



Member: South Central Federation of Mineral Societies



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1st Place, 2016 SCFMS Mini-Bulletin

1st Place, 2015 SCFMS Mini-Bulletin

GYPSUM

Don Shurtz, Pleasant Oaks Gem and Mineral Society

Gypsum is a common mineral that is mined extensively in North America, South America, Europe, Asia, Australia and in Northern Africa. In other words, it is found and mined just about everywhere. Chemically Gypsum is $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ – Calcium Sulfate Hydrate. Most gypsum is found in massive

form in layers or as a sandy layer on the surface. All of the crystal varieties of gypsum forms in a monoclinic crystalline structure (think a 3 dimensional parallelogram). Selenite is generally prismatic and transparent to translucent. Selenite is the defining mineral for Moh's hardness 2. Selenite crystals from the Naica mine system Cave of Giants in the Chihuahu desert of Mexico measure up to 35 feet in length – some of the largest known crystals of any substance. Selenite from the Cave of Swords in the same location forms as twinned translucent crystals that look like etched sword blades. Satin spar (also known as satin spar selenite, is another variety of gypsum that forms long, slender bars that look fibrous. Satin spar cut into spheres or domes may exhibit chatoyance (the cat's eye) effect. The desert rose crystal variety is a rosette shaped crystal that may be mixed thoroughly with sand or have a sand druse coating. Gypsum Flower crystal variety is also starts as a rosette shaped crystal but with spreading fibrous elements that can look a flower or other shape (e.g., rams horn). Gypsum

flowers sometimes have a druse coating. The final variety of gypsum is alabaster which is composed of very fine, highly compacted grains of gypsum. It is often associated with iron giving it a pink to brown color. Without iron it is white. Gypsum based alabaster has a hardness of 1.5 and can easily be scratched by a fingernail.



Gypsum variety Gypsum Flower / Ram's Horn. This specimen was found near Terlingua, Brewster County, Texas and is on display at the Perot Museum of Nature and Science, Dallas, TX

As mentioned, Gypsum is found in many locations throughout the world. It has also been identified on Mars. One of the earth's most famous locations for gypsum is the White Sands National Monument in New Mexico. In addition to being a spectacular site, it was also the home of the first atomic bomb tests. There are many industrial applications for gypsum. It is the basis of plaster and the primary component of wallboard, also known as sheet rock. Gypsum blocks have been used in construction of walls and buildings. Gypsum is vital to the petroleum and natural gas industry as an additive to their drilling mud due to its high density. It is added to cements and mortars as an agent to control the hardening time. It is also used as a soil conditioner and fertilizer.

Gypsum is also found in foods and drinks. It is a binding agent in tofu and added to water for brewing mead, ales, and other drinks. It is also found in soaps, shampoos, and toothpaste and a variety of other products.

Ref: Wikipedia, <https://en.wikipedia.org/wiki/Gypsum>

Picture: Don Shurtz of specimen at Perot Museum of Nature and Science

Show Calendar – Upcoming Show Dates

May 6, Arlington, TX, Arlington G&MC Swap Meet, 1408 Gibbons Rd, Arlington, www.agemclub.org
May 6 – 7, Lubbock, TX, Lubbock G&MS, Lubbock Memorial Civic Center, www.lubbockgemandmineral.org
May 13, Enid, OK, Enid G&MS Rock Swap, Meadowlake Park, 1120 West Rupe St., www.enidgemandmineral.org
May 27 – 28, Fort Worth G&MC, Will Rogers Memorial Center, www.forthgemandmineralclub.org

Jun 9-11, Ventura, CA, Ventura G&MS and AFMS Convention, www.vgms.org and www.amfed.org

July 01 – 02, Grapevine, TX, Arlington G&MS, Grapevine Convention Center, www.agemclub.org, show@agemclub.org

Nov 10 – 12, Humble, TX, Houston G&MS and SCFMS Convention, Humble Civic Center

Nov 18 – 19, Mesquite, TX, Dallas G&MS, Rodeo Center Exhibit Hall, www.dallasgemandmineral.org, case53d@yahoo.com

Ref:

- January - February 2017 SCFMS Newsletter
- Rock & Gem Show Calendar, <http://www.rockngem.com/show-dates-display/?ShowState=ALL>

Article or Picture Title

Author

This space reserved for a club member's article or pictures.

(Hint, Hint)

Visit an Area Club

[Arlington Gem & Mineral Club](#), 1408 Gibbins, Arlington, TX, 1st Tuesday of each month at 7:30 pm
[Cowtown G. M. & Glass Club](#), meets the 2nd Tuesday at 7:00 pm, Corp. Emp. Rec. Association (CERA) 3300 Bryant Irvin Rd. Fort Worth
[Dallas Bead Society](#), meets 1st Saturday of each month at The Point at CC Young, 4847 W. Lawther Dr., Dallas, TX
[Dallas Gem & Mineral Society](#), meets the 3rd Tuesday of each month at 7 pm, American Legion, 10205 Plano Rd, Dallas (next to their shop)
[Dallas Paleontological Society](#), 2nd Wed. of each month at 7:30 pm, Brookhaven College, Building H, 3939 Valley View Lane, 75244
[Fort Worth Gem & Mineral Club](#), 4th Tuesday of each month at 7:30 pm, 3545 Bryan Avenue, Ft. Worth
[Oak Cliff Gem & Min Soc.](#), 4th Tuesday of each month at 7:30 pm, Unitarian Universalist Church, 3839 W. Keist Blvd, Dallas,
[Pleasant Oaks Gem & Mineral Club](#), meets the 1st Thur. of each month at 7:30 pm, Garland Women's Activities Bldg., 713 Austin, Garland,

AFMS Land Use Policy

From the February 2017 AFMS Newsletter, Author information unavailable

1. Adherence to the AFMS Code of Ethics assures compliance with most statutes and regulations governing collecting on public lands and encourages respect for private property rights and the environment. Clubs are urged to read the AFMS Code of Ethics in at least one meeting every year, to publish the Code frequently in the club newsletter, and to compel compliance on club field trips.
2. Individuals and clubs are urged to write their elected representatives and land use management agency supervisors regarding issues of rule making, legislation and enforcement affecting field collecting of minerals and fossils.
3. Individuals and clubs are urged to join and support activities of the American Lands Access Association (ALAA), a sister organization with responsibility for advancing the interests of earth science amateurs with legislatures and land use management agencies.
4. The AFMS will receive a report from ALAA at its annual meeting.
5. The AFMS endorses the principle of multiple use of public lands as a guarantee of continuing recreational opportunities.
6. Wilderness and monument designations are inconsistent with the principle of multiple use. In view of the vast amount of public land already designated as wilderness and monuments, future such designations should be minimal, taking into account the increased demand for recreational opportunities, including rockhounding, created by a growing population.
7. In furtherance of the principle of multiple use, the AFMS believes that laws, regulations and rules established by relevant governmental authorities should be designed to allow freest possible access to all public lands, coupled with minimal restrictions on the recreational collection of minerals, fossils, gemstone materials and other naturally occurring materials.

8. A right to collect minerals and fossils on public lands should be protected by statute.

9. The AFMS urges its members to work with any or all government authorities to achieve a good working relationship in order to improve the “Public Image” of recreational collectors.

AFMS CODE OF ETHICS

From the March-April 2017 SCFMS Newsletter

I will respect both private and public property and will do no collecting on privately owned land without the owner’s permission. I will keep informed on all laws, regulations of rules governing collecting on public lands and will observe them. I will to the best of my ability, ascertain the boundary lines of property on which I plan to collect. I will use no firearms or blasting material in collecting areas. I will cause no willful damage to property of any kind - fences, signs and buildings. I will leave all gates as found. I will build fires in designated or safe places only and will be certain they are completely extinguished before leaving the area. I will discard no burning material - matches, cigarettes, etc. I will fill all excavation holes which may be dangerous to livestock. I will not contaminate wells, creeks or other water supply. I will cause no willful damage to collecting material and will take home only what I can reasonably use. I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others. I will support the rock-hound project H.E.L.P. (Help Eliminate Litter Please) and Will leave all collecting areas devoid of litter, regardless of how found. I will cooperate with field trip leaders and those in designated authority in all collecting areas. I will report to my club or Federation officers, Bureau of Land management or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes. I will appreciate and protect our heritage of natural resources. I will observe the “Golden Rule”, will use “Good Outdoor Manners” and will at all times conduct myself in a manner which will add to the stature and Public “image” of rock-hounds everywhere.

**Show-and-Tell: Bring a gypsum specimen / mineral or the May birthstone – Emerald
Field Trip: Martin Marietta on May 6th, contact David at rock@rocktrading.org**

BENCH TIPS BY BRAD SMITH

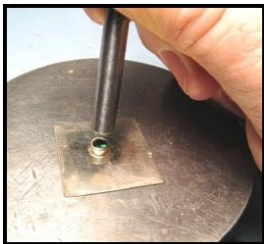
ADJUSTABLE CHUCK FOR DREMELS—Many of us have a Dremel motor tool to use at home or when out to a class or workshop. The one thing that makes this tool much more productive is the addition of one inexpensive option, an adjustable chuck. The basic motor tool as sold typically comes with a collet chuck. This means you have to use a wrench to change every tool bit, you have to switch collets to use different shaft sizes (3/32 or 1/8 inch bits), and you can't use ordinary drills at all - only the special ones that have a 3/32 shaft. A simple and inexpensive (\$12) adjustable chuck solves all of this. It's available in most large local hardware stores or model-making outlets. Tightening the chuck is done easily by hand to any size shaft. No key is required.



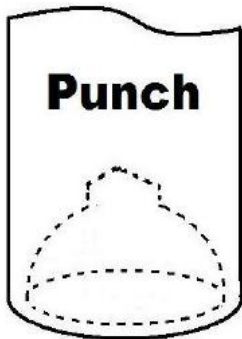
IDENTIFYING UNMARKED SOLDERS—There are plenty of ways to mark your sheet or wire solders, but suppose you forget and have a couple that you can't identify. The answer is to compare the melting temperature of the unknown with that of a known solder.

What I do is take a thick scrap of copper or nickel and arrange several solders on it. Ideally, I have a sample of easy, medium and hard known solders surrounding the unknown solder. Then I heat the plate from the bottom and watch the order in which the solders melt.

BENCH SHEARS-When cutting sheet metal, it's quicker and easier to use a set of shop shears as compared with using a hand saw. The cut is not as precise, but many times you don't need that. Shears will easily cut up to 24 gauge sheet, and some will cut 22 or even 20 gauge. Current prices for shears run from \$13 - \$22 in jewelry catalogs, and the Joyce Chen scissors recommended on some jewelry blogs run more than \$20. But we found a cheaper alternative at the 99 Cent Store - some gardening utility scissors that were only \$1.07 I buy a half dozen of them at a time for use in my jewelry classes. They're great for cutting bezels, trimming around a bezel cup and cutting a piece off a larger sheet.



BEZEL CLOSER-A bezel closer is a steel punch that makes quick work out of pushing the metal down over a round stone and burnishing it. The working end is a concave cavity that fits over your bezel or prong setting and is pushed and twisted to capture the stone. Sets can be purchased but are expensive and contain many sizes you will probably never use. If all you need is one or two sizes, here's how you can make them yourself. Find a good quality, round steel rod a little larger in diameter than your bezel cup or prong setting. Cut a 5 inch length. File both ends flat. Locate the center of one end, center punch a divot, and drill a small pilot hole about 5 mm deep. Remember to use a little oil as lubricant when cutting steel. Select a ball bur a bit smaller than the steel rod but slightly larger than the bezel. Enlarge the pilot hole to a full hemispherical cavity. Test for proper fit with your bezel. Bezel should first contact the cavity about a third of the way in. When the size is correct, polish the cavity using Zam on a length of chopstick in your flex-shaft. If the tool is not polished, it will leave scratches on your bezel or prongs. When using the tool, the first step is to capture the stone correctly. I usually work by hand and push the punch straight down over the bezel or prongs. This causes the metal to start bending over the stone. Next I inspect with a lens to be sure the stone is staying level. This is repeated until the stone is seated on its bearing and can't move anymore. Next you want to force the metal down onto the stone uniformly all the way around. While this can be done by hand, I often gently tap the punch with a hammer. Finally, burnish the bezel by twisting the punch around.



Please include the following attribution with each publication:
 “See all Brad’s jewelry books at: Amazon.com/author/bradfordsmith”



Pleasant Oaks Gem & Mineral Club of Dallas Purpose

The Pleasant Oaks Gem and Mineral Club of Dallas is organized for charitable and educational purposes to promote interest in the various earth sciences, particularly those hobbies dealing with the art of cutting and polishing gemstones, the science of gems, minerals and metal crafts, as well as their related fields.

President's Message

Ling Shurtz, POGMC President

IGEM will be over by time we have our May meeting, but this message is being written prior to IGEM in order to meet deadlines. I hope that IGEM will be a total success. We need to support IGEM as a club – I hope all members can help with IGEM set up and having a place in our booth. We need to use the show as a way to find new members for a club. I would challenge each member to come to the May meeting with an idea for how we can increase club membership and meeting participation.

Club Officers for 2017

President: Ling Shurtz
1st VP, Programs: Carolyn Grady
2nd VP, Field Trips: Open
Secretary: Lee Elms
Treasurer: Del Grady
Editor: Don Shurtz
E-mail: don.shurtz@gmail.com,
l.shurtz@gmail.com

Minutes of the April 2017 Meeting

The April 5th 2017 meeting of the Pleasant Oaks Gem Mineral Club was called to order at 7:30 PM by the President, Ling.

The Pledge of Allegiance was led by Don.

Sunshine report: Hat is still having back issues. He is currently undergoing physical therapy.

Visitors: Becky and James Norris visited us at our meeting. They also brought some rocks from Oregon for help in identification

Minutes: We discussed the minutes of the March Meeting as published in the Chips and Chatter. A motion to accept the minutes was made by Don and seconded by Carolyn. The motion passed

Treasurer's Report: Del gave the Treasurer's Report. A motion to accept the Treasurer's Report was made by Carolyn and seconded by Cheryl. The motion passed.

Old Business

- IGEM will be 28 – 30 April. Set up will be on Wednesday, 26 April.
- Del and Carolyn went to the Harmon's yard sale. Del reported still lots of rocks and equipment there.

New Business

- Don showed a potential design as suggest by Bud's Trophies. The new design was discussed. Cheryl made a motion to accept the proposed design. The motion was seconded by Warner. The motion passed
- Don also suggested we should all switch to the new design with the club paying for the new badges. Warner made a motion for the club to buy the new badges for all members. The motion was seconded by Casey and was passed
- We discussed if we wanted to print some club Business Cards prior to IGEM. Casey moved to approve business cards. Warner seconded the motion. The motion passed
- We discussed our July meeting. We decided to start the meeting at 7:00 and have a pot-luck salad bar.

After the break, we viewed one of the Great Course Lectures on DVD titled *The Grand Canyon – Earth's Layers*. During the lecture we learned that the Grand Canyon is a relatively young geological feature (5 to 6 million years old) and that the rapid erosion of the canyon was in part due to the shortening; it once flowed through California to the Pacific but switched its course to empty into the Gulf of California.

We held the raffle

The meeting was adjourned at 8:55 PM

Meetings

Our May 4th meeting will start at 7:30 at the Garland Women's Activities Building. Our program will be "Mining for Iron".

Our June 1st will start at 7:30 at the GWAB. A representative from the Dallas Paleo Society will introduce their latest book, "Guide to Fossil Collecting".

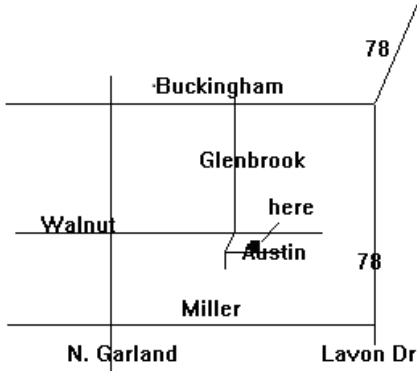
VISITORS ARE ALWAYS WELCOME

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PLEASANT OAKS GEM and MINERAL CLUB of Dallas



<p>Meetings First Thursday of each month, 7:30 PM Garland Women’s Activities Building 713 Austin St., Garland, TX (Northeast corner of Austin & Glenbrook)</p>
<p>Membership Single Adult: \$16.50, Junior: \$5.00, Family: \$27.50 (Plus badge fee for new members)</p>



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Field Trip: Martin Marietta on May 6th, contact David at rock@rocktrading.org

CHIPS AND CHATTER
 Pleasant Oaks Gem & Mineral Club
 PO Box 831934
 Richardson, TX 75083-1934

To:

VISITORS ARE ALWAYS WELCOME

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