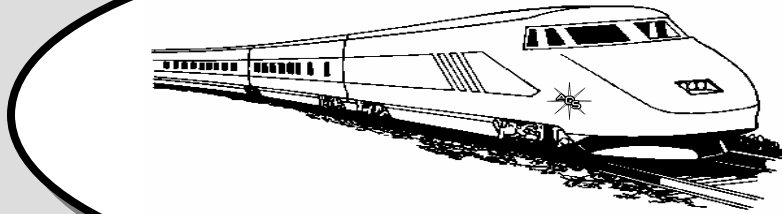


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Table of Contents:

President's Message	1
Opal & Gem Show was a Success!	1
Be Kind to Your Dealers	1
Grand Prize Winner of Opal & Gem Show Raffle	2
Opal Society Workshop	2
Members Only Website Password	2
The Story of Stone Soup	2
Geology of Opal Fields in the Lightning Ridge Region	2
Gamma Glow Takes Guess Work Out of Opal Mining	4
Opal to Shine at Big Event	5
Artifacts Hint at Early Jade Trade	5
Saint's Jewels on Show in Naples	5
Signs of Slump at Myanmar Gem Sale	6
2007 Opal & Gem Show Dealers	7
Is That Piece of Jasper an Agate?	7
December 2007 Gem & Mineral Shows	8

President's Message

By Gene LeVan

Our Opal & Gem Show was very successful for the members and dealers, thanks for coming out.

Our members found many very good opal treasures and some won prizes. The speakers offered interesting talks on opals and ventures.

Please come to the December 13th AOS Thursday Night **Christmas Party** at 7:30pm at the GG Women's Club, Garden Grove. We will again have great food and door prizes. This is a **potluck** party. The main course for dinner is **free**. See you there!

Opal & Gem Show was a Success!

By Jim Pisani

The Opal & Gems Show was a good show this year. We had a moderate number of people show up and the dealers seemed happy fro the most part. The AOS made enough money to keep going for another year.

We want to thank all of the volunteers for working hard at the show to put up signs, run the electrical wires, bring in the food, printing out flyers, manning the front desk, and managing the seminars.

We also want to thank the demonstrators for cutting, grinding, carving, soldering, etc., for two full days! A special thanks to Clair Gagnon, as always, for organizing them.

Of course, it wouldn't be the same without our great dealers. They made the show!

Last, but not least, a big thanks to the show chairmen, Jim Lambert and Jay Carey. They did it again!

Of course, we could have done better. Publicity wasn't as good as we wanted it to be. We need to be better organized next year. Any member experienced in advertising, conventions, etc.: we can use your help for next year!

Be Kind to Your Dealers

By Dr. Robert Carlson, AFMS President

I recently attended a show, and read about another one which had many dealers and very few customers. Result: Many of the dealers did not cover their expenses. Oh, they might have covered their dealer's fees. Better yet they might have covered their dealer's fees and their production costs; but when the customers aren't there, they don't cover their transportation, lodging, or food that are necessary expenses for them to attend the show. Result: They lose money; it costs them more to attend the show than they take in. In short, they could have saved money by staying home.

The dealer's fees are what make a show happen. Their fees cover the rent, the advertising, and some of the miscellaneous expenses. But they need sales to be able to exist.

The rockhounds at the show are primarily interested in raw materials as opposed to finished pieces.

Whether it be faceting rough, minerals, cabbing material or jewelry supplies, most rockhounds already have extensive collections and are only looking for something that is exceptional or unusual. They do a lot of looking, but not a lot of buying. The dealers, therefore, need to have a large number of products that are aimed at sales to the general public. Inexpensive things for the children and medium to high quality goods for the adults – at a substantial savings over the local jewelry store. Thus, most of their sales are aimed at the public that comes through the front door.

But, if for whatever reason, the public does not come through the front door, the dealers go home hungry. And, if they lose money over a couple of years, they are not likely to come to your show again.

I have painted a bleak picture; how can it be improved?

Show committees need to be more realistic, rather than optimistic, about the number of people who will come through the front door. Each person has only a limited number of dollars that can be spread among the dealers. The larger the number of dealers, the thinner is the spread.

Keep good records of the number of people that come through the front door. Canvas the dealers to see how they did, and what kind of items were their biggest sellers. Get an estimate of the dollars that came through the door and plan the next year's show accordingly. Set the number and type of dealers down to the point where they can all make money.

Remember, without dealers, your show cannot exist.

From the AFMS Newsletter, Sept 2006.



Grand Prize Winner Ana Lorenzo

Grand Prize Winner of Opal & Gem Show Raffle

Ana Lorenzo was the grand prize winner of the raffle at the Opal and Gem Show. The Grand prize is a beautiful opal inlaid pendant designed, built and donated by Stan McCall of Custom Creative (<http://home.earthlink.net/~custom-creative/>). Ana is active with the Searchers Gem & Mineral Society.



Grand Prize Designed By Stan McCall

Opal Society Workshop

The American Opal Society's workshop will re-opened on Sept. 11th after being closed for the month of August. The shop is located at Ball Jr. High School and will occur every Monday from 7:00 to 9:30 p.m. The school is located at 1500 W. Ball Road in Anaheim. If you are traveling east on Ball Rd. the parking lot entrance you need to use is just before the railroad tracks Room 37 is in the center of the campus.

Instruction will be given in cutting opal, wax models, lost-wax casting, fabrication, and setting stones. The workshop will furnish machines to cut and polish stones as well as a centrifuge for casting and a kiln for burnout. Please bring a roll of PAPER TOWELS with you for clean-up as the room is a science lab and needs to be kept spotless.

To attend, membership in the American Opal Society is a must due to insurance. A nightly fee of \$2 is asked to help keep the equipment in good running condition. Please contact Pete Goetz at (714) 345-1449 if you have any questions.

Members Only Website Password

To log onto the website's members only area at: http://opalsociety.org/aos_members_only_area.htm type: Name: "member" and Password: "opalshow".

The Story of Stone Soup

Once upon a time, somewhere in post-war Eastern Europe, there was a great famine in which people jealously hoarded whatever food they could find, hiding it even from their friends and neighbors. One day a wandering soldier came into a village and began asking questions as if he planned to stay for the night.

"There's not a bite to eat in the whole province," he was told. "Better keep moving on."

"Oh, I have everything I need," he said. "In fact, I was thinking of making some stone soup to share with all of you." He pulled an iron cauldron from his wagon, filled it with water, and built a fire under it. Then, with great ceremony, he drew an ordinary-looking stone from a velvet bag and dropped it into the water.

By now, hearing the rum or of food, most of the villagers had come to the square or watched from their windows. As the soldier sniffed the "broth" and licked his lips in anticipation, hunger began to overcome their skepticism.

"Ahh," the soldier said to himself rather loudly, "I do like a tasty stone soup. Of course, stone soup with cabbage -- that's hard to beat."

Soon a villager approached hesitantly, holding a cabbage he'd retrieved from its hiding place, and added it to the pot. "Capital!" cried the soldier. "You know, I once had stone soup with cabbage and a bit of salt beef as well, and it was fit for a king."

The village butcher managed to find some salt beef... and so it went, through potatoes, onions, carrots, mushrooms, and so on, until there was indeed a delicious meal for all. The villagers offered the soldier a great deal of money for the magic stone, but he refused to sell and traveled on the next day. The moral is that by working together, with everyone contributing what they can, a greater good is achieved.

From <http://www.extremelinux.info/stonesoup/stonesoup.html>

Geology of Opal Fields in the Lightning Ridge Region

By Matthew Goodwin

INTRODUCTION

Opal is currently being mined from depths between 1 metre (3 feet) and 30 metres (90 feet) below the surface. The opal is found in sedimentary rocks that were deposited in a freshwater environment during the Cretaceous period, about 110



Nobby opal



Seam opal

million years ago.

There are more than 200 distinct opal fields on the ridges of Cretaceous rocks surrounding the town of Lightning Ridge. These opal fields may be isolated or occur in groups. The main opal field "groups" are located at Lightning Ridge, Coocoran, Grawin/Carter's, Glengarry/Sheepyard, Wyoming, Jag Hill and Mehi.

A number of theories, or models, exist for how opal was formed in the Lightning Ridge region.

TYPES OF OPAL

Precious opal is the valuable form of opal which shows colourful patterns that result from the diffraction of light in a process similar to how the colours of a rainbow are formed. Good quality opals will show some variation in their patterns and colours as they are viewed from different angles, for example when they are turned in the hand.

Potch, or common opal, is generally of no value compared to precious opal as it does not show any diffraction of colour. Common opal occurs far more abundantly in the opal mines than precious opals.

Both precious and common opal is found in three major forms, or shapes;

1. **Nobby opal** is a type of opal that is found as rounded nodules from the size of a pea to as large as a potato.
2. **Seam opal** is usually found as a horizontal layer, or seam, in the opal bearing rocks.
3. **Fossil pseudomorphs** (false forms) are plant, shell, bone



Sandstone (orange) overlying opal bearing claystone (lighter), Coocoran opal fields, Lightning Ridge.



Fault plane (smooth surface) exposed in the sandstone roof of an opal mine, Coocoran opal fields, Lightning Ridge.

or teeth fossils which have been replaced by opal.

THE ROCKS IN WHICH OPAL IS FOUND

Most opal is recovered from the upper 0.3 to 0.5m of a claystone (fine grained) rock layer that is immediately overlain by a layer of sandstone (coarser grained). Opal tends to be more common in the claystone layer near faults (large cracks), blows (areas of heavily fractured rock, also known as breccia) and joints (smaller cracks) in the rock.

Currently most opal mining occurs at depths between 5m (15 feet) and 27m (80 feet) and generally involves the extraction of a single layer of opal bearing claystone. In some areas two or more layers may be mined.

AGE OF THE ROCKS

Opal miners find occasional plant stems and shells which have been opalised, usually as potch but sometimes as precious opal. Rarer still are opalised bones and teeth of various vertebrate animals such as turtles, lungfish, crocodiles, pterosaurs, plesiosaurs and dinosaurs.

These and other fossils have been used to determine that the opal bearing rocks were deposited during the Cretaceous period, about 110 million years ago, in a freshwater environment.



Blow (light coloured circular area) about 1.2 metres across exposed in the sandstone roof of a mine, Coocoran opal fields, Lightning Ridge.



Joints (light coloured) exposed in the sandstone roof of a mine, 3 Mile opal field, Lightning Ridge.

HOW OPAL WAS FORMED

Unlike many other minerals, relatively little is known about the processes involved the formation of opal in the Lightning Ridge region. Most miners and geologists with experience on the opal fields have their own ideas, but these can vary widely in their nature. Currently there are three major opal formation "models" that have a scientific basis and some acceptance amongst opal miners, as detailed below:

- (A) Deep weathering model - During the Tertiary period the rocks which now contain opal were subject to significant weathering. Over time small amounts of silica tended to be leached from sandstone layers by water which then passed through the rock until it became trapped by underlying layers of relatively impermeable claystone. Under the right chemical and physical conditions opal was precipitated from the water in porous areas or voids.
There is a tendency for opal to be found close to faults in the rock layers and near "blows" (disturbed ground). If this model is correct then these faults and blows would have provided paths for water containing silica to flow along.
- (B) Syntectonic (Pecover) model - Opal was deposited by heated water under pressure which originated from underground. The



Opalised fossils, top left - turtle vertebra, top middle - dinosaur leg bone, top right - gastropod (water snail), bottom left - pine cone, bottom right - lungfish tooth plate.

- water tended to flow preferentially along faults and blows and deposit opal nearby.
- (C) Microbe model - Opal bearing claystones commonly contain substantial amounts of fine, fossilised organic matter. Various types of microbe fossils, primarily aerobic (air dependent) bacteria, have also been identified as fossils within opal. Although the microbe fossils are not visible to the naked eye, microscopic studies have shown them to be quite abundant. Under this model the ongoing feeding and waste production processes of the microbes, while they were alive, created favourable physical and chemical conditions for the formation of opal.

Ultimately each of the above models for opal formation has its strengths and weaknesses, with more scientific research required to clarify whether opal has formed by one process or a mixture.

MORE INFORMATION

The following books and papers will provide more information on the geology of the Lightning Ridge opal fields.

- The New Syntectonic Model of Origin to Explain The Formation of Opal Veins,
- Breccia Pipes and Faults at Lightning Ridge, Pecover, S.R., 1999, Opal Ventures N.L., Sydney.
- Cretaceous Microbes – Producer of Black Opal at Lightning Ridge, NSW, Australia, Behr, H.J., Behr, K. & Watkins, J.J., 2000 Unpublished paper.
- Future Prospects for Opal Mining in the Lightning Ridge Region, Watkins, J.J., 1985, Department of Mineral Resources.
- Black Opal Fossils of Lightning Ridge, Smith, E. & Smith, R. 1999, Kangaroo Press, East Roseville, NSW.

From <http://www.wj.com.au/mining/lrgeology.html>

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Gamma Glow Takes Guess Work Out of Opal Mining

12 November 2007

[Australian National University](#)

The sale of opals contributes \$500 million to the Australian economy each year, yet up until now, finding the buried treasures has largely been a question of luck and perseverance for miners.

A new technique capitalizes on natural radiation emitted by the opals to dramatically improve the detection process.

Two scientists have spent nearly 20 years developing a way to 'see' underground areas of high opal concentration in a method that does away with the need for blind drilling.

"Australia is home to the largest and most widespread deposits of precious opal and accounts for 95 per cent of the world's production," Professor Lewis Chadderton from The Australian National University said.

"Opal deposits are found within deeply weathered sedimentary rocks in the Great Artesian Basin that occupies almost one fifth of the continent's centre and east. Geologists agree that there are vast areas within the Basin where opal is likely to occur, but until now there was no means of detecting this mineral other than by direct recovery of opal fragments during exploratory drilling. Opal sites tend to be discrete and sporadic, so even drilling within a rich deposit can be fruitless unless there is a direct hit."

Dr Brian Senior, formerly a geologist with the Bureau of Mineral Resources (now Geoscience Australia), discovered in 1990 that opals exhibit higher than background levels of radioactivity.

He and Professor Chadderton went on to discover that this radioactivity was the result of an unusual combination of uranium, thorium and their decay products trapped inside the structure of the opals when they formed approximately 20 million years ago.

This radioactive 'glow' means that opals can be detected with a much higher degree of accuracy than was the case with traditional exploratory drilling.

By using instruments capable of detecting natural gamma radiation when lowered into an existing drill hole, the researchers are able to guide drilling towards the centre of the opal deposit.

"We've discovered through extensive field tests in New South Wales and Queensland that we can create a detailed gamma ray map by taking measurements in just a small number of holes - even with as few as three readings," Dr Senior said.

Professor Chadderton, an Adjunct Professor at the Research School of Physical Sciences and Engineering at ANU, said the new technique could be a major boon for the opal mining industry.

"These discoveries have the immediate potential to revolutionize the way that exploration for precious opal is undertaken, and could pave the way for more cost effective exploration and mining and continuity of supply," he said.

The researchers' findings are presented in the latest edition of Australian Gemmologist Journal.

For interviews: Professor Lewis Chadderton 02 6236 9348 lewis.chadderton@anu.edu.au; Dr Brian Senior 02 6236 9272

(Dr Senior is away Monday and Tuesday)
ANU Media Office: Simon Couper 02 6125 4171, 0416 249 241
From <http://www.expertguide.com.au/news/Article.aspx?ID=736>

Opal to Shine at Big Event

01 November 2007

A Lightning Ridge opal will be one of the gifts presented by the Australian Miss World finalist to Sanya China the host city of the 2007 Miss World finals.

On Tuesday Mineral Resources minister the Hon Ian McDonald presented the opal to the Australian finalist Caroline Pemberton who was required to take three rocks or stones from Australia to be part of a commemorative 'garden' in Sanya.

All the Miss World finalists have been asked to bring three stones and Ms Pemberton decided to take one each from the coast, the Riverina and the Outback.

She said the Ridge opal was a natural selection and hopes it will bring Australian colour to the world stage.



The Australian Miss World finalist Caroline Pemberton will take a Lightning Ridge opal to be part of a commemorative garden in Sanya China.

Saturday December 1 when the winner is announced.

Ms Pemberton was crowned Miss World Australia in April 2007 in a competition which also recognized her humanitarian work.

"Caroline has worked in an orphanage in East Timor with a team from Father Riley's Youth off the Streets; she is a Goodwill Ambassador for UNICEF; an ambassador for the Red Cross and Life

Education; and is an International Patron for Wakisa, which is a pregnancy crisis centre in Uganda," Mr McDonald said.

From *The Ridge News, Lightning Ridge, NSW, Australia.*

Artifacts Hint at Early Jade Trade

Pendants and earrings, dating from as far back as 3000 BC, originated in Taiwan but have been found throughout the southwestern Pacific, archaeologists say.

By Thomas H. Maugh I
November 24, 2007

Jade pendants and earrings from archaeological sites throughout the southwestern Pacific originated in Taiwan, suggesting the existence of a sophisticated regional trade network much earlier than previously believed.

The itinerant craftspeople who transported the jade and transformed it into jewelry probably carried their language with them as well, spreading the Austronesian languages throughout the region, Australian researchers reported Monday in the Proceedings of the National Academy of Sciences.

Archaeologist Hsiao-Chun Hung of the Australian National University and her colleagues studied 144 three-pointed jade earrings, called lingling-os, and two-headed animal pendants from the Philippines, Malaysia, Vietnam and Thailand.

Using an electron probe microanalyzer to determine the relative amounts of iron, magnesium and silicon in the jade, they concluded that 116 of the artifacts were from a well-known jade mine at Fengtian on the eastern coast of Taiwan. The artifacts dated from 3,000 BC to AD 500.

Only one jade artifact, a lingling-o, has been found on Taiwan itself. But researchers have found castoff pieces of jade throughout the region, indicating that jade "blanks" were shipped from Taiwan and crafted locally.

The manufacture of jewelry required not only a high level of skill, but also a great deal of patience and labor, because of the crude tools that were available. Hung noted that eight hours of sawing on jade with a stone knife and sand will cut a groove only 11 millimeters, or less than half an inch, deep. An hour of drilling with bamboo, sand and water produces a hole only 10 millimeters deep.

So far, no researcher has found iron tools associated with jade manufacturing.

The team is now trying to pinpoint the origin of the other samples, Hung said.

From the *LA Times*. Reprinted for educational purposes under the "fair use" provision of the U.S. Copyright Act.

Saint's Jewels on Show in Naples San Gennaro Treasures Exhibited for First Time

Naples, November 11, 2007

One of the world's most precious collections of jewellery and gems are current only show in Naples for the first time ever. The pieces are among a selection of treasures devoted to the patron saint of Naples, San Gennaro or St. Januarius, which has been built up over the centuries. "This is an intact collection that bears testimony to 600 years of history and faith," said Paolo Iorio, director of the museum that normally guards the San Gennaro treasures.

"It has been developed over the centuries as rulers and powerful individuals passing through Naples commissioned these extraordinary works of art from Neapolitan goldsmiths in order to donate them to the city's patron saint". The collection is considered unique as it has survived unscathed through eras in which it was commonplace for invaders and rulers to help themselves to whatever took their fancy.

Iorio points to the example of Napoleon Bonaparte, who filched some of Italy's most valuable treasures during his conquest of the peninsula, sending them back to France. Upon reaching Naples, however, he instead commissioned an extremely expensive monstrosity as a gift to the San Gennaro collection. The exhibit,



The San Gennaro Jewels

which opened on November 14 in the San Gennaro Museum, features a selection of pieces from the collection, including its centerpiece, the necklace of San Gennaro. Considered the most precious piece of jewellery in the world, work on the necklace began in 1679 at the request of the Bourbon family. It is made of 13 large golden links, from which are hung crosses studded with sapphires and emeralds. Also on display is a gold-plated mitre of silver made in 1713, with over 3,700 rubies, emeralds and brilliants.

Other items include a massive gold chalice

donated by Pope Pius IX and the so-called mantle of San Gennaro, a cloak smothered in precious gems with heraldic designs picked out in gold and silver. Accompanying the jewellery are a series of paintings and photos exploring the popular worship of San Gennaro in Naples, including annual processions, miracles linked to his name and regular celebrations. "This unique exhibit will further strengthen the link between the city and the saint, as well as boosting the idea of hope through the power of worship," commented Regional Innovations Councillor Antonella Basilico. The exhibit, which runs until the start of February, has been designed as a traveling show although no plans have yet been made for future locations. San Gennaro is famous across Italy for a regular ritual in which his dried blood, stored in phials, returns to its liquid form when brought near his body.

The apparent miracle, first reported in 1389, is performed in Naples each May and on his feast day, September 19.

Although now a headline-making saint, little is known about San Gennaro except that he was bishop of Benevento to the south of Naples and was martyred during the persecution of Christians spearheaded by the Roman Emperor Diocletian.

The bishop was beheaded for refusing to bow down to his 'pagan' persecutors.

According to legend, his body and head, still dripping blood, were gathered up by an old man and taken to a safe place while a local woman filled a phial with his spilt blood.

From the NY Times. Reprinted for educational purposes under the "fair use" provision of the U.S. Copyright Act.

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Signs of Slump at Myanmar Gem Sale

By Thomas Fuller
November 16, 2007

BANGKOK Officially, the government-sponsored gem auction that opened this week in Myanmar is a success, with 2,667 traders browsing the country's renowned rubies, jade, sapphires, and other precious stones, according to Thursday's edition of the New Light of Myanmar, the government mouthpiece.

"More merchants will arrive," the newspaper predicted.

But dealers and a trader based in Yangon, the country's commercial capital, say sales of precious stones — a financial lifeline for Myanmar's cash-strapped economy — are slumping. They say the gem exposition and auction, the first since the junta's brutal suppression of popular protests drew international criticism

and the threat of Security Council sanctions, has been unusually quiet.

"Business is very slow, not like before," said U Kyaw, a gem merchant in Yangon reached by telephone Thursday.

The threat of sanctions by the United States and European Union that would specifically prohibit the import of Burmese gemstones has dented dealers' confidence, which could prove a serious problem for the junta that has ruled Myanmar for 18 years. Last year, the gem trade generated \$296.9 million for the state-run Myanmar Gems Enterprise, the third largest revenue earner for the military government after fossil fuels and timber.

Adisak Thawornviriyanan, director of the Gems and Jewelry Traders Association of Chantaburi, a province east of Bangkok that is a major center for cutting and polishing Burmese gems, has taken part in the gem auctions for the past four years. But he says he decided to not to attend this one.

"We will wait and see if we can sell our old stock, but I wouldn't dare buy more," Mr. Adisak said. "We don't know how strong the U.S. ban will be."

Cartier, the Paris-based jewelry house, joined two other major brands, Tiffany and Signet, last month when it banned Burmese gems.

Jewelers of America, an organization representing 11,000 jewelry shops, about a third of the total, announced on Oct. 9 it was backing the strengthened ban on Burmese gems being considered by the United States.

The bill seeks to close a loophole in current law that allows the import of Burmese gems that are polished or cut in a third country.

It was introduced Oct. 18 and passed by the House Foreign Affairs Committee on Oct. 31 and awaits approval by the Ways and Means Committee before being submitted to the full House.

Rubies are the most popular Burmese gem in the United States, with official imports calculated as \$87.4 million in 2006, mostly via Thailand, which is the main trading and polishing center for Burmese colored stones. Unofficial imports of the gems are probably much higher.

Should the Congressional measure pass, as seems likely, countries like Japan and China might make up for some of the lost sales, said Sean Turnell, an expert on the Burmese economy with Macquarie University in Sydney. Smuggling will also mitigate the effect of the boycott and trade restrictions, he said.

But drop in demand from the United States and European Union will cause prices of Burmese gemstones to drop, he predicts.

The boycotts could also crimp the ability of generals and Burmese business executives to move their assets out of the country. In the absence of a stable currency and with restrictions on holding dollars inside Myanmar, "gems perform a very important function in moving personal assets around the deck," Mr. Turnell said.

The boycotts and threat of sanctions have spawned a passionate but familiar debates over whether they are effective ways to pressure governments, as were used against the apartheid



Traders inspecting a piece of jade being sold by a private company at the Mid-Year Emporium in Yangon on Tuesday

government of South Africa and the so-called blood diamonds that fueled West African civil wars.

"If the U.S. and the EU were to cease buying all Burmese gemstones, I think it would take a huge chunk out of the regime's pocket," said Brian Leber, a jeweler based outside Chicago who is leading lobbying efforts to halt all imports of Burmese gems.

Critics of the sanctions say they will hurt those Burmese miners who earn their money independently from the government, often by smuggling their gems, especially rubies, to Thailand.

"This is going to be absolutely devastating to the people that deal with gems," said Edward Boehm, vice-president of the International Colored Gemstone Association, an organization of miners, gem cutters and traders. "Most of the mining that is done is artisanal and falls out of the radar of the government."

Mr. Leber counters that the biggest beneficiaries of the gem trade in Myanmar is the military-controlled government.

"There's an argument that this is only hurting the little people," he said. "There really aren't little people who have direct control over things in the gem industry."

There is also a debate over how accurately gems can be identified as being of Burmese origin. Leber and other gem experts says rubies, unlike diamonds, can be identified by certain chemical signatures.

But Henry Ho, an influential jeweler in Bangkok who has been dealing in Burmese gems for decades, says ultimately gem trading is

a business based on trust.

"Only God and the miner know where the gems come from," Mr. Ho said.

"God doesn't speak to you and the miner will lie about it."

From the NY Times. Reprinted for educational purposes under the "fair use" provision of the U.S. Copyright Act.

Is That Piece of Jasper an Agate?

By Sally Taylor

Finding a great agate or piece of jasper is a thrill for any rockhound, but being able to identify exactly what it is that has been found is quite a headache for the beginner. These headaches can be relieved very easily though with just a little bit of knowledge about the different quartz group stones.

Agate and jasper are actually chalcedony, which in turn is cryptocrystalline quartz. All are SiO₂. When you pick up a stone you can rule out that it is a piece of regular massive quartz quite quickly just by looking to see if you can see the grains of the stone. If you can see grains, you do not have an agate or jasper. Most likely, what you have then is massive quartz or some other type of stone. Many new rockhounds will mistake massive quartz for a piece of agate, so don't feel bad if you do. It's a very frequent mistake.

Jasper and agate will appear to be made of wax. If the rock is just plain clear to white translucent with no markings or patterns, it is

2007 Opal & Gem Show Dealers

Name	Company Name	Telephone	E-mail	Website
Noel Pacheco	Ancient Journeys	505-860-2578	anasazi4853@hotmail.com	http://www.ancientjourneysnm.com
Larry Hoskinson	Australian Opal	310-318-2170	lesneff@aol.com	
Eugene LeVan	Australian Opal Imports	562-621-1805	fineblackopal@sprynet.c om	http://www.australianopalimports.com
Alex Small	Australian Opal Rough	559-284-5057	AlexSmall@comcast.net	
Brain and Brandy Petersen	Brian Petersen Opals and Fine Jewelry	386-801-4661	bpetersen@cfl.rr.com	http://www.petersenopals.com
Mr. Salvador R. Chavez	Casa De Lumbre	408-926-7261	zrchavez@sbcglobal.net	
Stan McCall	Custom Creative Gem Cutting	714-220-9282	custom-creative@earthlink.net	http://home.earthlink.net/~custom-creative/
Andrew De Boer	De Boer's Gemstone Treasures	714-537-0473	precan@yahoo.com	
Peter De Pagter	Desert Gem Art	520-331-6894	boxovrox@cox.net	
Dragon Design	Dragon Design	626-576-4411	DragonDesignJewelry@earthlink.net	http://www.DragonsTreasureHoard.com
Rick Kennedy	Earth's Treasures	408-529-9690	riken@flash.net	http://www.earthstreas.com
Helen Serras-Herman	Gem Art Center	520-761-9907	helen@gemartcenter.com	http://www.gemartcenter.com
Ralph T. Carter	Handcrafted as a Hobby	801-484-6445		
Virginia Carter & Judith Osmer	J. O .Crystal Company, Inc	310-437-0736		http://www.ramaura.com
David Burton	Lapidary International	714-827-5680	gemsandopals@earthlink.net	
Donna Schultze	Lasco Diamond Products	818-882-2423	donna@lascodiamond.com	http://www.lascodiamond.com
Paul Marujo	Marrujo's Creations	760-745-4331	marrujo@sbcglobal.net	http://marrujoscreations.com
Sasha S. Bravo	Pearla del Mar	760-554-5206	sb@pearladelmar.com	http://pearladelmar.com
Lothar Vallot	Santiago Canyon College	714-893-6643	ovdiamonds@aol.com	http://www.sccollege.edu/apps/comm.asp?Q=65
Dale Atkins	Savings Unlimited Gems & Minerals	805-650-1655	daleswisebuys@verizon.net	
Steve Newstrom	The Village Smithy Opals, Inc.	406-651-4947	info@villagesmithyopals.com	http://www.villagesmithyopals.com
Matti Tikka	Tikka Opals	61-755469324	mattitikka@bigpond.com.au	
Uday Kotahwala	Tricolour Gem Dealer	49 498-7372	mail@tricolourgems.com	http://www.tricolourgems.com
Sally Patel	True Blue Opals Pty. Ltd.	61-755949760	Lightningopalsus@aol.com	http://www.trueblueopals.com
Dr. Walter Johnson	Walter Johnson	714-533-1287	donnawalt@msn.com	

considered chalcedony. If it is opaque, that is, if you cannot see into or through it, it is jasper. Jasper is most frequently earth tones or red but you can find jasper in just about any color or color combination and it can contain some very lively patterns. One well known form of jasper is called "picture" jasper, and just as the name suggests, the lines and markings look just like a scenic picture of mountains and valleys or forests and so on. Geometric patterns are also common in jasper stones.

If a stone is an agate, it will be translucent as is chalcedony, but an agate will have patterns. Most commonly, agates have bands, and are appropriately called banded agate. Sometimes the bands are also translucent, sometimes some are opaque. There are many agates named to describe how they look, such as plume, orbicular, or flower and many that are named for the place they are found, such as Dryhead or Lake Superior. For instance, moss agate is a clear to semi-clear agate that looks like moss was embedded in the stone. No two agates are alike and many fantastically patterned stones will not have specific type or place names.

There are also stones which you will find that have both jasper and agate in them. Both the opaque and translucent parts of these stones will appear waxy. These are often referred to as jaspagate. Once you become familiar with the look of both jasper and agate, you will be able to recognize jaspagate with no problems. One other stone that can be confused with agate or jasper is opal.

Opal will have flashes of color if it is precious opal. It can be also be common opal which is plain translucent or opaque and a just about any color or a mix of colors. Opal generally looks more glassy than waxy, and it is much more brittle and breakable than agate or jasper.

If you still aren't sure when you find a rock if it is jasper, agate, or opal, you should take it with you and ask someone about it. Your local rockshop or club or even a jeweler's shop can identify it for you.

You will have few problems identifying these stones after the first or second time. Once you learn to identify these basic stones, you will be surprised how many different types of gemstones you will start noticing on your hunts.

Sally Taylor: Sal is an avid gem and treasure hunter, explorer, writer, and Internet Marketer. She is the owner of <http://www.rockhoundstation1.com> and author of a controversial Internet Marketing Beginner's Guide to Business Building: <http://rockhoundstation1.net/ps/sally>

December 2007 Gem & Mineral Shows

30-2--SANTA BARBARA, CA: Show, "Gem Faire"; Gem Faire Inc.; Earl Warren Showgrounds / Exhibit Hall, 3400 Calle Real; Fri. 12-7, Sat. 10-7, Sun. 10-5; admission \$5 (weekend pass); contact Gem Faire Inc., (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com.
 1-2--BARSTOW, CA: 32nd annual show; Mojave Desert Gem & Mineral Society; Community Center, 841 S. Barstow Rd.; Sat. 10-5, Sun. 10-5; free admission; hands-on lapidary classes, dealers, beads, books, crystals, gems, demonstrations, more than 40 displays, grab bags, wheel of fortune, silent auctions; contact Gene Haines, 408 Barstow Rd., Barstow, CA 92311, (760) 256-0595; e-mail: email@mdgms.org; Web site: www.mdgms.org.
 7-9--COSTA MESA, CA: Show, "Gem Faire"; Gem Faire Inc.; Orange County Fairgrounds/Bldg. 10, 88 Fair Dr.; Fri. 12-7, Sat. 10-7, Sun. 10-5; admission \$5 (weekend pass); contact Gem Faire Inc., (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com.
 8-9--ARCATA, CA: Show, "North West Crystal Ball"; North Crystal Co-op Gem & Mineral Club; Portuguese Hall, 1185 11th St.; Sat. 10-6, Sun. 10-6; contact Jeffrey Wigginton, (707) 267-5135; e-mail: NorthWestCrystalBall@yahoo.com.
 14-16--SAN DIEGO, CA: Show, "Gem Faire"; Gem Faire Inc.; Scottish Rite Center, 1895 Camino del Rio S.; Fri. 12-7, Sat. 10-7, Sun. 10-5; admission \$5 (weekend pass); contact Gem Faire Inc., (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com.

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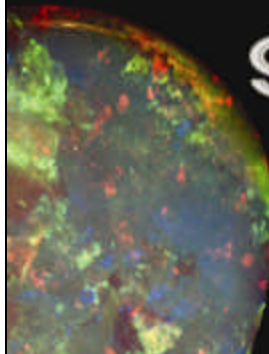
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Are Your Dues Due Now?
PLEASE CHECK YOUR ADDRESS LABEL. If your label shows the current month/year your dues are DUE NOW. If the date is older, your dues are overdue.
A Renewal Grace Period of two months will be provided. If your dues are due now you will receive two additional issues of the newsletter. Please note, however, that as the system is now set up, if your renewal is not received you will be AUTOMATICALLY dropped from membership thereafter. It is your responsibility to assure your dues are current.
 Thank you,
 The Editor

The Opal Express

American Opal Society
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**Volume #40 Issue #12
December 2007**

TO:

Some Topics In This Issue:

- Opal & Gem Show was a Success!
- Be Kind to Your Dealers
- Show Grand Prize Winner
- The Story of Stone Soup
- Geology of Opal in the Lightning Ridge
- Finding Opal by Radiation
- Opal to Shine at Big Event
- Artifacts Hint at Early Jade Trade
- Saint's Jewels on Show in Naples
- Signs of Slump at Myanmar Gem Sale
- 2007 Opal & Gem Show Dealers
- Is That Piece of Jasper an Agate

Important Info:

Board Meeting - December 4th

General Meeting - December 13th
Annual Christmas Potluck Party at the Clubhouse. Main course will be provided free; Please bring a side dish, dessert, or drink!

— GENERAL MEETINGS —

2nd Thursday of the Month
7:00 pm - 9:00 PM

Garden Grove Civic Women's Club
9501 Chapman Ave.
Garden Grove, CA 92841

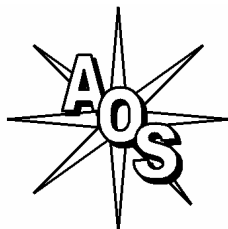
(NE corner of Gilbert & Chapman)

MEETING ACTIVITIES

Opal Cutting, Advice, Guest Speakers,
Slide Shows, Videos, Other Activities



December 13th Annual Potluck Christmas Party!



The American Opal Society

<http://OpalSociety.org>

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