



# Snoopy Gems

Volume 50 Number 8 August 2024  
Mississippi Gulf Coast Gem &  
Mineral Society Inc.



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

MGCGMS Established in 1974

## President's Message

Dear Members,

Hope your summer has been great. I think we are all probably ready for some cooler and more stable weather. Fall activities are filling up the calendar. Be sure to plan for our club workshops, new learning projects, and our 35th annual Gem Mineral and Jewelry Show.

Do you know one of our members who would be a great member of our board as an officer or committee chair? All it takes is someone who is willing to learn about the club and give a little extra time. Let our nominating committee know or me. We will name the nominating committee at this meeting.

In the meantime, enjoy the rest of your summer and treat yourself to something wonderful this month. (I think I'll buy myself a new or used piece of equipment or a new pair of pliers. Think about it!)

See you on Saturday!

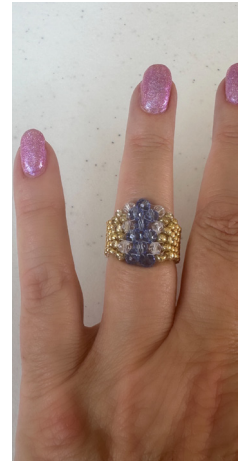
Liz Platt

MGCGMS President

## August Workshops:

Our Wednesday classes from 11-4:00 in our room at the Mary C. All members are welcome!

**Saturday Workshop: August 10th @10am Stephanie Hatcher** will be teaching coiled wire and seed bead handmaid beads and a beaded ring. Kits will be available for \$3.



### Materials:

**Beaded beads:** 20 gauge wire and either 8/0 or 11/0 seed beads.

**Ring:** 11/0 and 8/0 seed beads of the same color, 3mm and 4mm rondelle crystals, 6 lb fire line,

### Tools:

beading needle and scissors

## Wednesday workshop 8/21/24: Connie Boyd & Barbi

**Beatty** will be teaching a cabochon pendant. \$35 kit fee. It is open to the public @ The Mary C. O'Keefe. (everything provided.)



John Guglik will be available to test stones and metals.

**Machines:** Members of our tool committee will be available to help with cutting and capping gemstones. As always, we will have the club machines available for metal & gemstone testing, gemstone cutting, and capping. There is a \$3 tool maintenance fee to use the machines.

<http://www.mgcgms.org>

PO Box 857 Ocean Spring, MS 39566



# Meeting Minutes

## GULF COAST GEM & MINERAL SOCIETY

July 2024

**Meeting called to order:** 1:00 pm by Liz Platt, President. Welcomed guest, Allan Elliott's family, sister and nieces, and Rosalind Norvel-Daniels grandson.

**Meeting minutes:** Minutes as published in Snoopy Gems accepted. Vicki Reynolds made a motion to approve, second by Barbi Beatty.

**Treasurer:** No big changes, account balances provided for show, main, and savings. Funds received for membership and interest. Update in our paperwork required, before CD's can be purchased is completed. Will purchase two small CD's this month at 4.25% interest, each for 11 months. Banking done with Wells Fargo. John Guglik made a motion to approve, Harvey M second, motion carried.

**Sunshine:** Per Reba Shotts, Get Well and Birthday cards sent out. If you did not receive a birthday card it is because Reba does not have your birthdate.

**Membership:** Two joined online.

**Library, Closet, Inventory:** Library looking better. Please remember to return items back to where they were found.

**Equipment:** Per Harvey M., a new saw blade is needed. There may be one here, if not order one, or send information to Barbi for her to order. Chemicals needed for gold testing.

**Communication:**

**Newsletter:** Barbi Beatty usually prints out the newsletter. If anyone has any articles, bench tips, recipes, etc., please provide them to Barbi so that she can include them in the newsletter.

**Facebook:** Nothing to report.

**Show:** November 2024, start signing up for positions. Jackson club has information on pos system that Barbi will inquire about. Gem club is asking for consideration to purchase totes that will include our postcard and vendor information for advertising purposes. 100 per day will be issued to guests when entering the show. Will need volunteers for the set-up, break-down, welcome table, kids' corner, kitchen, raffle and membership table. Considering price increase for the raffle. The vendor dinner will be Friday night, elections afterwards. If you know of someone to promote/nominate, let Liz Platt know. The Art Association has three tables/booths available to rent for club members for its two-day event, November 1st and 2nd, Saturday and Sunday.

**Field Trip:** Need volunteers

**Workshops:** Trainer Mcquilkin, local artist, makes sculptures, would like to come in and talk with members. Wild Acres workshops are in August and September. Wednesday projects are tbd. August workshop will be wire wrap, taught by Stephanie Hatcher.

**New Business:** None discussed

**Old Business:** Expected to promote Mary C.

**Gem of the Month:** John Guglik discussed the Ruby, several samples shown.

**Motion to Adjourn:** 1:53 motion made to adjourn by Vicki Reynolds, second by Van Crump.

**Door Prizes:** Shannon, Reba, Bernadette, and Allan all won door prizes.

**50/50:** Allan's niece, Maggie won.

**Report by:** Rosalind Norvel Daniels

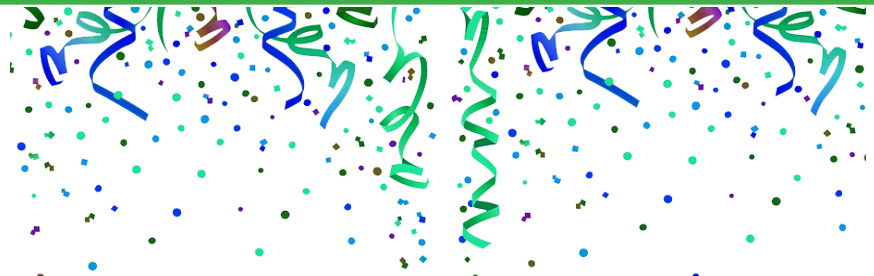


# Happy

# August

# Birthday

Van Crump & Dan Johnson



## Peridot: The Science and Beauty of August's Birthstone

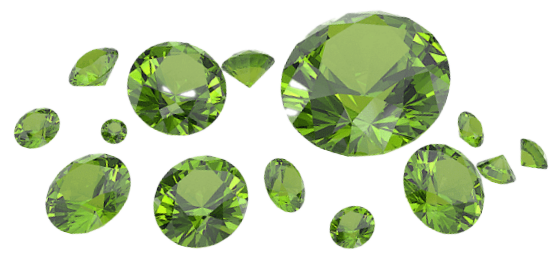
Peridot, a gemstone renowned for its vibrant green hue, has captivated humans for millennia. Often associated with the month of August, this gem's allure extends beyond its aesthetic appeal. It holds a rich scientific significance, spanning from its unique geological formation to its intriguing physical and chemical properties. This article delves into the science behind peridot, exploring its origins, characteristics, and uses.

### Geological Formation and Origins

Peridot is the gem-quality form of the mineral olivine, a silicate mineral composed of magnesium and iron. Olivine's chemical formula,  $(Mg, Fe)_2SiO_4$ , indicates that it is a solid solution series, meaning that magnesium and iron can substitute for one another within the crystal lattice. The presence of iron primarily determines the green color of peridot; higher iron content results in a more intense green shade, while lower levels can lead to a lighter, yellowish hue.

Peridot forms under specific geological conditions, typically in the upper mantle of the Earth, at depths between 20 to 55 kilometers (12 to 34 miles). It crystallizes from magma that is rich in magnesium and low in silica, a composition characteristic of the Earth's mantle. These magma sources are often associated with tectonic settings like oceanic spreading centers, mantle plumes, and subduction zones.

The gem reaches the Earth's surface through volcanic activity. As magma ascends, it cools and crystallizes, bringing peridot crystals along with other mantle minerals to the surface. Notably, peridot is also found in pallasite meteorites, which are remnants of the early solar system. These extraterrestrial sources suggest that the processes forming peridot extend beyond Earth, offering insights into planetary formation and evolution.



## Physical and Chemical Properties

Peridot's distinct green color sets it apart from other gemstones. Its hue can range from yellowish-green to deep olive, depending on the iron content. The gem's transparency and vitreous luster further enhance its appeal. Peridot has a Mohs hardness of 6.5 to 7, making it relatively durable but still susceptible to scratching compared to harder gemstones like sapphires and diamonds.

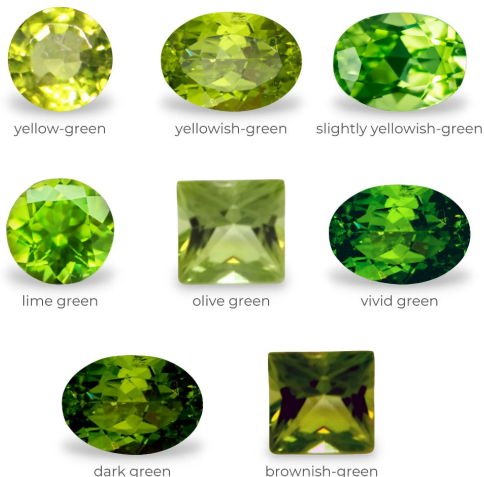
The crystal structure of peridot belongs to the orthorhombic system, characterized by three mutually perpendicular axes of different lengths. This structure contributes to the gem's distinct cleavage, which is typically imperfect along one direction. Peridot has a specific gravity ranging from 3.2 to 4.3, reflecting its relatively high density due to the presence of iron.

Optically, peridot exhibits double refraction, meaning that light entering the crystal is split into two rays traveling at different speeds and in different directions. This property can cause a slight doubling of facets visible through the gem, adding to its visual complexity. The refractive index of peridot ranges from 1.65 to 1.69, contributing to its brightness and sparkle.



## Historical and Cultural Significance

Peridot has been cherished throughout history, with records of its use dating back to ancient Egypt. The Egyptians mined peridot on the island of Zabargad (St. John's Island) in the Red Sea, where it was referred to as the "gem of the sun." They believed that peridot protected its wearer from the terrors of the night and brought good fortune. The gemstone was also used in religious ceremonies and as an adornment in churches during the medieval period.



In Hawaii, peridot is associated with the goddess Pele, the deity of volcanoes and fire. The local name for peridot, "Pele's tears," refers to the small, green crystals found in the volcanic sands of the islands. These cultural associations highlight the gemstone's perceived mystical and protective qualities across different civilizations.



## Modern Applications and Significance

Today, peridot continues to be a popular gemstone for jewelry, especially as the birthstone for August. Its vibrant color and affordability make it a favorite choice for rings, earrings, necklaces, and bracelets. In addition to its aesthetic appeal, peridot has found applications in industrial contexts. Due to its high melting point, olivine (the mineral form of peridot) is used as a refractory material in foundries and furnaces.

Beyond its practical uses, peridot also holds scientific importance. The study of olivine and peridot in Earth's mantle and meteorites helps scientists understand the composition, structure, and evolution of planetary interiors. Moreover, peridot's occurrence in meteorites provides clues about the early solar system's conditions, offering a window into the processes that shaped our cosmic neighborhood.



Peridot is a gemstone that beautifully combines aesthetic allure with scientific intrigue. From its formation deep within the Earth to its cultural significance and modern applications, peridot offers a unique perspective on the natural world. As both a symbol of August and a subject of scientific study, this vibrant green gem continues to fascinate and inspire, bridging the gap between geology, history, and culture. Article by Barbi Beatty

## Sardonyx: Mining and Processing of the Layered Gemstone

Sardonyx, a type of onyx characterized by its distinctive bands of sard (a reddish-brown variety of chalcedony) and onyx (a form of agate with parallel layers), has been valued for centuries for its unique appearance and historical significance. The mining and processing of sardonyx are intricate processes that involve several stages, from the extraction of rough material to the cutting and polishing of finished gemstones. This article explores the detailed steps involved in bringing sardonyx from the earth to the market, highlighting the techniques, challenges, and cultural importance of this fascinating stone.



### Geological Formation and Occurrence

Sardonyx is a member of the chalcedony family, a cryptocrystalline form of silica composed of fine intergrowths of quartz and moganite. It forms through the deposition of silica from solution in voids within volcanic rocks, resulting in layered structures. The color and distinct banding of sardonyx are due to the presence of various impurities and trace elements. The red and brown layers contain iron oxide impurities, while the white or black layers are typically pure or contain other elements like carbon.

Sardonyx deposits are found in various regions around the world, including Brazil, India, Uruguay, and the United States. The stone's availability and quality can vary significantly depending on the location, with certain regions known for producing particularly vibrant or uniquely banded specimens.

### Mining, Exploration, and Prospecting of Sardonyx

The first step in mining sardonyx involves exploration and prospecting to identify potential deposits. Geologists use a combination of field surveys, geological mapping, and geophysical methods to locate areas rich in chalcedony. In some cases, historical records and local knowledge guide prospectors to known sources of sardonyx.

Once a potential deposit is identified, sampling and drilling are conducted to assess the quality and quantity of the material. This stage is crucial for determining the economic viability of a mining

operation. High-quality sardonyx deposits typically exhibit well-defined banding, vibrant colors, and minimal inclusions.

### Extraction Methods

The extraction of sardonyx varies depending on the location and geological conditions. In open-pit mining, overburden (the surface material covering the deposit) is removed using heavy machinery, such as bulldozers and excavators. Once the deposit is exposed, the sardonyx-bearing rock is carefully extracted. In some cases, blasting may be necessary to break up the rock, but this is done cautiously to avoid damaging the gemstone material.

In contrast, underground mining involves tunneling into the earth to access sardonyx veins. This method is often used when the deposits are deep or located in areas with significant overburden. Miners use drills and explosives to create tunnels and extract the material. The rough sardonyx is then transported to the surface for further processing.



### Environmental Considerations

Like all mining activities, sardonyx extraction can have environmental impacts. Responsible mining practices are essential to minimize soil erosion, water contamination, and habitat destruction. Companies often implement reclamation plans to restore the land after mining operations are completed. This may involve backfilling open pits, replanting vegetation, and monitoring water quality.

### Processing, Sorting, and Grading of Sardonyx

After extraction, the rough sardonyx is transported to processing facilities, where it undergoes sorting and grading. The material is first washed to remove dirt and debris. Then, skilled workers sort the stones based on color, banding, and overall quality. Grading involves evaluating factors such as the intensity of color, clarity, and the definition of the bands. High-quality sardonyx exhibits vibrant, well-defined layers with minimal fractures or inclusions.

## Cutting and Shaping

The next step in processing sardonyx is cutting and shaping the rough stones into finished gemstones. This process requires precision and expertise, as the stone's banding must be carefully considered to create aesthetically pleasing pieces.



**Sawing:** The rough sardonyx is initially cut into manageable pieces using diamond-tipped saws. This stage involves cutting along the natural layers to maximize the visibility of the banding.

**Preforming:** The sawn pieces are then shaped into rough forms, typically cabochons or beads, depending on the intended use. This involves grinding the stone on diamond wheels to achieve the desired shape.

**Faceting and Cabochon Cutting:** For faceted stones, the preformed pieces are further refined by cutting and polishing individual facets. This process enhances the stone's brilliance and highlights its color bands. For cabochons, the stones are shaped into smooth, rounded domes, which showcase the stone's natural banding.

## Polishing and Finishing

The final step in processing sardonyx is polishing. This involves a series of increasingly fine abrasives to smooth the stone's surface and bring out its natural luster. The polishing process can be meticulous, as the stone's banding can affect how light interacts with the surface. Skilled artisans ensure that the bands are prominently displayed and that the stone's colors are vibrant.

Once polished, the sardonyx gemstones are inspected for quality. Finished stones may undergo additional treatments, such as waxing or coating, to enhance their appearance and protect the surface.

## Cultural Significance and Uses

Sardonyx has been treasured throughout history for its beauty and symbolic meaning. In ancient Rome, sardonyx was used to create cameos and intaglios—engraved gemstones used as seals and jewelry. The stone was believed to bring courage and protect

against negative energies. It was also associated with eloquence and clear communication, making it a popular choice for signet rings worn by orators and politicians.

In modern times, sardonyx is used primarily in jewelry, including rings, necklaces, earrings, and bracelets. Its unique banding and warm colors make it a popular choice for both classic and contemporary designs. Additionally, sardonyx is sometimes used in ornamental objects, such as carvings and figurines, due to its distinctive appearance.



The mining and processing of sardonyx involve a blend of geological knowledge, skilled craftsmanship, and cultural appreciation. From its formation in the Earth's crust to its transformation into beautiful gemstones, sardonyx embodies the intersection of natural beauty and human artistry. As a gemstone with a rich history and enduring appeal, sardonyx continues to captivate gem enthusiasts and collectors around the world. Its journey from rough stone to polished gem is a testament to the meticulous processes and expertise required to bring this unique material to market.



# Upcoming Gem & Mineral Shows

## Alabama Mineral and Lapidary Society

When

Sep 6 – 8, 2024

Where

Irondale Civic Center, 3521 Ratliff Road, Irondale, Alabama 35210

Description

AMLS Gem and Mineral Show, September 6-8, 2024. Friday and Saturday 10 AM to 6 PM, Sunday 10 AM to 4 PM, Adults: \$5; Teens: \$3, 12 and under free.

Link(s):

[lapidaryclub.com](http://lapidaryclub.com)

## Central Florida Mineral and Gem Society

When

Sep 7 – 8, 2024

Where

National Guard Armory 2809 South Ferncreek Ave. Orlando, FL 32806

Description

Sept. 7, 2024 9:00am till 5:00pm EST  
Sept. 8, 2024 9:00am till 4:00pm EST  
Adult tickets \$6.00 and children ages 6-15 \$3.00 . Enjoy demonstrations, door prizes, silent auctions, and kid's activities. also, we have vendor tables to purchase gemstones, crystals, minerals, unique beads, handmade jewelry, fossils, artifacts, and metaphysical stones

Link(s):

[www.cfmgs.org](http://www.cfmgs.org)

Find additional Show and Club information@  
<https://www.southeastfed.org/show-calendar>

# BENCH TIPS

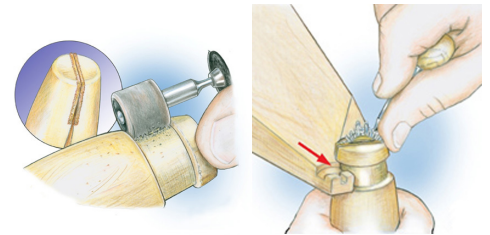
## Modify Wooden Ring Clamp

One persistent daily challenge a bench jeweler faces is trying to figure out the best way to hold onto tiny, delicate objects while performing mechanical operations such as sawing, filing or burring bearings for stone setting.



There are dozens of tools available for this purpose, some centuries old and some that are modern, sophisticated and often quite expensive. An alternative is to make a simple modification to a wooden ring clamp—which holds rings and other jewelry items—that turns it into a useful, multi-function holder.

The ring clamp is usually braced against the bench pin as you work. Trouble can develop if the clamp slips while you are applying pressure. When you push downward on the ring with a prong pusher, for example, the clamp can slip out of place—even slightly—and cause a sudden movement that results in a chipped stone, damaged prong or injury to your finger or hand.



Grinding a groove to modify it will help brace the clamp more securely and give you a greater range of motion as you work.

The inset shows the original shape of the ring clamp. Grinding a groove to modify it will help brace the clamp more securely and give you a greater range of motion as you work.

If you grind a channel in the ring clamp, however, you can lock it in place with the bench pin. This provides more stable support for the work in progress and enhances your accuracy and safety.

The groove in the ring clamp locks it into place against the bench pin for safety and stability as you work



The groove in the ring clamp locks it into place against the bench pin for safety and stability as you work.

An 80 grit 1/2" x 1/2" abrasive band and mandrel (drum arbor) works well for this modification. Draw a reference line on the ring clamp about 10mm from the end. Use the abrasive band to create a two-millimeter indentation around the ring clamp. Test the groove against your bench pin(s) and make adjustments as necessary so the clamp locks in place. This simple modification will make your tool more stable and reduce the chance of damaged jewelry or injury.

# 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: \$20.00		Individual +1 relative Same Address: \$30.00	
		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="checkbox"/>	Beading	<input type="checkbox"/>	Cabbing
<input type="checkbox"/>	Chain Mail	<input type="checkbox"/>	PMC
<input type="checkbox"/>	Field Trips	<input type="checkbox"/>	Faceting
<input type="checkbox"/>	Fossils	<input type="checkbox"/>	Wire Wrapping
<input type="checkbox"/>	Others: _____		<input type="checkbox"/>
			<input type="checkbox"/> Jewelry Making
			<input type="checkbox"/> Lapidary
			<input type="checkbox"/> Minerals
			<input type="checkbox"/> Silver Smithing
<b>How did you hear of us?</b> _____			
<b>Please check the following:</b>			
<input type="checkbox"/>	I understand that my picture or likeness may be used in Society promotions.		
<input type="checkbox"/>	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.  
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**Snoopy Gems**  
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 The Southeast Federation of Mineralogical Soci-  
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SFMS	Buddy Shotts: Past Long-range Planning, Past President, Past State Director

Annual dues are:  
 \$20 Individual  
 \$30 (2) Members in same house hold  
 \$6 Junior

**2024 Workshop/Meeting  
 Dates**

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

**Dates subject to change.**  
**Be sure to check each month!**  
 The November meeting is the Friday 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

**August 2024**

Sun	Mon	Tue	Wed	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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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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