



**September 2009
Volume 48
Number 9**

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

General meeting
15 September 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**

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CORPUS CHRISTI, TEXAS 78403-1817**

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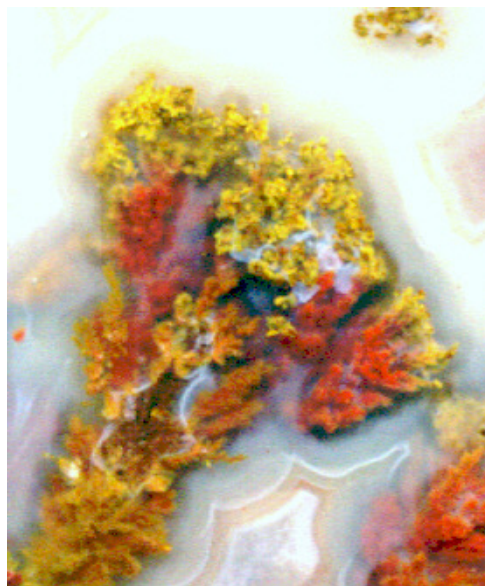
Membership Fees for 2010

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
Dona Grimes, Membership chair lady

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**Gold Plume
Walker Ranch
Brewster County
Texas
Agate & Picture
By Art Worley**



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 August 2009 Board Meeting of the Gulf Coast Gem & Mineral Society

Held 08/03/09 at the Corpus Christi Main Library. The meeting was called to order at 6:55 p.m.

Board members in attendance were Gene Schade, Dick Cline, Suzy Nick, Kevin Schleicher, and Jerrold Simpson.

Membership report – none

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

Treasurer report –Gene Schade gave treasurers report. Kevin Schleicher moved and Jerrold Simpson seconded, Treasurer's report approved.

Shop report – Dick Cline reported that another new saw blade has been ordered. Jerrold Simpson reported wire wrapping class was held on Saturday.

Fieldtrip report – none

Show report –Jerrold Simpson - 5 show dealers have already signed up. A workday is needed at the storage.

Education – Jerrold Simpson will chair a scholarship committee..

Federation – Linda Simpson has been asked to be Region 3 Vice-President for the South Central Federation. She will be more active in the federation after she retires.

Old Business – Bylaws revision-board members still need to review and bring suggestions to next meeting.

New Business – Officers need to be selected for next year.

Motion to adjourn by Dick Cline, second by Jerrold Simpson, meeting adjourned at 8:05 p.m.

Respectfully submitted,
Kevin Schleicher,
Secretary GCGMS 2008-2009

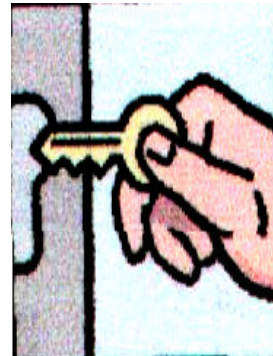


**Arizona Picture Wood
Agate & Picture By
Art Worley**

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



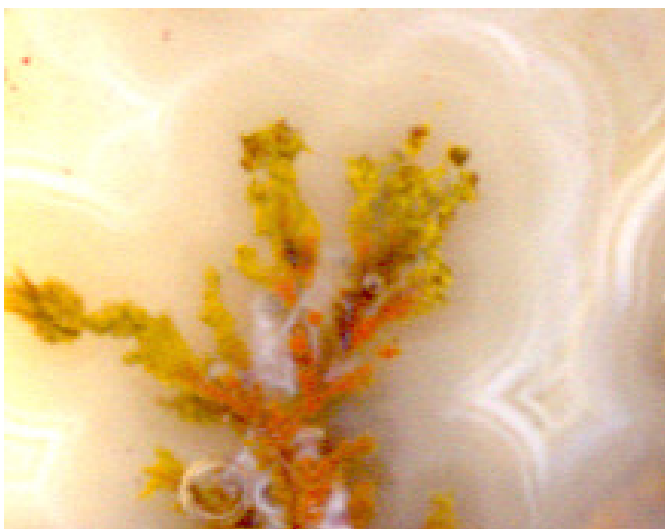
Those with keys to the Lapidary Shop are
Mike McCraw—361-993-6425
Jerrold Simpson—361-851-8788
Cell - 361-877-3073
Hank Swan—361-993-9861/361-857-2405
Richard Cline—361-853-8084

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.



**Gold Plume Agate
Walker Ranch
Brewster County
Texas
Agate & Picture By
Art Worley**

September Birthstone Sapphire

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

If you were born in the month of September, sapphire is your birthstone. Sapphire is a variety of corundum or aluminum oxide and Al_2O_3 gives its chemical formula--that is, two parts of Aluminum to three parts of Oxygen. The axes are arranged in a hexagonal crystal, a crystal with four axes, three of which are of equal length and intersect at 60 degree angles, and one of which is unequal in length to the others and intersects the others at a right angle.

Sapphire's companion variety of corundum is ruby. Rubies are red to orange-red to purplish red. If corundum is pink, the United States Federal Trade Commission requires that the stone be sold as a sapphire. In the United States "pink rubies" are eliminated from the gem trade by legal definition. In the simplest terms, corundum that is any color other than red is a sapphire. Except for color, all of the other physical and optical properties of sapphire are identical to those of ruby and you are referred to the ruby page for these data.

Supply and demand has dictated that cornflower blue sapphires are the most expensive. These stones are rare and the finest examples come from Kashmir, a mountainous area in northern India on the Pakistan border. Geographic isolation, political instability and high demand all combines to make these stones very expensive.

Sapphires have been found in many other places in the world but few have attained the desirability of the Kashmir stones. In the United States, the Yogo Gulch area in Montana has historically produced some fine sapphires but few of these attain the size of the fine Kashmir gems. Labor and mining costs have been very high in the United States and the Yogo Gulch mines have generally not been profitable for the operators.

Fee localities are areas where one can pay a set fee for the privilege to extract gems and minerals from mines or claims that are owned by a second party. There are several such fee locality sapphire mines in Montana that have been profitable for both the mine owners and the prospectors who have chosen to pay the fee. The prospector pays a set fee for the right to extract a given weight or volume of sapphire bearing rock or gravel. The fee locality operators allow only the use of hand tools such as picks, shovels, crowbars, gads and wedges. The miner extracts the sapphire bearing rock with the larger tools. This material is sieved through a series of screens that allow the miner to separate and discard the extremely large cobbles as well as the very fine grained sand, silt and clay. The volume the miner pays for is actually only that that is in the size range that will produce the most useable stones. The sieved residue is placed in buckets and toward the end of the day the miners return to the base camp where the operators have electric shake tables that wash the gravel and concentrate the particles with high specific gravity toward the bottom of a pan. A half-ton of gravel may actually yield only a few pounds of sapphire bearing concentrate. When the concentrate is collected in the pan, the pan is removed from the shaker and is dumped over quickly on a flat table. The largest sapphires will normally be on the top of the pile or what was earlier the bottom of the pan. Smaller stones may be found through the rest of the concentrate.

In addition to sapphire being found in Montana, some stones have also been produced from mines in North Carolina where several fee localities exist. Alluvial gravel that covers much of the North American mid-continent has also produced an occasional sapphire for the lucky prospector. In the Old World sapphire has been found in alluvial gravel in Burma and Sri Lanka. Many of the colorless stones from Sri Lanka can be enhanced by heat treatment. There are many other localities of lesser importance throughout the world that have produced sapphires.

Show Dates

September 3–6—Colombo, Sri Lanka. Facets. No. 38 Frankfurt Pl. Info.—Maryanne Kongahage, +94 11 25 97 226, or facets@facetssrilanka.com.

September 5–6—Augusta, ME. Kennebec Rocks and Minerals Club. 20th Annual Rockhoulder's Gem and Mineral Show. National Guard Armory, Western Ave. Info.—207/873-6270.

September 11–13—Winston-Salem, NC. Forsyth Gem & Mineral Club. 38th Annual Show. Coliseum Annex, Dixie Classic Fairgrounds, entrance gate 9. Info.—

W. A. Marion, marina1@yadtel.net.

September 11–13—Greenfield, IN. 500 Earth Sciences Club. 33rd Annual Gem, Mineral & Fossil Show. Hancock Cty. 4-H Fairgrounds. Info.—Don Mahoney, 574/892-5264, or dlnaclu@aol.com.

September 12–13—Walla Walla, WA. Marcus Whitman Gem and Mineral Society Show. Walla Walla Cty. Fairgrounds, 9th and Orchard Sts. Info.—Warren Rood, 509/522-2330, or wwood@coffeycomm.com.

September 16–20—Denver, CO. Martin Zinn Expositions. Colorado Mineral & Fossil Show (Fall). Holiday Inn—Denver Central, 4849 Bannock St. Info.—mz0955@aol.com, or www.mzexpos.com.

September 18–20—Denver, CO. Martin Zinn Expositions. Colorado Fossil Expo. Denver Merchandise Mart Plaza Annex, 451 E. 58th Ave. Info.—mz0955@aol.com, or www.mzexpos.com.

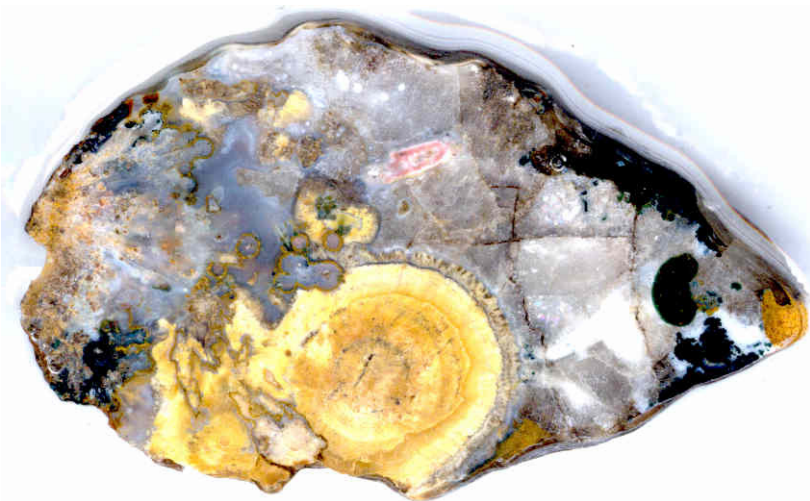
September 19–20—Howell, MI. Livingston Gem and Mineral Society. 36th Annual Gem, Mineral, and Jewelry Show. Hartland Education Support Service Ctr., 9525 Highland Rd. Info.—Chuck Amberger, 248/446-0818 or Marv Martin, 517/521-3135.

September 19–20—Rhinebeck, NY. Mid-Hudson Valley Gem & Mineral Society. Show & Sale. Dutchess Cty. Fairgrounds. Info.—Carolyn Reynard, 845/471-1224, or www.geocities.com/nyrockhounds.

September 26–27—Carmel, CA. Carmel Valley Gem & Mineral Society. 50th Annual Show. Monterey Fairgrounds, 2004 Fairgrounds Rd. Info.—Sky Paxton, 831/262-2492, or sky@familystones.net, or Janis Rovetti, 831/657-1933, or janis12@sbcglobal.net, or www.cvgms.org.

September 26–27—Franklin, NJ. Franklin Mineral Museum. 53rd Annual Franklin–Sterling Hill Mineral, Gem & Jewelry Show. Franklin School, Washington Ave. Info.—Lee Lowell, 973/827-6671

September 26–27—Missoula, MT. Hellgate Mineral Society. 15th Annual Gem, Mineral, and Fossil Show. Ruby's Reserve St. Inn, 4825 N. Reserve St. Info.—Bob Riggs, 406/543-3667.



**Pom Pom Agate
Sierra Aguja
Brewster County
Texas
Picture & Agate
By Art Worley**

September Birthstone Sapphire

Johnson and Coeval (1998, p. 293, 294), citing F. L. Southland and M. I. Garland stated that corundum formed in two distinct geochemical environments. (1) Alkali basalt where partial melting of the lithosphere over rising plumes of the earth's mantle can lead to eruptions of gem bearing lava. (2) Sapphires from Montana formed in crustal metamorphic sources on the basis of low Gallium contents. Sapphire forms in rocks that geologists call undersaturated, or rocks that have no free quartz. Spinel is another gem that forms in undersaturated rocks. Spinel may come in many of the same colors as sapphire and in earlier times many stones that were called sapphire or ruby included both corundum and spinel. Modern gem testing procedures can easily separate the two different minerals.

The colors of sapphires and rubies are controlled by trace elements that are included in the crystal lattice in amounts usually not exceeding about three percent. Some of these are listed in the table below:

- Chromium Oxide, Cr_2O_3 ---**ruby**
- Titanium Oxide, TiO_2 and Ferrous Iron Oxide, Fe_2O_3 ----**blue**
- Ferrous Iron Oxide---**yellow**
- Chromium Oxide, Ferrous Iron Oxide---**orange**
- Ferric Iron Oxide, Fe_3O_4 and Titanium Oxide---**green**
- Chromium Oxide, Ferrous Iron Oxide, Titanium Oxide---**purple**.



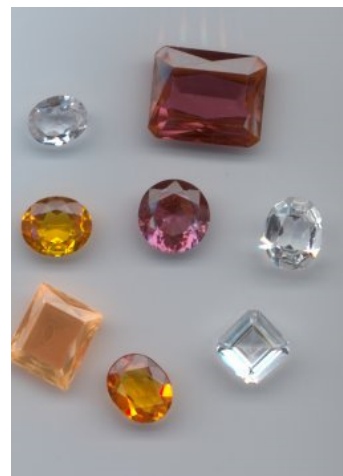
**Natural sapphires,
Burma and Sri Lanka.**



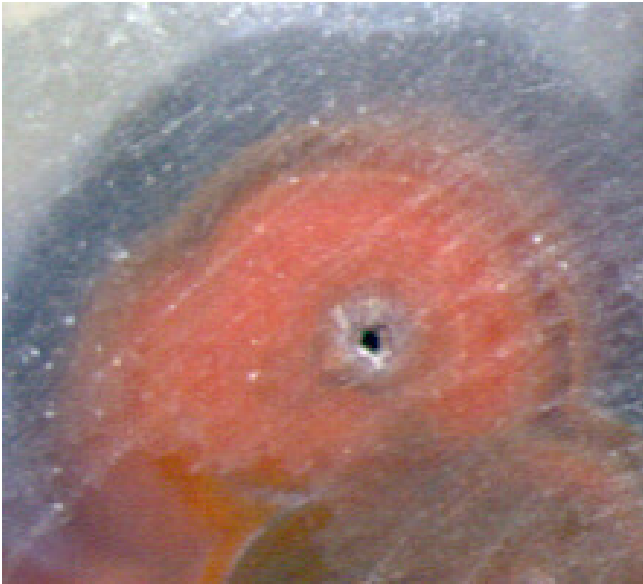
**Sapphire crystals,
Sri Lanka.**



**Blue glass, a common
sapphire substitute.**



Synthetic sapphires.





**Pom Pom Agate
Walker Ranch
Brewster County
Texas
Agate & Picture By
Art Worley**




**Red & Black Plume
Agate
Walker Ranch
Brewster County
Texas
Agate & Picture By
Art Worley**

**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
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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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