat and grind by up to 720 shackled prisoners from the decade from 1826 to 1836, it proved an abject failure.

The lives of the road-building convicts were not easy. They weren't meant to be – it was a task and region which was designed to deter further crime.

After all, these convicts were the recalcitrant ones who had committed repeat offences while in custody. Instead of being allowed to just languish in gaol, they were placed in leg-irons weighing up to 6 kilos which could only be applied and removed by a blacksmith.

If the recalcitrant convicts completed a sentence for their secondary offences without further misdemeanours, they could be 'rewarded' by being transferred to a Road Party. Here they could wallow in the pleasure of undertaking the same hard work but without having to wear the leg-irons. In Monty Python terms – luxury!



A convict-built stone embankment on the Great Northern Road still revealing the chain gangs' pick marks. *Source: Stephen Gard.*

The Great Northern Road was regarded as an engineering marvel for its time, especially considering the limited skills of the penal labour. Remnants of the Road still feature spectacular stone buttresses, culverts, bridges and twelve-metre high retaining walls hidden away in the bush plateaus between Sydney and Newcastle.

So, if it was an engineering triumph carved through rugged sandstone terrain that hindered early agricultural expansion, why was the Road such failure in practical terms?

The Road was not popular. It had steep grades, no permanent watercourses, nor horse feed along the route in the light sandy soils. It was also isolated, by-passing existing settlements.

By 1836, as the few remaining convict gangs were completing the last northern sections of the Road, it had been almost entirely abandoned as a route to the Hunter Valley. Alternative means of getting to the Hunter Valley, such as sailing packets then steamships were needed and eventually a railway. Strangely though, railway development would see Newcastle joined to the distant Brisbane by rail before Sydney. But more of that in the future.

The expansion of shipping

In response to the growing market opportunity of directly serving the expanding settlements in the Hunter Valley, the Australasian Steam

Company and the Hunter River New Steam Navigation Company established large sheds and wharf accommodation at Morpeth. Here cargoes were brought in by horse and bullock teams and droghers (small barges with a sail) from the upper navigable reaches of the Hunter and Paterson Rivers. The goods were then loaded onto ocean-going vessels. Some coal chutes were installed to help loading from a growing number of small surrounding mines.



Wreck of the "Adolphe" on the Stockton Breakwater at the Newcastle Port Entrance. *Source: Bronzie.*

Sixty Milers

The trip by sailing ship between Sydney and Newcastle was usually made at night and took about 12 hours. After arriving at Newcastle, travellers could take another sailing ship to Morpeth.

In 1831, the English-built 'Sophia Jane', the first steam ship, a paddle steamer, to arrive in Australia was put onto the profitable run direct between Sydney and Morpeth.

In 1832, the Australian built 'William The Fourth', joined the 'Sophia Jane' on the same route. These services allowed Morpeth to become a major port, and for nearby Maitland to grow substantially at the expense of Newcastle which was being regularly bypassed.

Both ships were known as 'sixty-milers', a nickname for ships that carried cargo the sixty miles from Sydney to Newcastle.



Inspecting the wreck of the ill-fated 'City of Newcastle' in 1878 from its namesake's cliffs. *Source: Coal River.*



Overlooking the wreck of the 'City of Newcastle' in 1878 from its namesake's cliffs. *Source: Hunter Living Histories.*

Treacherous Coast

However, while shipping technology improved, the dangers of the treacherous coastal run were still there, and many vessels continued to founder.



The Newcastle lifeboat 'Victoria' launched in 1897. *Source: Newcastle Herald.*

In response, the Newcastle Lifeboat Service was established in 1838 and lasted until 1946.



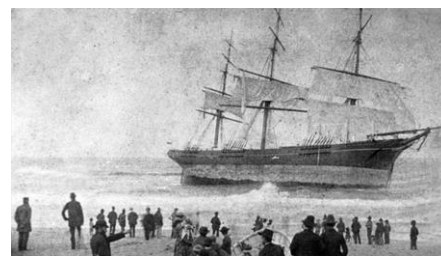
Newcastle Rescue Rocket. *Source: ABC.*

Later, working alongside the Life Boat crews, in 1866, the Newcastle Rocket Brigade came into service and operated right up 'til 1974.



The Rocket Brigade carrying out an exercise post WW2. *Source: ABC.*

The job of the Rocket Brigade was to fire a rocket with a light line attached from the shore over the distressed vessel. A heavier rope and pulley would be fed out to the foundering boat to enable a 'breeches buoy' (a large life ring with a big canvas bag in it and two holes in the bottom for legs) to be sent out. It was a flying fox arrangement, and in the case of the 'Susan Gilmore' in 1884, not only were the passengers and crew rescued in a storm, but two dogs, a cat and a pet canary as well.



The "Susan Gilmore" aground at Bar Beach, Newcastle, in 1884. *Source: ABC.*

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

Increased Defence

Meanwhile, the strategic importance of Newcastle was growing as the key industrial port in Australia and the source of the best coal for stationary or mobile steam engines and the growing production of coal gas in Australia and overseas.

To defend the important port, the hilltop overlooking the Newcastle Harbour Entrance at Nobbys Head had an earthen fort with battery constructed in 1828 and equipped with seven guns. In 1876, with fears of a Russian attack, Fort Scratchley was more substantially constructed with concrete and gun batteries built into the cliffs. In 1892, defences on the key port of Newcastle were strengthened with mines which could be exploded remotely from the Fort being laid in the Harbour Channel. Artillery could also be popped up, shoot and then be concealed through retractable hydraulic scissor hoists.



Fort Scratchley. Source: Heritage Hunter.

The rise of farming in the Valley

The Hunter River Valley was the first area outside Sydney's Cumberland Plain to be permanently occupied by European settlers, however the initial small farmers were only allowed the 'indulgence' by Governor Macquarie and they could be removed on his say so.

Because of the isolation deliberately created around the Newcastle Penal settlement as a place of secondary punishment until closure in 1823, there was a policy of having no large-scale settlement of the Hunter Valley until the worst convicts were transferred to Port Macquarie.

When the 'land gates' were opened, some of the new settlers to the fertile floodplain around Maitland came with wealth and privilege. Under new laws in the Colony of NSW, the rich were favoured with granted land according to their resources and allocated a convict for every 100 acres able to be effectively-developed. Some were also allocated allotments in the township of Newcastle.

To serve the expanding rural community developing on the Maitland Floodplain, Morpeth, sited on deeper reaches of the Hunter River, developed initially as a private town and port.

The settlements were so successful in meeting the needs of the Valley settlers, that Morpeth and Maitland gradually overtook Newcastle as the focus for trade and administration while

Newcastle was regarded as a dirty industrial coal town that most free settlers avoided.

The Great Northern Railway

However, one major disruptive innovation suddenly turned the status quo upside down. To steal trade from Hunter River steamers, a private railway linking the Newcastle District to Maitland was proposed in 1853, and the Hunter River Railway Company was founded involving many of the entrepreneurs involved with the Sydney Railway Company. Despite initial Government assistance, it failed as occurred in Sydney, and the rail construction had to be taken over by the Government.



Honeysuckle Station by Newcastle Harbour in the early 1900s. Source: Newcastle Herald.

Essentially, the construction of the Great Northern Railway in 1857, from East Maitland to Honeysuckle Point (located between the former Civic Station and Wickham Station) in Newcastle, bypassed Morpeth. This stimulated the development of Newcastle as the regional port and eventually dominant urban centre. Morpeth got its own railway a few years later but the horse had bolted.

The Great Northern Railway provided stiff competition for the shipping trade plying between Morpeth and Newcastle as trains took about an hour to complete the trip from Newcastle in any weather, whereas it was about three hours by steam ship subject to conditions. While many shortrange customers would be lost from ships to the railway, passengers or goods bound for Sydney or other distant destinations still took the boat from the start, rather than boarding at Newcastle.

Yet the railway construction did not go smoothly and the location of Maitland Station on the floodplain left it highly vulnerable to flooding which was to create massive challenges in the future.

Maitland Flood-prone



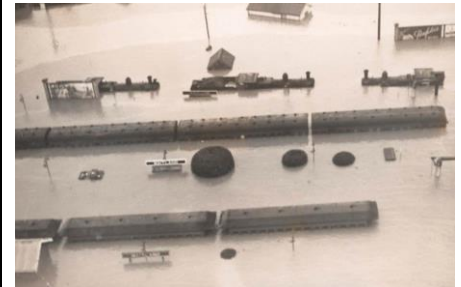
The next boat on Platform 1 is due to depart! West Maitland Station (later renamed Maitland) in the 1912 Flood. Source: Hiveminer

The early decision to locate a major railway station in what was called West Maitland and then Maitland was to have significant repercussions for the railway in subsequent years. The railway infrastructure would be severely hit by a series of floods over the years.



Wooden end-platform cars beginning to drown in the Maitland Flood of 1955. Source: Flickr.

Perhaps the most dramatic and best captured photographically was in 1955 when a massive deluge hit the City.



A flood-devastated Maitland Station in 1955. Source: Hiveminer.

Aside from the massive effects on railway infrastructure, 5200 houses were inundated, with 59 homes destroyed, and 40,000 people evacuated in the Hunter. There were 24 deaths – 5 by electrocution in the rescue operations.



Maitland Signal Box just prior to being swept away in the flood deluge of 1955. Source: SES.



Sandbagging Maitland Railway Station in 2015. Source: Newcastle Herald.

The vulnerability of the rail and road corridor between Maitland and Newcastle remains, as seen in the side-effects of Hurricane Harvey further North in 2015.



Flood pressure on the transport corridor between Maitland and Newcastle in 2015. Source: Newcastle Herald.

Continued next month...

Karoonda/Peebinga Line Revisited

A pictorial record of a South Australian Railways (SAR) train servicing people along the Karoonda - Peebinga branch line in the Murray Mallee District, SA. - December 28th, 1964.

This article was triggered by a previous article on page 9, in the February 2017 TTGGMC Newsletter, which was sourced from David Richardson, a past member of our club. The article, ‘*Steam Train Driver’s Memories*’, included details about a ‘Saurer Railcar’ that serviced people along the Karoonda – Peebinga branch line.

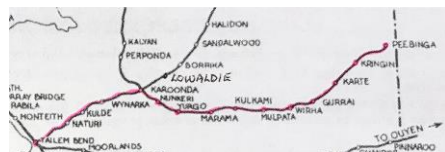
That newsletter article was picked-up on the TTGGMC website by Paul Tol, who was researching and writing an article about the history of the ‘Saurer Railcar’ in South Australia. See his completed article, ‘*Saurer A Type Railcar*’, pages 9 and 10, in the January 2019 TTGGMC Newsletter.

On the second page of Paul’s article (page 10 of the newsletter) is a picture of special interest to me (see the same picture 105283 in column 2, this page). The picture includes an Rx class steam locomotive (a familiar sight in my youth), a Commer railmotor (which I was familiar with), and the Karoonda grain silos (which I worked on during its construction as a concrete labourer). I googled the internet in search of more related pictures and found three others involving the same locomotive. That was all I could find at the time.

However, unrelated to this activity, I received an email from Garry Reynolds, author of ‘*Newcastle and Rail – The Never-ending Story*’ series of articles appearing in the club’s newsletters, that resurrected my enthusiasm to search again. Garry had found a website featuring a lot of South Australian train photos, and ‘Did I know about it?’ Well, no I didn’t. But the wheel was about to turn. Garry had provided me with a link to ‘[Teenager Railfan BlogSpot – I was a teenage railfan](#)’. At this site, I clicked on the link, ‘[Weston Langford Railway Photography](#)’ website. On Weston’s website I tried several searches, ‘*Karoonda*’ and ‘*Peebinga*’ which produced more pictures. However, a search by date, ‘*December 1964*’ produced a much larger collection of relevant pictures; starting at Taillem Bend and ending at Peebinga, which also included many of the sidings in between. ***Now, that was a find!***

These pictures cover, what some may consider just a minor branch line, but in reality, the pictures visually portray a service in operation that was very important to the lives of the people it served for many years.

The pictures sequence one train on its complete journey along the branch line; a rare set indeed.



The pink line follows the route of the train from Taillem Bend to Karoonda then branching off to Peebinga. (Our farm, where I grew up, ran on the right side of the line between railway sidings Lowaldie and Borrika, just to the North East of Karoonda.



105282 Taillem Bend Down Goods to Peebinga Rx 227.



105283 Karoonda Down Goods to Peebinga Rx 227 also Railmotor.



105284 Karoonda Down Goods to Peebinga Rx 227.



105285 Karoonda Down Goods to Peebinga Rx 227.



105286 Karoonda Down Goods to Peebinga Rx 227.



105287 Yurgo Down Goods Rx 227.



105288 Yurgo Down Goods Rx 227.



105289 Yurgo Down Goods Rx 227.



105290 Marama Looking towards Peebinga.



105291 Marama Down Goods Rx 227.



105292 Marama Down Goods Rx 227.



105293 Mulputa Down Goods Rx 227.

Karoonda/Peebinga Line Revisited *Continued...*



105294 Mulpata Down Goods Rx 227.



105295 Mulpata Down Goods Rx 227.



105296 Mulpata Down Goods Rx 227.



105297 Mulpata Down Goods Rx 227.



105298 Gurrain Down Goods Rx 227.



105299 Gurrain down side Down Goods Rx 227.



105300 Karte Down Goods Rx 227.



105301 Karte Down Goods Rx 227.



105302 Karte Down Goods Rx 227.



105303 Karte - Kringin Down Goods Rx 227.



105304 Karte - Kringin Down Goods Rx 227.



105306 Kringin upside Down Goods Rx 227.



105307 Kringin Down Goods Rx 227.



105309 Kringin Down Goods Rx 227.



105310 Kringin Down Goods Rx 227.



105311 Kringin Down Goods Rx 227.

Karoonda/Peebinga Line Revisited *Continued...*



105312 Kringin Down Goods Rx 227.



105317 Peebinga Looking West.



105322 Peebinga Down Goods Rx 227



105313 Kringin Down Goods Rx 227.



105318 Peebinga Looking West.



105323 Peebinga Down Goods.



105324 Peebinga Up end Looking East.



105314 Kringin Down Goods Rx 227.



105319 Peebinga Down Goods Rx 227



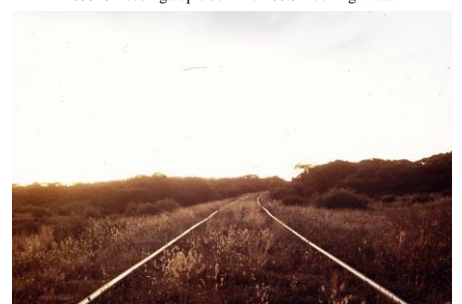
105325 Peebinga up side Mile 168.5 Looking West.



105315 Kringin Down Goods.



105320 Peebinga End of Track



105326 Peebinga up side Mile 168.5 Looking West.



105316 Peebinga.



105321 Peebinga 4-w wagon at end of track

[About Weston Langford](#)

Weston Langford passed away on 29th January 2014. His website is now being maintained by his son-in-law, Andrew Godfrey.

David Richardson fired trains on this line and fired at a few rabbits along the way for tucker later.

Contributed by Augie Gray...

Strange Confluence of Events

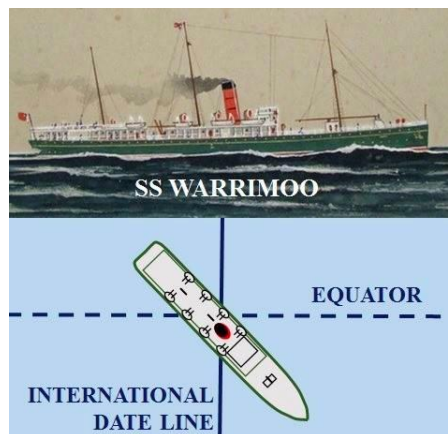
The passenger steamer SS Warrimoo was quietly knifing its way through the waters of the mid-Pacific on its way from Vancouver to Australia. The navigator had just finished working out a star fix and brought Captain John D.S. Phillips, the result. The Warrimoo's position was LAT 0° 31' N and LONG 179 30' W. The date was 31 December 1899. "Know what this means?" First Mate Payton broke in, "We're only a few miles from the intersection of the Equator and the International Date Line". Captain Phillips was prankish enough to take full advantage of the opportunity for achieving the navigational freak of a lifetime. He called his navigators to the bridge to check and double check the ship's position. He changed course slightly to bear directly on his mark. Then he adjusted the engine speed. The calm weather and clear night worked in his favour. At midnight the SS Warrimoo lay on the Equator at exactly the point where it crossed the International Date Line!

The consequences of this bizarre position were many:

- The forward part (bow) of the ship was in the Southern Hemisphere and in the middle of summer.
- The rear (stern) was in the Northern Hemisphere and in the middle of winter.
- The date in the aft part of the ship was 31 December 1899.
- In the bow (forward) part it was 1 January 1900.
- This ship was therefore not only in:
- Two different days,
- Two different months,
- Two different years,
- Two different seasons
- But, in two different centuries - all at the same time!

Very interesting, but is it all true?

Here is an explanation given by Snopes - Click/Tap on the following hyperlink... <https://www.snopes.com/fact-check/ss-warrimoo/>



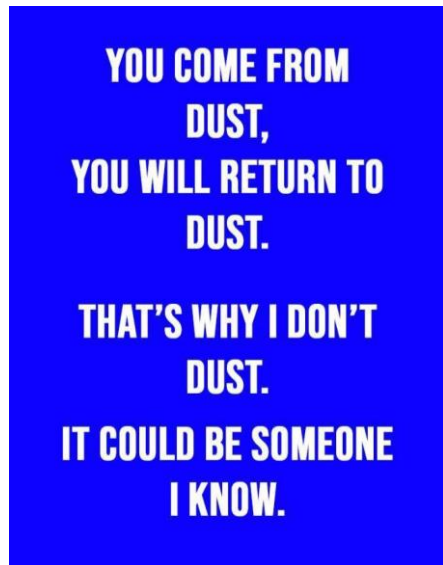
Contributed by Augie Gray and Ian Everard...

"Grape Agate" or "Grape Chalcedony"

This material, commonly known as "Grape Agate" or "Grape Chalcedony" from Indonesia, was published in the latest issue of the Mineralogical Record as finally having been classified as a simple Quartz, in other words a botryoidal Amethyst! Interestingly it appears that the source is becoming depleted, and the price is reflecting this. Two years ago, the price for a reasonably coloured specimen was around \$A80 a kg. Prices on the internet are now as high as \$A900 a kg, and the top colour is almost never seen for sale these days. Ian & I are glad we got ours when we did!



Contributed by Augie Gray...



Contributed by Michael Mabbitt...



Contributed by Doug Walker...

Faulty Drone



Does anybody know anything about drones? I bought this off a lad outside the pub last night and I can't get it to take off!

Contributed by Doug Walker...



I went to the grocery store and they now have a parking spot for Fat guys that like to grill. That's so considerate.

Contributed by Doug Walker...



Tailored to fit the occasion!

- Q. What do you get if you cross the Aussie cricket team with an OXO cube?
A. A laughing stock.
- Q. What's the height of optimism?
A: Aussie batsman putting on sunscreen.
- Q. What's the difference between an Aussie batsman and a Formula 1 car?
A. Nothing! If you blink, you'll miss them both.
- Q. What do Aussie batsmen and drug addicts have in common?
A. Both spend most of their time wondering where their next score will come from.
- Q. What does an Aussie batsman who is playing in the test have in common with Michael Jackson?
A. They both wore gloves for no apparent reason.
- Q. What is the difference between Cinderella and the Aussies?
A. Cinderella knew when to leave the ball.
- Q. What's the difference between the Aussies and a funeral director?
A. A funeral director isn't going to lose the ashes.

Contributed by Mike Mabbitt...



The School Teacher

After retiring from the military, a former Marine Corps Gunnery Sergeant took a new job as a High School Teacher. Just before the school year started, he injured his back. He was required to wear a light plaster cast around the upper part of his body for support. Fortunately, the cast fit under his shirt and wasn't noticeable. On the first day of class, he found himself assigned to the toughest students in the school. The punks, having already heard the new teacher was a former Marine, were leery of him and he knew they would be testing his discipline in the classroom. Walking confidently into the rowdy classroom, the new teacher opened the window wide and sat down at his desk. With a strong breeze blowing it made his tie flap. He picked up a stapler and stapled the tie to his chest. Dead Silence! The rest of the year went smoothly.

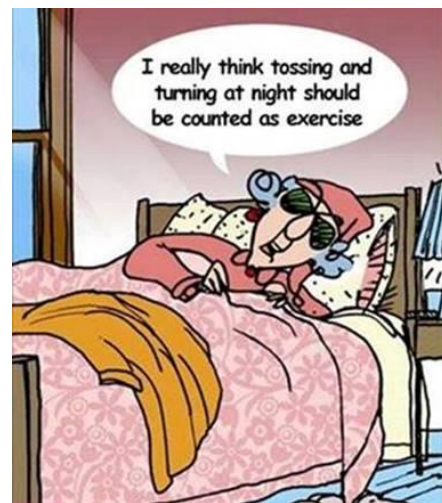
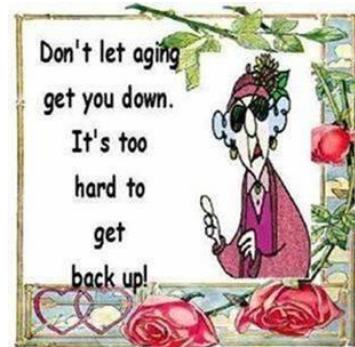
Contributed by Augie Gray...

Watergate Hotel

A honeymoon couple is in the Watergate Hotel. The new bride is concerned and asked, "What if the place is still bugged?" The groom says, "Hmm... Good point. I'll look for a bug." He looks behind the drapes, behind the pictures, under the rug, and, "AHA!", he shouts! Sure enough, under the rug was a small disc-shaped plate, with four screws. He gets his Swiss army knife, unscrews the screws, throws them and the plate out the window. The next morning, the hotel manager asks the newlyweds, "How was your room? How was the service? How was your stay at the Watergate Hotel?" Curious, the groom says, "And why, sir, are you asking me all of these questions?" The hotel manager says, "Well, the people in the room UNDER yours complained of the chandelier falling on them!"



Contributed by Doug Hughes...



Contributed by Doug Walker...



The Scottish Three Kick Rule
A London Lawyer Went Duck Hunting

[Click/tap here to watch The Scottish Three Kick Rule - London Lawyer Went Duck Hunting](#)

Sometimes the thoughts in my head get bored, and go for a stroll out through my mouth. This is never a good thing

www.facebook.com/ShutUpImStillTalking

I wish there was a way to donate Fat like you can donate Blood!

www.facebook.com/ShutUpImStillTalking

Why is it after I push ONE for English I still can't understand the person on the other end?

www.facebook.com/ShutUpImStillTalking

Never Ask Google For Medical Advice I Have Gone From Mild Headache To Clinically Dead In Three Clicks...

www.facebook.com/ShutUpImStillTalking

I love the kind of hugs where you can physically feel the sadness leaving your body

Some days I just wish I had the wisdom of a ninety year old, the body of a twenty year old and the energy of a three year old.

www.facebook.com/ShutUpImStillTalking

I TOLD YOU THAT I DO NOT HAVE ALZHEIMER'S. I HAVE "SOME - TIMERS" SOMETIMES I REMEMBER AND SOMETIMES I DON'T!!

www.facebook.com/ShutUpImStillTalking

Good morning everyone! My body is up. The mind will follow sometime later today hopefully!

I'm not short, I'm fun sized!

I'm gonna appeal this case all the way to Grandma!

Well I've finally reached the Wonder Years. Wonder where my car is parked? Wonder where I left my phone? Wonder where my sunglasses are? Wonder what day it is?

www.facebook.com/ShutUpImStillTalking

Life is too short to be serious all the time. So if you can't laugh at yourself, just call me, and I'll laugh at you.

www.facebook.com/ShutUpImStillTalking

The Secret to happiness is a good sense of humor and a bad memory.

www.facebook.com/ShutUpImStillTalking

I just been diagnosed with NCD
NO CAN DO!

www.facebook.com/ShutUpImStillTalking

Contributed by Augie Gray...



Nouns of Assemblage

You may not know the term “nouns of assemblage” by name, but you know it in practice. Nouns of assemblage are everyone’s favourite trivia question, and they’re practically never-ending: What’s a group of owls called? A parliament. Hippopotamuses? That would be a bloat.

Everyone loves a murder of crows, and we reference flights of stairs without even thinking twice about how that’s kind of a weird term for them. Though collective nouns exist in other languages, English is particularly full of these colourful, largely nonsensical linguistic specimens. In fact, many may have originated to show off obscure, cultured, and self-consciously amusing vocabulary.

Who decided that certain objects and animals require specialized terms when they congregate, and why?

“Terms of venery” are collective nouns that refer specifically to animals. “Venery” is itself a mass noun, an archaic term for hunting or “sexual indulgence.”

An incomplete list of animal gatherings, According to the United States Geological Survey:

- A shrewdness of apes
- A wake of buzzards
- A clowder of cats
- An intrusion of cockroaches
- A bask of crocodiles
- A business of ferrets
- A cackle of hyenas
- A smack of jellyfish
- A troop of kangaroos
- A romp of otters
- A company of parrots
- A shiver of sharks
- A scurry of squirrels
- A murmuration of starlings
- A knot of toads
- A rafter of turkeys
- A pod of seals or whales

While terms like herd, swarm, and pack seem

reasonable, others are downright ridiculous - and that’s probably because they were never meant to be taken seriously. According to the University of Cambridge, the *Book of St. Albans*, first printed in 1486, was famous for its compilation of lists - mainly lists about things that were considered to be of gentlemanly interest at the time. They included, among other things, heraldic devices, recognized dog breeds, and collective nouns. The collective nouns were said to refer to animals meant to be hunted - “Companyys of Beestys and Fowlys,” as they put it. But the list also included a doctrine of doctors, a superfluity of nuns, and an execution of officers.

It’s been hypothesized that many of these terms were mostly intended as kennings, complicated metaphors used to describe something simpler. The purpose of such phrasing would have been to showcase how learned and proper the user of the word is. Some of the more practical terms took hold over the years, while the more fantastic ones have mostly faded into obscurity, only to be trotted out during Trivial Pursuit.

From Quartz Obsession 7/1/16



Contributed by Doug Walker...

Ageless Advice

Never Squat with Your Spurs On

Will Rogers, who died in a 1935 plane crash, was one of the greatest political sages this country (USA) has ever known.

Some of his sayings:

1. Never slap a man who's chewing tobacco.
2. Never kick a cow chip on a hot day.
3. There are two theories to arguing with a woman. Neither works.
4. Never miss a good chance to shut up.
5. Always drink upstream from the herd.
6. If you find yourself in a hole, stop digging.
7. The quickest way to double your money is to fold it and put it back into your pocket.
8. There are three kinds of men: The ones that learn by reading. The few who learn by observation. The rest of them must pee on the electric fence and find out for themselves.
9. Good judgment comes from experience, and

a lot of that comes from bad judgment.

10. If you're riding' ahead of the herd, look back every now and then to make sure it's still there.

11. Lettin' the cat outta the bag is a whole lot easier'n puttin' it back.

12. After eating an entire bull, a mountain lion felt so good he started roaring. He kept it up until a hunter came along and shot him. The moral: When you're full of bull, keep your mouth shut.

About Growing Older...

First ~ Eventually you will reach a point when you stop lying about your age and start bragging about it.

Second ~ The older we get, the fewer things seem worth waiting in line for.

Third ~ Some people try to turn back their odometers. Not me; I want people to know *why* I look this way. I've travelled a long way, and some of the roads weren't paved.

Fourth ~ When you are dissatisfied and would like to go back to youth, think of Algebra.

Fifth ~ You know you are getting old when everything either dries up or leaks.

Sixth ~ I don't know how I got over the hill without getting to the top.

Seventh ~ One of the many things no one tells you about aging is that it's such a nice change from being young.

Eighth ~ One must wait until evening to see how splendid the day has been.

Ninth ~ Being young is beautiful but being old is comfortable.

Tenth ~ Long ago, when men cursed and beat the ground with sticks, it was called witchcraft. Today, it's called golf.

And, finally ~ If you don't learn to laugh at trouble, you won't have anything to laugh at when you're old.



Members' Noticeboard

Sat 30th - Sun 31st March 2019 Canberra Rock Swap – ACT

8:30am to 5pm (Sat) 8:30am to 4:00pm (Sun)
Wagtail Way, EPIC - Exhibition Park in Canberra,
ACT.

Features: Fossickers & dealers. Crystals, minerals, rough & cut gemstones, opals, fossils, lapidary supplies, jewellery. Sieve for sapphires. Food available - No entry cost

For further information in the first instance on any of these events please contact the Club's Show Convenor, **Norm Menadue** on (02) 6258 6631

Mineral Boxes and Flats Price List

(Prices may be subject to increase, due to the price of cardboard)

AA	3.5 x 3.3cm	per 100	\$12.00
	Per 10	\$1.50	
A	4cm x 4cm	per 100	\$13.00
	Per 10	\$1.50	
B	5cm x 5.2cm	per 100	\$15.00
	Per 10	\$2.00	
C	6.2cm x 7.5cm	per 100	\$18.00
	Per 10	\$2.50	
D	7cm x 7cm	per 100	\$19.00
	Per 10	\$2.50	
E	7cm x 9.5cm	per 100	\$20.00
	Per 10	\$2.50	
F	8.5cm x 9.5cm	per 100	\$22.00
	Per 10	\$3.00	
G	9.5cm x 9.5cm	per 100	\$23.00
	Per 10	\$3.50	
H	13cm x 9.5cm	per 100	\$25.00
	Per 10	\$4.00	
I	13cm x 12.5cm	per 100	\$30.00
	Per 10	\$4.50	
Flat	395 x 265 x 50mm	(lid & base)	\$2.50
Flat	398 x 290 x 98mm	(lid & base)	\$4.00

(All boxes and flats fold together, no staples required)
Greg Vort-Ronald 0413796279
Email luv2paint@iprimus.com.au



Fri 3rd - Sun 5th, May 2019, Murraylands Gem and Mineral Club Rockarama "Crystal and Craft Fair", Collier Park, Palmer, SA.

Features: Exhibits of gems, minerals, fossils, jewellery, lapidary machinery and more...most being for sale. Meals, snacks, and drinks available. Public Entry to all the weekend events is FREE.

The Rockarama also includes the 2019 South Australian Metal Detecting Championships which will be held at Collier Park, Palmer, South Australia, on Sunday May 5th, 2019 (Session 1 - Morning competition 10.30am - 11.30am, Session 2 - Afternoon competition 1.00pm - 2.00pm, and the competition prize presentation is at 2.45pm.).


Click/tap on link...[MGMC Website](#)

MGMC President (Kym): 0427 054 336





Tea Tree Gully Gem and Mineral Club Inc.
2019
Biennial Exhibition


Tea Tree Gully Primary School Memorial Drive, Tea Tree Gully Saturday 20th July - 9am to 5pm
Sunday 21st 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

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

More Signs...



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...](#)
- Lapidary World: [Click here...](#)
- Metal Detectors - Garrett Australia: [Click here...](#)
- Metal Detectors - Miners Den Adelaide: [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...](#)

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