



**October 2009
Volume 48
Number 10**

Next Meetings
Board Meeting
6 October 2009
Main Library 6:30 PM

General meeting
17 November 2009
Watergarden Room
Corpus Christi
Museum of Science &
History
1900 No. chaparral
6:30 PM

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

**P.O. BOX 1817
CORPUS CHRISTI, TEXAS 78403-1817**

**Art Worley Editor
361-345-4425
2561 Raintree Trail
Ingleside, Texas 78362
artleew@agates123.com**

Membership Fees for 2019

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
Dona Grimes, Membership chair lady



**Agate
Usan Angus Scotland
Agate & Picture By Art Worley**

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We are on-line

www.gcgms.org

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

Minutes of the September 2009 Board Meeting of the Gulf Coast Gem & Mineral Society

Held 09/01/09 at the Corpus Christi Main Library. The meeting was called to order at 6:33 p.m.

Board members in attendance were Gene Schade, Dick Cline, Suzy Nick, Kevin Schleicher, Donna Grimes, Linda Simpson and Jerrold Simpson. Member Joe Grimes also present.

Membership report – none

Minutes –Jerrold Simpson moved to approve August board meeting minutes and Dick Cline seconded. Approved

Treasurer report –Gene Schade gave treasurers report. Jerrold Simpson move to approve and Dick Cline seconded, Treasurer's report approved.

Shop report – Dick Cline reported that repairs have been completed and the new saw blade is working.

Fieldtrip report – We are looking for locations for more field trips.

Show report –Jerrold Simpson - 15 show dealers have already signed up. A workday is needed at the storage. Donna will handle advertising for the show.

Education – Jerrold Simpson said we need to present the scholarship at an upcoming meeting.

Federation – Bill and Lois Pattillo attended the Federation meeting in Billings, Montana.

Old Business – Bylaws revision continue-Jerrold Simpson proposed an amendment to Article III, §6, to extend the possible number of consecutive years an officer may serve from 2 years to 5 years. Donna seconded, approved. The proposed amendment will be published in the September bulletin and voted on in the September meeting.

Two members of the nominating committee were appointed. Jerrold Simpson was appointed by President Suzy Nick and Kevin Schleicher was appointed by the board, on motion by Dick Cline, second by Jerrold Simpson.

New Business –

Motion to adjourn by Dick Cline, second by Linda Simpson, meeting adjourned at 8:13 p.m.

Respectfully submitted,
Kevin Schleicher,
Secretary GCGMS 2008-2009

Minutes of the September Meeting of the Gulf Coast Gem & Mineral Society

Held 9/15/09 at the Corpus Christi Museum of Science and History.

Suzy called the meeting to order at 7:08 p.m.

Membership – Kevin Schleicher reported that there are 118 members, 87 regular, 8 honorary, and 23 junior

Minutes – May regular meeting and August Board Meeting minutes were approved upon motion by Gene Schade, second by Dick Cline.

Treasurer report – Given by Gene Schade, Jerrold Simpson moved to approve, second by Linda Simpson, motion approved.

Shop report – Dick Cline stated that everything is working in the shop. More people need to come out. Shop will be open Saturday 9:00 am-12:00 and Monday 6:00-9:00 pm. Work is needed on the display cases.

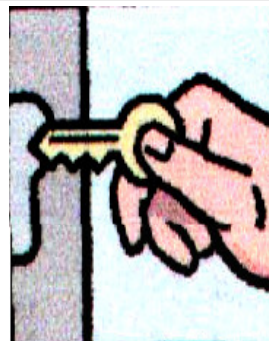
Fieldtrip report –Mike McCraw said we need ideas for field trips.

Continued on Page 3

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



Those with keys to the Lapidary Shop are

Mike McCraw—361-993-6425

Jerrold Simpson—361-851-8788

Cell - 361-877-3073

Hank Swan—361-993-9861/361-857-2405

Richard Cline—361-853-8084

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.



**Path of Condi Agate
Angus Scotland
Agate & Picture By
Art Worley**

October Birthstone Opal

Compiled by Roger K. Pabian, Research Geologist, Emeritus School of Natural Resources, UNL
Opal or Tourmaline, October's Alternate Birthstones

Opal or Tourmaline, 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.

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 (SiO_2) can pass on its way to becoming stable crystalline quartz.

Silicon dioxide, 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; pin-points 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.

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Show Dates October 2009

8-10 - MOUNT IDA, AR: Annual World Championship Quartz Crystals Digging Contest; Mount Ida Area Chamber of Commerce; Montgomery County Fairgrounds, Fairgrounds Rd; Thu 8-3, Fri 9-3, Sat 9-3; Adults \$75/\$90; keep all you find, meet other miners, maybe even win a prize, an international event; contact Maureen Walther, Mount Ida Area Chamber of Commerce, Mount Ida, AR 71957 (870) 867-2723; e-mail: director@mountidachamber.com; Website: www.mountidachamber.com

9-11 - MOUNT IDA, AR: Quartz, Quiltz and Craftz Festival; Mount Ida Area Chamber of Commerce; Montgomery County Fairgrounds, Fairgrounds Rd; Fri 8-6, Sat 9-6, Sun 10-4; Free Admission; Children's dig Sat, fun for all, crystals, crystals and more crystals; contact Maureen Walther, Mount Ida Area Chamber of Commerce, Mount Ida, AR 71957 (870) 867-2723; e-mail: director@mountidachamber.com, Website: www.mountidachamber.com

10-11 - TEMPLE, TX: Tri-City G&M Society South Central Federation Show; Frank Mayborn Civic & Convention Center, 3303 N Third St; Sat 9-6, Sun 10-5; Adults \$2, Children under 12 free; faceting demonstrations, grab bags, treasure wheel, silent auction, displays; contact Leslie O Connally, 875 N Wheat Rd, Belton, TX 76513, (254) 939-7015; e-mail: lconnally@clearwire.net

Oct 16-18—VICTORIA, TX: Show; Victoria Gem & Mineral Society; Victoria Community Center, 2905 E. North St.; Fri. 9-6, Sat. 10-6, Sun. 10-5; adults \$3, children free with adults; jewelry-making demonstrations, gemstone identification, wheel of fortune, jewelry, fossils, minerals, geodes, crystals, jewelry findings, gemstones, lapidary equipment and supplies; contact Ken Lemke, 3417 Coletoville Rd., Victoria, TX 77905, (361) 575-5350; email: klemke@vctx.org

Oct 23-25—AUSTIN, TX: Annual show; Austin Gem & Mineral Society; Palmer Events Center, 900 Barton Springs Rd.; Fri.9-5, Sat. 10-6, Sun. 10-5; adults \$5, seniors \$4, students (13-18) \$1; children (12 and under) 50 cents; more than 30 dealers, gems, jewelry, fossils, meteorites, art demonstrations, "Youth Education Day," door prizes; contact Brian Wetzig, 6719 Burnet Ln., Austin, TX 78757, (512) 458-9546; email: general@austingemandmineral.org; Web site: www.austingemandmineral.org

Oct 30-Nov 1—GLEN ROSE, TX: "Fossilmania" fossil show; Paleontological Society of Austin, and Dallas Paleontological Society; Somervell County Expo Center, 202 Gibbs Blvd (off hwy 144/67 just east of where they merge); For more information contact Bill Morgan (after 8:00pm) 210-492-9163 or

November 2009

7-8 - AMARILLO, TX: Golden Spread G&M Society Show; Amarillo Civic Center, 401 S Buchanan; Sat 10-6, Sun 10-5; dealers, demonstrations, exhibits, door prizes, wheel of fortune, silent auction, 43-pound sapphire display; contact Dee Hawkins, 108 S Polk St, Amarillo, TX 79101, (806) 681-0960

7-8 - OKLAHOMA CITY, OK: Oklahoma G&M Society Show, "River of Gems"; OK State Fair Park, 3001 General Pershing Blvd; Sat 9-6, Sun 9-5; Adults \$6, Children 12 and under, Boy/Girl Scouts/Campfire members in uniform Free with Adult; museum and member exhibits, dealers, minerals, cabochons, faceted stones, findings, demonstrations, wire wrapping, silversmithing, knapping; contact Arlene Burkhalter, 1267 Kingbird Lane, Choctaw, OK 73020, (405) 732-0808; e-mail: maburkhalter@cox.net

13-15 - HUMBLE, TX: Houston G&M Society 56th Annual Show; Humble Civic Center, 8233 Will Clayton Pkwy; Fri & Sat 9-6, Sun 10-5; Adults \$7, Seniors & Students \$6, Children under 12 free; displays, gems, minerals, fossils, fluorescent rocks display; demonstrations, jewelry making, beading, lapidary, children's activities, Scout Merit badge program, famous "Dino Dig", jewelry, minerals, fossils; contact Patty Scott, 14906 Summerland Circle, Cypress, TX 77429, (281) 373-1578; e-mail: nigels_mom@sbcglobal.net;

Website: www.hgms.org

13-15 - TULSA, OK: Retail and wholesale show; Bead Renaissance Shows; Expo Square, Exchange Ctr, 4145 E 21st St; Fri & Sat 10-6, Sun 10-5; Free admission; bead artists, dealers, ancient, vintage, contemporary and designer beads, jewelry, tools, books; contact J&J Promotions LLC, PO Box 420, Williamsburg, NM 87942, (575) 894-1293; e-mail: beadshow@aol.com; Website: www.beadshow.com

13-15 - HOUSTON, TX: Houston G&M Society Presents 56th Annual HGMS Gem, Jewelry, Mineral, and Fossil Show Fri & Sat 9-6, Sun 10-5 Humble Civic Center, 8233 Will Clayton Parkway, Humble, TX, 5 miles east of Bush International Airport, 1 mile east of Hwy 59

21-22 - MESQUITE, TX: Dallas G&M Society presents 52nd Annual Dallas Gem & Mineral Show: The World of Rocks; Sat 10-6, Sun 10-5; 1818 Rodeo Drive, Mesquite, TX; contact Darrell Harrison, PO Box 742033, Dallas, TX 75374-2033; email: Bravo1bravo@sbcglobal.net; Website: www.dallasgemandmineralshow.com

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October Birthstone Opal

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 opal but newer sources have been discovered in Brazil, Guatemala, Honduras, and Mexico. In the United States, opal has been found and commercially worked in Nevada, Oregon and Idaho. Common opal (stones without play of color) often have dendritic patterns or nice body colors and these are often called opalite. Strangely, gem opals were not discovered on the African Continent until quite recently when material was reported from Tanzania and Ethiopia. Some synthetic opal is available as both rough and cut stones and some laboratory made glass products have been fairly good opal substitutes.



Fire opal with deep red body color, Mexico.



Opal solids, Queensland, Australia.



Opal solids and doublets, Queensland, Australia.



Solid Black Opals Queensland Australia

Crinoids



The Crinoidea includes the most exquisite members of the Echinodermata, far more stunning as a rule than any plodding urchin or commonplace starfish (just to let you know at the outset where my allegiance lies). With a family tree rooted in almost 500 million years of history, they are the senior group of living echinoderms. Their typically echinoderm features include:

5-sided adult symmetry derived from a bilateral larva.

Water vascular system - a network of coelomic canals and reservoirs that may serve in respiration, circulation, feeding and locomotion, and that terminates in external **podia**, or tube feet.

Calcareous endoskeleton consisting of individual plates (**ossicles**) with a meshwork fine structure (**stereom**), each formed from a single high-magnesium calcite crystal.

Mutable collagenous (or catch connective) tissue that can alter between rigid and flaccid states under neuronal control.

Deuterostome, enterocoelous embryonic development with radial cleavage (Brusca and Brusca 1990).

Features that distinguish crinoids from other echinoderms are:

Two to four circlets of ossicles (never 4 in living species) fused together as a cup- or box-like **calyx** that contains or supports the viscera.

Five flexible, usually branched and featherlike **rays**—extensions of the body wall supported by skeletal plates and bearing food-collecting grooves and extensions of the water-vascular, nervous, haemal and reproductive systems.

The oral surface contains both mouth and anus and orients away from the substrate.

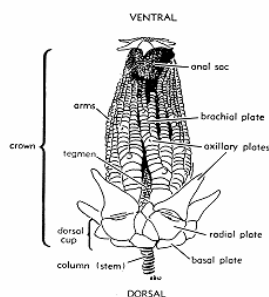
Most of the several thousand known fossil crinoids and several dozen modern deep-water species bear a stalk on the side of the body opposite the mouth (**aboral**) and are known as **sea lilies**. Imagine a feathery starfish on a stick. (Thanks, Conrad.) Modern stalked crinoids live almost entirely in waters deeper than 200 m,

Continued on Page 8

although *Metacrinus rotundus* occurs in 100 m off Japan (Oji 1986). Most living crinoids, however, shed their stalk at an early growth stage. Called **feather stars** or **comatulids**, they retain only the topmost stalk segment, which usually bears numerous hooks for anchoring the animal. While stalked crinoids have a fossil record dating to the Early Ordovician (Guensburg & Sprinkle 2003), comatulids first appeared during the Jurassic and have radiated substantially since (Meyer and Macurda 1977). They exhibit a morphological plasticity that generates major taxonomic difficulties and suggests that their diversification continues. Comatulids occur throughout modern seas (except the Black and Baltic) from the intertidal zone to abyssal depths. Currently, about 540 nominal species exist in 142 genera and 18 families. By contrast, 95 stalked species have been described (Roux et al. 2002).



Photo: David Clague



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Continued from Page 8

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Messing, C.G. and Dearborn, J.H. 1990. Marine Flora and Fauna of the Northeastern United States, Echinodermata: Crinoidea. NOAA Technical Report NMFS 91.

Meyer, D.L. and Macurda, D.B., Jr. 1977. Adaptive radiation of the comatulid crinoids. *Paleobiology* 3:74-82.

Oji, T. 1986. Skeletal variation related to arm regeneration in *Metacrinus* and *Saracrinus*, Recent stalked crinoids. *Lethaia* 19:355-360.

Roux, M., Messing, C.G. & Améziane, N. 2002. Artificial keys to the genera of living stalked crinoids (Echinodermata). *Bulletin of Marine Science* 70(3):799-830.the oral surface.

For More information on Crinoids Go To

<http://www.nova.edu/ocean/messing/crinoids/index.html#>

This Website Is Quite Informative.

Continued From Page2

Education Report-Mike Mendenhall has resigned, a new VP is needed..

Show report – Jerrold Simpson reported that about 17 dealers have signed up. All members are encouraged to assemble displays for next years show. Cases will be available.

Federation Report – no report

Old Business – None

New Business – Mike McCraw was appointed by the membership to the nomination committee, after motion by Linda Simpson, second by Gene Schade. A proposed revision to the bylaws was approved in its first vote by the membership, motion by Suzy Nick, second by Jerrold Simpson, which amends Article III, §6, to extend the possible number of consecutive years an officer may serve from 2 years to 5 years.

Certificates of Appreciation were presented to Art Worley and Dick Cline for their dedication and service to the club.

Motion to Adjourn by Kevin Schleicher, second by Jerrold Simpson. Approved.

Raffle Winners-Gene Schade won cut Agate, Kevin Schleicher won Agate Brooch.

Auction –Brought in \$21.00 dollars

Green Garnet Brooch-won by Suzy Nick



2. Amethyst crystals-won by Linda Simpson

Program Highlights

Program-Gene Schade gave a program on precious metals, including mining, refining and marketing


Respectfully submitted,
Kevin Schleicher
Secretary GCGMS 2009

**GULF COAST GEM & MINERAL SOCIETY, INC.
P.O. BOX 1817, CORPUS CHRISTI, TEXAS 78403-1817**


MEMBER	American Federation of Mineralogical Societies		South Central Federation of Mineral Societies, Inc	
Meeting	Held the third Tuesday of each month at 6:30 pm at the museum of Science & History 1900 North Chaparral September through May, and at the Lapidary Shop 3933 Timon Blvd., Corpus Christi TX for June through August.			
Membership Fees	Individual \$15.00 Couples \$20.00 Junior (under 17) \$5.00			
2009 Officers	President: Suzy Nick Vice President: Mike Mendenhall Past President: Mike McGraw	Secretary: Kevin Schleicher Treasurer: Gene Schade gene@casadeoro.net		
Board Appointees	Membership: Donna Grimes Education: Owen Hopkins Librarian: Linda Simpson Audit: Gene Schade	Show Chair: Jerrold Simpson Shop coordinator: Richard Cline Field Trip Coordinator: Mike McCraw Membership chairperson: Donna Grimes		
Standing Committees	Shop coordinator: Richard Cline Field Trip Coordinator: Mike McCraw Membership chairperson: Donna Grimes Federation Liaison: Bill Pattilo Historiorn: Frances Marten Communications: Suzy Nick Refreshment Hostess: Letty Rodriguez	Dealer Chair: Jerrold Simpson Bulletin Editor: Art Worley Webmaster: Art Worley E-mail artleew@agates123.com Door Prizes: Gilbert Rodriguez		

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

Slabs & Cabs Awards
Small Bulletins
2003 4th place



**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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