



# The Matrix

Official Newsletter of the  
Sacramento Mineral Society  
Sacramento, California

# SMS

October 2007  
Volume 67, No. 10

**YOU CAN DO IT!...**  
**YOU CAN DO IT!...**  
**YOU CAN DO IT!...**

## Nominations Solicited for the 2008 Governing Board of SMS

—By Joy Fergoda, SMS Nominating Committee Chair

It's that time of year again! Nomination Committee members **Joy Fergoda**, **Kim Hofer** and **Meg Zbierski** have begun compiling a list of SMS members willing to help with the operation of the club in 2008. If you have enjoyed using the club's facilities and participating in club functions (our hands-on shop, wire wrap and dichroic glass classes, educational meetings, field trips, shows), please consider giving back to your rockhounding community by throwing-your-hat-in-the-ring and running for office.

The Governing Board consists of 12 members: President, Vice-President, Secretary, Treasurer, Federation Director, Past President, Bulletin Editor, and five Directors. Officers are elected for a one year term (January 1 thru December 31); Directors are elected for a two year term; there are currently three Director Positions to be filled for 2008.

To see where you might be a good fit, below are the major duties of the officers and directors:

- **President:** Presides at all meetings (specifically, monthly business meeting and educational meeting) and appoints all standing and special committees with the approval of the Governing Board.
- **Vice-President:** Assists the President and, in the absence of the President, presides at meeting and acts in the President's behalf. The VP is also Educational Program Chair, arranging all speakers for monthly Educational meetings.
- **Secretary:** Keeps an accurate record of the proceedings of monthly Business and Educational meetings and attends to all routine correspondence.
- **Treasurer:** Oversees all financial transactions and provides monthly reports at each Business meeting. Receives all in-coming monies for deposit into SMS accounts and issues receipts for same. Pays all bills that have been authorized by the Governing Board. Issues an annual budget report to the Governing Board at the beginning of the year and a final report at the end of the year.
- **Bulletin Editor:** Edits and issues the monthly *Matrix* newsletter, both paper copy and email versions and maintains mailing and emailing lists. S/he may select people to help with production of the newsletter.
- **Past President:** Immediate past President assists and advises the Governing Board and attends monthly Business meetings.
- **Federation Director:** A past member of the Governing Board represents SMS at all CFMS meetings, typically two annual meetings.
- **Director:** Each Director works with the other officers to conduct SMS business and attends monthly Business meetings.

You may be thinking that you don't have the experience to be part of the Governing Board, but experience is really NOT necessary. Each of you possesses talent and expertise and has life experiences that would be useful to the Board and the operation of the club. And past officers will always be available to give you advice. You can make a difference by volunteering to run for a position.

If you wish to nominate someone or would like to be a nominee yourself, contact one of the Committee members: **Kim Hofer** at (916) 965-1223, **Meg Zbierski** at (916) 362-8470 or **Joy Fergoda** at (530) 756-5859 by October 20 (sooner would be better!) Remember that if you want to nominate someone else, you must first have her or his permission.

Currently we have the following candidates for the 2008 year, but please feel free to nominate others or volunteer yourself:

(Continued on page 7)

## IN THIS ISSUE

Page 2	October Shop Steward Schedule
Page 3	President's Message September Business Meeting Minutes
Page 4	September Educational Meeting Hard Rock Carving with Dick Friesen Opal Tips
Page 5	Tourmaline—"Alternative" Birthstone
Page 6	Show Update Members Talents at November Show
Page 7	What's a TYB???? SMS Calendar
Page 8	SMS Roster Updates
Page 9	Searching for Sunstones SMS Holiday Dinner
Page 10	Federation News: Sun Exposure, Swarf, Field Trips, Interested in Judging?
Page 11	SMS's New Members
Page 12	Molecular Expressions—Opal
Page 13	Earth Science Week Field Trip
Page 14	CO-OP / Field Trips
Page 15	Shows & Events



### Sacramento Mineral Society

P.O. Box 160544 ♦ Sacramento, CA, 95816

Founded February 1936 ♦ Colors: Blue & Gold

Member of:

American Federation of Mineralogical Societies  
California Federation of Mineralogical Societies  
CO-OP Field Trip Association

#### Location and Meeting Times:

SMS Clubhouse  
4205 Lemay Street, Rancho Cordova, CA

Business Meeting:  
2<sup>nd</sup> Thursday of every month, 7:00 p.m.  
Educational Meeting:  
3<sup>rd</sup> Thursday of every month, 7:30 p.m.

**Visitors are always welcome.**

Shop open Saturday and Wednesday  
10:00 a.m. to 2:00 p.m.; Shop fee: \$7.00

Dues: \$30.00 per calendar year/Juniors \$1.00

Web Site: [www.sacmineralsociety.org](http://www.sacmineralsociety.org)

#### Mission Statement

The Sacramento Mineral Society is dedicated to promoting interest in and increasing knowledge and understanding of mineralogy and the related sciences and lapidary and the related arts; to promote and organize field trips, to encourage the study of geological formations and the collection and preservation of minerals as they occur in nature.

#### SMS Goal

The goal of the Sacramento Mineral Society is to gain and maintain an active membership of adults and juniors who are interested in mineralogy and the related sciences, and lapidary and the related arts, and who will eventually carry our club into the future. Our club is about learning and teaching. We all have something to learn and each of us has something to teach. We share our passion for minerals, fossils and the lapidary arts.



The right to copy is freely granted to all AFMS-affiliated clubs and its members with proper credit given to *The Matrix*. All articles are written by the editor unless otherwise noted.

Deadline for submission of items is the 25th of each month preceding publication. Submission of items by email is preferred and should be addressed to: [sms-editor@pacbell.net](mailto:sms-editor@pacbell.net). All other items should be mailed to the attention of the editor at the SMS address:  
P.O. Box 160544, Sacramento, CA 95816

#### 2007 Board Members

President:	Kevin Beguhl	(916) 459-7556	<a href="mailto:webebeguhl@aol.com">webebeguhl@aol.com</a>
Vice President:	Frank Fawcett	(916) 967-5809	<a href="mailto:fffawcett@aol.com">fffawcett@aol.com</a>
Secretary:	Joy Fergoda	(530) 756-5859	<a href="mailto:jafergoda@yahoo.com">jafergoda@yahoo.com</a>
Treasurer:	Sheldon Shuper	(916) 383-9153	
Federation Directors:	Dan Brown	(209) 296-6466	<a href="mailto:danbrown666@msn.com">danbrown666@msn.com</a>
	Alma DeShazer	(209) 296-6466	<a href="mailto:bigguy3@volcano.net">bigguy3@volcano.net</a>
Editor:	Kris Jarusevicius	(916) 451-4806	<a href="mailto:sms-editor@pacbell.net">sms-editor@pacbell.net</a>
Past President:	Les Clark	(916) 421-4752	
Directors 2006-2007:	Linda Baglin	(916) 685-8132	<a href="mailto:LollieLinda@yahoo.com">LollieLinda@yahoo.com</a>
	Dixie Christenson	(916) 455-0421	<a href="mailto:gildedcat@sbcglobal.net">gildedcat@sbcglobal.net</a>
	Lana Paulhamus	(916) 372-5117	
Directors 2007-2008:	Carl Zimmerman	(916) 739-1279	<a href="mailto:cz4744@netzero.net">cz4744@netzero.net</a>
	Tarance Beguhl	(916) 519-2590	<a href="mailto:t1beagle@aol.com">t1beagle@aol.com</a>

#### Committees and Chairs

By-Laws:	Tarance Beguhl	Shop Advisors:	Tarance Beguhl
	Frank Fawcett		Carl Zimmerman
	Kris Jarusevicius	Shop Foreman:	Tarance Beguhl
Display:	Carl Zimmerman	Juniors:	Bill Elkins
Field Trips:	Dan Brown	Custodian:	Joy Fergoda
Groundskeeper:	OPEN	Webmaster:	Kris Jarusevicius
Historian:	Frank Fawcett		Tarance Beguhl
Librarian:	Frank Fawcett	Scholarship:	Kim Hofer
Newsletter Mailing:	Meg & Frank Zbierski		Sheldon Shuper
Membership:	Frank Fawcett (Temp)		Meg Zbierski
Club Publicity:	Tarance Beguhl	Audit:	OPEN (2)
Business Advertising & Corporate Sponsorship:	Kevin Beguhl, Sheldon Shuper		

#### 2007 Show Committees and Volunteers

Show Chairs:	Kevin Beguhl
	Frank Fawcett
	Kris Jarusevicius
Show Food Chair:	Linda Baglin
Show Print Advertising:	Ed Claborn
Show Mailings:	<i>Mailing Party</i>
Dealer Contracts:	Kevin Beguhl
	Sheldon Shuper
Exhibits:	Sheldon Shuper
Juniors Activities & Spinning Wheel:	Mary Adamis Viers

### October Shop Steward Schedule

Wednesday

Saturday

*The Shop Steward schedule for October was unavailable at press time.  
Please contact Tarance Beguhl for confirmation of assignments.*

**The shop will be open as usual on all Wednesdays and Saturdays.**

**Stewards: Please contact Tarance Beguhl at (916) 519-2590  
if you are unable to cover your assigned shift.**

#### Reminders:

- Glasses are always required while working in the shop.
- Be sure to sign in before using shop equipment.
- Report any problems to the Shop Steward of the day.
- Rock cutting is to be performed by Shop Stewards only.
- Please be sure to clean up your work area and your machine before leaving for the day.

## President's Message

Hello everyone—

We are approaching the end of September and fast approaching is our November show. With that being said the show committee (**Kris Jarusevicius**, **Frank Fawcett**, **Ed Claborn** and I) have been spending a lot of time and effort making this a show to remember. We have lined up some speakers and presenters and are aggressively seeking just a couple more. At that time we will release a schedule of who and when, but there will be something for everyone. **Mary Adamis Viers** has volunteered to take on the daunting task of overseeing the kid's area and putting together a committee to help her. **Linda Baglin** will again oversee and run the kitchen with the help of many others. But there are still a lot of things and areas that we need volunteers for. So please get in contact with one of the committee members and commit to some volunteer time.

On another note, we are seriously short on shop stewards, so if you would be interested in becoming a shop steward please contact me directly at (916) 459-7556 and I will make time to help you learn whatever you aren't comfortable with so that you can and will be comfortable helping others.

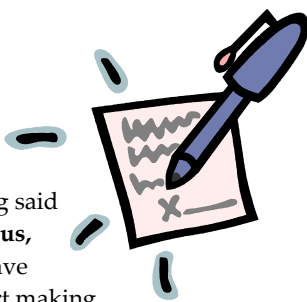
Well it has been a crazy month for me with trying to get the rock shop open at the store (*Katerina's Treasures*) as well as everything else, so I have not been able to spend as much time as I would have liked at the shop up to this point. But I hope that this problem changes for next month. Please feel free to call me if there are any questions as to whether I will be at the shop for classes or for any other reason.

Have some fun collecting and displaying rocks. On the point of displays we are looking for people to display at the show. If you are interested, please contact **Sheldon Shuper**.

I would like to take a second to note that the three members who donated items to the *KVIE Art Auction* helped them raise a good sum of monies for their programming. And I would like to pass on direct thanks from the station. They expressed their thanks when I was at the studio on the last day of the auction. **Katerina Beguhl's** piece went for \$225.00; **Kevin Beguhl's** piece went for \$350.00; and **Janis Marzolf's** piece went for \$200.00. These were great amounts for both Katerina's and Janis's; the items went for way over stated value.

I would like to also thank Janis for the work that she had put in towards the advertising and mailing for the show and apologize for any confusion that was caused by asking Ed Claborn to be responsible for publicity -- as in posters and printing and all that pertains to that end of it. In an effort to work these two areas together there was some confusion and I apologize for it.

Kevin Beguhl  
SMS President 2007



## Business Meeting Minutes of September 13, 2007

**Kevin Beguhl** called the meeting to order with the *Pledge of Allegiance*. A quorum of officers was present. The minutes of the past Business Meeting were approved 'as remembered' (no one brought a copy BUT no one remembered there being any mistakes either!).

### ANNOUNCEMENTS

A big "thank you" to **Dan Brown** for donating a large laminated geologic map of the Greater Sacramento Area to the club!

Volunteers are needed to staff the SMS info table at the *Gem Faire*, October 12-14. **Frank Fawcett** will do the set up and take down of the table. If you have a few hours to volunteer, please contact **Sheldon Shuper** at (916) 383-9153.

**Frank Fawcett** announced that SMS has nine new members. (See the article on page 11 of this issue of *The Matrix* for details.) Welcome aboard!

### REPORTS

**Sheldon Shuper** gave the Treasurer's report which was then posted on the bulletin board.

**Shop: Tarance Beguhl** is in the process of cleaning all the saws so while he's getting really dirty, we can all look forward to some nice, clean cuts!

**SMS Show: Kevin Beguhl** reported that the Show Committee is working on getting several speakers/demonstrations for our November show. Possibilities include a presentation on fossils and volcanoes with a huge dinosaur and "working" volcano, and a talk on the healing powers of rocks and minerals. The advertising sub-committee requested an appropriation of \$2,000 to begin advertising; the request was MSA. There was discussion on having an SMS members' booth where individuals could have a few pieces of their finished work for sale in exchange for volunteering to staff the booth and agreeing to donate 20% of the sale price to club. The SMS members' booth was MSA. **Kris J.** will follow-up. The club's exhibit cases have been cleaned and prepped and are ready for repainting. Kevin will get in touch with **Dixie Christensen** to arrange a good time to finish the project. The paint has been donated.

**Nomination Committee:** The call has gone out to elect officers for the 2008 year. Look for information in the October *Matrix* and ... please consider running for office.

**Holiday Party:** We discussed finding a location for our December holiday party. We narrowed the restaurants down to two Chinese buffets. It was MSA to let **Linda Baglin**, **Tarance Beguhl** and **Kevin Beguhl** decide between the two!

A discussion was had on the topic of 2008 membership renewals. We decided that in view of the slow response getting renewals in from members this year, we will send out reminders to all current members in November asking renewals be returned by January 31, 2008. The names of those who have not yet renewed by the end of the year will be published in the January, 2008 edition of *The Matrix* as a final reminder.

~ Joy Fergoda, Secretary

## Education Meeting Minutes, September 20, 2007

### How to Arrange Display Cases

Our speaker was Fred Ott, CFMS Secretary and ten-year member of the *El Dorado County Mineral & Gem Society*. Fred has had extensive experience designing display cases and provided us with some excellent tips on how to put together functional, interesting displays.

The standard exterior size for a display case is 2'x2'x4'. Fred recommends lining the bottom and three sides with rigid foam insulation covered in a material to complement the collection. Thick cardboard can be used in place of the insulation, but it is not as thick and does not hold tacks, pins, etc. very well, so insulation is preferred. Rigid foam insulation usually comes in 4'x8' sheets of varying thicknesses, so if you cut carefully with a utility knife, you will have enough for two display cases. Because a display case's interior dimensions will be somewhat smaller than the exterior 2'x2'x4', it is suggested that you cut down the pieces by about 1" to accommodate the varying interior dimensions. This way you will have a "traveling interior" that will fit most any display case. Also remember that when cutting the insulation, to keep the side pieces and back piece upright in the case, it is best to cut the side edges a little shorter so that they fit in front of the back edge...holding all sides in place. To add depth to your display, you can cover additional pieces of insulation and place them in the bottom to elevate areas.

Do not over-fill your case. Clutter is distracting and 'more' is usually not 'better'! You can include photos, postcards and/or objects related to your subject as visual aids. For example, in an exhibit case displaying copper ore, you might have photos or a postcard of a mine and a spool of copper wire, etc.

The color scheme is very important, so take some time to determine what color material will cover the insulation. Select a material that does not wrinkle. Most displays do best with muted tones that don't distract from the display objects... beiges, tans, grays, and eggshell white.

Take care in labeling your objects. Label fonts should be large enough and clear enough to read easily.

Fred suggests every club have a traveling "field trip display case" showing field trips the club has taken with photos of members at collecting sites, quotes from members about how interesting/fun the trip was and pieces of material taken from the site(s). This draws the interest of prospective members.

Fred was a wealth of information and we thank him for sharing so many great ideas with us!

Respectfully submitted,  
~Joy Fergoda, Secretary

**Lapidary: Someone who grinds their fingernails, sands their knuckles, and polishes their vocabulary while trying to do the same thing to a piece of agate.**

## Hard Rock Carving With Dick Friesen

The SMS is offering two classes on the techniques used for carving stones by well-known craftsman, Dick Friesen. Mr. Friesen, who resides in Livermore, has previously taught at *Camp Paradise* and has shares his techniques through both individual and group instruction at his home and group instruction at various clubs. He also invented the water shield used in his classes.

Two classes will be offered: one on Friday, December 7<sup>th</sup>, and another on Saturday, December 8<sup>th</sup>, both in the SMS clubhouse. Each class will begin promptly at 9:00 a.m., finishing approximately 3:00-4:00 p.m., and is limited to six students per session. The course will move the student carver through a project from start to finish. All tools and equipment, including a lathe, a water shield, cutting burrs, sanding wheels, polishing bits and diamond polishes, will be supplied; but bring an *Optivisor* if you care to use one.

Price for the course will ultimately depend on the number of people we have enrolled. If we can fill all twelve spots, the price will be \$60.00 plus \$7.00 shop fee; if we have fewer than twelve students, the price increases to \$75.00 plus \$7.00. All fees will be due on the day of class. The final price will be confirmed at the time of enrollment.

Those interested in attending should contact Craig McCoy at (916) 966-5582 or by email at [wcraigmc@comcast.net](mailto:wcraigmc@comcast.net). Mr. Friesen's classes at other clubs have filled up quickly, so please sign-up as soon as possible.

*Editor's Note: I took this class through the Roseville Rock Rollers in the summer of 2006. If you've ever had an interest in rock carving, this class is well worth the time and money. Dick is a wonderful instructor full of useful information and gives his students individual attention. And with his set-up of tools and supplies, you couldn't ask for anything more in a class!*

## Opal Tips

- Is opal fragile? A properly cut and polished opal, when properly set, lasts a lifetime. It should have a flat back that can be evenly supported by a matching flat setting.
- Thicker is better—the layer of color must be thick enough to cut down into it slightly to achieve the best results.
- Always cut for quality—think of this whenever a stone has a problem. It may be possible to cut one big stone with a little potch, or cut out the potch and cut two smaller stones; it's generally better to cut the smaller stones.
- Why is opal stored in water? Opal is stored in water because its appearance wet most closely resembles what it will look like polished. Be aware that water, even more so than glycerin, hides cracks.
- Crystal opal is brittle and flakes more easily. It needs a 320 lap for working. Break in all diamond wheels with agate to knock off the uneven edges of the diamonds.

Tips by Cliff Coan in *The Opal Express*, 4/99

*Birthstones are a fun way to celebrate one's birth. The list of modern birthstones currently accepted in the U.S. was developed in 1912 by the American National Association of Jewelers; a different list is maintained in Germanic countries. The gems now associated with each month have only a slight relationship to ancient beliefs however. Throughout history, different lists have reflected a variety of stones connected to ancient lore and different cultures. This series of articles is an attempt to share some of these old beliefs and will hopefully give us a chance to learn about a few more of the "gems" that catch our fancy. I hope you enjoy it. -Ed.*

## Tourmaline

Tourmalines are known for their variety of colors. According to an old Egyptian legend, on its long journey up from the center of the Earth, tourmaline passed over a rainbow and assumed all the rainbow's colors. Still today it is referred to as the "gemstone of the rainbow".

The name tourmaline comes from the Sinhalese words *tura mali*, meaning something like 'stone with mixed colors'. The stone comes in nearly any color, and they often have two or more colors. Some will change their color when the light changes from daylight to artificial light, and some show the light effect of a cat's eye. No two tourmalines are exactly alike.

This gemstone has an endless number of faces, and for that reason it suits all moods. No wonder that magical powers have been attributed to it since ancient times. It is most often known as the gemstone of love and friendship, assisting to render them firm and long-lasting.

Tourmalines are mixed crystals of aluminum boron silicate with a complex and changing composition, making the mineral group a fairly complex one. Even slight changes in the composition cause completely different colors. Crystals of only a single color are fairly rare; indeed the same crystal will often display various colors and various nuances of those colors. Another trademark of this stone is its dichroism; depending on the angle from which you look at it, the color may be different or more or less intense. It is always at its most intense when viewed looking toward the main axis, a fact to which the cutter must pay great attention. Tourmaline has excellent wearing qualities and is easy to look after, for all tourmalines have a good hardness of 7 to 7.5 on the *Mohs* scale.

In the trade, the individual color variants have their own names. For example, a tourmaline of an intense red is known as *rubellite*, but only if it continues to display the same fine ruby red in artificial light as it did in daylight. If the color changes when the light source does, the stone is called a pink or shocking pink tourmaline. Blue tourmalines are known as *indigolites*, yellowish-brown to dark brown ones as *dravites*, and black ones as *schorl*. Schorl itself is often used for engravings and is said to have special powers that can protect people from harmful radiation. A popular green variety known as a *verdelite* has a fine, emerald-green color caused by tiny traces of chrome; it is also referred to as a *chrome tourmaline*. The Paraiba tourmaline is a gemstone of an intense blue to blue-green and was not discovered until 1987 in a mine in Brazil. In good qualities, these gemstones are much

sought-after treasures today.

Tourmaline has even more names: stones with two colors are known as bi-colored tourmalines, and those with more than two as multi-colored tourmalines. Slices showing a cross-section of the tourmaline crystal are also very popular because they display the incomparable color variety of this gemstone. If the centre of the slice is red and the area around it green, the stone is given the nickname *watermelon*. On the other hand, if the crystal is almost colorless and black at the ends only, it is called a *Mohrenkopf*, resembling a certain kind of cake popular in Germany.

Tourmalines are found almost all over the world. There are major deposits in Brazil, Sri Lanka and South Africa. Other finds have been made in Nigeria, Zimbabwe, Kenya, Tanzania, Mozambique, Madagascar, Pakistan and Afghanistan. Tourmalines are also found in the USA, mainly in California and Maine.

Scientists are also interested in tourmaline's physical qualities, for tourmalines can become electrically charged when they are heated and then allowed to cool; they then have a positive charge at one end and a negative one at the other. This is known as *pyro-electricity*. The stone can also become charged under pressure, the polarity changing when the pressure is taken off; when the charge changes, the tourmaline begins to oscillate, similar to a rock crystal but much more pronouncedly. The Dutch were familiar with this effect long before it



could be explained scientifically, and they used a heated tourmaline to draw up the ash from their meerschaum pipes, calling the gemstone with this amazing power an *aschentrekker*.

It is believed to strengthen the body and spirit, especially the nervous system, blood, and lymph glands. It is thought to inspire creativity and was used extensively as a talisman by artists and writers. It attracts inspiration, and diminishes fear by promoting understanding and encouraging self-confidence. It also enhances cooperation. Ancient East Indian culture used it in rituals to provide direction toward that which brings "good"; and also recognized it as a "teller" stone, providing insight during times of struggle. It has been used by shamans in African, Native American and Aboriginal tribes, believed to bring healing power and provide protection from danger; to the African shaman, it promotes awakening from the "dream of illusion".

In the fascinating world of gemstones, the tourmaline is very special. Its high availability and its incomparable color spectrum make it one of the most popular gems. Apart from that, almost every tourmaline is unique. It is the stone for the Zodiac sign of Leo and the accepted gem for the 8<sup>th</sup> wedding anniversary.

## Show Update

Our annual show is fast approaching – only slightly more than a month away. The three show chairs, **Kevin Beguhl**, **Frank Fawcett** and **Kris Jarusevicius**, have been meeting regularly working on plans for the event. Our goal is to enhance the show somewhat over recent years, try a few new ideas, and provide some new and revamped offerings to our members and the public.

We've increased our space this year by opening up the back room of the *Scottish Rite Center*, where we'll have more dealers and presentations of interest. There are currently 35 dealers committed (and possibly a few more in the wings), including some who are new to our event bringing along some new items to offer our visitors. We are also considering spreading out our exhibits and demonstrations to increase movement of our guests throughout the facility, and we plan to bring back the rock auction this year with some special offerings (and could use a few good "talkers" to raise the enthusiasm). Along with our usual demonstrations, we also plan to have numerous speakers throughout the weekend offering a variety of presentations.

For the past few years, the Veteran's Day holiday has fallen on the Friday of our show, preventing us from emphasizing a day for the kids. With a return this year of the holiday to the following Monday, we are once again attempting to focus Friday as "Kid's Day". With that in mind, we've recruited **Mary Adamis-Viers** to organize more special events for the kids, not only just on Friday, but throughout the entire weekend.

New this year is a "Member's Talents Table", where members can show off some of what they're doing and what they've learned as members of the club and possibly sell some of their items to help benefit the SMS Scholarship Fund. See the article to the right for further details and consider showing off a few of your creations.

One achievement we're especially proud of is the fact that we've recruited **Ed Claborn** to coordinate our publicity. He has some wonderful ideas and great enthusiasm that we're sure will help get the word out about our show. Be expecting new flyers, car signs, and posters that members can share with their friends and businesses throughout the Sacramento area to be available soon. When you hear of their availability, please be sure to come by the shop to pick up a few to spread around town. We need everyone's help to get the word out!

Last year we seemed to break records with more than half our membership volunteering to help out at the weekend event. We'll be recruiting member volunteers shortly, so let's make it another record-breaking year!! We'll be needing help in all areas – with the kitchen and food sales, the entrance table, at the Spinning Wheel and kid's activities areas, with the rock auction, security, set-up and take-down. So when you get that call requesting help, be sure to think about the areas you'd enjoy most and give us a hearty "YES!" in response! Let's make this the best show yet!!

## "Member's Talents" Table at the November Show

Did you ever wonder if all the experimenting with cabbings, jewelry-making, carving, and other crafts you've been doing would be of interest to others? Have you ever wondered if anyone would be interested in buying your creations? Have you just been having so much fun with your creative hobbies that you now find yourself with extra pieces that you just don't know what to do with? Then this may be your answer.

New to this year's SMS show will be a "Member's Talents" table where those members who don't quite have enough items to fill a table as a dealer can put their creations out on display and offer them for sale to the public. The Member's Table has a multiple purpose: we want members to feel and experience the excitement and pride in discovering that others would value the items they create; as a club, we want to show off some of the skills that club participation can give; and finally, we wanted to find a way to earn a bit of money to dedicate towards the club's Scholarship Fund.

Any member in good standing may submit items to be sold at the table during the show, but there will be a few rules each person will have to follow. Items for sale should be hand-crafted and preferably contain some element related to our earth science interest and hobbies. Members must do their own pricing of their items. 20% of the sale price of each item will be returned to the club as a "donation" to the club's Scholarship Fund; the remaining 80% is "profit" for the craftsperson. Additionally, all members who submit items for sale will be obligated to man the table for *at least* one block of time, approximately 4 hours, over the show weekend. (This time is separate and apart from any time donated to working other areas of the show and is not subject to the earning of *SMS Thank You Bucks*). All those submitting items will also be required to tag their wares and provide an inventory list for tracking purposes.

To make this idea work, we obviously need the participation of many club members. If you are interested in participating or would simply like additional details, contact **Kris Jarusevicius** at (916) 451-4806 or by email at [sms-editor@pacbell.net](mailto:sms-editor@pacbell.net) no later than November 1, 2008. An instruction sheet will be provided to you on how to tag your items for sale and about doing "table duty" during the show. Additionally, if you have cases, display boxes, or other ideas to use at the table to show off the items for sale, loan of these items for the event would be appreciated.

So, artists... join in and let's do a bit of bragging about the work we do and make a healthy donation to the club's Scholarship Fund!

**Turitella** is composed of small gastropod sea shells fossilized into rock. The coiled shape of the sea shells can be seen scattered throughout the stone. The unique design, as well as the color, gives it the nickname "rattlesnake agate". Turitella is found only in southern Wyoming.

*Via Golden Spikes News 06/02, and ultimately Rollin'Rock 07/05*

## What's a "TYB"?????

We all know it to be true – the club could not be the club without the events we have during the year. Our presence at shows like *Gem Faire*, *Snyder's*, our Open House Events, and of course the biggie—the annual show, gets the word out about our club and supports us through each year.

And in turn, we wouldn't be able to have or participate in these events without the volunteer assistance of our membership. Without our members, our club is nothing.

To more fully address that point, the Board is attempting to acknowledge the help our members give with a new system of payback -- **Introducing: "SMS Thank You Bucks" (TYBs)!!**

Beginning with the October *Gem Faire*, the Board will reward members who volunteer to help at our functions with one TYB for each hour of help provided. While the TYBs have no monetary value in themselves, they are worth compensatory shop time or can be put towards the "purchase" of rocks from the yard.

The program works like this: for each hour of service a member provides to the club, that member will be rewarded with one TYB to be used at the member's discretion towards shop fees (including rock cutting fees), or to purchase rock from the yard. Each TYB is equal to \$1.00, so one hour of volunteer time could yield you two pounds of rocks! Seven TYBs can give you a free shop day! Use the TYBs one at a time or gather a bunch to use all at once – it's your choice, and they don't expire!

When you volunteer your time, be sure to check in with the event coordinator. At the end of the event, the sign-up sheets will be verified by the coordinator and submitted to the Board at the next monthly Business Meeting. Awards will then be given out to the volunteers at the next Educational Meeting.

TYBs will be awarded for volunteering at all our annual events: the SMS show, the *Gem Faires*, helping out in our booth at *Snyder's Pow Wow* in May, and the Open House/BBQ events. Additional TYBs may also be awarded at the Board's discretion to those who somehow go above and beyond to help the club.

You as an SMS member are valued and we do appreciate you. We want you to know it!

(Nominating Committee, continued from page 1)

President: Kevin Beguhl  
 Vice-President: OPEN  
 Secretary: Joy Fergoda  
 Treasurer: Carol Otterstrom  
 Federation Director: NONE  
 Newsletter Editor: Kris Jarusevicius  
 Past President: OPEN  
 Directors: Kim Hofer, Meganne Zbierski, Frank Zbierski

The full list of candidates will be listed on the ballot in the November *Matrix*. You may vote for the candidates of your choice

## SMS Calendar

All events held at the SMS clubhouse unless otherwise noted.

### October

- 6<sup>th</sup>—Saturday Jewelry Workshop with Kevin Beguhl  
 Wire Wrap or Dichroic Glass (Take your pick)  
 10:00 a.m. to 2:00 p.m., \$7.00 + materials fee
- 11<sup>th</sup>—Thursday Business Meeting, 7:00 p.m.  
 All members welcome!
- 18<sup>th</sup>—Thursday Educational Meeting, 7:30 p.m.  
 Speaker: Genna Seapara-Martin of *The Blossoming Path*  
 Topic: *"The Healing Properties of Minerals"*
- 20<sup>th</sup>—Saturday Jewelry Workshop with Kevin Beguhl  
 Wire Wrap or Dichroic Glass (Take your pick)  
 10:00 a.m. to 2:00 p.m., \$7.00 + materials fee

### November

- 8<sup>th</sup>—Thursday Business Meeting, 7:00 p.m., Scottish Rite Center  
 All members welcome!
- 9<sup>th</sup> thru 11<sup>th</sup>—  
 Fri. thru Sun. **SMS "Golden Harvest of Gems, Jewelry & Minerals"**  
**Show at the Scottish Rite Center**
- 15<sup>th</sup>—Thursday Educational Meeting, 7:30 p.m.  
 Speaker: Bob Willis  
 Topic: *Assessing the Value of Gemstones"*
- 24<sup>th</sup>—Saturday Jewelry Workshop with Kevin Beguhl  
 Wire Wrap or Dichroic Glass (Take your pick)  
 10:00 a.m. to 2:00 p.m., \$7.00 + materials fee

### December

- 7<sup>th</sup>—Friday or  
 8<sup>th</sup>—Saturday Hard Rock Carving with Dick Friesen  
 9:00 am-4:00 p.m., \$75.00 + \$7.00 shop fee
- 13<sup>th</sup>—Thursday Business Meeting, 7:00 p.m.  
 All members welcome!
- 20<sup>th</sup>—Thursday SMS Holiday Dinner and Installation of 2008 Officers  
 (See article on page 11)

**Shop open every Wednesday and Saturday from 10-2.  
 Bring a friend and show off your club!!**

anytime between **November 5-25**. There will be several ways to vote (pick one!). First review the list of candidates in the November *Matrix*, then...

1. Email the Nomination Committee Chair, Joy Fergoda, at [jafergoda@yahoo.com](mailto:jafergoda@yahoo.com) with your selections; OR
2. Mail the completed election ballot from the November *Matrix* to Joy Fergoda at 3421 Monterey Ave., Davis, CA 95618; OR
3. Fill out election ballot at the SMS clubhouse and deposit it in the on-site ballot box.

Officers for 2008 will be announced in the December *Matrix* and installed into office at the SMS Holiday Dinner and Installation of Officers on December 20th.

**SMS Roster Updates** *A monthly update of SMS member information.*

Please make note of the following new and returning members and note them in your SMS club roster. Changes or corrections should be forwarded to the editor at [sms-editor@pacbell.net](mailto:sms-editor@pacbell.net) or by phone at (916) 451-4806.

**Sharon Andrews**

9983 Tarzo Way, Elk Grove, CA 95757  
(916) 685-7471, [rs8@surewest.net](mailto:rs8@surewest.net)

**Monica Goodpasture**

5 Amador Circle, Rio Vista, CA 94571  
(707) 374-5391, [wheatwvr@citlink.net](mailto:wheatwvr@citlink.net)

**Gloria Marsh**

P.O. Box 162309, Sacramento, CA 95816  
(916) 337-9781, [gmarsh@cwnet.com](mailto:gmarsh@cwnet.com)

**Raymond Langley**

9963 Old Placerville Road, Sacramento, CA 95827  
(916) 363-8780, [rayzcane@comcast.net](mailto:rayzcane@comcast.net)

**Sandra Langley**

9963 Old Placerville Road, Sacramento, CA 95827  
(916) 363-8780

**Phyllis Lee**

937 Sonoma Way, Sacramento, CA 95819  
(916) 451-2426, [tigerlily@sacbeemail.com](mailto:tigerlily@sacbeemail.com)

**Ray Martin**

7664 19<sup>th</sup> Street, Sacramento, CA 95832  
(916) 665-1525, [rvshrine1@frontiernet.net](mailto:rvshrine1@frontiernet.net)

**Barbara Martin**

7664 19<sup>th</sup> Street, Sacramento, CA 95832  
(916) 665-1525, [rvshrine1@frontiernet.net](mailto:rvshrine1@frontiernet.net)

**Ronald McKelvey**

9983 Tarzo Way, Elk Grove, CA 95757  
(916) 685-7471, [rmckelvey@surewest.com](mailto:rmckelvey@surewest.com)

**Sandra Morgan**

P.O. Box 277734, Sacramento, CA 95827  
(916) 769-9510, [clearskies2u@yahoo.com](mailto:clearskies2u@yahoo.com)

**Chris Phinney**

937 Sonoma Way, Sacramento, CA 95819  
(916) 451-2426, [phinney@surewest.net](mailto:phinney@surewest.net)

**Patricia (Patty) Robinett**

7716 Kensington Drive, Citrus Heights, CA 95610  
(916) 863-5808, [pattyrobin@yahoo.com](mailto:pattyrobin@yahoo.com)




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## Searching For Sunstones

—By Meg Zbierski

I joined the *Sacramento Mineral Society* with my husband, **Frank Zbierski**, to be able to go along on field trips and was excited when I read in *The Matrix* that our club was sponsoring the CO-OP field trip to Oregon in search of sunstones. The leader of the trip, **Dan Brown**, provided us with excellent directions and we decided to make a long weekend of geology and rockhounding.

As we traveled up Highways 70, 89, and 299, Frank was reading from a club copy of *Roadside Geology of Northern California*. We stopped to hike Bumpas Hell in *Lassen National Volcanic Park* and then took in the beautiful Burney Falls. As we made our way north to Alturas and our motel, we traveled through what seemed to be the alfalfa growing region for the entire state.

We were off early the next morning to the field trip site and as we drove, *Roadside Geology* gave us lots of geological information about the areas we were traveling through. We arrived in Plush, Oregon with enough time to take in the general store and get a preview of Sunstone jewelry. Six miles out of Plush the pavement ended and then we traveled on about 20 miles of gravel road!

Dan had marked the route through the maze of dirt roads and greeted us when we arrived. He gave us a little geology lesson, some safety tips, several film containers for collecting stones, and then let us loose. We spent several hours collecting the small stones that were shining and glinting in the sun. Most of what we collected were clear or straw to a light amber color. We did find a few with some schiller of a pink tone. Frank is the rockhound, so he was at it longer than I. He found several chunks of matrix with embedded sunstones and walked out so far that he found the sign denoting the boundary of the *Bureau of Land Management Sunstone Collecting Site!*

As the sun climbed straight up, minimizing the ease of seeing the sunstones, we stopped for lunch and a rest. Dan shared some more geology and mining information with us, and we got to know our fellow club members, including **Alma De Shazer**, better. I was lamenting that I could not locate a very interesting large rock embedded with sunstone that I had found earlier. Dan suggested marking my future finds with a bright tape, and Alma gave me a roll of hers. Frank and I headed out again for more sunstone and he helped me find my rock. Before we headed back to Alturas, we drove around to see the two mines in the area. I was surprised to see so many people who seemed to be spending days, if not weeks, in the area to mine sunstone.

All in all we had a very successful field trip and are grateful that Dan organized it. The SMS is fortunate to have club members like Dan and Alma.

***Don't argue with an idiot; people watching may not be able to tell the difference.***

## SMS Holiday Dinner and Installation of Officers

Our annual Holiday Dinner & Installation of Officers will be held this year at *VIP Seafood Buffet*, 3405 El Camino Avenue (at Watt), on Thursday, December 20<sup>th</sup> at 6:30 p.m. SHARP. As is club tradition, the event will be held in lieu of a December Educational Meeting.

The evening will feature the ceremony installing new officers for 2008 as well as a gift exchange. All members are invited to participate in the gift exchange. Gifts should have a maximum cost of \$10.00. A man should bring a gift for a man, and a woman should bring a gift for a woman; please tag your gift with either "man" or "woman".

All diners may enjoy the full buffet-style dinner featuring seafood, Mongolian BBQ and sushi. Dinner price is \$15.00 per person, which includes the all-you-can-eat meal, non-alcoholic beverage, dessert, tax and tip.

Reservation forms (below) should be sent as soon as possible to help with the planning, but no later than Saturday, December 8<sup>th</sup>. Please be aware that there are no cancellations after that date. For questions, please contact **Linda Baglin** at (916) 685-8132.

So come join us to celebrate the holiday season with club members and friends!



### SMS Holiday Dinner & Installation of Officers for 2008

~~ RESERVATION FORM ~~

**Thursday, December 20, 2007, 6:30 p.m. SHARP**

**VIP Seafood Buffet**

*3405 El Camino Avenue, Sacramento  
(At the corner of El Camino and Watt)*

Dinner includes all-you-can-eat buffet, non-alcoholic beverage and dessert. Tax and tip included in reservation price.

**Please send in reservations by December 8, 2007.  
No cancellations after that date.**

Name: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Number of Reservations at \$15.00 each: \_\_\_\_\_

Check enclosed for \$ \_\_\_\_\_  
(Make check payable to SACRAMENTO MINERAL SOCIETY)

Send reservation form and check to:  
Sacramento Mineral Society, Attn: Holiday  
P.O. Box 160544, Sacramento, CA 95816  
Questions? Contact Linda Baglin at (916) 685-8132.

AFMS [www.amfed.org](http://www.amfed.org)

BE SAFE - BE WELL

## Sun Exposure: Changes Through Time

—By Don Monroe, AFMS Safety Chair

A few things that we consider as safety issues have actually changed, but not very many. Most hazards remain constant and are still bad for you but our attitude and our knowledge about sun exposure has really changed over time.

When I was young (no snide comments please), I remember the social implications of having a sun tan. Men were regarded as “rednecks” if they had a tan face and hands but were whiter over the rest of their body. Women who had a tanned complexion were thought of as farm women or farm workers and were thought to be of a lower socio-economic class. Many of the girls from the “city” were extremely careful about exposure to sunlight.

All of these attitudes changed in the mid-1900’s when it became stylish to have a tan. The health effects of sun exposure and the positive aspects of Vitamin D created emphasis on the tanned appearance. Everyone wanted a tan and we all got one and tried to keep one.

Well, now we are paying for those tans as the pendulum swings back toward sun protection. I won’t say that skin cancer is rampant, but it is a major concern particularly for the fair skinned. It was not very long ago when a popular money-making scheme was to own a tanning studio or sell tanning beds for home use. Now I see many more advertisements for sun creams, sprays and other forms of protection from the sun.

Until recently, I did not know what SPF meant and how sun protection was rated. A very tiny little black speck which turned out to be a melanoma absolutely changed my life and now I am seeing many of my friends learn the same hard lessons.

I am not in the medical profession, but I will share with you some thoughts that I share with my children and grandchildren.

- Visit a dermatologist on a regular basis, more often if you have a fair complexion.
- Minimize your sun exposure. I simply am afraid to stay out in the sun because it is not worth the risk. Dress sensibly wearing hats, sun glasses, long-sleeved shirts and light colored clothing outside.
- Use an appropriate sun screen following a doctor’s advice.
- Try to convince the younger generations that it is not “macho” to fry in the sun.
- Don’t forget the little children or grandchildren. I have been told that sun damage is a cumulative thing and we do not want the kids to start too young.

AFMS Newsletter, October 2007

Federation News



## Swarf...and How to Tame It

—From *Gem Cutters News*, Nov. 1984

*Swarf* is that milky liquid you get when you cut cabochons or facet stones. Although it appears to be harmless, swarf can be deadly to your plumbing system and lapidary equipment if not handled properly.

When you grind rocks to make cabochons or faceted stones, you’re removing tiny bits of the rock and carrying them away from your work with water. When the water evaporates, the tiny rock bits are left behind as a sort of concrete gunk. Over time, this gunk will harden like concrete.

So how do you tame the swarf? Never, never, ever, dispose of your swarf in your plumbing system. Don’t pour it down a sink or toilet because eventually that gunk will harden and narrow your pipes. Because it’s concrete-like when hardened, it will be almost impossible to remove! Instead, take your swarf outside to a non-important part of your garden and dump it there - or if there is no garden handy, allow the swarf to settle in the bottom of a bucket for a day or two, then carefully pour off the now clear water, and scoop out the swarf, put it in a plastic bag and toss it in the trash.

AFMS Newsletter, October 2007

## Field Trip North

—By Dave Muster

It’s July. In the past few months, I have been rock hounding in western Nevada. The temperature has risen from lower spring time highs. I am headed out on a field trip to Smith that I have done for 10 to 15 years.

I stopped in Wilson canyon to climb Mount Wilson from the Walker River. I looked up at the hike and guesstimated the amount of time it would take and the amount of water I would need. I had done this climb before. I knew its difficulty. I drank as much water as I could and packed two quarts.

For one and half hours I trudged up the near virtual talus slope of Wilson Canyon until I reached the top of Mount Wilson. The view was spectacular. The mountain canyon was awesome, but I was now low on water. I hiked over to some of the cliffs and looked at copper ores and then proceeded downward.

I discovered a vein of highly agatized rhyolite and started to dig with my mattock and rock hammer. I was into great material of reds and greens in blue agate. I ran out of water. I loaded my pack with 80 pounds of material. I filled a 10-pound ice sack and a two-gallon bucket and headed down the mountain thirsty. It was about 105 degrees when I reached the truck an hour later.

I did not take enough water. My message to you is to take more food and water than you think you need. If you have made a find and you are low or out of water, retreat. Go back to your vehicle, repack with water and food and then return. Go back with supplies to make the dig.

CFMS Newsletter, October 2007

## Interested In Learning How Judging Works?

—By Dick Friesen, CFMS Rules Committee

Even if you are not interested in becoming a CFMS Judge you might like to know more about how judging is done and how the rulebook is used in the judging process. Knowing what judges look for can help you improve your exhibit even if it is not going into competition.

Consider volunteering as a Clerk. The Clerk's job is to record the Judge's comments and scoring for an entry. You will be told everything to write and where to write it. If your handwriting is not too good, no problem, printing is preferred anyway. While the Clerk's position is used as a training step for prospective Judges, not all Clerks are interested in becoming a Judge and we almost always have more openings than volunteers.

A judging team is normally made up of two Judges and one Clerk. The Rules Committee will review the competitive entries and match the Judges to them based on experience, skill, and interest. This is done, when possible, prior to the Judge's meeting. Clerks are assigned to the Judging teams at the Judge's meeting.

The Judge's meeting is normally held on Friday morning at 7:30 AM somewhere close to the competitive exhibit area at the annual CFMS show. At this meeting the final Judging team selections are made and the teams are assigned the entries they will be judging. While there are exceptions, the teams are usually finished before noon.

If you think you might be interested in taking part in this interesting process, contact anyone on the Rules Committee or just show early on Friday morning and let someone know you are interested in Clerking. We will do our best to match you with a team that is working on a category that you are interested in. However, even if we can't match you with the category you would prefer, you will find that the categories are really all interesting and what you learn will help you understand the judging process better and that information will help you improve your own exhibit.

CFMS Newsletter, October 2007

## Diamond Pacific Tool Corporation

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## Sacramento Mineral Society's New Members

Its incredible how many people "discover" us at the *Gem Faire* when it's in town. The August show gifted us with eight of the following twelve new and returning members who were voted in at the September Board meeting.

**Patty Robinette** resides in Citrus Heights and has been interested in lapidary for about four years. She has a collection of beach moonstones and states, "I want to be able to create jewelry from stones found on the beach". She discovered us on the Internet when searching for information about wire wrapping.

**Sandra Morgan** of Sacramento has held her interest since childhood and is primarily interested in our offerings in mineralogy and lapidary. She has a small collection of polished and natural stone and is willing to help with club publicity.

**Raymond and Sandra Langley** reside in Sacramento and found our club on the internet. Raymond indicates that he's been interested in minerals and/or the lapidary arts for some 45 years and joined the club because he "wants to learn". He's the moderator of the *braidweaveknotwire* group on YahooGroups.com and is interested in our social activities. Sandra shares that she currently has a collection of butterflies, blue glass, tea pots and hat pins.

**Monica Goodpasture** of Rio Vista doesn't really have a collection, but likes crystals. She's interested in mineralogy, geology and the lapidary arts, especially jewelry making.

Residing in Elk Grove, new member **Ronald McKelvey** is interested in all our activities, but has not yet gathered a collection of any material. He is employed by *Sky King, Inc.* From the same address, **Sharon Andrews** is employed by the Sacramento County Department of Water Resources and has been interested in all our activities for about 25 years. She's willing to lend assistance in field trips, social events and at our annual show.

**Barbara Martin** is retired and resides in Sacramento. She's been interested in minerals and the lapidary field for about a year and is primarily interested in our lapidary and field trip activities. She's willing to help with the annual show. Her husband, **Ray Martin**, has been interested in lapidary for approximately one year as well. He shares that he can help the club with the annual show and doing computer work.

Sacramento's **Phyllis Lee** has had an interest in all areas of our field for "a long time", and currently has a collection of gemstones and rough material. She is employed by SMUD and is willing to help the club in many areas, including educational and social events, field trips and our annual show.

**Chris Phinny's** interests are mineralogy, geology and field trips. Chris is willing to help in areas of social events and our club show, and is employed by VSP.

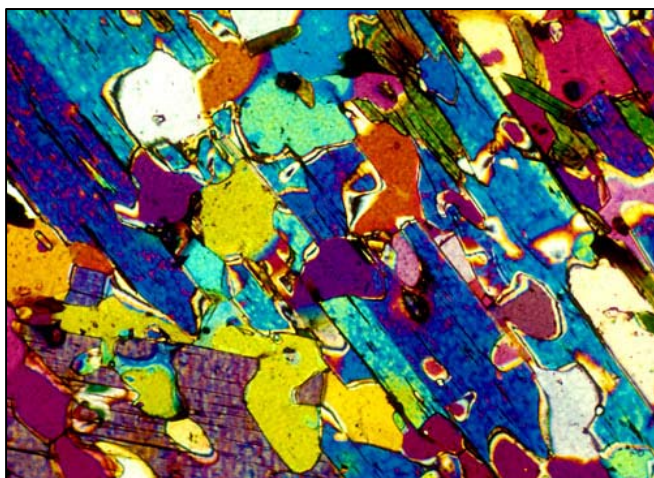
Returning member, **Gloria Marsh**, has a collection of minerals and gems, and has donated "tons" to a college. She's been interested in field trips, mineralogy and lapidary work for many years. Gloria resides in Sacramento.

Please greet them all warmly when you see them. Welcome everyone!!

## Molecular Expressions – August Birthstone

An interesting website called *Molecular Expressions* literally gets to the core of gemstone study. The site features photo galleries that explore the fascinating world of microscopy – photographs taken through an optical microscope. Maintained by Florida State University in collaboration with Optical Microscopy at the National High Magnetic Field Laboratory, the site displays a series of images entitled *The Birthstone Collection* containing digital images made from photomicrographs of mineral-thin sections that contain the select gems. Some images display the surface of impure and uncut stones, while others display crystallites formed from dissolved minerals.

Use of images and information contained in this series of articles has been granted by the website's owners. Many of the images in the collection were made from crude specimens and the team is in search of better specimens to examine and photograph. If you have such samples you feel they might be interested in and would like to see them photographed, please visit the website and follow the link to send them an email with your offering. You may visit their website directly by going to: <http://micro.magnet.fsu.edu/birthstones/index.html>.



### Opal

A popular gem for many centuries, the fiery, brilliant opal is considered a *mineraloid* because, unlike other mineral gems, it does not have a truly crystalline structure. Nonetheless, opal does possess a highly complex structure. Random chains composed of silicon and oxygen are packed into tiny spheres, which are irregular in size, concentration, and arrangement in most opals. Only opals with a perfectly aligned grid of silica spheres will exhibit a characteristic play of color, which results from the diffraction of light passing through the gem. The size of the spheres determines the wavelengths diffracted and, therefore, the colors seen by an observer. The brilliance of diffracted colors is determined by the regularity of the grid.

Opal is also one of the few gemstones that is sedimentary in origin. Millions of years ago, sandy sediments along the shorelines of ancient seas released silica into a solution that filled cracks in rocks, layers in

clay, and even some fossils. As the silica solidified, some of it was transformed into opal, which still contains 6 to 10 percent water, a remnant of that ancient sea.

Ancient opal was mined near Hungary (now Eastern Slovakia) in the old world and by the Aztecs in South and Central America. Today the finest opals are found primarily in Australia, Wales, and Mexico.

The Romans highly valued opal, and the Roman historian Pliny described its beauty as the combination of the beauty of all other gems. Opal was also treasured during the Middle Ages and was called *ophthalmios*, or eye stone, because of the belief that it was beneficial to eyesight. Blonde women wore opal necklaces to protect their hair from losing its color. Queen Victoria loved opals and gave them quite often as wedding presents. She and her daughters popularized the stone as a fashion accessory, particularly after the discovery of an exciting new source of opals within the British Empire -- Australia.

Gem scholars agree that the tradition of birthstones arose from the Breastplate of Aaron described in the Bible (Exodus 28, 15-30). The breastplate was a ceremonial religious garment set with twelve gemstones that represented the twelve tribes of Israel and corresponded with the twelve signs of the zodiac and the twelve months of the year. There are many different birthstone lists, however, and some argue that they should be assigned by astrological sign and not month. Opal is the birthstone for October and the zodiac sign Libra.

Used with permission from Michael W. Davidson, National High Magnetic Field Laboratory, Florida State University

### Gem Faire is Coming Again! October 12-14 at the Scottish Rite Center

Thank you to all those who have already volunteered to "talk us up" at the SMS booth! With our own show only one month later in the same venue, its one of the best ways we've found to advertise our upcoming show.

While we hear that all the volunteer spots are covered for the weekend, if you'd still like to help out, give **Sheldon Shuper** a call at (916) 383-9153 to let him know. I'm sure he'd fit you in somewhere!

### 2008 MEMBERSHIP DUES WILL SOON BE DUE

**\$30.00 ADULTS/\$1.00 JUNIORS**

The SMS will send out a renewal reminder in November. When you receive it, please be sure to send your renewal fees in promptly. As an added reminder, we will publish names of all those who have not renewed by the end of the year in the January 2008 edition of *The Matrix*.

Dues must be current by January 31, 2008 for a member to be included in the 2008 Membership Roster and for continued use of shop facilities.

Presented by the Nevada Bureau of Mines and Geology

## Earth Science Week Field Trip, October 20 or 21 — "Taking the Pulse of the Earth"

This year marks the tenth annual Earth Science Week (ESW) and our tenth year of hosting public field trips to help promote public and professional awareness of the status of earth science in society. The 2007 ESW theme of "Taking the Pulse of the Earth" will focus attention on geoscience research associated with the *EarthScope Program*, a major geophysical experiment, funded by the *National Science Foundation*, that is designed to understand the structure, dynamics, and evolution of the North American continent. The research is helping us understand the physical processes that control earthquakes and volcanic eruptions. Earth scientists are using seismometers, state-of-the-art drilling equipment, satellites, and GPS receivers to "take the pulse of the Earth."

Many scientists in our area are participating in *EarthScope*, including teams of geodesists, geologists, and seismologists at the University of Nevada, Reno. Some of those scientists will accompany us on our field trip to describe some of their scientific instruments, what kind of data they collect with those instruments, how they interpret that data to find out more about the interior of the Earth, and how that information benefits us in mitigating hazards and in building a sustainable base of both energy and mineral resources.

With this theme in mind, this year's ESW trip will visit three areas south of Reno where we will see how geoscientists obtain information about the earth and how that information is used to mitigate hazards, find geothermal energy, locate industrial minerals for construction use, and discover new information about the Earth.

Field trip participants will meet at the Mount Rose Summit rest area (on State Highway 431, 16.6 miles from South Virginia Street), beginning at 8:30 AM and leave the rest area at 9:00 AM. We will carpool into participants' four-wheel drive vehicles to caravan up a normally gated and locked road to the top of Slide Mountain. The road is very steep but otherwise easily negotiated by 4WD vehicle. At the top we will park and hike short distances to a GPS satellite receiver and to a seismic relay station. At these installations, seismologist Ken Smith (*UNR Seismological Laboratory*) and geodesist Bill Hammond (*Nevada Bureau of Mines & Geology*) will talk about the instruments, technology, and some of their recent findings of earthquakes near Lake Tahoe and related magma movement causing an increase in elevation at Slide Mountain.

At the summit we will also have the opportunity to collect specimens of granodiorite and pegmatite. We will look for inclusions of magnetite-rich rocks in the granite and copper stain on some rocks. We will eat lunch at the summit before retracing the route back to the rest area, where we will return to our vehicles and drive down the Mount Rose Highway to our second stop, the Redfield campus/Steamboat Hills geothermal area.

At the Steamboat Hills geothermal area, we will learn about the

operation of the geothermal power plants that extract and re-inject naturally-occurring hot waters from the ground to produce one of the cleanest and most environmentally friendly kinds of renewable electrical power available anywhere.

*Ormat Nevada, Inc.* is constructing the *Galena Geothermal Project*, which, when completed, will bring the total production capacity from existing Steamboat geothermal plants to over 100 megawatts of electricity. One megawatt of electricity can supply energy for approximately 500 to 1,000 typical homes in the area. The electricity produced at the plant is under contract to *Sierra Pacific Power Company*. *Ormat* owns and operates four other geothermal plants at Steamboat, the oldest of which has been in operation since 1986.

After our tour of the geothermal area, we will continue driving east on the Mount Rose Highway, crossing South Virginia Street, to visit the *Rilite Aggregate Quarry* in the Virginia Foothills, where a rhyolite flow dome has been mined for decades for construction aggregate. *Rilite* staff will describe quarry operations and products, and we should be able to collect specimens of beautifully flow-banded rhyolite and perlite.

NBMG geologist Chris Henry will tell us about radiometric age dating of these and other rocks and what this information tells us about the significance of the rocks for geothermal energy and volcanic hazards.

You must register online or by phone to attend this field trip. Register online at [www.nbmg.unr.edu/esweek/su7.php](http://www.nbmg.unr.edu/esweek/su7.php) or call (775) 784-6694. The complete road log for the trip will be available online by September 21. For more information about the trip content, call D.D. at (775) 682- 8772.

Field trip participants must bring their own insured, high-clearance vehicles, water, lunch, snacks, hats, sunscreen, and sturdy walking shoes. Field trip participants are required to sign a waiver of responsibility prior to participating in the field trip. This form may be downloaded and printed out at [www.nbmg.unr.edu/esweek/waiver.pdf](http://www.nbmg.unr.edu/esweek/waiver.pdf). Complete and sign the form and bring it with you to the field trip.

One of the sites we will visit will also have a *Geocache* site. See [www.geocaching.com](http://www.geocaching.com) for information about this program, which allows you to use a global positioning system (GPS) receiver to search for hidden items and take you to exciting places. The website for National Earth Science Week is at: [www.earthsciweek.org](http://www.earthsciweek.org). Please visit the site for more information about Earth Science Week activities, contests, "tool kit" and other ways to get involved.

The first stop will require four-wheel drive, so participants will be asked to carpool from the Mount Rose rest area to the top of Slide Mountain. If you have a 4WD vehicle, please bring it and offer rides to others; if not, plan on car-pooling with others.

Via CO-OP, 9/21/07

## Field Trips

## CO-OP

[www.coop.5u.com](http://www.coop.5u.com)

Due to CO-OP privacy concerns, details of CO-OP sponsored trips can no longer be published in *The Matrix*. Contact the SMS filed trip leader, Dan Brown, at (209) 296-6466 or [danbrown666@msn.com](mailto:danbrown666@msn.com) for further information and/or revisions. Information on field trips may also be obtained from the "members only" section of the CO-OP website at [www.coop.5u.com](http://www.coop.5u.com).

**Reminders:** Call the field trip leader in advance to verify details – climate and weather, tools, safety concerns, clothing, vehicle requirements, etc. Wear your name badge and sign in with the leader. All participants must sign a *Consent and Assumption of Risk Waiver of Liability* form upon arriving at the meeting site and non-CFMS members must show proof of personal liability insurance. Obey the AFMS Code of Ethics, Land Use Policy, and safety rules. Always use common sense.

- October 7 **San Andreas, CA** for serpentine ranging in color from black to dark green to yellow-green, found along the side of the road in piles. Also a visit to *Stories in Stone Emporium* in Angels Camp for an educational earth-science presentation. Sponsored by *Sun City Lincoln Hills Gem & Mineral Society*, members' guests are allowed. Contact trip leader, Ronald Clawson at (916) 543-0065, (916) 384-7266 (cell) or [cearon1@yahoo.com](mailto:cearon1@yahoo.com) if you plan to attend as the *Stories in Stone* presentation is limited to 50 people.
- Oct. 27-28 **Kettleman Hills, CA** for fossils. Limited to 30 attendees. *El Dorado Mineral & Gem Society*. Barbara Terrill, (530) 676-2375 or [membership@edcar.org](mailto:membership@edcar.org).
- Nov. 21-25 **Lavic Siding, CA**, east of Barstow for Lavic jasper, agate, fossils, copper minerals and other items. Sponsored by *Mother Lode Mineral Society*, members guests allowed. Dry camping with Thanksgiving potluck; MLMS will provide the turkey and dressing, participants should bring side dishes and dessert. Requires pick-up with 4x4 high clearance; no sedans as there are lots of sandy, rough roads. Contact: Albert Troglin, (209) 838-7725 or [shnalrokhound@yahoo.com](mailto:shnalrokhound@yahoo.com). Please RSVP by November 17<sup>th</sup>.

### CFMS Field Trip North Seminar October 6, 2007 – "Checking Land Status"

Hosted by the *Peninsula Gem & Geology Society* and Dave Muster, CFMS Field Trip North Chair, the seminar will be at the *Garden House* in Shoup Park, 400 University Avenue, Los Altos, CA 94022. The seminar will be from 9:00 a.m. to 12:00 noon, and coffee and a sandwich lunch will be provided. There will be information on map reading and items that need to be addressed by a field trip leader, as well as using the BLM to check land status; boundaries, quarter corners, township, section and range lines will be considered. Additional information may be obtained by contacting Dave Muster at (408) 245-2180.

Directions: Hwy 101 – Exit San Antonio Road, turn right on Main Street, Los Altos. Cross Foothill Expy, turn left on University Ave. Shoup Park is on your right. Hwy 280 – Exit Moody Rd/El Monte Ave; take El Monte. Turn left at light on University Ave. Shoup Park will be on your left. Can also take left on Foothill Expy, left on Main St, left on University Ave., and Shoup Park is on your right.

Via CO-OP and CFMS Newsletter, October 2007

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## Upcoming Shows &amp; Events

- October 3-7 **Joshua Tree, CA.** *The 32nd Annual Gem, Mineral and Crafts Show.* 6225 Sunburst Avenue, Joshua Tree. Hours: M-Sat. 8-5, Sund. 8-3. Over 50 dealers of gems, rock minerals, crafts, lapidary and rock polishing equipment. Raffles, Pancake Breakfast on Saturday, Classic Car Display, Sheriff's Mounted Search and Rescue Demonstration, Flag Raising Ceremony. All proceeds go to: *Sportsman's Building Fund* and *TLC (Tender Loving Christmas)*. (760) 366-2915.
- October 7 **Fallbrook, CA.** *Fallbrook Gem & Mineral Society's "Fall Festival of Gems".* FGMS Museum, 123 W. Alvarado. Hours: 10-4. Mary Fong-Walker, (760) 723-3484, [mrwizard@tfb.com](mailto:mrwizard@tfb.com), [www.FGMSORG/organization/orglocations/html](http://www.FGMSORG/organization/orglocations/html).
- October 13-14 **Grass Valley, CA.** *Nevada Country Gem & Mineral Society's "Earth's Treasures".* Nevada County Fairgrounds, 11228 McCourtney Road. Hours: 10-5 both days. Cliff Swenson (530) 272-3752.
- October 13-14 **Lakeside, CA.** *Cajon Valley Gem & Mineral Society.* Lakeside Rodeo Grounds, 12584 Maplevue. Hours: 10-5 both days. David Newton, (619) 390-5054, email: [jontom@netthere.com](mailto:jontom@netthere.com).
- October 13-14 **Trona, CA.** *Searls Lake Gem & Mineral Society's "66th Annual Gem-O-Rama".* Searles Lake G&M Society, 13337 Main Street. Hours: Sat. 7:30-5, Sun. 7:30-4. Bonnie Fairchild, (760) 372-5356, email: [jbfairchild@verizon.net](mailto:jbfairchild@verizon.net). Website: [www.iwvisp.com/tronagemclub/tronagemclub.html](http://www.iwvisp.com/tronagemclub/tronagemclub.html).
- October 20 **West Hills, CA,** *Woodland Hills Rock Chippers' "9th Annual Show".* First United Methodist Church, 22799 Sherman Way, Hours: Sat. 10-5, Virginia Rotramel (818) 790-7598, Email: [info@rockchippers.org](mailto:info@rockchippers.org), website: [www.rockchippers.org](http://www.rockchippers.org).
- October 20-21 **Placerville, CA.** *El Dorado County Mineral & Gem Society.* El Dorado County Fairgrounds, 100 Placerville Drive. Hours: 10-5 both days. Jackie Cerrato (530) 677-2975, [jacobcer@directcon.net](mailto:jacobcer@directcon.net), [www.eldoradomineralandgem.org](http://www.eldoradomineralandgem.org).
- October 20-21 **Anderson, CA.** *Shasta Gem & Mineral Society.* Shasta District Fairgrounds. Hours: Sat. 9-5, Sun. 10-4. Bill Steward, (530) 365-8641.
- October 20-21 **Santa Rosa, CA.** *Santa Rosa Mineral & Gem Society.* Veterans Memorial Auditorium, 1351 Maple Avenue. Hours: Sat. 10-6, Sun. 10-5. Shirley Mattson or Tom Dering, (707) 795-1730 or (707) 564-4537, email: [squirly48@yahoo.com](mailto:squirly48@yahoo.com) or [farmarch@sonic.net](mailto:farmarch@sonic.net). Website: [www.gem-n-i.org](http://www.gem-n-i.org).
- October 20-21 **Whittier, CA,** *Whittier Gem & Mineral Society,* Whittier Community Center, 7630 Washington Avenue. Hours: 10-5 both days. Jay Valle, (626) 934-9764.
- Nov. 3-4 **Concord, CA.** *Contra Costa Mineral & Gem Society.* Centre Concord, 5298 Clayton Road. Clayton Fair Shopping Center. Hours: 10-5 both days. Sam Woolsey (925) 837-3287.
- Nov. 3-4 **Anaheim, CA.** *American Opal Society.* Clarion Hotel Anaheim Resort, 616 Convention Way (off Harbor Blvd.). Hours: Sat. 10-6; Sun 10-5, Jim Lambert (714) 891-7171, email: [jlamb777@yahoo.com](mailto:jlamb777@yahoo.com), website: [www.opalsociety.org](http://www.opalsociety.org).
- Nov. 3-4 **Lancaster, CA.** *Palmdale Gem & Mineral Society,* 2551 W. Ave. H, Hwy 14. Hours: 9-5 both days. Susan Chassin-Walblom (661) 943-1861, 3mail: [SLChassin@yahoo.com](mailto:SLChassin@yahoo.com), website: [pgms@antelecom.net](http://pgms@antelecom.net).
- Nov. 3-4 **Ridgecrest, CA.** *Indian Wells Gem & Mineral Society,* Desert Empire Fairgrounds, Mesquite Hall, 520 S. Richmond Rd. Hours: 9-5 both days, John De Rosa, (760) 375-7905.
- Nov. 9-11 **Sacramento, CA.** *Sacramento Mineral Society's "65th Annual Golden Harvest of Gems, Jewelry & Mineral Show".* Scottish Rite Temple, 6151 H Street, Sacramento. [www.sacmineralsociety.org](http://www.sacmineralsociety.org).
- Nov. 10-11 **Yuba City, CA.** *Sutter Buttes Gem & Mineral Society's "Festival of Gems".* Grace Franklin Hall, 442 Franklin Avenue. Hours: Sat. 9-5, Sun. 9-4. Cliff Swenson (530) 272-3752.
- Nov. 17-18 **Oxnard, CA.** *Oxnard Gem & Mineral Society.* 800 Hobson Way. Hours: Sat. 9-5, Sun. 10-4. Miriam Tetrault, (805) 642-5779. Website: [www.ogms.net](http://www.ogms.net).
- Dec. 1-2 **Orangevale, CA.** *American River Gem & Mineral Society.* Orangevale Grange, 5807 Walnut Ave. Hours: 10-5 both days, Florence Hansan (916) 955-5189 or Evelyn Tipton (916) 791-4517.
- Jan. 19-20, 2008 **Exeter, CA.** *Tule Gem & Mineral Society's "Gemboree".* Veteran's Memorial Bldg., on Highway 65, Hours: Sat. 10-5, Sun. 10-4. Marshall Havner, (559) 562-4133, email: [mdhavner@verizon.net](mailto:mdhavner@verizon.net).



Show off your membership in the Sacramento Mineral Society by remembering to wear your SMS name badge and/or your SMS t-shirt when visiting shows and rockhounding events!



Daylight Saving Time ends at 2:00 a.m. on Sunday, November 4th. Remember to set your clocks back one hour.

Happy Halloween!!!



# WANTED

**The assistance of our members at the November Show.**

**We can't make it a success without you!**

Sheldon Shuper will once again be doing his magic by calling members to ask where they can help.

We're especially in need of those with the special talent of working with kids and talking up our offerings at the auction. But all areas could use help – including the kitchen, entrance area, set-up, take-down, security, rock auction, spinning wheel, and kid's activity areas.

If you already know where you'd like to help, please contact Sheldon Shuper at 383-9153 or one of the show chairs: Kris Jarusevicius at (916) 451-4806, Frank Fawcett at (916) 967-5809 or Kevin Beguhl at (916) 459-7556.

**And remember – for each hour you volunteer, you'll earn one TYB!!!! Start your stockpile of rewards now!!**



Sacramento Mineral Society  
P.O. Box 160544  
Sacramento, CA 95816

## The Matrix

October 2007

