

# MOROKS

JANUARY 2015

Monrovia Rockhounds Newsletter

P.O. Box 553

Monrovia, CA 91017

Editor – Janie Duncan



## JANUARY 2015 MONROVIA ROCKHOUNDS NEWSLETTER

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# MOROKS JANUARY 2015 NEWSLETTER



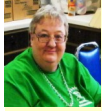
## MONROVIA ROCKHOUNDS



Our Website is [www.moroks.com](http://www.moroks.com)



### ELECTED OFFICERS



PRESIDENT – NEWSLETTER Janie Duncan (626) 358-8157



VICE PRESIDENT – Camille Rutkowski



SECRETARY – Michele Silcock



TREASURER – CUSTODIAN - Jim Lloyd



AUDITOR – FELLOWSHIP Louise Stack

### CHAIRPERSONS

REPRESENTATIVE – Ray Ritchey

REPRESENTATIVE – Colleen Chestnut

FEDERATION – Jo Anna Ritchey (626) 359-1624

HISTORIAN – Nancy Hamrick

BULLETIN – Janie Duncan (626) 358-8157

CUSTODIAN – Jim Lloyd

PICNIC – PHOTO Donald Sneberger

SHOW – WEBSITE – Jo Anna Ritchey (626) 359-1624

ROCK DRAWING - Louise Stack

FIELD TRIP – Ray Ritchey

CARD FELLOWSHIP— Aynn Freeman

**Mission Statement :** Our Purpose is to promote popular interest and education in the earth sciences, including geology, mineralogy, paleontology, the lapidary arts, and related subjects; to sponsor and provide means of coordinating the work and efforts of persons and groups with similar interests; and by and through such means to strive toward greater community and international good will and fellowship. We also support promoting and ensuring the right of amateur hobby collecting, recreational rock hunting and the use of public and private lands for educational and recreational purposes related to the earth sciences. We are a registered 501 C 3 non profit organization.

**Affiliations & Accreditations:** The Monrovia Rockhounds is affiliated with the California Federation of Mineralogical Societies, Inc. (CFMS), the American Federation of Mineralogical Societies (AFMS), and the American Lands Access Association (ALAA).

**Membership:** Annual donations are \$15.00 per member and \$5.00 per each additional member at the same address. \$10.00 per name badge is payable on the date of initiation.

**Meetings:** MOROKS meetings are held on the 3<sup>rd</sup> Thursday of each month. At 7:00 pm, in the basement of the United Methodist Church of Monrovia, located at 140 E. Palm Ave. Monrovia CA 91016. The building is on the corner of Ivy & Palm Ave. We use the door where there is handicapped access in the alley on the west side of the building. Do not try to enter from the front of the building. Guests are always welcome at our General Meetings. Please come and share our love of rocks.

**Information:** Monrovia Rock Hounds Inc. was founded August 28<sup>th</sup>, 1957. The club colors are green & white. The club is a non-profit organization dedicated to providing knowledge of the lapidary arts, geology, mineralogy, and other related fields. Members enjoy slide shows, lectures, demonstrations, displays, lapidary classes, our club library as well as field trips for exploration, study and collecting specimens.

We reserve the right to edit all material submitted for publication.

If you have any submissions for this newsletter or need to contact the editor Janie Duncan please email her at [janieduncan@altrionet.com](mailto:janieduncan@altrionet.com)

## 2014 MULTI-CLUB FIELD TRIP SCHEDULE

Distributed to the representatives of the Del Air – Glendora -- Monrovia -- North Orange County -- Pasadena -- Whittier Gem Mineral and Lapidary Clubs

### JANUARY 24 & 25 : QUARTZSITE ARIZONA SHOWS

For up-to-date information on these field trips and how to joining the trip please see your club's field trip leader or call Joe Goetz at (626)-622-9420.



Prez Sez

2015 already! What happened? Didn't we just have the 2014 show? It seems like yesterday. Before we know it the 2015 show will be upon us so it is time to get started. Plan to put in a showcase this year. We have the liners for you. If you need help just ask. Anything goes.

*Janie Duncan*

Vice Prez Sez

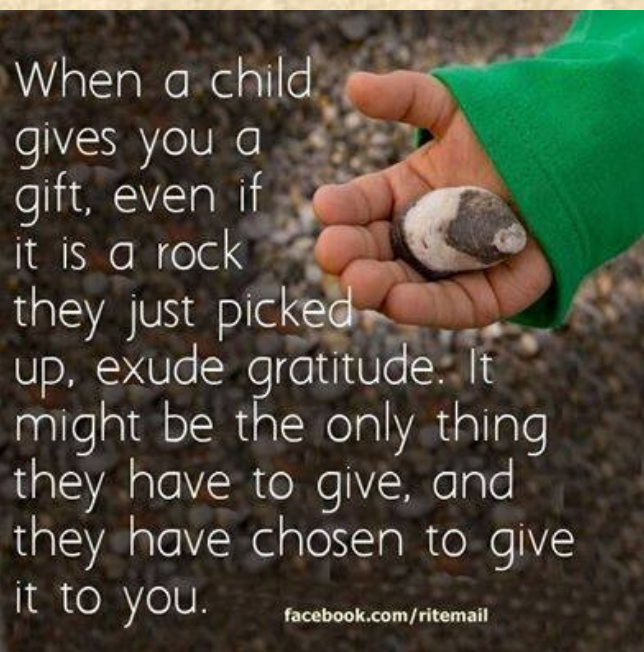


There are some interesting programs as well as February's show workshop meeting coming up. Please join us!

*Camille Rutkowski*

### My Life As A Rock By Dave Hughes

My life started off as a mass of molten magma deep within the earth. Then as I got a little older I started to rise up slowly toward the surface of the earth. As I went through a tunnel I picked up some minerals. Then I started to grow faster and faster, up up I went. When I reached the top I spewed out all over the ground. I could see my family, they were all around me. We all started to cool down and as the eons and eons went by we got harder and harder. As we laid there and cooled off I got more and more minerals from the ground water that flowed all around us and little tiny crystals started to grow inside of me. I had nothing to do and no place to go, so I just laid there and watched the time go by as the Earth kept changing. The mountains grew tall and then they were washed away by the wind and the rain. Millions of years went by and then one day a strange creature, (called a Rock Hound) came by and picked me up and took me away from my home and family. He took me inside his weird cave he called a shop, and threw me down with a bunch of other rocks that he had laying there in the corner. A short time went by and then one day he picked me up and put me inside of a big box that he called a saw, into something he called a vice and squeezed me real tight, then when he closed the lid there was a



When a child gives you a gift, even if it is a rock they just picked up, exude gratitude. It might be the only thing they have to give, and they have chosen to give it to you.

[facebook.com/ritemail](https://www.facebook.com/ritemail)

loud noise and oil sprayed all over me and then it happened, I was cut into several pieces. He then cleaned all my pieces and took one of them and marked an oval on me, then he cut me up again all around the oval on a smaller saw. Then he took me to another machine and started to grind away at me. He went from wheel to wheel down the line and as he went, the grinding got easier and easier. Then he put me on a wheel that had a smooth cloth that had a weird paste on it he called polish and polished me until I shone so bright you could see yourself. He then put me in a piece of metal that he called a Finding. When he was all done he sat back and admired me. I had turned into a beautiful piece of jewelry. Then he took me to another strange cave that had lots of lights and people in it, where he showed me to one of them. This person took me and put me in a glass case under a bright light and set it out where all the people could walk by and look at me. They said nice things about me. I am so happy with my new life as a rock. via Magic Valley Gem Club



December 4th

**MONROVIA ROCKHOUNDS BOARD MEETING**

**President:** *Janie Duncan* called the meeting to order at 2:25 PM.

**Vice President:** *Camille Rutkowski* December is the Christmas Party at 6pm at the Embassy Suites hotel in arcadia. January is Tony and Sandy Fender on Mt. Saint Helens. February will be a station table workshop on crafts for the Treasure wheel and show. April is the Silent Auction. May is Dick and Mary Pat Weber Pilbara Region of Australia.

**Secretary:** *Michele Silcock* The minutes were approved as corrected in the bulletin.

**Representative:** *Ray Ritchey* was absent **Representative:** *Colleen Chestnut* was absent

**Treasurer:** Jim Lloyd. We have 46 paid members.

**Auditor:** *Louise Stack* All is balanced.

**Website:** *Jo Anna Ritchey* It is up to date. All 1914 phone numbers have been removed.

**Photographer:** Donald Sneberger no report

**Federation:** *Jo Anna Ritchey* The 2015 Show will be in Lodi and hosted by the CFMS officers. The 2016 in Placer-ville. They are near gold panning areas.

**Fellowship:** *Louise Stack Ray* is still having problems recovering from the surgery and his stroke. Judy McCulloch is doing much better.

**Card Fellowship:** Aynn Freeman has sent cards

**Field trip:** see the group trips listed in the newsletter.

**Bulletin:** *Janie Duncan* There is will be no emails, birthdays or phone numbers except the Ritchey's and Janie's

**Historian:** *Nancy Hamrick* absent

**Potluck Bingo BBQ night:** *Donald Sneberger* was sick

**Great Rock Drawing:** *Louise Stack* We will have a members drawing for a sphere. January Rose Quartz sphere.

**Custodian:** *Jim Lloyd* Ralph has got the new screws for the show cases.

**MOROKS Fun Day.** Jewel Tunnel Open House Dec. 13th 10-4

**Refreshments:** Judy Romine and Janie Duncan will bring them for January.

**Show:** *Jo Anna Ritchey* She has assigned sub chairmen for show. Michele will do the Main Prizes, Janie will do Kids, Kitchen and ticket printing. Louise Stack will do Volunteers. Aynn Freeman will do the Treasure Wheel. William has been asked to do Security and Publicity and Denise Davis main prize tickets sales. We hope Tom will do the truck and Thomas Witt the overnight security. Jo Anna has asked Ray Audette to help with grab bags. All indoor spots are filled. Jo Anna has ordered the tumbled stones.

**Old Business:** *Janie Duncan* T shirts will be for sale at the January meeting. \$10.00 each

Michele Silcock is the 2014 nominating Committee chairman. See her if you wish to run for office. The proposed slate of officers is Janie Duncan President Michele Silcock Vice President Jim Lloyd Treasure Louise Stack Auditor Denise Davis Secretary.

**Janie Duncan** Adjourned the meeting at 3:15 pm



**Bench Tips by Brad Smith** More BenchTips by Brad Smith are at FaceBook [facebook.com/BenchTips](https://www.facebook.com/BenchTips) or at [groups.yahoo.com/group/](https://groups.yahoo.com/group/) Get all of Brad's bench tips in "Bench Tips for Jewelry Making" on Amazon .com

**DRILLING A STONE** One of the things my students often ask to do is drill a hole through a piece of gemstone. The usual thought is to get a diamond drill, but I've found these often break or burn up. The reason I think is that the drill pivots on the piece of diamond on the drill tip. By pivoting the diamond does not cut. When it doesn't cut, you tend to add more force, and the drill is damaged by excess heat. A much better approach is to use a core drill. This is a small hollow tube with a coating of diamond grit at the business end. The diamonds easily carve out a circular arc without undue pressure or heat buildup. Core drills are readily available from lapidary and jewelry supply companies. They come in sizes as small as 1mm and are reasonable in price, for instance \$6 for 2mm diameter. Chuck up the core drill in a drill press or a Foredom and be sure to keep the drilling zone wet to cool the tool and to flush out debris. Also, if you're drilling a through hole, go very easy on the pressure as the drill is about to break through. Otherwise you will usually chip off some of the stone surface around the hole.

December 18th

**MONROVIA ROCKHOUNDS GENERAL**

**President:** *Janie Duncan* called the meeting to order at 7:30 PM.

**Vice President:** *Camille Rutkowski* Tonight is the Christmas Party.

**Secretary:** *Michele Silcock* The minutes were approved as written in the bulletin.

**Representative:** *Ray Ritchey* no report

**Representative:** *Colleen Chestnut* no report

**Treasurer:** *Jim Lloyd*. We have 49 paid members by the end of the night.

**Auditor** *Louise Stack*: The auditor report says the books are balanced.

**Website:** *Jo Anna Ritchey* up to date.

**Federation:** *Jo Anna Ritchey* The 2015 Show will be in Lodi and hosted by CFMS officers. The 2016 in Placerville. They are near gold panning areas.

**Fellowship:** *Louise Stack* We had 1 guests present. Raymond Ritchey.

**Photographer:** Donald Sneberger No report

**Show:** *Jo Anna Ritchey* has assigned sub chairmen for show. We have a couple of new dealers for the show next year. Michele will do the Main Prizes, Janie will do Kids, Kitchen and ticket printing. Louise Stack will do Volunteers. Aynn Freeman will do the Treasure Wheel. William and Ralph will to do Security and Publicity. Denise Davis main prize tickets sales. We hope Tom will do the truck and Thomas Witt the overnight security. All indoor dealers are final. Ray Audette is doing Grab Bags. We ordered tumbled stones from Village Originals now. Inside dealers are filled.

**MOROKS Fun Day:** Tonight!

**Field trip:** Quartzite

**Bulletin:** *Janie Duncan* There is will be no emails, birthdays or phone numbers except the Ritchey's and Janie's

**Historian:** *Nancy Hamrick* no report

**Potluck Bingo BBQ night:** *Donald Sneberger* No report

**Great Rock Drawing:** *Louise Stack* Members only drawing of an onyx sphere was won by Colleen Chestnut.

**Custodian:** *Jim Lloyd*

**Refreshments:** Janie Duncan and Judy Romine have volunteered for January.

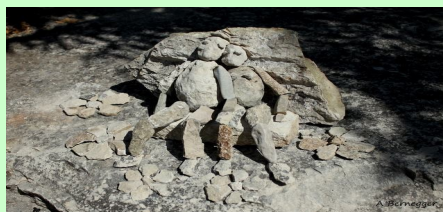
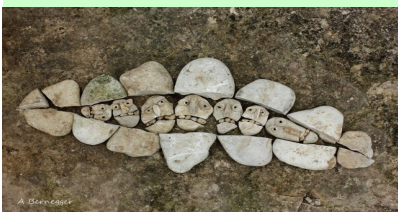
**Old Business:** *Janie Duncan* 1. Michele Silcock has volunteered to be Chairman of the 2015 Election of officers. The proposed slate of officers is Cal Matthews President Michele Silcock Vice President Jim Lloyd Treasure Louise Stack Auditor Denise Davis Secretary. If you wish to run for an office please see Michele.

**New Business:** *Janie Duncan* 1. Janie has a girl scout rock booth coming up in January.

She is also helping a group of Boy Scouts in a geology identification competition.

**Janie Duncan** Adjourned the meeting at 7:40pm

**PS** *The bill for the Christmas Party was resolved. We ended up paying for drinks and the Embassy Suites admitted that there was a problem between what we had been told and what they tried to charge us. We ended up paying about \$62.00 more. Needless to say we will not be going back there again.*



**Rock Song Title of the Month:**

**Like A Rock - 1986 - Bob Seger**

**January Program will be Tony and Sandy Fender on Mt. Saint Helens**



<http://www.amlands.org> for more information on what you can do to protect our rock sites.

**BLACK TOURMALINE BY Lizzie Lyles**

Tourmaline has long been revered by many ancient cultures . Egyptian legend speaks of how Tourmaline made its journey from the center of the Earth and passed over a rainbow , taking with it all of the colors as its own . Ancient magicians relied upon Black Tourmaline , known as "Schorl, " to protect them from earth demons as they cast their spells . Today, this stone is still revered as a premier talisman of protection , a psychic shield deflecting and dispelling negative energies , entities or destructive forces . It guards against radiation and environmental pollutants , and is highly useful in purifying and neutralizing one' s own negative thoughts and internal conflicts , and turning them into positive , usable energy . Black Tourmaline is also a powerful grounding stone , electrical in nature , providing a connection between Earth and the human spirit. Its supportive energy

aligns the energy centers of the body and channels healing light throughout the system . It promotes a sense of power and self-confidence , allowing for a clearer , more objective view of the world . It is empowering to those who must live or work in challenging environments , or when facing difficult circumstances . Tourmaline belongs to a complex family of aluminum borosilicates mixed with iron , magnesium , or other various metals that, depending on the proportions of its components may form as red , pink , yellow , brown , black , green , blue or violet. Its prismatic , vertically striated crystals may be long and slender , or thick and columnar , and are uniquely triangular in cross-section. The name Tourmaline comes from an ancient Sinhalese word turмали , meaning " a mixed color precious stone," or turamali , meaning "something small from the earth." The most common species of Tourmaline is Schorl , which accounts for ninety-five percent of all Tourmaline in nature . It is black , or sometimes a blue so deep it appears to be black .

The term Schorl was in use before the 1400s , named for a town in Saxony , Germany , where Black Tourmaline was found in nearby tin mines. Needles of Black Tourmaline , or Schorl , can also be found embedded in clear Quartz , called Tourmalinate do radiant black are believed to create a perfect polarity of energies , a manifestation of light and dark forces united together for a common goal . It is regarded as a symbol of great fortune .

One of Tourmaline' s most distinguishing properties is its ability to become electrically charged simply by heating or rubbing it. When charged , one end becomes positive and the other negative , allowing it to attract , or repel , particles of dust or bits of paper . This property of pyroelectricity (from heat) or piezoelectricity (from pressure or rubbing ) was well-known to the Dutch traders of the 1700 s who used Tourmaline to pull ash from their Meerschaum pipes , calling the stone Aschentrekker, or "ash puller." Black Tourmaline is an excellent grounding crystal for meditation and healing. It is said to be soothing for panic attacks, especially those caused by dark or confined spaces. It also helps control fears of doctors or dentists. In the workplace, Black Tourmaline is helpful for boosting concentration. Holding the stone for a few moments can refresh the mind when it is feeling overtaxed. It provides an excellent shield against environmental pollutants, electromagnetic smog, and radiation associated with cell phones, computers, and other electronic equipment. Black Tourmaline is a stone of purification, cleansing the emotional body of negative thoughts, anxieties, anger or feelings of unworthiness. It helps in overcoming substance abuse, and releases any suicidal thoughts or self-harming tendencies. It may be beneficial in treating obsessive or compulsive behaviors, and in relinquishing chronic worry. (It is important to note that crystal therapies are not intended as a substitute for other forms of health care, but may be used to compliment or enhance treatment).

Black Tourmaline increases physical vitality, replacing tension and stress with the ability to view the world objectively with clear, rational thought and neutrality. It inspires a positive attitude, no matter the circumstances, and stimulates a practical creativity. Black Tourmaline is devoted to grounding spiritual energies. It furthers the ability to remain radiant in the darkest of circumstances, and to maintain a spiritual consciousness, and helps one to understand the love of the universe

References: 1. Cunningham, Scott. Cunningham's Encyclopedia of Crystal, Gem, and Metal Magic. Llewellyn Publications. St. Paul, 2001. 2. [crystalvaults.com/crystal-encyclopedia/black-tourmaline](http://crystalvaults.com/crystal-encyclopedia/black-tourmaline) via Healthy Beginnings Magazine, October 2014 [www.HBmag.com](http://www.HBmag.com).

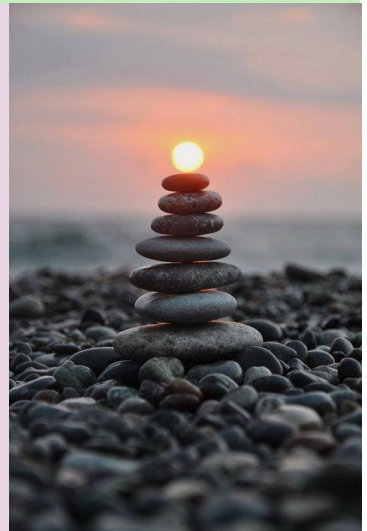
**Drop of Water Test for Topaz**

Quartz and topaz are not easy to separate by eye, and sometimes it is impossible when the quartz is a true topaz color. There is a big difference in price between the two, and anyone describing quartz as "topaz," however innocently, may well be in trouble. Topaz is quite a different mineral and is harder than quartz. Because of this, a drop of water will not spread on topaz but will spread on quartz. Clean the stone as effectively as possible with a cloth or handkerchief to remove all traces of grease. It must be dry before the test. Then place a spot of clean water on it with a thin glass or metal rod. On stones with a hardness of less than 7 on the Mohs scale, the water is dispersed. On harder stones it will remain a globule. The harder the stone, the more rounded will be the globule.via Gritty Greetings



## A QUIZ – A Rockhound I.Q. via The Rockhouser

1. What mineral would one be speaking of if he mentioned Schorl?
2. What is “Scotch Topaz”?
3. What is an “Arizona Ruby”?
4. What is “Rhinestone”?
5. What is a reconstructed stone?
6. If one speaks of a corundum gem, what well know gem stone might he be referring to?
7. What is White Gold?
8. What is Uintahite?
9. What is an opaque stone?
10. When one speaks of different cuts in faceting and refers to “tin cut”, what is he speaking of?



### Answers to Rockhound I.Q.

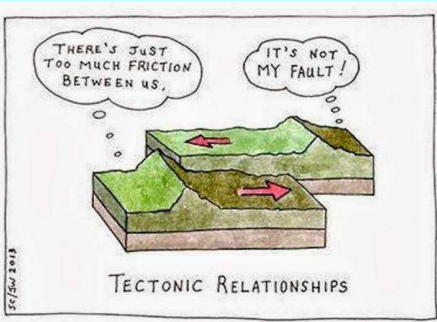
1. Schorl is black tourmaline. 2. Misnomer for quartz, either citrine or smoky quartz. 3. Misnomer for gem quality pyrope garnets. 4. “Rhinestone” is the name for the colorless “paste” or glass which in the main are transparent but show some flashes of color. 5. One formed by fusing small pieces to make a larger stone. Coloring oxide is usually added to improve the color. 6. Corundum gems are ruby and sapphire. 7. Gold alloyed with silver, nickel, platinum, or palladium. 8. A variety of asphalt better known as Gilsonite. 9. A stone so dense that no light can pass through it. 10. A term applied to a “paste” or molded glass imitation stone whose facets have been polished on a lap.

Score: 4—5 Good 6—7 Very Good 8—10 Excellent

### A NEWSLETTER STORY By Dick Stata 03-10-2005 via “El Gambrisino”

I find some of the Mineral clubs in North America have unusual and inventive names for their Newsletters. Here are a few from the Scribe membership list.

Out west I’m known as THE ROCKCOLLECTOR, I was traveling down the ROCKYROAD, heading through the canyon, hearing the ROCKY ECHOES; the noise chased a ROADRUNNER away. I was heading for an old ROCKMINE I’d heard about, if I had any luck I would find a MINERAL VEIN or maybe some OUTCROPPINGS. I had my COLLECTING BAG; in it was my old STONE CHIPPER and my trusty ROCK CHIPPER. I was in luck I found the TAILING’S pile. In seconds I became an AGATE EXPLORER and in those PICKIN’S AND DIGGIN’S I found to my amazement an AMMONITE. It was around about then that I startled by a ROCK RATTLER who scared me so bad I made a YELLOWSTONE DEPOSIT on the ROCKPILE, I thought for a minute I’d be writing my MINERAL MEMOS to the SCRIBE HISTORIAN. I recovered my wits and picked up my AGATIZER, I used it to locate STRATA DATA, it was in my bag with THE DOPSTICK and that water sprayer I used so I wouldn’t have to be a ROCK LICKER, you know CHIP AND LICK. I love to hear the CHIPPERS CHATTER and those GRANITE CHIPS flew as I hammered with all my MINERAL MITE in that SHAWNEE SLATE. I was startled again, this time by a HOUNDS HOWL it was a ROCKHOUND HEROLD of sorts, seems it was ahead of a ROCKHOUND ROUNDUP from the MINGUS ROCKY TIMES, it was all SHIN SKINNER NEWS to me. I met with a Mr. BEEHIVE BUZZER and had a little STONE



CHAT about me being a HI GRADER they had me in a COLLECTORS CORNER. After a little ROCK CHATTER and a few QUARRY QUIPS he calmed down. I told him I was broke so he gave me a GRUBSTAKE. I couldn’t stand all those ROCKHOUND RUMBLINGS, so I threw my PINK DOLOMITE SADDLE on my old horse ROCK-IT and rode off. I made like a SILVER CAMELION and I disappeared into MOTHER NATURES BASEMENT, I had a few bucks in my pocket but I didn’t have a single CRYSTAL, not even a single PRAIRY GEM, it was a bad day for the T-TOWN ROCKHOUND.

## Obsidian: A Biography by Terry Yoschak via WGMS Rockhounder

If we were to tell the life story of a piece of obsidian, one of the millions of pieces native to California, it might go something like this: born in a volcanic eruption, quarried and carved into a scraper for tree bark, traded for ocean shells, chipped into an arrowhead, lost during a deer hunt, buried by debris and sediments, dug up by an archeologist, mailed to a laboratory for testing, and finally laid to rest in a museum collection.

That sounds like a useful, well-traveled life. But a short one, since its lifespan as described above could be a mere 20,000 years or so – quite a youngster compared to most rock and mineral specimens. Yet few other minerals have had as much cultural, historic and scientific importance as obsidian. The key to obsidian's impact lies in two factors: its homogeneity (uniformity or sameness) and its ability to hydrate (to absorb water from the surrounding air or soil).

When obsidian is born in a rhyolitic lava flow, where the lava cools so fast that no crystals form, the resulting chemical composition is homogenous across the flow.<sup>1</sup> Every flow will contain slightly different amounts of trace elements than every other flow, so each flow has a chemical “fingerprint” of its own. Two pieces of obsidian from the same flow will have identical fingerprints, no matter how far apart they were discovered. Obsidian “sourcing” (determining exactly where a piece of obsidian originated) is accomplished by the use of Neutron Activation Analysis (NAA), which bombards the specimen with a field of neutrons. The trace elements within the sample become radioactive and the radioactive emissions are used to identify dozens of different elements and the amounts of each element. Since no two flows anywhere in the world have exactly the same trace elements in exactly the same amounts, comparing the specimen to a database of previous specimens solves the mystery. According to the Worcester Polytechnic Institute, “fingerprinting of obsidian artifacts by NAA is a nearly 100 percent successful method.”<sup>2</sup>

Obsidian sourcing has been a primary means of determining patterns of migration and trading among prehistoric peoples in California. If the same obsidian fingerprints exist on samples formed at Lassen Peak and excavated near Alameda, trading surely occurred during that 250 mile trip. People near the coast who had no local source of obsidian often traded their coastal treasures, such as shells, for the prized spear point and arrowhead-making material.

Just as homogeneity has enabled us to determine the “where” in the life of a piece of obsidian, hydration has given us clues about the “when.” As soon as obsidian is formed, its exposed surface begins to absorb water from the atmosphere. The absorption continues steadily over time, dependent on variables such as local temperature and humidity. By microscopically measuring the depth of the absorbed water layer, called the “hydration rim,” we can determine the date of an obsidian artifact, either relative to another artifact, or – sometimes – with an absolute date.

When obsidian is quarried or flaked in the process of becoming an artifact, new surfaces are suddenly exposed to the atmosphere, beginning new hydration processes. In our biography above, the tree bark scraper would have been hydrating longer than the arrowhead – but how would we know the true age of the artifact when different hydration depths and layers exist on the same specimen? In addition, without knowing how the climatic variables may have changed over thousands of years, the process of the hydration dating method has “major limiting problems.”<sup>2</sup> Some of these pitfalls have given rise to wildly conflicting and controversial theories about the age of the first human settlements on our continent.

A new technique called Secondary Ionization Mass Spectrometry (SIMS) involves slowly penetrating into the obsidian sample with an ion beam and measuring more precisely the distribution of hydrogen (in the absorbed water), and the depth of the hydration rim.<sup>3</sup> As science develops even more sophisticated laboratory techniques and computer models to analyze hydration variables, we will gradually be able to refine and revise the “when” of obsidian specimens, and then perhaps every piece of obsidian can have its own true biography.

References: 1. Glascock, Michael. *Archaeology, Geology, and Geochemistry of Obsidian for Provenance Research*. Oct 2002. <[http://www.peak.org/obsidian/abstracts\\_g.html](http://www.peak.org/obsidian/abstracts_g.html)> 2. “Neutron Activation Analysis.” Worcester Polytechnic Institute. <<http://www.wpi.edu/Academics/Depts/ME/Nuclear/Reactor/Labs/R-naa.html>> 3. “The Obsidian Clock.” Oak Ridge National Laboratory. <<http://www.ornl.gov/info/reporter/no7/clock.htm>> 4. Photo from “Introduction to Obsidian Hydration Studies.” <[http://www.obsidianlab.com/info\\_oh.html](http://www.obsidianlab.com/info_oh.html)> <http://>







Pictures by Donald Sneberger

# MOROKS PICTURE PAGE

## Old MOROKS Pics Page



← Raymond M Alf  
Museum of  
Paleontology



↓  
Gold Panning on the  
North Fork  
Azusa Canyon



↑  
Fieldtrip to the  
Cryo Genie Mine

→  
Trip to Boron





# CFMS January Rock Shows

## January 17 - 18: EXETER, CA

Tule Gem & Mineral Society, Visalia  
 Exeter Veterans Memorial Building  
 324 N Kaweah Avenue, Hwy 65  
 Hours: Sat 10 - 5; Sun 10 - 4

## February 13 - 22: INDIO, CA

San Gorgonio Mineral & Gem Society, Cabazon  
 Riverside County Fair & National Date Festival  
 82-503 Highway 11

## February 27 - March 8, IMPERIAL, CA

Imperial Valley Gem & Mineral Society  
 Imperial Valley Expo 200 East 2nd Street/dd>  
 Hours: Weekends noon - 10 pm; Weekdays 4 pm - 10 pm

## February 28 - March 1: VALLEJO, CA

Vallejo Gem & Mineral Society  
 Solano County Fairgrounds, Mc Cormack Hall  
 900 Fairgrounds Drive Hours: 10:00 - 5:00 daily

## QUARTZSITE 2014-2015 SHOW LIST

- Oct. 31 - Feb. 28 Quartzsite Market Place Street Fair
- Nov. 01 - Feb. 28 Hi Ali Swapmeet
- Jan. 02 - 14, 2015 Prospectors Panorama
- Jan. 01 - Feb. 28, Desert Gardens Gem & Mineral
- Jan. 02 - 11 Tyson Wells Rock & Gem Show
- Jan. 05 - 25 Main Event to be confirmed)
- Jan. 16 - 5 Tyson Wells Sell-A-Rama
- Jan. 17 - 25 Big Tent Sports Vacation & RV Show
- Jan. 21 - 25 Pow Wow Gems, minerals & jewelry
- Jan. 30 - Feb. 8 Tyson Wells Arts and Crafts
- Feb. 06 - 07 Quartzsite SR Center Quilt Show -
- Feb. 13 - 15 Quartzsite Gold Show

### CAMP ZZYZX MARCH 29th - APRIL 5th, 2015

Earth Science Seminar (Zzyzx) near Barstow, CA. dormitory style rooms with bed, mattress & desk. bring bed linen s All rest-rooms and showers are in separate buildings at the center and are communal. , NO PETS limited number Subject to change these classes will be offered: LAPIDARY SOFT STONE CARVING & SCRIM ADVANCED WIRE ART FIELD TRIPS FACETING SHAWSILVER FABRICATION PRECIOUS METAL CLAY BEADING WIRE ART ALTERNATIVE CASTING The fee is \$390.00 per person three meals per day, and classes. Additional charges may be assessed for material furnished by instructors.

See the CFMS for more info and applications

## WEST COAST - SPRING GEM & MINERAL SHOW

MAY 15 - 17, 2015

SANTA ANA, CA

Holiday Inn - Orange County Airport  
 2726 S. Grand Ave.

(take 55 Fwy exit for Dyer Rd. to S. Grand Ave.)

### 80 Top Quality Dealers

- Minerals ★ Fossils ★ Gemstones ★ Jewelry
- Beads ★ Decorator Pieces ★ Meteorites
- Lapidary ★ Metaphysical

**FREE ADMISSION ★ FREE PARKING ★ WHOLESALE ★ RETAIL**

Show Hours: Fri. & Sat. 10 - 6 ★ Sun. 10 - 5

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Cobaltian Calcite- Morocco  
 Photo by Joe Budd©

## CALIFORNIA'S GOLDEN BEAR



CALIFORNIA FEDERATION OF MINERALOGICAL SOCIETIES

2015

### JEWELRY, MINERAL & GEM FESTIVAL

June 12, 13 & 14, 2015  
 10am - 5pm Friday & Saturday  
 10am - 4pm Sunday  
 Lodi Grape Festival & Harvest Fair  
 413 East Lockeford Street, Lodi, Ca  
 www.cfmsinc.org  
 \$6 Adults, Children under 12 Free