MOROKS

JUNE 2014

Monrovia Rockhounds Newsletter

P.O. Box 553 Monrovia, CA 91017 Editor – Janie Duncan



Monrovia Rockhounds June 2014 Newsletter

SUN	MON	TUE	WED	THU	FRI	SAT
1 CFMS SHOW Pomona Fair- grounds # 5	2	3	4	5 MOROKS Boanrd Mtg. 2:15 @ Janie's	6	7
8	9	10	11	12	13	14
14 Happy Father's Day	16	17	18	19 General Mtg. Welo Opals	20	21 Summer begins
22	23	24	25	26	27	28
29	30			Dues	Are	Due

MOROKS JUNE 2014 NEWSLETTER

MONROVIA ROCKHOUNDS

Our Website is www.moroks.com							
ELECTED OFFICERS	CHAIRPERSONS	CHAIRPERSONS					
PRESIDENT – NEWSLETTER Janie Duncan (626)	6) 358-8157 REPRESENTATIVE – Ray Ritchey	(626) 359-1624					
VICE PRESIDENT – Camille Rutkowski	REPRESENTATIVE – Colleen Chestnut FEDERATION – Jo Anna Ritchey	(626) 443 7662 (626) 359-1624					
	•	(626) 357-4106					
SECRETARY – Michele Silcock (626)	357 8425	(626) 358-8157					
	CUSTODIAN – Jim Lloyd	(626) 793-9239					
	PICNIC – PHOTO Donald Sneberger	(626) 941-6214					
TREACURER CUSTORIAN lim Loud (696)	SHOW – WEBSITE – Jo Anna Ritchey	(626) 359-1624					
TREASURER – CUSTODIAN - Jim Lloyd (626)	ROCK DRAWING - Louise Stack	(626) 966-0350					
	FIELD TRIP – Ray Ritchey	(626) 359-1624					
AUDITOR – FELLOWSHIP Louise Stack (626) 96	66-0350 CARD FELLOWSHIP— Aynn Freeman	(626) 303 4343					

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 3rd 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 28th, 1957. The club colors are green & white. The club is a non-profit organization dedicated to providing knowledge of the lapidary arts, geology, mineral logy, 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.

MONROVIA ROCKHOUNDS

MOROKS NEWSLETTER JUNE 2014

Page 3

Monrovia Rockhounds June Birthdays Michael Machlis Becky Fregoso Aynn Freeman Cheryl Lopez



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

JUNE: CERRO GORDO MINE - Historical Ghost Town and minerals associated with the mining of silver, lead, zinc.

JULY 12 : PALOS VERDES -: Glaucophane, barite and agate minerals.

AUGUST 2 : LOS OLIVOS to collect Serpentine, Cinnabar and fossilized whale bone.

SEPTEMBER 20 & 21 : JALAMA BEACH - Agate, jasper, petrified whale bone, travertine onyx, Marcasite and fossils.

OCTOBER 11 : SEARLES LAKE CLUB SHOW & field trips: Pink halite crystals & borax minerals.

NOVEMBER 1 & 2 : WHITTIER CLAIM AREA - honey onyx, agate, jasper, palm root, etc.

NOVEMBER 28 - 30 : WILEY WELL AREA - Geodes, Agates and other good stuff.

DECEMBER 6 : HIMALAYA MINE TOURMALINES - Dig your own pink and green California tourmalines from the world's most famous tourmaline mine, the near beautiful Lake Henshaw in San Diego County, 20 miles east of Pala. Over 200,000 lbs. produced since 1898 including quartz crystals, lepidolite, topaz, morganite, and other pegmatite minerals.

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

The California Federation of Mineralogical Societies Show and meeting is at the Pomona Fairgrounds May 30th 31st and June 1st. I will be there all 3 days volunteering in the Kids Zone. We are very fortunate to have such a large show as close to Monrovia as this and we should all go and see what wonders are there. This is a great opportunity to see how the federation works and the amount of dealers at this show is staggering. Please take time to come and please tell all your friends about it. PS I have another news update. We re-

Janie Duncan

ceived another letter from the Department of Justice and we do not need to register with them. Good news.



VICE PREZ SEZ

The May program on the Desert Tortoise Preserve was very interesting. I think we all learned a lot about what the Preservation committee does to protect our desert tortoises. The June program on African opal s is a new program we have not had before. Please come and learn about African opals with us.

May 1st MONROVIA ROCKHOUNDS BOARD MEETING

President: Janie Duncan called the meeting to order at 2:20 PM.

Vice President: *Camille Rutkowski* May is Mary Logan from the Desert Tortoise Preserve. June is Gabriel Mosesson on Welo Opals from Ethiopia.

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

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

Treasurer: Jim Lloyd. We have 26 paid members.

Auditor: Louise Stack took the receipts.

Website: Jo Anna Ritchey It is up to date.

Photographer: Donald Sneberger gave Janie the card.

Federation: Jo Anna Ritchey Ray reported Pasadena club plans to host the 2014 CFMS Show.& Convention at the Pomona fairground building 5 by the Sheraton Hotel May 31-June 2 Janie has been asked to do a children's table. Ray, Becky, Jo Anna, Louise William are all volunteering. Jo Anna, Michele and Janie had made reservations for the Sheraton Hotel by the Fairplex. There is a discount for seniors and children Parking is \$10 per day.

Fellowship: *Louise Stack* Michele Silcock has a sprained ankle and a bone spur in her foot. Her wrist is healing. Ray has severe vertigo.

Field trip: We need a field trip Chairman. Any volunteers?

Bulletin: Janie Duncan no report

Historian: *Nancy Hamrick* was absent **Picnic:** *Donald Sneberger* We discussed the picnic and have decided to do it at the July meeting at 6pm. Maybe more people will come itf it is not on a Saturday when people are so busy. **Great Rock Drawing:** *Louise Stack* Calcite Crystal.

Custodian: Jim Lloyd no report.

MOROKS Fun Day Go to the CFMS Show.

Refreshments: Louise Stack is doing May and we will have ice cream.

Show: *Jo Anna* 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. We still need someone for publicity, Silent Auction is not filled. William has been asked to do Security and Denise main prize tickets. We hope Tom will do the truck and Thomas Witt the overnight security.

Old Business: Janie Duncan

New Business: Janie Duncan

- 1. We sent a letter back to the Department of Justice with what they asked for but no registration. listed as we are not a trust. No news yet.
- 2. We are doing the \$500 Scholarship same as we gave last year to a Monrovia High School student. June 2nd.
- 3. We voted Judy Romaine in as a new member.
- 4. The club is buying gravel with sapphires in it for the September meeting. We will all be hunting for gemstones to keep.

Janie Duncan Adjourned the meeting at 4:00 pm



Bench Tips by Brad Smith More Bench Tips by Brad Smith are at FaceBook facbook.com/ Bench Tips or at groups.yahoo.com/group/ Get all 101 of Brad's bench tips in "Bench Tips for Jewelry Making" on Amazon .com

SAWING JUMP RINGS The difficult part of making jump rings for me has always been holding the coil while cutting off the individual rings. I use a saw to get the best fit when closing the rings later. I've seen all sorts of suggestions for ways to hold the coil, but the one that works best for me is this little jig made from scrap wood. It's about 2 inches wide and 4-5

inches long with a groove cut down its length to cradle the coil of wire and a thin stop attached to the front end.

May 15th

MONROVIA ROCKHOUNDS GENERAL MEETING

President: Janie Duncan called the meeting to order at 7:05 PM.

Vice President: *Camille Rutkowski* Tonight is Mary Logan from the Desert Tortoise Preserve. June is Gabriel Mosesson on Welo Opals from Ethiopia. July is the picnic at 6pm same place. August is open. September is Sapphires hunting in Monrovia.

Secretary: *Michele Silcock* was absent. The minutes were approved as corrected in the bulletin. 2 mistakes. **Representative:** *Ray Ritchey* was absent

Representative: Colleen Chestnut was absent

Treasurer: Jim Lloyd. We have 26 paid members. **Dues are due.**

Auditor Louise Stack: no report.

Website: Jo Anna Ritchey was absent

Federation: *Jo Anna Ritchey* was absent. Janie reported Pasadena club is hosting the 2014 CFMS Show & convention at the Pomona fairground Building 5 by the Sheraton Hotel May 30-June 1 Janie has been asked to do a children's table. With Louise Stack. Ray, Ralph, Becky William and Jo Anna will be there helping.

Fellowship: *Louise Stack* We had 3 guests present. Mary Logan Ray and Holly. We sang happy birthday to Jim Lloyd and Michele is slowing healing her ankle and wrist.

Photographer: Donald Sneberger took pictures.

MOROKS Fun Day: Go to the CFMS Show!

Field trip: Looking for a chairman.

Bulletin: Janie Duncan no report

Historian: Nancy Hamrick no report

Picnic: *Donald Sneberger* The picnic will be at 6pm before the July regular meeting. We will discuss it more next month. Don't forget the bingo. The club will furnish the meat, condiments, paper goods and drinks. The rest will be potluck. Guests are welcome.

Great Rock Drawing: *Louise Stack* yellow calcite sphere was won by Denise Davis. Ray won the sharks tooth and some Rockhound symbols items were won by Nancy Hamrick.

Custodian: Jim Lloyd no report.

Refreshments: Louise Stack brought them tonight. We had ice cream. Michele and Nancy will do June.

Old Business: Janie Duncan

- 1. Janie and Jim have sent the letter replying to the Dept. of Justice with what they asked for but no registration. No reply yet.
- 2. Janie did the booth at Olvera Street. It was really fun.
- 3. We will be giving a \$500.00 scholarship this to a Monrovia High School Student in Earth Sciences. Her name is Alejandra Esparza. She is studying environmental Engineering.
- 4. Judy Romaine was accepted as a new member.
- 5. Janie gave out the plaques form the installation lunch to Michele and Louise.

New Business: *Janie Duncan* The sapphire gravel came in the mail and Jim put it in our cupboard. We will use 1 container out of the 7 for a main prize at our rock show next year.

Janie Duncan Adjourned the meeting at 7:50pm

Rock Quote of the Month: Ev

Everybody must get stoned.

Bob Dylan

June Program is on Welo Opals of Africa



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

Popigai Crater & Impact Diamonds

About 35 million years ago an asteroid about 3 to 5 miles in diameter, traveling at a speed of about 35,000 to 45,000 miles per hour slammed into the area that is now known as the Tamyr Peninsula of northern Siberia, Russia. The energy delivered by this hypervelocity impact was powerful enough to instantly melt thousands of cubic kilometers of rock and blast millions of metric tons of ejecta high into the air. Some of the ejecta landed on other continents.



The large Popigai impact crater from space. Photo © www.wikipedia.org

The explosion produced a 62 mile-wide impact crater with a rim of deformed rock up to 12 miles wide. We now know this feature as "Popigai Crater" or "Popigai Astroblem," the seventh largest impact crater that has been identified on Earth. It is designated by UNESCO as a Geopark, a site of special geological heritage. The heat and pressure produced by this impact greatly exceeded what is required for the formation of diamonds at the impact point. A hypervelocity impact of a 3 mile wide object would produce an energy burst equivalent to millions of nuclear weapons and temperatures hotter than the sun's surface. In late 2012, the Siberian branch of the Russian Academy of Science said the Popigai crater in eastern Siberia contains "many trillions of carats" in so-called "impact diamonds" which are good for technological purposes but not for jewelry. The deposit was discovered in the 1970s but

kept a state secret. It was little publicized even after the fall of the Soviet Union when its sheer remoteness, 1,200 miles from the main Trans-Siberian railway line, made exploitation impossible. Even today there are problems linked to accessibility and mining in an extreme environment. Large examples of impact diamonds from Popigai Carter. Photo © www.nydailynews.com However, according to the official news agency ITA Tass, the diamonds at Popigai are "twice as hard" as the usual gemstones, making them ideal for industrial and scientific uses. Many of the diamonds at Popigai contain crystalline lonsdaleite, an allotrope of carbon that has a hexagonal lattice. Pure, laboratory-created lonsdaleite is 58%



harder than ordinary diamonds, although it is unknown whether the natural, impure examples at Popigai show similar characteristics. Additionally carbon polymorphs even harder than l onsdaleite have been discovered at the crater. What remains to be seen is if this creates the possibility of Russia undercutting the price of synthetic diamonds now produced in China, and delivering a cheap new technology for making machine and airplane parts as well as jewelry work.

Information for this article came from www.wikipedia.org, www.nydailynews.com, www.csmonitor.com.www.geology.com, via www. Gemcrafters and Explorers Club "EL Gambrisino" phys.org

The Great Cameo of France by Carolyn Weinberger Proof

that the Greeks and Romans cut cabochons can be found in numerous museums around the world including our own Walters Art Museum here in Balti-more, but do you know about the Great Cameo of France? This amazing cameo is a five layered sardonyx that dates back to approximately 23 AD. It has a well documented past probably coming to France from the Byzan-tine Empire, then stolen during the French Revolution and recov-ered in Amsterdam years later. The cameo is the largest of the ancient cameos to survive. It is engraved in 24 layers which are divided up into three levels. The theme of the work as-serts the continuity and dynastic legitimacy of the Julio-Claudian dynasty. The original gold frame which was lost during the Revolution has been replaced with one of bronze. The cameo is now on display at the Bibliotheque Nationale in Paris. Via Gem cutters News



Dangerous Geology: Who Put the Quick in Quicksand? by Andrew A. Sicree, PH. D. Nittany

Mineralogical Society Bulletin, Jan 2009 via The Agatizer

Can quicksands kill? In the final scene of many an old time movie, the bad guy met his end slowly sinking into quicksand along the bank of a jungle stream. After a minute or two, nothing remained of the villain but his hat, floating on the now-placid surface of the quicksand. Quicksand makes for Hollywood classics, but does it make scientific sense that a quicksand could kill a man? The "quick" in quicksand implies "living" or "lively" (from the Anglo-Saxon cwic, "living") - akin to the use of the term "quicksilver" for mercury. A quicksand is a "lively sand" - an apt name for a sand that moves and swallows up unfortunate bad guys. Without a doubt, quicksands exist in many parts of the world. Reportedly, they are found in environments as disparate as Morecambe Bay, England; coastal regions of New Jersey, North Carolina, and Florida; the Lençois Marahenses of Maranhão, in northeast Brazil; in the Sahara Desert in the Qattara Depression in Egypt; and near Qom in Iran. The critical question is whether or not one of these quicksands could entrap a man and suffocate or drown him. Experts point out that any mixture of sand and water would have a density greater than that of the human body; thus a human being should be able to float on top of a quicksand. This is, however, only part of the story. Sand and quicksand Normal sand is mostly composed of well-rounded grains of quartz transported and sorted by the action of water and wind. Beach sands, for instance, are deposited by wave action and blowing winds, while wind alone forms desert sand dunes. How does a natural bed of sand become a Quicksand? In a well-packed pile of quartz sand, gaps between the rounded sand grains make up about 25 to 30 percent of the total volume. These voids are filled with air or water. But not all sand grains are spherical, and elongate or irregular sand grains make loose packing possible. In loosely-packed sand, voids make up between 30 and 70 percent of the volume. A loosely-packed sand is metastable - it looks firm, but readily collapses and compacts to a stable, more densely packed bed. Pressure, vibration, or upwelling water serves to overcome the friction between grains and the sand re-sorts itself in a more stable configuration. Studying quicksands in recent years, scientists discovered that not all quicksands are identical. Fluidized beds The classical explanation of quicksand is that it is a "fluidized bed." In a fluidized bed, the grains are partially supported by the pressure of the surrounding fluid. A flow of water upwelling through a bed of sand serves to create a quicksand because the water is effectively "floating" the sand enough that the entire bed of sand behaves like a fluid. Anyone walking onto such a sand would rapidly sink down into the quicksand just as though they had walked into the surface of a pond. Quicksands created by upwelling water occur in many places where there are natural springs. This can be along riverbanks, at the bases of alluvial fans (fan-shaped masses of sand and gravel carried down from the mountains by erosion), or on beaches exposed at low tide. The latter can be particularly treacherous because someone trapped in a beach quicksand might be drowned by the incoming tide before being freed. Civil engineers watch for "quick-conditions" during construction of buildings, dams, and bridges because upwelling waters can fluidize any soil (not only sands) and cause catastrophic failures of structures built on them. You would never, of course, construct a building on a quicksand deliberately, but a soil or sand that appears firm today might, given sufficient rainfall, become "quick." At that point, some stimulus such as a minor earthquake tremor might cause the underlying sediments to liquefy and undermine the foundations of your building. The destruction of Port Royal In the 1600's the town of Port Royal, Jamaica, was "sin city," home to buccaneers, cutthroats, slave traders, and prostitutes. Port Royal sat perched upon a spit of sand on the edge of the Caribbean Sea near Kingston, Jamaica. An earthquake struck on June 7th, 1692 at 11:43 a.m. (we know the exact time from a watch that was recovered from the destroyed city afterward). The city's buildings didn't collapse; they sank into the sand, and about 3000 people, half of the city's residents, perished. It was as though the Earth "swallowed them up." Survivors claimed the wrath of God was visited upon the city for its sinful ways. Certainly it must have seemed that way to those lucky enough to live though the disaster. The 1692 earthquake served as the stimulus for the liquefaction of the sand upon which the town was built. Normally, at Port Royal the water table was only a few feet below the surface. Perhaps the spring of 1692 was wetter than usual and the water table had risen. The shaking of the ground during the earthquake caused the sand to become "quick" and the resulting quicksand swallowed whole streets of buildings. At the same time, the ground surface dropped downward (due to compaction and seaward slumping) and most of the town was submerged. Tsunamis that hit the town after the earthquake did nothing to improve the situation. Today, the town lies at least 25 feet (8 m) below average sea level. The semi-rigid trap Quicksands are common in the Lençois Marahenses of Marahhão, in northeast Brazil. Here, sand dunes intermingle with rainwater-filled lagoons. As these lagoons dry up, a soft crust of brown or green algae and cyanobacteria remains, covering pits of water-saturated quicksand. People who have stood on the crust of these quicksands liken the experience to standing on a waterbed. As long as the crust remains intact, the quicksand bed quivers and vibrates underfoot. If you break through the crust (which is easy to do), you'll quickly sink to the bottom of the sand pit. Upon being disturbed, the quicksand "collapses" to a much firmer sand in which the shear strength increases with depth. In other words, the deeper your legs are stuck in the sand, the harder it gets to pull them out. Most of these pits are only about a meter (3 feet) deep, so they don't present an immediate threat to life, but it can be challenging to extricate oneself from them. By laying sheets of plywood on the surface, researchers found they were able to walk across these pits without perturbing the quicksands. In other parts of the world, such as Iran and Egypt, salt rather than bacteria and algae appears to play a role in holding the quicksand in a metastable condition. These semi-rigid trap-type quicksands differ from the fluidized bed-type of quicksand in two important ways. First, the semirigid traps have stationary water - there is no continuous up flow of spring water. Second, the semi- rigid raps change drastically after they have been disturbed: they switch from a fluid state to an almost solid state. Death of the bad guy While it is true that you should be able to float on (and presumably swim out of) a fluidized bed-type of quicksand, the semi-rigid trap-type quicksands present a different challenge. When you walk onto one of these quicksands, you rapidly sink into the sand. Upon being disturbed, the morass changes from a quicksand to a tightly compacted, almost solid, mass, effectively "cementing" you in place. The force required to pull your legs out of the compacted sand can be much greater than that which a single man can exert. If you don't have friends nearby with a rope to pull you out, you'll have to slowly wiggle about and dig to free your legs. If you have the misfortune to fall into a quicksand that is deeper than your height, you might not live to write home about the experience.

MOROKS NEWSLETTER JUNE 2014

SAGENITE. Agates with inclusions are some of the rarest and most beautiful agates in the world. These inclusions may be sagenitic (sagenite), plume, dendritic, or moss. During our club's November field trip to the Afton Canyon area near Barstow, CA, we were directed to a barren hill in Baxter Wash. Sylvia Cliffe, one of our club's most experienced members, informed us that we were going to search the hillsides for Sagenite. This prompted the question: –What is Sagenite? II and your editor was tasked to provide an explanation. After some research I can report that the term –Sagenite II is perhaps a misnomer - a term that refers to a characteristic of agates whereby the material displays rays, or sprays, of crystal growth within the substance. Cover photo is of Sylvia Cliffe showing her just-found sagenitic agate in Baxter Wash. Collector Pat McMahon, of the Sedona, Arizona, Gem and Mineral Club, has identified sagenite from over 250 different agate deposits worldwide. She offers this information for our readers: – Sagenite, or more accurately, *sagenitic agate* is any agate having acicular or needle-like mineral growths. These hair-like filaments are often arranged in fans or sunbursts and may come in a wide array of colors. My belief is that at least a little sagenite can be found at most agate fields. It is impossible to say today what percentage of the original. Via PLS Ramblings



Wyoming Jade Putters Submitted by Dave Duncan

Jade Putters is a company that specializes in making custom golf putters out of jade. Marble, petrified wood and a variety of agates can also be custom ordered. According to the company, "many types of stone may be used; however, the primary stone is commercial grade of Wyoming nephrite jade, which is one of the toughest rocks in the world. It produces a very light feel when hit soft, and a very crisp feel when hit firm. This unique variety of jade is found only in a narrow band of rock outcrops in the middle of Wyoming. What makes it special is that it contains a high percentage of iron, magnesium and other metals in the chemical formula, which adds to the weight of the jade. The shafts are standard equipment and can be special ordered to include steel, colored steel or graphite, long or short. Standard grips are mid-sized pistol style. The

putters are made to be used and conform to USGA rules as per ruling 93-238. They are also given as executive gifts, trophies, awards and prizes. They may be custom engraved with names, dates or logos."

Jade Putters, LLC 1002 Frontier Park Ave. Cheyenne, WY 82001 307-630-7728 Email sales@jadeputters.com





Photos by Donald Sneberger

MOROKS PICTURE PAGE May Program Desert Tortoise Perserve Mary Logan



Mary Logan from the Desert Tortoise Preserve

Nancy Hamrick and Denise Davis with the prizes they won.

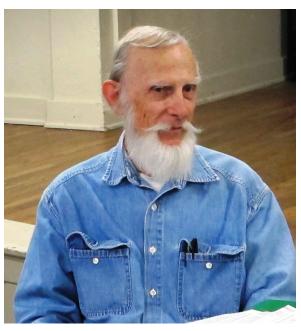




Guest Ray with his rock



Pamela Osburn Birthday Girl



Jim Lloyd birthday Boy



Go see a CFMS Show this June

May 30 – June 1: POMONA, CA 2014 CFMS Show and Conference Fairplex, 1101 W. McKinley Ave. Pomona, CA – to be hosted by the Pasadena Lapidary Society Show Website: www.cfms2014show.com June 6 - 8: LA HABRA, CA North Orange County Gem & Mineral Society Sonora High School 401 S. Palm Street Hours: Fri 4 - 8:30; Sat 8 - 8; Sun 9 - 6 Contact: Nancy Bird, (562) 697-0636 Website: www.nocgms.com June 7 - 8: GLENDORA, CA Glendora Gems & Mineral Society Goddard Middle School 859 East Sierra Madre Hours: Sat. 10 - 5; Sun 10 - 4 Contact: Bonnie Bidwell, (626) 963-4638 Website: Facebook Page June 14 - 15: CAYUCOS, CA San Luis Obispo Gem & Mineral Club Cayucos Vets Hall at the Pier 10 Cayucos Drive Hours: 10 - 5 daily Contact: Kim Noyes, (805) 610-0603 Website: www.slogem.org June 27 - 29: RIALTO, CA Orange Belt Gem & Mineral Society "Tailgate" across street from Rialto City Hall 105 S. Palm Ave. (corner 1st & Palm Ave.) Hours: Fri & Sat 9 - 6; Sun. 9 - 3 Contacts: Ken or Jessica Gard, (909) 624-1782, (909) 887-5507 kengard@roadrunner.com Website: obmsrocks.yolasite.com June 28 - 29: CULVER CITY, CA Culver City Rock & Mineral Club Veterans Memorial Auditorium 4117 Overland

- Why does a Moon-rock taste better than an Earth-rock? Because it's a little meteor.
- What did the mommy volcano say to her baby? I lava you!
- Never lend a geologist money. They think a short term loan is a million years.
- Why would a geologist take his girlfriend to a quarry? Because he wants to get a little boulder.
- Igneous is bliss.



WEST COAST GEM & **MINERAL SHOW**

NOV. 7 - 9, 2014

SANTA ANA, CA

Holiday Inn - Orange County Airport 2726 S. Grand Ave. (take 55 Fwy exit for Dyer Rd. to S. Grand Ave.)

75 Top Quality Dealers

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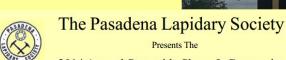
Lapidary **★** Metaphysical

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

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Presents The 2014 Annual Statewide Show & Convention

of the

CALIFORNIA FEDERATION OF MINERALOGICAL SOCIETIES "California's Gem & Mineral Bounty" FAIRPLEX, Building 5, Pomona, CA

May 30, 31 & June 1, 2014 Friday & Saturday, 10 AM to 5 PM Sunday, 10 AM to 4 PM

Admission: Adults \$5, 3-day pass \$12 Seniors 60+ & Military \$4, 3-day pass \$10 Juniors (13-17) \$3, 3-day pass \$7 Kids 12 & Under-Free w/paid Adult

Gems, Minerals, Beads, Rocks, Fossils, Jewelry, Dealers, Exhibits, Speakers, Demos **Raffles, Silent Auctions Kids Activities!**



Parking in Lot 3 for \$10 airplex, Building 5, 1101 McKinley Ave., Pomona, CA. For more information contact-626 260-7239