



Mineralogical Society of Western Australia (inc.)

October 2005

Volume 5, Issue 3

Forward Diary
2005

President's Report

Greetings to everyone on this my first report. For all those who did not attend the AGM it was an pleasant evening which culminated in the election of some new office bearers and an interesting talk by Mignonne Clark on Ixiolites.

Following are the office bearers elect for this year.

Stewart Cole _ Vice President

John Reeve _ Secretary /Treasurer

Mignonne Clark _ Social Officer/Assistant Secretary

Nimal Perera _ Field Trip Officer

Suzanne Koepke _ Newsletter Editor

Ted Fowler _ Committee Member

Thankyou all for the opportunity to lead our Society into 2006

I shall endeavour to keep up the good work done by our Past President Jim Goldacre.

Yours Sincerely

Jeff Manners.

Reloaded for October due to AGM. (Apologies from Ed.)

This month we are looking at the Hexagonal System, follow these links below for more information.

<http://www.rockhounds.com/rockshop/xtal/part6.html>

<http://webmineral.com/crystal/Hexagonal.shtml>

I am expecting to see a lot of Tourmalines and any other surprises will we get. Some Apatite Xls also and Mimetite and Pyromorphite. Looking forward to seeing you all there with some interesting minerals.

ED.

February 2th

Club Meeting

April 6nd

Club Meeting

June 1nd

Club Meeting

August 3th

Club Meeting

October 5th

Club Meeting

December 7th

Club Meeting

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WORLD CLASS IXIOLITE SPECIMEN FOUND

LOCATION LONDONDERRY ON TUESDAY 14th JUNE 2005

On Monday 13th June following the 28th Annual Joint Mineralogical Societies Seminar 2005 held in Perth. About 30 mineral enthusiasts set off for Coolgardie – which is 510 kilometres east of Perth and arrived in the late afternoon. The next morning the group set out for the Quarry at Londonderry. An infamous but now disused mine site which is located 21 kms from Coolgardie.

It was here that Rebecca & Lawrence Queen from Queensland, who were casually examining the loose rocks on side of the embankments built around the quarry , made their prize discovery which now takes pride of place in their collection.

Continued over.



Photos by courtesy of Beatie Smith.

With only a few more minutes to drive before reaching Toodyay, a historic town less than 100km north-east of Perth, WA, the surrounding fog started to concern me as I didn't fancy the idea of digging while feeling cold and clammy. However, by the time our small convoy of 4 vehicles went up the hill to the quartz crystal collecting site, it had cleared and turned into the beginning of a perfect (if you ignore the ferocious mozzies) digging day.

It was not long before our group of 8 adults, 5 children and 1 baby had settled down to pick small crystal fragments off the surface and dig shallow holes in the topsoil. Nothing too strenuous, though: the social aspect and being out in the fresh air were equally important as the 'treasure hunt'.

After a short while, everyone started finding a few nice crystals including 'matrix specimens' and by mid-afternoon, the busy collectors each had a handful of 'little sparklers' to show for their efforts.

Over lunch, Glen and Jodie visited Toodyay, while Wendy, Noel and Sue went off on short strolls to explore the surrounding countryside. After her first walk, Wendy returned with an attractive piece of "Toodyay Stone": a quartzite that displays green chrome mica (fuchsite) along its smooth parting.

Quartzite bands form areas of high relief near Toodyay and consist of "interlocking grains of quartz with only minor amounts of muscovite, chrome-muscovite, feldspar, sillimanite, or garnet. The green chrome-muscovite is characteristic, though variable in amount."

To the west and south of Toodyay (towards Perth), a quartzite band which has been "quarried sporadically along its length for building and facing stone ("Toodyay Stone")" extends southward from Jimperding Hill to Clackline.

At the quartz crystal location near the Rifle Range, Toodyay, "quartz veins formed within a metamorphic quartzite bed that traverses the area. Fractures within the quartzite allowed low temperature quartz-rich water solutions to crystallize within them."

The quartz crystals were found loose in the topsoil, having weathered directly from thin, vuggy quartz veins that subcrop below. Larger masses of vein quartz within quartzite have also been found within the topsoil.

The best finds of the day (7th August) included numerous quartz crystals with well defined chlorite 'outlined' phantoms inside, including my 26mm x 6mm DT (doubly terminated) crystal with a DT phantom. Most quartz crystals from this site exhibit the 'usual' form and are terminated at one end. A small distorted, flattened terminated specimen was found by Wendy and a pink included DT crystal by me, while Noel unearthed a cute one with 2 terminations side by side, plus some material suitable for faceting. Noel's 'fattest' of 14 good crystals measured 20mm x 13mm. Glen and Jodie dug some very chunky specimens as well as groups and matrix specimens that need cleaning, and the 'Tichelaar tribe's abundant finds were awaiting cleaning as well.

While several quartz crystals found on this day were clear, most have inclusions of chlorite, epidote, hematite, magnetite, rutile (needles) and/or siderite in any combination. No smoky quartz crystals were found on this occasion.

During an earlier trip to this site, loose octahedral magnetite crystals to 1mm had been found in the topsoil, therefore I was delighted to discover a 'swarm' of octahedral magnetite crystals 'going through' an otherwise clear quartz crystal tip. This specimen is so richly included that it can be picked up with a magnet.

WORLD CLASS IXIOLITE SPECIMEN FOUND

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A little history for you.

Coolgardie is an Aboriginal name of uncertain meaning. Different sources give it as meaning "a rockhole surrounded by mulga trees" (the mulga tree is named "koolgoor"), from "coolgabby" meaning a tree near a waterhole, or after the large Bungarra lizard, pronounced "Coolgardie" by the Aborigines. It is claimed that Warden John Finnerty was the first to record the name, having asked local Aborigines the name of the place. The name was difficult to spell, and what some claim is "Golgardie", was spelt by Finnerty as Coogardie.

Prospectors Arthur Bayley and William Ford struck gold at Fly Flat in September 1892. Within six months there were thousands of miners living on the Coolgardie goldfields with prospectors, many on foot, making their way to the diggings along the 192 km bush track from Southern Cross; until the railway line from York was opened in 1896. The town site was laid out in 1893; at it's height there were 23 hotels, 7 newspapers and 2 stock exchanges; with wide streets to allow the camels trains to turn around.

Some of the best buildings from this era have been preserved with different construction material used - stone, brick, corrugated iron and timber.

In Austin Sprake's book "Londonderry The Golden Hole" © 1991 Hesperian Press ISBN 0 85905 1609

Tells the infamous story of how the "Londonderry Mine" became listed on the London Stock Exchange On December 1st 1894 to May 6 1896 Shares issued at £1 – peaking on March 29, 1894 at 28 shillings and 9 pence, this was also the day Lord Fingall found the Golden Hole to be no more than an empty shell By May 5th, 1896 the share price dropped to 2 shillings and 6 pence.

Londonderry had been discovered in May 1894 when six mates – John Mills, John Huxley and Thomas Elliott from Victoria; and William Gardner, Henry Dawson and Peter Carter from NSW, were camped out from Coolgardie. Mills was prospecting when he found a quartz reef about six feet above ground level with visible gold in it. Returning to camp with several good specimens the group lost no time in pegging the site. Registering the tenement on May 7th; naming it 'Londonderry' after Mills' hometown back in Ireland, for it was the custom to give a name to every lease.

The secret of their discovery lasted six weeks before the rush to Londonderry began.

On Saturday 23rd June 1894 the Union Bank weighed 4,280 ounces of gold from the mine. The Coolgardie Miner gave prominence to the discovery on the 30th June.

The opening of the telegraph line from Southern Cross to Coolgardie on July 23, 1894 spread the news to the outside world. Previously a cyclist carried the urgent messages 120 miles to The Cross.

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The following is some of the most recent published research of this site

Quoted under the heading “Londonderry” page 133 in the WAGS Mineral Resources Bulletin 22 – Tantalum in Western Australia by J.M. Fetherston © 2004 ISBN 0 7307 8939X

The three Londonderry pegmatites have intruded a south-trending suite of metamorphosed Archaean greenstones comprising metagabbro and other metamorphosed mafic intrusive rocks, komatite flows, and high magnesian basalt. The pegmatites appear to have a relationship with a course-grained biotite monzogranite that forms small intrusions and sheeted complexes together with pegmatite and aplite within the greenstone sequence (Hunter 1993)

In 1914 the first pits were sunk into lenses of lepidolite, but these proved to be uneconomic.

Between 1939 and 1979, Australian Glass Manufacturers mined potash feldspar from the pegmatites. They also mined small quantities of tantalite, columbite, and beryl.

This site is well worth visiting with many very nice specimens found.

Mignonne Clark.

Re-visit to Koolyanobbing via Satellite

On 25th March 2005, during the Easter holidays, we went on a mineral fossicking trip to Koolyanobbing in association with the Western Australian Lapidary and Rockhunting Club. A good description of this trip was already reported in their newsletter but there is another way to describe this trip via satellite with help from the internet. Hence, to continue with this description, you need to download the software GoogleEarth from the internet following this procedure:

Get on the internet and go to <http://earth.google.com/>

Then click the “Downloads” button on the upper left corner.

Check that your computer setup meets the criteria listed on the webpage.

Please note that if you have a dial-up network or a slower system, the program will still work but will be slow.

Proceed to download the file by double clicking on the free software “Google Earth” button and then the “I’m good to download GoogleEarth .exe” button.

On the file download box click on “Save” and then specify a temporary file to download the self-extracting file to.

Once the downloading has finished close all files and double click on the downloaded self extracting file.

The program should then install the GoogleEarth program, install an icon on the computer desktop and register the software on the web.

Now you are ready to start using the software

Double click on the GoogleEarth icon and you will see the image of planet earth as the information is downloaded from the internet.

On the bottom of the page you will see the control buttons for moving the planet (pan right-left-up-down buttons in the centre, rotate anticlockwise on the left, rotate clockwise on the right, zoom in-out levers to the left, tilt upward-flat on the right) with the coordinates of the pointer on the upper left (in degrees) and the depth of view (in feet) in the information bar just below the image of the planet.

Move the planet to get Western Australia in view and then zoom in slowly and maintain the pointer at the coordinates 31° 13’ 6.26”S, 119° 18’ 30.39”E. Zoom in to about 10,000 feet and wait until the download is complete as indicated by the Streaming = 100% indicator below the image.

What you will be seeing if you have made it this far, is a satellite view of the Southern Cross Railway Station just about NW of the Southern Cross town itself with a view of its railway line, roads, houses and other building structures.

From here, zoom out to about 15 miles and then move the planet southwards (so that the pointer moves north) so that the pointer is at 30° 52’ 56”S, 119° 32’ 40”E. Again zoom in to about 10,000 feet and you will see our campsite area which we used for three days during the trip

Following the same procedure of zooming out at about 15 miles and then zooming in to about 10,000 miles which offers the best image, go to the location 30° 59’ 27”S, 119° 38’ 20”E. This location is on the shore of Lake Seabrook where we collected halite and gypsum crystals on the second day of the trip.

Going further north at 30° 49’ 28”S, 119° 31’ 10”E we come to the heart of Koolanoobbing which is the junction of the north-south road and the east-west railway line. From here you should be able to see the salt pile at the train loading point at 30° 49’ 38”S, 119° 30’ 52”E which we visited on the third day of the trip. We also collected some specularite beside an access mine road at 30° 49’ 19”S, 119° 32’ E and then fossicked around the haematite mine pit at 30° 50’ 8”S, 119° 32’ 25”E and got haematite and goethite specimens.

On the morning of the last day we packed up and moved to Mukinbukin and had lunch at the caravan park at 30° 55’ 10”S, 118° 12’ 23”E and went to the pegmatite at 30° 53’ 29”S, 118° 08’ 43”E where we were able to collect some radioactive allanite, fergusonite, smoky quartz and biotite crystals etc. From here we ended the trip and departed for Perth.

Before ending the program find and view the location of your home in Perth or in any other part of the world. Unlike the satellite images of outback Australia which have a lower resolution and can be viewed at about 10,000 feet, the images of some major cities including Perth have been superimposed with aerial images that can be viewed to about 500 feet. So find the location of your house and have a bird’s eye view of where you live.

Following that, do try some of the other features of the software like the tour function *etc.* (By clicking view then play tour or hit the F10 button), or view other areas that interest you. Have fun!

MINERALOGICAL SOCIETY OF WESTERN AUSTRALIA (INC)

Office Bearers:

President: Jeffrey Manners
58 Berkley Road,
Marangaroo, W.A., 6064 Tele. (08) 93428648 (h)

Vice President: Stuart Cole
PO Box 220
Applecross W. A., 6153 Tele.(08) 9317-4425(h)

Secretary Treasurer: John Reeve
13 Buchan Place,
Hillarys, W.A., 6025 Tele. (08) 9401 1963 (h)

Social Officer: Mignonne Clark
11 Tarongo Way
City Beach, W.A., 6015 Tele. (08) 9341-6746 (h)

Field Trip Coordinator: Nimal Perera
19 Waraker Way,
Leeming, W.A., 6149 Tele. (08) 93602839

Committee Member: Ted Fowler
112 Marine Terrace
Marmion, W.A. 6020 Tele. (08) 94471304

Membership Details:

Joining Fee \$5.00

Adult Member \$20.00

Newsletter only \$3.00 per issue Snail Mail

Email Newsletter- No charge to Min Soc members. Email to newsletter editor at jandsman@bigpond.net.au

An application form for membership can be obtained by writing to: -

The Secretary, J. Reeve
Mineralogical Society of Western Australia (Inc)
13 Buchan Place, Hillarys, W.A. 6025

Ordinary meetings of the Society are held on the **FIRST** Wednesday in February, April, June, August, October and December in the **W.A. Lapidary and Rock Hunting Club rooms 31 Gladstone Street Rivervale**, commencing at 7.30pm. The January meeting will involve social activities at a time and place to be notified. **Visitors are most welcome**

Newsletter of the Mineralogical Society of Western Australia 13 Buchan Place, Hillarys, 6025, Western Australia, Australia

OUR SOCIETY'S MISSION

To encourage mineralogical study by amateur and professional alike and, in so doing, discover, document and preserve the earth's and in particular Western Australia's natural history.

OBJECTIVES

Whilst focusing on the minerals of Western Australia, the overall objectives of the Society shall be:

- (a) To advance the science of mineralogy.
- (b) To disseminate knowledge of minerals, their occurrence and associations.
- (c) To establish and maintain a register of mineral species and their occurrences in Western Australia.
- (d) To increase knowledge of related fields of earth science.
- (e) To keep members abreast of developments in mineralogy.
- (f) To encourage an appreciation of the aesthetic value of minerals.
- (g) To promote the proper care and preservation of mineral specimens.
- (h) To promote the conservation of the geologically unique and of the environment in general.
- (i) To provide a means of contact between professionals and amateurs in the various fields of the earth sciences.
- (j) To foster a sense of cooperation and understanding between individuals, institutions and resource companies in the field of mineralogy.
- (k) To provide a forum for debate and discussion on matters relating to mineralogy.

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