# Mineralogica Tasmanica



## THE MINERALOGICAL SOCIETY OF TASMANIA JOURNAL & NEWSLETTER NO. 73, MAY 2010

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# THE MINERALOGICAL SOCIETY OF TASMANIA:

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**Meetings** Are held on the second Friday of each month at 7.00pm,

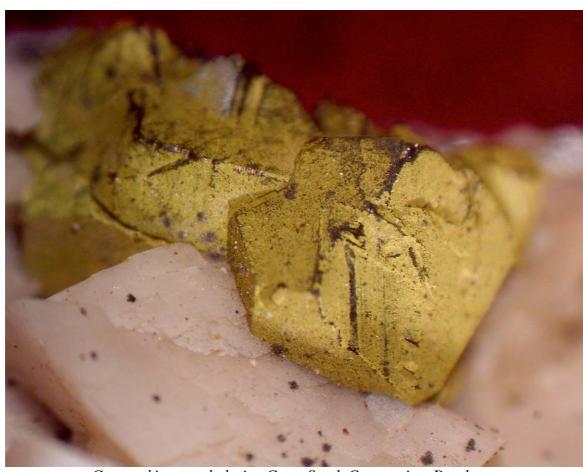
in the first year lecture theatre, Geology Dept., University of Tasmania, Sandy Bay. Visitors are most welcome.

**Membership fees** \$15: single, \$20: family (includes 4 newsletters/yr)

**Patron:** Professor Ross Large, University of Tasmania **Website:** <a href="http://www.mineral.org.au/socs/taspg001.html">http://www.mineral.org.au/socs/taspg001.html</a>

**ABN:** 49 582 252 658

The Mineralogical Society of Tasmania is a member body of the Tasmanian Lapidary and Mineral Association Incorporated.



Greenockite on sphalerite, Great South Comet mine, Dundas. Ralph Bottrill specimen and photo. FOV 20mm.

## PROGRAM / EVENTS



14<sup>th</sup> May 2010 Meeting: P Manchester and/or Gemboree

12-14th June: JAMMS Symposium - Adelaide

18<sup>th</sup> June Meeting: Bill Baker: Saxon minerals

5-8th July AESC:Canberra

9<sup>th</sup> July Meeting: AGM?; Mexican crystal caves

13<sup>th</sup> August Meeting: **RSB: Tasmanian type minerals or** 

gems?

29<sup>th</sup> August?? Field trip: ? **Lonnavale?** 

10<sup>th</sup> September Meeting: **Tony Joyce: Brett's big adventure** 

19<sup>st</sup> September Field trip:

8<sup>th</sup> October Meeting: Quiz night/Soapbox?

17<sup>th</sup> October Field trip: ?

?2-14th November Arizonan Club excursions (TBA)

5-7th November Zeehan gem & mineral Fair

12<sup>th</sup> November Meeting: **Ray Grant** 

? November 2008 Xmas function (?)

Dec? Field trip: Weld River?

December 2008: No meeting

19th -20th April 2011: Hobart Gem and Mineral exhibition

119-20th April Hobart Gem & Mineral exhibition

### TLMA programs: see p. 5

*Italicized* items are non-MST events: ask Ralph for contacts.

Nb: Most trips are tentative dates. PLEASE CONFIRM field trip details and your attendance, at least two days in advance, with a nominated **Field Trips Officer** or contact the president.

# Thumbnail Boxes

We have a supply of these available now. Clear Lid, white or black base

From \$1.60 each, with quantity discounts.

Size (Metric):38mm x 38 mm x 32 mm Base Size: 38mm x 38 mm x 11mm



# PRESIDENT'S REPORT

#### **Recent MST affairs**

On the 12<sup>th</sup> March the theme of the Meeting was a UV fluorescence mineral night, presented by the president, with extended tests of many minerals.

The March trip (28/3/2010) was a successful one to Cygnet (see p. 7)

Gemboree 2010 was held very successfully in Devonport ( $2^{nd} - 5^{th}$  April 2010) (see p. 9 for some photos). Next year's Gemboree will be in Bathurst.

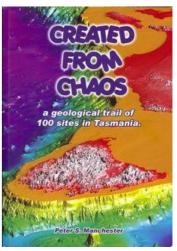
The April meeting was cancelled due to too many things being on during that period.

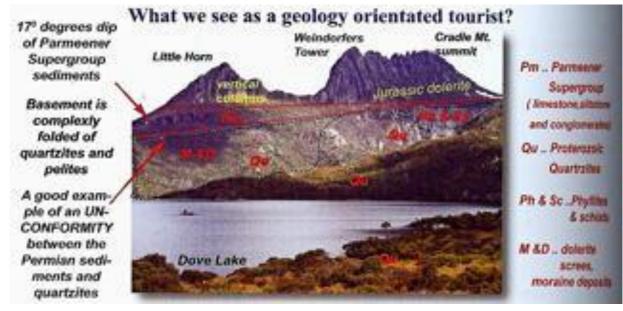
The Hobart exhibition (2-5/4/2010) was also very successful (see p. 9), and we are working on another for next year (<u>Gem and Mineral Exhibition</u>; see p. 14). The show will be moving to the Glenorchy showgrounds.

On 14<sup>th</sup> May we had a meeting with a talk by Peter Manchester on his book and what we don't know about the geology of Tasmania. This was followed by a slideshow by Michael Pope on the Gemboree and Exhibition, and Peter's book signings.

# **Created from Chaos**

A geological trail of 100 sites in Tasmania, written by geologist, teacher, photographer and our own MST member Peter Manchester, this excellent book has just been released. This is a well illustrated description of 100 of the best and most accessible geological features in Tasmania, written for the layman. This is a book that we should all take with us on our trips to help us understand out landscape and its formation. They are available in some bookstores now for \$60, but members of the society can get copies for \$50, plus \$8 postage if required (contact Peter on <a href="mailingandi@vision.net.au">milingandi@vision.net.au</a> or Marnie or Ralph will take orders).





## **MST LIBRARY**

Interesting articles in journals recently received include:

*Micronews (Canada)* 44 (2): Microlabelling, 44 (3) Mt St Hilaire

Microscope (NZ): 73 Mar 2010: Anatase, Skeletal quartz

**NWTMC** (May 2010): Mineral Collecting

Taslap (Lap Club Tas) (March 2010): Fossil trip

Mineralogical Society of Vic Newsletter

Apr 2010: Hugo Strunz June 2010: Mines of Victoria



Mineralogical Society of Qld Newsletter Oct 2009: vivianite

Mineralogical Society of NSW Newsletter Feb 2010

Many interesting articles occur in these newsletters; please don't hesitate to ask to borrow these, or any of our books. We also hold many mineral-related books and some videos and CD-ROMs. A catalogue is available from Michael Pope ( <a href="mailto:pope00@ozemail.com.au">pope00@ozemail.com.au</a>, ph 03 62442023), who also curates a photo album for the Society; all relevant donations (eg. from field trips) are most welcome (electronic or hard-copy, but please add some details).

# ANZ Mineral Collector magazine

Issue 9 contains articles on Broken Hill gahnite, Harts Range kyanite, field trips to Namibia and Madagascar and more. It is full colour, and 28 pages.

New pricing structure: This issue is the first that provides a number of options.

The first is to order directly through Lulu in the same way as in the past. High quality printing and a cost of \$US12.50 plus postage: See: <a href="http://www.lulu.com/smartarts">http://www.lulu.com/smartarts</a>.

The second option is through a printing facility in Melbourne, Australia. The quality is still good, but not quite as high as Lulu. The benefit, particularly for Australian and New Zealand subscribers, is the lower cost which is \$AU12.50 post paid in Australia, and \$AU15.00 post paid to New Zealand. To take up this option, orders will need to come through Steve Sorell: steve@crocoite.com.

Mineral Collector

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April 2009

The third option is an electronic one. Each issue can be downloaded directly from Lulu. Cost for this option is \$US5.00.

Issue 10 Just out!

## TLMA NEWS

# Tasmanian Lapidary & Mineral Association Inc.

Report on TLMA & GEMBOREE Meetings 15th May 2010, by Barry & Marnie Pope.

Pam Carter (GEMBOREE Manager) reported that Tasmania had accomplished all that it set out to do and that the event was very successful. She thanked all the Managers.

Nigel Burch (Treasurer) noted that the profit included Grants from Devonport Council and Events Tasmania.

Val Holmes (Competition Manager) thanked all the judges (Tasmanian & Mainland), but noted more judges, especially jewellery, minerals and fossils were needed before the next GEMBOREE in Tasmania in 2016. There were 951 competition entries.

The Hall Manager reported the Devonport Council were happy with the floor considering the amount of foot traffic. Evening activities and field trips were well attended with all guests enjoying themselves.

Gavin Linger (Tailgate Manager) was very pleased with the clean condition that the tailgaters left their area.

The TLMA is looking into changes to the Constitution and anybody with any thoughts should submit their ideas to the President (Neil Newman) in advance, so there can be a discussion at the next meeting on Saturday 4th September in Launceston, which is also the date of the AGM.

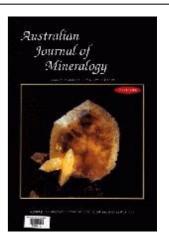
Photos of Devonport GEMBOREE 2010 are at p. 9 and : http://www.victoriangemclubs.asn.au/VGCAWebsite/Gallery.html http://aflaca.org.au/gemboree/gallery

and a copy of GEMBOREE 2011 at Bathurst NSW booklet is available at: http://aflaca.org.au/wp-content/uploads/2010/04/Booklet\_GEMBOREE\_Bathurst2011.pdf

See p. 10 for photos of Gemboree 2010.

# **Australian Journal Of Mineralogy**

The latest issue of this great journal (14/2) is now out, with an article on Kolitschite (see below) and more . For more information see: <a href="http://www.mineral.org.au/pubs/ajm.html">http://www.mineral.org.au/pubs/ajm.html</a> . We can show you copies on request and provide subscription forms (\$28/yr). The journal is a must-have for all Australian mineral collectors and mineralogists. It is of a similar standard to the Mineralogical Record, but the focus is on articles on Australian minerals and localities. Any contributions, advertising, suggestions can be directed through the editor Dermot Henry (dhenry@museum.vic.gov.au) or the president. The second Tasmanian issue is still in prep. Other upcoming issues are Gold (November 2008?) and possibly Gem minerals. Several back issues of the AJM are available from the society (via Ralph).



# TRIP TO CYGNET

By Brett Chandler With photos by Colin and Bianca and Peter Manchester

On the 28<sup>th</sup> March 2010 we held a field trip to the Cygnet area. The primary focus of the field trip was to visit somewhere closer to home, Cygnet only being some 54 km's from Hobart, and to look outside our normal mineralogical interests and spend some time looking at the Permian aged fossils of the area and the Syenite dykes exposed along parts of the foreshore from Cygnet to Lymington.

The weather was great, and the trip was well attended by members, twelve from memory, as we worked our way



along the coast following the geological markers of the Lymington trail. The Lymington trail, as I understand it, is due largely to the efforts of our very own Mike Jagoe who has great local knowledge of this area and had markers (signs) erected along the coast which indicate and explain the relevant geology at each particular point of geological interest.

It is at this point that I would like to formally acknowledge Mike Jagoe for his local

knowledge and past efforts (the Lymington trail) which were valuable in making the field trip a success and who's website has provided much of the following detail, thanks Mike.

Cygnet was originally called Port des Cygnes (Port of Swans) in 1793 by the French explorer Bruni D'Entrecasteaux due to the prolific number of swans found in the area. William Nichols was the first European settler in the region in 1834. His grandson John embarked on a ship building business at Port Cygnet. Probation stations for convicts were instituted at Port Cygnet, Lymington, Nicholls Rivulet and Huon Island in 1845. The first post office opened in 1854, and by 1915, the town became known as Cygnet.



Porphyritic syenite dyke with coarse sanidine, Regatta Pt

Built in 1840 the St James Catholic Church in Cygnet is one of Australia's oldest houses of worship, and it is from around this time that reef and alluvial gold was being mined from the surrounding hills.

Looking back beyond its most very recent history, the Cygnet area during the Permian Era, some 275,000,000 years ago, was the floor of a shallow sea, comprised of sedimentary silts and sands upon which shellfish (Brachiopods, Gastropods & Pectens) and coral like bryzoan structures (Fenestella) lived.

Then during the Jurassic Era, some 175,000,000 years ago, large amounts of the sea floor were intruded by doleritic magma which worked its way through the sedimentary material to form dolerite sills and dykes. This hot magma altered some of the sedimentary material along its contact causing some of the unusual looking rocks which can be seen in areas along the foreshore today, in particular at Regatta Point.

Some 100,000,000 years ago, during the Cretaceous Era, another intrusion of magma, Syenite this time, worked its way into the sedimentary and dolerite rock of the area. As it worked its way towards the surface it formed the numerous Syenite dykes that are currently exposed along the foreshore.

The most interesting and visually appealing of this Syenite is the sanidine porphry which contains large yellow-white crystals of feldspar in a matrix of dark green Syenite. The feldspar crystals aligned with what was the flow direction



of the molten magma as it was cooling to its solid state.

Of course our field trip took place many millions of years after these events, but it was still there for us all to see. Members of the field trip had the opportunity to view fossil brachiopods and fenestella from the Bundella formation; the predominant mudstone and siltstone of the area. Sanidine porphry, and a few Melanite (dark brown) and Spessatine (red) garnets were found amongst the Syenite dykes and exposures as we worked our way along the foreshore and enjoyed the picturesque scenery.

After approximately four hours of rock hopping along the coast most of us made our way back to Mike Jagoe's house in Nicholls Rivulet were we looked at his collection and had a BBQ lunch. It was here that we all got to enjoy the greatest treasures we had seen on the field trip, a couple of Mike's large homemade apple pies with cream – beautiful. All up it was a very enjoyable day, made so by the company of our members, the nice weather, the opportunity to look at rocks, and the efforts of our host – Mike Jagoe. Thanks to all.

By the way if you are interested in a bit more information on the Cygnet area or the Lymington trail, then visit Mike's webpage at:

http://www.eftel.com.au/~imagemaker/cygnet.htm





# **GEMBOREE 2010**

Photos by Michael Pope and Nancy Preuss

We had a very successful Gemboree in Devonport over Easter this year (see TLMA news for more info), and the MRT/MST stall was also successful. Many thanks to all who helped, particularly the Popes, Brett, Colin, Tony, Mathew and Mike.











# **GEM & MINERAL EXHIBITION**

Photos by Michael Pope and Nancy Preuss

We also had a very successful Exhibition in Hobart the following weekend, and the MRT/MST stall was again very successful too. Many thanks to all who helped, particularly Dave, Bill, Brett, Colin, Matthew, Sue and Mike.











# T.L.M.A. FIELD TRIPS 2010

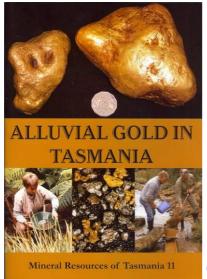
The trip leaders MUST be contacted with 2 days prior to the trip. Please remember the T.L.M.A. Code of Ethics at all times. Stone swaps can be held at field trips – check with trip leader.

Date	Location	Information	Club	Leader
<u> </u>			<u>Olub</u>	<u> </u>
May 1 & 2	Campbell Town	Rock, Swap & Sell	L.C.N.T.	G. Linger
		•	L.C.T.	63678143
				P. Sawyer
				62633237
June 13	Flowery Gully	Pick, Safety gear.	NWTMC	Sam Caberica
		Calcite	Ulverstone	6425 4340
July 11	Calder	Pick, bucket – Agate	D.L.C.	Ken Donaghy
	Penguin	" -Jasper		Ph 64 241303
August 15	Mt. Bischoff	Safety gear	NWTMC	Sam Caberica
		Minerals		6425 4340
September 12	Moina	Safety gear	D.L.C.	Ken Donaghy
		Topaz, Quartz		Ph 64 241303
October 10	Milton	Pick, Shovel	L.C.T.	Pam Sawyer
		Wood, Agate		6263 3237
November 6 & 7	Zeehan	Gem & Mineral Show		Kim Dunstan
				6471 6553
November 14	Lune River	Pick, Shovel, Probe	L.C.T.	Rod Hewer
		Agate, Wood, Fern		6248 7669

NOTE: Safety Gear = Hard Hat, Safety Glasses, High Visibility Vest, Steel Cap Boots, (Under 18 not allowed in working mines)

Remember ....No Safety Gear.....No Participation

Alluvial Gold Book revised and reprinted by Mineral Resources Tasmania



To order, contact rbottrill@mrt.tas.gov.au

# A Catalogue of the Minerals of Tasmania

by R S Bottrill and W E Baker

Catalogues of the minerals found in Tasmania

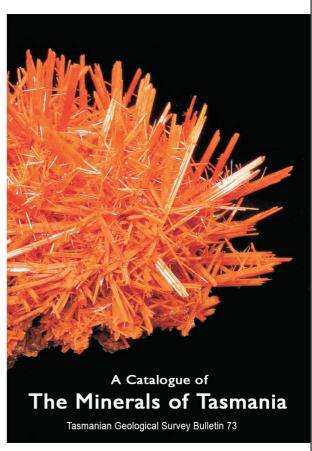
have been kept since almost the earliest days of mining and have been of invaluable assistance to prospectors, mineral explorers, mineralogists and collectors. The catalogue was first published by the Tasmania Department of Mines in 1910, and was extensively revised in 1969. Since then the improvements in technology and further investigations of minerals and mineral deposits have not only increased the number of identified species and data on mineral occurrences, but have also invalidated many previous 'species'.

The new Catalogue, published in late 2008, extensively updates the previous catalogue. A total of 753 minerals are described, comprising 483 confirmed species, 162 unconfirmed species, 72 variety or invalid names, and 36 series and group names. All entries in the 1969 catalogue have been re-evaluated and are now reclassified as to their known or likely validity.

Species invalidated or doubted from the 1969 listing have been retained, with comments. The new 254 page A4-size catalogue includes information on mineral occurrences and 314 colour photographs of Tasmanian mineral specimens. The soft-cover book has a recommended retail price of \$49.50 (including GST and post/packing). A very limited number of hard cover books are available only from MRT at \$75 (plus \$5 post/packing).

More info: see MRT Website: http://www.mrt.tas.gov.au





#### How to get a copy

Copies can be purchased from Mineral Resources Tasmania:

#### In person:

From our Rosny Park offices, 30 Gordons Hill Road, Rosny Park

#### By mail:

PO Box 56, Rosny Park, Tasmania 7018

#### By phone:

(03) 6233 8377

#### **Email:**

info@mrt.tas.gov.au

Some will also be available to collect in Hobart from the Mineralogical Society for a small discount – please contact Marnie (pope00@ozemail.com.au).

Cerussite, Magnet

3/0/10

## MINERALS FOR AMATUERS



# Mineral

# Matters

By Mike Jazoe

o you are interested in minerals and you have joined the Tasmanian Mineral Society. Is the Society meeting your expectations and are you getting the answers and enjoyment you expected from the organization?

If you have learnt that you don't call your minerals 'stones' then you are on the road to being a fully fledged mineral hound. If you've learnt that your beautiful mineral is not a 'rock' but is in fact a mineral then you have taken the next step.

It is the aim of these notes to help you better understand the wonderful world of mineral collecting and all its possible offshoots that come from it. Fossil collecting, outings, informative meetings and generally increasing your geological knowledge, for a start. Remember you certainly don't need to have a university degree, a diploma or blooming anything to get great enjoyment out of collecting. With a little basic knowledge and a penknife you can easily tell calcite from quartz and fool's gold from the real thing.

The fact that the hardness of quartz is 7 and calcite is 3 on Mohs hardness scale (a very easy to learn scale) and that knife tip pressed on a bit of fool's gold will cause it to shatter while putting the knife on that minute bit of gold will cause it to cut or flatten like lead and not shatter (i.e. is malleable or ductile) doesn't require a degree and is not 'Rocket Science'. Just think for a moment how those poor gold miners with just that tiny bit of knowledge could have saved so much heart-ache knowing those large hunks of 'gold' that was going to make them rich was in fact iron pyrite (fool's gold).

Remember it doesn't matter if you don't understand chemical formula. You don't have to know that NaCl stands for one molecule of the compound sodium chloride or common SALT when you are trying to identify that specimen of Halite—just give it a lick!

Over the next few Mineral Matters you will read about how mineralogists have devised a simple system of diagnostic test to assist to more easily identify minerals, that Mohs chap, a mineral's streak, cleavage, colour, fracture, luster, crystal form or habit, plus the basic chemical groups

mineralogist have placed them in.

O yes! One thing that horrified me at the Devonport mineral show was people trying to sell material at high prices with no or a very poor location for the specimen. A mineral without a location – Country, State or Province Mine etc.

(the more the better) a fossil without location, geological age and formation and at least some name trilobite, brachiopod etc and if your luck species name or even better genus name is worth next to nothing – just like that Royal Doulton cup with a great big chip out of it!

If you have any questions about what you would like to know about I will always try to help in Mineral Matters. Email me at: imagemaker@eftel.com.au Mike.

## **EXHIBITION 2011**

The next Gem and Mineral Exhibition will be held in the Glenorchy Showgrounds, greater Hobart, Tasmania, Australia. This is the principal gem and mineral show in Tasmania, run by the Mineral Society and the lapidary Club of Tasmania, now held every year:

# The Hobart Gem and Mineral Spectacular 2011 Tasmania's Hidden Treasures

Saturday 19th April 11.00 am - 5.00 pmSunday 20th April 10.00 am - 4.00 pm

Grandstand Hall, Hobart Showgrounds, Glenorchy



## YOU KNOW YOU ARE A ROCKHOUND IF...

### **Adapted from Mindat.org**

You know you are a rockhound if...

- Someone brings you a nice specimen to identify it and you ask: "Can I whack it with a hammer and scratch it with a nail?" ...you lick it to see how it will polish.
- After a week or two digging,,,, you don't care WHAT DAY it is,,,,, there's still crystals to dig out!!!
- People ask why you're always looking down.
- Collecting Rocks becomes your actual JOB!
- Its impossible to leave a mineral show with nothing
- If your rock garden has taken over your entire yard.
- You have to move the rocks out of the dish drainer so you can clean up from dinner. For that matter, you have to move the rocks so you can make dinner.
- you climb over a mountain and come back carrying twice the weight you started with
- You facet your kidney or gall stones.
- You find yourself trying to explain mindat to a friend (who happens to be a Trekker, or Trekkie, or whatever they prefer to be called), and patiently trying to convince him that it is not a tiny community....you have specimens in your cupboards instead of pots and pans, etc!
- You walk across a parking lot with rocks in the landscaping and find yourself thoroughly examining the rocks as you walk by, wondering if there is anything good in there, and wondering how you would classify the locality even if you did find something. When you hear about a new road construction project, you think first about the new road cuts, and not about the traffic snarls.
- If while in a place of business you look at the polished table tops, counter tops and floors for fossils, mineral suites and alteration products. My wife gets really upset at me when in a restaurant I am always looking for something geologically interesting in polished table tops, especially when I find something of note and point it out to her!
- When your china cabinet has no china in it, but is full of specimens. When your
  decorating style is classified by silicates, carbonates, phosphates, etc.
  Also...if every available flat surface in your house is covered in rocks or rock related
  stuff...so it's a real pain to tune the piano!
- when you have the wife steer the car for you after you almost run off the road looking at the road cuts.
- When you go house hunting you admire a new kitchen counter top by scanning it with a Geiger counter & then asking from where it is from. Also when the age of the counter top rock is more important then the kitchens age.
- When you are driving down the highway on vacation with the family, braking your neck
  to check out the road cuts at 70 mph! You say in a bit more than a whisper...."wow, look
  at the rock" and your wife pipes in to get your attention saying..."LOOK AT THE
  ROAD"!!!!!
- On Christmas morning, when you discover that you have been given COAL in your Christmas stocking, you exclaim: "Great, It's anthracite!"
- At parties, your are cornered, but responding courteously to: "I'm sure it's a meteorite! Can I bring it over.....,"
- when you buy tickets to a rock concert and are disappointed when the bands come out
- You are driving along, see a sign on the other side of the street that says "Rock Shop", make an illegal U-turn, find a parking spot a few blocks away, get an adrenalin rush when you see the "Open" sign then the big let down they only sell records (Denver, ca. 1973)
- If you cut the \*&#!@ out of your fingers while collecting quartz and stop the bleeding by putting little balls of clay on your fingertips while you relax and check out your haul!