

#### Ogden Rock and Gem Club



### Beehive Buzzer

October 2012

Volume 39 Issue 10

#### Issue Highlights... Pro Clu

esident's Message	2
ub Elections	2

On the Web Calendar & Show Dates

On Our Right to Vote

Calcite or Quartz? Rocking Stones

Flexible Sandstone

Birthstone: Opal

The Wave Racetrack

Officers & Club Org



#### Club Notes:

- Club dues are past due!
- Thanks to those who have paid. Send check by mail. (See Pg 2)
- Club Officer elections Nov mtg.
- Meeting Location: Roy Library,

1950 W 4800 S Roy, Ut





10

11





#### **Beehive Club Activity** Thursday 25th October

We will going to the Box Elder Museum in Brigham City to view the large collection of rocks, fossils, minerals, petrified trees, plants, etc. in lieu of the prior planned program which has been cancelled.



- 90%+ of these choice items were donated by the Gunther
- They are displayed in 5-6+ rooms and halls of an old Elementary School.
- One of the rooms has "fluorescent " rock displays a winner for children

We are aware that the Weber Schools have "no school "on the following day, so it would be a great opportunity to bring all the kids and grandkids and friends to see this great collection. ... Those who would like to carpool could meet in the rear Roy library parking lot (1950 W 4800 S, Roy, Ut) no later than 6:30 PM. For all and others there is a map how to get to the site at 641 East 200 **North**, **Brigham** City (See page 2.) It will take most people about 30-40 minutes to arrive so we can gather at the museum about 7:00 pm.

(We could also arrange to see the Gunthers private museum and workshop if there is an interest.)

"Rocky" Ray, Program Chair

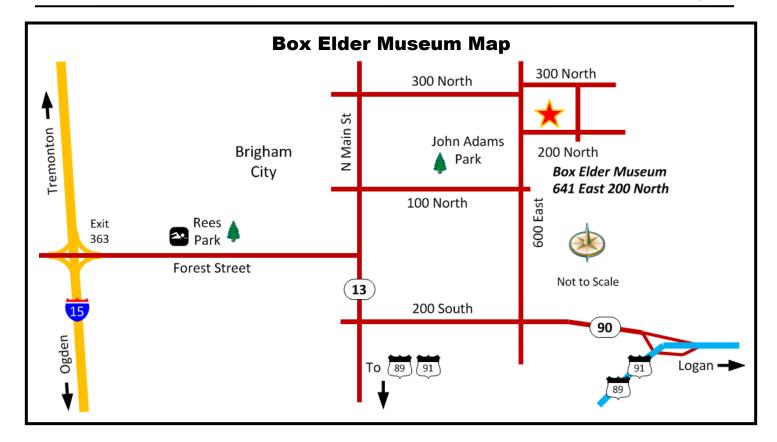
#### See the map to the museum on the next page.

See also: http://boxeldermuseum.org/

Who are the Gunthers? For a short bio of our most famous club members go to: <a href="http://www.geo-tools.com/about.htm">http://www.geo-tools.com/about.htm</a>

#### What's up?

Attendance to the monthly meetings is way down since our move to the Roy library. What's up with that? Did we not get the word out? Did the earlier publication of the newsletter mess you up? In any case, we miss you! Put the 25<sup>th</sup> on your calendar because it is going to be a great activity!



#### **Presidents Message**

Well it is time to think of club elections and volunteerism. I don't know of anyone who is not willing to serve another year with the exception of myself. I will be stepping down to pursue other activities. That being said we will hold elections at the November meeting, if you wish to run for one of the elected offices, President, Vice President, Secretary, or Treasurer please let one of the board members know at the October meeting the next board meeting.

Joe Kent, President

#### **Concerning Our New Meeting Location**

Due to the library policy, we are not allowed to sell anything at the library. Something about money changers in the temple. Just kidding. They just have a non-commercialization policy. The use of the library conference room is free as long as we do not conduct any business. This means we cannot accept payment for membership dues at our monthly meetings. You can send your check by mail to:

Beehive Rock & Gem Club P.O. Box P.O. Box 1011 Ogden, UT 84402 You can also give your check in person to David Law outside of the library, i.e. on our outing next month to the museum.

This library policy also means we cannot hold our annual auction at the library. We are looking for an alternate location to hold our auction.

#### **Club Officer Elections Next Month**

*November is election month!* Elections will be held at our next general meeting, Thursday, Nov 29, 2012. The elections are for:

President No nominations currently

Vice President Steve Smith Secretary Dave Offret Treasurer David Law

Every adult member in good standing can run one of the positions and is entitled to one vote. Voting is done by secret ballot.

Nominations may be made from the floor for any of the offices at the time of the elections with the consent of the nominee.

If you have any questions or would like to run for any of the above positions, please call Joe Kent at 801-771-8184.

#### On the Web



On May 24, 1989, the Australian photographer and mountaineer, Roderick Mackenzie, reached the Mount Everest Summit and made, as far as is known, the only 360° panorama from the top. Click on full screen. Cool!!!!

http://www.panoramas.dk/fullscreen2/full22.html

#### 2012 Sumatra Earthquake Triggered Temblors Worldwide for Nearly a Week, Research Shows

By Physorg.com, September 26, 2012

http://phys.org/news/2012-09-sumatra-earthquake-triggered-temblors-worldwide.html#nwlt

#### Nazi-Acquired Buddha Statue Came From Space

By: Stephanie Pappas, September 26, 2012

http://www.livescience.com/23483-nazi-buddha-carved-meteorite.html?utm\_source=feedburner&utm\_medium=feed&utm\_campaign=Feed%3A+Livesciencecom+(LiveScience.com+Science+Headline+Feed)

#### **NYC Auction Offers 125 Meteorites For Sale**

By Ula Ilnytzky, September 26, 2012

http://phys.org/news/2012-09-auction-chunk-moon-sale.html#nwlt

#### **Top 5 Strangest Meteorites You Can Buy**

By Wynne Parry, September 27, 2012

 $\frac{http://www.livescience.com/23504\text{-}strangest\text{-}meteorites\text{-}you-}{can\text{-}buy.html}$ 

#### Election Day Nov 6, 2012



If you are so inclined, early voting is available in Utah Oct 23-26, Oct 29-Nov 2. For early voting locations:

http://vote.utah.gov/early-voting/location/

Not registered yet? You have until

Oct 22: <a href="https://secure.utah.gov/voterreg/index.html">https://secure.utah.gov/voterreg/index.html</a>

For those of you who live outside of Utah, check with your state for information on voting.



When do you ever get a chance to name a rock? Well, you do now. This rock is immense, huge, big...I mean really, really big because it is an asteroid. NASA has a spacecraft mission planned to asteroid 1999 RQ36 in 2016 to bring back rock samples. The Planetary Society, MIT's Lincoln Laboratory, and the University of Arizona are sponsoring a contest to come up with a more fitting name for the first asteroid to be explored by a spacecraft from earth. Only those under the age of 18 are eligible and entries are due Dec 2, 2012. Click on the following links for all the details for this contest:

http://planetary.org/get-involved/contests/osirisrex/ http://www.nasa.gov/topics/solarsystem/features/name-asteroid.html

#### Andy Williams...

"The important things are children, honesty, integrity and faith."

"I made up my mind several years ago that I had worked very hard to get to where I am in life and that I was only going to do things that are fun and exciting."

"I still think I'm not as good as anybody else."



Andy Williams passed away Sept 25, 2012 at the age of 84

#### **Pumpkin Head**

Aileen Fisher

We bought a pumpkin big and round that lived the summer through without an eye to look at things... and now it looks through two.

It used to be all dark inside when growing on the vine, but now it has a toothy smile and face that's full of shine.

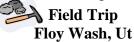
#### Calendar

October

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**Columbus Day** 

12-14



14-20

**Earth Science Week\*** 



National Fossil Day\*

25

Monthly Club Meeting Roy Library 7 pm

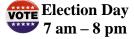
**31** Halloween



#### November

6

Board Meeting Ogden Airport 7 pm



12



**Veterans Day** 

22





**29** Monthly Club Meeting Roy Library

> **Club Elections** 7 pm

> > **December**

No Meetings



**25** Christmas

#### **Show Dates**

#### October

12-14—MOAB, UTAH: Annual show; Moab Points & Pebbles Club; Old Spanish Trail Arena; 3641 S. Hwy. 191; Fri. 10-7, Sat. 10-7, Sun. 10-4; free admission; dealers, field trips, demonstrations, displays; contact Jerry Hansen, PO Box 1459, Moab, UT 84532; e-mail: moabrockclub@live.com

#### **November**

3-4—PHOENIX, ARIZONA: Retail show; Sharon Szymanski and Val Latham; El Zaribah Shriner's Auditorium; 552 N. 40th St.; Sat. 10-5, Sun. 10-4; adults \$3, children (under 12) free with adult; dealers, fine and costume jewelry, fossils, minerals, rough slabs, cabachons, crystals, copper, beads, lapidary equipment and supplies, wirewrappers; contact Sharon Szymanski, 1792 E. Laddoos Ave., San Tan Valley, AZ 85140, (480) 215-9101; e-mail: <a href="mailto:goldcanyon2@yahoo.com">goldcanyon2@yahoo.com</a>

#### January—February 2013

1-28—QUARTZSITE, ARIZONA: Wholesale and retail show; Desert Gardens RV Park; Desert Gardens RV Park; 1055 Kuehn St.; Mon. 9-dusk, Sun. 9-dusk; free admission; crystals, minerals, rough, polished, jewelry, lapidary equipment; contact Sharon (manager), 1055 Kuehn St., Quartzsite, AZ 85346-2818, (928) 927-6361; e-mail: info@desertgardensrvpark.net; Web site:

www.desertgardensrvpark.net

Check  $\underline{\text{http://www.rockngem.com/show-dates-display/?ShowState}} = \underline{\text{ALL}} \ \ \text{for other shows throughout the country.}$ 

#### **Thoughts on Our Right to Vote**

"The man with the best job in the country is the vice-president. All he has to do is get up every morning and say, 'How is the president?'" *Will Rogers* 

"Bad officials are elected by good citizens who do not vote." *George Jean Nathan* 

"Nobody will ever deprive the American people of the right to vote except the American people themselves and the only way they could do this is by not voting." *Franklin D. Roosevelt* 



"Always vote for principle, though you may vote alone, and you may cherish the sweetest reflection that your vote is never lost." *John Quincy Adams* 

"I believe with all my heart that America remains 'the great idea' that inspires the world. It is a privilege to be born here. It is an honor to become a citizen here. It is a gift to raise your family here, to vote here, and to live here."

Arnold Schwarzenegger

It was shortly before the election. Reporters seemed to be having trouble getting one candidate to give straight answers to questions. Finally they cornered him and demanded a straight response to any question, not necessarily even a political question. One reporter asked, "What is your favorite color? You can give us a straight answer to that, can't you?" The candidate said, "Certainly. My favorite color is plaid!"

## Calcite or Quartz? Two Basic Minerals Every Rockhound Should Learn to Identify By "Rocky" Ray Rutledge

Why? — Because if you don't recognize calcite from quartz you may be trying to make cabs from the wrong kind of mineral material.

Calcite is often mistaken for quartz. For example, in the book *Rockhounding Utah*, a Falcon Guide, on pages 82-83, "The Sardine Summit", the author thinks the white veining in the dark black/gray limestone is "quartz" when it is actually calcite. He wonders why it won't polish —as soft calcite won't.



The Sardine calcite sample on the left was sprayed with lacquer to show contrasts.

Learning to identify

quartz and calcite is not difficult and it is a skill that every rockhound should learn. You will become an astute rockhound and it will keep you from bringing home useless rocks.

Since both minerals are very common, you will come across both as a rockhound. The key to distinguishing between the two is to compare their physical characteristics which are summarized in the following table.

	Calcite	Quartz
Material	Calcium Carbonate — CaCO3	Silicon Dioxide — SiO2
Mohs Hardness	3	7
Color	Usually white but also colorless, gray, red, green, blue, yellow, brown, orange	Quartz occurs in virtually every color. Common colors: clear, white, gray, purple, yellow, brown, black, pink, green, red.
Hexagonal Crystal System	Rhombohedral Class Pyramid Faces – No Vertical Prisms  Pyramid Faces Only  "Dog Tooth" Form	Both Prism & Pyramid Faces Pyramid Angle 85°  Pyramid Faces  Twinning Striations  Vertical Prism Faces
Cleavage & Fracture	Rhombohedral Cleavage 3 Planes "Perfect Cleavage" Pyramid Angle 50-75°, Seldom Fractures  "Rhomb"  Light Reflects off Cleavage Steps (3 Planes)	No cleavage, fractures only (Uneven to "Conchoidal")  Massive Quartz may Show Some Vertical Prisms (Flat Surfaces – Crystal Faces)
Other	Effervesces in contact with acid	

# Calcite

# Quartz

- 1 shows a large "Dog Tooth" crystal from which a smaller dogtooth has cleaved off. Cleavage of calcite is the most common feature with 3 planes of perfect cleavage
- 2 shows the telltale "rhombic " cleavage forming "rhombs"
- 3 shows one of the most distinct calcite forms "dogtooth" crystal form. The one to the extreme right shows a layer of very small dogteeth.
- 4 shows (as well as the white #2 shows the stepcleavage look which reflects light off each cleavage step

- 1 shows a 6 sided (hexagonal crystal) with a much shorter point of the "pyramid" faces. The number is on one of the six crystal vertical prism faces
- 2 shows a flat "prism face" beneath the number while the rest of the crystal is broken with concoidal glass-like fractures
- 3 shows the horizontal lines across the vertical crystal prisms which are twinning type striations. Quartz crystals which have been reworked with grinding and polishing equipment to make them look "perfect" remove these features (telltale sign).

The two photos above show some examples of the diagnostic features of these two minerals.

The numbers on the photos are to show some of the key features you would use in the field to determine whether it is calcite or quartz.

Besides distinguishing the differences using these visually cues, you can determine the surface hardness. If it can be scratched with a penny or nail, you have calcite. If you have dilute acid or vinegar with you in the field, the easist way to check for calcite is to put some drops on the samples to see if it fizzes. If it does, it is calcite.

While most of the time, we are looking for the Chalcedony forms of silica (Agate), it helps to know if we are searching in "silica" formations rather than in calcareous (limestone) ones.

For many beautiful photos of calcite and quartz, I refer you to web sites such as Bing or Google. Enter the mineral name "quartz" and/or "calcite":

See Also:

All about calcite:

http://geology.com/minerals/calcite.shtml All about quartz:

http://geology.com/minerals/quartz.shtml

#### **Rocking Stones**

By Dave Harris

Rocking stones? I know, it sounds like the name of a rock band but it is actually a very interesting geological formation that is common in Britain but also exist in other places in the world.

Rocking stones are immense rocks that are balance such that they can be rocked back and forth with very little effort, sometimes just with a finger. Some of these rocks are incredibly immense, some as large as 90 tons.

#### **See a Rocking Stone in Action:**



40 Ton-Rocking stone in Norway:

http://www.youtube.com/watch?v=2aAdicYCSZ8

Rocking stones are also known as logan stones or logans (pronounced "logg-uns"). It is believed that it likely derived from the word "log" which means "to rock" in an English dialect or that it comes from an expression for how drunkard sways back and forth. They are also referred to as judgment stones in Scotland because in ancient times the movement of stones by the wind was used to determine the guilt or innocence of those accused of serious crimes.

Ancient Druids considered them sacred and included them in their ceremonies. For centuries, the stones have been associated with the supernatural and with witchcraft.



Logan Rock at Pendower Cove, near Zennor, Cornwall



The Logan Stone on the Rhinns of Kells in Galloway in 1789

Rocking stones have been mentioned throughout the ages of time. In the following verse by E. Cobham Brewer about rocking stones, he refers to several locations of rocking stones. He cites from the writings of Pliny the Elder (23-79 AD) and Ptolemy (90-168 AD).

#### "Logan or Rocking Stones

for which Cornwall is famous.

Pliny tells us of a rock near Harpăsa which might be moved with a finger.

Ptolemy says the Gygonian rock might be stirred with a stalk of asphodel.

Half a mile from St. David's is a Logan stone, mounted on divers other stones, which may be shaken with one finger.

At Golcar Hill (Yorkshire) is a rocking stone, which has lost its power from being hacked by workmen who wanted to find out the secret of its rocking mystery.

In Pembrokeshire is a rocking stone, rendered immovable by the soldiers of Cromwell, who held it to be an encouragement to superstition.

The stone called Menamber in Sithney (Cornwall) was also rendered immovable by the soldiers. under the same notion.

There are very many others."

E. Cobham Brewer 1810–97, Dictionary of Phrase and Fable.1898. <a href="http://www.bartleby.com/81/10455.html">http://www.bartleby.com/81/10455.html</a>

So how are these rocking stones created? It is usually created when a portion of the underside of the rock is eroded by water and wind until only a thin neck remains which the stone is balanced on. Some of the stones are glacial erratic which happen to be situated such that they rock. Some logan stones over time lose the capability to rock over time.

#### "FLEXIBLE SANDSTONE"



You don't have to be "Superman" to bend this rock with your bare hands.

Although sandstone is a common sedimentary rock, Itacolumite, "Flexible Sandstone", is a naturally occurring sandstone that is amazingly bendable when cut into thin strips.

Unlike ordinary sandstone that has mineral cement holding the sand grains together, it is generally believed that the flexibility of Itacolumite is caused by a slight metamorphism. The individual grains become interlocked and subsequent removal of the cement allows it to bend along the bedding planes. This rare form of yellow sandstone is only found in Brazil, India, Georgia and North Carolina.

We initially saw an exhibit of this unusual sandstone at The South Dakota School of Mines & Technology Museum in Rapid City. A few weeks later while at the Petrified Wood Gallery in Ogallala, Nebraska we were allowed to hold and flex a specimen of Itacolumite. It was surprising how smoothly it flexed back and forth and how much it curved. It also possessed more tensile strength than what we originally imagined.

Dick & Mary Pat Weber

Source: *Rocky Review*, Sept 2012 Conejo Gem & Mineral Club

#### OCTOBER BIRTHSTONE - OPAL

Opal is the October birthstone. The well-known Roman naturalist Pliny described opal as "made up of the glories of the most precious gems...the gentler fire of ruby, the rich purple of amethyst, the sea-green of the emerald, glittering together.."

White opal has a white or light body color with flashes of many colors. Black opal has a black, dark blue, dark green or gray body color with vivid flashes of color such as red, blue, yellow and bright green.

Opal has symbolized hope, innocence and purity through the ages. In the Middle Ages, young, fair-haired girls wore opals in their hair to protect its lovely blond color. Medieval writers believed opal could render its wearer invisible when the need arose. It was also said to have a beneficial effect on eyesight. It was thought to banish evil spirits and favor children, the theater, amusements, friendships and feelings.

Care should be taken to protect opal from sharp blows, scratches, household chemicals, and extreme temperature changes. To maintain the brilliance of opal it should be wiped clean with a soft cloth. Do not use a home ultrasonic machine or jewelry cleaner.

Opal sources are Australia, Mexico, and the U.S., with a relatively new discovery in Africa. Submitted by *Barbara Hartman*, Membership

Source: Conglomerate, Oct 2012 Remo Gem & Mineral Society



From MWFMS Bulletin Editor News, Jan 1984 via Golden Spike News, Sept 2000 via Conglomerate, Oct 2008

#### GEOLOGIC WONDERS-THE WAVE

FROM PICK-HAMMER NEWS, 3/11, VIA QUARRY QUIPS, 9/12 via Rocky Mountain Federation News, Sept 2012

The Wave is a Fantastic sandstone rock formation located on the Arizona/Utah border on the slopes of Coyote Buttes, in the Paria Canyon-Vermillion Cliffs Wilderness, on the Colorado Plateau. It is famous among hikers and photographers for its colorful, undulating forms, and the rugged, trackless hike required to reach it.

The Wave is made of Jurassic-age Navajo Sandstone that is approximately 190 million years old. Scientists who study The Wave say that the old sand dunes turned into hard compacted rock over the ages, calcifying in vertical and horizontal layers. Erosion by wind and rain has created the spectacular landscape which appears now.

Breathtaking sculpted swirling bands of color run through the sandstone, which has eroded into interesting shapes. The colors and shapes change with the light as the day progresses. Red, pink, yellow, and green rock has been blended together to form castles, beehives, chutes, and other structures. The soft sandstone of The Wave is fragile, one needs to walk carefully to not break the small ridges.

The Paria Canyon-Vermillion Cliffs Wilderness, which contains The Wave, is administered by the BLM, and a permit is required to visit The Wave. Due to the fragile nature of the site, only twenty permits are issued per day. Ten of the permits are available in advance through a lottery that is conducted four months before the month for which the permit is sought.

The remaining ten permits are available by lottery on the day before one's intended hike at the Paria Ranger Station in Page, Arizona. The lottery for the walk-in permits takes place at 9:00 in the morning. Every day during the summer, hikers are lined-up at the door of the station. The best, and most popular, time to visit The Wave is in the springs and fall.

The Wave is challenging to find. In an effort to maintain the natural integrity of the region, there is no formal trail to The Wave. The Paris Ranger Station will give hikers with permits a lengthy, full color photo and map handout called "Finding The Wave" with GPS, latitude-longitude, and UTM coordinates. Regardless, it is easy to get lost, and in past years there have been a significant number of Search and Rescue Operations conducted by both the Coconino County Sheriff's Office (Arizona) and the Kane County Sheriff's Office (Utah) for persons lost hiking to and from The Wave.

If it rains, the hike might be cancelled as the mud formed literally sucks and makes it dangerous to hike. During the summer, it can easily get over 100°, so plenty of drinking water is a must as dehydration is a real risk. Everything must be carried in and carried out. This causes an-

other hassle as a hiker must poop in a bag (and if you never have—it can be an experience). Human/dog waste bags are, of course, provided free of charge. Dogs can be taken on the hike but must be on a leash and under control at all times.

Regardless of the hassles involved in the permit process and hiking in the rugged, trackless wilderness to reach it, The Wave is a photographer's delight. It is said that the best time to photograph it is when the sun is directly over head, but at other time the shadows give it nice contracts.

Beautiful, fragile, and protected, The Wave is a geological wonder of the world!







#### RACETRACK Playa Mountains

(Information obtained from several sources by Linda Behr for The Mountain Gem.)

Nestled in a remote valley between the Cottonwood and Last Chance Ranges, the Racetrack is a place of stunning beauty and mystery. The Racetrack is a playa—a dry lakebed—best known for it's strange moving rocks. Although no one has actually seen the rocks move, the long meandering tracks left behind in the mud surface of the playa attest to their activity

The moving rocks, also known as sliding rocks or sailing stones, are a geological phenomenon found in Racetrack Playa, a seasonally dry lake (a playa) located in the Panamint Mountains in Death Valley National Park, California. The rocks move across the surface of the playa, leaving long tracks behind them as they go, without human or animal intervention.

They have never been seen or filmed in motion. Racetrack rocks only move once every two or three years and most tracks last for just three or four years. Rocks with rough bottoms leave straight striated tracks while those with smooth bottoms wander. Most of the moving stones originate from an 850-foot (260 m) high hillside made of dark dolomite on the south end of the playa, but some are intrusive igneous rock from adjacent slopes. Tracks are often tens to hundreds of feet (low to high tens of meters) long, a few to 12 inches (8 to 30 cm) wide, and typically less than an inch (2.5 cm) deep.

Over the years there were many speculations and possible explanations made on how the stones move, ranging from supernatural to very complex. Most hypotheses favored by interested geologists suggest that strong winds when the mud is wet are at least in part responsible. But some stones weigh as much as a human, which some researchers feel is too heavy for the area's wind to move. They maintain that ice sheets around the stones either help to catch the wind or move in ice flows. But both theories don't explain how two rocks right next to each other could go in two opposite directions or one could stay put while the one three times the size, doesn't. So far every attempt of explanation has been insufficient and purely assumptive. The mystery of moving rocks is yet to be revealed.

Main source:

http://britishexpats.com/forum/showthread.php?t= 542408 and other Internet sites

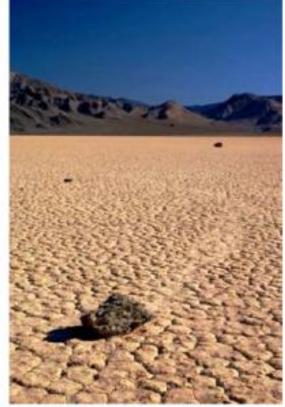
> via The Mountain Gem 06-2009 via Quarry Quips, Sept 2009

Read more at:

http://geology.com/articles/racetrack-playa-slidingrocks.shtml

http://www.anomalies-unlimited.com/OddPics/Playa.html All pictures were copied from the above sites.









#### 2012 Board of Directors

#### **Officers**

President	Joe Kent	`801-771-8184
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	Open			
Assistant	Open			
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		
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 auditorium at the Weber County Library Southwest Branch located at 1950 W 4800 S, Roy, Utah.

All visitors are welcome!

Board Meetings are held at 7 pm on the first Tuesday of each month in the lobby of the Ogden Airport Terminal Building.

#### Newletter

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.

