

THE MINERALOGICAL SOCIETY OF NEW SOUTH WALES INC

C/o School of Natural Science B.C.R.I. Parramatta Campus University of Western Sydney Locked Bag 1797 Penrith South DC N.S.W. 1797 Website: www.minsocnsw.org.au

NEWSLETTER

MARCH 2012

The March Meeting will be held on Friday the 2nd March at 7.30 p.m. in the LZG14 lecture theatre on the ground floor of Building LZ in the Science campus of the University of Western Sydney on the corner of Victoria Road and James Ruse Drive in North Parramatta.

The program at the March Meeting will commence with a report on this year's Tucson Show to be given by Peter Beckwith.

Tucson Update 2012

The report will be followed by a lecture to be given by Rob Barnes on : -

'Metallogenic Mapping. Locating the Mineral Deposits of N.S.W.'

FORTHCOMING MEETINGS

Society General Meetings will be held on the first Friday of each month from February through the rest of the year except in April when Good Friday is on the 6th and the Society Meeting in that month will be held on the second Friday. Subject to circumstances some changes to the following schedule of program subjects and speakers may have to be made in due course.

April 13th : (Second Friday). The program will commence with a lecture to be given by Larry Barron on 'Australian Diamonds'. There will be a second talk, not yet finalised, but may include a display of microscope photographs of diamond crystal forms with explanation from Penny Williamson.

May 4th : Members Mini-Auction.

June 1st: The program is to be advised but it is hoped will include a lecture to be given by Professor Peter Leverett of U.W.S. It is also expected that there will be a 'Return to Kingsgate' symposium with several speakers relating aspects of the geology, mineralogy and collecting at that significant site.

July 6th: Lecture by Arthur Roffey on 'A Lifetime with Minerals' and a talk by Gary Sutherland on the Museum of Lead Mining at Wanlockhead in Scotland.

August 3rd : Society A.G.M. which will be followed by the Betty Mayne Memorial Lecture to be given by Peter Williams on : - 'Gazing into the Mineralogical Crystal Ball. Where is it all going?'

2012 Society Membership Fees REMINDER

Society membership fees were due from January 1st and so far only about two thirds of Society 2010 and 2011 members have renewed their memberships so there are a number of people who have overlooked this. Members are urged to consider whether they have renewed yet and if not to do so as soon as convenient.

It was resolved at the last Society A.G.M. that all members would be registered for **Personal Accident Insurance** but this is **subject to them being financial members before March 31st**. Also and in order to avoid last-few-day payments the Society will not guarantee to insure members whose subscriptions are received by the Treasurer or Secretary after 23rd March. After this date the member will not be covered by insurance until the subsequent September 1st. Members of all ages will be insured except for persons over the age of 85 who cannot be insured for injuries incurred on field trips. Membership infers one person to be insured but if a member wishes in addition to insure one or more family member/s they must pay an extra **\$5 per person** who must be named on the subscription form. Family members can only include spouse/partner and children.

Information on the degree/s of cover provided by the **Personal Accident Insurance** is available from the Society Secretary or the Gem & Lapidary Council of N.S.W. Inc. The insurance has been arranged for many years by the Council for member clubs and associations through brokers Webster Hyde Heath in Adelaide with QBE Commercial Insurance Ltd and provides a number and scale of benefits for personal injuries.

Subscription renewal forms were sent out in December or are available from the Secretary or Treasurer at any Meeting. Members are recommended to provide their e-mail addresses if available in the interest of placing as many people as possible within electronic communication, not to mention cutting down the cost of posting out hard copies of the Society Newsletters. Members with e-mail capability may still wish to receive hard copy communications however and can indicate so on the subscription form.

The SOCIETY COMMITTEE

PRESIDENT: VICE-PRESIDENT:

SECRETARY:

TREASURER: COMMITTEE MEMBERS:

Tel: (02) 9477 1060 Dieter Mylius John Chapman Tel (02) 9808 3481 E-mail: chapmanjr@optusnet.com.au George Laking Tel: (02) 9636 7145 E-mail: bglaking@tech2u.com.au Graham Ogle Tel: (02) 9876 5224 David Colchester Tel: (02) 9449 3862 Tel: (02) 4572 5812 Arthur Roffey John Smedley Tel: (02) 9688 1284 Gary Sutherland Tel: (02) 9871 1379 Penny Williamson Tel: (02) 4221 4075

The FEBRUARY MEETING

At the commencement of the General Meeting there were a few announcements. The Society President, Dieter Mylius advised members that the Society would be hosting the **2013 Joint Mineralogical Societies Seminar** in Sydney. A Seminar sub-committee would be formed and members were urged to consider whether they would be able to offer any help with the various Seminar tasks and if so to make their availability known to the sub-committee.

John Chapman advised that the Society was planning a Field Trip to the Tambar Springs-Garrawilla area to look at the Garrawilla Volcanics. The Trip was tentatively to be held in May but the details had not yet been finalised.

Return to Girilambone

Girilambone. The History and Minerals. Jim Sharpe

Jim Sharpe advised that the Prospect symposium last year had been very successful with a number of members speaking during the program and providing information and aspects of the geology, mineralogy and their collecting experiences at the significant and previously well-visited site. The intention was to have more such symposiums on notable sites and this evening's mini-symposium on Girilambone was intended to be an introduction to this program format.

The Girilambone mine is situated a short distance from the main road between Nyngan and Bourke in central NSW. The deposit was originally discovered by the same fellows who discovered Cobar, Charles Campbell, Thomas Hartman and George Gibb and there is an open cut just to the north of the main Girilambone workings called 'Hartmanns'. The deposit was discovered in 1875 about nine years after Cobar had been found and mining by underground working commenced in 1881. At its peak of operation by 1888 there were over two hundred miners working there. Mining was largely discontinued after 1900 due to low copper prices with only very intermittent working subsequently which completely ceased after the end of World War One.

Modern exploration was commenced in 1960 by the Nord Australex company which by 1989 had performed some 15,000 meters of drilling and established the extent of an oxidized zone which it was decided would be mined by open cut. The early miners had relied on furnace smelting the copper sulphide ore but oxidized ore is more amenable to acid leaching extraction. The earlier methods of dealing with leached copper solutions involved adding scrap iron metal to the vats of solution and the copper would precipitate out but this was not a very efficient method. With the commencement of copper production at Girilambone from 1993 the company established the SXEW - Solution Extraction by Electro-Winning process which was much more efficient. At the time this was the first such operation in NSW and possibly the first in Australia. Subsequently a number of other SXEW plants were established at other mines elsewhere in Australia. Nord Australex and its partner Straits Resources made a comfortable profit for a while until mining and processing wound down after 2002.

Girilambone has also been important in terms of the suite of minerals found which changed as the miners penetrated deeper into the deposit. There were copper phosphate minerals, libethinite, pseudomalachite and a rare occurrence of sieleckiite, then the carbonates, malachite and azurite and further down in the deposit there was native copper and cuprite and eventually the sulphides. Interestingly Jim Sharpe has only found one small specimen of atacamite from Girilambone which told him something of the chemistry of the groundwater affecting and reacting with the minerals in the deposit. The groundwater at Girilambone must have been very low in chloride preventing the formation of very much atacamite, compared to the 26 pit at Northparkes where there are large quantities.

The mineral high-light at Girilambone must have been the amount and quality of the azurite, a number of superlative specimens of which had been acquired by John Chapman and some brought in to display to the Meeting along with other specimens brought in by Jim Sharpe and other members.

Girilambone. Collecting Trips and Specimens Collected. John Chapman.

John Chapman spoke next about Girilambone and referred first to the specimen of sieleckiite, a copper aluminium phosphate, which he had brought in to display. The specimen was actually first acquired by a collector, Harold Crossingham, who showed it to the speaker at Broken Hill during the 2000 Mineralogical Seminar held there that year. This was only the second known World occurrence of the mineral recorded after its original discovery at Mt Oxide in Queensland.

The speaker then described the trips to the mine site that he had either made personally or the field trip that a party of Society members had made some ten years ago. Specimens collected on these trips had been considerable in number with many of very high quality. The Society field trip with about a dozen members attending was made when the mining operations had taken the main open pit depth down to just below the base of the oxidized zone and whilst the bottom was strewn with shallow muddy puddles it turned out to be full of native copper, some in sheets more than a meter in length or diameter. Anywhere that the members dug there was copper and in being prized out of the mud the pieces came out bright pink having been acid-etched by the natural sulphuric acid in the groundwater. A number of the copper sheet specimens collected on that trip were on display at the Meeting.

John Chapman then described what he called a 'mineral collectors dream' trip that he had made to Girilambone some months before the Society visit when the mining had still been working through the oxidized zone of the deposit. He and a colleague spent the afternoon with the mine exploration geologist. Towards the end of the afternoon the speaker asked the geologist if they could look at the open pit and upon being driven down and into the bottom observed large amounts of green and blue minerals, - malachite and azurite, 'glinting from the walls'. They asked to be allowed as long as possible to collect and came out with a large amount of bright, clean, sparkly material. At that point they were approached by a miner who asked what they had been doing and upon being shown what they had been collecting the miner said, "*Oh that's just junk, you should see what I've got!*" So the speaker met the miner afterwards in the local pub and was shown the contents of a sack that the miner had in the back of his car and which contained three specimens, one of malachite and two with large lustrous azurite crystals. One had azurite crystals associated with malachite and another comprised a doubly terminated azurite crystal 7cm long on matrix. 'Negotiations' were conducted and John Chapman was able to acquire the specimens which he had brought in to display.

Over that period the mine was also producing some very nice cuprite specimens and large libethinites but John Chapman was not able to persuade anyone to part with any of these. In answer to a few questions the speaker advised that native copper specimens from Girilambone or other locations could be cleaned by acid-etching with dilute sulphuric acid, NEVER with hydrochloric and only after making sure that the specimens did not have any cuprite on them which would also be removed by any acid.

Some Further Mineral Chemistry Jim Sharpe

Jim Sharpe concluded the mini-symposium on Girilambone by pointing out some of the specimens brought in to display particularly stressing that whilst many people may think that most of the more beautiful minerals are formed from very high temperature volcanic action this was not the case for all. Many copper and other minerals have been formed at relatively low temperatures often by chemical action involving air and ground water.

[The Girilambone deposit, history, geology and mineralogy was described in an article 'The Copper Deposits at Girilambone, New South Wales' written by John Chapman, Jim Sharpe and Peter Williams which appeared in the Australian Journal of Mineralogy, Volume 11, Number 2, December 2005 special issue titled 'Minerals of the Cobar Region, New South Wales'.]

The Geology and Minerals of Iceland – from a brief visit. Dieter Mylius

Dieter Mylius made a holiday touring trip to Iceland last year taking a large number of photographs and managing to find a quite a few minerals along the way. His lecture this evening was to describe his trip with the aid of the projection system showing a selection of his pictures. Substantial notes have been provided by the speaker to incorporate into the following summary of his lecture.

Iceland is a volcanic island in the North Atlantic Ocean, just below the Arctic Circle and sits right on the Mid-Atlantic Ridge that separates the North American and European tectonic plates. The Ridge runs through Iceland in a roughly SW to NE direction and is a region where due to the American and European plates moving away from one another, new rock in the form of lava, is constantly welling up all along the Ridge, including through Iceland. This has always been producing extensive volcanic activity across the island.

Iceland was originally settled about 1,100 years ago by Norse seafarers from Scandinavia and the language spoken today is a variant of Old Norse. The population today is just over 300,000, about half of whom live in the capital Reykjavik. The other major population centres are Keflavik (the airport) and Akureyri. Nobody lives in the central highlands. About half of Iceland is a lava desert and about 10,000 square klm or about 11% is covered by permanent ice caps and glaciers. The country is about 100,000 square klm or about eight Icelands would fit into NSW. The coastline is quite convoluted measuring about 5000 klm and the highest point is Hvannadalshnukur on the SE coast at 2110m. About 20% of the land is used for grazing (mainly sheep and horses) with less than 1% under cultivation (mostly forests). There was a cool temperate climate, due to the North Atlantic current, in the summer when the speaker was there. In Reykjavik average temperatures range from 0°C in winter to 11°C in summer. Resources are fish and power from hydrothermal and geothermal sources much of which has been utilized by multinational companies operating massive aluminium smelters. Iceland has no aluminium ore, all materials have to be brought in from elsewhere to take advantage of cheap electricity.

The main road, called No 1, all bitumen, goes all the way around the island and although it does not follow all the fjords still took the speaker and his wife eight days to travel. Iceland is a fairly safe country except for three main hazards, volcanoes, earthquakes and glacial flooding. Geologically the country is all basalt with huge ice-fields, the largest being the Vatnajökull, (Water Glacier), cum ice cap which is the largest glacier in Europe. It was formed around 2500 years ago. Presently glaciers in Iceland are pulling back about 100m a year. As they move towards the coast and start melting they form huge glacial lagoons which acquire mini icebergs as the front parts of the glaciers break off. The best known of the glacial lagoons and possibly most accessible where all the tourists visit is the Breiðamerkurjökull (Wide field glacier).

Iceland is often called the land of fire and ice, for good reason. It was formed as the result of two processes. About 60-90 million years ago the Atlantic Ocean started opening and spreading apart with a current rate of movement of about 1cm per year in both directions and formed a rift which is being filled with new rocks welling up from below. Whilst the process started 60-90 million years ago and some authorities say it was longer, Iceland itself formed about 24 million years ago. It is the only place where you can stand on the Mid-Atlantic Ridge on dry land and this can be seen at Thingvellir valley where one can see both sides of the rift system in one place and that the earth is being gradually torn apart. Thingvellir is also the site of the largest inland lake in Iceland, Thingvallavatn.

Iceland seems to exist by coincidence because even although it is situated on the Mid-Atlantic Ridge there should not have been enough lava upwelling to form a large island in the middle of the Atlantic Ocean. However not only is Iceland on the Ridge, it is over a volcanic hotspot or mantle plume which provides an up welling of very hot rock from the mantle and has given the volume of rock needed. The hotspot is presently under the Vatnajökull icecap. This covers several subglacial volcanoes including Grímsvötn (last erupted in 2011). To give an idea of how much volcanism occurs on Iceland, a third of all magma that has erupted on earth in the last ten thousand years has been on Iceland and a third since 1500AD. On average a volcano erupts on Iceland every 4-5 years or so. The last notable ones were in 2010 and 2011.

The oldest rocks in Iceland are to the east and west of the country with the youngest in the centre associated with the most volcanically active areas which were pointed out on maps. Iceland has a great deal of basalt, from very young (a few weeks/months/years) to older flows. The central belt of land which follows the Ridge (the most volcanically active) is under 700,000 years old, then there is the belt to each side of between 700,000 and 3 million years old whereas the oldest rocks are classified as over 3 million years old. While the older basalts are often very vughy, there is little sign of mineralisation in the newer basalts.

Volcanic activity takes many forms but is mainly through volcanic fissure swarms, central and stratovolcanoes. Fissure swarms are rows of craters, tephra rings and scoria cones, 5-10km wide and 30-100 klm long. They seem to follow the trend of the ridge through Iceland. Lava tends to be very liquid and spreads over large areas. 60% of earth's fissure eruptions have been in Iceland. The most prominent type of volcano is the stratovolcano (compound volcano) including the table mountains (moberg) which have flat tops due to erupting under icecaps an example being Bláfell - Blue Mountain, which formed during the last ice age. Because of all the volcanism there are also geysers, boiling mud, steam vents and sulphur deposits in various places. (The word geyser is taken from the Icelandic place called Geysir where there are a number of them. Geysir means 'to gush').



Geysir

Columnar Basalt at Kalfshamarsvik

The basalt rock can be quite attractive having formed stands of columnar basalt in places. Whilst rocks in many areas may be seen to be full of vesicles, most of these are sadly all virtually empty and there is little sign of mineralisation in the newer basalts. Some minerals can be found however in vesicles in the older rocks around the country. One mineral that Iceland is not short of was described by the speaker in presenting a short quiz. *What mineral crystallises in the hexagonal system, is colourless to white, has a white streak, vitreous lustre, a hardness of 1.5, a specific density of only 0.9 to 1.0, has no cleavage, is brittle, has a conchoidal fracture and is transparent when pure. Dana gave it the classification number 04:01:02:01, putting it in the oxides and the Nickel-Strunz number is 04.AA.05. It is probably not in the average collection but is probably in the average domestic refrigerator. Ice – H₂O'*



Ash on Vatnajökull, Skalafellsjokull branch

The Eyjafjallajokull volcano which brought Europe's air travel to a standstill in 2010 is fairly small, but quite active. The most active at the moment is Grímsvötn, which cannot be seen because it is under the Vatnajökull icecap. The implications of volcanic activity occurring under a glacier are huge since this will lead to a large amount of glacial melt and causes massive floods called jokulhlaup. A further result is the formation of huge flood plains of black sand and rocks to the south of the country and along the southern coastline. The glacial floods rival the flow of the world's major rivers in short bursts and regularly take out bridges.

Due to constant eruptions many areas of the glacier surfaces are not pristine white but black due to the ash constantly falling. The speaker found however that the Icelanders were not too concerned with all the volcanic activity or the ash falling since apparently they took the view that most of the ash blows away in the direction of Europe and did not inconvenience them much at all !.



Surtsey Island

One individual feature of all the volcanic activity was a submarine eruption which started in the sea off the south coast of Iceland, south of the Westman Islands, on 14th November 1963 and by the next day a new island was born which became named Surtsey. It was extensively reported in the World's media for some time and has been an isolated sanctuary to study the geology, weathering processes and biology of an evolving and isolated landmass in a hostile environment. Mineral collecting is not permitted on Surtsey, visitors are not allowed without permission and a legitimate reason to go there although Mindat lists over twenty minerals that have been found.

The interesting point about the minerals of Surtsey is that they are all less than fifty years old. These included several zeolites, sulphur and sulphates, calcite and fluorite and even some opal.

Iceland has many large and spectacular waterfalls due to the thermal activity and melting of icecaps and fields. Largest is Dettifoss and its sister Selfoss, about one klm upstream, resulting from the melting of Vatnajökull. By volume discharge it is the largest waterfall in Europe. It is 100m wide and drops 45m with an average water flow of 193 cubic meters per second. The river flows north, not south, and cuts through the middle of an otherwise dry lava desert over which dust storms can occur. Other major and popular falls to visit are Gullfors and Skogafoss.

Commercially Iceland has no current mining industry although in the past has produced small amounts of diatomite from Lake Myvatn and also small amounts of sulphur for gunpowder from various sites. Also in the past the country has notably produced a quantity of optical grade calcite then called Iceland Spar. For the collector however there are many places in areas of older basalt rocks where if one stops beside the road they will find traces of zeolites, chalcedony and calcite. The speaker showed a list by Mindat of over 130 minerals found in Iceland, not so many for a whole country but interestingly before India became the main source of spectacular zeolites, Iceland was one of the main places where people collected zeolites and is the type locality for four minerals, (eldfellite, epistilbite, heklaite and leonardsenite).

With the aid of images of maps and of a number of specimens Dieter Mylius indicated the places where type minerals were found. The Eldfell volcano on Heimaey off the south coast has been the source of eldfellite NaFe³⁺(SO₄), a fumerolic mineral and also of leonardsenite (MgAlF₅.2H₂O). Hekla volcano in from the south coast is where heklaite (KNaSiF₆) also a fumerolic mineral and leonardsenite have been found and Berufjordur (old volcanics) has been a source of epistilbite (CaAl₂Si₆O₁₆.5H₂O). The speaker had only managed to collect examples of the type mineral epistilbite but indicated a number of other sites with other minerals that he had visited and collected a number of specimens. Hvalfjordur (Whale Fjord) is noted for a range of minerals including stilbite which is quite common, a road cutting at Haugar along Road No 1, the Baula volcano area for chalcedony and calcite and the Myrvatn area for sulphur and gypsum.



Stilbite from Haugar



Helgustadir Iceland Spar Mine



Epistilbite from berufjord

Iceland Spar was first obtained in Iceland from the Helgustadir mine, actually really a quarry on the Eskifjordur near the Reydarfjordur. It was founded in 1669 and was in peak production through the mid to late 1800's and eventually closed in the early 1990's. It is a national monument and is state-owned. Apart from calcite other minerals found there included heulandite, laumontite, quartz, and stilbite. Iceland spar was important in the days before Polaroid was available and was used in many optical instruments. An image shown by the speaker was of a 230 kilo piece of Iceland spar in the British Natural History Museum.

Contrasting landscapes in Iceland.



Hvalfjordur



Lava wasteland near Dettifoss

At Berufjordur the Fossarfell (waterfall) quarry site has provided a large number of minerals other than the epistilbite and these were listed with a number of images shown of some of the ones found by the speaker. These were, heulandite which looks quite attractive but specimens found were very fragile, mesolite in small tufts, mordenite, scolecite and stilbite.

In concluding his lecture on **The Minerals of Iceland** Dieter Mylius finally showed a picture of an item very important to Icelanders and tourists when they get hungry: - The not very large but quite delicious **Iceland Hotdog**, a recipe for which was provided.

	MENU - ICELAND HOTDC)G	
Toasted bun	Continental Frankfurt	Special mayonnaise	Special mustard
Special tomato sauce	Cold crisp fried onions	Fresh raw chopped onions	

The Minerals of Iceland. An Earlier Visit.

John Chapman

John Chapman had visited Iceland earlier in the year than the previous speaker, in April, when as he assured the audience, the weather was not a temperate ten degrees !. It was miserable, with howling gales every day and it rained, snowed, hailed and sleeted most of the time he was there. He found that the Icelander's advice to visitors was that if they think the weather is bad, just wait half an hour and it will get worse!.

John Chapman had visited Iceland primarily to conduct a photographic touring trip around the island following the route around the country on the main road No 1 that Dieter Mylius was to follow later. A selection with explanatory commentary of the obviously very large number of photographs of Iceland that the speaker had taken was shown to the Meeting. The emphasis of the speaker's trip was on photography with no time spent on collecting and only one occasion looking at minerals. This was when a small mineral museum was found in the town of Höfn on the south-east coast and a pleasant and interesting 1-2 hours was spent there photographing the displays.

The museum at Höfn was apparently a 'quirky little place' according to the speaker and run by an obviously enthusiastic but 'quirky little fellow' who did not speak a word of English. This did not detract from the quality and quantity of the minerals in the museum which, it turned out, had been converted from what was the entrance to the town's municipal swimming pool. There were several rooms and a courtyard which had one of the smaller bathing pools, empty and dry, recessed into the floor. The whole museum, rooms, shelves, courtyard and sunken pool were packed with minerals. They were apparently all self-collected by the proprietor and all apparently from within Iceland but John Chapman could not find out where everything came from due to the language barrier.



The Höfn Mineral Museum with owner."



Jasper, Höfn Mineral Museum

There were a lot of jaspers, agates and chalcedonies, most polished, and many with beautiful colours. There were also many thunder eggs, shelves of zeolites, quartz crystals and groups, and of course, a selection of pieces of Iceland Spar. Then John Chapman was taken 'down into the bowels of the earth', actually down a short way into the corridors under the previous swimming pool which had housed the pumping, heating and filtration equipment for the pool and which the proprietor now used as his lapidary workshop. In the below-ground-level corridor under the pool the speaker noted some recent mineralogical development, of concrete stalactites growing due to 'concrete cancer' on the corridor ceiling. The proprietor and guide had seemed very proud to show this to the visitor.

John Chapman then switched on a photomontage display of a selection of his other Icelandic photographs to work through providing explanation on them along the way. In traveling around Iceland the speaker had noted that there were many derelict farms, people having apparently given up and moved to the few cities. There seemed to be horses everywhere whereas at that time of the year the speaker saw no cows or sheep, the horses apparently being left to fend for themselves outside in the cold whilst other stock may have been in barns. There were many views of the sea-ward end of glaciers and black sand beaches with chunks and large blocks of ice broken off from the ends of glaciers standing out white against the black.

The speaker advised that at the time of the year when he was in Iceland, traveling and accommodation was quite economic. Especially if one took one's own sleeping bag and was prepared to look after oneself as much as possible. Anywhere with any service would cost a lot more. By contrast Dieter Mylius advised that when he had gone to Iceland in the summer he had to pre-book all accommodation since there was a peak to the tourist season of only about three weeks when many Europeans visit there to take advantage of the 22-hour daylight. At that time in a main town like Reykjavik it is, as he put it, 'party central'. With these tourist tips being made the evening's lectures were concluded.

FORTHCOMING EVENTS

BACK FROM TUCSON MINERAL SALE

Being held from 10.00 a.m. to 5.00 p.m. on Saturday and Sunday the 5th & 6th of March at 52 Macpherson Road, Londonderry.

Featuring:

Sales by Crystal Habit, Quality Gem Rough Supplies and Quality Alpaca Supplies of a fine selection of mineral specimens, decorator pieces, faceting and cabbing rough, gemstones, beads, metaphysical needs and fine Alpaca products.

Hosted by Arthur and Christine Roffey, Peter & Debbie Beckwith and John and Val Tunzi. Inquiries to Arthur Roffey on (02) 4572 5812 or Peter Beckwith on 0412 333 150

Other shows through 2012 are : -

Over the : - 16th & 17th of June at the Windsor Function Centre, Windsor.

25th & 26th August, Roselea Community Centre. Carlingford

24th & 25th November, Windsor Function Centre, Windsor.

GLENN INNES MINERAMA GEM, MINERAL AND FOSSIL SHOW

Glen Innes District and Services Club, 120 Grey Street, Glenn Innes 10.00 a.m. to 6.00 p.m. Friday to Sunday, 9th, 10th & 11th March. 'This annual fossicking and gem show is held at the Glen Innes & District Services Club. More information is available at *www.minerama.com.au*_or contact Alison Wood on 02 67 32 1599

CANBERRA ROCK SWAP 2012

Hosted by the Canberra Lapidary Club, Inc

Saturday 24th and Sunday 25th of March from 8.30 am to 5.00pm in the EPIC park, off Northbourne Avenue, Canberra.

'Dealers, non-commercial rock enthusiasts and tailgaters will be selling rough and cut gemstones, jewellery, fossils, opals, crystals, beads, beading supplies, and lapidary equipment. Entry is free for the public.

'For those interested in our Rock Swop and staying over for the weekend. We have about 25 powered camping sites available, and 25 for tailgaters at Wagtail Way, EPIC. Unpowered sites are also available. Pets are permitted (and welcome!). The emphasis is on having a fun event with a minimum of administrative interference. Hence there are no restrictions on selling times. Selling to dealers and other tailgaters on the Friday is quite OK.

Space per camping site :- 8m front (same as last year) Our planning will be based on this, so please advise if you require more space. A map showing slot allocations will be placed in the middle area of the camping ground, at the grey water dump point. Advance registration will help to minimise the chaos at the time, but we hope to be able to accommodate those who make a last minute decision to attend but you WILL NOT get a preferred site in this case

A local caravan rental company is offering 2- to 6-berth vans for hire, and they will put them on site. If you want to hire a van, please contact B & V Van Hire directly. Contact details are given below. We will also have 2.4 metre tables for hire for those who may be unable to bring their own. As we have to pay for all table supplied, we will only order enough for those who reserve them. There will be no spares.

EPIC is only a couple of minutes drive from the Dickson shopping centre which trades seven days a week. In addition to Woollies and the usual array of specialty shops, Dickson is the home of Canberra's Chinatown, with an excellent selection of restaurants. All the major attractions of the National Capital, such as the War Memorial, National Gallery, National Museum, Old and New Parliament Houses etc are within about fifteen minutes drive of EPIC and the park is also close to several motels and guest houses. For more information, please contact the Canberra Visitors' Information Centre. Contact details are also given following

Canberra Visitor Information Centre, Phone: 02 6205 0044, FAX: 02 6205 0629 crvc@act.gov.au or *www.visitcanberra.com.au*. 330 Northbourne Ave, Dickson ACT. Open 9am-5pm weekdays, 9am-4pm weekends and public holidays

Exhibition Park in Canberra (EPIC), Phone: 02 6241 3022, www.epic.act.gov.au, info@epic.act.gov.au

B & V Van Hire: *bvvanhire@iprimus.com.au* 44 Buttle St, Queanbeyan NSW 2620. Ph 02 6299 1101, Mobile phone ; - 0412 531 465

Norm Menadue, Show Convenor - nmenadue@optusnet.com.au Telephone :- 02 6258 6631

Canberra Lapidary Club ; - 0407 718 347 www.canberralapidary.org.au/

GEMBOREE 2012

AUSTRALIA'S 48TH NATIONAL GEM AND MINERAL SHOW

Easter 2012 from the 6th to 9th of April 2012.

In the Bundaberg Showground, Burrum Street, Bundaberg, Queensland. Hosted by the Bundaberg Gem & Mineral Society Inc on behalf of the Queensland Gem Clubs Association and AFLACA. Lapidary traders, tailgating stalls, entertainment, refreshments, working demonstrations, displays, lectures, tours.

Everyone Welcome

Camping available on site. Booking enquiries to P.O.Box 5886 West Bundaberg 4670 or e-mail *bundygemboree@yahoo.com.au*

GEMKHANA 2012

In the Showground at Mudgee over the long weekend Saturday, September 29th 10.00am-5.00pm; Sunday, September 30th 10.00am-5.00pm; & Monday, October 1st, 9.00am to midday.

'We are returning to Mudgee Showground this year. The competition brings entries from all across NSW and quite a few from interstate. Dealers and tailgaters will attend. We will have children's activities. Refreshments will be available. There is wheelchair access and plenty of parking. On-site camping is available.

Contacts are Una (Co-ordinator) 02 4759 2440, Marilyn 02 9635 8218, email to gemlapidarycouncilnsw.org.au
