Special Anniversary Year

Ogden Rock and Gem Club

Beehive Buzzer

April 2013 Volume 41 Issue 4

Issue Highlights...

This Month: Geology of Utah

There was more material on the geology of Utah that could fit in this month's issue. The rest will be included in future issues.

Club Notes:

- Club Birthday Celebration at this month's meeting. Don't miss it!
- This year's auction was a success! Thanks to all who participated.
- Remember to RSVP Joe Kent before each field trip.

Beehive Rock & Gem Club Program

Annual Club Birthday Party

Thursday, April 25, 2013 – 7 pm

Our club meeting will be about this year's Club Field Trips to the following areas:

Grouse Creek — April 26-28
Henry Mt. — May 24- 28
Topaz Mt. — June 7-9
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

List of Field Trips also on website: www.beehiverockandgemclub.com

Our Club Field Chairman is Joe Kent. Please advise him if you plan on going to any of these trips –especially if you don't have an internet site from which all last minute communications (e.g. cancellations or date changes) are made.

There will be examples of things to find on each trip and some examples of craft items made from the rocks, minerals and fossils found plus photos of the areas in a program by Joe. Members who wish to show craft pieces from these locations could bring their items.

"Rocky" Ray, Program Chairman

Opportunity of a Lifetime
Beehive Buzzer Newsletter Editor

I need to step down as Newsletter Editor. I would like to continue to help with the newsletter by submitting articles, but I need to relinquish the main duties of the editor due to my commitments. You will have great support from me and Leora Alexander. It is a great experience. All you need is a computer. If you are interested, contact me or a member of the board.

Dave Harris, Editor

Lloyd Gunther
By "Rocky" Ray

We have noted the passing of Lloyd Gunther of Brigham City at the age of 96 (less 2 days) on the 24th day of March. He and his sons (past Club Honorary Members) have rendered appreciated service to the Beehive Club in giving programs on Trilobites and Plant fossils; in arranging showings of their personal and public museum collections, etc. The Gunther name is one most often associated with many new Trilobite species found in North America and many university museums, etc. have collections of their findings.

Lloyd, though aged, was as enthusiastic as any rock-hounder could be and was always trying to find, swap or locate other fossil and rock samples for the families' extensive collect-ions. His knowledgeable son, Val, will continue to offer showings of their museums, etc.

Lloyd Gunther Links:

Obituary
"The Mormon Trilobite Choir", *Cruisin' the Fossil Freeway*, by Kirk Johnson
"Lloyd Gunther 1917-2013 Trilobite King"

Beehive Board Meeting Notes:
April 4, 2013

Steve conducted this month's meeting. He started by showing the Club's First Aid Kit, and what he has added lately to bring it more up to date. Items will be added as needed. It is still recommended that each vehicle has it's on First Aid kit.

Discussed last month's Club Auction. We had a good turnout, and everyone had a good time.

Linda has found a person who can make our Club Embroidered Patches. It will be $30.00 for making the Master, and $10.00 for each 7 inch patch after that.

Joe, our club Field Trip Chairman, ran through the Field Trip list. We will print another list in the Buzzer.

The Wasatch Club is asking for Silent Auction items for the upcoming Rocky Mountain Federation show in May. This year it will be held in Salt Lake City, Utah. Rock hounds from over 10 states will be in Utah on May 17-19th to see, buy, and hunt for our Resources. We encourage Club members to attend the show to meet fellow Rock Hounds and to support the Federation.

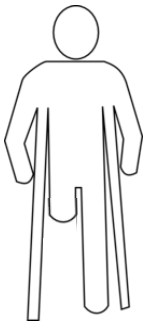
Dave Offret, Club Secretary

Club Auction Last Month

The auction was a success! Thanks to those who donated items! Thanks to all those who participated! Thanks to Ray Law for being our auctioneer!

Photo Credit: Shari Bush

"Leaving This Place to the One-Legged Guys "
By "Rocky" Ray



Seeing the old scars on my wrist always reminds of our rock-hounding trip to Paul Bunyan's Post-Pile on Highway 6 between Eureka and Jericho Junction several years ago. Leaving the old state campground we bounced our way at an angle up the hills along a close fence then across some rough, roadless area to stop on a flat place facing a fairly steep canyon across from where a mining shaft was noticeable on the other side. When our group arrived there was a single pickup truck parked there but no persons visible. While the major part of our group headed directly ahead looking for rocks with quartz drappings and petrified wood, I decided to head to the right toward a knoll about 50 yards away.

After about 20 minutes without finding anything I decided to head down the knoll and join the others. Now the rock under foot was limestone lying at an angle with ridges of "chert" sticking out between the weathered limestone. It was very rough and sharp. Walking fairly normally and about half way down my heel caught one of those sharp chert pieces and I went flying into a "header" downward across the sharp rocks and into a very sharp, dried Pinyon Pine. With great difficulty I was able finally get back up (backing uphill) with pieces of Pinyon Pine sticking in my wrists, arms and thumb and bleeding scrapes from the rocks in other areas. When I finally got back up I started feeling dizzy so I hurried a bit to get on a flat spot where I could sit on a low rock. I don't remember really sitting on the rock but when I came to, I was lying on the ground and began to realize that I probably had passed out. I lay there for some 10 -15 minutes trying to clear my head and stop the dizziness. Then I looked toward where the others were but could not see them. ***Then to my puzzlement I see a one-legged man coming out of the steeper part of the canyon with crutches, and with a backpack of rocks on his back and another bag hanging from his neck. How in world was that man doing that ???---Was this an allusion ??-- Then I decided that I should probably leave this kind of place to the "one-legged guys".***

When I got over to where the others were working the rocks, I found that Ray Law had also cut himself on these rocks. Lynn Hayes was the only one with a couple of bandages in his wallet for us two "wounded" guys. When we got to talk to this one-legged man, we marveled how he did these kinds of things and oddly enough, expressed our concern for him being out alone by himself – but guess who needed help!! In fact, when we offered to help him carry other loads up out of the gulley/canyon he declined – in fact he went back down to show us where to find the good stuff.

Anyhow it took about 2 months for the last of the Pinyon Pine points to work out of my thumb but the scars on the wrist and memories are still there.

Tumbler Tips

- Vaseline can be used around the rim of a tumbler before anchoring the lid to get a tight seal and an easily removable lid.
- Use enough filler materials to keep the rocks from knocking together. Suggested filler materials are whole grain oats purchased from any feed store, ground up corn cobs, rubber bands (which can be used and re-used), and plastic pellets.
- Be sure to have a lot of small stones and a variety of sizes for good abrasive action among the stones. The smaller stones help abrade the centers of larger materials.

When finished with polish let the stones soak in a50/50 solution of vinegar and water.

Via *Pick-Hammer News*, 2/12, *Pineywoods Rooter, 7/*00
Quarry Quips, 2/12, *Strata Gem*, 4/13

Bench Tips
By Brad Smith

You can make your own inexpensive wax pen from a small soldering iron plugged into a light dimmer switch for heat control. Both components are easily found at Radio Shack, a big hardware store or at Harbor Freight. For an example of the dimmer and soldering iron, see www.harborfreight.com items # 43060 and # 47887. Look for a soldering iron of around 25-30 watts. File the tip to the shape you prefer or even better get a soldering iron with replaceable tips. Then you can make several tip shapes for different tasks. Set the dimmer control just hot enough to melt the wax without producing any smoke.

Via *Moroks Newsletter*, 3/12, *Strata Gem*, 4/13

Grouse Creek Field Trip

April 26-28. 2013

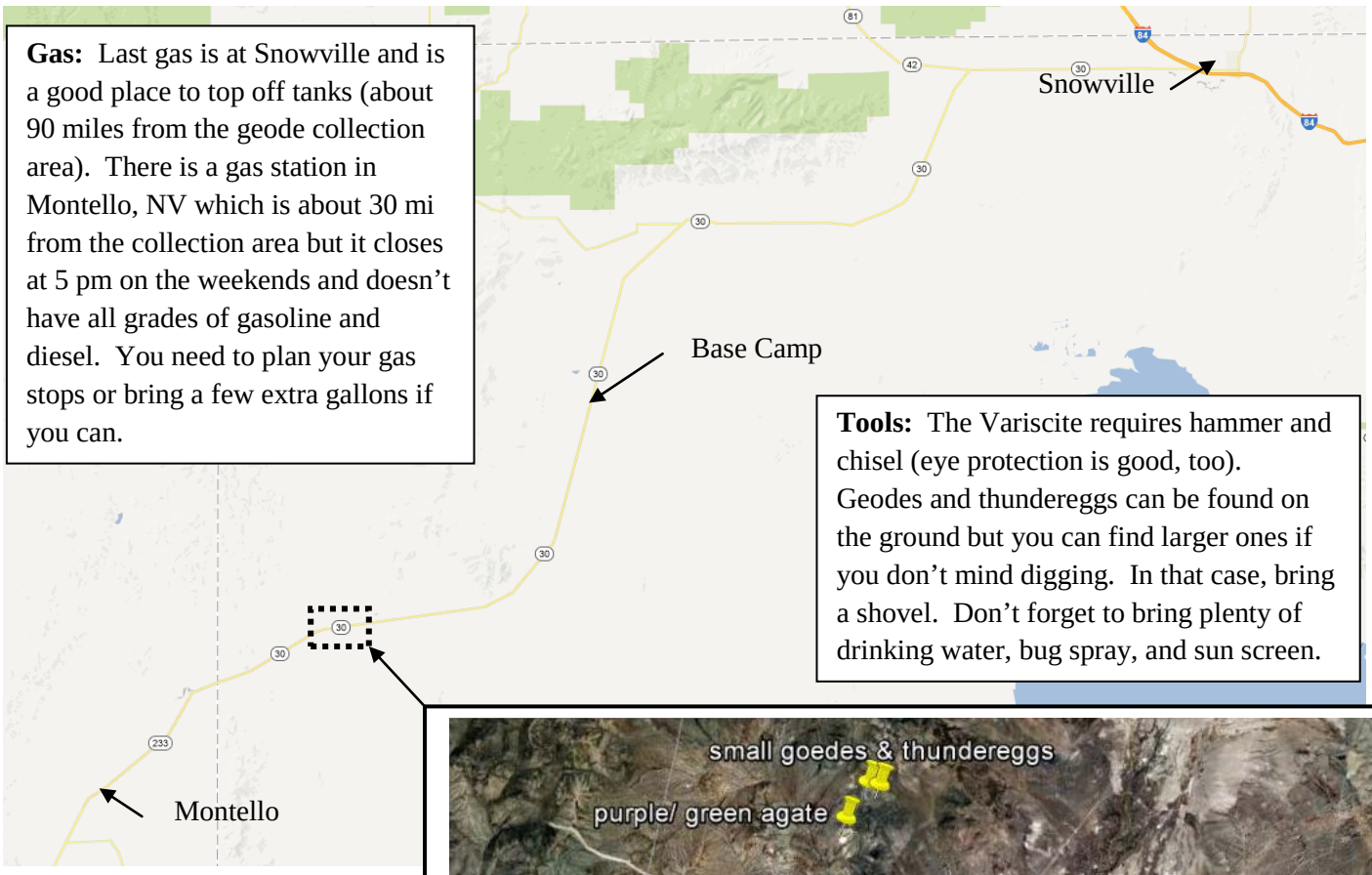
Itinerary: Base camp is at the Highway Dept gravel pile on Hwy30 about 60 miles from Snowville. (See map). The area is on both sides of Hwy 30 right next to the road. Not sure yet which side we will choose. Look for campers next to the road.

Friday Afternoon/Evening: Quartz crystals near the Devils Play Ground area.

Saturday Morning: leave the camp at 9 am and head for the purple/green churt followed by the geode area and lunch. After lunch well head for the Variscite. When done there will head for camp. Sunday to be determined by those still around.

Joe Kent, Field Trip Leader

Gas: Last gas is at Snowville and is a good place to top off tanks (about 90 miles from the geode collection area). There is a gas station in Montello, NV which is about 30 mi from the collection area but it closes at 5 pm on the weekends and doesn't have all grades of gasoline and diesel. You need to plan your gas stops or bring a few extra gallons if you can.



Tools: The Variscite requires hammer and chisel (eye protection is good, too). Geodes and thundereggs can be found on the ground but you can find larger ones if you don't mind digging. In that case, bring a shovel. Don't forget to bring plenty of drinking water, bug spray, and sun screen.

Important

Please RSVP Joe Kent by Thursday, April 25 so he knows how many are going, when you are planning on arriving, and so he can contact you if something changes.

Joe Kent, Field Trip Leader:

801-771-8184 (Home)

801-540-8586 (Cell)

Email: joekent225@msn.com.

Rockin' Thru Utah: Introduction and Colorado Plateaus

Dr. Mike Nelson

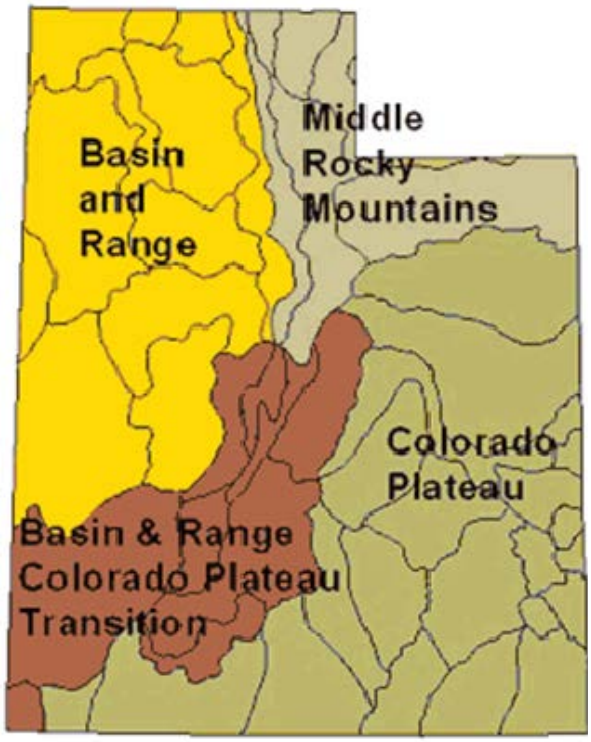
T his article, and some that will follow, will do double duty—they will continuemy series of small articles briefly covering the geology of RMFMS states, and also introduce the geology of Utah to those travelers attending the Federation's annual meeting and show. This event, hosted by the Wasatch Gem and Mineral Society, will be held May 17-19 in Jordan.

The Federation website lists a substantial number of active clubs in the state: Cache Rock and Gem club (Logen), Mineral Collectors of Utah (Kaysville); Moab Rock Club (Moab); Beehive Rock and Gem Club (Ogden); Rockhounders Outreach for Community Knowledge (Salt Lake City); Wasatch Gem Society (Sandy); Toole Gem and Mineral Society (Toole). Most are located along the Wasatch Front with the exceptions being the Moab club in the Colorado Plateau, and the Toole club west of Salt Lake City in the Great Basin. A disclaimer: the RMFMS website may not have the most current information about member clubs. Utah is another one of those states that is divided between federations. I have found listings for several other Utah clubs (evidently non-RMFMS members): Color Country Gem & Mineral Society (Panguitch); Golden Spike Gem & Mineral Society (Ogden); Southern Utah Rock Club (Cedar City). At any rate, it appears that rock and mineral clubs are alive and well in the state.

I have a very soft spot in my heart for Utah—in fall 1967 I had a "big week" as I graduated from South Dakota, traveled to Kansas, got married, and drove to Utah for additional graduate school. All worldly items were packed in a 1959 Pontiac with a portable roof carrier. It was an enormous beast (compared to versions today) with a huge trunk and a mighty 285 hp engine. Everything seemed to work out and graduation came three years later, as did a university teaching position back in Kansas. For the next 21 summers, I packed up my students and my family, and we collected and studied Utah geology at many localities, from border to border. Life was good (See August 21, 2012 Utah Petrified Wood and Flower Children at www.csmsgeologypost.blogspot.com). My most recent large research projects (each involving several summers) were: 1) examining the large vertebrate animals that lived along the shoreline of Pleistocene Lake Bonneville; and 2) collecting and describing Cretaceous mammals from the San Rafael Swell Laramide uplift in central Utah). At the time (mid to late 1980's), these tiny fossils represented some of the first Cretaceous mammal faunas known west of the interior seaway.

Like most of the Rocky Mountain States, Utah has a very complex geological history and any detailed explanation is beyond the scope of this small paper. For additional reading I would refer readers to: 1) Utah's Spectacular Geology, 2005, Lehi F. Hintze; and 2) Geological History of Utah, 2009, Lehi F. Hintze & Bart Kowallis. Both seem available on used book sites. The "good" thing about this variety and complexity is that the spectacular geology is displayed along the many roads and trails in the five National Parks, seven National Monuments, two National Recreation Areas, a National Historic Site, and six National Forests.

In terms of physiography, Utah includes portions of three major regions: 1) Colorado Plateaus; 2) Basin and Range; and 3) Middle Rocky Mountains. In addition, a fourth "semiregion" includes the Colorado Plateau-Basin and Range Transition Area. The included subdivisions of each region display spectacular geology and fantastic scenery. All areas have produced great specimens for collectors and with some patience and digging many localities still yield nice finds.



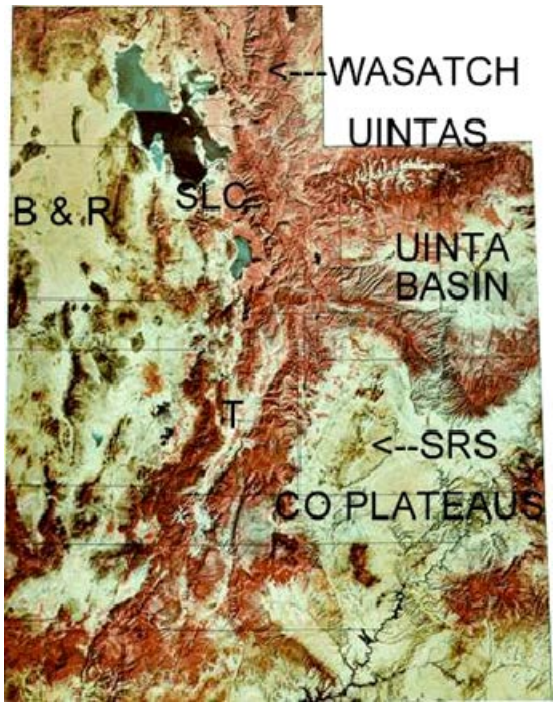
Physiographic Regions of Utah. Map from Utah Geological Survey.

The Middle Rocky Mountains are a segment of the larger Rocky Mountain System and in Utah consist of two major ranges---the east-west trending Uinta Range and the north-south trending Wasatch Range. Although Utah does not have a 14er in either range, the mountains do display some fantastic scenery and high peaks. Kings Peak, the highest in the state at 13,528 feet, is in the Uintas, and Mt Nebo (11,928 feet) anchors the southern end of the Wasatch. Most of the population of Utah

(over two million) is centered along the western side of the Wasatch between Brigham City in the north and Santaquin in the south--- members of the LDS faith found this land to be fertile if irrigated by waters coming off the mountains. The Wasatch Front supports 80% of the state's population that is somewhat crowded and sandwiched between the Wasatch and Great Salt Lake in the north and the Wasatch and the desert or mountains in the south.

East of Salt Lake City, at the 2002 Olympics resort town of Park City, is a very interesting geological feature where the Uinta Mountains meet the Wasatch Mountains at a right angle junction (see maps above). This junction is manifested at the surface by a great outpouring of volcanic rocks and intrusions of igneous rocks. The mining riches of Park City are associated with the volcanics while igneous stocks extending west produced such metallic hotspots as Alta.

The Colorado Plateaus include much of what visitors associate with "Red Rock Country" although certainly not all of the rocks are red, especially in places like the Uinta Basin (described below). However, national parks and monuments such as Zion, Bryce, Canyonlands, Arches, Grand Staircase/Escalante, Cedar Breaks, Capitol Reef and Glen Canyon National Recreation Area display perhaps the most spectacular desert scenery (much of it red) of any locality in the world. Much of this landscape is due to erosion by the Green and Colorado River systems.



Relief map of Utah. SRS is San Rafael Swell, T is Transition Zone, SLC is location of Salt Lake City. Refer to map of Physiographic Regions above.

In addition to the "red rocks", large scale igneous intrusions (termed laccoliths) have produced a series of domed mountains (discussed later). These laccoliths - the Blue or Abajo Mountains, La Sal Mountains and Henry Mountains - were the first of their kind to be named and studied by geologists. All have peaks in excess of 11,000 feet and Mt Peale at 12,721 feet in the La Sal Mountains in the highest point between the peaks of the Uintas and someplace in Mexico.

The Basin and Range Province has a unique geology with numerous north-south oriented mountain ranges separated by sediment filled basins. The ranges are usually asymmetric in cross section due to bounding high-angle normal faults. These faults create uplifted ranges (a horst) and down-dropped basins (grabens); often the ranges are tilted at an angle. The asymmetry is created when the steep side of the tilted range erodes as a scarp. Most of the exposed core rocks in the ranges are Paleozoic or Mesozoic in age but are often covered by Cenozoic volcanic rocks. The Cenozoic valley-fill sediments are thick (~2000-3000 feet) and represent material shed off the eroding ranges as well as lake beds.

Some of the mountain peaks in the Basin and Range are quite high in elevation with White Mountain Peak in California, a 14er. In Utah, Ibapah Peak in the Deep Creek Mountains comes in at 12,101 feet. The region is characterized by having internal drainage—no river leaves the Basin and Range and heads toward an ocean. Faulting and mountain building seemed to have started in the Miocene, perhaps ~17 Ma, and is an extensional event - the crust is stretching and thinning. This is in contrast to the formation of the Rocky Mountains, a compressional event.

The varied and complex geology of Utah, coupled with the fact that I have a limited number of words available in the newsletter, has caused me much concern - how do I get my points across in a flowing, reasonable, and concise manner? I decided that result may be impossible since I do have some personal time constraints—for example, the Tucson Show is starting and that is a multiday effort! Therefore, I will be combining some previous articles written for my blog as well as for the CSMS Pick&Pack. So, this article may seem to flow in a haphazard fashion; however, Tucson is calling.

One of the major subdivisions of the northern Colorado Plateaus is the Uinta Basin (see figure above), a large basin associated with the Sevier/Laramide (Cretaceous & early Tertiary) Orogeny and located in eastern Utah south of the Uinta Mountains. The Basin is a structural basin, as opposed to a topographic basin, meaning that it is a very large syncline, and a compliment to the anticlinal Uinta Mountains. The structure is related to the Piceance Basin of northeastern Colorado, and the Fossil and Green River Basins north of the Mountains in Wyoming. The rocks in the Basin are an interesting

sequence of latest Paleocene (~58 my) to early Oligocene (~28my) basin-fill sediments consisting of, in ascending order, the Colton Formation (stream and flood plain deposits), the Green River Formation (Lake Uinta, part of a large fresh water lake system), the Uinta Formation (lake edge and lake filling sediments), and the Duchesne River Formation (stream and flood plain sediments on top of the lake sediments (see Pick&Pack v. 49, #9, and #10 for additional descriptions).

One of the more interesting aspects of these basins is the presence of numerous accumulations of hydrocarbons, the best known being the famous "oil shale", deposits, and the numerous fields of liquid petroleum and natural gas. Many RMFMS travelers have specimens of kerogen-rich mudstone, the oil shale, suitable for cabinet displays. However, there are other types of less well known hydrocarbons that are of interest both to collectors and to "oil" speculators—the aptly named solid hydrocarbons.

When I first arrived in the Basin town of Vernal in the late 1960's, it was quite evident that during the hot summer weather the city streets seemed quite "soft" and somewhat unstable. Further inquiry lead me to the nearby open-pit quarry on Asphalt Ridge where city crews mined "tar sands" and constructed a paving mix. It seems as if the city had started paving with raw tar sand in the 1920's and continued to develop more effective methods until the mix was being used on state highways in the 1980's.

Bitumen-impregnated (Tar Sands) Santstone at Asphalt Ridge near Vernal, Utah.

My next interaction with the tar sands came in the early 1980's when I was completing a Paleontological Environmental Impact Statement on Asphalt Ridge near a DoE funded in-situ (in place) experimental project (with a nice play on words, the TARZAN project). The bitumen-impregnated sand at Asphalt Ridge is in the Eocene-Oligocene Duchesne River Formation; however, other tar sand deposits in Utah are located in the Green River Formation (Eocene), Mesa Verde Group (Cretaceous), Moenkopi Formation (Triassic), and White Rim Sandstone (Permian) (Gwynn, 2007). The Uinta Basin tar sands had their genesis in the Green River oil shales—migration of hydrocarbons.

The activity and commercial speculation sort of died out in the late 1980's and 1990's; however, I do know that some companies, for example Nevtah Capital Management in conjunction with privately held companies, have invested considerable resources in trying to develop an extraction process and hold many lease acres in Utah. In addition, mining of tar sands may have started at PR Springs in a remote part of the Basin on the East Tavaputs Plateau.

Whatever the case, Utah tar sands may one day play a major role in the "energy business" and a sample of this unique rock deserves a place on the collector's cabinet next to the oil shale specimen.

Perhaps the most interesting mineral in the Uinta Basin is one that a few years ago (pre-1995) would not be classified as a "mineral" and that is Uintaite, referred to in this article as the trade name Gilsonite. In 1995, the International Mineralogical Association adopted a new definition of a mineral as "an element or chemical compound that is normally crystalline and that has been formed as a result of geological processes" (Nickel, 1995). This definition opened the way for an organic class of substances that included hydrocarbons of which Gilsonite is a member. Gilsonite is a solid hydrocarbon that comes from the solidification of petroleum. It is usually a dull black in the field and resembles coal; however, some fresh surfaces are quite shiny with a conchoidal fracture and superficially looks a little like obsidian.

Gilsonite in the Uinta Basin occurs in long veins (measured in miles) from a few inches to several feet thick and hundreds of feet in a vertical direction. Most thick veins occur in the Green River and Uinta Formations, both units are Eocene in age. In fact, the veins seem "rooted" in the oil shales of the Green River Formation. Tripp (2004) believes the Gilsonite had its beginning in the large amounts of organic debris that accumulated in the sediments of tropical Lake Uinta. The burial of these sediments created heat and pressure, and the Green River oil shales were formed. Again, burial of the oil shales created water and hydrogen, and this explosive mixture was expelled and created fractures in the surrounding rock. These fractures were later filled with petroleum whose viscosity disappeared with desiccation. Gilsonite is essentially solid "petroleum"

Gilsonite. Photo author unknown.

Email Dr. Nelson at: csrockguy@yahoo.com
or go to his blog: www.csmsgeologypost.blogspot.com

Source: Rocky Mountain Federation News, Mar 2013

TRILOBITE TROUBLE

BY BOB FARRA, *THE ROSTRUM*, MARCH 2013

Could it be? Morocco is running out of trilobites? Say it ain't so! But, yes, as hard as it may seem to believe, the great flood of trilobites coming out of Morocco is finally starting to dry up. Most MGS members know that I have been traveling to Morocco for a number of years to visit some of their many famous mineral and fossil localities. I was there again last October, and learned from the people involved with the trade in trilobites that all is no longer rosy.

Anyone who is familiar with fossils will know that Morocco has been a source of an amazing variety of trilobites for many years. There are many localities in Morocco where trilobites are found, but the greatest variety and most bizarre forms come from the Devonian formations near Alnif, in the southeastern part of the country. The diversity of trilobites found there is amazing, and includes such genera as Reedops, Dicranurus, Ceratarges, Harpes, Paralejurus, and many others. Most of these trilobites come from a locality near Alnif known as Issoumour Mountain, or Jbel Issoumour (also spelled Jissoumour). Within Issoumour Mountain, most of the interesting trilobites are found in one layer of limestone near the top of the mountain. Collecting is very simple. Chunks of limestone are pried out and cracked open with a hammer. The digger then looks for a squiggly black line. That line represents the cross section of a trilobite. The rock usually breaks through the trilobites rather than around them as it does at some other localities. The two halves of the rock are then taken to one of many preparers shops in Alnif, Rissani, or Erfoud. There, the two pieces are glued back together and the specimen is prepped out. The better preppers use small pneumatic hammers and microsand blasters to prep their pieces, while others use hammers and small chisels or nails.

Issoumour Mountain is not a small hill. It is a ridge that runs for many miles through the desert. There would seem to be enough rock there to supply trilobites practically forever. So why are they running out? Part of the answer has to do with how the material is mined. All of the work is done with simple hand tools. There are no extensive underground mines. As the diggers dig back into the trilobite layer, they can only go so far before there is a danger of cave-ins. At that point, they have to move to another spot. The problem is that most of the accessible spots have been dug to the point where it would be dangerous to dig any further. Diggers must now often go many miles to find an accessible spot.

Comura sp. Devonian trilobite from Morocco
(Photograph taken by Jim Stedman of a specimen on display at the Smithsonian's National Museum of Natural History.)

Another part of the problem is economics. The fossil business in Morocco is hurting. Much of their trade has long been with Europe, and, as most people are aware, the economy in Europe is in pretty bad shape. There is less economic incentive to walk the long distances to accessible fossil digging spots. Many of the diggers have left the business and gone to work mining industrial minerals such as barite. They don't exactly get rich mining industrial minerals. Industrial barite, for example, sells for about 22 cents per pound, of which the mine owner gets a cut. But, they can apparently still make more this way than they can digging fossils.

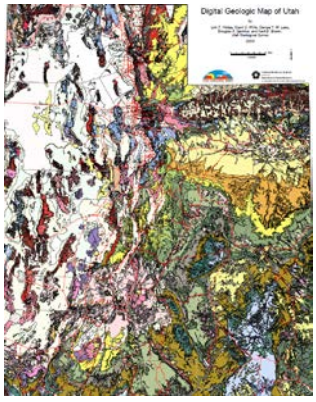
So are they really no more Moroccan trilobites? Not quite; there are still some specimens coming out. Many of the preppers have old stocks of unprepped material that they are still working on. Many dealers also still have extensive stocks. And, some digging is still going on. But, when I was there last October I did not see the vast numbers of trilobites that I had seen on previous trips. (I did, however, see lots of other fossils, such as dinosaur and shark teeth.) Of course, there are still a lot of fake trilobites around, as there have long been. This will always be a problem it seems.

Thus, if you happen to own authentic Moroccan trilobites, consider yourself lucky. If you think trilobites offered for sale by reputable dealers are on the expensive side, now you know one reason why. Maybe now that they might not be so abundant as to leave us all a little jaded, we can come to appreciate Moroccan trilobites for the beautiful and bizarre creatures that they really are.

Via *Rocky Mountain Federation News*, April 2013

Utah Geological Survey

A wonderful web site with loads of information on the geology of Utah is the Utah Geological Survey web site: http://geology.utah.gov.
They have a ***cool*** interactive geological map of Utah. You can zoom into any location in Utah and determine the geological makeup of that area. *Very, very cool.*
http://geology.utah.gov/maps/geomap/interactive/viewer/index.html
As a bonus this month, you will receive a digital version of this map. A 39" x 48" hardcopy of this map can be purchased from the Utah Geological Survey for $15.
http://www.mapstore.utah.gov/ma1.html



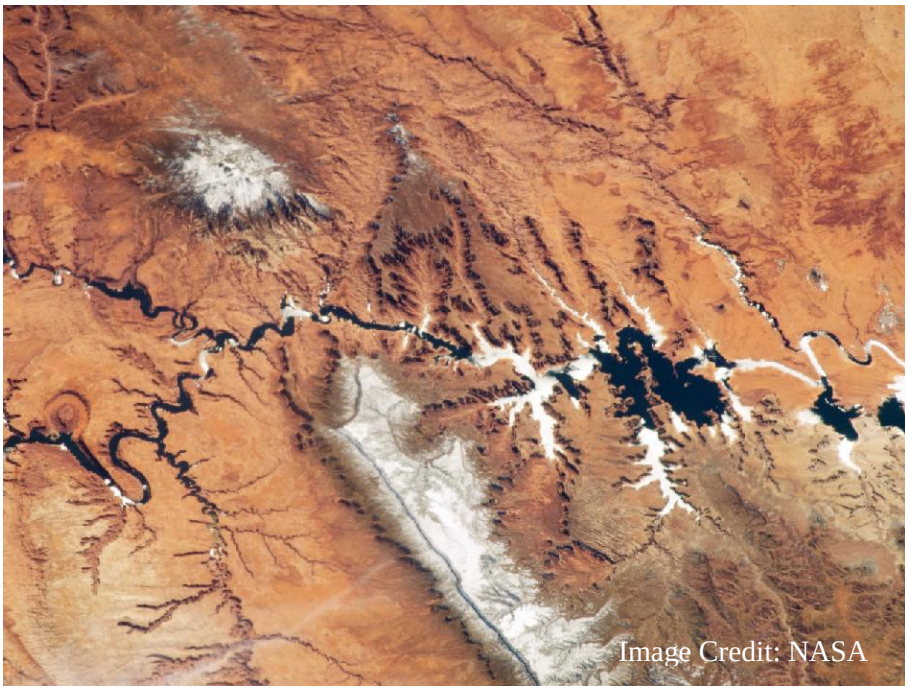


Image Credit: NASA

An Astronaut's View of the Colorado Plateau

NASA The Colorado Plateau spans northern Arizona, southern Utah, northwestern New Mexico, and southwestern Colorado. This physiographic province is well known for its striking landscapes and broad vistas—an impression that is enhanced by the view from the orbital perspective of the International Space Station. This astronaut photograph highlights part of the Utah-Arizona border region of the Plateau, and includes several prominent landforms.

The Colorado River, dammed to form Lake Powell in 1963, crosses from east to west (which is left to right here because the astronaut was looking south; north is towards the bottom of the image). The confluence of the Colorado and San Juan Rivers is also visible. Sunglint—sunlight reflected off a water surface back towards the observer—provides a silvery, mirror-like sheen to some areas of the water surfaces

The geologic uplift of the Colorado Plateau led to rapid downcutting of rivers into the flat sedimentary bedrock, leaving spectacular erosional landforms. One such feature, The Rincon, preserves evidence of a former meander bend of the Colorado River.

WASATCH GEM SOCIETY IS PROUD TO HOST THE 2013
ROCKY MOUNTAIN FEDERATION OF MINERALOGICAL SOCIETIES CONVENTION

Annual Gem - Mineral - Fossil Show!

MAY
FRIDAY 17TH 10am - 6pm
SATURDAY 18TH 10am - 6pm
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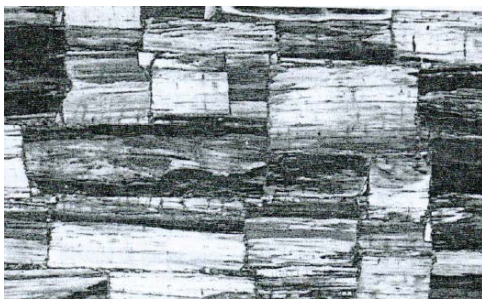
www.wasatchgemsociety.com

Unique Flooring

If you are travelling in the vicinity of Kennewick, WA, take time to visit East Benton County Historical Society Museum. The entryway features the beautiful petrified wood flooring donated by D. L McKeown in 1979 of Maxey's Trailer Court. The original floor was created by Gordon Maxey in 1958 and installed in the offices of Maxey Trailer Court. It took a lifetime to accumulate and prepare the material. Mr. Maxey went through more than $5,000 worth of diamond saw blades cutting the petrified wood. It took him 8 months to install the floor after it had been ground, sanded, and polished.

Via *Gneiss Times*, April 2013



Calendar

April

22
Earth Day

25
Monthly Club Meeting
Roy Municipal Center
7 pm

26-28
Grouse Creek
Field Trip

May

2
Board Meeting
Roy Library
7 pm

12
Mother's Day

23
Monthly Club Meeting
Roy Municipal Center
7 pm

24-28
Henry Mtns Field Trip

27
Memorial Day

2
Board Meeting
Roy Library
7 pm

June

6
Board Meeting
Roy Library
7 pm

7-9
Topaz Mt Field Trip

14
Flag Day

16
Father's Day

Show Dates

April

26-29—WICHITA, KANSAS: Show and sale; Wichita Gem & Mineral Society; Cessna Activity Center; 2744 George Washington Blvd.; Fri. 9-7, Sat. 10-7, Sun. 10-5; adults $5, students $1, children free; contact Gene Maggard, (316) 742-3746; e-mail: gandpmaggard@wildblue.net

May

9-11—LOGAN, UTAH: Show and sale; Cache Rock & Gem Club; Bridgerland Applied Technology College West Campus; 1000 West 1400 North; Thu. 10-8, Fri. 10-8, Sat. 9-6; free admission; rough and polished rocks, slabs, gems, jewelry, fossils, demonstrations, cabbing, faceting, flint knapping, displays, jewelry, minerals, silent auctions, raffle, children's activities; contact Gary Warren, (435) 720-1775; e-mail: rock_hunter1@hotmail.com; Web site: http://cachegeologicalsociety.yolasite.com/

11-12—RENO, NEVADA: 48th Annual Jackpot of Gems Show; Reno Gem & Mineral Society; Reno Livestock Events Center; 1350 N. Wells Ave.; Sat. 10-5, Sun. 10-4; adults $6, seniors and students (6-12) $4, children (under 6) free; more than 60 exhibits, 20 dealers, demonstrations, gems, beads, minerals, fossils, geodes, books, raffles; contact Melissa Petersen, RGMS, 480 S. Rock Blvd., Sparks, NV 89431; Web site: www.renorockhounds.com

17-19—SOUTH JORDAN, UTAH: Annual show; Wasatch Gem Society of Utah, Rocky Mountain Federation of Mineralogical Societies; Salt Lake County Equestrian Park & Events Center; 2100 West 11400 South; Fri. 10-6, Sat. 10-6, Sun. 10-5; adults $2; door prizes, wheel of fortune, rock grab bags, silent auctions, show displays, demonstrations; contact April Robinson, (801) 599-6587; e-mail: april@thrivepress.com; Web site: www.wasatchgemsociety.com

18-19—CHEYENNE, WYOMING: Annual show; Cheyenne Mineral & Gem Society; Archer Complex - Bldg. M; south side of I-80 at Exit 370, 6 miles east of Cheyenne; Sat. 9-6, Sun. 10-4; adults $3, children (12 and under) free with adult; exhibits, jewelry, fossils, petrified wood, grab bags, fluorescent minerals, dealers, beads, rock sphere making, faceting demonstration, New Zealand minerals, gold panning, silent auction; contact Bob King, (307) 632-2702

June

21-23—SANDY, UTAH: Wholesale and retail show; Gem Faire Inc.; South Towne Expo Center; 9575 S. State St.; Fri. 10-6, Sat. 10-6, Sun. 10-5; adults $7 (3 days), children (11 and under) free; jewelry, gems, beads, crystals, silver, rocks, minerals, more than 70 exhibitors, jewelry repair while you shop; contact Allen Van Volkinburgh, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com

Check http://www.rockngem.com/show-dates-display/?ShowState=ALL for other shows throughout the country.

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.

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