

WHITTIER

ROCKHOUNDER

GEM & MINERAL
SOCIETY

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**** LOCATION CHANGE ****

**February General Meeting
Senior Center—Rooms 3& 4
February 26 at 7:30 PM**



Award winning rock paintings seen at Quartzsite

ROCKHOUNDER

THE PREZ SEZ:

This is the month of transitions, the holidays are over and the Super Bowl has come and gone. Life is returning to normal, whatever normal is for you. You may be looking forward to the fieldtrips that are up and coming or you can get back to doing the projects that were put on hold over the holidays.

So while you are deciding what stone you are going to cut or what piece of jewelry you are going to make, start thinking about your jewelry. You can show. Well, as you know the show is the time for you to be able to brag about what your special facet of the hobby is, without seeming to brag. We have always had great display cases in our show and your participation is most important to that end.

For introducing a great hobby and the adventures that await both in going on fieldtrips, but also the learning of new skills to those that had no idea that there are clubs that are willing to do just that. We are lurking just below the surface as they remember the interest they had as kids.

And just think it may be all possible because of what you thought about it in February!

*Somewhere,
Joe Goetz*

WGMS General Meeting

*****LOCATION CHANGE*****

**Whittier Senior Center
(Behind the Community Center)**

Thursday, February 26, 2015 at 7:30 PM

“Jewelry-Making How-To DVD”

By popular request of those attending the January general meeting, we will view a second DVD which demonstrates making jewelry. While the pieces are of a more difficult degree, we should all enjoy watching the steps it takes to make a brace or earrings.

Marcia

February Field Trip Opportunities

(For the complete list of proposed field trips for 2015 look on pages 8 & 9.)

February 15: Tajiguas Creek - Day Trip.

We will be exploring the coast north of Santa Barbara for fossilized whale bone, petrified wood, etc. Meet 10 am at the McDonalds, 6900 Market Place Drive, Goleta: use the Glen Anie Rd./Storke Road exit from U.S. 101 and turn south (away from the mountains). Please RSVP the trip leader, Andrew Hoekstra, at delvings@yahoo.com, or at ajhoekstra@yahoo.com, or 562-584-3190.

February 21-22: Lake Havasu

Field trip with the Searchers to collect blue calcite near Lake Havasu, Arizona.

The Searchers February field trip will be the an area just outside

of Lake Havasu City. Different types of agate and jasper are plentiful in the area. There is red jasper with white and blue striping. The agates come in many colors, mostly pastel colors. There is also a site with a nice purple agate. Pieces are all float, large and small. Buckets, ham-mers, a spray bottle and good walking shoes are all you need for some great rock gathering. The road in is not long, but it does have some deeper sandy areas and a couple of steep, short climbs. 4 wheel and high clearance is highly recommended. Temperatures should still be pleasant. Always bring things for all conditions.

There is a BLM dispersed campsite called Craggy Wash just down the road and motels and food in Havasu.

The Field Trip will start 9 AM (California time) from the McDonalds in the Wal-Mart shopping center on the east side of 95. Very close to the airport on the North side of town. 6501 Showplace Ave.

Directions: Drive will take around 4 to 5 hours. Take 15 toward Barstow to the 40 to the Arizona border. At the 9 mile marker take highway 95 South toward Lake Havasu. The BLM site is on the left side around 11 miles from the 95 turn off. It is down a dirt road a little ways into a wash. GPS: 34° 35.636'N 114° 1.616'W .

Staying in Havasu: There are lots of motels in Havasu, some in the \$60 range. Lots of good places to eat too. We have set up a special deal at the Travelodge. Normally 120, you can stay for \$79 if you mention Searchers or Jack Horn to JC at the registration desk. This is a very nice, clean motel with free breakfast. There are a lot of different activities going on in Havasu so make any reservations early to make sure you have a place.

Any questions - Jack or Linda Horn 714 779-6664 or Curt Clark at 714 639 9927

Pegmatite Review

Pegmatite is a coarse-grained vein or dike rock with crystals that range from a inch or so to many feet in length. Pegmatites are mined for their mica and feldspar, or for gems and other accessory minerals. They often contain cavities or vugs lined with crystals.

Pegmatites are limited to areas of crystalline rocks, especially ancient metamorphic rocks. Most of the pegmatites of Idaho and Montana lie within mica schist or gneiss, but some are enclosed in hornblende gneiss, granodiorite, or crystalline limestone. Both the pegmatites and the crystalline rocks in which they occur were formed at great depths in the crust of the earth. They are exposed at the surface only because erosion has removed many thousands of feet of rock that lay over them when they were formed. Pegmatites have been intruded, injected, or otherwise emplaced in the rocks that enclose them.

Most pegmatites are composed of quartz, feldspar and mica, having a similar basic composition as granite. Pegmatites are important because they often contain rare earth minerals and gemstones, such as aquamarine, garnet, topaz, fluorite, apatite and corundum, often along with tin and tungsten minerals, among others.

Within the metamorphic belts, pegmatite tends to concentrate around granitic bodies within zones of low mean strain and within zones of extension, for example within the strain shadow of a large rigid granite body (batholith). Similarly, pegmatite is often found within the contact zone of granite. Some skarns associated with granites also tend to host pegmatites.

Miarolitic Cavities

The term "miarolitic" originates from an Italian word, miarole, which originally referred to small crystalline cavities in granite from the famous mineral-collecting regions of northern Italy. Miarolitic pegmatites are those that possess a proportionately large number of crystal-lined cavities, and from which most of the world's great pegmatitic gem & mineral specimens are mined.

The miarolitic cavities or vugs are where the heated mineral enriched, liquid cavities formed within the pegmatites. As the pegmatites and cavities cooled over 1 billion years ago the crystals formed in the liquid pockets. The crystals form from the outside walls toward the center of the pocket or vug. Due to tectonic plate/volcanic action, weathering and other erosion processes many of these now collapsed crystal pockets are near the earth's surface and ready for harvesting.

The difficulty in finding the old collapsed pockets stems from hundreds of people digging through the pegmatites and finding the easy to get crystals. Sometimes a portion of the pegmatite is exposed to the surface and creates "float" crystals. The crystals are called float because they are on the surface and detached from their source. Inexperienced rock hounds often pick up these float crystals or keys to the location of the crystal pocket without realizing they've not only missed the mother lode, but also erased evidence for others to find the crystal pocket.

It is not unusual to find broken crystals in a cavity. The crystal breakage can be a result of either the original pocket rupturing under pressure during crystal formation, earth movement, or the grinding of crystals against each other over millions of years of frost thaw cycles and other erosion processes.

- < For a more detailed explanation of how these form, follow this link: <http://www.omgs-minerals.org/London/Pegmatite2>
- < Link to Idaho Batholiths-- <http://imnh.isu.edu/digitalatlas/geo/bathlith/bathdex.htm>
- < Good Link with pictures on miarolitic cavities and Idaho gems: <http://www.mindat.org/article.php/568/The+Sawtooth+Mountains+of+Idaho>
- < More on Idaho gems & minerals(end of article): <http://imnh.isu.edu/digitalatlas/geog/mining/deposits.htm>
- < Another link on Devils Den area: http://www.asterism-services.com/FIELD_NOTES.html
- < Idaho dept of Lands, Gemstone Guide: <http://www.idl.idaho.gov/mining/rockhounding/gemstones.html>

Boulder Buster 1/15

**2015 MULTI-CLUB
FIELD TRIP SCHEDULE**

Here is the proposed field trips for the rest of 2015. Expanded and current information for these collecting opportunities will be published in the various newsletters for the particular month.

As always, you should to contact the field trip leader ahead of time because: 1. Sometimes field trips are canceled or changed for various reasons including inclement weather or areas being e n q u g f 0 " 4 0 " K h " y g " f q p ø v " m p q y " { you and you may not find out the planned camp site was moved until too late.

FEBRUARY 15th: TAJIGUAS CREEK - Exploring the coast north of Santa Barbara for fossilized whale bone, petrified wood, etc. Meet 10am at the McDonalds, 6900 Market Place Drive, Goleta: use the Glen Anie Rd./Storke Road exit from U.S. 101 and turn south (away from the mountains). Please RSVP the trip leader, Andrew Hoekstra, at delvings@yahoo.com, or at ajhoekstra@yahoo.com, or 562-584-3190.

FEB 21-22: Optional trip with the Searchers to collect blue calcite near Lake Havasu, Arizona.

MAR 21-22: LAVIC SIDING AREA - Jasper, thulite, agates and others.

APR 24-26: KRAMER JUNCTION - Collecting dendritic agates, jasper, bloodstone, white opal, petrified bog showing many nice reeds, twigs and grasses and opalite, mineral collecting at the Borax Mine. Optional Petroglyph viewing.

MAY 9-10: PRIMM, NV - Magma Chamber minerals, pyrites, visit to the Copper World Mine.

JUNE 20: TOURMALINE DIG - Pala area. Mine location to be determined.

JULY 18: PALOS VERDES -: Glaucofane, barite and agate minerals.

AUG 2: LOS OLIVOS to collect Soap Stone and Serpentine, the California State Rock.

SEPT 19-20: GREENHORN MOUNTAINS - Kernville for Rose Quartz, Epidote, Garnet and fluorescents.

OCT 10-11: SEARLES LAKE CLUB SHOW & field trips: Pink halite crystals & borax minerals.

NOV 7-8: WHITTIER CLAIM AREA - Barstow for honey onyx, agate, jasper, palm root.

NOV XX: JEWEL TUNNEL - Wholesale rocks and minerals. Baldwin Park.

NOV 27-29: THANKSGIVING TRIP - Owens Valley or Afton Canyon.

DEC 12: SALTON SEA - YUHA Fossil Beds, Tour Geothermal Power Plant, Mud Volcano Field.

JAN 24-25: QUARTZSITE ARIZONA SHOWS

Distributed to the representatives of the Delvers ó Long Beach ó North Orange County ó Pasadena ó Whittier ó SearchersGem, Mineral and Lapidary Clubs

Updated January 31, 2015. For up-to-date information on these field trips and how to joining the trip please see your

Science Project Geodes

Geodes can be grown without using egg dye. the resulting crystals are clear to milky white, like quartz. while large chicken eggshells are suggested in this process, larger eggshells can be used. simply increase the size of the plastic or glass container and double or triple the amounts of dye (1 packet), alum (3/4 part), and water (2 parts) used to create the growing solution This craft from Jim "Figgy" Noonan doubles as a science project, offering an opportunity to show kids the crystallization process at work. To make a fluorescent variation for Halloween, substitute the water and egg dye solution with glow water.



Resources: If you don't want to blow your own egg or would like to try a larger eggshell, pre-blown shells are available from The Eggerly Place. Alum is available at most grocery or drug stores but can also be purchased online from Talas. Powdered egg dye is available from Surma: The Ukranian Shop. Ready-made Crystal Egg Geode kits available from Professor Figgy's Fabulous Science Kits at www.professorfiggy.com .

MATERIALS:

- *Blown-out eggshell
- *Plastic or glass container
- *Alum powder
- *White glue
- *Small paintbrush
- *Egg dye
- *Hot water
- *Craft stick or spoon
- *Latex gloves
- *Drying rack or newspaper

STEP 1 Start by blowing out a large white chicken egg and splitting it in half, lengthwise. The egg can be cracked by striking it against a surface or cut with a small pair of scissors. Make sure the inside of the eggshell is clean and dry.

STEP 2 With a small paintbrush, apply white glue to the inside and cracked edges of each half of the eggshell and sprinkle with alum

powder until completely coated. Set eggshell halves aside to dry overnight.

STEP 3 The next day, prepare your growing solution in a glass or plastic container by using a craft stick or spoon to mix 2 cups of very hot water (almost boiling) with an entire packet of powdered egg dye. Be sure to wear latex gloves to protect your hands from the dye. Tip: Liquid food coloring can also be used to dye the geode -- 30 to 40 drops will adequately saturate the solution.

STEP 4 Add 3/4 cup of alum powder to the hot dye bath and stir until completely dissolved. If there are remaining crystals in the bottom of the container, place the solution in the microwave for a few minutes to dissolve them. This will prevent alum from being drawn away from the geode.

STEP 5 Once the alum is completely dissolved, let the solution cool slightly (for about 30 minutes) and then submerge one of the dried, alum-coated eggshells in the growing solution, allowing it to rest on the bottom of the container with the inside of the shell facing up.

STEP 6 Set the container aside in a safe place overnight to allow the crystals to grow undisturbed. The longer the eggshell is in the solution, the larger the crystals in the geode will be. Twelve to 15 hours will usually result in a perfect geode.

STEP 7 The next day, remove the geode from the growing solution very carefully (as wet crystals are quite fragile), being sure to wear latex gloves to prevent the dye from staining your hands. If you are not satisfied with the size of your geode crystals, return the geode to the growing solution and wait a day or two. As water evaporates from the solution, more alum will be deposited in your geode, increasing the size of the crystals.

STEP 8 Place your geode on a drying rack or newspaper and allow to dry completely before handling.

STEP 9 To grow a second geode in the other half of the eggshell, simply re-dissolve the crystals remaining at the bottom of the growing solution in the microwave and follow the instructions above starting at step 5.

The Sooner Rockologist 6/14

Calculating The Value Of Scrap Gold By Tony Orzano

I have been asked many times how do you calculate the value of scrap gold? The spot price for gold (price traded on the stock market) is a poor indicator of the real value of your scrap gold (the price quoted is for pure gold - 24 Karat). What is scrap gold? Any gold that is not wanted. You might have some jewelry pieces you have not worn for a long time and do not want anymore; these can be turned into cash.

Before you sell your gold, make sure you know how much actual gold you have and what it is worth. You must separate your gold into karat groups: 10k, 14k, 18k, 22k and 24k. Make sure the items are stamped with only these marks - if there are any other marks, it is not real - gold.

To find the value of each group you must use the gram scale. Gold is measured in Troy ounces. One troy ounce equals 31.1 grams.

First, get the updated price per ounce for gold; divide the price by 31.1 to get the rate for 1 gram of pure (24k) gold. Example: \$1,000 per oz ÷ 31.1 = \$32.15 per gram for pure gold. But what about for other purities? The 'k' value indicates the ratio of gold in the alloy, Divide this by 24 to get the ratio:

- 10k: $10/24 = 0.4167$ 41.67% gold content
- 14k: $14/24 = 0.5833$ 58.33% gold content
- 18k: $18/24 = 0.7500$ 75.00% gold content
- 22k: $22/24 = 0.9167$ 91.67% gold content
- 24k $24/24 = 1.0000$ 100.00% gold content

Example: If today's gold rate was \$1,000 per ounce, the following would be the value of the gold in 10 grams of each of the five karat groups:

- 10k: $0.4167 \times \$32.15 \times 10 = \133.95
- 14k: $0.5833 \times \$32.15 \times 10 = \187.53
- 18k: $0.7500 \times \$32.15 \times 10 = \241.12
- 22k: $0.9167 \times \$32.15 \times 10 = \294.49
- 24k: $1.0000 \times \$32.15 \times 10 = \321.50

Most people will use grams for calculating, but scrap dealers will use the pennyweight system to confuse you. There are 20 pennyweight in a troy ounce. Just substitute 20 for the 31.1 to calculate pennyweight in the previous formulas. Keep in mind scrap dealers will not give you the full value. They usually will try to get you for 30-40% of the price. If you go in with your gold separated by karat weight and have already done the calculations, then you may get between 50-70% of price. You will never get more than that from anyone unless it is pure 24K gold, and then you will usually get 90-95% of price. They calculate the smelting and processing fees in the quote. Remember if you have an antique jewelry piece or coin, it might be worth more because of rarity, and the value would be more than the gold it contains.

ALWAYS REMEMBER: Bring your gold to a reputable dealer. Avoid the-fly-by night operations with ads such as: "We are here at so-and-so hotel for one week only...If you want the best price we are the only ones that can give the best result for your gold" - **BALONEY!** Seller beware.

Via Monongahela Rockhound News 02/10, El Gambrisino, 02/13, via Rocky Mountain Federation News 03/13

<http://www.wasatchgemsociety.com/>

Upcoming CFMS Gem Shows

- Feb 13-22** **INDIO, CA.** San Gorgonio Mineral & Gem Society
Riverside County Fair & National Date Festival
82-503 Highway 11
Hours: 10 - 10 daily
- Feb 27-
March 8** **IMPERIAL, CA.** Imperial Valley Gem & Mineral Soc
Imperial Valley Expo, 200 East 2nd Street/dd>
Hours: Weekends noon -10 pm; Weekdays 4 pm - 10 pm
Website: www.IVGMS.org
- Mar 7-8** **ARCADIA, CA.** Monrovia Rockhounds
Los Angeles Arboretum, 301 Baldwin Avenue
Hours: 9:00 - 4:30 daily
Website: www.Moroks.com
- Mar 7-8** **VENTURA, CA.** Ventura Gem & Mineral Society
Ventura County Fairgrounds, 10 West Harbor Blvd.
Hours: Sat 10 - 5; Sun 10 - 4
Website: www.vgms.org
- Mar 13-15** **VICTORVILLE, CA.** Victorville Valley Gem &
Mineral Society
Stoddard Wells Road & Hwy 15
Hours: 9 - 5 daily
Website: www.vvgmc.org/tailgate
- Mar 14-15** **SAN MARINO, CA.** Pasadena Lapidary Society
San Marino Masonic Center, 3130 Huntington Drive
Hours: Sat 10 - 6, Sun 10 - 5
Website: www.pasadenalapidarysociety.org
- Mar 14-15** **SPRECKELS, CA.** Salinas Valley Rock & Gem Club
Spreckel's Veterans Hall, 5th & Llano Streets
Hours: 10 - 5 daily
Website: www.salinasrockandgem.com

WGMS MEETING LOCATION!
Whittier Community Center
7630 Washington Ave. Whittier



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Affiliations



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Location: Whittier Senior Center
(See page 4 for information)