



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

Volume 49

Number 2

February 2010

Next Meetings

Board Meeting
2 March 2010
Baptist Church
6:00 PM– 9:00 PM

General meeting
16 January 2010
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 chair lady

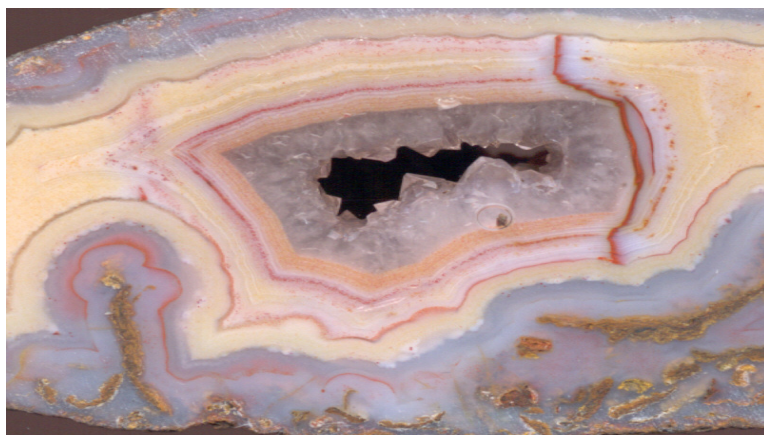
Fieldtrip

Mike McCraw has set a fieldtrip for Saturday, February 20th , weather permitting.

Bad weather alternate date is February 27th . The trip will be to McMullen Co to collect pertified wood. The group will meet at the Walmart parking lot in Calallen at 9:00. The group will then caravan to the site..

INSIDE

Notices Pg 1
Dec Board Minutes Pg 2
Shop Keys & Rules Pg 3
Feb. Birthstone Pg 4-6
Coming Events Pg 5-8
General Board Meeting
Minutes Pg 7
Fossils Pg 9
Info Page Pg 10



Fortification-Moss-Agate-Quartz
Harte Ranch, Near Van Horn, Texas

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 February Board Meeting of the Gulf Coast Gem & Mineral Society

Minutes of the Board Meeting held on 2/12/10 at the Corpus Christi Main Library.

Meeting was called to order at 6:40 by President Kevin Schleicher.

Membership Report – Shanda Hinkle reported that we currently have 40 regular, 8 honorary, and 4 junior members.

Secretary Report - Minutes for January 2010 club meeting and the January Board meeting were published in the Slabs and Cabs. A motion to accept the minutes as published was made by Mike McCraw, seconded by Jerrold Simpson. The motion was approved.

Treasurer Report - Gene Schade e-mailed the treasurer's report prior to leaving for the Tucson show. Jerrold Simpson made a motion to accept the report. Mike McCraw seconded the motion. The motion carried.

Shop Report - Dick Cline reported that the large cutting saw and the small trim saw were cleaned. All of the cutting oil was used. Jerrold Simpson went to Arnold's Oil to order Brite Cut Oil. Arnold's did not have any on site but are looking to see if they can order a drum. Attendance at the shop is about the same on Saturday and Monday. The regular crew comes.

Fieldtrip Report - Mike McCraw has set a fieldtrip for Saturday, February 20th, weather permitting. Bad weather alternate date is February 27th. The trip will be to McMullen Co to collect pertified wood. The group will meet at the Walmart parking lot in Calallen at 9:00. The group will then caravan to the site.

A mini-field trip will be held at James Horn's house early Sat. Meet at 5638 Antigua, Corpus Christi. James has many rocks for sale. The shop will not be open this Sat due to the fieldtrip.

Show Report - Jerrold Simpson reported that 23 dealers have responded. There are 4 or 5 dealers who have responses pending. The dealer fees are \$9,250. We collected \$7,425 of this amount so far.

New Business - Linda Simpson made a bookmark that could be given out at the membership table during the show or at meetings. Board members looked over the bookmark and suggested adding the website to it. Linda will make the changes.

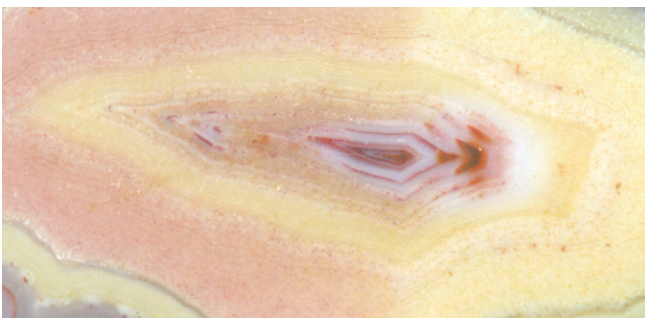
Old Business – Art Worley made changes to the website. He had sent an email last month asking members to look at the website and report any corrections that need to be made back to Art. Also for suggestions. The website is www.gcgms.org.

Jerrold Simpson reported that at this point, no scholarship applications have been returned.

Education Report - Fossil Identification is the topic for the meeting in February. The program will be presented by Linda and Jerrold Simpson.

Motion to adjourn the meeting was made by Dick Cline and seconded by Mike McCraw. The motion passed and the meeting was adjourned at 7:22.

Respectfully submitted by Linda Simpson on behalf of Suzy Nick.



**Fortification-
Island Agate**

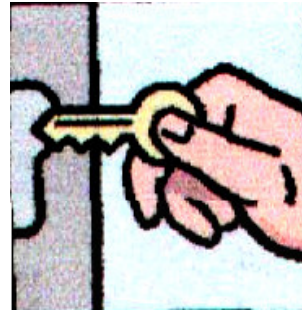
**Harte Ranch,
Near Van
Horn, Texas**



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



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.

Announcement

**The Shop will not be open Saturday
 The 20th of February due to a field trip.
 Alternative Day if field trip rained out.
 27th of February**



**Above Balancing Rock in black Plume Agate
 Left black Plume Agate
 Harte Ranch near Van Horn Texas**

February Birthstone, Amethyst

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

Amethyst usually is a transparent variety of **quartz** that comes in shades of purple. Some translucent to opaque amethyst is also found and the purplish zones alternate with white or grayish areas. Color zonation can be very intense in transparent, translucent and opaque varieties. Amethyst is the traditional birth stone for the month of February.

Quartz in all varieties is **Silicon Dioxide, SiO₂**, it crystallizes in the **hexagonal** system, it has a **specific gravity of 2.66**, and it defines **7 on Mohs hardness scale**. it has **refractive indexes** ranging from **1.544 to 1.553**, it is **uniaxial, positive**, and may be strongly **dichroic** in several colored varieties.

Most of the amethyst that is used in the gem trade now comes from Brazil. Historically, the Ural Mountains in Russia produced many fine amethysts and thousands were acquired by Catherine the Great. The most desired hues ranged from deep purplish-red to purple-red and these stones were called Uralian or Siberian Amethyst, terms that are now color grades rather than source areas.

Amethysts from Brazil are mostly extracted from large geodes that are found in basalts of either Triassic or Jurassic age that crop out in the State of Rio Grande do Sul, in the southeastern corner of the country. Many of these geodes were commonly seen for sale in gem shows in the late 1980's and early 1990's, but fewer of them have been seen in the late 1990's. Many of the geodes with transparent amethyst were broken down to small crystals for the gem trade and this kind of geode is now fairly scarce intact.

Some very attractive amethyst has been produced in Mexico but most of it that has been of desirable gem shades formed in crystals that were quite small and many of the larger crystals were not sufficiently toned to produce fine faceted gems. The amethyst from Mexico has produced many fine, large cabinet specimens that appear in both private and museum collections. When I first took up lapidary in 1961, there were some amethyst tips from Mexico that were nicely colored and produced fine cabochons but they were all nearly opaque. Some of the Mexico specimens had nice small phantom crystals of amethyst in a colorless body of rock crystal.

In North America a great deal of amethyst is extracted from mines in the Thunder Bay, Ontario, Canada, area. There are several commercial mines and several fee localities where one can pay to collect. The status of the mines and fee localities varies from year to year so it is best for one to write or call ahead before planning trips to these areas. Most of the amethyst from Thunder Bay is strongly color zoned and these zonations appear as **chevrons** if the cut is *diagonal* to the **c-axis** of the crystal or sometimes as **six triangles** of alternating purple and colorless or white areas if the cut is made *perpendicular* to the c-axis of the crystal. The latter have been called **Port Arthur Amethyst**. Port Arthur was the name of a port in the Kwantung Province of Manchuria; this area was an historic producer of very fine amethyst. Port Arthur was also the former name of Thunder Bay, Ontario. Which of the Port Arthurs yielded its name to that color zonation of amethyst is currently unknown to me. Some very fine examples of color zoned amethyst similar to the Port Arthur Amethyst appeared in gem shows in the early 1980's; this material was from India.

The strong color zonations of the Port Arthur Amethyst is probably produced by numerous twinned crystals and twinning planes within the crystal. When observing a section of the India material under polarized light and with a condensing lens, very strong interference patterns are readily observed and the normally fine interference figure seen in most quartz appears to be a garbled set of figure superimposed over figure.

Nebraska is not without its amethyst. Some examples have been collected from small geodes that formed in the Grant Shale of Permian age that is exposed in several areas near Krider and Odell in Gage counties. The amethyst is nearly opaque to be sure and it will fade after exposure to light for a few days. If the amethyst is returned to a dark box, it will regain the purple color in a few days. It may be that the light energy displaces electrons in the chromatophores that color the amethyst. I have also observed examples of Lake Superior agates with amethyst centers that were collected from the glacial tills in southeastern Nebraska.

Continued on Page 6

FEBRUARY 2010:

4-12--TUCSON, ARIZONA: Business to Business Gem Trade Show; Gem and Lapidary Wholesalers Inc.; Holiday Inn Palo Verde/Holidome, 4550 S. Palo Verde Rd. (I-10 at Palo Verde Rd.); daily 10-6, last day 10-3; contact Gem and Lapidary Wholesalers Inc., P.O. Box 98, Flora, MS 39071-0098, (601) 879-8832; e-mail: info@glwshows.com; Web site: glwshows.com

5-7--ROSEVILLE, CALIFORNIA: Show, "Gem Faire"; Gem Faire Inc.; Placer County Fairgrounds, 800 All America City Blvd.; Fri. 12-7, Sat. 10-6, Sun. 10-5; \$5 weekend pass; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com

5-8--TUCSON, ARIZONA: 9th annual show, "Westward Look Show 2010"; FineMineralShow; Westward Look Resort, 245 E. Ina Rd.; Fri. 10-6, Sat. 10-6, Sun. 10-6, Mon. 10-5; more than 25 of the world's top dealers, "Collector Day" Sat., featuring Will Larson's private collection, Sun. evening cocktail hour, mineral art gallery, and artist panel, including Eberhard Equit, Hildegard Konighofer, Susan Robinson and Wendell Wilson; contact Dave Waisman, P.O. Box 8543, Spokane, WA 99203; Web site: www.finemineralshow.com or www.westwardminerals.com

12-14--KIRKWOOD, MISSOURI: Show; Cabin Fever Productions; Kirkwood Community Center, 111 S. Geyer; Fri. 4-9, Sat. 10-6, Sun. 10-4; adults \$3, seniors and students \$2, children 12 and under free; jewelry, gems, rocks, minerals, fossils, attendance prizes; contact Melanie Vick, 1801 Barbary Way, Swansea, IL 62226, (618) 830-8471; e-mail: cabinfeverprod@aol.com; Web site: www.cabinfeverproductions@yolasite.com

12-14--PORTLAND, OREGON: Show, "We Rock"; Oregon Agate & Mineral Society; OMSI, 1945 S.E. Water Ave.; Fri. 10-5, Sat. 10-5, Sun. 10-5; contact Richard Hall, (360) 751-0699 or (360) 263-2599; e-mail: bernice-hall@mcleodusa.net

12-14--SANTA MONICA, CALIFORNIA: Show, "Gem Faire"; Gem Faire Inc.; Santa Monica Civic Auditorium, 1855 Main St.; Fri. 12-7, Sat. 10-6, Sun. 10-5; \$5 weekend pass; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com

12-21--INDIO, CALIFORNIA: Show, "Riverside County Fair & National Date Festival"; San Geronio Mineral & Gem Society; Gem & Mineral Bldg., Bldg. #1, 46-350 Arabia St.; 10-10 daily; adults \$8, seniors \$7, children \$6; contact Bert Grisham, (951) 849-1674; e-mail: bert67@verizon.net

13-14--OAK HARBOR, WASHINGTON: 45th annual show, "Sweetheart of Gems"; Whidbey Island Gem Club; Oak Harbor Senior Center, 51 S.E. Jerome St.; Sat. 9-5, Sun. 9-4; contact Keith Ludemann, (360) 675-1837; e-mail: rock9@whidbey.net

19-21--SANTA BARBARA, CALIFORNIA: Show, "Gem Faire"; Gem Faire Inc.; Earl Warren Showgrounds/Exhibit Hall, 3400 Calle Real; Fri. 12-7, Sat. 10-6, Sun. 10-5; \$5 weekend pass; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com

20--PHOENIX, ARIZONA: Annual show, "Family Fun Day at the Museum"; Maricopa Lapidary Society; 1502 W Washington St.; Sat. 10-4; free admission; dealers, demonstrations, kids' activities, gold panning, metal detecting; contact Laurette Kennedy, (602) 771-1611 or (602) 738-2552; e-mail: lkennedy11@aol.com

20--UPPER MARLBORO, MARYLAND: Show; Southern Maryland Rock & Mineral Club; The Show Place Arena, 14900 Pennsylvania Ave.; Sat. 10-4; ages 7 and up \$3, 6 and under free; vendors, exhibitors, minerals, fossils, gems, original jewelry designs, demonstrations, faceting, bead stringing, wire wrapping, gold panning, children's crafts, door prizes; contact Michael Patterson, 11000 Thrift Rd., Clinton, MD 20735, (301) 297-4575; e-mail: michael.patterson@pgparks.com; Web site: www.freewebs.com/smrmc/

20-21--ALBANY, NEW YORK: 17th annual James Campbell Memorial Gem, Mineral, and Fossil Show and Sale; New York State Academy of Mineralogy, Capital District Mineral Club; Museum, Empire State Plaza, Madison Ave., 4th floor; admission \$6 (includes flower show); Sat. 10-5, Sun. 10-5; more than 20 mineral and fossil dealers, guided museum tours, mineral and fossil identification; contact Michael Hawkins, (518) 486 2011;

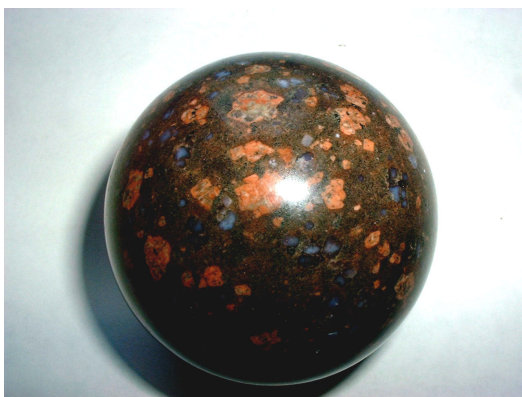
Continued on Page 8

Amythyst Continued from Page 4

Ametrine is an unusual form of amethyst that was not well-known in the gem trade until about the early 1970's. Ametrine has the same kind of color zonation as Port Arthur Amethyst but the zones are purple and yellow (citrine). The first ametrine was actually produced in the laboratory by treatment of heat and irradiation. In the late 1970's or early 1980's, large amounts of this gem came onto the market from Bolivia. Much of it was sold under the trade name **Bolivi-anite**. It was later learned that these stones were natural stones and came from near Anahi in extreme eastern Bolivia and in neighboring Brazil. Because of legal restrictions on mining in that area, the earlier material was said to have been found in Paraguay, Uruguay, or Matto Grosso do Sul in Brazil. Natural ametrine actually consists of zones of citrine intergrown between zones of amethyst. In this sense, it differs from the laboratory produced material that was derived from color zoned Brazilian amethyst. That is to say, the trace element contents in the chromatophores that produce citrine and amethyst are significantly different in the yellow and purple portions of the ametrine crystal. Hence, ametrine should be probably considered a separate variety of transparent quartz at least in the gem trade.

If you are fashioning amethyst for gem purposes, it can be a bit tricky to polish. The problems usually begin at about the time of the 600 grit sand if you are using carbide. It is much easier to sand and polish with diamond compounds. A smooth but matte' surface can be obtained by the time you get to the 14,000 grit. You may lose the polish if you try to bring up the polish with tin oxide on leather. There tends to be a lot of undercutting on the twinning planes. This problem can often be alleviated by putting a few drops of vinegar or oxalic acid in the water used for polishing. It seems to work if you can get the **pH** (concentration of Hydrogen [H⁺] ions in the water) on the weakly acidic side. Polish can be improved with the 50,000 diamond too. Some pieces can be finished with tin oxide and water on a hard leather pad.

Amethyst

Scottish Agate
Collected by
Nick LorimerLlanite Sphere
Mason Texas

General Board Meeting on 19 January 2010

The General Meeting was called to order at 7:04pm by President Kevin Schleicher.

Introductions were made of the new officers for 2010.

Shanda Hinkle gave the Membership Report and we have 39 regular members, 4 junior members and 8 honoree members.

Guests are Mark and Renita Brackin from Wyoming and they winter down here.

The minutes from the last Board Meeting were published in the Cabs & Slabs. Chuck Nelson made a motion to accept the minutes as published and Jerrold Simpson seconded the motion. The motion was approved.

Gene Schade gave the Treasure's Report. Linda Simpson made a motion to accept the Treasure's Report as presented and Julio Barrada seconded the motion. The motion was approved.

Dick Cline gave the Shop Report by saying the shop is going strong and there were no problems. The shop is open on Saturday from 9am-12pm and on Monday nights from 6pm-9pm.

Mike McCraw gave the Field Trip Report by saying we are planning a February trip to McMullen County to an area that has petrified wood. Kevin Schleicher said we postponed the trip to see Dr Simpson's collection. Donna Grimes added there was no tentative date yet to reschedule this trip but it would probably be sometime in March. Jerrold Simpson told us the LaRue's had a shop and would like for us to come out. Mr. Holmes has over 1 ton of different specimens at his home and also some equipment (some working and some not but with a little work would work again). His phone # is 806-2715, please call him first.

Kyle Hinkle gave the Education Report. We will do a fossil ID presentation in the February meeting and would like to get as many junior members to attend as possible.

Jerrold Simpson gave the Show Report. We have 23 dealers with an additional 3-4 that he's waiting on their contracts.

Donna Grimes has the presale tickets and since she'll be leaving she'll give them to Kyle Hinkle. The advertising has been done we are on the radio KOUL, TV KRIS at the 6 and 10pm news and in the Newspaper the Caller-Times.

We will need lots of volunteers to help set up, work the show and tear down the show. Sign up sheets were at the rear table.

Linda Simpson had nothing new for the Federation Report.

There was no old business.

Under new business Joe Grimes said there was a show in Tyler this week end and to come on up!

Door Prizes were won by Shanda Hinkle (a road runner pin with a tiger eye, donated by Dick Cline) and Kyle Hinkle (cabochon donated by Art Worley).

Terri Barrada made a motion to adjourn the meeting and Julio Barrada seconded it. The meeting was adjourned at 7:27pm.

The auction was held –

A Bolo Tie with a petrified palm cabochon donated by Dick Kline was won by Mr. Holmes

Selenite Rose from Chihuahua Mex donated by Art Worley was won by Terri Barrada

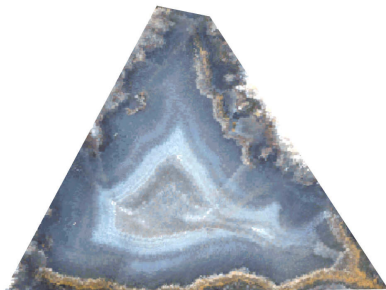
Aragonite pseudomorph donated by Art Worley was won by Linda Simpson

Tunnel Agate from Brazil donated by Art Worley was won by Suzy Nick

Turtle Rock (a form of Jasper) donated by Art Worley was won by Terri Barrada

The program was presented by Mark Villarreal on Fake Minerals. Everyone has bought one at one time or another and if you haven't you will! Mark gave some examples of things that are not real and had several specimens to show.

What you might think is a fake might be real. Dental Glue is being used to glue things together to present it as a whole specimen rather than several pieces. It was extremely interesting and we thank Mark for speaking to us.



**Big Diggins
South of Deming New Mexico**



Coming Events Continued from Page 8

e mail: mhawkins@mail.nysed.gov

20-21--ANTIOCH, CALIFORNIA: 51st annual show, "Treasures of the Earth 2010"; Antioch Lapidary Club; Contra Costa County Fairgrounds; Sat. 10-5, Sun. 10-5; adults \$3, active military with ID and spouse, Scouts in uniform, and kids 12 and under free; lapidary demonstrations, dealers, faceted stones, lapidary tools, findings, handmade jewelry, rocks, beads, supplies, opals, fossils, minerals; contact Ellen Bauer, (925) 458-2539; e-mail: ebauer_lapidary@yahoo.com; Web site: <http://antiochlapidaryclub.tripod.com>

20-21--PLAINVIEW, TEXAS: 48th annual show; Hi Plains Gem & Mineral Society; Ollie Liner Center, south I-27; Sat. 10-6, Sun. 10-5; adults \$2, students \$1; dealers, demonstrators, grand prizes, silent auction, kids' wheel; contact Mildred Matlock, 701 Zephyr, Plainview, TX 79072, (806) 293-3476; e-mail: jmmatlock@suddenlink.net

26-27--NORTHRIDGE, CALIFORNIA: Show, "GEMboree"; Del Air Rockhounds Club; United Methodist Church, 9650 Reseda Blvd.; Fri. 3-9:30, Sat. 10-5; free admission, children under 16 must be accompanied by an adult; gems, jewelry, beads, Girl and Boy Scout merit badges; contact Julia Marin, 18220 Marilla St., Northridge, CA 91325, (818) 886-7190; e-mail: jomarin@dslextre.me; Web site: <http://delairrockhounds.blogspot.com>

26-28--COSTA MESA, CALIFORNIA: Show, "Gem Faire"; Gem Faire Inc.; OC Fair & Event Center/Bldg. 10, 88 Fair Dr.; Fri. 12-7, Sat. 10-6, Sun. 10-5; \$5 weekend pass; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com

26-28--MELBOURNE, FLORIDA: Show; Frank Cox Productions; Melbourne Auditorium, 625 E. Hibiscus Blvd.; Fri. 10-5, Sat. 10-5, Sun. 10-5; gems, jewelry, beads; contact Frank Cox Productions, 755 S. Palm Ave. #203, Sarasota, FL 34236, (841) 954-0202; e-mail: frankcox@comcast.net; Web site: www.frankcoxproductions.com

27--BARTOW, FLORIDA: 6th annual show; Imperial Bone Valley Gem, Mineral & Fossil Society; Stuart Center, Polk County Extension Service Bldg., 1702 US Hwy. 17 S; Sat. 9-5; free admission; silent auction, door prizes, children's sand pit, demonstrations, rocks, minerals, fossils, jewelry; contact Jim Reed, 5740 Hebron Ln., Lakeland, FL 33812, (863) 644-6665; e-mail: rocks57@tampabay.rr.com; Web site: www.bonevalley.net

27-28--BOISE, IDAHO: Annual show; Idaho Gem Club; Expo Idaho, 5610 Glenwood; Sat. 10-7, Sun. 10-5; contact Charlie Smith, (208) 628-4002

27-28--EVERETT, WASHINGTON: 57th annual show; Everett Rock & Gem Club; Washington National Guard Armory, 2730 Oakes Ave.; Sat. 10-6, Sun. 10-5; contact Fritz Mack, P.O. Box 1615, Everett, WA 98206, (425) 232-0809

27-28--JACKSON, MISSISSIPPI: 51st annual show; Mississippi Gem & Mineral Society; Mississippi State Fair Grounds/Trade Mart Bldg., 1207 Mississippi St.; Sat. 9-6, Sun. 10-5; adults \$5, students \$3; free demonstrations, door prizes, educational and hands-on booths, 24 dealers; contact Keith Peacock, 114 Quail Ridge Rd., Braxton, MS 39044, (601) 863-6535; e-mail: kpcoc@aol.com; Web site: missgems.org

27-28--ROSEVILLE, MINNESOTA: Show; Anoka County Gem & Mineral Club; Har Mar Mall, 2100 Snelling Ave; Sat. 10-6, Sun. 12-5; free admission; gems, minerals, jewelry, fossils, agates, collectibles; contact Martha Miss, 8445 Grange Blvd., Cottage Grove, MN 55016; e-mail: rockbiz@cs.com

28--SPOKANE, WASHINGTON: Show, "Rings & Things BeadTour"; Rings & Things; Mirabeau Hotel Spokane Valley (Ballroom), 1100 N. Sullivan Rd.; Sun. 11-4; free admission; gemstones, bead strands, wholesale prices, findings, stringing supplies; contact Dave Robertson, P.O. Box 450, Spokane, WA 99210, (800) 366-2156; e-mail: drobertson@rings-things.com; Web site: www.rings-things.com/Show/city.php?city=Spokane

Ancient Mollusk, the Orthoceras, Grew Feet Out of its Head!

Orthoceras was an ancient mollusk that lived more than 400 million years ago. The name means straight horn, referring to the characteristic long, straight, conical shell. The preserved shell is all that remains of this ancestor of our modern-day squid.

The soft body lived in the last open-ended segment at the large end of the conical shell. As the body grew and the housing segment became too small, a dividing wall, called the **septa**, grew to separate the old “home chamber” from the new one. The differences in the composition of these shell parts allowed for differences in fossilization so the parts can be seen.



The **siphuncle** is a tube that runs the entire length of the shell, through each of the chambers. This tube had two functions. Once filled with water, the nautiloid could force the water out, propelling itself backward with a kind of jet propulsion. By releasing the water and leaving air space, the tube could serve as a buoyancy device allowing the animal to rise and lower itself to different depths.

These straight shelled nautiloids ranged in size from less than a centimeter to more than 14 feet long!

All the living relatives of these nautiloids, squid, octopus, cuttlefish, and nautilus are predators, and we can assume that orthoceras was also a hunter of the Paleozoic seas, possibly having trilobites for breakfast!

Notice the siphuncle and septa in the fossil below. The siphuncle is the line running down the center from head to tail. The septa are the short curved lines that run across and or side to side.

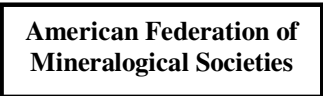

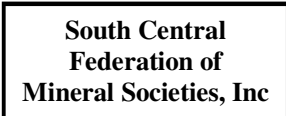



Example of the Camerate crinoid [Macrocrinus mundulus](#) (Family Batocrinidae) with preserved anal tube. This is another of the very 3-D preserved crinoids for which the Crawfordsville deposits are well known.

[Platycrinites saffordi](#) stem the stem served two main functions: (1) placing the crown into the water column to filter out food particles, and (2) anchoring the crinoid in the substrate





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

MEMBER of					
	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			
	2010 Officers	President: Kevin Schleicher Vice President: Kyle Hinkle Past President: Suzy Nick		Secretary: Suzy Nick Treasurer: Gene Schade gene@casadeoro.net	
	Board Appointees	Membership: Sandra Hinkle Education: Owen Hopkins Librarian: Linda Simpson Audit: Gene Schade Show Chair: Jerrold Simpson		Show Publicity: Donna Grimes Shop coordinator: Richard Cline Field Trip Coordinator: Mike McCraw Dealer Chair: Jerrold Simpson	
Standing Committies	Shop coordinator: Richard Cline Field Trip Coordinator: Mike McCraw Federation Liaison: Linda Simpson Historiorn: Frances Marten Librarian Linda Simpson Communications: Suzy Nick Refreshment Hostess; Letty Rodriguez		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

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

Permission is granted to use any article in this publication, provided proper credit is given.