

The Golden Frog



SEPTEMBER 2019 EDITION

**Robin Williams, Editor
P.O. Box 1135
Murphys, CA 95247**



**SEPTEMBER Birthstone
SAPPHIRE**

Calaveras Gem & Mineral Society, Inc.

P.O. Box 517
Angels Camp, CA 95222

Clubhouse: 2500 Meacham Ranch Road

Website: www.calaverasgemandmineral.org

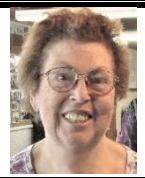
Est. in 1948 and incorporated in 1950 as a non-profit charitable organization dedicated to share our love of rocks & minerals and all the lapidary arts with our community. Member of both the California and American Federation Mineralogical Societies.

SAPPHIRE



SEPTEMBER BIRTHSTONE

2019 BOARD of DIRECTORS



PRESIDENT
Anna Christiansen
achristiansen7132@comcast.net



VICE PRESIDENT
Lynn Becker
beckerbk@sbcglobal.net



SECRETARY
Debby Brooks
dbb49@att.net



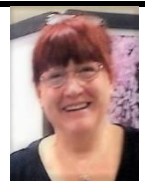
TREASURER
Karen Crabtree
kcetc@volcano.net



FEDERATION DIRECTOR
Marion Roberts
mvroberts1@comcast.net



FIELD TRIP CHAIRMAN
Brad Becker
beckerbk@sbcglobal.net



GEMSHOW CHAIRMAN & NEWLETTER EDITOR
Robin Williams
robinski@yahoo.com



1st DIRECTOR
Bob Young
ryoung1738@aol.com



2nd DIRECTOR
Amy Sturdivant
amy95247@yahoo.com



3rd DIRECTOR
Pat Gulyas
golddustmurphy@yahoo.com



ADDITIONAL CLUB POSITIONS:



SHOPmasters
Murray Smith & Marilyn Bodle
marilyndte@gmail.com



PROGRAMS
Tom Harrington
thomasharrington266@gmail.com



WEBmaster
Andrew Brown
brown.andrewg@gmail.com



HISTORIAN
Loretta Pagni
lorettapagni@aol.com



**A Message from
Our President...**

I was so happy to see everyone at our August meeting. We had two new members join and we had a wonderful lunch. Thanks everyone!

The Board had a great meeting this morning and the general meeting went smoothly - even though I tend to get ahead of myself sometimes. Thanks for keeping me on task Madam Secretary, Debby. It takes a village!

Thanks to everyone who stayed for the 2020 GEM SHOW committee meeting. I am positive that we will have another great show this year with everyone's help. See you in September.

Anna Christiansen
2019 CGMS President

Loretta has two daffi-nitions for us...



RHODONITE...
The road you go
down at night!



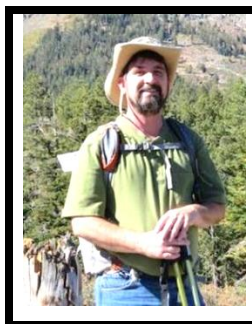
RHODOCHROSITE
...The road you
cross at night!

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SEPT 15th, 2019 ~ MEETING INFO

- 3rd Sunday, Sept 15, 2019.
- Meet & Greet begins at 11:00 am.
- POT LUCK Lunch begins at Noon.
- General Membership Meeting
- Program: Glen White
"About those July 2019 SoCal Quakes..."
- Board Meeting TBA



**SEPT 15th
PROGRAM**

Glen White is returning to share his vast knowledge and experience with us at our Sept. Meeting. If you missed his previous visit...

DON'T MISS THIS ONE!

Glen has been an adjunct professor at Columbia College (1993 - 1996, 2000 – present) teaching such wonderful classes as Environ. Geology, Intro. to the Earth, Oceanography, Field Geology, Geology of the National Parks, Natural Hazards, and CA Geology.

His extracurricular dedication to geoscience (volunteering to drive on geology field trips four to five times a year, presenting hands-on science labs for K-12 students throughout the foothills and mentoring) along with his 26-year teaching career has earned him the National Association of Geoscience Teachers (NAGT):

**Outstanding Adjunct Faculty Award
for Spring 2019!***

(* see Union Democrat July 24, 2019)

At our meeting on the 15th, Glen will be sharing information about the July 2019 Earthquakes that rocked southern California and their suspected effect on the future status of So-Cal Earthquakes.



(Is it time to buy land in the Rockies??)

GENERAL MEETING MINUTES from Aug 18th, 2019

Calaveras Gem and Mineral Society
General Meeting Minutes
August 18, 2019

Meeting Called to Order at 1:10 a.m.
by President Anna Christiansen

Pledge of Allegiance

Board of Directors Absent
Field Trip/CO-OP Brad Becker
Federation Director Marion Roberts

Members Present: 43 **Guests:** 3

Minutes from July 21, 2019: Rich Lundin made a motion to accept the minutes from July 21, 2019 as presented. Loretta Pagni seconded the motion. Minutes approved by majority.

Club Correspondence: Debby Brooks

An informational pamphlet from PG&E: How to Prepare for Possible Power Shut-Off During High Fire Risk is now located at clubhouse.

Treasurer's Report: Karen Crabtree

The Financial Report will be posted at the clubhouse for review by club members. Karen and Lynn Becker meet regularly during the last report to enter the financial data into the club laptop.

Loretta Pagni made a motion to accept the Treasurer's Report as presented. Margaret Kolaczyk seconded the motion. The Treasurer's Report was approved by majority consent.

COMMITTEE REPORTS

Federation Report: Margaret Kolaczyk

CFMS (California Federation of Mineral Societies) will be holding the 2020 Federation Show on June 26, 27, 28, at the Lodi Grape and Harvest Fairgrounds.

The Junior Activities Program at the CFMS show needs a Gem and Mineral society to sponsor this activity. *Continued...*

The sponsoring Society will keep all the proceeds collected from the Junior Activities.

CFMS does not own any display cases. In order to compete in the Display Showcase Competition, each competitor needs to bring their own display case.

Field Trip: Bob Young

The recent field trip, July 28, to Eagle Meadows was a success. Many club members travelled the distance to enjoy beautiful weather, lush meadows and great rock hounding.

The next field trip has not been scheduled. Brad will notify members the details of the next trip by email.

As a member if you are interested in sharing a rock hounding site and wish to conduct a field trip, contact Brad Becker. There is a formal process/paperwork that is required to be completed and a process to notify club members of the trip.

Historian: Loretta Pagni

The first show that the Calaveras Gem and Mineral Club sponsored was in 1954. Loretta's Father, Charles Pagni took her to the show, which was held on the lower grounds of the Calaveras County Fairgrounds.

The cases for display of collections were flat and owned by the State of California. Loretta joined the club in 1965. She subscribed to the Gem and Mineral Magazine in 1962; she has the first edition of the magazine.

Newsletter Editor: Robin Williams

Robin is requesting articles/information from Club Members. Articles can be of any activity, interesting stories or what projects you would like to share with other club members. Email to Robin your story- activity pictures - she welcomes all.

Continued...on page 5

Continued...GENERAL MEETING MINUTES from Aug 18th, 2019

Shop/Classes: Murray S. & Marilyn B.

The saws are working; one saw is currently being repaired.

Review of SHOP DAY FEES

\$2.00 per day for CLUBHOUSE use
 \$5.00 per day for LAPIDARY SHOP use.
 \$.15 per square inch for Bid Saw cuts.

The shop day fees help to offset the electricity & equipment maintenance costs.

Show Chairperson Report: Robin W.

A 2020 GEM SHOW PREPARATION meeting will be held after today's club meeting, to review what volunteer opportunities are available and desperately needed.

Club members are encouraged to attend to learn about the specific venue details of the show and GET INVOLVED!

OLD BUSINESS

Rock Hound of the Year: Anna C.

Members are encouraged to vote for your pick of either a person or couple who goes above and beyond in time and commitment for the betterment of CGMS.

A ballot box will be located at the front of the club house along with ballots and each member is allowed one vote. The August Edition of The Golden Frog has Rock Hound of the Year details.

The Rock Hound of the Year decision will be announced at the December meeting.

Table cloths for Show Display Case Tables:

All "sewing machines, thread, & scissors" are invited to gather on Saturday, August 24th at the Club House to begin creating the Display Case Custom Table Cloths.

NEW BUSINESS

Display Case EXHIBIT needed:

Please contact President Anna Christiansen with your interest to display your collection in the club Display Case for the September 15, 2019 meeting.

Storage shed: The storage shed that was flattened by an oak tree will not be replaced. The metal will be recycled as the shed is dismantled.

Club shirts/hats: Robin Williams

Robin happened upon an Embroidery Company in Angels Camp that could sew our club logo on polo shirts, t-shirts, caps and sweatshirts. Club members present at the meeting, by majority, expressed interest in purchasing club logo items.

Now we just need a member (or two) to research the facts & figures (Anna has another embroidery source) and set the project in motion. Contact Anna.

New Member Vote: WELCOME Y'ALL!

Meg Leeds
 Shannon Hughey

Programs: Tom Harrington

September: Greg White -
 "The July 4th 2019 SoCal
 Earthquakes"

October: Claudia Brackett -
 "Safety with rocks"

November: Joan Sutton -
 "How to set up a display case"

Meeting Adjourned at 1:37 p.m.
 by President Anna Christiansen

Minutes Respectfully Submitted:

Debby Brooks, Secretary
 Calaveras Gem and Mineral Society

Criteria for ROCKHOUND "VOLUNTEER" of the YEAR



It takes many players to create a baseball team and our club "team" is no different... there's a task for everyone and EVERY TASK, big or small, contributes to the overall success of the team.

Our CGMS' SPECIFIC PURPOSE is:
(as paraphrased from our Bylaws)

"To share our love of All Things Rock & Mineral."

And, HOW do we fulfill our PURPOSE?

By maintaining a GEM CLUB that:

- 1) provides opportunities to learn about the earth sciences and...
- 2) through classes to teach members "what to do with all of these rocks"!



Now, "Maintaining a GEM CLUB" involves a LOT of duties (many taking place behind the scenes!) so remember that fact as you make your VOTE for ROCKHOUND of 2019.

Your choice for



of the YEAR...

should be for the
- single member or couple -
that YOU feel has gone that
"extra mile" to help make 2019
the best year ever.

Your nominee could have served in one or more of these (alphabetical) Volunteer-ing Duties:

- | | |
|----------------------|--------------------|
| Account-ing | Program-ing |
| Board Officer-ing | Rock Prepare-ing |
| Club Maintenance-ing | Shop Supervise-ing |
| Construction-ing | Table-cloth-ing |
| Field Trip-ing | Teach-ing |
| Fundraise-ing | Tumble-ing |
| Hospitality-ing | Web-master-ing |
| Organize-ing | or... |
| PR & Publicity-ing | "You-Name-It"-ing |

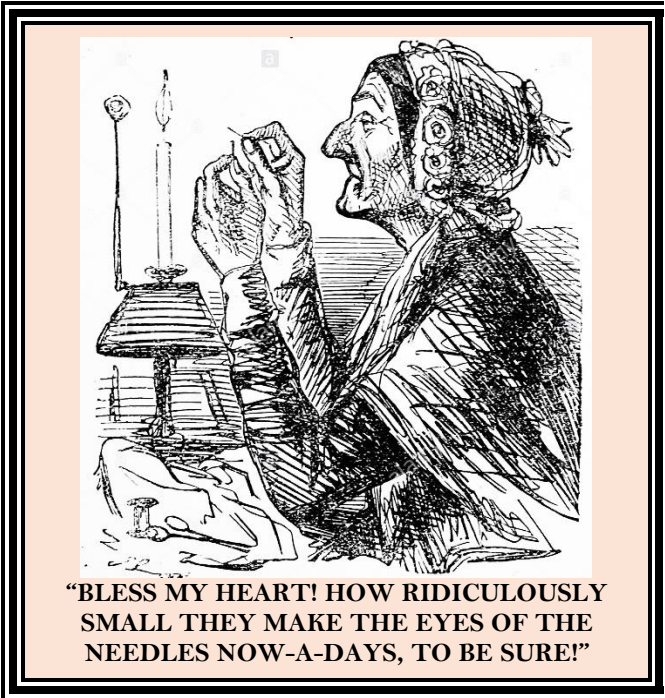
Ballots & Ballot Box will be at the Clubhouse by September and we'll announce the winner(s) at our December 2019 Christmas Party Club Meeting.

Sisterhood of the Travelling Table Covers

A group of 6 intrepid women gathered on Aug. 24th to tackle the task of creating 13 table covers for the Display Case Tables used at our annual Gem and Mineral Show. Sandy Ostrander, Marilyn Bodle, Phyllis Kyle, Cookie Hirn, Claudia Brackett, and Debby Brooks put their creative spirits together and created a table cloth that fits on the case table with ease, is portable, and reusable.

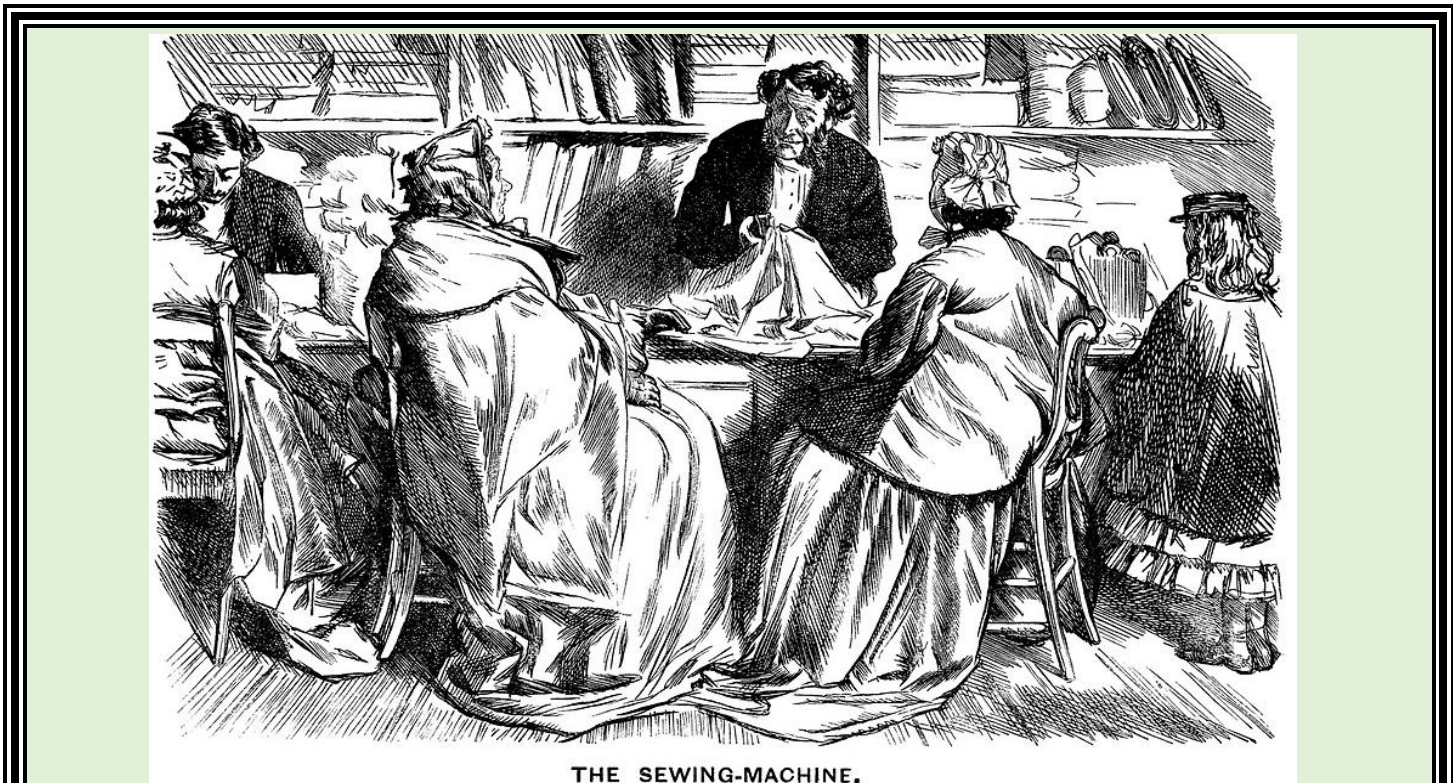
The team of table cloth designers went back and forth on measurements, correct length, and a multitude of variables. Fortunately, Tom and Sue Reeves were available for consultation with their many years of show experience, and the table cloth team tapped into their knowledge.

A prototype was created and all the people cheered.



At the end of the day, it was pats on the backs and all felt a job well done. Only 12 more to go...

~ By Debby Brooks ~



"A MOST WONDERFUL INVENTION, INDEED, MUM, AND IT REALLY EXECUTES THE WORK SO EFFICIENTLY AND QUICKLY, THAT, UPON MY WORD, I THINK THERE'S NOTHING LEFT FOR THE LADIES TO DO NOW BUT TO IMPROVE THEIR INTELLECTS!"

ANISOTROPIC vs ISOTROPIC GEMS

Last April, I had the opportunity to share Rocks & Minerals with Pastor Doug's (of Mountain Christian Fellowship - that did the SPECIALITY COFFEES at last year's Gem Show) Homeschool Group and I thought it would be fun to tie the Rocks and Minerals into their Sunday School studies...
YOU'LL NEVER GUESS WHAT I DISCOVERED!!!

The FOUNDATION STONES of NEW JERUSALEM will reflect the light so as to create RAINBOWS!

HUH?? When I looked at the list of minerals used in the foundation walls, (list on right →) in my lowly experience, I didn't think any of them created rainbows! Maybe if they had used diamonds for the walls, maybe??
 Uh, maybe not!...

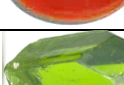
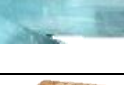
Science uses CROSS-POLARIZED LIGHT to identify which gems are isotropic and which are anisotropic.



When viewed in Cross-Polarized Light Diamonds are **BLACK!** (They're ISOTROPIC.)
BUT, all of the FOUNDATION GEM STONES are ANISOTROPIC and cross-polarized light causes them to shine like RAINBOWS –full of color – even the opaque ones (but you've got to cut the slice really thin!)



Here's the 12 Foundation Stones* of the New Jerusalem. Each of the four walls is about 1,400 miles long, 200 feet thick, and 200 feet tall!

| | |
|---|--|
|  | 1. <u>Jasper</u> : a var. of Chalcedony, a cryptocrystalline quartz - SiO_2 + add'l elements. |
|  | 2. <u>Sapphire</u> = Corundum - Al_2O_3 blue, orange-pink, golden, white, and black. (red = Ruby) |
|  | 3. <u>Chalcedony</u> : cryptocrystalline quartz - SiO_2 + add'l elements – in blue, yellow, brown or gray. |
|  | 4. <u>Emerald</u> : grass-green variety of Beryl - $\text{Be}_3\text{Al}_2\text{SiO}_6$ |
|  | 5. <u>Sardonyx</u> = Onyx + alternate layers of orange-red (aka Sard) and white Chalcedony- SiO_2 . |
|  | 6. <u>Sardius</u> = Carnelian - SiO_2 - an orange-red var. of Chalcedony – a cryptocrystalline - SiO_2 |
|  | 7. <u>Chrysolyte</u> = Peridot - $(\text{Mg},\text{Fe})_2\text{SiO}_4$ - transparent green gem of mineral Olivine. |
|  | 8. <u>Beryl</u> - $\text{Be}_3\text{Al}_2\text{SiO}_6$ - colorless, Aquamarine blue to blue-green. (Emerald = green, plus comes in yellow, green-gold, red, & pink.) |
|  | 9. <u>Topaz</u> : $\text{Al}_2\text{SiO}_4(\text{F},\text{OH})_2$ - yellow, blue, pink, gold, peach, green, red, brown, and colorless, |
|  | 10. <u>Chrysoprase</u> : greenish-gold SiO_2 + Nickel (green) |
|  | 11. <u>Jacinth</u> = orange variety of Zircon - ZrSiO_4 - Colorless, it's used to imitate diamonds. |
|  | 12. <u>Amethyst</u> : purple transparent quartz - SiO_2 + Fe. |

*Scholars don't agree on what minerals some of the ancient names translate into today. This is just one list.

2020 GEM SHOW REPORT

We have **5 MAJOR SHOW VENUES:**

1. ADMISSIONS
2. ROCK SALES
3. RAFFLE
4. FOOD SALES
5. HOSPITALITY

We have volunteer chairpersons for all but
RAFFLE _____ **your name here** _____
HOSPITALITY _____ **your name here** _____

We have **25 MAJOR SHOW CATEGORIES:**

These do not have a volunteer chairperson:

STREET BANNER permit & hanging of
SIGNS & BANNERS put up & take down
FLYER & POSTER distribution supervisor
GOLF CARTS supervisor
CUSTODIAN
In-show SIGNAGE, plus flags, balloons
SECURITY to work with Sheriff Volunteers
DOOR PRIZES need 26 minimum
DISPLAY CASE GIFTS need 49
KIDS ACTIVITIES & make prizes
PHOTOGRAPHER
TABLE COVERING supervisor

We have need for hourly workers for set-up, during the show, and take-down. The Volunteer Sign-Up posters will be available at the October Meeting.

There is a GEM SHOW BIBLE binder on the front desk at the club house. It contains the duties for all 30+ SHOW CATEGORIES. Please feel free to read about any category you may be willing to volunteer for...

The large manila envelope tucked in the Binder contains pages that can be copied for your use. Unfortunately, the printer at the clubhouse is dead so feel free to email me and I will send you the pages you request via email: robinski@yahoo.com

There is a task for everyone.

SEPT 14th CLASS INFO

No information was available SO...
check your emails.

This September is a weird one...
the 2nd Saturday and the 3rd Sunday
both occur on the same weekend...
which also means the
14th Class Date and 15th Meeting Date
are on the same weekend.

SEPT FIELD TRIP INFO

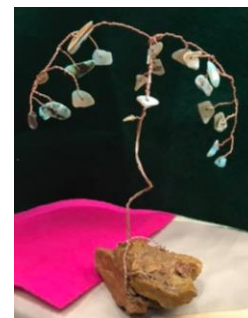
No Field Trips planned.

CAMP PARADISE PHOTO REPORT

from Pat Gulyas



Magnet



First Try



2nd Try

Pat's students are having a fantastic time learning the art of wire sculpture by making Ming Trees of all kinds and sizes!

MINUTES of Aug. 18th BOARD of DIRECTORS MEETING

Calaveras Gem and Mineral Society Board Meeting August 18, 2019

Call to Order at 11:00 a.m.
by President Anna Christiansen.

Board Members Absent:

Newsletter & Show Chair: Robin W.
Field Trip/Co-Op: Brad B.
2 Yr. Director: Amy S.
Federation Director: Marion R.

OLD BUSINESS

Printer Update: Lynn Becker

The current printer has suffered a fatal injury, the printer head is malfunctioning. Repairing the printer head would cost more than a new printer. Lynn is searching a temporary fix, looking for a donated printer to cover printer needs until a new printer is purchased.

Note: The NEWSLETTER printer's printing head also died (last Dec.) and Robin is currently using her personal printer for all of the club printing (Classes, Gem Show & Newsletter). So, club also needs to consider purchasing a Newsletter printer in the near future.

Treasurer's Report: Karen Crabtree

No response from the IRS regarding the finalizing of the 2017 taxes.

The CD at Central State Credit Union will mature September 7th. The plan is to take the matured CD money out of the Central State Credit Union and deposit the funds into the El Dorado Savings Account to receive a higher rate of return.

Debby Brooks, Secretary and Karen Crabtree, Treasurer will meet, September 11th to carry out this plan.

Field Trips: Lynn Becker

Club members wanting to lead a Field Trip must discuss their proposed trip with the Field Trip Leader. A formal request with a completed "Field Trip Proposal Form" must be presented to the Board of Directors.

Upon Board approval, the details of the field trip will be distributed to club members. Club members are encouraged to make suggestions & ideas of rock hounding venues to the Field Trip Leader

Memorial Bench: Karen Crabtree

The expense for the memorial bench & plaque for Dan Brooks is more than originally approved.

Lynn Becker made a motion to increase the amount for the bench by \$50.00 to cover the increased cost. Pat Gulyas seconded the motion. The Motion was passed by majority consent.

Saw Cover: Robert Young

The company chosen to replace the saw cover is not responding to Bob's phone calls and emails. Bob will keep pursuing to make contact and order the saw cover.

Bob investigated a large grinder to polish large rocks for the show. The grinder is a wet/dry and vertical. The cost is \$800.00, well within the budget allotted.

Bob will proceed with on-going searching for a large grinder/polisher.

2018 Audit: Lynn Becker

2018 fiscal data is being entered into the computer. The 2018 Audit will be scheduled during the third quarter.

An audit procedure is being developed and will be presented to the club by the October meeting. The results of the audit will be reported to the club.

Continued... page 11

Continued...MINUTES of Aug. 18th
BOARD of DIRECTORS MEETING

By-laws Update: Anna Christiansen

The By-Laws committee met and revamped the current By-laws. Anna Christiansen is typing the By-Laws and will present the By-Laws to club members at the September meeting.

Rock Hound-2019: Anna Christiansen

A Rock Hound of the Year ballot box will be located at the front of the club house with ballots available to members.

Anna will present the Rock Hound of the Year at the December meeting. Members are encouraged to vote for their selection.

Camp Paradise Scholarship:

A scholarship will be offered for the 2020 session of Camp Paradise. The Board will develop a scholarship policy that will support the goal and purpose and define the responsibility of the scholarship recipient.



Membership Dues: Membership fees paid by new members who join the club during the last quarter of the year, (Oct., Nov., Dec.) will carry over as the next year's dues.

Meeting adjourned at 11:57 a.m.
 by President Anna Christiansen

Minutes respectfully submitted,

Debby Brooks
 Secretary
 Calaveras Gem and Mineral Society

The Gemstone SAPPHIRE

Sapphire is the non-red variety of the mineral corundum (red corundum is called Ruby). At 9.0 on the Mohs scale of hardness, sapphire is the 2nd hardest natural mineral.



Blue is by far the most popular color for sapphires, but they can be almost any color, including yellow, green, white, colorless, pink, orange, brown, and purple.

Padparadscha is the name for a rare orange-pink variety of sapphire and it has a higher value than blue sapphires!




Sapphires with inclusions of tiny, rutile (titanium) needles exhibit an optical property called asterism. This is the star shaped effect seen in star sapphires and is usually only seen in cabochon cuts.

Star sapphires usually have six ray stars, but twelve ray stars are also known. When sapphires are cut 'en cabochon', they can sometimes exhibit a cat's eye effect – with a thin band of light down the center of the stone that is known as chatoyancy.

Sapphire was first created synthetically in 1902 and lab-grown sapphires are hard to separate from natural sapphires except by gemologists. They range in price and smaller stones are frequently used in less expensive jewelry.

SEPTEMBER CALENDAR of EVENTS

| SUN | MON | TUES | WED | THURS | FRI | SAT |
|--|-----|---|-----------------|-------|-----------------|----------------------------|
| 1 Kyle M. | 2 | 3 | 4 Burt B. | 5 | 6 Phyllis H. | 7 SHOP 10-2 |
| 8 | 9 | 10 | 11 Andrew B. | 12 | 13 | SHOP 14 & CLASS 10-2 |
| 15 MEETING & Gem Show Planning | 16 | 17 | 18 | 19 | 20 Samuel T. | 21 SHOP 10-2 |
| 22 Lorra B. | 23 | 24 | 25 Cyndra N. | 26 | 27 | 28 SHOP 10-2 |
| 29 Terry P. | 30 |  <p>SAPPHIRES</p> | | | | |

September Birthdays

| | |
|-----------------|----|
| Kyle Myrick | 1 |
| Burt Byam | 4 |
| Phyllis Holmes | 6 |
| Andrew Brown | 11 |
| Samuel Theule | 20 |
| Lorra Burns | 22 |
| Cyndra Nelson | 25 |
| Terry Prebalick | 29 |



SEPTEMBER & OCTOBER 2019 GEM SHOWS

- SEPT 21-22—MONTEREY, CALIFORNIA: Carmel Valley Gem and Mineral Society; Monterey County Fairgrounds, Email: janis12@sbcglobal.net; Website: cvgms.rocks
- SEPT 28-29—LODI, CALIFORNIA: Stockton Lapidary and Mineral Club; Lodi Grape Festival Grounds. Email: mmathis@nwp.org; Website: stocktonlapidary.org/show
- OCT 5-6—GRASS VALLEY, CALIFORNIA: Nevada County Gem and Mineral Society; Nevada County Fairgrounds. Email: 4vanclan5@att.net; Website: ncgms.org
- OCT 19-20—PLACERVILLE, CALIFORNIA: El Dorado County Mineral & Gem Society; El Dorado County Fairgrounds. Email: mvoneill@comcast.net; Website: eldoradorocks.org