



## From the President's Pen

The end of the year is quickly coming upon us and a number of folks will be getting on the road to go visit family and friends to celebrate Thanksgiving and Christmas. I just want to say be careful and be prepared for wherever you are planning to go. And, if you just happen to be going somewhere to collect some wondrous rocks, make sure you checked the weather patterns beforehand so that you do not get stuck in the middle of nowhere.

I wanted to pass along that our prior Vice President, Bob Wilson, is mostly settled into his new home in Oregon. So well so, that he has been recognized by his community as an artist for his rock carvings. It is great to hear that a member or even prior member has received some well-deserved recognition for their artistic capabilities. Congratulations go out to Bob Wilson!

I want to thank all the members for volunteering to help out fellow members at the recent shows. Also to our volunteer members who go above and beyond to ensure our lapidary equipment within the shop is running smoothly. And, to all those members who do any number of things that are overlooked, thank you! You all make this a great group to be a part of.

— Glenn Fiala

## Vice President's Corner

A message from our previous Vice President, Bob Wilson:

Still carving and have a big craft fair the first weekend in November, sponsored by the local Rock & Arrowhead Cub [of which I am now a member].

Pic of latest carving attached - a Jade Pheasant on dendritic sandstone. After being part of a city-wide juried art show last month, I was invited to be a vendor-artist at the huge annual Klamath Falls bird watching convention in February and will probably have a private show at the city's Art Gallery, sometime next year. So, yeah, things are looking up as I transition from lowly crafter to recognized artist. — Bob



**Bob's latest carving—  
Jade pheasant  
on dendritic sandstone**

**Educational Program  
for November 14, 2017  
In the Garden Room  
See instructions, Page 6.**



**A DVD about the Ametrine of  
the Anahi Mine in Bolivia**

**(See map & directions to the  
Garden Room on Page 6)**

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## MINUTES FOR ROSEVILLE ROCK ROLLERS EDUCATIONAL MEETING OCTOBER 10, 2017

**Call to Order** at 7:04 p.m. by Vice President, Jan Kessler.

**Flag Salute** led by Madilyn Ogden

**Present:** 60 members, 8 Juniors and 8 Guests.

**Introductions** by guests.

**Sunshine Report** – no report.

**Juniors' Advisor** – Carole Kowalik reported there were 9 Rookies and 2 guests. A presentation was given by Henrie Notley on diamonds. Jim Hutchings brought in Lake Co. diamond specimens. The juniors' project was to create diamond shapes from soap.

**Treasurer** – Terry Yoschak had no new report.

**Secretary** – Florence Brady reported she is collecting dues (renewals) for 2018. Membership is 278.

**Programs** – Jan reported we are looking for a new presenter for our Nov. Ed. Mtg.

**CFMS Director** – Mike Hunerlach reported he will be attending the meetings in Visalia in November.

**Vests, tee shirts & patches** – available for purchase after the presentation.

**Field Trips** – upcoming field trips are listed in the bulletin.

**Librarian/Historian** – Karla Shannon shared the books she has brought on sapphires. Check out procedures were reviewed.

**Junior Advisor** – Carole reported she is working on next month's program.

**Show** – the next 2018 Show Committee meeting will be Nov. 21<sup>st</sup>.

**Lapidary Shop** – Mike Hunerlach reported he will organize a work party to fix the ramp and railings down at the Lapidary Shop. An e-mail notice will be sent out. He introduced the 4 other instructors besides himself. Any member interested in becoming an instructor is to contact Mike.

**Shows** – upcoming shows are listed in the bulletin.

**Lapidary Class Coordinator** – Cathy Nelson stated she is continuing to work on scheduling classes.

**Refreshments** – the clipboard for signups was passed around.

**General Announcements** – please refer to the bulletin for a list of upcoming shows.

**Drawings** - winners were: Member, Carla La Fave; Junior, Raymond Rule and Guest, Rick Freitas.

**Old Business** –

Fairgrounds update – Jim Hutchings summarized the changes to the grounds and the renovations to the buildings. We hope to return to the Garden Room starting with the Nov. Ed. Mtg. We received a check for the money on deposit with the former Fairgrounds management. Jim said we still have some issues to work out with the new management. Member Stan Bollinger shared his impressions when he went to the meeting for neighbors.

Nominations Committee – Committee Chair Megan Zbierski shared the slate of candidates for offices for 2018. She asked for nominations for each of the offices, none were received. This procedure will be done again at the Nov. Ed. Mtg.

**New Business** – none

**Program** – Vice President Jan Kessler introduced RRR Member Jim Hutchings, who gave a presentation on Yogo Gulch sapphires.

**Silent Auction** – Hugh Brady encouraged members to look at the items and bid.

**Recess for Refreshments.**

**Adjournment** – meeting adjourned at 8:10 p.m.

## MINUTES FOR ROSEVILLE ROCK ROLLERS BOARD MEETING OCTOBER 10, 2017

**Call to Order** by Vice President Jan Kessler at 8:16 p.m.

**Present:** 8 Officers, a quorum.

**Membership Applications** – a motion was MSA to approve the membership application from Rick & Kathy Freitas.

**RRR Field Trip Chairperson** – a motion was MSA to approve Gene Doyle as RRR Field Trip Chairperson

**Adjournment** – meeting was adjourned at 8:20 p.m.

Respectfully submitted,

Florence Brady, RRR Secretary

## MINUTES FOR ROSEVILLE ROCK ROLLERS BOARD MEETING OCTOBER 24, 2017

**Call to Order** by President Glenn Fiala at 7:04 p.m.

**Roll Call** – present, all officers except Teresa Johnson, Jan Kessler and Karla Shannon. A quorum was present. Guest: Cathy Nelson

**Minutes** – a motion was MSA to approve the minutes for the Bd. Mtg. September 26, 2017 and Ed. & Bd. Mtgs. October 10, 2017.

**Treasurer** – Terry Yoschak reported nothing new to report.

**Membership** – Florence Brady reported we have 280 members. Renewals are coming in, over 87.

**Programs-Vice President** – Jan Kessler was absent. Jim Hutchings will work on finding a presentation.

**Historian/Librarian** – Karla Shannon was absent.

**Bulletin Editor** – Terry reported the deadline for the November bulletin will be Thursday, Nov. 2<sup>nd</sup>.

**Field Trips** – Gene Doyle reported he has received the field trip leader's information from previous field trip leader Gordon Standlee. Gene will attend the CO-OP meeting on Nov. 4<sup>th</sup>.

**CFMS Director** – Mike Hunerlach reported he will be attending the November CFMS meetings in Visalia.

**Lapidary Classes** – Cathy Nelson reported Dan Bender, from Studio 26, will be giving a class on silversmithing on November 19<sup>th</sup>. Information will be sent out via e-mail. It was determined that priority for signups will be given to RRR members. Non-RRR members can attend, if there are openings.

**Show Chair** – Jim Hutchings – show flyers are available and more, revised flyers will be obtained. Jim shared his discussions with Cheryl Goldfarb, events coordinator - logistics for using the Fairgrounds, days we wish to use it, parking charge will be \$5, we will need to rent more tables. We do not plan to use Lauppe Hall, even if it is still there. Storage trailer can be parked where it usually is parked. A newly made room in Johnson Hall will be used for the fluorescent minerals display. Shared was the use of a Group Code, to be used by those who rent a motel room in Placer County.

**Lap Shop** – Mike reported there is no water available due to a pipe being broken during the parking lot construction. Pumps have been cleaned and the small trim saw needs to be repaired or replaced. Lumber for rebuilding the ramp is being obtained. A gate needs to be installed in the back. A work party will be scheduled.

**Directors** – Richard Kowaleski will recheck with Dolores Kassionas to see if she still has items to sell.

**Juniors** – Juniors' Advisor, Carole Kowalik, reported the

Rookies will hold their meeting at the Lapidary Shop and there will be a presentation on crystals along with an activity.

**Old Business –**

Update on Fairgrounds – the contracts for our monthly meetings and the 2018 show will be finalized shortly. Jim reported on his meeting with Cheryl Goldfarb (see minutes under Show Chair). Jim’s impression of the Fairgrounds was that it was brand new and beautiful! He discussed the Garden Room’s carpet and suggested using plastic runners when needed to protect the carpet. To be determined is where to hold the Dec. Ed. Mtg. potluck dinner. Monthly rental fees will be gradually raised, starting with 2018.

Nominations Committee –discussed we have 4 candidates for two, 2 yr. Director positions. As Gene Doyle is now the Field Trip Chairperson (an officer position), he will resign effective Nov. 29<sup>th</sup> as Director (one year, for 2018). The election by ballot, will be held during the Dec. 12<sup>th</sup> Ed. Mtg. It was decided that the 2 candidates receiving the most votes will be the new, 2 year directors and the 3<sup>rd</sup> place candidate will be appointed by the Board to fill the vacant one year Director position.

CSUS Geology Club Auction – an announcement was in the October RRR bulletin along with a request for donations. Date: November 17<sup>th</sup>, 6:00 pm - 9:00 pm, Sac. State Alumni Center.

Volunteers at the Mineral ID section at the Placerville. Jim thanked his volunteers, Doug La Rocca and Frank Zbierski, who helped before, during and after the show.

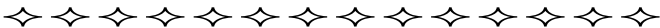
Rockhound of the Year Award – past recipient/ Chairperson, Carole Kowalik, will be contacting past recipients for assistance.

**New Business** – CSUS scholarship – Richard Kowaleski asked for another member to coordinate this. He will be happy to assist that person.

**Next Board Meeting** –November 28, 2017

**Adjournment** – meeting was adjourned at 8:15 p.m.

Respectfully submitted,  
Florence Brady, RRR Secretary

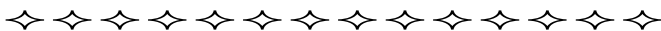


## November Show Meeting

The meeting will be held Tuesday, November 21 at 7:00 PM in the club Lapidary Shop at the Fairgrounds. Members are encouraged to attend and get involved!

## November Board Meeting

The meeting will be held Tuesday, November 28 at 7:00 PM in the club Lapidary Shop at the Fairgrounds.



## November Refreshments

Refreshments for the November 14 Educational meeting are to be provided by Carole Lockhart, Shirley Penman, Ed Ernst, Gail Rainwater, Kimberly Fiala, Rick Lynch and JoAnn Ewasko. Thank you all in advance!



## Welcome New Members:

Rick & Kathy Freitas

## Rookie Rock Roller News



The Rookies will meet in the lapidary shop at 5:30 p.m. on November 14, 2017.

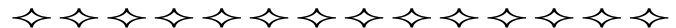
At our last meeting, Henrie gave a wonderful presentation on Diamonds. Jim Hutchings brought his microscope so the juniors could see diamonds up close. We tried to fool Jim with some fake diamonds to no avail. He identified the fakes easily. Jim also gave the kids samples of Lake County diamonds (quartz) and beautiful Pakistani diamonds (Herkimer) for their collections. After the presentation the rookies carved their own faceted diamonds out of soap.

At the meeting in November, we will have a presentation on crystal formation and then have an activity.

Remember to turn in any rocks you have tumbled for our gem show grab bags.

See you all at the meeting, if your homework is done!

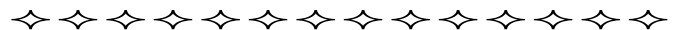
*Carole Kowalik, Junior Advisor*  
916-705-2124 home3004@gmail.com



## Donations & Volunteers

The Prize Tree needs donations for men: belt buckles, bola ties, etc.

Jim Hutchings would like to thank the volunteers at the Mineral ID section at the El Dorado Show: thanks to Doug La Rocca and Frank Zbierski.



## Sunshine

A sympathy card was sent to the family of Karen Dunlap.

When you know of any member who is ill or has been hospitalized, please contact our Sunshine Chair, Heather Crane, at (818) 903-4433 or hmcrane7@gmail.com



## Renewing Your RRR Dues for 2018

Just a gentle reminder, please US mail or bring to the November 14th Ed. Mtg. your dues payment along with the form.

Printed in this bulletin is a renewal form to be used for renewing your RRR membership dues for 2018.

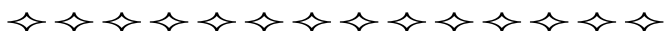
Our dues are from January 1, 2018 to December 31, 2018.

Checks can be payable to RRR. If paying with cash, please have the exact amount.

Please do not add a new member to the renewal form. Rather, use a membership application, which is available either on the RRR website ([www.rockrollers.com](http://www.rockrollers.com)) or at a meeting.

We appreciate your early payment for the 2018 dues! Renewal dues paid after December 31, 2017, will incur a \$3.00 late fee.

*Florence Brady, RRR Secretary/Membership Chair*  
*Terry Yoschak, RRR Treasurer*



### In Memoriam

(Submitted by Martha Nichols)

Very sad news. My dear friend and fellow RRR member **Karen Dunlap** passed away on October 19th. Karen was in Gold Beach, Oregon, hunting for agates on the beach when she was swept away by a wave and drowned. I am not sure about a memorial as her family is very private.

Karen, myself, and my husband Rob enjoyed the Love-lock field trip very much. She really had a great time hunting for the Nevada Wonderstone, druzy, and petrified wood, and looked forward to many future field trips. As a matter of fact, she was so encouraged by the Love-lock trip she wanted to plan and host a field trip to Gold Beach for the RRR to look for agate and jasper.

I am devastated by her loss, and just now found the strength to send you this news which I'm hoping you can share with our club. Karen was born and raised in Citrus Heights and lived throughout the Sacramento area as an adult. She was a retired correctional officer and lately split her time up living in Gold Beach, San Francisco, and Sacramento. She was 57 years old when she passed.

[Editor's note: Karen joined RRR in 2016. She volunteered and worked in our show at both the Silent Auction and the Raffle].

## ☆☆☆ SHOW BIZ Stuff ☆☆☆

It's Getting Closer! March 24-25, 2018

### HEAR YE TUMBLER-ERs



We need your extra tumbled rocks. They do not need to be perfect. Any donations will be well used. We also accept beads, fossils, jewelry findings, etc. There should be jars labelled "Rookies" at the lapidary shop or educational meeting. Or hand them in to any show chair or junior advisor. We plan to use them to fill grab bags, use on the spinning wheel and for other activities in our Kids' Junction for our Show in March.

*Carole Kowalik, Juniors' Advisor*

### Raffle Donations

Chris and Denise are requesting donations for the Show Raffle and Door Prizes. We are looking for your rock art and jewelry. Also, we are looking for slabs. Please ID your items, and add your name if you wish.

There will be a donation box on the Show & Tell table at the meetings and a box in the classroom at the shop. Any more questions contact Denise at [dedoodads@gmail.com](mailto:dedoodads@gmail.com) or Chris at [evergreen.369@juno.com](mailto:evergreen.369@juno.com)



### PR for Next Year's Show



We desperately need help, especially on the social media side of things. We have two volunteers, but we could use a couple more people to help post on Facebook and other media to publicize our show.

If you can help, please contact Gloria Marie at (916) 216-1114 or [gloriarosevilleroockrollers@gmail.com](mailto:gloriarosevilleroockrollers@gmail.com).

## Lapidary Classes

**Lapidary Classes** - Introduction to Shop Use & Cabochon making is \$10 per class for 5 classes or \$45 paid in full. Our Shop is staffed Monday & Wednesday nights 5 pm - 9 pm! Learn more about the Lapidary Arts & Cabochon Making. A DVD is available for viewing at the Shop for Cabochon Making.

Regular \$5 per day or \$20 monthly rates apply for lapidary shop use after Orientation/Introduction classes.

Large & Extra Large Saws: \$1 per slab for 18 inch saw & \$2 per slab for 24 inch saw for cutting large & extra large rocks.

**Crafty Days** - Crafty Days is an open get together/play day for anybody wanting to work on their craft while yakking and snacking! We always have fun! Bring whatever you are working on and a snack to share. We meet 1st and 3rd Mondays each month. No class or class fee, \$5 for use of the Shop is the only fee. 10-2pm at the Lapidary Shop. **Crafty Days this month are November 6 and 20.**

**Silversmithing Class with Dan Bender—Fee \$25** (this includes the \$5 shop fee)

**Sunday, November 19, 2:00-5:00 pm** at the RRR Lapidary Shop. **Note: This class is full!** But you can sign up for future silversmithing classes at the meetings!

Please note, Parking Lot C is closed, under construction. Go down the street, alongside Parking Lot C, and just before the Lapidary Shop, turn into the driveway which is in front of the shop.



Please pre-register with Cathy Nelson, the Lapidary Classes Coordinator 925-321-2024 canelson2@netscape.net

**Sign up at the meetings for:**

**Mineral ID with Jim Hutchings**

TBA Sign-up for next offering.

Learn the necessary tools, books & techniques of identifying rocks & minerals! Fee: \$25

**Stereo-Microscope Workshop**

TBA Sign up for next offering. Hands-on workshop. Scopes provided or bring your own. Fee: \$5

**Remember - We ask that you sign up ahead of time for classes.** For our classes listed as by appointment or TBA, we build the class based on sign-ups & instructors schedules. In other words, we make the date when we have sign-ups. For more class information, contact Cathy Nelson, (925) 321-2024 canelson2@netscape.net



## Fairgrounds/Show Update by Show Chair Jim Hutchings

As you all know already, the Fairgrounds now known as "@ the Grounds", has undergone major renovations! It is under new management, and of course, that means "change"! Change is unsettling. As the show chair, it can cause some sleepless nights. This last week, I got to meet with the new Grounds Manager, Cheryl Goldfarb.

Cheryl is the onsite manager and our direct contact for our show and show contract. Some things we addressed, helped move us towards a better understanding about the changes to our show! One issue we have escaped over the years is food preparation! Thanks to Lisa Giampietro, we have a certified food handler on site and she will pull the necessary County food preparation permits.

Our vendors will need to enter the two main buildings from the roll up doors at the rear of Jones and Johnson Hall. We will not be using Lauppe Hall as it is destined for destruction after our show. We will be moving our Demonstrators, Fluorescent display, Education Station, and Kids' Junction to Johnson Hall. We will be moving some vendors from Johnson to a new cubicle in Jones Hall, now that the old stage has been removed!

The stage in Johnson Hall is now ADA accessible, and we can use it freely with out concern for handicap visitors. There is a new, small board room in Johnson, in the old hall near the Kitchen, that will serve as a perfect, and dark, fluorescent display room with plenty of room for additional exhibitors who may wish to put cases in.

As you may know, the \$2.2 Million dollar C Gate Parking lot renovation, will cost our visitors \$5.00 to park in. Unfortunately, that was not negotiable. We are in discussion regarding parking fees for Volunteers and Vendors. We do not believe that Volunteers should pay.....to volunteer! We will have plenty of room for our Tailgate Vendors between the buildings. However, they will not be able to drive up to their spots as in the past, due to the construction of a brand new patio and landscaping between the two main buildings!

A brand new digital Marquee should be up and running by the time of our show. We should not need to rent a genera-

*(Continued on page 6)*

(Continued from page 5)

tor, and we will not be renting Lauppe Hall. That should mitigate any increase in costs to rent the grounds this year. In 2019, the facility costs should go up, but they have assured us that they will not double or quadruple.

A new camping area is being built, possibly near the Armory. We should be able to keep our Show Trailer where we usually park it, this year. We anticipate that we will have to rent the Halls for an additional "set up day" on Thursday afternoon, and she is considering a compromise on cost to allow us the freedom to "stage" materials ready for Friday morning! We do not know if we will have to set up tables, or if they can arrange for the Jail trustees to do it as in the past!

These grounds were badly neglected. The facilities are top notch now and will match our show...first class!



## Garden Room Instructions

### Accessing the Fairgrounds during Renovations to Parking Lot C

For the November 14th Educational Meeting, we will be back at the Fairgrounds in the Garden Room, our usual meeting room.

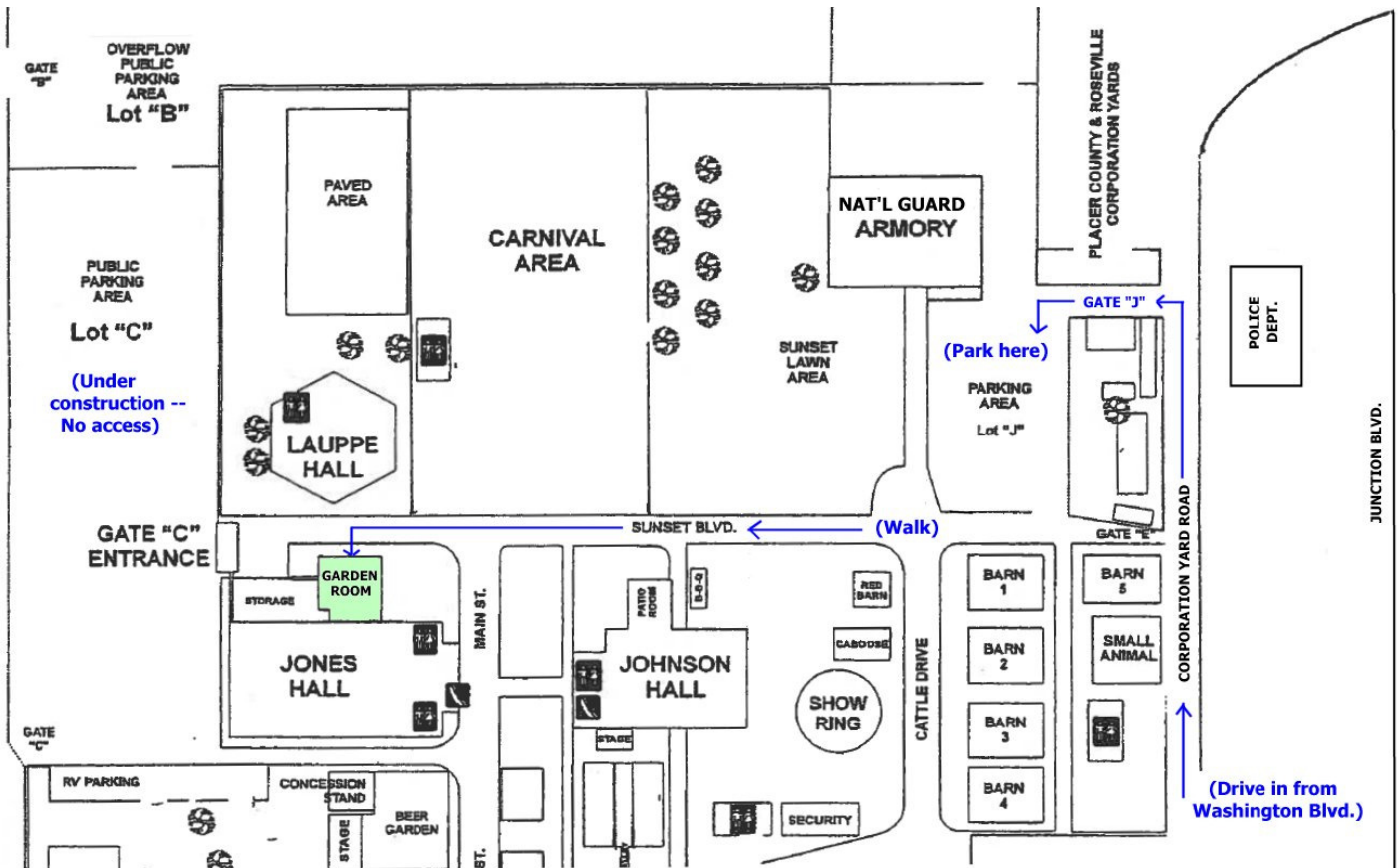
But...we cannot use **Parking Lot C**, the usual parking lot used to access the Fairgrounds.

Rather, we must use Gate J.

To get to Gate J, turn onto Corporation Yard Rd. from Washington Blvd. This road is just north of the speedway. Drive up Corporation Yard Rd. and by the Police Station on the right, **turn left into Gate J driveway**. Proceed down the driveway, (Armory is on the right side.) and park in the parking lot. **Leave your vehicle in the parking lot**, you cannot drive down past the barns into the Fairgrounds.

Walk through the opening onto the driveway and proceed up the driveway towards the Fairgrounds buildings. The Garden Room is the last building on the left, before you reach the "gate houses".

If need be, call Bradys, (916) 715-4088 for assistance.



# ROSEVILLE ROCK ROLLERS – MEMBERSHIP RENEWAL for 2018

(Please do not add a new member to this form)

**If your personal/contact information is the same, just write SAME on this form, under your name(s).**

NAME(S) \_\_\_\_\_

ADDRESS \_\_\_\_\_

Street

City/State

Zip

PHONE # including area code (\_\_\_\_\_) \_\_\_\_\_

E-MAIL \_\_\_\_\_  
(e-mail address will be part of the Club's Membership Roster)

**DUES:**

**Adult (one) Membership** \$15.00 per year (receiving bulletin via E-Mail)

**Family Membership** \$23.00 per year (receiving bulletin via E-Mail)  
(2 adults, same address)

**Junior Membership** \$8.00 per Junior Member

\_\_\_\_\_ **Amount Paid**      **Ck. #** \_\_\_\_\_

Dues not paid until after December 31, 2017 will be delinquent and an assessment of \$3.00 will be charged. Checks should be payable to RRR or Roseville Rock Rollers.

If paying by US mail, please mail to: Roseville Rock Rollers Gem & Mineral Society  
P.O. Box 212, Roseville, CA 95678



## November Calendar

Birthstone: Topaz



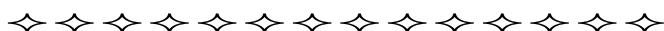
Sun	Mon	Tues	Weds	Thurs	Fri	Sat
For more class information, contact Class Coordinator: Cathy Nelson (925) 321-2024 Email: canelson2@netscape.net			1 Lapidary Shop 5:00-9:00 pm	2	3	4
5 	6 Crafty Day 10-2 Lapidary Shop 5:00-9:00 pm	7	8 Lapidary Shop 5:00-9:00 pm	9	10	11 
12	13 Lapidary Shop 5:00-9:00 pm	14 Meetings: Rookies 5:30 pm Club 7:00 pm	15 Lapidary Shop 5:00-9:00 pm	16	17	18
19 Silversmithing 2:00-5:00 pm	20 Crafty Day 10-2 Lapidary Shop 5:00-9:00 pm	21 Show Meeting 7:00 pm	22 <b>Shop Closed</b>	23 	24	25
26	27 Lapidary Shop 5:00-9:00 pm	28 Board Meeting 7:00 pm	29 Lapidary Shop 5:00-9:00 pm	30		



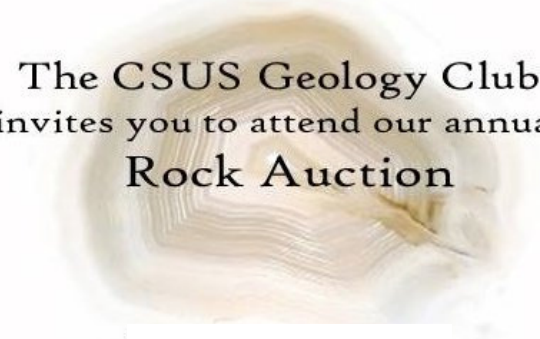
## Upcoming Northern California Shows

**November 4 - 5: CONCORD, CA**  
Contra Costa Mineral & Gem Society  
Centre Concord, 5298 Clayton Road  
Hours: 10 - 5 daily  
Contact: Mary Hicks, (925) 289-0454  
Email: maryhicks@comcast.net  
Website: (web site temporarily under construction)

**November 11 - 12: YUBA CITY, CA**  
Sutter Buttes Gem & Mineral Society  
Yuba-Sutter Fairgrounds - Franklin Hall  
442 Franklin Avenue  
Hours: Sat 10 - 5; Sun 10 - 4  
Contact: Karen Horita, (530) (916) 677-6696  
Email: horita@comcast.net  
Website: www.sutterbuttes.net



The CSUS Geology Club  
invites you to attend our annual  
**Rock Auction**



**November 17th, 2017**

The Sacramento State Geology club is asking for donations of rock and mineral samples, as well as any gently-used field gear that can be distributed to students in need.

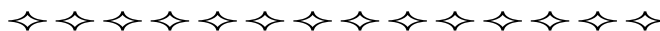
This year marks our 14th Annual Rock Auction, an event that supports students throughout their degree program. The Rock Auction is our main fundraiser and provides scholarships for student gear, individual undergraduate research, conference travel, and most notably for field studies. Every dollar spent at the event goes directly back to the students, nurturing and encouraging the geologists of tomorrow. Our Rock Auction raised over \$17,000 in 2016 and we are aiming ever higher this year!

*Alyssa Smith, Community Outreach Coordinator  
Geology Club at Sac State  
alyssasmith@csus.edu*

**The auction will be held Friday, November 17, 6:00 pm - 9:00 pm, at the Sacramento State Alumni Center.**

## Co-Op and Other Field Trips

SCHEDULE for 2017	
Thanksgiving Nov. 23-25	NBFT Black Butte Res, CA Stoney Creek, for jaspers and agates. Vallejo GMS. Contact/Leader: Dick Pankey: dickpankey@juno.com/925-439-7509



### Definition of the Month

**Breccia** is a rock composed of broken fragments of minerals or rock cemented together by a fine-grained matrix that can be similar to or different from the composition of the fragments. The word has its origins in the Italian language, in which it means either "loose gravel" or "stone made by cemented gravel". A breccia may have a variety of different origins, as indicated by the named types including sedimentary breccia, tectonic breccia, igneous breccia, impact breccia, and hydrothermal breccia.



Breccia forms where broken, angular fragments of rock or mineral debris accumulate. One possible location for breccia formation is at the base of an outcrop where mechanical weathering debris accumulates. Another would be in stream deposits near the outcrop such as an alluvial fan. Some breccias form as debris flow deposits. The angular particle shape reveals that they have not been transported very far (transport wears the sharp points and edges of angular particles into rounded shapes). After deposition the fragments are bound together by a mineral cement or by a matrix of smaller particles that fills the spaces between the fragments.

Breccia and conglomerate are very similar rocks. They are both clastic sedimentary rocks composed of particles larger than two millimeters in diameter. The difference is in the shape of the large particles. In breccia the large particles are angular in shape but in conglomerate the particles are rounded. This reveals a difference in how far the particles were transported. Near the outcrop where the fragments were produced by mechanical weathering the shape is angular. However, during transport by water away from the outcrop the sharp points and edges of those angular fragments are rounded. The rounded particles would form a conglomerate.

*Sources: Wikipedia, Geology.com. Article submitted by Angela Brown. Photo by Angela Brown of jasper & quartz breccia from Ventura beach.  
Via Rockhound Rambling 2/16*



ROSEVILLE ROCK ROLLERS GEM & MINERAL SOCIETY  
BULLETIN EDITOR  
P.O. BOX 212  
ROSEVILLE, CA 95678

Send exchange bulletins to  
above address



November 2017

**\* First Class Mail \***



the  
**ROLLIN'  
ROCK**

ROSEVILLE ROCK ROLLERS, INC.



**MEMBER, CALIFORNIA FEDERATION OF MINERALOGICAL SOCIETIES  
MEMBER, AMERICAN FEDERATION OF MINERALOGICAL SOCIETIES  
VOL. 58 NO. 11 NOVEMBER 2017**

**EDUCATIONAL MEETING 2<sup>ND</sup> TUESDAY OF EACH MONTH, 7:00 PM  
EXECUTIVE BOARD MEETING 4<sup>TH</sup> TUESDAY OF EACH MONTH, 7:00 PM**

**EDUCATIONAL MEETING LOCATION: ROSEVILLE FAIRGROUNDS,  
GARDEN ROOM, 800 ALL AMERICA CITY BLVD., ROSEVILLE, CA**

**BOARD MEETING LOCATION: ROSEVILLE FAIRGROUNDS,  
LAPIDARY SHOP TRAILER BEYOND GATE "C" PARKING LOT**

*Changes and exceptions will be published in the bulletin.*  
**GUESTS AND VISITORS ALWAYS WELCOME**