



**Tea Tree Gully Gem & Mineral Club Inc. (TTGGMC)**  
**Clubrooms: Old Tea Tree Gully School, Dowding Terrace, Tea Tree Gully, SA 5091.**  
**Postal Address: Po Box 40, St Agnes, SA 5097.**  
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**August  
Edition  
2016**

# "Rockzette"

## Tea Tree Gully Gem & Mineral Club News

In This Edition...	President's Report	Meetings, Courses & Fees.
<ul style="list-style-type: none"> <li>Diary Dates.</li> <li>Stop Press.</li> <li>President's Report.</li> <li>Club Activities.</li> <li>Meetings, Courses &amp; Fees.</li> <li>TTGGMC – Bits and Pieces.</li> <li>What's New in the Mineral World?</li> <li>Lapidary Fundamentals – Cabochon Cutting.</li> <li>General Interest.</li> <li>Nancy's Travel Poem.</li> <li>Members Notice Board – For Sale items x 3 and Southern Rockhounds invitation</li> </ul>	<p>Hi All, Several members have asked me when <b>next year's exhibition</b> will be. It's usually held on the third weekend in June which will make it <b>Saturday 17<sup>th</sup> and Sunday 18<sup>th</sup> June, 2017</b>. I hope you are all keeping warm and dry. Cheers, Ian.</p>	<p><b><u>Meetings (Amended for Jun, Jul, Aug &amp; Sep.)</u></b>          Club meetings are held on the 1<sup>st</sup> Thursday of each month except January:          Committee meetings start at 7.00 pm. General meetings - arrive at 7.30 pm for 8.00 pm start.</p>
	<p style="text-align: center;"><b>Club Activities</b></p>	<p><b><u>Faceting</u></b> (times to be advised)  <i>Course 10 weeks x 2 hours Cost \$20.00.</i>  <i>Use of equipment \$1.00 per hour.</i></p>
<p style="text-align: center;"><b>Diary Dates</b></p>	<p><b><u>Competitions</u></b>          Competitions have been suspended indefinitely and are currently replaced with members showcasing an interesting part of their collection.</p>	<p><b><u>Lapidary</u></b> (Tuesday mornings)  <i>Course 5 weeks x 2 hours Cost \$10.00.</i>  <i>Use of equipment \$1.00 per hour.</i></p>
<p style="text-align: center;"><b>2016</b></p> <ul style="list-style-type: none"> <li><b>Sat 13<sup>th</sup> - Sun 14<sup>th</sup> August 2016</b>              Enfield Gem and Mineral Club Gem Show 10am-4pm. Enfield Primary School, Clarice Ave, Enfield.</li> <li><b>Sat 3<sup>rd</sup> - Sun 4<sup>th</sup> Sept 2016</b>              Mildura and District Gem and Mineral Club Annual Gem Show. Sunraysia Masonic Centre Irymple, Calder Highway, Irymple, Victoria.</li> <li><b>30<sup>th</sup> September, 1<sup>st</sup> October and 2<sup>nd</sup> October, 2016.</b> Broken Hill Gem and Mineral Show, 'Rock On 2016' Memorial Oval / Showgrounds, Broken Hill, NSW.</li> </ul>	<p><b><u>Field Trips</u></b>          No fieldtrips planned during Summer months.</p> <p><b><u>Library</u></b>  <b>Librarian - Augie Gray</b>          There is a 2 month limit on borrowed items.          When borrowing from the lending library, fill out the card at the back of the item, then place the card in the box on the shelf.          When returning items, fill in the return date on the card, then place the card at the back of the item.</p>	<p><b><u>Silver Craft</u></b> (Friday mornings)  <i>Course 5 weeks x 2 hours Cost \$20.00.</i>  <i>Use of equipment \$1.00 per hour.</i></p>
<p style="text-align: center;"><b>Stop Press</b></p>	<p><b><u>Silver Craft</u></b>          Friday mornings - 9 am to 12 noon. Cost \$20 for new short course attendees. All are welcome.</p>	<p>While some consumable materials are supplied by the club, trainees must supply any additional requirements.</p>
<p style="text-align: center;"><b>Amended</b></p> <p><b><u>Winter Club Meetings Arrangement</u></b>          The trial Winter meetings schedule has been amended; it now covers <b>June, July, August and September</b>. That is, on the first Thursday of these months the Committee meeting will start at 3pm and the general meeting will start at 3.30pm.</p> <p><b><u>August - TTGGMC's Birthday Month</u></b>          Members are asked to bring a plate of finger food to share and celebrate the club's birthday. There will be no speaker to allow for a social afternoon tea get together.</p>	<p><b><u>Tuesday Craft</u></b>          Tuesday mornings - 11 am to 2.30 pm Faceting, etc. All are welcome. Contact Doug (08 7120 2221) if you would like to learn faceting.</p> <p><b><u>Wanted</u></b> - The faceting group occasionally has members wishing to buy a 2<sup>nd</sup> hand faceting machine &amp; accessories. Could anyone with one not being used please contact: Doug Walker 0871202221 or Russell Fischer 0417083227</p>	<p>Trainees who use the club equipment (for example, magnifying head pieces, faceting equipment, tools, etc.) must return them to the workshop after usage. Trainees are also encouraged to purchase and use their own equipment.</p>
<p>The Tea Tree Gully Gem &amp; Mineral Club Inc. is not and cannot be held responsible or liable for any personal injuries, loss or damage to property at any club activity, including, but not limited to, meetings, field trips, all crafts and club shows. An indemnity is to be signed by all participants before each and every field trip activity they attend.</p>	<p><b><u>Club Subscriptions</u></b>          \$25.00 Family.          \$20.00 Family/Pensioner.          \$15.00 Single.          \$12.50 Single/Pensioner.          \$10.00 Joining Fee.</p>	<p>In the interest of providing a safe working environment, it is necessary to ensure individuals using the workshops follow the rules set out in <i>Policy No. 1 - 20/11/2006</i>.</p>

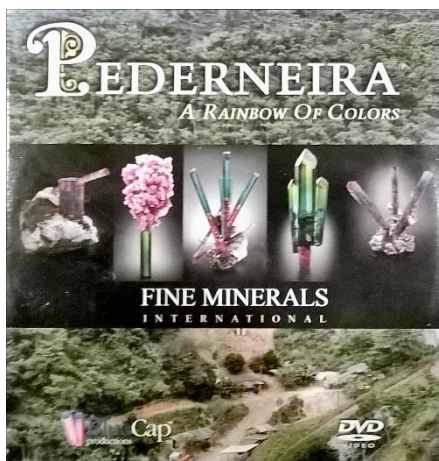
Contributed by Wendy Purdie...

**Hailstones at the clubrooms,  
Tuesday 12<sup>th</sup> July, 2016.**



Contributed by John Hill...

**Pederneira Mine DVD.**



This mine in Brazil has produced the most colourful and magnificent selection of tourmaline crystals over many years.

The video is an excellent history and exposure of the mining techniques in pegmatite in a very difficult region; not least from the security aspect.

The photos of the superb crystals against a black background display the wide range of colours and the total crystal form. Some of the pockets are large (the size of a small car) while others are the size of a cricket ball. The crystal are in feet and inches (imperial) and many are on/in crystal matrix of quartz, feldspars and several others.

The 'show' runs for about an hour and is introduced by Daniel Trinchillo.

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Contributed by Ian Everard...



Ian's quartz sphere with a very dominant rutile inclusion. It almost looks like it's sitting on the surface, but it's fully contained in the quartz.

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**Mineral Fakes**

At the July 7<sup>th</sup> 2016 meeting, Kym Loechel gave an interesting and informative talk on 'Mineral Fakes', which included altered, enhanced, reconstructed, repaired, and man-made specimens. He also covered some simple tests to establish whether a specimen has been enhanced or altered – two examples: (1) use an ultraviolet light to detect whether glue has been used to assemble extra crystals to enhance or repair a specimen; (2) check whether the colour of the crystals appears to be leached in to the mother or base rock of the specimen, suggesting artificial colouration.

Kym said that some 'Fakes', nevertheless, can have their value, but it must be declared as such, so that the potential customer can make an informed choice whether to buy or not to buy.



Kym Loechel presenting talk on 'Mineral Fakes'.



Home grown Chalcanthite.



Cubic galena glued to a quartz geode base.



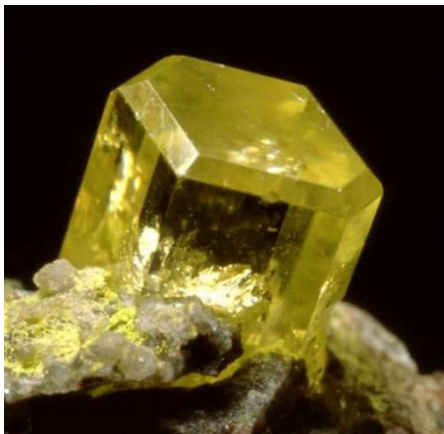
Dyed quartz to imitate amethyst.

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Contributed by Russell Fischer...

<http://www.minrec.org/contents.asp>

## What's New In The Mineral World?



### Report #43 By Thomas P. Moore The Mineralogical Record TPMoore1@cox.net

Yes, I'm still here—setting out once again to fill you in on what's new on the web.

Actually there is quite a lot new, as dealers have processed what they picked up at the February Tucson Show and elsewhere. Now the long summer slog begins (we Tucsonans know all about it), and school will be getting out and work perhaps will be letting up some, and field collecting might be getting dicier (at least in Arizona) because of the heat. So here are some dealers' offerings, popping up on the web like spring flowers and tempting you to some picking.



### On The Web

Rudolf Watzl, the gent from an Austrian Strahler family who now runs the Saphira Minerals dealership ([saphiraminerals.com](http://saphiraminerals.com)), has just—April 30—posted some pages of newly arrived, mostly one-of-a-kind, mostly high-end specimens, displayed in photos typically gorgeous: it's always a pleasure to browse these pages (forgetting about the financial inhibitors in one's life).

Scattered among the specimens on the "Treasure Trove" page (see under "Galleries") are a few crystal groups of gold from a find in September 2015 at Serra do Caldeirão, Pontes e Lacerda, Mato Grosso, Brazil. As you'll read in my print report on the 2016 Tucson Show (coming up in the May-June 2016 issue now being printed), this is marvelous gold and there's plenty of it: hundreds of first-rate specimens ranging in size from small-thumbail to almost 8 cm were brought to Tucson last February and were the talk of the town. Rudolf's pieces are miniatures, and they are typical of the occurrence in that the crystals, though many are hopped, distorted and somewhat tortured-looking, are sharp-edged all around: the gold stayed "in place" once weathered out from its host rock, and thus the crystals were spared alluvial rounding. Other web dealers besides Rudolf now also have the new golds from Brazil, but to get a feel for how good they can be you are advised to visit the Saphira site. Quite a few of the specimens there are already marked "sold," but in general this material, so abundant in Tucson, will probably linger around the market for quite some time yet even if there are no fresh finds.



Gold, 4.5 cm, from Serra do Caldeirão, Pontes e Lacerda, Mato Grosso, Brazil. Saphira Minerals specimen and photo.

Rob Lavinsky's The Arkenstone usually gets some notice in this space, and why not? as Rob still has one of the most wide-ranging and creative of dealerships and a deep, diverse website to spread the word. At the 2015 Munich Show, Rob picked up some excellent cabinet and small cabinet-size fluorite specimens from a "small new find" at Frohnau near Annaberg, Erzgebirge, Upper Saxony, Germany, and nine of these specimens are offered now on his site ([irocks.com](http://irocks.com)). Major extraction of Ag-Bi-Co-Ni ores ceased long ago around Annaberg, but local collectors have continued digging good fluorite specimens from some of the old mines; in Munich I always check out

certain German (former East German) dealers who've been known to bring the material in. Most Frohnau fluorite is yellow, yellow-brown or orange-brown, but some is very deep purple and largely opaque such that specimens appear black at first glance; when strongly backlit some crystals show purple-yellow or purple-orange color zoning. In Rob's specimens, though, there is no confusing opacity, only straightforward beauty. The simple cubic crystals are transparent, lustrous and a lush yellow-orange except for bits of purple where they meet matrix.



Fluorite, 7.7 cm, from Frohnau near Annaberg, Upper Saxony, Germany. The Arkenstone specimen and photo.

Further, on an April 7 "Rare Species" update on the site of The Arkenstone, Rob offers ten pages of rarities, mostly from the former collections of Paolo Matioli and the late Rock Currier, and a surf through these pages can be fascinating even for those (like me) who are not especially into rare species per se. Inevitably, some of these specimens are massive pieces in mottled colors with little arrows affixed to point out spots of interest, but others are quite well crystallized and aesthetically respectable at the very least. Some represent rare old occurrences of common species—pink apophyllite from Andreasberg, Harz, Germany; sharp, tan-colored scheelite from Traversella, Piedmont, Italy—and some are from unique but fairly familiar finds—boleite from the Amelia mine, Baja California, Mexico; zunyite from Quartzsite, Arizona; chalcocite from St. Day, Cornwall, England. But there are also pyrosmalite from Broken Hill, Australia; painite from Burma; perhamite from Oxford County, Maine; the brand-new species bobdownsite from the Yukon; and lots, lots more.

*Continued next page...*

Pictured here are two handsome examples of rarities from their world's-only-significant occurrences: a thumbnail-size, matrix sapphirine from Androy, Madagascar, and a cabinet-size piece with an open cavity lined by drusy senegalite, from the type locality in Senegal. Tired of looking at trophy-type aquamarines and rhodochrosites and tourmalines? Give these pages of Rob's a try.



Sapphirine, 3 cm, from Androy, Toliary Province, Madagascar. The Arkenstone specimen and photo.



Senegalite, 8.5 cm, from the Kouroudiako iron deposit, Tambacounda region, Senegal. The Arkenstone specimen and photo.

Speaking of rare minerals, Jordi Fabre (fabreminerals.com) has a few miniatures of yuanfuliite (I did too spell it right), a very rare borate described as a new species in 1994. The type locality is in China but Jordi's specimens were collected in early 2016 at a Spanish locality. There is something appealing about these specimens whereon lustrous, red-brown, acicular to fibrous crystals of yuanfuliite form flat-lying sprays on salt-and-pepper matrix of lamproite rock.



Yuanfuliite, 3.3 cm, from the Nuestra Señora del Carmen mines area, La Celia, Jumilla, Murcia, Spain. Fabre Minerals specimen and photo.

Jordi also offers some beautiful calcite specimens from a revered Spanish locality: the La Florida mining area, Herrería-Valdáliga-Rionansa, Santander Province (region of Cantabria). The small Pb-Zn mines of the La Florida group have been inactive since 1978, but in 1998 some Spanish collectors breached a single enormous cavity which gave up about 1000 superb calcites; Jordi says that his specimens were gathered around the year 2000, and thus it's likely that they came from this discovery.



Calcite, 5.6 cm, from the La Florida mining area, Herrería-Valdáliga-Rionansa, Santander, Spain. Fabre Minerals specimen and photo.

Another excellent Spanish dealer, Joan Rosell of Rosell Minerals, has a large number of one-of-a-kinders, especially from Spain and more generally from Europe, on his site right now. Often Joan comes up with a great old classic—witness (below) the galena from the Dörnberg mine, Ramsbeck district, Nordrhein-Westfalen, Germany, collected at some time during the 1960s, as the last of the old Ramsbeck mines were closing down. The specimen is already marked Sold, but here it is anyway. Also, from recent finds on the dumps of the old La Vidale lead mine, Bréziès, Asprières, Aveyron, France, there is this large specimen of botryoidal yellow-green Pyromorphite. I like these unusual new

pyromorphites from La Vidale, and I mentioned them in reports from the Ste.-Marie-aux-Mines shows of 2012, 2014 and 2015...so here's another, as good as just about any I've seen, which Joan would let you have for 220 Euros (about \$250); it is on page 2 of the April update on his site (rosellminerals.com).



Galena, 4.2 cm, from the Dörnberg mine, Ramsbeck district, Nordrhein-Westfalen, Germany. Rosell Minerals specimen and photo.



Pyromorphite, 9.8 cm, from Mine de la Vidale, Bréziès, Asprières, Aveyron, France. Rosell Minerals specimen and photo.

This article will be continued next month...

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Contributed by Doug Hughes...

<https://www.gemsociety.org/article/lapidary-fundamentals-cabochon-cutting/>

## Lapidary Fundamentals: Cabochon Cutting

By *Donald Clark, CSM IMG*



Cabochon cutting is challenging, but with patience and practice, anyone can learn the most popular branch of the lapidary arts. "Rhodochrosite and gold ring" by Mauro Cateb is licensed under CC By 2.0.

Cabochon cutting or capping is the most popular form of [gem cutting](#). Although it requires a fair amount of skill, almost anyone can master this technique. Rough material for capping can be found or purchased inexpensively. Many people never buy their rough and are content to cut the many stones they trade for or find. Of course, as you gain experience, you can if you wish move on to more valuable materials like [turquoise](#), [lapis lazuli](#), and even [phenomenal stones](#) like cat's eye [chrysoberyl](#) and black [opal](#).

### Cabochon Cutting Tools

Capping tools can be as simple and inexpensive or elaborate and pricey as your tastes run.

#### Genie, Diamond Pacific

The most popular cabochon cutting machine is the [Genie by Diamond Pacific](#). It has six permanently mounted wheels. The first two are 100 and 260 [grit](#) diamond on solid wheels. The other four range from 280 to 14,000 grit. They have a foam backing, which conforms to the curvature of the stones. There are two movable "geysers" that supply water to the wheels for lubrication. You can't polish everything with one method, so this machine comes with a flat disk that can be mounted on the end. This disk can hold enough varieties of pads and polishing compounds to polish anything you might encounter.

The Genie's advantages are that you never spend time changing accessories and that the diamond wheels last almost forever. Cost is its primary disadvantage. This machine is a major investment. It's also large and heavy, which is fine for a permanent setup. However, if you need portability, this isn't the unit for you.

#### Lortone

[Lortone](#) offers a unit lower in price than the

Genie with a built-in saw, a silicon carbide grinding wheel, an expanding drum, and a flat disk for polishing. The quality of the machine and the work you can do with it are both excellent. The cost reduction comes in the wheels.

[Silicon carbide wheels](#) round in the centre. They soon become difficult to use and can eventually become unusable. To flatten them, you need a diamond tool. These wheels don't last nearly as long as [diamond wheels](#). A good six-inch diamond wheel can cost three to seven times as much as an equivalent silicon carbide wheel. Although the initial cost of silicon carbide is lower, in the long run diamond is less expensive. Bear this in mind when replacing a wheel or building your own machine.



Squaring a grinding wheel.

The Lortone also uses an expanding drum that's four inches wide. To use it, you place a belt around the drum, and, as the machine comes up to speed, the drum expands and holds it in place. Many kinds of belts are available. They come in silicon carbide or diamond and in grits from 100 to 50,000. In the long run, these belts cost more than wheels with embedded diamond, but the difference isn't as significant as with the silicon carbide grinding wheels. The primary disadvantage of these belts is the time it takes to change them between grits. You'll need to completely stop the machine, remove the old belt, replace it with a new one, and then bring the machine back to speed. You'll need to assess your needs to decide if this delay is significant enough to affect your work and/or enjoyment.

#### Rock Rascal

One of the least expensive cabochon cutting machines is the [Rock Rascal](#). It has only one station (so you'll be changing accessories constantly) and holds only one-inch wide wheels. However, this tool has been on the market for decades, which speaks volumes for its durability.

#### More Options

There are a number of [cabochon cutting machines](#) available with a variety of features and prices.

Some people have made their own machines. The requirements are: an axle of the proper diameter for the wheels you want, a motor, a pulley system to attain the proper speed, and a method to keep the wheels wet. This is usually a drip system. Another simple system is a sponge arranged to sit in water and constantly wipe the wheel clean. You can cab on a faceting machine, but you can't [facet](#) on a capping machine. If you're a beginning lapidary student and budgeting your equipment costs, keep this in mind. You can shape your cabs with the same coarse laps you use for faceting. Clean your coarse lap, then put a piece of firm, 1/4" thick foam rubber on top of it. This will hold pieces of 600 grit wet/dry [sandpaper](#) (that you must cut to shape) for smoothing. To polish, replace the sandpaper with an [Ultra Lap](#), a piece of leather, or other polishing pad charged with your favorite compound.



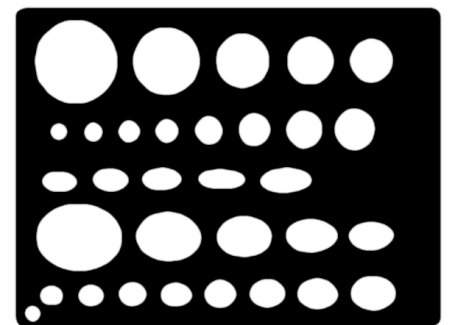
Tourmaline, 12-ct oval cabochon, Brazil.

### Cabochon Cutting Techniques

The [oval cabochon](#) is the most common shape for cabs. Other shapes just require minor technique adjustments. In this section, you'll learn how to cut an oval.

#### Slabbing

Most cutting begins with a slab. Yes, that means you'll need a saw. Some cabs can be cut without slabbing, but [most will need to be cut](#) into 1/4" to 3/8" thick slices. Begin by placing a [template](#) over the slab. If your material is a solid colour, you're just looking for the largest piece you can cut. If the material has a pattern, then you're looking for the shape and size with the most eye appeal. This is a bit of a guessing game, since the pattern will change as you round the top. Look at both sides of the slab to get an idea of how it will change.



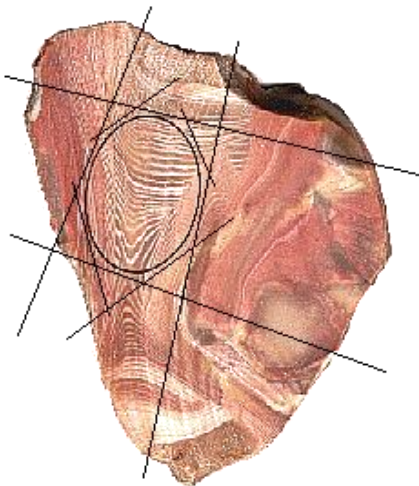
Cabochon cutting template.

## Lapidary Fundamentals: Cabochon Cutting

Cabochon Cutting Techniques – *Continued...*

A template isn't always necessary. Some valuable materials, notably opal, are usually cut freeform for [maximum weight retention](#). However, you'll want to end up with calibrated sizes and shapes with most gem material, since these will fit into pre-made jewellery settings. Saving a little weight on most cabs but then having to spend time and money to make settings isn't cost effective.

When you've chosen your area, mark it for cutting. An aluminium pen is ideal for this. The mark won't wash away like a pencil mark. Furthermore, many gem materials will absorb liquid ink, which leaves an unsightly and costly mess that has to be cut away. Once your cab is outlined, take it to the saw and cut away as much excess material as possible. Until you get used to this process, it's helpful to draw guide lines with the aluminium pen and a ruler.



Cabochon outline and saw guide lines.

If you're working with a large gem, you can move on to the grinding stage. Smaller stones should be [dopped](#) to save your fingers from unnecessary abuse.

Now it's time to start cutting. If you're working with something hard, like a piece of [agate](#), begin with your coarsest wheel. If you're working with something soft, like opal or turquoise, or something small, begin with one of the smoother wheels. If it cuts too slowly, you can always go to a coarser one, but starting gently is best.

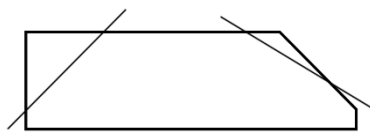
Bring your machine up to speed and get your chosen wheel thoroughly wet before starting to cut. The water serves two important purposes. It acts as a lubricant, keeping the friction and heat down, and carries away the swarf (the cutting debris). This keeps the wheel from clogging. Most manufacturers recommend you use an additive for additional lubrication.

Unless your machine is made entirely of stainless steel, you'll need an additive with rust preventative properties as well.

Use the lower quarter of the wheel when grinding. If you try to work above the centreline, the gem will probably be pulled out of your hands. "Pulled" is a tame word for what actually happens. The gem will be yanked violently from your hands and flung to the far reaches of your shop. If you can find the stone, it'll likely be broken.

Start by grinding the excess material down towards the outline you've drawn. Use a pair of [callipers](#) to measure your progress. Templates are great for shapes but aren't accurate for dimensions. Leave yourself some room for the remaining steps. Depending on the size of your cab, you may want to leave a half-millimetre or so. This is something you'll learn from experience. The amount varies with the [hardness](#) of the material and the size of the gem.

Once you have the outline shaped, you'll start the process called "peeling the apple." Grind a bevel all the way around the gem at about 45°, bringing it 2/3rd to 3/4th of the way down to the bottom. Then, grind another bevel, all the way around the stone again, at about 60°. Leave some of the previous cut showing. Keep "peeling the apple," cutting bevels at increasingly steeper angles, until they meet in the centre.



**First Cut 45°      Second Cut 60°**

"Peeling the apple", side view of 45° and 60° cuts.

This is the area that causes the most trouble for beginners. It may seem that just three cuts will completely cover the stone, except for maybe a tiny area right in the centre. That's not good enough. If you have even a tiny area that's flat and not properly domed, the cab won't take a proper polish. To make matters worse, the flat area will be right on the very top, where it shows the most!

You have to be patient and learn to get the entire stone evenly domed. Look at the stone from both ends and both sides. The curvature should be even in every direction and all the way to the centre. You should make this inspection at every step, but especially in the first, coarsest stage. Any irregularities are easier to correct now than later with the finer grits.

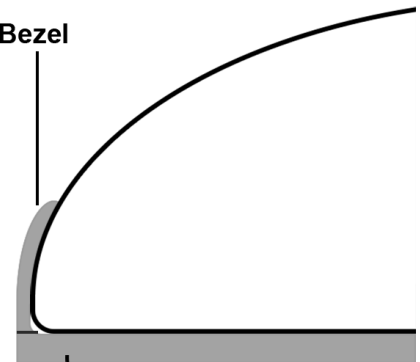


Evenly domed.

One of the toughest challenges when learning cabochon cutting is getting the entire gemstone evenly domed.

This next step may seem like you're getting ahead of yourself, but it's presented just so you know where you're heading. As you're shaping the gem, leave a small, vertical area on the sides before it begins to taper in. Also, sand a very small bevel on the lower edge of your [girdle](#). This is done in the fine sanding stage. The bevel prevents the edge from chipping and also leaves a small area for solder.

### Bezel



Sand a very small bevel on the lower edge of your girdle to prevent chipping and allow a little space for solder.

Cabs are usually placed in a [bezel setting](#). The bezel, a thin strip of metal, is soldered to the main piece. Hence, you need a little room for the solder. To hold the gem securely, the bezel needs to be bent inward, over the curvature of the stone. The vertical area on the side offers support without having to bend the bezel too far in. When finished, you want to see mostly the stone. You don't want the bezel to come so far over the edges that it distracts from the gem.

These steps are particularly important with brittle opal stones. If you leave a sharp edge on the girdle, the stone can chip or crack when tightening the bezel. The steeper the sides, the more support the gem receives. Of course, this can also be overdone. The illustration above shows the ideal proportions from the metalsmith's point of view.

Once you're satisfied with the shape of your gem, you'll start sanding out the coarse scratches. If you're using diamond, this will take a series of steps. Typically, you'd use a combination like 260, 600, and 1,200 grit. Inspect your gem after each step. Look for proper curvature, as you did before. Also, make sure you've removed all the coarse scratches from the previous step. This is very important. If you don't get them all out before moving to the next step, you'll either have to do it again or settle for a low-quality finish.

The gem needs to be dry for you to see the progress. In a humid environment, this can be challenging. If possible, warm the room before starting. If you can't warm the room, at least use warm water.

## Lapidary Fundamentals: Cabochon Cutting

**Cabochon Cutting Techniques** — *Continued...*

Have plenty of towels available. Dry your hands before trying to dry the stone.

If you are using silicon carbide, all you need is 600 grit. It wears fast and becomes the finer grit you need for a pre-polish. Unfortunately, these have limited uses. You may need to keep two 600 belts. Use one for shaping and another, well-used one for pre-polishing.

The quality of your pre-polish, the final fine sanding, can't be overstated. This is the single most important element in getting a high polish. The surface should be ultra-smooth, with no visible scratches at all. Any time you're having trouble getting a high polish, go back to the pre-polish step. Soft materials like lapis and opal scratch readily with diamond. 1,200 diamond is a fine pre-polish for agate, but you might need something much finer, like 3,000 or 8,000, for softer gems.



"Hydrogrossular." cabochon cut from a raw piece of pink hydrogrossular garnet, by R.H.C. Langendam is licensed under CC BY 3.0

### Polishing Cabochons

Polishing can be very confusing for a beginner. There are hundreds of methods. If you buy a new cabochon cutting machine, it'll probably come with a polishing system. That's a good place to start.

Here are some tricks of the lapidary trade:

Use [aluminum oxide](#) on suede, soft side out. This is the most versatile polishing method available. It'll put a high polish on more materials than any other method.

[Quartz](#) responds best to [cerium oxide](#). This does well for opal, too, but be very careful about heat build-up with opal. Stones get hot quickly during polishing, and [heat can destroy opals](#). [Jade](#), on the other hand, needs a lot of heat and friction to polish. Use [chromium oxide](#) on leather or felt.

[Diamond polish](#) can be used on leather or specially made pads.

However, it has never gained the popularity with cab cutters that it has with faceters. It's more expensive than aluminum oxide and doesn't offer any significant improvements, except on [ruby](#) and [sapphire](#).

These are the most common and most useful polishing methods. With them, you'll be able to get a mirror polish on any material. That mirror polish is important. It takes a fair amount of work to procure a cabochon cutting machine, learn how to use it, find the rough, orient it, and finally cut a cab. Getting that mirror-high polish on a beautiful stone makes it all worthwhile.



"Fire opal in 14 gold w rose gold overlay," top-quality Mexican fire opal cabochon, by Jessa and Mark Anderson is licensed under CC BY 2.0

### Judging Your Cabochon Cutting

When examining a cabochon, start by judging the polish. Look for any scratches or pitting that will reduce the amount of light reflected from the surface.

Next, judge the shape. How even is the contour? A cabochon should have an even curvature to its surface. Look at the cab from both ends and both sides. The shape (the curvature) should be a mirror image from side to side. No area should be thicker than its opposite. There should be no bulging.

Examine the shape further by holding the cab so light reflects off its surface. Move the gem so the light travels across the top. If the surface is properly cut, you'll see the band of reflected light glide evenly over its surface. The band of light will begin to snake if there are any irregularities.

Path of Light



Polished

Rough

Poor cabochon cutting as well as poor polishing will affect how light moves across the gemstone.

You're most likely to see a problem at the top of the cabochon. Often, a small area will be somewhat flattened. From the side, this is hard to see. However, when light passes over the area, it's obvious. The fact that light doesn't flow smoothly over this area is why the cabochon cutting would be considered second rate. (If you look closely, that area probably doesn't have a good polish, either).



The oval is the basis for all cab cuts, even fancy shapes like rectangles, teardrops, and hearts. "Hearts," heart-shaped cabochons, left to right: hematite, rose quartz, tiger's eye, and two sodalite tones, by Mauro Cateb is licensed under CC BY 2.0

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Contributed by Denise and Granton Edwards...

**Subject:** Old fossils on the move – Continued on from the July 2016 Newsletter....

Hi to all,

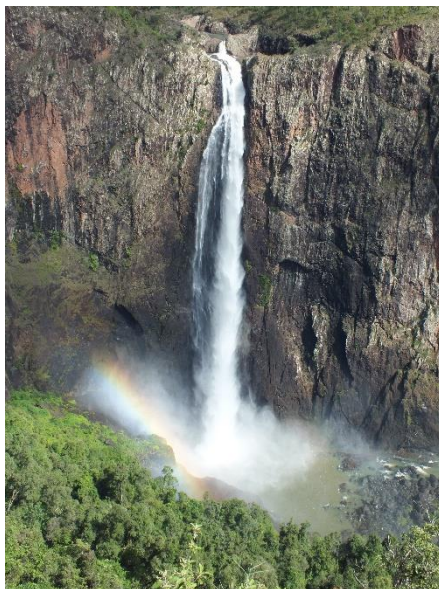
We have been at Lucinda for a few weeks now and experienced mixed weather with lovely sunshine for a few days and then the rain would set in but one good thing is that it's not cold. It is incredible how many big rigs are here (that includes the cars as well as the vans) and just about every van has a boat next to it.



Speaking of boats our friends have a lovely big 6.2 metre cruise craft, capable of going out to the reef, which we did not so long ago, with a 5 am start setting out in the sea mist and watching the sunrise and after 1½ hours we reached the rim of the reef. Out here if you don't feel any nibbles within the first 5 minutes you up anchor and relocate and we were fishing in 14 metres of water. We spent 10 hours out on the water and came back with 5 Coral Trout, a red Emperor and Trelvalley. It was great fun constantly reeling in fish even if they had to go back. The second trip out also yielded another 5 Coral Trout and 3 Trelvalley.



We took a drive to Girringun National Park as we drove out along the narrow dusty windy 14 Kilometre road to Wallaman Falls. It became a National Park in 1988.



The height of the fall is 288 metres and the pool depth is estimated to be 20 metres deep and after the rains that had fallen there was a lot of water cascading over making for a spectacular view.

There were some beautiful blue butterflies fluttering around as well. As we made our way back down from the falls we couldn't believe our luck, as there was a cassowary on the side of the road feeding. We stopped and watched it for quite some time as it was not fazed by the fact that we were there.



We headed to the Paluma Mountain Range where we drove into Journaman and then further south toward Paluma where we drove along a very narrow 14 Kilometres windy road and will never complain about driving in the Adelaide Hills again. We stopped at Little Crystal Creek where we walked down to the creek bed to view the old bridge, which they started building in 1933 with lovely rock pools and water falls. Crossing the bridge and continuing up the windy road again we finally reached Paluma at an elevation of 2,925ft or 898 metres, which is only a little township with not much there, although we could get something to eat at a great cost though. Paluma area was used in war time by the Americans and Australians to overlook the water in case of invasions.



Sugar cane is being harvested right now and on one of our drives around we came across someone working nearby the road where we could stop and watch for a while at how it is now done mechanically and then the little sugar cane train carting it to the refinery.



The jetty here is also a hive of activity as a ship has been docked at the end for a few days being loaded up with raw sugar.

Right at the moment we are sitting out rain hoping it improves for tomorrow as it is planned for another fishing trip.

Keep safe all and warm

Granton and Denise

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**MEN WOULDN'T LOOK AT ME WHEN I WAS SKINNY**

**but...**  
**Since I Gained 10 Pounds This New, Easy Way I Have All the Dates I Want**

NOW there's no need to be "skinny" and friendless, even if you never could gain as a source before. Here's a new, easy treatment that is giving thousands attractive flesh—in just a few weeks! Doctors for years have prescribed yeast to build up health. But now, with this new yeast discovery in little tablets, you can get far greater tonic results—regain health, and also put on pounds of firm flesh, enticing curves—and in a far shorter time. Not only are thousands quickly gaining beauty-bringing pounds, but also clear skin, freedom from indigestion and constipation, new pep.

**Concentrated 7 times**

This amazing new product, Ironized Yeast, is made from specially cultured *Saccharomyces* ale yeast imported from Europe—the richest yeast known—which by a new process is concentrated 7 times—made 7 times more powerful. But that is not all! This super-rich yeast is ironized with 3 special kinds of iron which strengthen the blood, add energy. Day after day, as you take Ironized Yeast tablets, watch fat chest develop, skinny limbs round out attractively, skin clear to beauty, new health comes—you're an entirely new person.

Contributed by Janet and Mel...

**The Overland Corner Walking Trail.**

**1. The Overland Corner Hotel.**

Built 1859, this is by far the oldest surviving building in the Riverland. Its original construction was almost entirely of locally available materials, including limestone, red gum and native pine timbers, a dirt floor and thatched roof of river reeds. This rough bush inn, situated on a vital stock route from N.S.W., catered to drovers, explorers and other travellers and became the heart of the first outlying European settlement in the region. It is said that it was frequented by bushrangers. Its flood prone site is an alluvial fan. When an underground tank was dug, twenty years after the hotel was built, it was discovered that there is a very old Aboriginal burial ground 3 metres beneath the building. The hotel represents the beginning of a time of great and rapid change in the area.



Note the 1956 flood level marker.



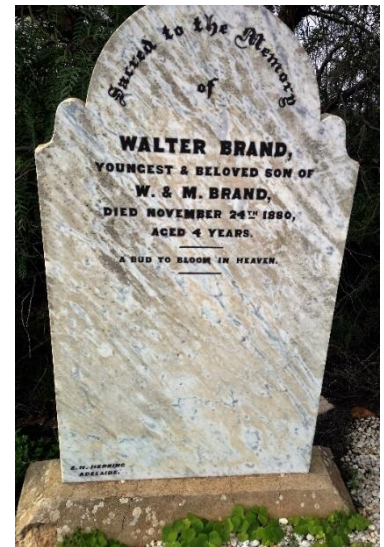
**2. The Limestone Quarry.**

The limestone quarry provided the stone for the Overland Corner Hotel, and up until the late 1950s it was the source of building materials for other buildings in nearby towns, including the Lutheran Church at Paringa. The rock is composed almost entirely of fossils. Corals, shellfish and the occasional shark’s tooth give evidence that this area was once covered by warm, shallow seas, long before man walked on the earth, some fifteen million years ago.



**3. The Small Cemetery.**

This the oldest cemetery in the area. The two children’s graves reflect the lifestyle hazards of the past. Many died of infectious diseases such as consumption (Tuberculosis), influenza, and dysentery. Aboriginal people suffered the most; from terrible epidemics of new diseases that raged through the region emanating from the NSW colony.



**4. The Copper Mine.**

In 1938 a party of Cornish miners worked at this site for almost a year. Nothing of economic value was discovered and the diggings were abandoned. (There was no evidence of copper mineralisation sighted when we visited the area).



Contributed by Janet and Mel...

**The Overland Corner Walking Trail.**

**4. The Copper Mine: Continued...**



Overland Corner Hotel viewed from the lookout.



Overland Corner Hotel viewed from mine diggings.



This iron mineralisation is prolific in massive form below the ochre quarry to below the lookout area.



Janet climbing the trail to the ochre quarry.

**5. The Ochre Quarry.**

Ochre, both red and yellow was used by Aboriginal people to make paint. It is believed that colour from this quarry was highly valued and traded with people as far away as the Coorong and Flinders Ranges. The site is known to be pre-European settlement...up to 30,000 years ago.

**7. Overland Corner Cemetery.**

The Overland Corner is the largest in the immediate area and is still in use. Members of the Brand family and other residents of the early European settlement are buried here. The indigenous population of this locality has never recovered to that of pre-European settlement. About 200 Aboriginal people lived here permanently, generation after generation for up to 30,000 years. This suggests that there may be something like 100,000 Aboriginal graves in the area.



**8. Black Box Tree (*Eucalyptus largiflorens*).**

This tree, with dark rough bark, generally grows above the red gum zone and clearly shows various high water levels. (Note the 1956 flood line on the hotel.) The species has fibrous roots that were chewed by Aboriginal women to make a tough fibre. The fibre was used to make netting to trap birds, animals and fish. Nets were up to 50 metres long and could take a year or more to make. Members of the Brand family planted many of the young box trees in 1987. They worked with the Glossop High School students with the hope of restoring vegetation to the locality to the lush abundance of former times.

Continued next page...

Contributed by Janet and Mel...

**The Overland Corner Walking Trail.**

**8. Black Box Tree:** Continued...



**BLACKBOX TREE 1780**  
 "EUCALYPTUS LARGIFLORENS"  
 ONE OF THE OLDEST KNOWN BOX TREES  
 PLANTED BY THE GREATEST RECORDED  
 FLOOD APPROXIMATELY 1780.  
 TWICE THE VOLUME OF THE 1956 FLOOD.

**9. Canoe Tree.**

River red gum trees showing large characterised scars from their bark being prised off (as pictured below) are known as 'canoe trees'. They were once numerous in the Riverland. Unfortunately, many have been cut down and used for firewood and building materials. These trees were a well-used resource by Aboriginal people in many other ways. Climbing notches were often cut to provide access to the rich habitat of birds, animals and bees, which were sources of food, skins, and feathers used for clothing and decoration.



End of Trail... Back to Overland Corner Hotel.



C0n7r1bu73d by D0ug W4lk3r...

**R34D1NG T357**

Here's another trick from the Doctor to test your skills. Can you meet this challenge? We've seen this with the letters out of order, but this is the first time I've seen it with numbers.

Good example of a Brain Study: If you can read this OUT LOUD you have a strong mind. And, better than that: Alzheimer's is a long, long, way down the road before it ever gets anywhere near you!

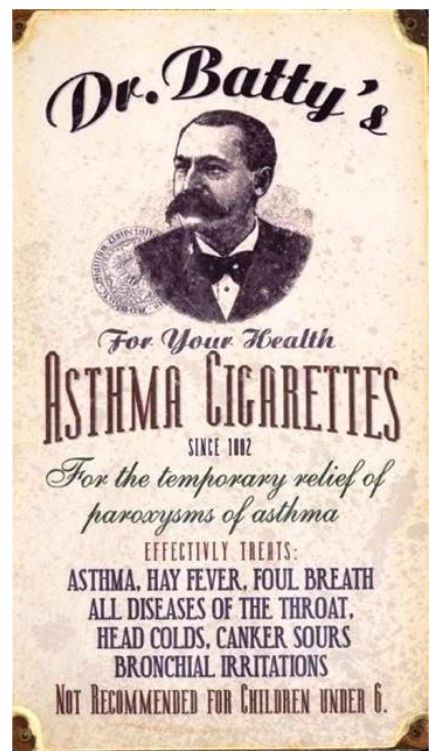
7H15 M3554G3  
 53RV35 70 PROV3  
 HOW OUR MIND5 C4N  
 DO 4M4Z1NG 7H1NG5!  
 1MPR3551V3 7H1NG5!  
 1N 7H3 B3GINNING  
 17 WA5 H4RD BU7  
 NOW, ON 7H15 LIN3  
 YOUR M1ND 1S  
 R34D1NG 17 4U70M471C4LLY  
 W17H0U7 3V3N  
 7H1NK1NG 4B0U7 17,  
 B3 PROUD! ONLY  
 C3R741N P30PL3 C4N  
 R3AD 7H15!  
 PL3453 F0RWARD 1F  
 U C4N R34D 7H15.

To my 'selected' strange-minded friends: If you can read the following paragraph, forward it on to your friends with 'yes' in the subject line. Only great minds can read this. This is weird, but interesting!

If you can read this, you have a strange mind, too.

Can you read this? Only 55 people out of 100 can.

I don't believe that I could actually understand what I was reading. The phenomenal power of the human mind, according to research at Cambridge University, it doesn't matter in what order the letters in a word are, the only important thing is that the first and last letter be in the right place. The rest can be a total mess and you can still read it without a problem. This is because the human mind does not read every letter by itself, but the word as a whole. Amazing huh? Yeah and I always thought spelling was important! If you can read this forward it.



Contributed by Doug Walker...

### Why Teachers drink

(Questions set in last year's GED examination and some genuine answers made by 16 year olds).

Q. Name the four seasons?

A.. Salt, pepper, mustard and vinegar.

Q. How is dew formed?

A.. The sun shines down on the leaves and makes them perspire

Q. What guarantees may a mortgage company insist on?

A.. If you are buying a house they will insist that you are well endowed.

Q. In a democratic society, how important are elections?

A.. Very important. Sex can only happen when a male gets an election.

Q. What are steroids?

A.. Things for keeping carpets still on the stairs.

Q. What happens to your body as you age?

A.. When you get old, so do your bowels and you get intercontinental.

Q. What happens to a boy when he reaches puberty?

A.. He says goodbye to his boyhood and looks forward to his adultery.

Q. Name a major disease associated with cigarettes?

A.. Premature death.

Q. What is artificial insemination?

A.. When the farmer does it to the bull instead of the cow.

Q. How can you delay milk turning sour?

A.. Keep it in the cow.

Q. How are the main 20 parts of the body categorised? (e.g. The abdomen)

A.. The body is consisted into 3 parts - the brainium, the borax and the abdominal cavity. The brainium contains the brain, the borax contains the heart and lungs, and the abdominal cavity contains the five bowels: A,E,I,O,U.

Q. What is the fibula?

A.. A small lie

Q. What does 'varicose' mean?

A.. Nearby.

Q. What is the most common form of birth control?

A.. Most people prevent contraception by wearing a condominium.

Q. Give the meaning of the term 'Caesarean section'?

A.. The caesarean section is a district in Rome.

Q. What is a terminal illness?

A.. When you are sick at the airport.

Why Teachers Drink - continued...

Q. What is a seizure?

A.. A Roman Emperor (Julius Seizure, I came, I saw, I had a fit).

Q. What does the word 'benign' mean?

A.. Benign is what you will be after you be eight.

Q. What is a turbine?

A.. Something an Arab or Shreik wears on his head. Once a Arab boy reaches puberty, he removes his diaper and wraps it around his head.



### Lexophilia

Velcro - what a rip off!

How does Moses make tea? Hebrews it!

Venison for dinner again? Oh deer!

Cartoonist was found dead in his home. Details are sketchy.

Haunted French pancakes give me the crêpes.

They told me I had type-A blood, but it was a TypO.

England has no kidney bank, but it does have a Liverpool.

I tried to catch some fog, but I mist.

I changed my iPod's name to Titanic. It's syncing now.

Jokes about German sausage are the wurst.

I know a guy who's addicted to brake fluid, but he says he can stop any time.

I stayed up all night to see where the sun went, and then it dawned on me.

This girl said she recognized me from the vegetarian club, but I'd never met herbivore.

When chemists die, they barium.

I did a theatrical performance about puns. It was a play on words.

Why were the Indians here first? They had reservations.

I didn't like my beard at first. Then it grew on me.

Did you hear about the cross-eyed teacher who lost her job because she couldn't control her pupils?

When you get a bladder infection, urine trouble.

Broken pencils are pointless.

I dropped out of communism class because of lousy Marx.

All the toilets in New York's police stations have been stolen. The police have nothing to go on.

I got a job at a bakery because I kneaded dough.

Don't worry about old age; it doesn't last.



Contributed by Cortana; the lady on my PC...

How about a medical joke? Did you hear about the pig who lost his voice? He was disgruntled!

How about a science joke? Have you heard about the sick chemist? If you can't *helium* and you can't *curium*, you'll probably have to *barium*.

How about a pirate joke? What did the buccaneer say on his 80<sup>th</sup> birthday? ... "aye matey"

They say a Freudian slip is when you say one thing, but really mean your mother.

Cortana says she's pretty good with spreadsheets. She says, "Some might even say that I Excel at them."

How about a comparison: what's the difference between ignorance and apathy? I don't know and I don't care.



Contributed by Doug Walker...

### Post Turtles

An old farmer was getting his hand stitched up after an accident at his cattle farm.

He and the doctor start into conversation, which leads into politics.

The old farmer explained, "Well, as I see it, most politicians are 'Post Turtles'."

Not being familiar with the term, the doctor asked what a 'post turtle' was. The old farmer explained as best he could, "When you're driving down a country road and you come across a fence post with a turtle on top, that's a 'post turtle'."

The doctor remained puzzled. The farmer continued further.

"You know he didn't get up there by himself, he doesn't belong up there, he doesn't know what to do while up there, he's elevated beyond his ability to function, and you just wonder what kind of dumb arse put him there to begin with."



### Blonde Jokes

Q: What did the blonde say when she saw the sign for YMCA?

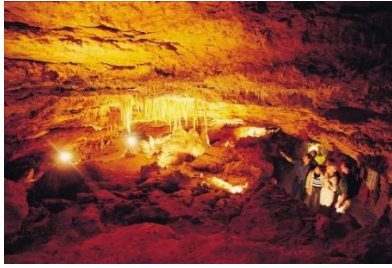
A: "Look, they spelled Macy's wrong!"

Q: What do you call a blonde with two brain cells?

A: Pregnant.



**Ballarat and Grampians 1990 – Nancy Lynn**



In 1990 we did take,  
A trip to Ballarat in the great Victoria State.  
First stop was Naracoorte to see Olive and Doug,  
Where it rained so much it made the ground like mud.



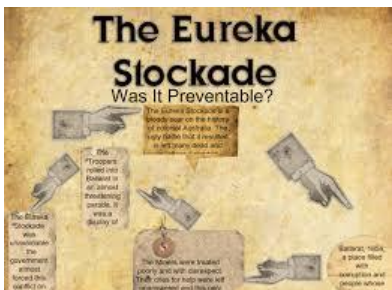
On our first night at Portland down by the sea,  
There was Doreen and John, Don and me,  
The wind it was howling and cold as could be,  
So we soon went to bed after eating our tea.



Saw Tower Hill, then through Warrnambool on this day,  
Then down the lovely rugged coast, past Port Campbell on our way.  
We took so many photos of these lovely coastal scenes,  
There was so much rugged beauty, and you can see it in your dreams.



Into Geelong and with friends we did stay,  
Then we went out to Morrison for a picnic there one day.  
Next to Alden Lodge Coral Gardens to see,  
The beauty of shells and coral from way down under the sea.



Into Ballarat and the Eureka Stockade,  
Then on to Sovereign Hill our merry way we made  
It tells the story of mining for gold,  
And of fortunes and hardships there are all told.



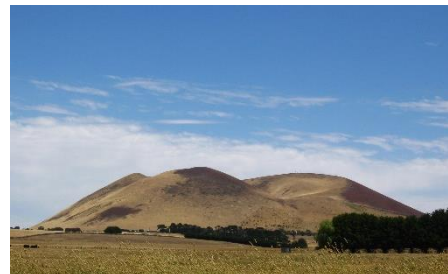
We stayed with friends called Valerie and Ron,  
Then to the Ballarat Gardens we took Val along.  
Next at Anakie Fairy Park we saw,  
Age old fairy stories there galore.



We saw the calisthenics at the Ballarat Old Town Hall,  
Saw those pretty girls there all dressed up galore.  
They sang and danced in a delightful way,  
Then the winners were announced at the end of the day.

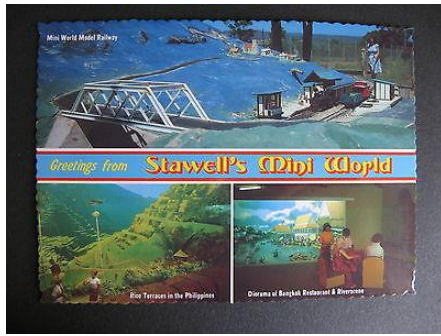


We viewed Mt. Elephant at Derrinallum,  
To Kevin and Monica's place we surely had come,  
Then at Mortlake we found an Olivine Bomb,  
There in an old mine that we chanced upon.



We came to the Grampian Mountains as we travelled by one day,  
We say their rugged beauty as we wandered on our way,  
The beauty of the mountains and the waterfalls so high,  
And the tall leafy gum trees reaching for the sky.

*Continued next page...*



We saw the laughing Kookies and the Koalas in the tree,  
And then we went to Stawell the mini-world to see,  
We climbed right up to Wonderland up the Grand Canyon Track,  
And when we had seen the beauty, well, then we walked right back.



We walked down to the McKenzie Falls to see,  
Clear cool sparkling water, tumbling past rocks and trees,  
With ferns and wild flowers growing by,  
And pretty birds, flying in the bright blue sky.



Next we called at Zumsteins as on our way we go,  
To see the Kangaroos a hopping to and fro,  
They came to eat the crusts that Don held in his hand,  
Then, when they had their fill they lay down in the sand.



We spent our last night, at Nhill along the way,  
For ten lovely days we'd been away.  
We've seen such lovely places and met some real great friends  
And now that we are home again, here my story ends.

*Nancy Lynn.*

\*\*\*

Contributed by Doug Hughes...

### Friday Funny.

An elderly frumpy couple return to a Mercedes dealership, where the salesman has just sold the car they were interested in to a beautiful, leggy, busty blonde.

"I thought you said you would hold that car till we raised the \$75,000 asking price," said the man. "Yet I just heard you close the deal for \$65,000 to the lovely young lady there. You told us there could be no discount on this model."

"Well, what can I tell you?" replied the grinning salesman. "She had the ready cash and, just look at her, how could I resist?"

Just then, the young woman approached the middle-aged couple and gave them the keys.

"There you go Dad," she said. "I told you I could get the tosser to reduce the price!"



Contributed by Doug Walker...

### Fly AirCanada

The little boy had been looking out of the window. He turned to his mother and asked, "If big dogs have baby dogs, and big cats have baby cats, why don't big planes have baby planes?"

The mother couldn't think of an answer. She told her son to ask the flight attendant.

The boy went down the aisle and asked the flight attendant, "If big dogs have baby dogs, and big cats have baby cats, why don't big planes have baby planes?"

The busy flight attendant smiled and asked the boy, "Did your mother tell you to ask me that?" The boy replied, "Yes, she did."

"Well", said the flight attendant, "you tell your mother that there are no baby planes because AirCanada always pulls out on time.

Have your mother explain that to you."



Contributed by Doug Walker...

### Nine Important Facts to Remember As We Grow Older

#9 Death is the number one killer in the world.

#8 Life is sexually transmitted.

#7 Good health is merely the slowest possible rate at which one can die.

#6 Men have two motivations: hunger and hanky panky, and they can't tell them apart. If you see a gleam in his eyes, make him a sandwich.

#5 Give a person a fish and you feed them for a day. Teach a person to use the Internet and they won't bother you for weeks, months: maybe years.

#4 Health nuts are going to feel stupid someday, lying in the hospital, dying of nothing.

#3 All of us could take a lesson from the weather. It pays no attention to criticism.

#2 In the 60s, people took acid to make the world weird. Now the world is weird, and people take Prozac to make it normal.

#1 Life is like a jar of jalapeno peppers. What you do today may become a burning issue tomorrow.



## Member's Noticeboard

### For Sale

**Attention: Cabbers & Collectors**

**Indonesian Amber for sale –**

**Red, gold & the very rare  
Sumatran blue**

(Which comprises only 2% of that mined.)

**Material has been carbon dated at  
20-25 million years old.**

**All AAA grade & sold by the piece.**

**Pieces range from 10 – 100 grams**

**Red / gold priced at .65 per gram**

**Blue priced at .80 per gram.**

**If interested, contact Augie**

**On 08 8265 4815 or 0433 571 887**

\*\*\*

### For Sale

**GEMMASTA GS.10**

**10 Inch Power Feed Saw**

**Complete with - Board, Motor and  
Hood**

**Excellent Condition**

**Price New - \$3,100**

**For Sale - \$1,400**

**Contact Tony Bailey at  
0400293057**

\*\*\*

### Garage Sale

**Rocks, Minerals, Gemstones, and  
Mineral Books/Booklets, etcetera.**

**Sat 20<sup>th</sup> August and Sun 21<sup>st</sup> 2016**

**9.00am 'til 4.00pm**

**23 Dorset Street,  
BRAHMA LODGE 5109**

**Phone Vince on 08 8258 9917.**

\*\*\*

### Rockhounds 50<sup>th</sup> Year Invitation

*Greetings to all the Gem and Mineral Clubs  
of SA,*

*Below you will see an invitation to the  
Southern Rockhounds Swap Meet.  
2016 is our 50<sup>th</sup> year so we would like to  
invite fellow members to come and help us  
celebrate the occasion on the 18<sup>th</sup> of  
September.*

*Please note that it is a simple swap meet  
and is not designed for professional  
traders.*

### Swap Meet at the Southern Rockhounds

On Sunday the 18<sup>th</sup> September 2016;  
between 10.30am-2.30pm., we are  
Celebrating our 50<sup>th</sup> Anniversary.

Come and join us at our clubrooms at 17  
Gerald Court Christie Downs. It's open to  
all South Australian Gem and Mineral Club  
Members.

BBQ lunch available for nominal cost.

Call Lyn on 8387 8951 or 0458 153 426 or  
email [lyn@cloudford.com](mailto:lyn@cloudford.com)

Ten camp sites are available for those  
travelling longer distances.

Camp site Bookings are Essential.

All items must be Lapidary and Allied Craft  
related.

Kind Regards, Lynn Ford.

\*\*\*

## Useful Internet Links

2016 Australian Gem & Mineral Calendar: [Gem & Mineral Calendar](#)

Adelaide Gem and Mineral Club: [AGMC](#)

AFLACA-GMCASA: [AFLACA-GMCASA](#)

Australian Federation of Lapidary and Allied Crafts Association (AFLACA): [AFLACA](#)

Australian Lapidary Forum: [Australian Lapidary Forum](#)

Broken Hill Mineral Club: [BHMC](#)

Enfield Gem and Mineral Club Inc: [EGMC](#)

Flinders Gem, Geology and Mineral Club Inc: [FGGMC](#)

Gem and Mineral Clubs Association of South Australia: [GMCASA](#)

Metal Detectors - Garrett Australia: [Garrett Australia](#)

Metal Detectors - Miners Den Adelaide: [Miners Den Adelaide](#)

Metal Detectors - Adelaide Agent for Garrett Australia: [Shell Lap Lapidary Supplies Pty Ltd](#)

Mineralogical Society of SA Inc: [MinSoc](#)

Murraylands Gem and Mineral Club Inc: <http://www.murraylandsgmc.org.au/>

NQ Explorers: [NQ Explorers](#)

Prospecting Australia: [Prospecting Australia](#)

Shell-lap Lapidary Supplies: [Shelley's Lapidary Supplies Pty Ltd](#)

Southern Rockhounds: [Southern Rockhounds](#)

The Australian Mineral Collector: [The Australian Mineral Collector](#)