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: cjjrgill@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

June Edition 2018

"Rockzette"
Tea Tree Gully Gem & Mineral Club News

President's Report

Hi All, just an early reminder about next year's exhibition…consider preparing some pot plants for the club stall and/or donating some rocks/minerals for the club stall (soon, to allow cleaning and preparation ready for the exhibition). Items can be left at the club rooms on craft days or at monthly meetings.
Cheers, Ian.

Diary Dates / Notices

Happy Birthday

Members celebrating June birthdays:
20th – Wendy Bailey.
25th – Wendy Purdie.
27th – David Roberts.
28th – Augie Gray.

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General Interest

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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.

Club Activities / Fees

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	

Augie's June 2018 Agate Selection – Germany (Pt. 4)

This month we conclude our trip through the Agates of Germany, with a selection which have not been identified as to their specific region of origin but are too beautiful not to include.


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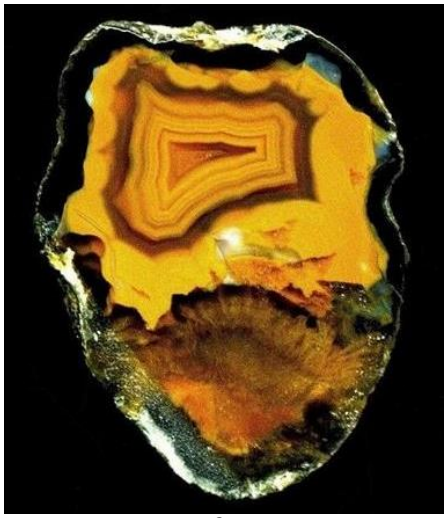
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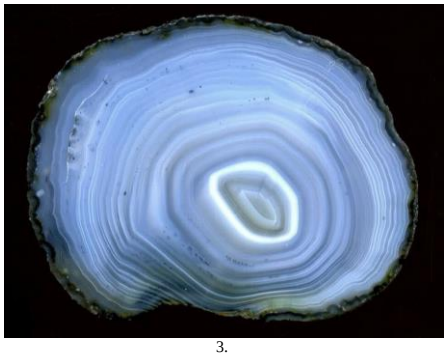
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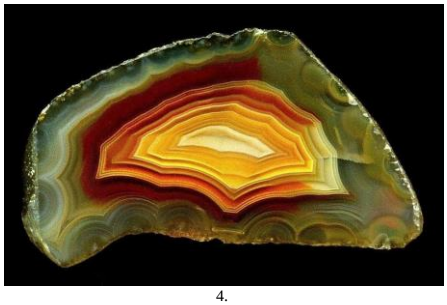
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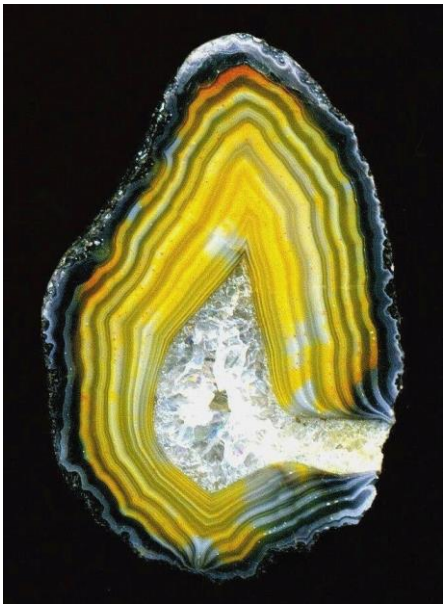
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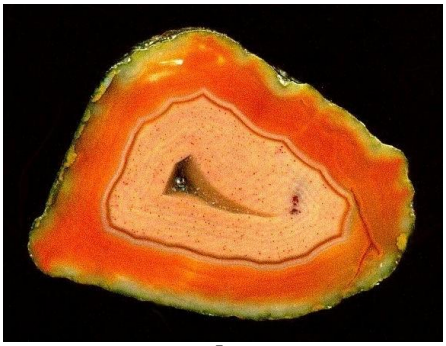
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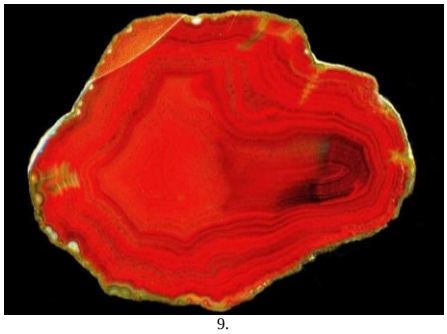
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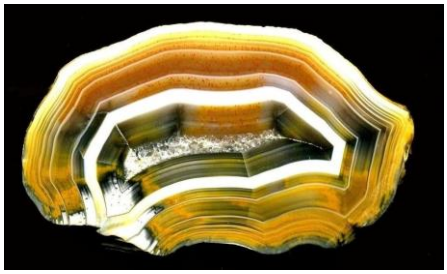
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Augie's June 2018 Mineral Selections.
Continued…

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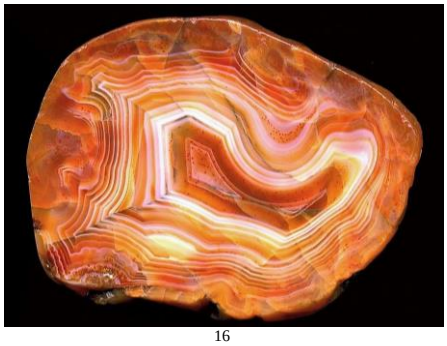

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Augie's June 2018 Mineral Selections.

Aurichalcite with Calcite - Southwest Mine, Bisbee, Cochise County, Arizona, USA.

Grape Agate – INDONESIA.

Azurite - Malbunka copper Mine, Western Aranda, Ltalaltuma, AUSTRALIA. (See TTGGMC Newsletter December 2016, pages 7 & 8 which covers the 'The Malbunka Copper Mine Project – Mel.)

Barite - Linwood Mine, Scott Co., Iowa USA.

Manganite in Calcite on Kutnahorite - N'Chwaning II Mine, SOUTH AFRICA.

Creedite - Navidad Mine, MEXICO.

Copper - Champion Mine, Houghton Co., Michigan, USA.

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

Fluorite and Quartz - Yaogangxian Mine, Yizhang Co., Chenzhou Prefecture, Hunan Province, CHINA.

Augie's June 2018 Mineral Selection
Continued…

Cavansite with Calcite - Wagholi Quarry, Maharashtra, INDIA.

Quartz and Calcite - Trepča, Kosovska Mitrovica, KOSOVO.

Vanadinite – MOROCCO.

Skeletal Smoky Quartz - Brandberg, Erongo Region, NAMIBIA.

Tourmaline - Barra do Salinas, Minas Gerais, BRAZIL.

Manganoan Calcite - N' Chwaning Mine, Kuruman, North Cape Province, SOUTH AFRICA.

Mimetite on Cerussite - Nakhlak Mine, Madan-e Nakhlak, Anarak District, Nain, Isfahan Province, IRAN.

***

Mel's Mineral Selections from *Amazing Geologist* on Facebook…

Quartz crystal with a full and complete phantom. Location: Minas Gerais, BRAZIL. Photo: The Geology Man. (Personal Collection).

Large Quartz var. Amethyst from Reel Mine, Iron Station, North Carolina, USA. Credit: Mark Davis.

Quartz var. Amethyst from Las Vigas, MEXICO. Credit: Yasu Okazaki.

Tourmaline on Quartz from Mogok Township, Mandalay, MYANMAR (Burma). Credit: saphiraminerals.

***

Contributed by Ian Everard…

Ian’s Quartz Collection Selections for June 2018.

2168 Quartz var. Amethyst, Vera Cruz, MEXICO.

0012 Quartz var. Amethyst, URUGUAY.

0787 Quartz var. Amethyst Sceptre, Cerro de la Concordia, Vera Cruz, MEXICO.

2167 Quartz var. Amethyst, Vera Cruz, MEXICO.

2153 Quartz var. Amethyst, Chala Mine, Haskova, Oblast Province, BULGARIA.

0869 Quartz var. Amethyst after Calcite, Artigas, URAQUAY.

Contributed by Ian Everard…

Ian's Quartz Collection Selections for June 2018.

Continued…

2154 Quartz var. Amethyst, Johannesburg, SOUTH AFRICA.

0673 Quartz var. Amethyst, Vera Cruz, MEXICO.

2013 Quartz var. Amethyst, Whyloo Station, WEST AUSTRALIA.

0092 Quartz var. Amethyst, ARGENTINA.

0700 Quartz var. Amethyst, Piedra Parade, Vera Cruz, MEXICO.

2010 Quartz var. Amethyst, Whyloo Station, WEST AUSTRALIA.

Extract from…

Geology in

http://www.geologyin.com/2015/01/killer-minerals-worlds-10-most-deadly.html

The World's 10 Most Deadly Minerals

Precious minerals make the modern world go 'round—they're used in everything from circuit boards to tableware. They're also some of the most toxic materials known to science and excavating them has proved so dangerous over the years, some have been phased out of industrial production altogether. Listed below are the 10 most deadly minerals on earth. These rocks do not need to be thrown to hurt you!

Arsenopyrite - FeAsS

Arsenopyrite. Photo: Crystal Classics.

Arsenopyrite is an iron arsenic sulphide with a brilliant steel metallic colour often found in hydrothermal vents and pegmatites. The arsenic leads to several environmental and human damages and can sometimes be associated with gold deposits. Oxidation of arsenopyrite leads to soluble arsenic in water and subsequent acid mine drainage.

Asbestos - $Mg_3Si_2O_5(OH)_4$

Asbestos

You have likely heard of the mineral asbestos and associate it with lung cancer. Asbestos is not one mineral but six defined separate minerals. Unlike the other minerals in the top 10 deadliest. This silicate mineral grows thin fibres crystals that can easily break off and form dust particles. And it was once widely used for a variety of commercial and industrial applications thanks to its strong, fire-resistant, and flexible nature—from ceiling tiles and roofing materials to flooring and thermal insulation. The fibres can cause lung cancer, mesothelioma, and asbestosis.

Chalcanthite - $CuSO_4 \cdot 5H_2O$

Natural Chalcanthite from Planet Mine, Buckskin Mts, La Paz Co., Arizona, USA
Photo: Tony Peterson.

Chalcanthite is a hydrated water-soluble copper sulphate. The mineral is used to ore copper, however it's necessary to keep the environment dry as the mineral can easily dissolve and recrystallize in a wet environment. It is water soluble and will crystallise out again from solution. The copper in this mineral is very bio-available and is toxic to plants and in high quantities toxic to humans.

Cinnabar - HgS

Cinnabar from Wanshan mine, Tongren Pref., Guizhou province, China. credit: Dakota Matrix Minerals.

Cinnabar is a deep red mercury sulphide mineral that provides much of the world's elemental mercury. when oxidized, this element will produce methyl mercury and dimethyl mercury, two toxic compounds that cause irreparable harm to the nervous systems of children. It is deadly in small concentrations and can be absorbed through the respiratory tract, intestines, or skin.

Galena - PbS

Galena from Denton Mine, Hardin Co., Illinois, United States.
Photo: Dakota Matrix Minerals.

Galena is one of the most abundant and widely distributed sulphide minerals. Galena is the principle ore of lead, and forms… glistening silver cubes with almost unnaturally perfect shapes. Although lead is normally extremely flexible, the sulphur content of galena makes it extraordinarily brittle and reactive to chemical treatment. It's not as bad as mercury, which will kill you immediately outright, but lead doesn't get flushed out of your system. It accumulates over the years, eventually reaching toxic levels. Once that happens both you and your kids pay the price, as lead toxicity is carcinogenic to you and is teratogenic (causing severe birth defects) to your offspring.

Hutchinsonite - $(Tl, Pb)_2As_5S_9$

Hutchinsonite from Quiruvilca Mine, Peru
Photo: Dakota Matrix Minerals.

Hutchinsonite is a form of arsenic sulphide with thallium and lead that can be found in hydrothermal vents. Thallium salts are nearly tasteless and highly toxic and have been used in rat poison and insecticides. The thallium inclusion in this arsenic sulphide combines two extremely dangerous and deadly minerals. Exposure to this mineral can potentially lead to death.

Orpiment - As_2S_3

Orpiment from Twin Creeks mine, Humboldt Co., Nevada
Photo: Dakota Matrix Minerals.

Orpiment is another arsenic sulphide mineral with a stunning orange-yellow colour. The mineral is found naturally in hydrothermal vents, hot springs, and fumaroles. Strangely, this mineral was once used medicinally in China despite its toxicity and in alchemy in search for a way to create gold. The arsenic, especially if it can oxidize, will lead to arsenic poisoning if handled incorrectly.

Continued next page…

The World's 10 Most Deadly Minerals Continued…

Riebeckite - $Na_2(Fe^{2+}_3Fe^{3+}_2)Si_8O_{22}(OH)_2$ - Asbestiform Riebeckite (Crocidolite) Ore Mineral

Blue Asbestos (Crocidolite). Credit: Flickr/Asbestorama.

The finely fibrous variety, known as Crocidolite, usually originates from altered metamorphic rocks. It was once widely used for a variety of commercial and industrial applications thanks to its strong, fire-resistant, and flexible nature—from ceiling tiles and roofing materials to flooring and thermal insulation. The fibres can cause lung cancer, mesothelioma, and asbestosis.

Stibnite - Sb_2S_3

Stibnite and Calcite from Herja Mine, Chiuzbaia (Kisbanya), Baia Mare, Maramures Co., Romania. Photo: Quebul Fine Minerals.

Stibnite is a toxic antimony sulphide mineral with an orthorhombic crystal lattice and a source of metalloid antimony. Stibnite paste has been used for thousands of years for cosmetics to darken eyebrows and lashes. The mineral was also used to make eating utensils, causing poisoning from antimony ingestion.

Torbernite - $Cu(UO_2)_2(PO_4)_2 \cdot 8 – 12 H_2O$

Torbernite from Musonoi Mine, Congo.

Torbernite is a dangerous mineral composed of hydrated green copper, phosphate, and uranyl. The mineral is often found in granites that contain uranium and is dangerous due to its radioactive nature. The mineral releases radon naturally and can cause lung cancer if exposure is long enough. This is one mineral you do not want on your display cabinet shelf.

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Extract from:

Geology

Giant 6-Story-Deep Sinkhole Opens on a New Zealand Farm on April 30th, 2018.

View of the eastern end of the newest tomo at Earthquake Flat. Photo: Colin Tremain.

A spectacular sinkhole the length of two football fields and the depth of a six-story building has opened on a New Zealand farm. The huge chasm appeared after several days of heavy rainfall near the North Island town of Rotorua, reactivating a series of collapsed holes and causing a 500-metre crack along a fault line.

Farm manager Colin Tremain told RT.com he stumbled upon the sinkhole on Monday morning, guessing it opened quickly some time on Sunday. Locally known as 'tomo' the hole is about 180 meters long, 20 metres wide and 20 meters deep (591ft x 66ft x 66ft).

The formation of collapse holes (tomo) is very common in the soft, easily eroded pumice-based soils of the Rotorua-Taupo area. The holes most commonly form when water seeping into the ground washes away finer particles, creating an underground cavity or tunnel – a path for water to flow in. The eroded soil is carried away into the porous volcanic rock underneath. "Faults make easy pathways for water to flow into the ground, so these cavities will often form along faults, or at the bottom of fault scarps", says GeoNet Volcanologist Brad Scott. "Eventually a cavity can get so big that the overlying land falls into it, and boom – a collapse hole or tomo. This process can happen quickly, over the course of a few hours."

Before the cavity collapse there might not be any evidence, or only very subtle evidence that this underground erosion is happening.

"Many are discovered by tractors or fertiliser trucks driving across what appears to be solid ground", says Brad. "The collapse holes most often appear during heavy rain, when water ponds in low lying areas or old craters, and existing collapse holes can reactivate and get bigger during heavy rain."

View looking East of the newest tomo to form at Earthquake Flat. Photo: Colin Tremain.

Earthquake Flat, where the most recent collapse hole has formed, is a unique area about 15km southeast of Rotorua. It is the summit crater of a volcano that erupted about 60,000 years ago, flinging 50 cubic kilometres of pumice across the surrounding countryside. "This has created a basin of 'internal drainage', which means that there are no streams flowing out of the crater – all the rain that falls in the crater must slowly drain out through the pumice soils in the basin floor.

"The Earthquake Flat crater is also criss-crossed with faults of the Taupo Fault Belt, and it is these faults that provide a convenient path for water to seep into, eroding away the soil as it goes."

"Last weekend's downpour – almost 170mm of rain in 38 hours – created the 'perfect storm' for a collapse hole to form," says Brad. While this collapse hole is particularly large, and inconvenient for the farmer who must now work around it, these sorts of features aren't unusual around Rotorua."

In 1967, part of State Highway 5, about 1km east of this latest 'tomo' collapsed under similar circumstances, again along one of the faults in Earthquake Flat crater.

The one good thing about collapse holes is that they give our volcanologists a fascinating view back through tens of thousands of years, providing a few more pieces in the puzzle of the Taupo Volcanic Zone's history.

"We can see the layers of lake sediments, quietly formed on old lakebeds over long quiet periods, punctuated by layers of ash and pumice from relatively short but violent eruptions.

Watch the short video...click here.

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Extract from: Australian Geographic

Places to Fossick for Gemstones in Australia

Top 10 places to fossick for gemstones by Australian Geographic staff, August 11, 2017 - Try your luck.

FOSSICKING HAS A long history in Australia. Travelers continue to try their luck at striking it rich by discovering a deposit of colourful gems. In our smallest towns and most remote areas lies some of Australia's most renowned fossicking sites: try Killiecrankie for topaz, Harts Range for garnet and the gemfields of Central Queensland for sapphires.

Oberon, New South Wales
About 150km west of Sydney, this small town nestled in the shadow of the Blue Mountains has five unique fossicking sites designated for the public. Visitors can search for sapphires, zircon, gold and diamond.

Oberon, New South Wales.

Coober Pedy, South Australia
About 750km north-west of Adelaide, Coober Pedy is one of Australia's most prolific opal-mining areas— up there with Lightning Ridge. Visitors are free to sift through opal mine tailings at the Jewell Box, an area still used as a mine dump. Avid 'noodlers' may find small opals or pieces of colourful potch (low-quality opal) in the tailings.

Coober Pedy, South Australia.

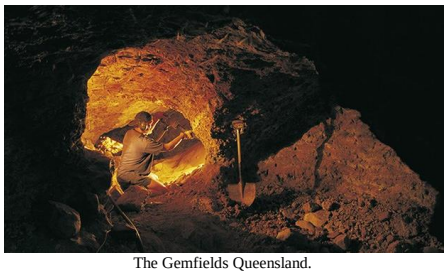
Killiecrankie Bay, Tasmania
Beachgoers and fossickers are drawn to this remote bay at the northern end of Flinders Island, Tasmania. Careful beachcombers may uncover specimens of topaz – known locally as Killiecrankie diamonds – at low tide.

Killiecrankie Bay, Tasmania.

Inverell, New South Wales
Lovers of sapphire can explore fossicking sites throughout the Inverell district, which is located on the western slopes of the New England Tablelands in northern New South Wales. Several privately-owned mines offer advice and equipment for beginners.

Inverell, New South Wales.

The Gemfields, Queensland
Visitors to Sapphire in central Queensland, 285km west of Rockhampton, don't have to leave town to discover gems. For the adventurous, however, there are 11 local fossicking areas, many of which yield multi-coloured sapphires and zircon. Beginners can hire equipment and ask for advice at Blue Hollow Mine, near the Big Bessie fossicking area.

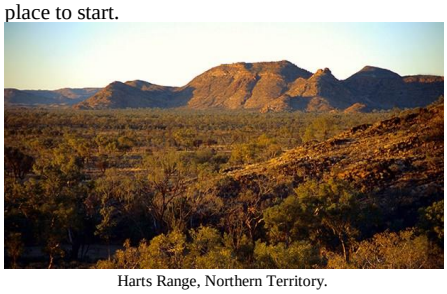


The Gemfields Queensland.

Glen Innes, New South Wales
On the northern border of New South Wales, in the hills of the Great Dividing Range, lies one of Australia's most renowned fossicking sites. Glen Innes and surrounds is the most prolific sapphire region in New South Wales and one of the world's richest mineral diversity belts. Fossicking in New South Wales does not require a license, so visitors can get started as soon as they arrive.

Glen Innes, New South Wales.

Harts Range, Northern Territory
Garnet lovers may be lucky enough to find large, well-shaped gems in this region, 125km north-east of Alice Springs. The Spotted Tiger campground is a designated fossicking area and an excellent place to start.



Harts Range, Northern Territory.

Mount Hope, New South Wales
In the late 19th and early 20th centuries, Mt Hope, 600km west of Sydney, was a copper mine. A huge bushfire during the 1950s saw its closure and the area has since become a ghost town, with a population of just more than 50. However, brave fossickers may chance upon an abundance of rock crystal half a metre below the surface.

Mount Hope, New South Wales.

Mount Surprise, Queensland
Topaz, aquamarine and smoky quartz were once of little value to tin miners who worked this area, about 280km north-west of Townsville. It's no surprise then that nice specimens have been found near old mine sites close to the banks of the Elizabeth and O'Briens creeks. Beginners can take fossicking tours from Mount Surprise Gems, while the more experienced can make use of mud maps.

Mount Surprise, Queensland.

Newry Station, Northern Territory
Head 750km south-west of Darwin and you'll find the Newry fossicking area on dirt-swept Newry Station. The site is famous for being one of only two places on Earth where zebra rock, also known as Kimberley siltstone, has been found.

Newry Station, Northern Territory.

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52 Breathtaking Caves from Around the World - Three More in More Detail

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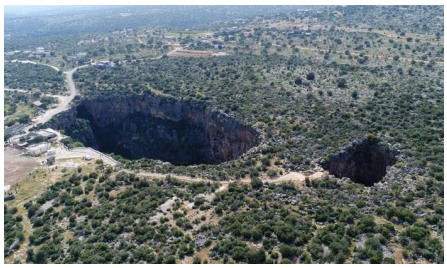
40. Caves of Heaven and Hell, TURKEY.



Watch Videos…

https://www.youtube.com/watch?v=7OztRpXSzPs

Extract from Wikipedia - View Website…

https://en.wikipedia.org/wiki/Cennet_and_Cehennem

Cennet and Cehennem (English: heaven and hell) are the names of two large sinkholes in the Taurus Mountains, in Mersin Province, Turkey. The sinkholes are among the tourist attractions of the province.

The opening of Cennet is 250 x 110 m^2 (820 x 360 ft^2) and its average dept is 70 metres (230 ft). It is possible to reach the bottom of Cennet by a primitive staircase composed of 300 steps. At the bottom toward the south, there is a smaller and 150 step deeper cave. In this cave are the ruins of a monastery built in the 5th century by a certain Paulus and dedicated to Virgin Mary. In this monastery one can hear a small underground stream which flows from the monastery to the gulf of Narlıkuyu.

By Klaus-Peter Simon - Own work, CC BY 3.0, https://commons.wikimedia.org/w/index.php?curid=4612508

Cehennem is a deeper sinkhole with a depth of 128 metres (420 ft). But its top opening is smaller with dimensions 70 x 50 m2 (210 x 150 ft2). As the upper edge of the opening is concave there is no access to the bottom of Cehennem.

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41. Saalfeld Fairy Grottos, GERMANY.

View Websites…

http://en.feengrotten.de/

http://www.germany.travel/en/specials/family-attractions/saalfeld-fairy-grottoes.html

Watch Videos…

http://www.dw.com/en/the-saalfeld-fairy-grottoes-colorful-stalactites-in-th%C3%BCringen/av-16500406

https://www.youtube.com/watch?v=9Fa7XNZC9w8

The Saalfeld Fairy Grottoes are in the Guinness Book of Records as the world's most colourful caves. Among the most popular tourist attractions in the Thuringia region, they serve as a striking reminder of medieval mining. An underground tour through the breathtaking, richly coloured world of stalactites and stalagmites reveals fascinating insights into how the grottoes formed, the minerals they contain and the lives and labour of the miners. Over in the sensational interactive museum Grottoneum, there's not a boring old display cabinet in sight. Instead, it's all about feeling, reading, hearing and tasting, allowing you to make your own fascinating discoveries. There's so much to see, including a mineral magnifier, treasures of the mountain and giant scorpions. You can also grow your own stalactites and set molecules in motion, or piece together the minerals of the fairy grottoes and trace 440 million years of history in the panorama grotto cinema. This is a place of discovery for visitors young and old!

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42. Uplistsikhe Caves, GEORGIA.

This is not just one cave, but an entire cave town. First in habited in 1000 BCE, what remains today is enough to leave everyone in awe.

View Websites…

http://georgiantour.com/uplistsikhe/

https://www.atlasobscura.com/places/uplistsikhe-cave-town

Watch Videos…

https://www.youtube.com/watch?v=iWiDF5BV8CY

https://www.youtube.com/watch?v=p66GbWI6tFQ

Located in Eastern Georgia, Uplistsikhe (literally "Lord's Fortress ") is an abandoned rock-hewn town, which once have played an important role in Georgian history. The place was founded in the late Bronze Age, around 1000 BC, and continued to be inhabited until 13th century AD. Between the 6th century BC and the 11st century AD, Uplistsikhe was one of the most important political and religious centres of pre-Christian Kartli – one of the predecessors of the Georgian state.

Photo by By Moreau.henri - Own work, CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=11996228

Photo – TripAdvisor

Photos - https://www.adventurous-travels.com/posts/uplistsikhe-ancient-cave-town-in-georgia

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Contributed by Ian Everard…

MGMC's Palmer Rockarama 'Crystal and Craft Fair'

Friday May 4th – Sunday May 6th, 2018

A look at some of the traders on the Palmer Oval.

Several early morning pics before it all starts for the day.

'Rockarama' Head Honcho – Kym Loechel.

Trading stall – Wendy and Tony Bailey.

Trading stall (near right) – Mike Fisher.

Trading stall – Brenda and Les Cowie (Ian's accommodation site).

Trading stall – Debbi and Peter Beckwith. (Hat worn by Lyall Rochow)

Ian's Quartz Purchases at the Rockarama

Quartz var. Smoky and Feldspar, Malawi, AFRICA.

Quartz var. Smoky, Congo, AFRICA.

Quartz, Minas Gerais, BRAZIL.

2402 Quartz var. Amethyst with inclusions, Chibuku Valley, Zambezi Valley, Mashonaland West, ZIMBABWE.

2403 Quartz var. Amethyst with inclusions, Chibuku Valley, Zambezi Valley, Mashonaland West, ZIMBABWE.

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Contributed by Doug Hughes…

MGMC's Palmer Rockarama 'Crystal and Craft Fair'

Friday May 4th – Sunday May 6th, 2018

A look at some of the traders on the Palmer Oval.

Trading stall - Betty Anderson, Jean Hickman, and Mary Warner.

Trading stall – Mike Fisher.

Trading stall – Mardi Van der Horst.

Boulder Opal (Yowah Nuts) QLD.

Trading stall – Mick Vort-Ronald.

Trading stall - Greg Vort-Ronald.

Trading stall - Maurice Burt.

Next column - a look at some of the Metal Detecting activities held on the Sunday…

Juniors just as keen as Seniors.

Kym reading the 'Riot Act'…competition rules and consequences.

Ready, set, and waiting for 'Go!"

Off they go…seeking those hidden treasures.

Are those knitting needles in the left-hand container?

Waiting to see who the winners are.

Juniors are well supported in the competition.

Contributed by Wendy Purdie…

'Our Cool Kangaroo Island Safari'
Tuesday May 8th – Friday May 11th, 2018.

Wendy relaxing at back of the ferry while crossing over to KI.


Wendy indulging in Wild Cherry jam and scones at Granny Stirling's in Penneshaw.


Kingscote Wharf and a rainbow.

Wendy and Ong at American River searching for Tourmaline. No luck there.

Wendy at Admiral's Arch. We had a great time there watching the Fur Seals and their pups sheltering from the wild weather.

Ong at Cape du Couedic Lighthouse.

Wendy at Cape du Couedic Lighthouse.


Wendy braving the wild weather down at Seal Bay.


Sea Lions sheltering from the wild weather.


The skeletal remains of a juvenile humpback whale


Wendy holding a Kestrel at Raptor Domain.


Wendy holding a Wedgetail Eagle at Raptor Domain.


Wendy at American River looking for Tourmaline.

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Contributed by Augie Gray…
http://www.bbc.com/news/uk-43740033

Women's suffrage: 10 reasons why men opposed votes for women

By Francesca Gillett BBC News – 29th April 2018.

A statue marking the life of suffragist Millicent Fawcett was unveiled in London this week.

This hugely influential feminist campaigned for the right to vote, which **was granted to women over the age of 30** a century ago in 1918.

But even as late as 1917 - just months before the bill was passed - powerful men in Parliament were trying to stop votes for women.

Here are some of their arguments, according to House of Commons records.

Getty Images

Sir James Grant, MP for Whitehaven
"Men have the vote and the power at the present moment; I say for Heaven's sake let us keep it.

"We are controlled and worried enough by women at the present time, and I have heard no reason why we should alter the present state of affairs."

Getty Images

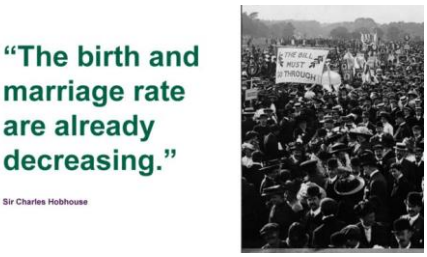
Rowland Hunt, MP for Ludlow
"There are obvious disadvantages about having women in Parliament. I do not know what is going to be done about their hats.

"How is a poor little man to get on with a couple of women wearing enormous hats in front of him?"

Getty Images

Frederick Banbury, MP for City of London
"Women are likely to be affected by gusts and waves of sentiment.

"Their emotional temperament makes them so liable to it. But those are not the people best fitted in this practical world either to sit in this House... or to be entrusted with the immense power which this bill gives them."



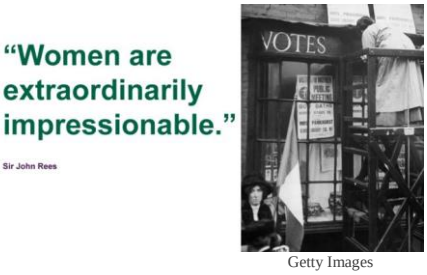
Getty Images

Sir Charles Hobhouse, MP for Bristol East and Chancellor of the Duchy of Lancaster
"You have at the present moment certain statistics which show that both the birth and marriage rate are decreasing.

"Can you adopt at this time a policy which might mean an immense destruction of the population of the country which it is essential should not only be retained but increased."

Getty Images

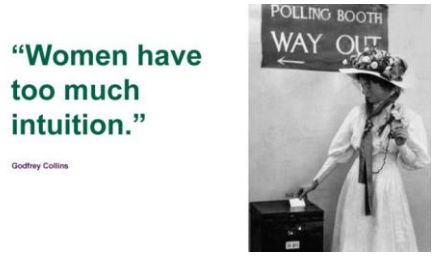
Sir Charles Henry, MP for Wellington
"One of the greatest features in connection with this country is the responsibility of men towards women, and I would view with the greatest apprehension any step which would tend to relieve men of that responsibility."



Getty Images

Sir John Rees, MP for Nottingham East
"Women are tremendously accessible, extraordinarily impressionable, noted for the adoption of any new thing, and for the easy acceptance of other people's views.

"Are those qualities which fit women to rule over the home and foreign affairs of a mighty empire?"



Getty Images

Godfrey Collins, MP for Greenock
"Intuition is far more largely developed in women than in men, but instinct and intuition, although good guides, are not the best masters so far as Parliament is concerned.

"Parliament exists for the very purpose of opposing feelings, fancies, and inclinations by reason."

Getty Images

John Henderson, MP for Aberdeenshire Western
"I have read their writings, and in one paper... a moderate publication, I saw that the Prime Minister was violently described as an old fossil.

"What can you say of people who exhibit such a want of judgment, and such a lack of perception of actual facts?"

Getty Images

Arthur Beck, MP for Saffron Walden
"I daresay that the idealism of the feminine mind and its deadly logic which we have all experienced in private life are qualities superior to those of men, but I do say that in governing a great country and in considering the problems which we have to consider every day in this House such qualities are not valuable, but destructive."

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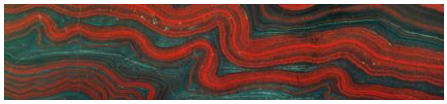
South Australia mesa journal LAST UPDATED MAY 2018

Latest advances in South Australian geoscience and resource sector news

Features

Magnetite: South Australia's potential



Read more on Magnetite: South Australia's potential

Asbestos mystery solved

Austrian 'asbestos mystery' solved with reference to South Australian study

Read more on Asbestos mystery solved

News

MinEx CRC bid successful

Breaking new ground for mineral discoveries.

Read more on MinEx CRC bid successful

Horizontal drilling for oil and gas

Developing reservoirs in the Cooper and Eromanga basins.

Read more on Horizontal drilling for oil and gas

Investment strategies

Tips for mineral explorers.

Read more on Investment strategies

PDAC: South Australia shines

South Australia on global mining stage.

Read more on PDAC: South Australia shines

GESSS-SA student symposiums

Showcasing student research.

Read more on GESSS-SA student symposiums

Industry news

Includes Havilah Resources' Kalkaroo inferred resource for cobalt.

Read more on Industry news

Continued next column…

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Contributed by Augie Gray…

Man Made Diamonds

Extract from…

Daily Mail Australia

Growing Diamonds – View Video: Click/tap here...

- ***One-carat diamonds are cultured in a matter of days at a laboratory in Cardiff using just methane and hydrogen gas.***
- ***Researchers use methane and hydrogen gas to create artificial diamond sheets.***
- ***They say their diamonds are purer than anything you would see in nature.***
- ***Several companies around the world are now growing diamonds for jewellery.***
- ***Researchers behind the project say the lab-grown stones are purer, 20% cheaper and more environmentally friendly than real gems.***

By Harry Pettit For Mailonline

PUBLISHED: 01:54 AEST, 4 May 2018
UPDATED: 07:57 AEST, 4 May 2018.

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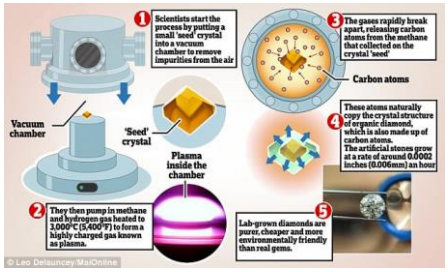

Scientists are 'growing' diamonds that are so pure they are almost indistinguishable from natural stones. Researchers used a small 'seed' crystal as a scaffold and then heat methane and hydrogen gas to release carbon atoms that naturally bind to make an artificial diamond

Professor Oliver Williams, a physicist at Cardiff University, told **Sky News**: 'The diamonds are purer than anything you would see in nature. 'With the best growers, less than one atom in a trillion is an impurity.' Professor Williams leads a team making diamond sheets for research into semi-conductors - but the same process can be used to grow decorative gems.

Scientists start the process by putting a small 'seed' diamond into a vacuum chamber to remove impurities from the air. They then pump in methane and hydrogen gas heated to 3,000°C (5,400°F) to form a highly charged plasma. The gases rapidly break apart, releasing carbon atoms from the methane that collect on the diamond 'seed'. These atoms naturally copy the crystal structure of organic diamond, which is also made of carbon atoms.

Each artificial stone grows at a rate of around 0.0002 inches (0.006mm) an hour. Whereas, natural diamonds form over millions of years under high pressures and temperatures deep within the Earth's crust. Lab-made gems are threatening to upset the diamond industry, with several companies worldwide now growing the stones for jewellery.

Diamonds fetch their lofty price tags because they form over millions of years under high pressures and temperatures deep within the Earth's crust.

But, several companies are now growing the gems in laboratories across the world, threatening to shake up the diamond industry.

An artificial diamond is typically 15-20 per cent cheaper than a natural stone of the same size.

Professor Williams said: 'It's man actually beating nature. 'We're perfecting it and it's an enormous accomplishment to grow a material that traditionally has been very difficult to grow.'

But although man-made diamonds are now being sold at some high-end jewellers - industry bosses say most customers prefer the real deal.

Jean-Marc Lieberherr, chief executive of the Diamond Producers Association, said the value of a gem is partly due to its sentimental quality. 'The fact they cannot be distinguished with naked eye does not make them identical, or equal,' he said. 'Think of very good replica of a Picasso painting. We might not be able to tell it apart, but with the right equipment an expert will be able to. 'One has enormous monetary and emotional value, one is a replica with no inherent or resale value. It's the same thing with diamonds.'

View Another Video: Click/tap here...

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Here Are the Questions…

1. The Bat and Ball Problem

A bat and a ball together cost $1.10. The bat costs $1 more than the ball. How much does the ball cost?

2. The Widget-Making Machine Problem

If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets?

3. The Size-Double Lily Pad Patch Problem

There is a patch of lily pads in a lake. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half the lake?

Scroll down to read the answers to the questions.

Here Are the Answers…

Answer to Question 1: The ball costs 5 cents. You probably guessed 10 cents, didn't you? No judgment. A ball that costs 5 cents plus a bat that costs $1.05 will set you back $1.10. And $1.05 is exactly $1 more expensive than 5 cents. A Princeton study found that people who answered 10 cents were significantly less patient than those who got it correct.

Answer to Question 2: It would take 100 machines 5 minutes to make 100 widgets. Your gut might tell you the answer is 100 minutes. From the question, we know that it takes 5 minutes for 1 machine to make 1 widget. Thus, it would take 5 minutes for 100 machines to make 100 widgets.

Answer to Question 3: The lily pads would cover half the lake in 47 days. You might have guessed 24 days. It seems intuitive to halve the number of days because you're halving the size of the lily pad patch. But if the area of the lake covered in lily pads doubles every day, it would only take one day for it to go from being half covered to fully covered. Take one day away from 48 days and you're left with 47.

***

Contributed by Doug Walker…

Dinner Party

All throughout dinner my wife's best friend's four-year-old daughter stared at me as I sat opposite her. The girl could hardly eat her food for staring. I checked my shirt for spots, felt my face for food, and patted my hair in place, but nothing stopped her from staring at me. Finally, I asked her, *"Why are you staring at me?"* Everyone at the table had also noticed her behaviour, and the table went quiet, waiting for her response. Finally, the little girl said, *"I'm just waiting to see how you drink like a fish."*

***

Contributed by Doug Walker…

Where Eagles Dare

French military using winged warriors to hunt down rogue drones.
This is amazing.

A golden eagle grabs a flying drone during a military training exercise at Mont-de-Marsan French Air Force base, Southwestern France.

Following incidents of drones flying over the presidential palace and restricted military sites – along with the deadly 2015 Paris terror attacks – the French Air Force has trained four golden eagles to intercept and destroy the rogue aircraft.

Aptly named d'Artagnan, Athos, Porthos and Aramis – an homage to Alexandre Dumas' "The Three Musketeers" – the four birds of prey have been honing their attack skills at the Mont-de-Marsan in southwestern France since mid-2016.

"A drone means food for these birds," Gerald Machoukow, the military base's falconer, told FRANCE 24. "Now they automatically go after them."

The use of hunting birds – normally falcons and northern goshawks – by militaries around the globe is common practice in the fight to scare other critters away from runways and so cut the risk of accidents during take-off or landing. But it wasn't until 2015 when the Dutch started using bald eagles to intercept drones that other militaries started to see the benefit of these winged warriors.

The French bred the four golden eagles – three males and one female – using artificial insemination since eagles are a protected species and harvesting wild eggs is strictly forbidden. They chose the golden eagle because of the birds hooked beak and sharp eyesight. *Continued next column…*

Also weighing in around 11 pounds, the birds are in a similar weight class as the drones they're sent to destroy and clocking in at a top air speed of 50 miles per hour, with the capability of spotting its target from over a mile away, the eagles are deft hunters.

To protect the eagles from drone blades and any explosive device that might be attached to them, the French military designed mittens of leather and Kevlar (an anti-blast material), to protect the bird's talons.

A golden eagle carries a flying drone (2017). "I love these birds," Machoukow told Agence France-Presse. "I don't want to send them to their death."

The birds are first taught to attack in a straight line before graduating to diving from heights. Soon they'll be patrolling the skies over the Pyrenees Mountains in southern France and could possibly be deployed at airports and special events, such as political summits and soccer tournaments.

The French air force already expects four more eagles to join the fleet.

***

Contributed by Mike Mabbitt…

George and the Dragon

A homeless guy is traveling down a country lane, tired and hungry he comes across a Pub called the "George and the Dragon." Although it's late and the Pub is closed he knocks on the door. The innkeeper's wife sticks her head out of a window. "Could I have some food?" he asks. The woman glances at his shabby clothes and obviously poor condition and sternly says, "No!" "Any chance of a pint of ale then?" "No!" she says again. "Could I at least sleep in your barn?" "No!" By this time, she was shouting. The down-and-out says, "OK Then Might I please...?" "What now?" the woman shouts impatiently. "Might I please have a word with George?

***

"Why is there so much blood in my alcohol system?"

***

Contributed by Doug Walker…

Dog's Jacket

The wife said, "Here's $40.00, get the dog a warm jacket, and if there's any money left, then get yourself a beer!"

***

Contributed by Doug Walker…

Where Do Old Bumper Cars Go?

The ones in Coney Island and Rockaway Park back in the 20's thru to the 50s ran on electricity and had a pole on the back going to a metal electrically charged overhead wire grid.

Remember driving the bumper cars at amusement parks or a fair, don't you? They were so much fun!

Well, now what do you do with 'Old Bumper Cars'? (and check out the license plates!)

Yes, you read that right; these little beasties are street legal.

They run on either Kawasaki or Honda motor-cycle engines and co-opt vintage bumper car bodies into the most awesome form of mini-car we've seen in too long.

There are seven of these little monsters floating around California and they're all the creation of one man, Tom Wright, a builder in the outskirts of San Diego who figured the leftovers of the Long Beach Pike amusement park needed a more dignified end than the trash heap.

They were originally powered by two-cylinder Harley Davidson motorcycle engines, but they rattled like heck because of the two-cylinder vibration and Tom replaced them with four-cylinder Honda or Kawasaki 750s. And, a couple have been measured as capable of 160 MPH, which is terrifyingly fast in machines with such a short wheelbase.

By the way, the cars are almost Indestructible in accidents!

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Memories…

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Contributed by Doug Walker…

Fashionistas

Now we know how fashionistas get inspiration for some of their bizarre creations!

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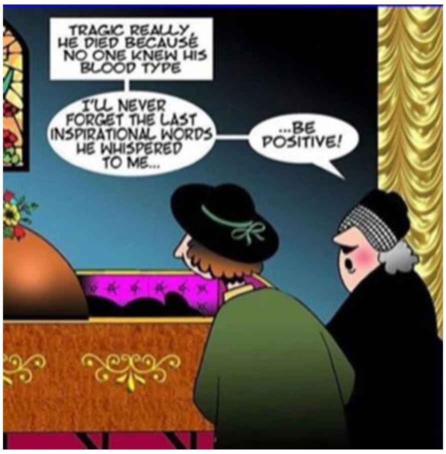
Contributed by Doug Walker…

Blood Type



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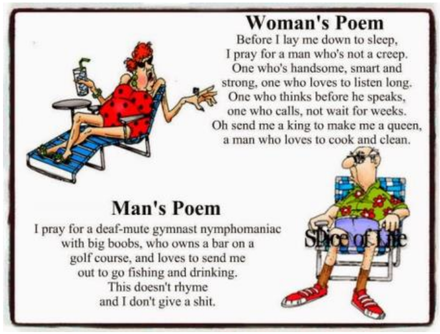
Contributed by Mike Mabbitt…

Woman's and Man's Poem



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Broken Hill Mineral Club
Rock-On Gem and Mineral Show 2018.

Long weekend in September/October - Friday 28th, Saturday 29th and Sunday 30th of September, with field trips on Monday 1st and Tuesday 2nd of October. To be held at the Broken Hill Showgrounds / Memorial Oval. Application forms and information about the show will be available soon.

http://brokenhillmineralclub.wikispaces.com/

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Contributed by Doug Hughes via emailed videos…

Boat viewing tours around the lava coast of Big Island, Hawaii.

Big Island Lava Tours...Click Here

Moku Nui Lava Tours - Best Lava Tours - Hawaii 2018...Click Here

View YouTube Videos…

Dr. Guillen: Kilauea volcano is officially a triple threat...Click Here

Hawaii lava flows to the Pacific Ocean...Click Here.

Eruptions at Hawaii volcano send lava closer to power plant...Click Here

Fire Hose Video taken in April 2018...Click Here

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2018 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...
Metal Detectors - Adelaide Agent for Garrett Australia: Click here...
Mineralogical Society of SA Inc: Click here...
Murraylands Gem and Mineral Club Inc: Click here...
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The Australian Mineral Collector: Click here...