Special Anniversary Year

Ogden Rock and Gem Club

Beehive Buzzer

June 2013 Volume 41 Issue 6

Issue Highlights...

Club Notes:

- Next Board Mtg July 11
- The Club Bylaws will be reviewed in the next board mtg.
- Next field trip:
  Cedar City, July 19-21

Beehive Rock & Gem Club Program

Thursday, June 27, 2013 – 7 pm

The program for this month will be a series of short rock-hounding topics of interest including: the club trips & other miscellaneous field trips; a mineral "pair "common to Utah; economic lapidary equipment; Rock & Gem Magazine articles; the making of one of the nation's great National Parks.

A Note on Last Month's Program:

Those who didn't attend last month's program on tumblers and Tumbling Skills missed an excellent presentation of ideas and expertise by member Jeff Huefner. He showed us other ideas on using tumbled rocks and techniques to have consistent good results.

"Rocky" Ray, Program Chairman

Reminder: July Board Meeting Change of Date

The July Board Meeting has been change to Thursday, July 11 due to Independence Day. One topic slated to be discussed is a review of the bylaws of the club. If you would to propose a change to the bylaws, notify a board member. Also, all members are welcome to attend the board meetings.

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Pioneer Days July Celebration

For current information on all the events:

Ogden: http://ogdenpioneerdays.com/

Salt Lake City: http://www.daysof47.com/

So Long, and Thanks for All the Fish*


Photo: "Rocky" Ray

I am borrowing the title of book four of five in Douglas Adam's unconventional *Hitchhikers Guide to the Galaxy Trilogy*** series since it is apropos to my situation. I am not going anywhere, but regrettably, this is my last issue as Buzzer Newsletter Editor due to my work demands. As I step down, I feel I owe thanks to you since it has been such a rewarding experience. I am grateful I had the gumption to volunteer despite not knowing a thing about being a newsletter editor.

First, I want to thank you, the members of the club. You were all very supportive of me, even when I was struggling to figure out how to do this job. I look back at some of those earlier issues, and they look pretty lame. I appreciate the patience you had with me. Thanks for all your ideas and contributions.

Special thanks to the Alexander's. Jim and Leora have been taking care of the printing and mailing of the hardcopies. It has been a huge, huge help and something for which they haven't receive much thanks or recognition. They have been helping me all along the way, giving me lots of suggestions and tips. They never said "no" to any of my requests for help.

I appreciated the efforts of our newsletter photographers, Roger and Shari Bush. The photos they provided, along with all the photos provided by other members, contributed significantly to the newsletter. A newsletter without photos is like food without seasoning; bland.

One of the advantages of being the editor is working with the other board members. I think it is worth volunteering for a position just to have the opportunity to get to know the board members. Or just come to the board meetings, since they are open to all members. All of the board members supported me, helped me, and taught me. I could not have done it without them.

I plan on being active in the club as much as possible and still contribute to the newsletter from time to time.

Dave Harris, Buzzer Editor

* The title refers to what the dolphins say to us when they leave earth to return to their home planet.

** When you are Douglas Adams you can get away with calling a five-book series a "trilogy".

Rocks for Sale

Mike Gibson, son of former member Hi Gibson, has a twenty plus-year collection to sell. Call 801-808-5681 if interested.

Rockhounding in Larry's Backyard

Our club is invited to a special rock sale in Fillmore. I recently received this email from Cindy Aeschlimann from the Golden Spike Gem Club. Contact Cindy at 801-710-3540 to RSVP or for more information. Editor

-----Original Message-----
From: Cynthia S. Aeschlimann
Sent: Thursday, June 06, 2013
To: Dave Harris
Subject: INVITE

Hi Dave,

Cindy here from the Golden Spike Gem Club...

My friend Larry lives in Fillmore and has a HUGE yard full of rock, some rare from the 1940's, 50's and 60's. He sells by the rock, pound or ton. If you went to the club show in April he was the guy at the silent auction.

Anyway, every year he likes me to invite the club to come do rock hounding in his yard. This year we are expanding the invite to a couple more clubs. It's fun, he provides lunch, and doesn't charge much for the rocks. If there is any way I could get it in your bulletin, let me know. It's set for JULY 13, 2013. RSVP only.

My contact # is 801.710.3540.

HAVE A GREAT DAY!!

Cynthia S. Aeschlimann

2013 Field Trip Schedule

Cedar City. — July 19-21
Salina. — August 16-18
Texas Springs, Nevada.— August 30- Sept 2
Gardner Canyon, Wyoming — September 20-22
Floy Wash. — October 11-14

Calendar

June

27
Monthly Club Meeting
Roy Municipal Center
7 pm

July

11
Board Meeting
Roy Library
7 pm

4
Independence Day

19-21
Cedar City Field Trip

24
Pioneer Day
(See notice on Page 1 for links to events)

25
Monthly Club Meeting
Roy Munic ipal Center
7 pm

August

1
Board Meeting
Roy Library
7 pm

16-18
Salina Field Trip

22
Monthly Club Meeting
Roy Municipal Center
7 pm

30
Texas Springs, NV
Field Trip

September

5
Board Meeting
Roy Library
7 pm

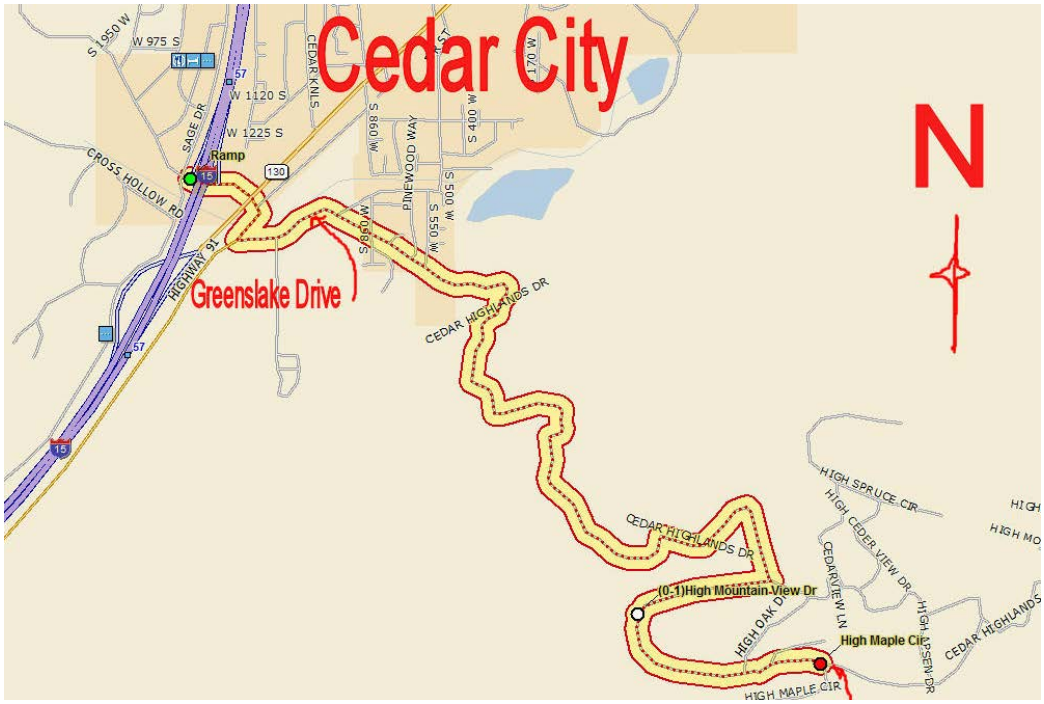
Field Trip to Cedar City, UT
July 19-21

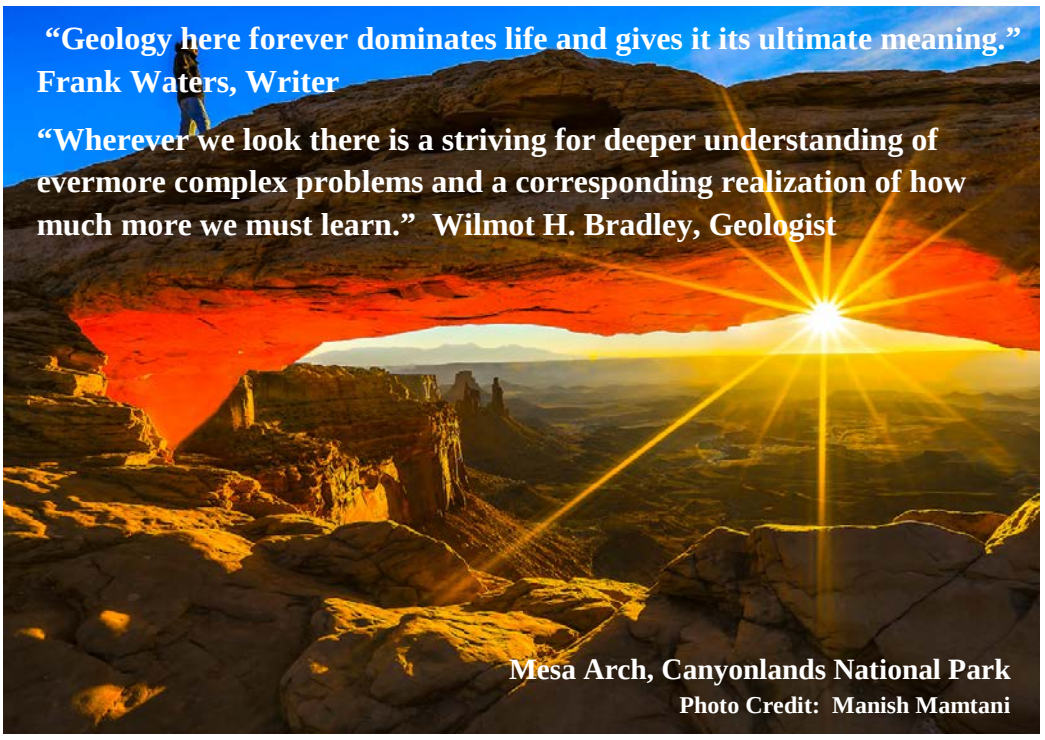
Roger Bush graciously volunteered to be the Field Trip Leader. He also lead the group last year to Cedar City on a very fun and successful trip. For more information, contact Roger at 801-775-0147 or r.bush2003@comcast.net.

Directions:

Head South on I-15 to Cedar City and take exit 57. Turn left onto Cross Hollow Road, and then turns left onto Greens Lake Drive and becomes Cedar Highlands Drive. Take the first right onto High Mountain View Drive.

It is about 300 miles from Ogden, approximately a 4.5 hour drive.





Tour the Grand Canyon From Your Computer

The National Park Service has created a cool Grand Canyon fly-through animation where you can experience roller-coaster twists and turns flying the length of the Colorado River. Go to:

http://www.nps.gov/grca/photosmultimedia/multimedia.htm

Spectacular Lightning Strike at the South Rim of the Grand Canyon.

"America will never be destroyed from the outside. If we falter and lose our freedoms, it will be because we destroyed ourselves."

Abraham Lincoln

Very Cool Photo

At storms end, a double rainbow breaks through the clouds at the end of a thunderstorm filled with lightning at Badlands National Park in South Dakota. NPS

Cave of the Crystals (*Cueva de los Cristales*)


Photo: Naica Project

Cave of the Crystals is a cave connected to the Naica Mine 980ft below the surface in Naica, Chihuahua, Mexico. The main chamber contains giant selenite crystals (gypsum), some of the largest natural crystals ever found. The cave's largest crystal found to date is 39 ft in length, 13 ft in diameter and 55 tons in weight. The cave is extremely hot with air temperatures reaching up to 136 F with 90 to 99 percent humidity. The cave is relatively unexplored due to these factors. Without proper protection people can only endure approximately ten minutes of exposure at a time.

A group of scientists known as the Naica Project have been heavily involved in researching these caverns. For more information on the Naica Project, go to: http://www.naica.com.mx/english/index.htm.

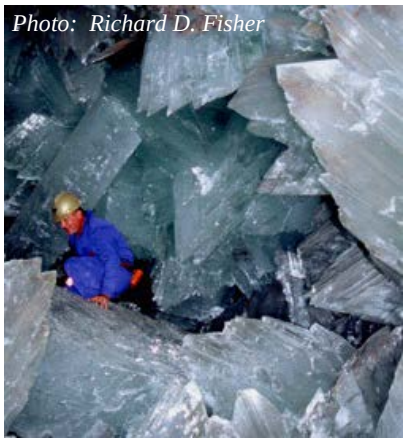


Photo: Richard D. Fisher

Naica lies on an ancient fault and there is an underground magma chamber below the cave. The magma heated the ground water and it became saturated with minerals, including large quantities of gypsum. The hollow space of the cave was filled with this mineral-rich hot water and remained filled for about 500,000 years. During this time, the temperature of the water remained very stable at over 122 F. This allowed crystals to form and grow to immense sizes.

In 1910 miners discovered a cavern beneath the Naica mine workings, the Cave of Swords (Cueva de las Espadas). It is located at a depth of 400 ft, above the Cave of Crystals, and contains spectacular, smaller (3 ft long) crystals which resemble swords. It is speculated that at this level, transition temperatures may have fallen much more rapidly, leading to an end in the growth of the crystals.

The Cave of the Crystals was discovered in 2000 by miners excavating a new tunnel for the Industrias Peñoles mining company located in Naica, Mexico, while drilling through the Naica fault, which they were concerned would flood the mine. The mining complex in Naica contains substantial deposits of silver, zinc and lead.

The Cave of Crystals is a horseshoe-shaped cavity in limestone rock. Its floor is covered with perfectly-faceted crystalline blocks. Huge crystal beams jut out from both the blocks and the floor. The caves are accessible today because the mining company's pumping operations keep them clear of water. If the pumping were stopped, the caves would again be submerged. The crystals deteriorate in air, so the Naica Project is attempting to visually document the crystals before they deteriorate further.

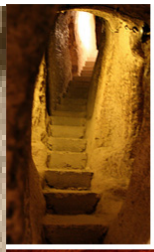
The Cave of the Crystals is not open to the public but you can take a short tour of the cave from your computer.

Watch the BBC Video: "Rare footage of Mexico's Cave of Crystals", http://news.bbc.co.uk/2/hi/science/nature/8466493.stm

Source:Wikipedia


Photos: Feliciano Guimaraes

Stone House, Portugal

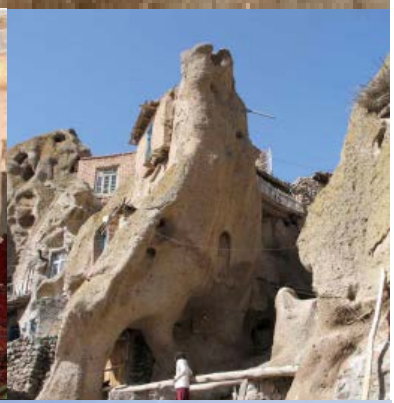


1,000 yr old Rock Homes, Cappadocia, Turkey

HOMES IN STONE

Boulder House, Scottsdale, Az

700 yr old Rock Homes, Kandovan, Iran



News from ALAA…

By Joanne Spivack, New Mexico Access Activist

How NEPA Works (very short version): The national forests are not allowed to just close roads and trails by claiming it's because of the Travel Management Rule. They still have to follow NEPA regulations, which require that closure decisions must be based on a rational and complete analysis which is fully disclosed to the public. That analysis is presented in an Environmental Impact Statement (EIS) or the shorter version, the Environmental Assessment (EA). They can't just do this 'any old way they please'. The details of how the EIS or EA must be done are in the Code of Federal Regulations, and these have the force of law. When someone sues the BLM or Forest Service, they are usually claiming the agency violated one or more of these regulations, which means they are breaking the law. Remember, any sort of lawsuit must be based on a claim that a law has been broken.

Knowledge is Power: When you understand how these pieces fit together, you'll have the tools to make the Forest Service and BLM follow their own rules and federal laws. You will NEVER hear the Forest Service or BLM explain any of this in a public meeting. When the public doesn't understand how to fight back, the agencies are free to break the laws and do whatever they want. Unfortunately, the buck stops on our desk: NEPA puts the burden of watchdog on the public. There is no internal governmental review or congressional oversight that prevents the agencies from breaking these laws. If we don't make them behave, no one else will. You will find that most local FS and BLM staff do not understand the rules and laws that govern what they do.

Why the No Action Alternative is the Heart of the EIS/EA: The regulations say the EIS or EA analysis must be done by comparing various options (called 'alternatives') to the current state of things (called the No Action Alternative in an EIS, or 'Existing Condition' in some EA's). The cornerstone of the analysis is the No Action Alternative, because by law it must be used as the basis for comparisons. The EIS or EA must disclose the magnitude and effects of what the FS is proposing to change, and that must be done by comparing the options (alternatives) to the baseline (No Action Alternative, or Existing Condition).

SIDEBAR: The CFR Both the FS and BLM must follow the Code of Federal Regulations. They do the details of the process a bit differently, but the basics are the same. The Code of Federal Regulations (CFR) applies to both of them. The Travel Management Rule (TMR) is only in the National Forests, it's a USFS rule. It is NOT a law. The TMR is subservient to the CFR. The CFR is divided in chapters ca lled 'Titles'. The part of the CFR that applies to NEPA, it is Title 40, Part 1500. The BLM and FS also each have their own sections in the CFR that address NEPA regulations. Title 36 covers Parks and the USFS. Title 43 covers the D.O.I. and BLM. The 'ecfr' (electronic CFR) is at http://www.ecfr.gov/cgibin/ECFR?SID=c17fb90a7b80fcd7453cb039537f8b56&page=browse

The easiest way for the FS (or BLM) to hide the extent of road closures, is by showing a deceptive 'Existing Condition' or 'No Action Alternative' in the EIS or EA. We have read dozens of travel management EISs and EAs, and this is by far the most common tactic used to deceive the public. In a nutshell, here is how it works: Let's say your forest has 2,000 miles of roads and trails. The Forest Service will say the No Action Alternative, or Existing Condition, is 1,000 miles. Then they write 3 or more alternatives. Just to frame an example, let's say one alternative leaves 600 miles open, another leaves 800 miles open, and the last leaves only 400 miles open. The Forest Service will claim that leaving 600 miles open means 60% remains open, but that's because they are counting only 600 miles out of 1,000 miles. (And so forth, 400 miles open will be claimed as 40% open). You know that they are leaving only 600 miles open out of 2,000 miles. That means that they are closing 70%, not 40% as they claim. They are not telling the truth. (These EIS's and EA's usually have maps that only show what is being left open, not what is being closed. On a 1.5 million acre forest or BLM field office, it is difficult to compare these to real maps, to see what is being closed.)

In our example, the 1,000 miles they 'swept under the rug' are ALL CLOSED BY DEFAULT. Here's how that works. The NEPA regulations say that only the roads and trails that were included in the EIS or EA can be designated. The Travel Management Rule says any road or trail not designated is closed by default. See where this goes? The easiest way to deceive the public and close huge amounts of road and trail and to HIDE THAT, is to keep those miles OUT of the EIS or EA. This is how the NEPA regulations 'interact' with the Travel Management Rule. Those 1,000 miles of roads and trails excluded from the No Action Alternative won't be in any of the other alternatives either. Those 1,000 miles don't appear anyplace in the EIS/EA. Result: they can't be designated (NEPA) and will be closed by default (Travel Management Rule). Do you think the Forest Service didn't intentionally write the Travel Management Rule to accomplish this? You need to consider if you are being tragically naïve. The USFS top managers in Washington are not idiots.

Information came from the Jan-Mar 2013 ALAA Newsletter, via the Magic Valley Gem News, May 2013.

For more information, go to the ALAA website: www.amlands.org

Forensic Geology

by Steve Mulqueen, VGMS

Forensic Geology is the study of physical evidence related to soils, minerals, rocks, petroleum and many other natural substances found on or within the Earth that may be applied to criminology. Forensic geology involves the application of the geological science for solving crimes, for preparing legal evidence and for determining scientific fact. Forensic geology evidence, gathered at crime scenes, can be very important in creating a complete story of the sequence of events that proceeded or followed a criminal act. The evidence can lead directly to a suspect, can aid in an arrest, and can be applied to the legal process of a conviction in a court of law.

Traces of soil, clay, gravel or aggregate can be found at the crime scene and traced back to its source, as a way to link two or more separate loca-lities to one criminal act. Samples are gathered as for-ensic geology evidence for analysis of its geochemical, mineralogical or physical attributes. The distinct features may include color, mineral composition, rock composition, texture, grain size, clast lithology (particle composition), shape, angularity and particle size distribution. Some examples of evidence that are gathered may include soil from the sole of a shoe, mud found in a tire tread and soil or gravel found on a vehicles floor mat or on floor coverings inside a building.

The first modern textbook on the subject of forensic geology was written by Ray Murray and fellow Rutgers University professor John Tedrow and published in 1975. In 1973, Murray was asked to determine the composition and probable source of a soft soil sample presented to him by an agent of the Bureau of Alcohol, Tobacco and Firearms. After this chance encounter in applying geologic research to the gathering of criminal evidence, Murray began a lifelong interest on the subject.

According to Murrays's textbook "Forensic Geology," the use of geological evidence in solving crimes dates back to the late 1800s. In numerous written works by the famous Sherlock Holmes author, Sir Arthur Conan Doyle, there are detailed descriptions of how some of his fictional cases were solved with the application of Forensic Geology.

In 1891, Hans Gross (1848-1915) published the book "Criminal Investigation" in Austria. This book was the first comprehensive description of the uses of physical evidence in solving crimes. In 1893, Gross also published "Handbook for Examining Magistrates" as a System of Criminology. His first case, involving forensic evidence, was solved through the analysis of soils from a suspect's shoes that linked that individual to a crime scene. Forensic geology remains to be an important subject in most criminology curricula at universities around the world. Without the application of geological evidence, many crimes would not be solved. In many respects, all geologists are detectives, applying their lifelong scientific knowledge to solving the mysteries of the Earth.

References:

Murray, Raymond C., and Tedrow, John C.F., 1975, "Forensic Geology – Earth Science and Criminal Investigation". Rutgers University Press, Salem, New Jersey, 217 pages.

Rapp, John S., "Forensic Geology and a Colusa County Murder", *California Geology Magazine*, July, 1987, pp. 147-153, California Department of Conservation, Division of Mines and Geology.

Ventura Gem & Mineral Society
Rockhound Ramblings, January, 2013,
Via *Pick Hammer News*, June, 2013

Floral Flag

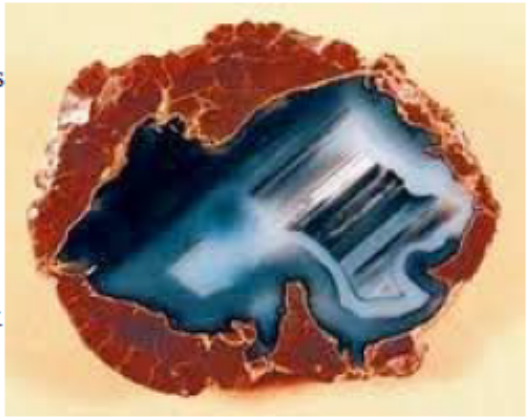
Photo: Bill Morson

This floral flag was created in 2002 by the City of Lompoc, California, as a tribute to 9/11. It was planted by the Bodger Seed Company. The dimensions were amazing. The flag was made of 400,000 larkspur flowers, measured 740 feet by 390 feet and covered 6.65 acres. Each of the fifty stars was 24 feet in diameter, and each of the thirteen stripes was 30 feet wide.

For flyby video and satellite photo, go to:
http://www.cityoflompoc.com/government/flag/index.htm

T. E. & G (Thundereggs & Geodes)

by Ward Chappelle



I have been a rock collector for about twenty years and like most rockhounds tried several different phases of the lapidary arts until I found one I enjoyed the most, namely, collecting thunder eggs and geodes.

For the past thirteen years, I've collected thunder eggs and now have specimens from many states as well as some from Mexico. At present my collection also includes some eight different types from Oregon. As for geodes, I have been collecting them for only eleven years. Believe it or not, before I looked closely and observed their special beauty, I threw them away.

Cutting a thunder egg correctly is sometimes pure luck, as the outside doesn't give many clues for guidance. Some eggs are oblong, some round, while others are just big chunks of rock looking like nothing.

The Priday thunder egg from Madras, Oregon usually has a guiding pattern for cutting, the bottom of the egg being bud shaped. By cutting through this bud, a nice specimen can usually be obtained. Another characteristic of the Priday egg is the agate seams that appear on the outside. If you cut close to one of these seams, there is a good possibility of getting a fine specimen.

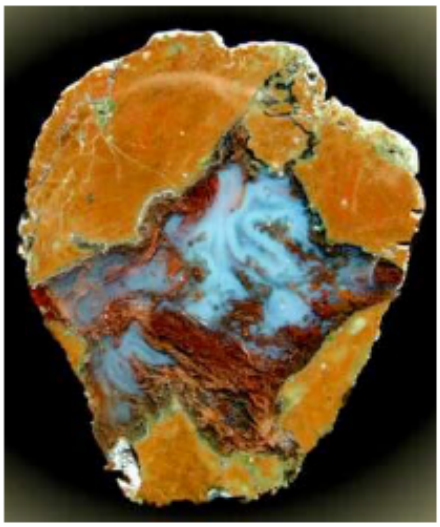
I know many rockhounds who have beautiful geodes stuck away in drawers because of past unsuccessful attempts to polish the rims without damaging the delicate crystals inside. The secret of working with geodes is to keep your lap wet – never let it get dry! In this way, if any grit gets inside the geode, it can be easily removed.

First, wrap your geodes and eggs with electrical tape. This protects the edges from chipping while the specimen travels around the lap. Use 220 grit for 8 hours, then 500 grit for 8 more hours, cleaning thoroughly as always between operations. For the final polishing I use pure tin oxide on industrial felt and polish until I get the finish I want.

Bases can be made from plaster of paris [*or wood*] or the specimen can be sliced on one side to give a flat base.

A last reminder which everyone knows but is apt to forget: If you want to keep your crystals in, keep your fingers out!

from Carny Hound, February 1966; reprinted 1/13



Hot Tip on Thundereggs

Many lapidaries now heat nodule and thunderegg halves under a heat lamp for a few minutes before polishing with tin oxide or cerium oxide on felt. The polish comes up almost instantly. Alternatives include putting specimens in a 2oo° oven until warm to the touch or putting specimens in a kettle full of hot water until they are warm; dry off excess water before polishing.

The Voice, 12/10, via Roc Toc, 4/11

A site with great thunderegg pictures with the source locales: *http://rayerminerals.homestead.com/Verkoop_Thundereggs.html*

Via *Rocky Trails*, June 2013

Lapidary Equipment FOR SALE

By "Rocky" Ray Rutledge
801-732-8331, (West Haven, UT)

***Genie* Grinder/Polisher** for cab making with 4 extra diamond carving wheels -$950

***Crystalite* Lap** with copper plate $90

***Harbor Freight* Tumblers:** Double barrel -$20; Single barrel -$10 –Both with good Hoover belts

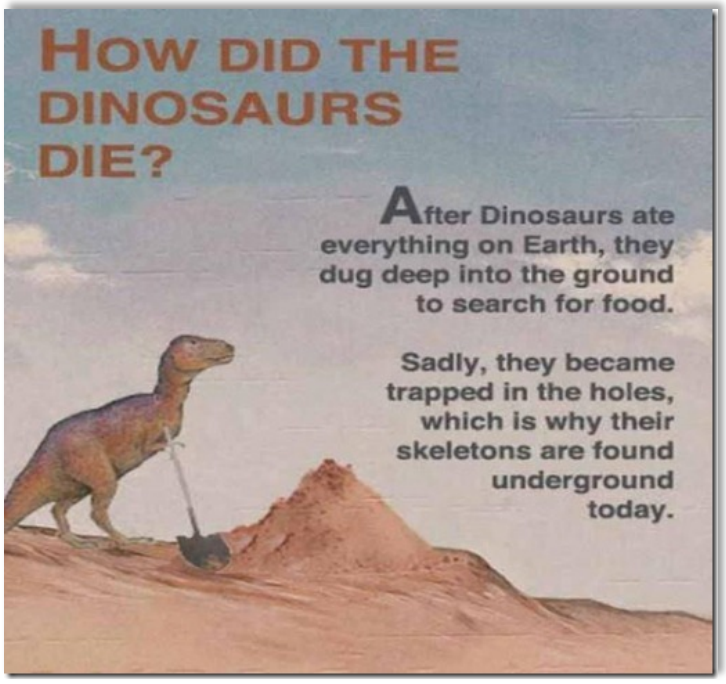
***Rock Rascal* Trim Saw** (oil) with hinged motor and switch on mounting board - $80 Superstar

Other items not shown include: *Fordham* Drill; *Fordham* drill press; an electric heated cab doping station; and equipment covers for cabbing equipment.

FOR SALE: Water Cutting Saw

Call Dave Harris
801-737-1266

Great for trim work, slabs and pieces. 7 inch blade. Can handle fist size thicknesses. $100 OBO



Submitted by Roger Bush

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 ¼ page or 15 cents per word for less than ¼ 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.