



**SLABS & CABS**  
**OFFICIAL BULLETIN OF THE**  
**GULF COAST GEM & MINERAL SOCIETY**

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**Volume 49**

**Number 10**

**October 2010**

**Next Meetings**

Board Meeting  
5 October 2010  
Downtown Library  
6:00 PM– 9:00 PM

General meeting  
19 October 2010

**Regular Meeting**  
Watergarden Room  
Corpus Christi  
Museum of Science & History  
1900 No. chaparral  
Corpus Christi, Texas  
6:30 PM

**Membership Fees for 2010**

Membership dues for 2010 are due in January 2010  
We have 4 types of memberships and they are as follows:  
Single \$ 15.00  
Spousal \$ 20.00  
Junior \$ 5.00  
This is for any member from the age of 6-17 years Of age  
Honorary  
Sandra Hinkle , Membership Chairlady



**Fossilized Clam Shell**  
**65 Million Years Old**  
**Sierra Aguja**  
**South Brewster County Texas**

**INSIDE**

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**We are on-line**

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

Thanks to Chris Davis of Spurfire and Owen Hopkins  
For getting us back up and running! Take a look.

### 5 October 2010 Board Meeting of the Gulf Coast Gem & Mineral Society

The meeting was called to order by president Kevin Schleicher at 6:41 pm. Present were board members Kevin Schleicher, Art Worley, Kyle Hinkle, Shanda Hinkle, Gene Schade, Mark Wolbrink, Donna Grimes and Suzy Nick. One member present, Joe Grimes

The Membership Report was given by Shanda Hinkle and we have 77 Regular Members, 10 Junior Members and 9 Honoree Members.

There were no minutes for the board meeting or the General Meeting in September. Kyle Hinkle will resend the Board Minutes and Gene Schade will send the General Meeting minutes to Art Worley to publish in the newsletter.

Art Worley is having trouble with his computer and the newsletter will be published shortly.

The Treasure's Report was given by Gene Schade. Kyle Hinkle made a motion to accept the report as given and Suzy Nick seconded it. The motion was approved.

The Shop Report was given by Mark Wolbrink. The shop has been very busy. He made minor repairs to equipment that was damaged and it is now working correctly. He replaced the trim saw blade. There is some trouble with the big saw since it will run and then stop because it has become over heated. Some possible solutions were discussed.

At the last General Meeting Johnny French was named as Interim Field Trip Coordinator. Johnny has sent several E-mails about a field trip to the Walker Ranch in West Texas. More information will be given at the General Meeting.

The Show Report was given by Donna Grimes. Our ad for the show has always been in the Local Section. Last year, another show was advertised in the front section and she asked if we want our ad in the front or local section. There most likely will be an additional charge for the front section. Donna will find out the charge and let the Board know at the next meeting.

The Education Report was given by Kyle Hinkle. Kyle has ordered 2 DVDs for the meetings when we don't have a speaker. He would like to publish a list of guest speakers and/or DVDs for the meetings in advance and is working on getting this completed.

There was no Federation News.

Old business was the nomination committee for officers for 2011. Donna Grimes was chairperson for this committee and said all existing officers were qualified to serve another term and they had all agreed to run for 2011. This will be presented to the General Meeting in October and any other nominations will be taken from the club membership. This will be voted on in the November meeting and they will be installed at the December Meeting.

A long discussion was held on how to increase our membership and how to get more children interested in our club. Both the Midland-Odessa and Lubbock Clubs have increased their memberships. Our president Kevin Schleicher will contact the presidents of those clubs to see if there is anything we can use to increase our membership.

New business was from Art Worley who will need someone to take over the newsletter for a couple of months while he has surgery.

Kyle Hinkle made a motion to adjourn the meeting and Mark Wolberg seconded it. The meeting was adjourned at 8:06pm.

Respectively Submitted by  
Suzy Nick



**Big Eye Pom Pom Fossil Green Moss Stalicites  
Sierra Aguja South Brewster County Texas**



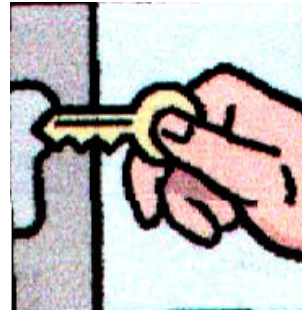
**GCGMS Lapidary Shop Rules**

1. The lapidary shop equipment may not be used by anyone who has not signed a liability waiver.
2. Shop equipment use flat fee is \$2.00 per hour. Sign in on arrival.  
Pay Supervisor and sign out before leaving the shop.
3. "Open shop" hours are to be used only by those who have taken the cabochon class or have shown proficiency on the equipment.
4. All children under the age of 17 must be accompanied by an adult trained on the use of the equipment.
5. Supervisor must inspect rock "set-up" prior to anyone starting slab saw.
6. Long hair should be tied back, loose sleeve should be secured, and safety procedures followed.
7. Safety glasses are recommended and are the responsibility of the individual. Some are furnished by the GCGMS, or you may bring your own.
8. The last person to use a piece of equipment before the shop closes is responsible for cleaning that piece of equipment and the work area. This may include tabletop, sponges, aprons, catch trays, etc.
9. Shop Supervisor is the final authority on shop rules and usage.

Revised May 2009



**Aragonite Pseudomorphs  
Sierra Aguja  
South Brewster County Texas**

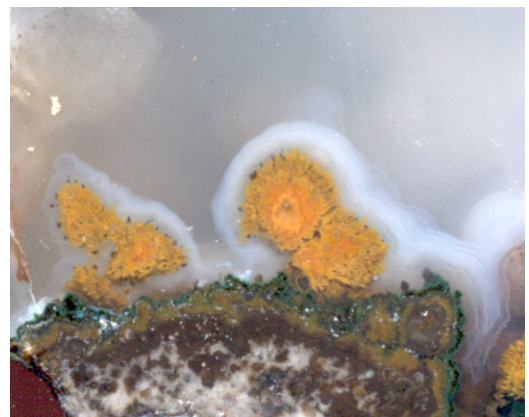


Those with keys to the Lapidary Shop are

Mark Walbrink 361-991-2495 Shop Supervisor  
 Jerrold Simpson—361-851-8788  
 Cell - 361-877-3073  
 Hank Swan—361-993-9861/361-857-2405

Please call one of these when you would like to use the shop. They will not all be available at the same time, and once in a while none of them will be available. Most of the time at least one of them should be able to work out a time and date the shop could be open for you. Remember the club has a lot of good equipment to use. Several different classes are being conducted on Monday evening from 6:00 PM to 9:00 PM. The shop is open during these times for use of the equipment even if you are not involved in a class. Shop is also open Saturday 9:00 Until Noon.

**Any Articles, Minutes are other items not received by Thursday Morning 9:00 am After the Board Meeting. Will Not Be Published in That Months Newsletter The Editor**



**Green Moss Pom Pom Agate  
Sierra Aguja  
South Brewster County Texas**

## Tourmaline October Birthstone Opal

### *Tourmaline or Opal, October's Alternate Birthstones*

If you were born in October, you are one of those people who has a choice for your birthstone. Opal was originally the gem trade's recognized birthstone for October but in 1952 the Jewelry Industry Council suggested that pink tourmaline be an alternate stone to opal. These changes were accepted and approved by the American Gem Society and the National Retail Jewelers Council. Although the original designation for tourmaline was pink tourmaline, the practice has become that many people accept tourmaline of any color for October's birthstone. Tourmaline comes in nearly every shade one can find on a color chart or color wheel---therefore, tourmaline has become a popular stone in recent years.

Tourmaline derives its name from the Singalese word *tourmali*, which means "mixed stones." Ruby, sapphire, peridot and spinel have all been found together in the gravel of localities such as Sri Lanka and Burma. The early gem traders who had no idea about the optical and physical properties of gems, other than color, probably called red tourmaline ruby; blue tourmaline sapphire; green tourmaline peridot, etc. Modern gem testing equipment has enabled gemologists to differentiate between all of these stones and it was with development of optical gem testing techniques that the gemological properties of fine tourmaline were made known to the world.

Tourmaline is a complex silicate of Boron and Aluminum. Many different elements are able to find a spot for substitution in the crystal lattice and this accounts for all of the different colors of tourmaline that are available to the gem fancier. It would be difficult to write down a neat and easy formula for tourmaline because of the numerous possible substitutions that can take place within the crystal. In the past names such as *rubellite* and *indicolite* were used for red and blue tourmaline respectively. Since the mineral suffix *ite* implies each are a different mineral, it is now preferable to use the terms red tourmaline and blue tourmaline, etc.

Tourmaline's many color variations make it an example for another kind of mis-labeling. For example, one will sometimes see the usage of names such as *Brazilian sapphire* or *Brazilian emerald* for blue and green tourmaline respectively. Such names confuse the potential buyer into thinking the stone is something other than what it really is.

Tourmaline is fairly easy to identify. Finished stones have a soft luster and the two refractive indexes, 1.620 and 1.640 allow for some doubling of back facets and inclusions in the stone. Tourmaline may also show some long tubes that are oriented parallel to the *c*-axis of the crystal. The typical tourmaline crystal is long and sub-triangular in cross section and the outer surface is usually deeply striated. The lapidary must orient the stone such that the table of the stone is parallel to the *c*-axis of the crystal. Tourmaline absorbs light along the *c*-axis of the crystal and if the table is perpendicular to that axis, the stone will develop a very dark body color. If you have a transparent tourmaline crystal available, look at it from directions that are perpendicular to the *c*-axis and parallel to the *c*-axis. The effect will be striking.

Tourmaline may show a couple of different phenomena: *watermelon tourmaline* and *particolor tourmaline*. In the former, the outer layer of the crystal is green and the inner part of the crystal is red and there may be small black inclusions that resemble black seeds similar to a cross section of watermelon. The distinction is now used for any tourmaline that has an outer layer of the crystal with one color and an interior of another. These color variations may be brought about by varying concentrations of metallic cations that were favored in crystallization of tourmaline from a solution or melt.

In the United States tourmaline has been found in Maine, North Carolina, and California. The Black Hills of South Dakota have produced some finely colored blue stones that have been rarely used for gems because of small size and many tiny fractures. Brazil has produced many fine tourmaline crystals of many colors that have found use both as cut gems and as museum specimens. Namibia, Nigeria and Zambia in Africa have produced some fine gem tourmaline in recent years.

**Continued on Next Page**

**Birthstone Continued from Previous Page****Coming Events**

9-10--FORT WORTH, TEXAS: Show and sale, "LMRA Rockfest Fort Worth"; Lockheed Martin Recreation Assn.; LMRA Trinity River Park, 3400 Bryant Irvin Rd.; Sat. 10-5, Sun. 10-5; free admission; rocks, flint, gems, minerals; contact Steve Shearin, 860 Stafford Station Dr., Saginaw, TX 76131, (817) 777-1997; e-mail: [steve.l.shearin@lmco.com](mailto:steve.l.shearin@lmco.com); Web site: [www.facebook.com/profile.php?id=100001244652268&v=app\\_2309869772#!/group.php?gid=132202050142082](http://www.facebook.com/profile.php?id=100001244652268&v=app_2309869772#!/group.php?gid=132202050142082)

15-17--VICTORIA, TEXAS: Show; Victoria Gem & Mineral Society; Victoria Community Center, 2905 E. North St.; Fri. 9-6, Sat. 10-6, Sun. 10-5; adults \$4; contact Patty Shay, 306 W. Houston, Refugio, TX 78377, (361) 526-2936; e-mail: [pshay4@yahoo.com](mailto:pshay4@yahoo.com); Web site: [www.victoriagemandmineral.com](http://www.victoriagemandmineral.com)

22-24--AUSTIN, TEXAS: Show, "Gem Capers 2010"; Austin Gem & Mineral Society; Palmer Events Center, 900 Barton Springs Rd.; Fri. 9-5, Sat. 10-6, Sun. 10-5; adults \$5 (all three days), seniors \$4, children 13-18 \$1, 6-12 50 cents, 5 and under free; more than 30 vendors, displays, Rock Food Table, touch table of rocks and fossils, demonstrations of cabbing, wire wrapping, faceting, polymer clay, fossil cleaning, kids' day Fri., Wheel of Fortune, Gem Mine, jewelry making, rocks that glow in the dark, grand prize; contact Brian Wetzig, 6719 Burnet Ln., Austin, TX 78757, (512) 458-9546; e-mail: [ShowChairman@AustinGemAndMineral.org](mailto:ShowChairman@AustinGemAndMineral.org); Web site: [www.GemCapers.com](http://www.GemCapers.com)

6-7--AMARILLO, TEXAS: Annual show; Golden Spread Gem & Mineral Society; Amarillo Civic Center, 401 S. Buchanan; Sat. 10-6, Sun. 10-5; admission \$2; jewelry, gems, minerals, fossils, metal detectors, working demonstrations; contact Roy or Wanda Finley, 9170 FM 1151, Claude, TX 79019, (806) 944-5464; e-mail: [finfran@midplains.coop](mailto:finfran@midplains.coop)



**Pom Pom Agate  
Sierra Aguja  
South Brewster County Texas**

**Birthstone Opal Continued from Previous** opal but newer sources have been discovered in Brazil, Gua-

## October Birthstone, Opal

Compiled by Roger K. Pabian, Research Geologist, Emeritus  
School of Natural Resources, UNL

### *Opal or Tourmaline, October's Alternate Birthstones*

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There is a superstition that suggests that it is bad luck to wear an opal if opal is not your birthstone. This superstition probably is not rooted deep in history but only goes back to the early or middle 19th Century. It may even have been an invention of Sir Walter Scott in the novel *Anne of Geierstein*, published in 1831. It seems that Anne had an opal that reflected her moods: it shone red when she was angry, blue when she was sad and green when she was happy. When Anne died, the opal faded and lost all of its color. The last observation may have actually been based on a fact: opals can deteriorate and change from a highly colorful, somewhat glassy stone to a rather colorless mass of a chalky silicon dioxide. That is because opals are unstable and are just one of the phases through which gel-like silica ( $\text{SiO}_2$ ) can pass on its way to becoming stable crystalline quartz.

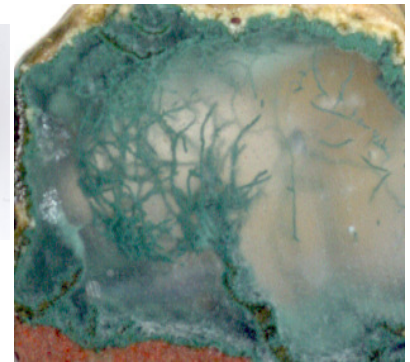
Silicon dioxide,  $\text{SiO}_2$ , the same elements that make up quartz is also the constituent of opal. The formula of opal is often written as either  $\text{SiO}_2 \cdot n\text{H}_2\text{O}$  or  $\text{SiO}_2 + n\text{H}_2\text{O}$ . Neither formula is really correct. The water is neither a water of hydration as the first formula suggests nor is it unattached to the silica as the second formula might imply. Researchers in Germany have produced a detailed nomenclature of micro- and non-crystalline silica minerals. They listed seven species of opal and characterized the microstructure of each. Fibrous microcrystalline quartz, microcrystalline opals and non-crystalline opals all showed diffuse X-ray small angle scattering that were due to inhomogeneous distributions of water in their microstructures.

Precious opal, or opal with a play of color. The play of color is caused by diffraction of light by the ordered arrangement of closely packed microscopic silica spheres with water enriched spaces between them. The spheres are arranged in octahedrons (base to base pyramids). When the packing of the silica spheres becomes faulted, the striations produce colors that can be seen in reflected light. Play of color is sometimes erroneously called "fire." The term "fire opal" should be used to describe opals with a red body color; they may or may not show play of colors.

Opal is neither very hard (5 1/2 to 6 1/2 on a scale of 10) nor very tough. It has a conchoidal to splintery fracture and is often very brittle. The play colors from the stone can occupy almost any wavelength in the visible spectrum but red and orange are more often preferred than yellow, blue or green. The body color of the opal may be white or tan or bluish. The finest opals have an even distribution of colors in fairly large splotches; pinpoints of light are less desirable. Gray or brown undertones detract from the stone. Some rare opals may show chatoyancy and produce a very fine eye and such stones are desirable even where play of color is insignificant.

Solid opals are the most highly preferred stones but the play of color often is confined to thin layers of horizontally banded opal. Stones called doublets (a thin opal/clear quartz layer) or triplets (a colored back/opal/clear quartz layer) account for many of the opals we see today. Some examples of doublets with opal caps with sodalite backs that produce a blue body color are known. Since opals are not very tough, it is best that ring stones or stones that will be making contact with solid objects be doublets or triplets.

Old World sources for opal were Czechoslovakia and Hungary. Many important opal fields were discovered in New South Wales, South Australia, and Queensland in Australia in the late 19th Century. These fields still produce much of the world's



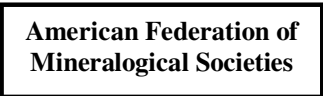

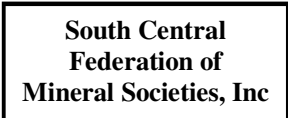

**Pom Pom Agate  
Sierra Aguja  
South Brewster County  
Texas**

**Green Moss Agate  
Sierra Aguja  
South Brewster County Texas**




**Green Moss and Small Pom Pom  
Sierra Aguja South Brewster County Texas**

**GULF COAST GEM & MINERAL SOCIETY, INC.**  
**P.O. Box 60781 Corpus Christi, TX 78466**


|                            |   |   |  |   |  |
|----------------------------|---|---|--|---|--|
| <b>MEMBER of</b>           |    |    |                                      |    |  |
|                            | <b>Meeting</b>  | Held the third Tuesday of each month at 6:30 pm at the museum of Science & History<br>1900 North Chaparral September through May, and at the Lapidary Shop 3933 Timon Blvd., Corpus Christi TX for June through August. |  |   |  |
|                            | <b>Membership Fees</b>  | Individual \$15.00 Couples \$20.00 Junior (under 17) \$5.00   |  |   |  |
|                            | <b>2010 Officers</b>  | President: Kevin Schleicher<br>Vice President: Kyle Hinkle<br>Past President: Suzy Nick   |  | Secretary: Suzy Nick<br>Treasurer: Gene Schade<br>gene@casadeoro.net  |  |
|                            | <b>Board Appointees</b>   | Membership: Sandra Hinkle<br>Education: Owen Hopkins<br>Librarian: Linda Simpson<br>Treasurer Gene Schade<br>Show Chair: Jerrold Simpson  |  | Show Publicity: Donna Grimes<br>Shop coordinator: Mark Wolbrink<br>Field Trip Coordinator: Mike McCraw<br>Dealer Chair: Jerrold Simpson |  |
| <b>Standing Committies</b> | Shop coordinator: Mark Wolbrink<br>Field Trip Coordinator: Johnny French<br>Federation Liaison: Linda Simpson<br>Historiorn: Frances Marten<br>Librarian Linda Simpson<br>Communications: Suzy Nick<br>Refreshment Hostess; Letty Rodriguez |   | Bulletin Editor; Art Worley<br>Webmaster: Art Worley<br>E-mail artleew@agates123.com<br>Door Prizes; Gilbert Rodriguez |   |  |

**Slabs & Cabs**  
 Art Worley  
 2561 Raintree Trail  
 Ingleside, TX 78362

**Slabs & Cabs Awards**  
**Small Bulletins**  
 2003 4th place SCFMS



**AFMS**  
**TROPHY**



**BULLETIN**  
**AWARD**  
**SCMS**

**PUBLICATION**  
 2nd 2002                      2001 1st  
 2001-4th place AFMS  
 2000 9th place SCFMS  
 1999-8th place SCFMS  
 1999- 9th place (new editor) AFMS

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