# Ogden Rock and Gem Club



# Beehive Buzzer

July 2013 Volume 41 Issue 7



# Issue Highlights...

Calendar	2
Board Meeting Notes	2
Faux Silver	2
How NEPA Works, Part II	3
Hutchings Museum	4
Eye of the Sahara	4
Sailing Stones Mystery Solved	5
Bizarre Creature Discovered	5
Dendrites vs Moss Agates	6
Officers & Club Info	7



# Club Notes:

- The location for board meetings has been changed to the bowery behind the Roy City Building.
- Roger Bush is filling in for Joe
   Kent as Field Trip Leader.



# Beehive Rock & Gem Club Program

Thursday, July 26, 2013 – 7 pm

Our main presentation will be done by Dr. Sherm Thomson on how to make some of those boring grays, tans, etc rocks come to life with beautiful



colors or accents. Sherm always does a great job and is a talented lapidarist. Come and enjoy the evening in the cool of our meeting room and expand your talents.



"Rocky" Ray, Program Chairman

### Proposed Changes to Beehive Rock and Gem Club Bylaws

Following are the proposed changes to the Beehive Rock and Gem Club Bylaws. The old words are in bold print and the new proposed words are in italics.

#### **ARTICLE 5**

**Board Meetings** 

The Board meeting shall be on the first **Tuesday** (*Thursday*) of each month unless otherwise stated and is open to all club members.

### ARTICLE 19

Federation delegates

The Federation delegates will be appointed by the Officers and the Board of Directors and **must** (can) be an Officer(,) **or** Board member(, or an appointed member delegate.)

These changes will be voted on at the regular July general Club meeting.

Jim Alexander



"Rest is not idleness, and to lie sometimes on the grass under trees on a summer's day, listening to the murmur of the water, or watching the clouds float across the sky, is by no means a waste of time."

John Lubbock

### Calendar

July

25

Monthly Club Meeting Roy Municipal Center 7 pm

### August

1

Board Meeting Roy Municipal Center 7 pm

16-18

Salina Field Trip

22

Monthly Club Meeting Roy Municipal Center 7 pm

30- Sept 2

Texas Springs, NV Field Trip

### September

2

**Labor Day** 

5

Board Meeting Roy Municipal Center 7 pm

20-22

Gardner Canyon, WY Field Trip

26

Monthly Club Meeting Roy Municipal Center 7 pm

### **October**

3

Board Meeting Roy Municipal Center 7 pm

14

Columbus Day

### Board Meeting Notes July 11, 2013

Both the President and the Vice President were unable to attend. Nine Board members were able to attend. The Board reviewed the Club's Bylaws, and made a few minor changes. These changes were voted on and approved by the Board, and they will be discussed at the next Club Meeting.

Dave Harris will be able to do one more issue of the *Buzzer*, and then will turn his duties over to Linda Pilcher. Thanks to Linda for taking on these duties. Dave would like to stay on as an Associate Editor, but Linda will take on the main role.

Roger Bush is filling in for Joe Kent for a while as the Trip Leader until Joe recovers. Field trips were discussed, and more details of these will be in the Buzzer. Rocky Ray talked about the upcoming meeting, and other meeting topics were discussed.

Next Board meeting will be outside, under the bowery's with the Picnic tables behind the Roy City building where we meet as a club. It was decided that while the weather is good, we could save the club a few bucks, and meet outdoors.

Thanks again to all the Board members for all the work that goes on "behind the scenes"!!

Dave Offret, Club Secretary.

Note: There are no shows listed in the newsletter this month but you can go to <a href="http://www.rockngem.com/show-dates-display/?ShowState=ALL">http://www.rockngem.com/show-dates-display/?ShowState=ALL</a> for shows throughout the country.

### Faux Silver by Brad Smith

I'm fortunate to live in a big city that has frequent jewelry shows where I can buy supplies. But there are certain risks in buying at one of these events or from some of the online venues. Recently, a friend bought a package of 12 mm Sterling jump rings that became copper plated in the pickle. There was no sign of any steel contamination, so I tested them with a magnet to discover they were just plated steel. I ran into a similar misrepresentation a couple years ago. I bought some "genuine" turquoise beads that I needed for 10 mm cabs only to find they were a white magnesite that had been dyed. Best solution is to carry a couple of simple tools with you when you go to buy stones or findings. I usually carry a ten power loupe and a small vernier caliper to measure things. From now on, I'll also be carrying a small, strong magnet with me to test the findings. Dealers are not necessarily the problem. Many have no idea their metals are plated. They were duped by their supplier. Regardless of who's to blame, I think it's worth reporting any problems you find to both the dealer and to the show promoter.

Source: Bench Tips by Brad Smith via MOROKS, Aug 2013 For more tips go to: FaceBook facbook.com/BenchTips or at groups.yahoo.com/group/



### **Danger of Texting**

Wife texts husband on a cold winter's morning:

"Windows frozen."

Husband texts back:

"Pour some lukewarm water over it."

Wife texts back 5 minutes later:

"Computer completely hosed now."

### News from ALAA...

### How NEPA Works - The Very Short Version By Joanne Spivack, New Mexico Activist

This is a continuation of the article of the same title printed in the Buzzer last month. Editor

First Place to Look for Fraud, the No Action Alternative and Existing Condition: These will be in the first two chapters. Easy to find these, use the word-search function in the PDF file of the EIS or EA. We have yet to see one with an honest No Action Alternative. When we challenge this with comments or appeals, the Forest Service throws back a blast of 'smoke and mirrors' about how they are allowed to choose what can be in the No Action Alternative. Once your appeal is rejected, the only way to fight this is to take them to court. We firmly believe they cannot manipulate NEPA regulations, but only a judge can decide that.

**Deception in Action:** The two largest forests in NM, the Santa Fe and the massive Gila (3.3 million acres) both used the same false No Action Alternative. Their EIS's both say 'we chose to define the No Action Alternative as our best estimate of where people drive now.' Huh? This is like claiming a golf course has only 5 holes if only 5 holes are being played at 7 am on a Monday. The No Action Alternative and 'Existing Condition' are the sum total of roads and trails, NOT the agency's 'guess' about which ones get the most use.

# Here's How This Deception Translates into Legal Points:

"First Law-Breaking: they made an illegal pre-NEPA decision to keep existing legal, SYSTEM roads out of the No Action Alternative. They are not allowed to make undisclosed decisions outside of the EIS/EA. If they chose only some roads and trails to be included, that obviously required some decision process for what to keep in and leave out.

"Second Law-Breaking: they do not present the true Existing Condition, as required.

"Third Law-Breaking: corrupt analysis. All the comparisons and conclusions in the EIS are false, because they are based on rigged numbers. (False analysis).

"Fourth Law-Breaking: hiding the true extent of closures from the public. (Failure to disclose).

"Fifth Law-Breaking: Failure to analyze the true impact that the closures will have on the public and on the local economy. (Yes, those are required parts of the analysis. If they hide 30% of the closures, they have understated by 30% how much recreation is being lost.)

**How Bad Was It?:** The Santa Fe excluded 23% of their own system roads, and the Gila excluded 27% of their

own roads. I'm not talking about the so-called 'unauthorized' or user-created roads. I mean their OWN roads that are in their INFRA database and transportation atlases. And then they cut down from there in the alternatives. **Result:** everyplace in their EIS's where the Santa Fe and Gila are comparing the alternatives, it's a lie. For example, they'll say an alternative leaves 60% of the roads open. But it is not really a 40% closure, it's more like a 65% closure that leaves only 35% open, because the NO Action Alternative is false, and rigged to be artificially low.

The Even Deeper Deception: The Santa Fe claimed that 15% of the roads are not being used, and excluded 15% of all the system roads based on that. But in our digging in the project record, we found that the '15%' figure was based on one field survey of only 18 segments of ML-1 roads. (roads that are closed to the public, for administrative use only). In that field survey the roads engineer explicitly says that 15% is only a statistical calculation, and warns against using this figure across the forest. And what do they do? Exactly what the engineer said NOT to do. This ploy was used to eliminate over a thousand miles of roads. Which ones did they take out? Easy to see when you look at the maps. They closed roads near wilderness, roads near and in inventoried roadless areas, roads that were the only route across large areas, and roads that were critical for connectivity. Not only did they close over 70% of the forest system roads, they closed them methodically to butcher the network. Instead of loops, we have lots of unconnected dead ends off a few main routes. Do you think that was a coincidence? They have deliberately made travel in the forest difficult and inconvenient. They have also created large blocks of land with no motorized use allowed.

The Larger Plan: The massive road closures against motorized use in the Santa Fe National Forest are creating large areas where there is no motorized use. This is setting the stage for future expansions of wilderness designations and roadless areas. Travel Management closures are just Step 1 of an even bigger lock out. The Santa Fe NF started a 'reforestation' planning project last year. This object of this project is allegedly to improve forest health. It includes obliterating (destroying) roads. In other words, they are so anti-access that they immediately started pursuing road obliteration, before the Travel Management decision was even made! When we called "Foul" on them for this, they scrambled to backtrack and change the wording. But make no mistake, the long term plan is to remove roads from the land in order to inhibit and reduce where and how the public can access the forest lands.

Reprinted from the ALAA Newsletter, Jan-Mar 2013. Via Magic Valley Gem News, June 2013



# Hutchings Museum Lehi, Utah

**By Shane Walter** 

April 27th was our first outing of the year. We went to the Hutchings Museum in Lehi, Utah. It had thirteen rooms that ranged from everything from local birds and butterflies, to antique tools and attire, to Native American relics then onto our FAVORITE room - the Rocks and Minerals!! The first thought that came to our minds was, "Why can't we find specimens like these?!" Making us all want to look harder when we are out Hounding. The level of specimens at this museum range from the most brilliant colored to the darkest. There was an extreme variety of different sizes, shapes, textures and colors, which showed the unique characteristics from one specimen to the next. Some single minerals, such as the Pyrite collection, went through all the above characteristics. It showed us that even if you have a piece of really nice pyrite in your collection, there are still many different examples of it that you could continue hunting for! There were even those "oddball" ones, that made you just stare and say "Wow!"

What was displayed was only a sample of all that can still be discovered in Utah. There were specimens from other locations in the US, as well as other countries which showed an even greater differences that can occur in the same rocks and minerals. To us rock hounds, they have a certain magic that is hard to explain. More than a couple oohs and aahs were heard throughout the room!

Source: Wasacht Club News and Views, June 2013

Hutchings Museum Website:

http://www.lehi-ut.gov/discover/hutchings-museum



# Photo Credit: NASA/GSFC/METI/Japan Space Systems, ASTER Science Team

# Richat Structure (Eye of the Sahara)

This prominent circular feature in the Sahara desert of Mauritania has attracted attention since the earliest space missions because it forms a conspicuous bull's-eye in the otherwise rather featureless expanse of the desert. Described by some as looking like an outsized ammonite in the desert, the structure [which has a diameter of almost 50 kilometers (30 miles)] was a landmark for shuttle crews. Initially interpreted as a meteorite impact structure because of its high degree of circularity, it is now thought to be merely a symmetrical uplift (circular anticline) that has been laid bare by erosion. Paleozoic quartzites form the resistant beds outlining the structure. **NASA** 

### Mystery of Death Valley's 'Sailing Stones' Solved

By Marc Lallanilla, LiveScience, June 17, 2013



Excerpt: "For years, scientists have been puzzled by the mysterious "sailing stones" of Death Valley.

Located in a remote area of California's Death Valley National Park, the heavy stones appear to move across the dried lake bed

known as Racetrack Playa, leaving a trail behind them in the cracked mud.

The rocks' apparent movement has been blamed on everything from space aliens and magnetic fields to pranksters. But no one has actually seen the rocks move, which only adds to the mystery...

In 2006, Ralph Lorenz, a NASA scientist investigating weather conditions on other planets, took an interest in Death Valley. Lorenz was particularly keen on comparing the meteorological conditions of Death Valley to those near Ontario Lacus, a vast hydrocarbon lake on Titan, a moon of Saturn.

But while investigating Death Valley, he became intrigued by the enigmatic sailing stones of Racetrack Playa.

Lorenz developed a kitchen-table model — using an ordinary Tupperware container — to show how the rocks might glide across the surface of the lake bed.

"I took a small rock and put it in a piece of Tupperware, and filled it with water so there was an inch of water with a bit of the rock sticking out," Lorenz told Smithsonian.com.

After putting the container in the freezer, Lorenz ended up with a small slab of ice with a rock embedded in it. By placing the ice-bound rock in a large tray of water with sand at the bottom, all he had to do was gently blow on the rock to get it to move across the water.

And as the ice-embedded rock moved, it scraped a trail in the sand at the tray's bottom. Lorenz devised his

clever experiment by researching how the buoyancy of ice can cause large rocks, when encased in ice, to move by floating along tidal beaches in the Arctic Sea.

Lorenz's research team calculated that under certain winter conditions in Death Valley, enough water and ice could form to float the rocks across the muddy bottom of Racetrack Playa in a light breeze, leaving a trail in the mud as the rocks moved."

For full story, go to:

http://www.livescience.com/37492-sailing-stones-death-valley-moving-rocks.html

The Oct 2012 Buzzer ran an article on the "Sailing Stone" of Racetrack Playa Mountains. Editor

### Bizarre 500-Million-Year-Old Creature Unearthed

By Tia Ghose, LiveScience, June 25, 2013



Excerpt: "A new fossilized, cigar-shaped creature that lived about 520 million years ago has been unearthed in Morocco.

The newfound species, Helicocystis moroccoensis, has "characteristics that place it as the most primitive echinoderm that has fivefold symmetry," said study coauthor Andrew Smith, a paleontologist at the Natural

History Museum in London, referring to the group of animals that includes starfish and sea urchins. Modern

echinoderms typically have fivepoint symmetry, such as the five arms of the starfish or the sand dollar's distinctive pattern.

The primitive sea creature, described today (June 25) in the journal Proceedings of the Royal Society B, could even change its body shape from slender to stumpy. Researchers say it is a transitional animal that could help explain how early echinoderms evolved their unique body plans, Smith said."

Pł

For full story, go to:

http://www.livescience.com/37721-five-fold-symmetric-cambrian-fossil.html?cmpid=527279

## Dendrites vs

# Moss Agates: Orbicular Jasper vs Polka Dot Agate









We are usually delighted but not surprised to find inclusions in crystals, eg., quartz of one color or another, rutile, sagenite 'stars'. The appearance of inclusions in microcrystalline varieties of quartz, however, have a name-making propensities of collectors. When our vision of inmysterious ambiance that brings out the clusions is obscured, our imagination takes hold. Chalcedony (clear to cloudy), agates (clear but usually banded), and jasper (opaque) are all variations of silica oxides, with hardness between 6 and 7, which makes them very suitable for polishing. They may all have included material and the nature of the inclusion is dictated by the composition of the host rock material and the manner of rock formation. Dendritic chalcedony and moss agate are terms or names frequently applied to the same material. They are basically similar, but dendrites can form not only in chalcedony and agate, but also on limestone and soapstone and some sandstones. The dendrites, so called from the Greek Dendron, or tree, are branching structures of mainly manganese and irons oxides, in or on the host material. Dendrites occur in many places in the world, basically wherever water rich in oxides flows across rocks. The dendrites form on a surface and are two dimensional, like snowflakes or frost crystals on a windowpane. If the rock is chalcedony, the dendrite forms on the surface, but more chalcedony may entomb it. The dendrites are usually earthy, black, brown, reddish, but near Four Corners, in the eastern Mojave, near the junction of highway 58 & highway 395, rockhounds reputedly find blue. The 'mosses' of moss agate, not organic material at all but chlorite or celadonite, are visible impurities in the agate. Scientists attempt to distinguish between the two by determining, if possible, whether the dendrite/ moss or the mineral rock formed first. The moss forms while the chalcedony is still gel-like and can then form three dimensional shapes within the stone. Moss agate, also widely distributed, can be a variety of colors, green, black, white, yellow, red, orange, and tan. It is widely used in jewelry, and polishes beautifully, if care is taken not to cut into and pluck the moss. Multi-colored balls can appear in rhyolite flows. Rhyolite is a fine-grained igneous rock that, if it contains sufficient silica to take a brilliant polish, and is sometimes called jasper. Orbicular material usually appears as a mass of rhyolite that has silicated. As the rhyolite cools, sometimes excess silica starts to precipitate out of the magma, forming spherical balls. The ball shape is the form that any extremely concentrated silica (cristobalite) takes, as opposed to the crystal from in dilute concentrations. However, any material that by composition or consistency is immiscible (not mixable) with the host magma will also form balls. Regional metamorphism can also form orbicular jaspers. We hear names like Rainforest Jasper from Australia, Leopardskin Jasper from Mexico, Poppy Jasper from California, and Ocean Jasper from Madagascar. We may find one color surrounding another, or bands of balls, or veils of lighter colors staining the background. Polka Dot Agate from Oregon, has iron rich spheres floating in a snowy extremely fine-grained jasper, along with veils of golden brown. This material is so fine-grained it is almost chert, and resembles porcelain. The rockhound distinction of jasper and chert is; if its attractive, its jas per; if its dull, its chert. Some jasper represents replaced limestone or dolostone, some occurs as nodules, and sometimes it is part of the gangue of mineral deposits by hydrothermal or metasomatic processes. Agates are translucent and usually banded, with subvitreous luster; jasper is opaque with a dull to pearly luster; to a rockhound jasp-agate is a fine mixture of these beautiful oxides.

Source: Calumet Gem, via PGGS Petrograph 6/03, via Golden Spike News 7/06 Via Strata Gem Via MOROKS 6/13

# Officers & Club Information

### 2013 Board of Directors

### **Officers**

President	Dan Siler	801-737-3013
Vice President	Steve Smith	801-731-4216
Secretary	Dave Offret	801-791-6081
Treasurer	David Law	801-731-4255

### **Activity Committee and Chairpersons**

Field Trip Leader	Joe Kent	801-771-8184		
Program	Ray Rutledge	801-732-8331		
Door Prize	Jim Alexander	801-399-0785		
Hospitality	Linda Pilcher	801-392-7620		
Communications	Kay Berry	801-825-6261		
Membership	David Law	801-644-4931		
Mini-show	Alice Crittenden	801-547-7781		
Safety	Lynn Hayes	435-723-2216		
Publicity	Mark Acker	801-475-4705		
Buzzer Editor	Dave Harris	801-737-1266		
Associate	Leora Alexander	801-399-0785		
Photographer	Shari Bush	801-388-8605		
Calling Committee Sherm & Ricky Thompson				

435-760-1362

### **Federation Representatives**

Rocky Mountain Federation Delegate	Joe Kent
Utah Federation Delegate	Open
Public Land Advisory Committee	Jim Alexander

### **Club Affiliations**

The Beehive Rock & Gem Club began in April of 1970 and is a member of the following:

Utah Federation of Mineralogical Societies Rocky Mountain Federation of Mineralogical Societies

American Federation of Mineralogical Societies Scribe

### **Advertising Rates:**

For sale ads are permitted for members at no charge. Business advertisements will be charged at the rate of \$5.00 for \(^{1}\)4 page or 15 cents per word for less than \(^{1}\)4 page.

### **General Objectives of the Club**

The purpose of our club is to stimulate interest in the collection of rocks, minerals, gem materials, and legal fossils. To discuss and impart our knowledge of the different phases of collecting, cutting, polishing and displaying them. Also to organize educational meetings, field trips and similar events while enjoying and protecting our natural resources.

### **Membership Dues**

Yearly membership dues are for adult members are

Single \$11

Couple or Family \$16

Junior (Under 18 not part of family membership) \$5

Dues are due October 1 of each year.

### **Meetings**

General club meetings are held at 7 pm on the fourth Thursday of each month in the multi-purpose room of the City of Roy Municipal Center located at 5051 South 1900 West, Roy, Utah.

All visitors are welcome!

Board Meetings are held at 7 pm on the first Thursday of each month at the Roy Library located at 1950 West 4800 South, Roy, Utah.

### Newsletter

The Beehive Buzzer is the official newsletter of Ogden Beehive Rock and Gem Club and is published eleven times per year. Please send submissions and exchange bulletins to beehivebuzzer@gmail.com.

Any material in this bulletin may be copied, unless marked as copyrighted, as long as credit is given.

