



ROCK TALK

White Mountain Gem & Mineral Club

Member of RMFMS and AFMS

Volume 14 Issue 8 August 2010

whitemountain-azrockclub.org

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Treasurer Larry Legge
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Editor Charlene Bingell
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Field Trip Chairman- Open

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Advertise & PR Larry Legge
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Auctioneer Bill Stalder
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(928) 537-2524

Coalition Trips/Historian/Sunshine
Eunice McQuiston
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Education (Schools/Libraries)
Open

Web Master Ron Ginn
wginn3@gmail.com
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President's Message

August 2010

Have you noticed the days being shorter? Then there is all the "back-to-school" stuff. Our year is quickly moving right along.

Welcome and thank you to all our new members who came to the August meeting. And you too, Judy, whom I'm sorry couldn't stay. I hope you're feeling better.

I'm really looking forward to the Lava Tubes around Flagstaff this month. Thank you, David, for making the arrangements for this special step back into history. That same day there is a coalition trip in Parks (practically next door) and they will be after obsidian. Possible two-fer?

Still another thanks to David for starting the travel brochure file that all Club members can reference. If you go on vacation this summer, be sure to add what you can. The brochures are free at most gas, restaurants, and motel lobbies. They are a wonderful addition to the available informative materials Your Club provides.

Be sure to gather your rocks and crafts for sale at the September 7th Open Bazaar. This is meant to be a FUN SOCIAL, as well as educational, night of seeing what others can do and what they are willing to offer.

Also mark your calendars for the Saturday September 11th Hwy Clean-Up. Our Club is active in community support and this is one area that takes very little time or effort but it does make a BIG impression. See you there-details inside.

I hope you can get outside this month and find the "good stuff"!

Rock On!

Nanz

"Rock Talk" is published monthly by The White Mountain Gem & Mineral Club, Inc. Any comments members wish to have published in "Rock Talk" need to be turned in or called in at the general membership meeting to the Editor.

Membership dues are \$15.00 for single membership and \$20.00 for couple/family. Dues are due the first of January of every year along with a completed application.

Meetings are held at J.B.'s Restaurant on the Deuce of Clubs, Show Low, Az., 1st Tuesday of the month, social hour starts at 5:30/meeting at 6:30.

Meeting Minutes

Minutes of General Meeting
White Mountain Gem & Mineral Club
August 3, 2010

President Nanz Marshall called the meeting to order at 6:30 p.m. There were 27 members present including new members: Emily, Larry & Brookie, Laura & Dan and son Luke, and returning members Tom & Karen.

A motion to approve the July minutes as published was made by Thomas and seconded by Bill Stalder. Upon a vote the members present unanimously approved the minutes as published.

Nanz called for announcements and officer reports.

Eunice announced the forthcoming nuptials of Lynn Wheeler and a card was passed so members could extend their wishes for happiness.

Ron Ginn reported he and Ron Dale had recently visited Prineville, Oregon and found a great rock shop.

Tonie MonDragon reported she had discovered a new Jasper... At the Humane Society. It is believed that Jasper is an Australian Cattle Dog and he will join us on some of our trips.

Eunice reported that the DoBell Ranch near Holbrook had been featured in the August Rock & Gem Magazine.

Larry Legge gave the Treasurer's report.

Secretary, Tonie, and Editor, Charlene Bingell had no reports

Vice President, David Bingell, reported on his progress toward a Scholarship Program. He has identified 3 members of the selection committee and is publishing a questionnaire in this newsletter so members can have input. Please respond to David. David and Charlene have just returned from vacation and brought flyers on sites of interest to rockhounds. He encouraged other members to pick up and share similar type free brochures found on their travels. David will keep a file on the flyers so when members intend to travel, check out some brochures ahead of time. David will give an educational program on Blue John Stone after the break.

David has volunteered to lead the next field trip on August 21st to a lava tube near Flagstaff. Information on the trip and the meeting place are in this newsletter.

Eunice reported on the July trip to the St. Johns Landfill. This was the Coalition Trip and six clubs were represented in the 26 people that attended. Some of the items found included an agatized petrified log and teeth of an extinct alligator.

Eunice also urged members to book their reservations for the September 24th field trip to Magdalena, New Mexico. We will have a Native American guide to a fossil field on the Alamo Reservation and the Kelly Mine will be revisited.

New Business: Nanz gave a head's up for the September 11th Highway Clean-up. Members will meet at the Big K parking lot and leave at 9 a.m. to go to our adopted mile. The whole activity should be completed in 1 hour. Also, Nanz announced the Open Bazaar for the September 7th meeting. Bring your items for sale, enough to fit in front of you on the table, and be prepared to make a contribution based on 10% of your sales plus one piece for the door prize.

At 7:15 p.m. the meeting took a 10 minute break.

We resumed at 7:25 p.m. with David giving another presentation in his Ethnic Gemstone Theme. This presentation was on Blue John Stone, the only gemstone of Great Britain. David and Charlene had visited the mine in Castleton, Derbyshire, and showed finished jewelry and rough to the members. The rough is no longer available to foreigners, just finished jewelry.

The door prize was drawn and Eunice won a belt holder for a rock hammer. Bill Stalder won the 50/50, Charlene won 2nd prize of a fire agate specimen, and Bob Shoup won 3rd prize of an adamite specimen.

Sandra Angelo made a motion to adjourn, seconded by Bob Shoup, and the motion was unanimously approved with the meeting ending at 7:40 p.m. The Silent Auction ended 3 minutes later.

Respectfully submitted,
Tonie MonDragon, Secretary

Next Meeting

Mark your calendars: Our meetings are always the first Tuesday of the Month- Next month will be **September 7, 2010** - at JB's Restaurant on the Deuce of Clubs in Show Low- social hour starts at 5:30 meeting starts promptly at 6:30 PM.

Web Site Info

whitemountain-azrockclub.org

Birthdays

Happy Birthday August and September babies! Summer is coming to a close – enjoy the warmth it won't last long -CELEBRATE!

August
Rod Murphy – 4
John Ferguson – 23

September
John Scholten-8
Don Cassidy- 14

FIELD TRIPS

Club Filed Trip- August 21, 2010

THIS MONTH'S FIELD TRIP IS TO A LAVA TUBE OUTSIDE OF FLAGSTAFF. NO COLLECTING. BRING HARD HAT, THREE SOURCES OF LIGHT PER PERSON, A LIGHT JACKET AND A BAG LUNCH. MEET AT 10:00 am AT SAFEWAY IN

FLAGSTAFF, SOUTH PLAZA WAY (east side of parking lot), LOCATED BEHIND GIANT GAS STATION ON MILTON.

THE TERRAIN OF THE CAVE IS MOSTLY FLAT WITH SOME ROCKS TO MANEUVER AROUND ONCE INSIDE. MOSTLY, THIS TRIP HAS MODERATE TERRAIN FROM THE SURFACE THROUGHOUT THE CAVE.

This mile-long lava tube cave was formed roughly 700,000 years ago by molten rock that erupted from a volcanic vent in nearby Hart Prairie. The top, sides and bottom of the flow cooled and solidified first, after which the insides of the lava river continued to flow emptying out the present cave.

Ample evidence of how the tube was born is written in the rocks of which it is formed. Small wave-like undulations in the floor are the remains of ripples frozen in the last trickle of molten rock that flowed from the cave. Stone icicles hanging from the ceiling show where a final blast of volcanic heat caused the rock to partially re-liquefy and drip.

Dress appropriately when you come to visit, with warm clothes and sturdy shoes. The cave is as cool as 42° even in summer, and you may even find some ice inside. The rocks are always sharp and slippery, too. Bring two or three sources of light, in case one happens to fail, it can be very dark one mile from the nearest light source.

Portions of the cave which were defaced by graffiti, have been recently cleaned up. Today's more environmentally aware visitors take better care of such a unique resource and report vandals when they see them.

Location: About 14 miles north of Flagstaff on paved highways and graveled Forest Roads. Travel time is about 45 minutes.

GPS: N35° 20' 32.1714", W-111° 50' 8.196"

Access: Drive 9 miles north of Flagstaff on US 180 and turn west (left) on FR 245 (at milepost 230)



Continue 3 miles to FR171



and turn south 1 mile to where

FR 171 B



turns left a short distance to Lava River Cave.

Notes:

Wear warm clothes and sturdy shoes. Bring two or three light sources.

Please don't deface cave surfaces, but do report anyone who does. Call 928-526-0600.

Questions on the road- David's cell number 928-205-5197 Charlene's 928-242-7870

Coalition Trip for August

August 21, 2010

From: "John McArthur" <johnkiwi@earthlink.net>
Subject: Re: Coalition field trip for August

Eunice

Yes - we have a field trip and are going up into the tall pines on August 21 to get away from some of the heat! We are going to just north of Parks - just off route 40 - to get obsidian. You will be very welcome to join us! We are leaving Chino Valley at 8:30 am - should be up there about 9:30 or so. You could meet us just North of the Parks exit to Rt 40.

Let me know if you need more data.

John

Field Trip Report for July 24, 2010

Field Trip Report
St.John's Landfill

I'll start off with a thank you to all who took part on this very beautiful day.

Six clubs, the Leaverites, Fluorescent Mineral Society, the Mineralogical Society of Arizona, the Verde River Rockhounds, the Apache Junction Rock Club, and the White Mountain Gem & Mineral Club, were represented totaling 26 rockhounds. We left Wilber's at 9:15 and after going a mile out of town, we turned in at the guard gate and were greeted with "Who are you?" "What are

you doing here?" I presented the guard with written and signed approval and after a short discussion, he let us go through with almost a smile on his face.

As soon as we parked Larry and Gary, with some help, put up the shade covers. Thanks guys for bringing them. They were needed and appreciated!

Then it was off and looking. Mardy Zimmerman's grandsons, Andrew, John, and Clayton were looking for teeth and skull plate. They were rewarded with both. Some very interesting petrified wood was found by Jim Van Wert. He called it "Bacon Wood" It was really quite pretty. With several bands of different colors, when slabbed, it looks like bacon. Kathy found some bone fragments, Clete found allot of petrified wood and told others where to find big pieces, and Sumner found various forms of metal to use with his sculptures. I was after the calcite. It didn't take long to fill my bucket. David D. found a large piece of calcite and gave it to me. Thanks, David. There was material of interest for everyone! No one went home without their own treasures.

Around noon, watermelon was offered. No one turned it down. A great thirst quencher!

Thanks go to all who participated on this trip. Remember, if you do, your name goes into the pot for drawing at the end of the year. Special thanks go to Ed Nichols and Jim Van Wert for sharing their knowledge of rocks. It was great to visit with other club's members and our own. It was a fun day!

Eunice

P.S. A polar bear was spotted at the collecting site!

"Magdalena Minders"

If you are thinking about scheduling the trip to Magdalena for the September 24 and 25 (actual trip day is the 25th, here are a few motel phone numbers again--- Western Motel (may already be full) 1(575)854-2417; the High Country Lodge, 1(575)854-2062; and the Eagles Nest, 1(575)854-3135.

This trip has always been a fun get-together for rockhounds. I hope during your busy schedules, you will make time to join us for what always turns out to be a different experience and rewarding trip.

If you have any questions, please call me at 1(928)536-7209 or email to rocknglow@frontiernet.net

Eunice

VOLUNTEER WANTED - Field Trips – 2010

WANTED: Someone to assume the title and responsibilities of the "Field Trip Chairperson"

Education

BLUE JOHN STONE

1. National stone of the United Kingdom ... it's the only gemstone found in the United Kingdom, specifically outside of the town of Castleton, county of Derbyshire. There are 11 caves in the region, but only two caves produce this material, though one is closed for future gem-stone cutters.
2. Known since the Roman Era, from archaeological sites in Pompeii and Herculaneum. Roman and Victorian mining tools have been found in the Castleton caves as well. Revived in French courts of the "Louis'," it is where the stone received its name "bleu et jeanne," and the name has stuck as "Blue John" stone, regardless of the bawdy tales one may hear about this stone.
3. It is also described in the Brontë novel Wuthering Heights, and that described piece can be seen in Haworth, England at the Brontë House Museum. In the early 1900's, Queen Victoria sent a 200 lbs piece to her granddaughter Alexandra Feodorovna on her wedding to Nicholas II, and that piece can be seen as a huge vase in the Hermitage Museum, though no large pieces like that have been pulled out of the mine since the late 1880's.

4. Now it is protected, and only licensed gem-stone cutters (farmers in their off season) can make jewelry or vases from it.
5. We bought some rough in 2000, and it has since risen in price due to its popularity in Europe. However, my pieces are resting quietly in their hidden kingdom at my home. As soon as I can find them, I'll set one or two pieces out for the club to bid, if interested.
6. The rough material must be consolidated first. This has been done since the Roman Times, and is presently done by heating the stone and the pine lacquer separately to 200° F, then put the stone in the lacquer and allow both to come to room temperature. Repeat until the stone has taken the lacquer into a depth of 2mm. If this is not done, the rough material will just fall apart.
7. Blue John stone is both fluorite and feldspar, a flourspar, and must be treated with some consideration. As a fluorite, it is soft, can be dissolved in water and will fade in the sunlight. The feldspar aspect makes Blue John stone a durable material suitable for rings and other pieces of jewelry. Keep rough Blue John material and finished jewelry out of both direct and indirect sunlight. Do not clean it with harsh abrasives, and preferably, set in gold because polishing with or without polishing paste will erode the gemstone.

Rock and Gem Shows

Hi there fellow Gem and Mineral Clubs -

A package will shortly be in the mail to all of your clubs with brochures about our upcoming Gem and Mineral Show. I want to send along, in advance, my personal invitation to all of your members because I think that this year's show will be really exceptional!

The Grant County Rolling Stones Gem and Mineral Society will host our 27th Annual Gem and Mineral Show on Sept. 4,5, and 6 in Silver City, New Mexico. We're very excited that our show will be held in a much larger and nicer venue this year - the new Grant County Business and Conference Center on Hwy 180 East in Silver City.

We have a full slate of vendors, and in fact have started a waiting list for 2011. If any of your members have questions, tell them to feel free to call me or drop an email. They can also find more information about the Show on our web site linked below, including a diagram of our planned show set-up.

There are also a number of other fun things going on Labor Day weekend in Silver City, so visitors should plan to stay a few days!

Thanks very much - and we hope to see you on Labor Day Weekend.

With best regards,

Marcia Andre
2010 Show Chair
575-534-0006
marciarandre@gmail.com
<http://rollingstonesgms.blogspot.com/>

August 2010

12-15--BUENA VISTA, COLORADO: Show, "The Rock Show at Buena Vista: A CONTINental Divide TAILgate"; Contin-tail LLC; Rodeo Grounds, Gregory Rd. and Rodeo Rd.; Thu. 9-5, Fri. 9-5, Sat. 9-5, Sun. 9-5; free admission; more than 120 dealers, rocks, minerals, gemstones, fossils, beads, jewelry, lapidary equipment, demonstrations (glintknapping, stone cutting, wire wrapping, beading, precious metal clay), free rock for children, door prizes, fluorescent mineral display; contact Carolyn Tunnickliff, 1130 Francis #7010, Longmont, CO 80501, (720) 938-4194; e-mail: ctunnickliff@comcast.net; Web site: www.coloradorocks.org

14-15--WALNUT CREEK, CALIFORNIA: Show, "Contra Costa Crystal Fair"; Pacific Crystal Guild; Civic Park Community Center, 1375 Civic Dr. at Broadway; Sat. 10-6, Sun. 10-4; admission \$6; contact Jerry Tomlinson, (415) 383-7837; e-mail: sfxtl@earthlink.net; Web site: www.crystalfair.com

19-22--WOODLAND PARK, COLORADO: Show, "Woodland Park Gem, Mineral & Jewelry Show"; Rock Gypsies; Woodland Park Saddle Club, 111 N. Center St.; Thu. 9-6, Fri. 9-6, Sat. 9-6, Sun. 9-5; free admission; contact Kim or Bodie Packham, 87 Plum Creek Rd., Divide, CO 80814, (719) 360-9665; e-mail: runninboar@hotmail.com

20-22--COSTA MESA, CALIFORNIA: Show, "Gem Faire"; Gem Faire Inc.; OC Fair & Event Center/Bldg. 10, 88 Fair Dr.; Fri. 12-7, Sat. 10-6, Sun. 10-5; weekend pass \$5; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com

20-22--LAKE GEORGE, COLORADO: Outdoor show; Lake George Gem & Mineral Club; U.S. Hwy. 24, next to post office; Fri. 8-5, Sat. 8-5, Sun. 8-5; free admission; 40 dealers, minerals, fossils, jewelry, lapidary, local amazonite, smoky quartz, topaz; contact Becky Blair, (719) 748-3030; e-mail: blairra@hotmail.com; or John Rakowski, (719) 748-3861; e-mail: rakgeologist@yahoo.com

20-22--LONG BEACH, CALIFORNIA: Show; MalicJewels Jewelry & Gift Show; Long Beach Convention Center Hall B, 300 E. Ocean Blvd.; Fri. 12-6, Sat. 11-6, Sun. 11-5; free admission; loose diamonds, colored gemstones, contemporary antique, estate, costume, custom designed, gold, silver, titanium and beaded jewelry, beading supplies, mineral specimens, gift items; contact Debbie Williams, 270 E. Hunt Hwy., Suite 16, #323, San Tan Valley, AZ 85143, (480) 458-7600; e-mail: debbie@malicjewels.com; Web site: www.malicjewels.com

27-29--SAN DIEGO, CALIFORNIA: Show, "Gem Faire"; Gem Faire Inc.; Scottish Rite Event Center, 1895 Camino del Rio S; Fri. 12-7, Sat. 10-6, Sun. 10-5; weekend pass \$5; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com

27-29--SANTA CLARA, CALIFORNIA: Show; MalicJewels Jewelry & Gift Show; Santa Clara Convention Center, Hall D, 5001 Great America Pkwy.; Fri. 12-6, Sat. 11-6, Sun. 11-5; free admission; loose diamonds, colored gemstones, contemporary, antique, estate, costume, custom designed, gold, silver, titanium and beaded jewelry, beading supplies, mineral specimens, gift items; contact Debbie Williams, 270 E. Hunt Hwy., Suite 16, #323, San Tan Valley, AZ 85143, (480) 458-7600; e-mail: debbie@malicjewels.com; Web site: www.malicjewels.com

SEPTEMBER 2010:

3-5--SANTA BARBARA, CALIFORNIA: Show, "Gem Faire"; Gem Faire Inc.; Earl Warren Showgrounds/Exhibit Hall, 3400 Calle Real; Fri. 12-7, Sat. 10-6, Sun. 10-5; weekend pass \$5; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com

3-6--FORT BRAGG, CALIFORNIA: 48th annual show; Mendocino Coast Gem & Mineral Society; Town Hall, Main and Laurel; Fri. 10-6, Sat. 10-6, Sun. 10-6, Mon. 10-4; free admission; contact Don McDonell, P.O. Box 868, Fort Bragg, CA 95437, (707) 964-3116, or Jane Webb, (707) 964-7182

4-6--SILVER CITY, NEW MEXICO: 27th annual show; Rolling Stones Gem & Mineral Society; Grant County Business and Conference Center, 3031 Hwy. 180 E, next to ACE Hardware; Sat. 10-5, Sun. 10-5, Mon. 10-4; free admission; more than 55 dealers, daily free field trips, silent auction, wheel of fortune; contact Marcia Andre, 1311 Peterson Dr., Silver City, NM 88061, (575) 534-0006; e-mail: marciarandre@gmail.com; Web site: www.rollingstonesgms.blogspot.com

9-12--TUCSON, ARIZONA: Business-to-business gem trade show; Gem & Lapidary Wholesalers Inc.; Holiday Inn Palo Verde/Holidome, 4550 S. Palo Verde Rd. (I-10 at Palo Verde Rd.); Thu. 10-6, Fri. 10-6, Sat. 10-6, Sun. 10-3; contact G&LW, P.O. Box 98, Flora, MS 39071-0098, (601) 879-8832; e-mail: info@glwshows.com; Web site: glwshows.com

9-12--TUCSON, ARIZONA: Business-to-business gem trade show; Gem & Lapidary Wholesalers Inc.; The Grant Inn, 1365 W. Grant Rd. (I-10 and Grant Rd.); Thu. 10-6, Fri. 10-6, Sat. 10-6, Sun. 10-3; contact G&LW, P.O. Box 98, Flora, MS 39071-0098, (601) 879-8832; e-mail: info@glwshows.com; Web site: [glwshows.com](http://www.rockngem.com/showdates.asp)

Uses of Minerals

Feldspar – A rock forming mineral; industrially important in glass and ceramic industries; pottery, porcelain and enamelware; soaps; bond for abrasive wheels; cement and glues; insulating compositions; fertilizer; tarred roofing materials; and as a sizing, or filler, in textiles and paper applications.

Fluorite – (Fluorspar) – Used in production of hydrofluoric acid, which is used in pottery, ceramics, optical, electroplating and plastics industries. In the metallurgical treatment of bauxite; as a flux in open-hearth steel furnaces and in metal smelting; in carbon electrodes; emery wheels; electric arc welders; toothpaste as a source of fluorine and in water fluoridation.

Gallium – Used in the electronics industry.

Garnet – Used in water filtration, finishing wood furniture, electronic components, ceramics, glass, jewelry and abrasives in transport manufacturing.

Germanium – A by-product of refining base metal ores. Fiber optics and infrared lenses.

Gold – Used in dentistry and medicine; in jewelry and arts; in medallions and coins; in ingots as a store of value; for scientific and electronic instruments; computer circuitry; as an electrolyte in the electroplating industry; in many applications for space travel.

Granite - Granite is an intrusive igneous rock. Intrusive means that it solidified while still buried deep within the earth. Granite can be cut into large blocks and used as a building stone. When polished it is used for monuments, headstones, statues and facing on buildings. It is also suitable for railroad ballast, for asphalt and road aggregate in highway construction.

Graphite – Dry lubricant; steel hardener; pencils.

Gypsum – Processed and used as a prefabricated wallboard or an industrial or building plaster; used in cement manufacture; agriculture and other uses.

Halite – (sodium chloride – salt) – Used in human and animal diet, food seasoning and food preservation. To prepare sodium hydroxide, soda ash, caustic soda, hydrochloric acid, chlorine, metallic sodium; used in ceramic glazes; metallurgy, curing of hides; mineral waters; soap manufacture; home water softeners; highway deicing; photography; in scientific equipment for optical parts.

Indium – By-product of zinc refining. Used in alloys and instruments.

Iodine – A by-product of seaweed soda ash, Goiter treatment, antiseptic and photographic applications.

Iron Ore – Used to manufacture steels of various types. Used in metallurgy products; magnets; high-frequency cores; auto parts; catalyst and many other applications. Most U.S. production is from Minnesota and Michigan.

Kyanite – Used in smelting and processing ferrous (iron) metals, nonferrous metals, glass and ceramics.

Lead – (Galena) – Transportation, batteries, gasoline additives, construction, ammunition, TV tubes, nuclear shielding, ceramics; ballast or weight; tubes or containers. U.S. is largest producer (mainly from Missouri), consumer and recycler of lead metal.

Limestone – Limestone is a sedimentary rock and composed of calcium carbonate. Limestone, along with dolomite, is one of the basic building blocks of the construction industry. Limestone is used as aggregate,

building stone, cement, lime, as fluxes, glass raw material, refractories, fillers, abrasives, soil conditioners, and ingredients in a host of chemical processes.

Lithium – Compounds are used in ceramics and glass; in primary aluminum potlines and production; in the manufacture of lubricants and greases; rocket propellants; silver solder; batteries; and medicine.

Manganese – Essential to iron and steel production.

Magnesium – Used in cement, rubber, paper, insulation, chemicals and fertilizers, animal feed and pharmaceuticals.

Mercury – (Cinnabar) – Electrical, electrolytic production of chlorine and caustic soda, paint, industrial and control instruments (thermometers and thermostats).

Mica – Mica commonly occurs as flakes, scales or shreds. Sheet muscovite (white) mica is used in electronic insulators; ground mica in paints, as joint cement, as a dusting agent, in well-drilling mud and lubricants; and in plastics, roofing, rubber and welding rods.

Molybdenum – Used in alloy steels (475 of all uses) to make automotive parts, construction equipment, gas transmission pipes; stainless steels (21%); tool steels (9%); cast irons (7%); and chemical lubricants (8%). As a pure metal, molybdenum is used because of its high melting temperatures (4,730 F) as filament supports in light bulbs, metalworking dies and furnace parts.

Nickel – Vital as an alloy to stainless steel; plays a key roll in the chemical and aerospace industries. Leading producers are Canada, Norway and Russia.

Oil Shale – Source of oil for fuel; used in plastics, , synthetic fabrics, lubricants, etc.

Perlite – Expanded perlite is used in roof insulation boards; as fillers, filter aids and for horticulture.

Phosphate rock – Used to produce phosphoric acid ammoniated phosphate fertilizers, feed additives for livestock, elemental phosphorus, and a variety of phosphate chemicals for industrial and home consumers. U.S. production is from Florida, North Carolina, Idaho and Utah.

Platinum Group Metals (PGMs) – Includes platinum, palladium, rhodium, iridium, osmium and ruthenium.

Commonly occur together in nature and are among the scarcest of the metallic elements. Platinum is used principally in catalysts for the control of automobile and industrial plant emissions; in jewelry; and in catalysts to produce acids, organic chemicals and pharmaceuticals; an in dental alloys used for making crowns and bridges.

Potash – Carbonate of potassium; used as a fertilizer, in medicine, in the chemical industry and to produce decorative color effects on brass, bronze and nickel.

Pyrite – Used in the manufacture of sulfur, sulfuric acid and sulfur dioxide; pellets of pressed pyrite dust are used to recover iron, gold, copper, cobalt, and nickel.

Quartz – (silica) – As crystal, quartz is used as a semiprecious gemstone. Crystalline varieties include amethyst, citrine, rose quartz, smoky quartz, etc. Because of its piezoelectric properties, quartz is used for pressure gauges, oscillators, resonators and wave stabilizers. Also used in manufacturing of glass, paints, abrasives, refractories and precision instruments.

<http://www.nwma.org/education/Uses%20for%20Minerals.htm>

Highway Clean Up

September 11, 2010

Kmart Parking Lot

Highway side at 9 AM

Please no Juniors.

For Rent

2 bedrooms Home Show Low 2 bath Stainless Steel Appliances Ceramic tile Large heated garage Treed lot

205-8223 Pat

Next Club Meeting

OPEN Bazaar

See next Page for the Scholarship Questionnaire

Please complete and return to David – educator.

Your opinion is important to the scholarship program.

Scholarship Questionnaire

(Due by the **October 5** regular Club meeting or sooner.)
Send to [dbingell@hotmail](mailto:dbingell@hotmail.com) or bring results to the Club Meeting.

1. To whom shall we offer the scholarship?

a. Two Students:

1. Two Undergraduate Students
2. One Undergraduate Student and One Graduate Student
3. Two Graduate Students

b. One Student:

1. One Undergraduate Student
2. One Graduate Student

2. How much will we award the Student(s)?

- a. \$500/one time, one semester
- b. \$1,000/two semesters = \$500/semester for 2 semesters
- c. \$1,500/two semesters = \$750/semester for 2 semesters

3. How often shall we award this scholarship?

- a. Once a year
- b. Once every other year
 1. Even Year
 2. Odd Year
- c. Once every three years

4. How shall we prepare for the financial responsibilities of this scholarship?

- a. Keep award money in the Club's Savings Account.
- b. Keep award money in a separate Savings Account.
- c. Keep award money in a separate, high interest account, like a Certificate of Deposit.
- d. Other: _____

5. What shall we call this Scholarship?

White Mountain Gem & Mineral Club
P.O. Box 3504
Show Low, AZ 85902-3504

Member:
Rocky Mountain Federation
Of Mineralogical Societies



American Federation of
Mineralogical Societies

