



# Snoopy Gems

Volume 47 Number 10 October 2021  
Mississippi Gulf Coast Gem &  
Mineral Society Inc.



Email: [mgcgms@bellsouth.net](mailto:mgcgms@bellsouth.net)

MGCGMS Established in 1974

## President's Message

Dear Members,

I hope to see you all at the October 9 meeting. The focus is on the club show. Our 32nd annual Gem, Mineral and Jewelry Show is November 12, 13, and 14. This October meeting is our main time to complete plans and distribute information about the show held at the Jackson County Fair Grounds in Pascagoula. We need your help for as many days as possible. Let us know how you prefer to help and we will try to make it work.

It will take each and every member to put on the show. We will sadly miss David Cook this year. He did demonstrations and he and Jane helped at the front desk. David's passing is a loss for the whole community and particularly for our club. We will try to fill in the best we can.

Remember the show provides money for the following year to provide scholarships and buy new equipment. This show also brings us new members who are eager to learn so the show is a worthwhile endeavor for the club.

Come to the meeting and help us prepare. NOTE: With the Cruising the Coast folks still in town, you may need to avoid Washington Avenue. There should be plenty of parking around the Mary C. See you there. Call me with any issues or questions.

Liz Platt  
MGCGMS President

## October Workshop:

We will not have a traditional workshop this month. If you have a project you want to finish or if you would like to work on something to donate for the show raffle, please feel free to bring it.

We will be working on putting together brochures and entry tickets for the show and distributing advertising such as postcards and window flyer's.

Machines: Members of our tool committee will be available to help with cutting and cabbing gemstones. As always, we will have the club machines available for metal & gemstone testing, gemstone cutting, and cabbing.

Claire Martin  
Workshop Chair  
228-366-3612  
[ladycomfms@yahoo.com](mailto:ladycomfms@yahoo.com)





# Meeting Minutes:

## GULF COAST GEM & MINERAL SOCIETY

September 11, 2021



**Meeting called to order:** at 1:01pm by Liz Platt, President. Welcomed visiting guest Lori Heinemann, Officer of SFMS (Southeast Federation of Gem & Mineral Societies, Inc.) and Editor of the Lodestar. Lori asked that if you are not receiving the Lodestar, email her at [sfms.lodestar@gmail.com](mailto:sfms.lodestar@gmail.com) in order to get Lodestar straight to your inbox. Membership in the MGCGMS automatically includes you for membership at the Regional level and the American Federation. Annual meeting for SFMS is coming up November 19-21 in Columbia, SC and will also be available on Zoom. Members are welcomed to attend. Ms. Heinemann also gave Kyanite and Matchstick Quartz to all attending members. There were 16 members present. Also welcomed new/returning member Leah Baptiste.

**Meeting Minutes Approval:** Liz Platt thanked members for coming and asked for a motion to approve August 2021 minutes as published in Snoopy Gems Newsletter. Motion made by Vicki Reynolds, second by Harvey Marcum, motion carried.

**Treasurer's Report:** Barbi Beatty, Treasurer, not a lot has changed since last report. Some deposits made in September. Totals provided for all accounts. Treasury report excepted as reported per Liz Platt.

**Meeting Site:** Glad to be at the Mary C O'Keefe Cultural Arts Center and to have the closet for storing our equipment and supplies. There will be a Beginner Beaders class offered by Rosalind Norvel-Daniels through Mary C. O'Keefe. There will be a Halloween event October 30<sup>th</sup> called The Witches Ride held in the city and will converge at Mary C. O'Keefe. It will give us an opportunity to pass out MGCGMS cards and information on the upcoming Gem & Mineral Show. Liz is asking for volunteers to assist from 6pm-8pm.

**Workshop:** Vicki Reynolds taught a chain maille bracelet with aluminum jump rings.

**SFMS Workshop and Scholarship:** Scholarship winner, David Spencer will not be able to attend. The second alternate winner Reba Shotts will go to Wild Acres this year with Buddy Shotts who was the winner of HCGMS scholarship. Reba will attend the Chain Maille class and Buddy will attend Gem Identification.

**Tools and Equipment:** Per John Guglik, Van Crump is working on a piece of equipment. On one of the pieces of equipment the pump does not work all of the time.

**Sunshine:** Reba Shotts continues to send out cards and if anyone did not receive one for their birthday, please provide Reba with birthdate. "Happy Birthday" to Liz Platt. Her Birthday is September 27<sup>th</sup>.

**Membership:** Not all club members have returned yet so we will see how things go as members continue to return. David Cook is really missed. He was the cornerstone of our workshops and would have something every time or he would get somebody.

**Snoopy Gem Newsletter:** Liz Platt asks that all members read the Snoopy Gem Newsletter. Barbi Beatty is accepting written material from members to publish.

**Outside Classes/Workshops:** Gallery 782 has several events coming up. Vicki Reynolds has a show coming up. She does jewelry and paintings that she sales at the Gallery. Seafood festival currently being held at the Biloxi Town Green. People are starting to get back in the swing of attending events.

**Gem Show:** November 12, 13, & 14th MGCGMS Gem and Mineral show will be held at the Jackson County Fair Grounds. Per Barbi Beatty, we will not have the same number of vendors we previously had. There were two new inquiries, one lapidary and one jewelry. Neal and Julie will not attend this year due to illness so we will not have a sluice. Contracts received from 12 of the vendors. Lori Heinemann knows some vendors and will provide Barbi with their information. Due to fewer vendors, we will need to cut back on some of the advertising. Barbi stated she is concerned the most with covering costs involved with hosting the show. Will need to consider how the vendor dinner is done this year. As a safety measure, we may need to serve rather than allow everyone to self-serve. We can also use wrapped utensils.

**Old Business:** Seeking member participation for 2022 Officers. Harvey Marcum mentioned previous discussion concerning display cases for the show. Stated since there is no sluice and fewer vendors, we can scatter the display boxes around. Liz Platt asked how many of the display cases are still good? There are 13 fully lined cases ready for use.

**New Business:** Per Barbi Beatty, the storage company has been sold to another company and the storage fee increases from \$45 monthly up to \$60 monthly starting in September There are things in the storage unit that will need to be stored. Current unit is a 10 x 10. Vicki Reynolds offered to obtain prices from another storage facility.

**Gem of the Month/Show and Tell:** Buddy Shotts provided club members with extensive information on Sapphires. Passed around both natural and synthetic sapphires to view.

**Motion to Adjourn and Door Prizes:** Meeting adjourned at 2:27pm. Barbi Beatty gave the motion to adjourn, Reba Shotts second. Leah Baptiste, Rosalind Norvel-Daniels, Lori Heinemann, & Van Crump each won one of the four door prizes.



# Happy



# October

# Birthday

Barbi Beatty Karl Beatty Miku Daynes  
Melinda Gerhart Michelle Hebert Stacy Reichel  
Bruce Sundberg Lynn Tate Justin Williams



**OPAL** is one of the world's most popular gemstones and the birthstone for the month of October. A nice precious opal can flash every color of the spectrum with an intensity and quality of color that surpasses the fire of diamond. The best opals command prices per carat that rival expensive diamonds, rubies, sapphires, and emeralds.

**Chemical Classification:** A hydrated variety of amorphous silica

**Color:** Commonly having a bodycolor of white, yellow, gray, black, or brown; however, the bodycolor of opal can be any color. Some of the most beautiful common opals are red, orange, pink, green, or blue. The play-of-color of precious opal displays spectral colors of red, orange, yellow, green, blue, and violet.

**Streak:** White

**Luster:** Rough opal can have a dull, pearly, waxy, or vitreous luster. Most opal polishes to a vitreous luster.

**Diaphaneity:** Translucent, opaque, semi-transparent, and, rarely, transparent.

**Cleavage:** None, breaks with a conchoidal fracture.

**Mohs Hardness:** 5 to 6

**Specific Gravity:** 2.0 to 2.2, varying with impurities, which include various amounts of water

**Diagnostic Properties:** Conchoidal fracture. Sometimes exhibits play-of-color. Low specific gravity and hardness.

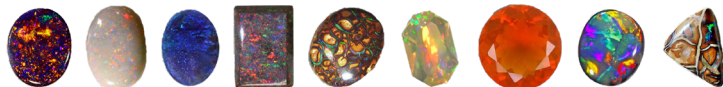
**Chemical Composition:**  $\text{SiO}_2 \cdot n\text{H}_2\text{O}$

**Crystal System:** Amorphous



## WHERE IS OPAL FOUND?

Opal comes from many places around the world like Brazil, Mexico, Ethiopia, Honduras and the western US, however Australia produces 95% of the world's precious opal. It is Australia's official national gemstone.



## HOW IS OPAL FORMED?

Opal is formed from a solution of silicon dioxide and water. As water runs down through the earth, it picks up silica from sandstone, and carries this silica-rich solution into cracks and voids, caused by natural faults or decomposing fossils. As the water evaporates, it leaves behind a silica deposit. This cycle repeats over very long periods of time, and eventually opal is formed.

Occasionally, when conditions are ideal, spheres of silica, contained in silica-rich solutions in the earth form and settle under gravity in a void to form layers of silica spheres. The solution is believed to have a rate of deposition of approximately one centimeter thickness in five million years at a depth of forty meters. If the process allows spheres to reach uniform size, then precious opal commences to form. For precious opal the sphere size ranges from approximately 150 to 400 nanometers producing a play of color by diffraction in the visible light range of 400 to 700 nanometers.

Each local opal field or occurrence must have contained voids or porosity of some sort to provide a site for opal deposition. In volcanic rocks and adjacent environments, the opal appears to fill only vughs and cracks whereas in sedimentary rocks there are a variety of voids created by the weathering process. Leaching of carbonate from boulders, nodules, many different fossils, along with the existing cracks, open centers of ironstone nodules and horizontal seams provide a myriad of molds ready for the deposition of secondary minerals such as opal.

Much of the opal deposition is not precious. It is called “potch” by the miners, or common opal by the mineralogist, as it does not show a play of color. Opaline silica not only fills the larger voids mentioned but also may fill the pore space in silt and sand size sediments cementing the grains together forming unique deposits, known as matrix, opalized sandstone or “concrete” which is a more conglomeratic unit near the base of early Cretaceous sediments.

The many variations in the types of opal depends on a number of factors. In particular, the climate provides alternating wet and dry periods, creating a rising or more importantly a falling water table which concentrates any silica in solution. The silica itself is formed either by volcanic origin or by deep weathering of Cretaceous clay sediments producing both silica and white kaolin often seen associated with the Australian opal fields. Special conditions must also prevail to slow down a falling water table in order to provide the unique situation for the production of its own variety of opal. The chemical conditions responsible for producing opal are still being researched, however some maintain that there must be acidic conditions at some stage during the process to form silica spheres, possibly created by microbes.

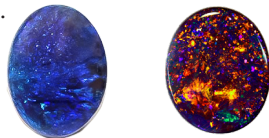


The Boulder opal found in Queensland forms in a slightly different method to other types of opal, forming inside an ironstone concretion. The concretion was formed due to ionization, from sedimentary deposition. The opal forms in generally elongated or ellipsoidal ironstone concretions or boulders, from a few centimeters, to up to 3 m across. The boulders may be confined to one or more layers or randomly distributed through the weathered sandstone. Their composition ranges from sandstone types or ironstone types. The opal occurs as a filling or lining between the concentric layers or in radial or random cracks in the ironstone, or as a kernel in smaller concretions or nuts.

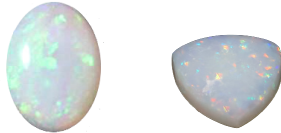
## TYPES OF OPAL

What are the different types of opals and treatments?

**Black Opal** – Black opal is characterized by a dark body tone causing brightness of color which is unmatched by lighter opals. Black Opals are usually mined in Lightning Ridge, New South Wales, and are the most famous, and sought-after type of opal. The term ‘black opal’ does not mean that the stone is completely black. It simply means the stone has a dark body tone in comparison to a white opal.



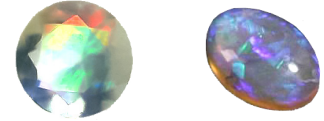
**White Opal**– Also known as ‘milky opal’, white opal features light white body tones, and is mined in South Australia. White opal is more common and because of its body tone, generally does not show the color as well as black opal. Nevertheless, white opals can still be absolutely magnificent in color if a good quality stone is found.



**Boulder Opal** – Boulder opal forms on ironstone boulders in Queensland. This type of opal is often cut with the ironstone left on the back, as the opal seam is usually quite thin. Leaving the ironstone on the back means that boulder opal can be very dark and beautiful in color. The opal forms within the cavities of the boulders in both vertical and horizontal cracks. Boulders vary in shape and size, from as small as a pea, to as big as a family car. Boulder Opal has a tendency to cleave; when cleaved the “split” leaves two faces of opal, with a naturally polished face.



**Crystal Opal** – Crystal opal is any kind of opal which has a transparent or semi-transparent body tone where you can see through the stone. Crystal opal can have a dark or light body tone, leading to the terms “black crystal opal” and “white crystal opal”.



**Fire Opal** – Fire opal is a term not commonly used within Australia but is quite common amongst Americans. Technically, the main type of opal known as ‘fire opal’ is Mexican Fire Opal, mined in Mexico, which usually has a distinct orange coloring. However, the term has been used to describe any opal which displays a significant amount of red coloring. Red of course is the rarest color, so these are quite valuable. Recent discoveries in Western Australia have unearthed an Australian form of ‘Fire Opal’ which is an exothermic type of opal.



**Matrix opal** – Matrix opal is where the opal occurs as a network of veins or infilling of voids or between grains of the host rock (ferruginous sandstone or ironstone). Matrix comprises precious opaline silica as an infilling of pore spaces in silty claystone or ironstone. It generally shows fine pinfire color in the natural state.



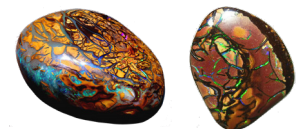
**Andamooka** matrix opal may be enhanced by soaking the specimen in a sugar solution and then boiling in acid to deposit carbon in the available pore spaces, resulting in a dark background.



**Natural boulder** opal matrix is another kind of matrix opal, found at Yowah in Queensland, which in its natural state consists of brown ironstone with small deposits of opal interspersed. This kind of opal is not treated.



**Yowah nuts** – Found in the far South Western mines at Yowah in Queensland, Yowah nuts are ironstone concretions resembling ‘nuts’ which contain precious opal in their center. Upon cracking or slicing the Yowah nut, the precious opal is revealed.



**Welo Opal** – an Ethiopian form of opal, which can produce rich color. This material is known as hydrophane opal, as it is a porous gem, which can absorb moisture (over several hours) and cause the Welo Opal to change appearance. ‘Dewatering’ of the opal can take anywhere between a few days to a few weeks to occur. Ethiopian Opals can have durability issues due its hydrophane property (the absorption of water can possibly cause cracking). Only a fairly recent discovery (2008).





## SYNTHETIC OR MAN-MADE STONES

Synthetic opal – Opaline silica produced in the laboratory and having a similar structure to that of precious opal. The most well-known form of synthetic opal is Gilson Opal, and you can learn more about identifying this type of opal in our synthetic opal article.



The following differences can be seen between natural and synthetic opal;

Synthetic opals generally show brighter colors, and color patches are often larger than in natural opals.

Color grain boundaries are generally highly irregular in synthetic opal.

Within each color grain in synthetic opal there are numerous sub-grains that produce a distinctive snakeskin pattern.

Synthetic material generally shows a more ordered array of colors since artificial material does not duplicate the intricate pattern of natural opal.

Imitation opal – A material such as colored tinsel set in clear plastic or epoxy resin. (These imitations are virtually worthless and not very convincing to a trained eye).

Doublets & Triplets – Doublets and triplets are partially man-made stones, consisting of only a paper-thin slice of opal cemented to a black backing. Triplets have, in addition to this, a clear quartz or glass capping over the top to magnify the color, protect the stone, and give it a cabochon (domed) appearance. The idea of doublets and triplets is to imitate valuable black opals at a fraction of the cost.

Solid (cabochon) – Most cutters prefer to produce the opal as a solid cut cabochon if the gem is sufficiently thick. The opal is left in its natural state and simply shaped and polished on the cutter's wheel.

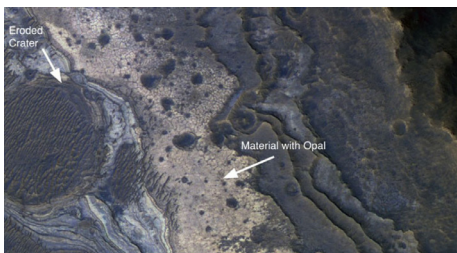
Doublet – A thin veneer of opal may show enhanced color with a dark backing of either black or grey silica material, or a thin slice of common opal cemented to the back of the opal with epoxy resin.

Triplet – A slice of quartz may be used to cap the thin opal veneer to protect it from abrasion. This produces a three-tiered gemstone known as a triplet, which can often display brilliant colors. It is a cheaper method of presentation and can enhance the appearance of the opal.

Doublets and triplets are a good affordable substitute for solid black opals, however their disadvantage is their susceptibility to water penetration. Due to the fact that the layers are attached with glue, a doublet or triplet may become water-logged if immersed in water repeatedly. If this happens, the stone will take on a 'foggy' appearance.

## OPALS ON MARS

In 2008, NASA's Mars Reconnaissance Orbiter discovered a number of opal deposits on Mars. In this satellite image, the surface in the pinkish cream-colored area to the right of the impact crater is covered with hydrated silica rock debris that we would call "opal." Mars researchers have also identified layers of opal exposed in the outcrops of crater walls. Since opal is a hydrated silicate, its formation requires water. So, the discovery of opal on Mars is another evidence that water once existed on the planet.



## BENCH TIP

### SAVE WHEN BUYING SILVER

Silver products like sheet, wire, and casting shot are sold by the Troy ounce at what is called the spot price. That's what companies pay for the pure metal on the commodities market, and the spot price changes daily.

But in addition to the spot price, there is also a cost to fabricate the metal into wire or sheet, so the price of the item you buy is the cost of the metal plus the cost to make it. Different products have different fabrication charges because each takes a different amount of labor. Also, different companies will have different fabrication charges because of local labor rates and their desired profit margin.

You can save money by finding a company with a lower fabrication charge. Also, note that the fabrication charge per ounce is less on larger orders, so you can save more by buying more. Find a friend to place a joint order and split the shipping charges.

But for casting purposes, there's an even better way to save. Buy your silver at a coin store. They sell bars and rounds in pure and Sterling for the spot price plus about a dollar per ounce.

The local coin shop adds only a small profit over the spot price. So I save about \$3 per ounce, pay no shipping charges, don't have to wait for mail order, and support a local business.



### SAWING JUMP RINGS

The difficult part of making jump rings for me has always been holding the coil while cutting off the individual rings. I use a saw to get the best fit when closing the rings later. I've seen all sorts of suggestions for ways to hold the coil, but the one that works best for me is this little jig made from scrap wood.

It's about 2 inches wide and 4-5 inches long with a groove cut down its length to cradle the coil of wire and a thin stop attached to the front end.

To cut the rings, thread your saw blade through the coil, hold the coil down in the groove and against the front stop, and saw through the bottom of the coil at about a 40 degree angle.

Don't forget to use some wax or cutting lube. It really does make a difference. If you don't believe me, do an experiment while you're cutting a lot of rings. Count how many rings can be cut before the blade breaks. First, do the test without lube, and then do it again while adding some lube to the blade after cutting every 8-10 rings.

It's the best way I've ever found to hold the coils easily and securely. If the coil doesn't move, you break fewer blades. And it is safer than some other techniques because you are cutting away from the fingers.

2 pictures attached




Pick Up a Few New Jewelry Skills With Brad's "How To Do It" Books  
<http://amazon.com/author/bradfordsmith>

# We always welcome new members!



Date \_\_\_\_\_ Mississippi Gulf Coast Gem and Mineral Society

<a href="http://www.mgcgms.org">http://www.mgcgms.org</a>		<b>Application for Membership</b>	
Individual: \$16.00		Individual +1 relative Same Address: \$20.00	
		Junior Under 18: \$6.00	
Name: _____		Cell: _____	
Name: _____		Cell: _____	
Address: _____		Home Phone: _____	
City: _____			
State: _____		Email 1: _____	
Zip: _____		Email 2: _____	
<b>Members Birthdays</b>			
Adult: _____		Birthday M/D: _____	
Adult: _____		Birthday M/D: _____	
Junior: _____		Birthday M/D/Y: _____	
Junior: _____		Birthday M/D/Y: _____	
<b>Please Check All Applicable Interests</b>			
<input type="radio"/> Beading	<input type="radio"/> Cabbing	<input type="radio"/> Jewelry Making	
<input type="radio"/> Chain Mail	<input type="radio"/> PMC	<input type="radio"/> Lapidary	
<input type="radio"/> Field Trips	<input type="radio"/> Faceting	<input type="radio"/> Minerals	
<input type="radio"/> Fossils	<input type="radio"/> Wire Wrapping	<input type="radio"/> Silver Smithing	
<input type="radio"/> Others: _____			
<b>How did you hear of us?</b> _____			
<b>Please check the following:</b>			
<input type="radio"/>	I understand that my picture or likeness may be used in Society promotions.		
<input type="radio"/>	I authorize MGCGMS to include my contact information be included in Society listings for members to contact each other only.		
Signature: _____			
Signature: _____			

Mississippi Gulf Coast Gem & Mineral Society Inc. P.O.  
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**Snoopy Gems**  
 is the Official Publication of  
 The Mississippi Gulf Coast Gem and Mineral Society,  
 Inc.

**AFFILIATIONS**  
 The Southeast Federation of Mineralogical Societies,  
 Inc.  
 The American Federation of Mineralogical Societies,  
 Inc.  
 S.C.R.I.B.E. (Special Congress Representing Involved  
 Bulletin Editors)

**OFFICERS 2021**

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Vice President	Natalie Webb
Treasurer	Barbi Beatty
Secretary	Roslind Daniels
Parliamentarian	John Guglik
Editor	Barbi Beatty
Web master	Barbi Beatty
Member at Large	Harvey Marcum
Member at Large	Reba Shotts

**COMMITTEES**

Membership	Barbi Beatty
Show Chair	Barbi Beatty
Historian	Lettie White
Librarian	Liz Platt
Sunshine	Reba Shotts

**AFFILIATIONS**

ALAA	John Wright: Director
SFMS	John Wright: Past President
SFMS	Barbi Beatty: Treasurer & Insurance Liaison
SFMS	Buddy Shotts: Past Long-range Plan- ning, Past President, State Director

Annual dues are:  
 \$16 Individual  
 \$20 (2) Members in same house hold  
 \$6 Junior

**2021 Workshop/Meeting  
 Dates**

January 9 TBD 9:30-4:00  
 February 13 TBD 9:30-4:00  
 March 13 TBD 9:30-4:00  
 April 10 TBD 9:30-4:00  
 May 8 TBD 9:30-4:00  
 June 12 Mary C. 9:30-4:00  
 July 10 Mary C. 9:30-4:00  
 August 14 Mary C. 9:30-4:00  
 September 11 Mary C. 9:30-4:00  
**October 9 Mary C. 9:30-4:00**  
 November 13 After Vendor Dinner 5ish  
 December 11 Christmas Party Mary C.  
 11:00am-3:30pm

**Dates subject to change.  
 Be sure to check each month!**  
 The November meeting is the Thursday eve-  
 ning of the gem show after the dinner for the  
 dealers at the Jackson County  
 Fairgrounds Civic Center Building.  
 December will be our  
 Christmas Party and Installation of  
 Officers

**October 2021**

Sun	Mo	Tue	We	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

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Official Publication of the Mississippi Gulf Coast Gem & Mineral Society Inc.



<http://www.mgCGMS.org>



The Mississippi Gulf Coast Gem & Mineral Society is a Non-profit Organization Dedicated to Education, Science, and the Lapidary Arts and Crafts

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P.O. Box 857  
Ocean Springs, MS 39566