

FROM THE E-NEWSLETTER EDITOR

Welcome to the first monthly e-newsletter for the 53rd GEMBOREE 2017 which is now just a little over twelve months away. Plans have been well underway for some three years and are coming together nicely at this time. Come and enjoy yourself whilst in Lithgow and be sure to visit some of the many attractions that historic Lithgow has to offer.

GEMBOREE 2017, the 53rd National Gem & Mineral Show, will be held from Friday 14th to Monday 17th April, 2017, at Tony Luchetti Showground in Lithgow, New South Wales. It is staged by the Gem & Lapidary Council of N.S.W. Inc. under the auspices of the Australian Federation of Lapidary & Allied Crafts Association Inc. Various gem and lapidary clubs from around New South Wales assist in organising and coordinating the various aspects of this mammoth event which will draw a large crowd of lapidaries and hobbyists, as well as the general public.

Next year's GEMBOREE 2017 will be the largest event of its type in New South Wales and is the first time that such an event has been held in Lithgow, the location being most appropriate with this city's association with coal mining and associated industrial industry. The city is located on the Great Western Highway and the Main Western railway line so is easily accessible, even for a day trip.

The city sits in a mountain valley that was named Lithgow's Valley by John Oxley, the colonial explorer, in honour of William Lithgow, the first Auditor-General in the colony of New South Wales.

Professional mineral and gem dealers have already booked themselves in and this has filled the dealer area in the main halls. Outdoor tailgaters space still has plenty of room available at this time however time will get away from you so be sure you request an application form from <u>ernst.holland@bigpond.com</u> Lapidarists have already started to get their competitive entries ready for next year's event.

The GEMBOREE 2017 Booklet has been printed with

all the information needed to take part and attend this annual event. Please consider entering the competition side of the GEMBOREE 2017 even if you have not done so before. It is a great sense of achievement. There is still plenty of time to consider what you may do, however keep the deadline dates in mind.

The e-newsletter will have any changes and the details of 'Field Trips' as they come to hand. It will also have historical information on Lithgow and district, mining, lapidary, as well as articles on rocks, minerals and fossils and much more. I hope you enjoy these monthly e-newsletters and that they will be interesting and beneficial. To get on the email list or get back issues – just email me at <u>amcrae@lisp.com.au</u>



It's time to consider your accommodation needs and if you are staying off-site I expect that accommodation will be at a premium. Should you need accommodation or other local information you can contact the friendly staff at the Lithgow Visitor Information Centre, 1137 Great Western Hwy, Lithgow. NSW 2790 or telephone 1300760276 or email <u>tourism@lithgow.com</u> or www.tourism.lithgow.com

It will be great to meet people in person and I hope you all make the effort in a year's time to visit Lithgow in the Central Tablelands of New South Wales and its picturesque environment.

Alan McRae, FAIHA – GEMBOREE 2017 e-newsletter Editor and Publicity Officer

GEMBOREE 2016 - ULVERSTONE

By all reports Ulverstone in Tasmania had a most successful GEMBOREE 2016 so congratulations on all the work of the organising committee. The 52nd National Gem & Mineral Show boasted some very high quality entries and hats off to all those who received an award or won one of the many trophies.

Lapidary is the age-old art of transforming natural rocks and minerals into polished gemstones suitable for use in jewellery and for other ornamental purposes and Gemborees and Gemkhanas allow the hobbyist to show what you have achieved. Well done Ulverstone.

GEMBOREE CO-ORDINATOR BRIEFINGS

WELCOME TO THE GEMBOREE 2017

Welcome to everyone involved with the art of lapidary and associated crafts to the 2017 Gemboree held at the Tony Luchetti Sportsground in Lithgow which is situated on the western fringes of the Blue Mountains, just two hours from Sydney.

This year's event has been organised under the Auspices of A.F.L.A.C.A. by the Gem & Lapidary Council of N.S.W. Inc.

I would like to thank all the committee members for their support and for the many hours organising this event over the past 3 years, to the competition committee and judges and all fellow members around Australia who will be sending entries for the 2017 competition.

The committee has spent many hours searching for the right venue and we believe this Sportsground will be the perfect location to showcase our hobby for everyone's benefit, it is situated right in the heart of Lithgow City close to all accommodation, restaurants and shops.

The grounds have been well laid out with separate powered/un-powered sites with ample amenities, tailgaters will be situated around the showground track and the main hall will house the Dealers and all competition entries.

Please check your "Gift Pack" on arrival for the programme of entertainment, field trips, meetings and "What's On" over the four day event.

Take some time to relax and explore the Lithgow area itself with its industrial heritage and the many historic towns and villages. There is much to see also in the surrounding country areas.

I look forward to seeing you at the 53rd National Gem and Mineral Show.

Colin Wright - GEMBOREE 2017 Co-Ordinator



PREHNITE CRYSTALS



In 1774 a man found some greenish mineral crystals in the Cape of Good Hope Colony in South Africa though it wasn't named till 1788 when Abraham Gottlieb Werner named it, the same year as the arrival of the First Fleet from Britain to establish a penal colony in New South Wales.

The fascination of collecting rocks and minerals as a hobby has been around for at least three hundred years and is still alive and well in 2016.

The fine crystallised mineral specimen above was found in a nodule in basalt rock near Premer in New South Wales, though prehnite is found in numerous places around Australia and indeed around the world. Prehnite is mined in the Northern Territory (Wave Hill) and the Kimberley region as well as deposits in Western Australia.

Other countries where prehnite is found includes China, America, India, Canada, France, Germany and Austria where the mineral can be obtained in botryoidal masses, tabular or stalactitic forms.

The mineral was named after Colonel Hendrik Von Prehn (1733-1785), a veteran of the Seven Year's War and commanding officer of the Netherlands's Army with the Dutch East India Company in the Dutch colony at the Cape of Good Hope. He was also the Governor from 1768 to 1780. One of his hobbies was collecting rock and mineral specimens. When he returned home to Wurttemberg in Germany, after serving in the settlement he took some specimens that would later be named after him.

Some local traders learnt of the location and traded the prehnite to Europe calling the specimens "Cape Emerald", obviously after its greenish colour. Prehnite was initially considered rare and exclusive to the South Africa location for many years. With its globularshaped crystals varying in colour from white to dark grey to yellowish to yellow-green or brownish, even colourless, prehnite specimens are sought after.

Its pearly lustre could make one believe they are a wax-like model but it has a long history. Greek physicians used to grind up prehnite, that they had traded, to treat their patients with bladder and kidney problems though one wonders if it really worked.

The Chinese often refer to their prehnite as "grape jade" due to the greenish colour of specimens from China and its shape which can look a bit like a bunch of grapes. Some unscrupulous traders have been known to try to pass it off as genuine jade.

Some of the Clans in Scotland have used the pale green variety found there to adorn and compliment their tartans outfits.

Prehnite crystals have been found in the small bag belonging to an Aboriginal medicine man. They were 'magic stones' used to performed magic rites to attract prey such as emus and kangaroos for the tribesmen to hunt successfully. Also inside the bag was a quartz crystal and two pieces of skin, one small piece each of an emu and kangaroo.

With a Mohs Hardness of 6 to 6.5 it is an interesting mineral specimen found in many collections. Prehnite is composed of hydrated calcium, aluminium and silicate (chemical composition Ca2Al2Si3O10(OH)2) which occurs in areas where there has been volcanic activity and is often found in conjunction with zeolites.

It is sold and used for ornamental or jewellery purposes such as rings, pendants and earrings. Prehnite can be seen in collections as tumbled stones, beautiful cabochon pendants, various shapes of faceted gems, carved figurines, decorative pieces or just as a specimen such as this to put on one's display shelf. Due its absence of full transparency prehnite is considered a rather inexpensive gemstone.

Bathurst lapidarists usually cut prehnite into beads or cabochons whilst some local advanced carvers have used blocks of prehnite to carve objects like birds and flowers.

There will be a great range of fossils, rocks, minerals and gemstones on display and for sale at the GEMBOREE 2017, the 53rd National Gem & Mineral Show, will be held from Friday 14th to Monday 17th April, 2017, at Tony Luchetti Showground in Lithgow. MEAT WORKS LITHGOW



Lithgow was fortunate for its early pioneers who saw the township for its potential. Few people outside Lithgow would be aware that Lithgow had a large meat works operating there in the 1870s. This happened after some land to the north of Farmer's Creek, and adjacent to Esk Bank, was purchased by Thomas Sutcliffe Mort who was an Australian businessman, auctioneer and industrialist. He was also responsible for improving the refrigeration of meat, both for use in New South Wales and overseas export.

Thomas Mort required the land at Lithgow for holding paddocks for livestock, pens and abattoirs and for the freezing works which were constructed during 1874 and 1875.

Thomas Sutcliffe Mort was born at Bolton in Lancashire, England, on 23rd December, 1816. Thomas was the second son of Jonathan Mort and his wife Mary, née Sutcliffe. Afterwards the family moved to Manchester where he received his education. His father's health prevented him from sufficiently supporting his family. He passed away when Thomas was just eighteen. Thomas received nothing from his father's estate which meant his eldest brother had to pay off the debt.

Thomas was already a clerk and when he was offered the opportunity to get a better job in Sydney he sailed south in the 'Superb' soon after. They went via Tristan da Cunha and Hobart before he arrived in February 1838. It seems that Thomas was so impressed with the colony he wrote to his younger brothers James and Henry and they later followed him to Sydney.

The young Englishman began work as a clerk here at Aspinall, Browne & Company and later for Gosling, Browne & Company where he was able to gain a good understanding in Australian and intercontinental commerce. On 27th October, 1841, Thomas married Theresa Shepheard, daughter of James Laidley, in the Christ Church of St Laurence, a newly established Anglican church in Sydney. Ironically Theresa's sister, Maria, later married Henry Mort. Theresa's father was a Scotsman and soldier, as well as Deputy Assistant Commissary General in the Peninsular War. He was later sent to Sydney and appointed Deputy Commissary General though he died in August 1835 before the weddings took place.

In 1851, just after the discovery of payable gold the year before, Thomas became a director of the Sydney Railway Company as he could see the benefits of the steam rail system.

By the mid-1860s Thomas Mort was investigating the use of refrigeration as a way to prolong the freshness of food for the colony of New South Wales and to send any excess overseas to British and other markets.

So sure Mort's ideas were sound he paid Mr. Eugene Nicolle to do experiments into large refrigeration units that could be put aboard ships as well as refrigerated carriages on trains. Then there would also be large refrigerated warehouses or depots as Mort referred to them.

Mort's business interests included a sizable engineering plant and he envisaged that it would manufacture the necessary equipment as Mr Nicolle would have them at his disposal.



With his mind always thinking ahead Mort devised the idea that he could have agents buy livestock from around Lithgow and to the west to be slaughtered in a substantial abattoir in the town. Cattle and sheep could be driven or trained-in from the west, butchered and then placed in cold storage. The frozen meat could be placed in refrigerated carriages and sent to Sydney. Any excess tallow from the nearby abattoir could also be sent to Sydney. Thomas Mort had coal mined at the Zig Zag Colliery to provide coal for the boilers at his processing works at Lithgow.

As it turned out the refrigerated train carriages didn't eventuate per say but specially insulated carriages

were constructed to forward meat already frozen to cold storage in Sydney.

Thomas rarely lost an opportunity to promote his projects and in 1875 to assist the public take in the idea of refrigeration he arranged a picnic in Lithgow. Some 300 guests were transported on a specially hired steam train up to his refrigeration complex and abattoirs where he had cooks use some ingredients that his freezer plant had processed eighteen months prior. Guests were generally very impressed.

As his abattoirs ended up producing more tallow than was expected, Thomas decided to get a soap factory going in Lithgow. The soap works were located nearby with the area known as Soapy Gully. This gully was later called State Mine Gully.

Just three years before Mort died he established the New South Wales Fresh Food & Ice Company. Mr. Nicolle's refrigerated storage units were used in this operation.

When Thomas Sutcliffe Mort died on 9th May, 1878, he had already made a great contribution to the Colony of New South Wales. He had created the fundamentals to export meat and other frozen products, commercial refrigeration, pioneered wool-broking, inaugurated selling wool overseas, founded the Australian Mutual Provident Society, launched his dry dock in Sydney and still had time to be a lay preacher in the Anglican Church.

FOSSILISED TORTOISE EGG

Early life on our planet is known to us in many cases by the fossils which have been found and identified by palaeontologists. Tortoises are known to be one of the oldest reptile groups in the world with some going back more than 150 million years ago. The oldest tortoise fossils are known from the late Palaeocene Period in Mongolia.



The circular shape seen on page 5 is a fossilised tortoise egg - OLICOCOVE gopherus tortoise species – family Testudnidae – from the Badlands in South Dakota, U.S.A. This species appears to be native to the American continent.

The rugged Badlands National Park in South Dakota boasts striking geologic deposits that contain one of

the world's richest fossil beds with ancient mammals such as the rhinoceros, horses and sabre-toothed cats. The current reserve and park comprises 244,000 acres and gives up a wide variety of fossils. It contains the world's richest Oligocene epoch fossil beds which date from 23 to 35 million years old. The hardy reptiles had adapted to its many environments, from desserts to forests.



The early Lakota Indians found fossilised remains of early seashells, bones and turtle shells assuming the region was once underwater. Trappers and traders in the 1840s trekked from Fort Pierre to Fort Laramie along a trail that passed through the Badlands area. They would occasionally find fossils that they took along with them to sell. One buyer was the American Fur Company who would try to sell or trade them on.

One was an unknown piece of a jaw which was purchased in 1843 by a physician in St. Louis, named Dr. Hiram A. Prout. Three years later Prout published a paper on the jaw in the American Journal of Science. Shortly after, the White River Badlands became a popular fossil hunting ground within twenty years. Since then numerous new fossil species had been uncovered.

Tortoise shells, and the rarer to find eggs, of the family Testudinidae, are amongst the most common fossils found in the White River Badlands rocks of Late Eocene through to the Oligocene age, some 37 to 27 million years ago. Their appearance on the North American continent took place after the globular temperature warmed allowing the reptiles to migrate.

Tortoises are generally reclusive cold-blooded reptiles which breathe air, though they mostly live in or around water. They must surface at regular intervals to refill their lungs.

The tortoise egg specimen above is in a hard whitish limestone matrix. These fossil tortoises appeared with the crocodilians some 210 to 208 million years ago. Not to be confused with those marine dwelling turtles this is an egg from their land dwelling counterparts, the tortoises with their short sturdy legs. These creatures had an armoured shell, thick leathery skin and like today's counterparts, have very slow movement so that they tended not to migrate far at all. They lived most of their life in burrows and could dig into the ground with their strong legs. They often would dig several underground burrows in a dry spot within their local territory. Usually they lived a solitary life except for the breeding season.

The tortoise's outer protective shell was a bone casing onto which a covering of hard horny grey to black plates or shields were attached for protection. The bony plates were fused to the ribs and vertebrae. Some species had heavily armoured shells.

These animals grew to around a foot long and could weigh 12 to 25 lbs with males having a longer tail and scent glands. Females became fertile after 10 or so years and probably laid from 3 to a dozen or so eggs. They are not laid underwater. She would scoop up the surrounding sandy soil into a mound. This mound would be near her burrow and scientists estimate they took about 80 to 100 days to hatch, depending on the temperature of the sand in their burrow. These herbiferous creatures mainly ate local aquatic plants and other grasses. Others of these early reptiles ate insects, worms and snails as well as eating any decaying flesh.

One recent interesting find was in America where North Carolina State University palaeontologists located the fossilised remains of an enormous turtle in a Colombia coal mine. As it turned out it is the world's largest specimen found and dates from around 60 million years ago. It measures almost 8 feet across and has been named Carbonemys cofrinii.

PLACES & ATTRACTIONS TO VISIT



Whilst lapidaries, hobbyists and collectors are visiting GEMBOREE 2017 at Lithgow why not take the opportunity to visit Hassans Walls boardwalk and lookout (above) at Hassans Walls Reserve.

Magnificent 180 degree views are available just minutes out of Lithgow's town centre at Hassans Walls Lookout. Be sure to take your camera as the Sir Joseph Cook boardwalk will allow you easy access to the most magnificent views of the Blue Mountains escarpment and rolling valleys below.

Lithgow City Council has done an enormous amount of work in the area of the Hassans Walls Lookout which is the highest lookout in the Blue Mountains at approximately 1,100 metres above sea level.

Visiting Hassans Walls lookout has been a pastime for Lithgow people and tourists alike as early newspapers reported.

In January 1930 a new coal colliery was opened at the base of Hassans Walls. Six men were initially employed with the owners hoping to sell their entire production to Australian Glass Manufacturers, Ltd. In April 1935 the trustees of Hassan's Walls Lookout reserve decided to erect a safety fence extending 100ft along to a new look-out.

In April 1936 the electrical engineer of the Lithgow Municipal Council (Mr. R. Houston) proposed to the council that Hassans Walls Lookout should carry a Neon sign advertising the beauty spot. He suggested that a tower should be built, with a beacon light on the top, visible for many miles. On either side should be the letter H, denoting Hassans Walls, 10 feet high, one facing Mount York Promontory and the other the Crown at Tarana, an eminence between Lithgow and Bathurst. The scheme was expected to cost £800. The council referred the report to the lighting committee.

The following month the Lithgow Council appointed Alderman J.T. Peachman to confer with the Hassans Walls trust regarding the provision of a kiosk at Hassans Walls Lookout.

In June 1936 the N.R.M.A. Touring Department reported that the Lithgow Council had reconstructed the road leading to Hassans Walls and a uniformly good surface was now available to traffic. The lookout from Hassans Walls, which was only about two miles from Lithgow, commands one of the finest views obtainable in the district. The Council had also constructed a road leading to the Farmer's Creek dams, from which the town's water supply was drawn. Lithgow Council had used their annual Government grant of £43 to help pay for the work.

When you visit, look out to Mount Wilson, Mount York, Mount Tarana and Mount Blaxland and the whole Hartley Valley below. To the south are the Kanimbla and Megalong Valleys and Mount Bindo (1,363 metres). The light is often spectacular in the early morning. If you need more information on Hassan Walls or Lithgow you can email tourism@lithgow.com * In the 18th and 19th century jewellery, especially broaches, were made using what the trade called "brown topaz". Craftsmen worked out that by heating yellow topaz they could produce a pink variety which was said to be 'rare' and thus commanded a higher price for their jewellery.

* Tutankhamen's Mask is largely made up of lapis, cornelian, obsidian and quartz which were inlaid in gold along with numerous pieces of coloured glass.

* In Byzantine times, around 1,000 AD, many of their daily and religious artefacts were decorated in gold and precious stones.

* That a miner's pick consists of three parts - the universal head, pick tool and handle. The tool and head were both made from cast-iron while the handle is wooden. The universal head fits onto the end of the handle like a metal sleeve allowing the pick tool to fit over it. The pick tool is symmetrical in shape with the working part of the pick shaped like a metal spike.

* Jade can be found in the translucent emerald green variety known as "Imperial Jade", or in white, brown, orange and the rarer lilac colouring.

GEMBOREE 2017 CONTACTS

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