

June 2004

PRESIDENT'S PATTER

Nothing submitted.



Jerry Lohmann, President

MINUTES OF THE GENERAL MEETING

The meeting of the Convaire Rockhounds was called to order at 6:45 p.m. (we were waiting for more members to arrive) on May 4, 2004. Lynda Lohmann led everyone in the Pledge of Allegiance.

Minutes of the previous meeting were approved as written by (I think Lynne Cadman as I was at a Padre game) and distributed in the Tektite.

Hospitality Chairman Emmeline Ellis reported on the good turnout at the memorial held for Ann Ludlam. Cathy Davis is coming along all right. Joe Rogers has gotten pneumonia so his hip surgery has been postponed.

Membership chairman Phyllis Mahoney reported that we have 25 members and 2 guests - Delores and Rich Brenner from Chicago. She is Virginia Dzialowy's sister.

County Council and CFMS: We need to fill two positions at the moment: **County Council** and **CFMS representatives**. Please someone step up.

There was no **Old Business**.

New Business was that the Picnic would be held on August 14th at the same spot on Miramar MCAS. Plans etc., will follow in the Tektite.

John Duncan had a **Show and Tell** with Lepidolite from a Die-Hard Rockhound Field Trip.

Jerry Lohmann reminded everyone that the next **Board Meeting** will meet Tuesday, May 11th.

Door Prizes were won by: John Duncan, Basie Garcia, Jerry Lohmann, Al Ellis, Peggy Duncan, Phyllis Mahoney, Emmeline Ellis, Jim Schneider, Dolores Brenner, Mary Otto, and Al Thompson.

Raffle prizes were won by Elaine Thompson, Basie Garcia, Al Thompson, Al Ellis, Gary Clark, Phyllis Mahoney and Mary Otto.

There was no program tonight, as both Bob Cadman and Bob Plunkett were ill. The meeting was adjourned and refreshments were served.

Lynda Lohmann,
Secretary

MINUTES OF THE BOARD MEETING



Board Meeting held May 11, 2004.
Nothing submitted.

?????

June 2004

FIELD TRIPS

???????????? Chairperson

As all of you know we

DO NOT have a Field Trip Chairperson nor do we have an active field trip program.

I will try to post information about where and when other Clubs and groups are going out and doing what we would all like to do and that is ROCKHOUND.

CFMS FIELD TRIP TO OREGON (CO-OP & NBFT Members may attend)

by John Stockwell,
CFMS Field Trips North



TRIP LOCATION - Ochoco Mountains, Oregon.

WHEN - June 28 - 29, 2004.

ORGANIZATION - CFMS

MEMBER'S GUESTS - Allowed (*only if accompanied by member).

COLLECTION MATERIAL - attractive agate and jasper filled thundereggs. (Also see re Pow Wow below.)

LEADER & CONTACT INFO - Contact by June 20, John Stockwell, CFMS Field Trips North kugeln@msn.com or 510-526-1646)

PROPOSED SCHEDULE - June 28 digging at Lucky Strike Mine (\$1/lb); June 29 digging at White Fir Spring (no fee) and possibly at Fallen Tree claim.

MEET (where/when) - each morning at 10 a.m. at Elkins Gem Stones shop at the south end of Prineville on State 27. Carpooling probably available.

CAMP/FACILITIES - RV camping available next to the shop at Crook County RV Park. (541-447-2599) and at the Crook County Fairgrounds (also tent) /\$10 per night, some electricity and water. Camping also at Prineville Reservoir State Park (1-800-452-5687) approximately 45 miles from collecting sites/full service.

Dry camping (first come) also at Ochoco Reservoir campground (21 sites) 8 miles east on US 26. Camping is usually available in Prineville at the Prineville Pow Wow (\$10/night, some electricity and water). At Madras camping is at the Fairgrounds.

TOOLS - usual rockhounding equipment/medium shovel and pick necessary.

SAFETY CONCERNS - goggles advisable.

CLIMATE/WEATHER - warm to hot, possible shower.

CLOTHING - have full cover available (mosquitoes?)/insect lotion

OTHER REMARKS - June 28-29 has been chosen to make possible attendance at the Prineville (June 24-27) Pow Wow and the Madras (June 30 - July 4) Pow Wow. (Also, the Redmond show is June 18-20 and the Sisters show July 1-4.)

TRIPS at Prineville (sign up at show): 6/25, Bear Creek (by boat, available, \$?) for agate nodules, some with plume; 6/26, McDonald's Ranch for Sequoia rounds and chunks; 6/27, Maury Mountain for green and red moss agate. These trips are sponsored by the Prineville Pow Wow organizers.

TRIPS at Madras: each day to nearby Ashwood area ranches (open only three times a year) for thundereggs and probably jaspers. These trips require an on the spot membership (\$5?) in and are conducted by the sponsoring All Rockhound Pow Wow Club. Digs are fee digs, very reasonable prices.

There is said to be a new locality being made available. Richardson Ranch with its many digging sites and shop is nearby.

Contact Leader by June 20 if you intend to go on the June 28 and 29 trips. These are the CFMS trips. Please bring evidence of CFMS club membership.

June 2004

MORE INFORMATION available from trip leader.

FEE (if applicable) - \$1/pound digging at Lucky Strike Mine; camping fee. Madras Fairground camping \$.

HOSPITALITY CORNER

Emmeline Ellis, Chairperson

If you know of someone that could use our thoughts and prayers please let Emmeline know. You can reach her at (619) 463-0778.



PROGRAM

Bob Cadman, Program Chair

The program for June is a **Silent Auction**. Clean out under the bed, that old car, check the stuff in the rafters, those dark and musty closets!

Price it with a minimum bid and set it out for others to snatch up! Everyone has something sitting around that they would like to unload.

Remember that **Jim Claypool** will be collecting 10% of all sales for the Club Treasury.

HAPPY BIRTHDAY TO OUR JUNE CELEBRANTS



Neil Harter	June 04
Joe Rogers	June 13
Mary Jane Dunn	June 19
June Wade	June 24
Eva Niedbulec	June 26
Franklin Wade	June 29

SHOP and FIELD TRIP HINTS

Remember, your Editor only writes these things up. She DOES NOT try them out!!

Final Polish on Silver – depends on the number of buffing wheel threads, not the amount of rough used. A cheap buff will not give the same results as a quality buff.

Blacklight Safety -- Don't look directly at a blacklight lamp, it could cause eye damage. The ultraviolet rays from the blacklight are greater than those from the sun.

Tumbling Tips – Use a pre-polish, at the very least, use a soap run prior to going into polish. This is a flushing action and loosens any grit that was not washed out in the grinding runs.

Above hints from the *Breccia* 12/2002 via the *Lithosphere* 2003

* * * *

Time-Tested Shop Tips from Ed Hansen via The Pegmatite April 2004

End cuts: Use Elmer's glue to bond end cuts (or any hunk of rough material, for that matter_ to a chunk of 2" x 4". Clamp the 2" x 4" in your slab saw vise and continue slabbing. Soak off the wood by dropping in a bucket of water for about a week. Voila!

Sanding sticks: Dip Popsicle sticks in glue, then in grit. Or, wrap a piece of sandpaper around the Popsicle stick. Use various grits, make lots. Very handy.

India ink: Use India ink to paint dinosaur bone slabs. The softer matrix will hold the black ink. Then cut and polish your cab. You will have a nice black outline around the colorful cells.

June 2004

Montana agate: The plumes and patterns form along seams so cut perpendicular or parallel to lines to get the best pictures.

Tarnish remover: A pinch of baking soda rubbed on silver takes off tarnish.

Thin Turquoise: If you have thin pieces of turquoise, imbed them in J.B. Weld or Devcon to make them thicker, then cab as usual.

Spic & Span has oxalic acid in it and is especially good in the polishing agent. The monument maker uses a weak solution of oxalic acid to acquire the glassy shine on granite. It is used as a polishing aid. Dissolve a little acid in water and work into the felt buff or add to the polishing paste and try on agates. A piece of corduroy glued to soft rubber makes a fine inexpensive polishing material. (*Via: Achates*)

From *Achates* via *Rockwood Gem & Mineral Society*, April 2004

How to Clean Minerals--

Fluorite can be cleaned with muriatic acid.

Barite can be cleaned in hydrochloric acid. It will loosen clay and iron.

For **water soluble** minerals, use alcohol.

For **carbonate** minerals try full strength bleach.

Sulfide minerals such as **pyrite** and **marcasite** can be made bright by soaking over night in a solution of oxalic acid (2 oz to one qt. of water).

The red and brown stains so often associated with **quartz** can usually be removed by a concentrated solution of oxalic acid.

For black stains made by manganese, try diluted hydrochloric acid.

Caution: Always remember the formula: always add acid. Meaning to always add acid to water, never the reverse, to keep down any possibility of accident.

To clean **desert roses**, immerse in a solution of Axion for at least 12 hours. Brush lightly and rinse in clear water.

TUMBLING HINTS for APACHE TEARS:

When attempting to polish "Apache tears" we have heard of lots of personal "recipes". Here are some methods you may want to try.

1. In steps 3 & 4, add corn syrup to the load to slow down the action. This thickens the slurry and will keep the Apache tears from scratching themselves.

2. Use cerium oxide as a polish, and use it with oat meal. Let it go for several weeks. Do NOT add water in this method. Polish dry.

3. Use a vibrating polisher. These type polishers do not have the harsh action a rotary polisher has.

DID YOU KNOW??

Dinosaurs in Antarctica –

Two teams of fossil hunters working independently in Antarctica have discovered bones of two previously unknown types of dinosaurs. An 8-foot tall theropod or running dinosaur, a carnivore related to T. Tex, was discovered by Judd case of St. Mary's College and James Martin of south Dakota's School of Mines on James Ross Island. Millions of years ago, the climate of this island was much like present-day northern California. Thousands of miles inland, 13,000 feet up Mt. Kirkpatrick near the Beardmore Glacier, William Hammer and his crew located the remains of a

June 2004

primitive sauropod, or herbivore, estimated to be about 6 to 7 feet tall and 30 feet long when alive. Millions of years ago, before tectonic uplift, this site had been a soft riverbed.

(Ref: NSF Press Release 04-025 at www.nsf.gov/od/lpa/newsroom/pr.cfm?ni=52)

Distant Mountain Influence River Levels 50 Years Later --

Arlington, Va.—Rainfall in the mountains has a major influence on nearby river levels, and its effects can be seen as much as 50 years after the rain has fallen, according to hydrologists funded by the National Science Foundation (NSF).

Scientists had believed that the downslope distance from a mountain to a river is significant, such that rain falling on a mountaintop doesn't have an impact on a river below, according to Christopher Duffy, a civil engineer at Pennsylvania State University. But Duffy has found that rainfall and snowfall over the mountains, at least in the basin and range area of New Mexico, play an important part in recharge of the water table and the Rio Grande River.

"This has huge implications for development," Duffy today told attendees at this week's spring meeting of the American Geophysical Union in Montreal, Canada. "The role of the water table is important."

Duffy uses a computer model to investigate groundwater in central New Mexico. The terrain is divided into three areas: mountains; sloping bajada; and riparian or river area. Duffy looks at environmental variables including rainfall, snowpack, evapotranspiration and altitude. Also important, he says, are the geologic porosity and conductance of the rocks. Much of the data comes from the SAHRA – Sustainability of Semi-Arid Hydrology and Riparian Areas – Center,

an NSF Science and Technology Center. SAHRA is based at the University of Arizona; Penn State is a partner.

"Much of the country depends on groundwater resources," says Doug James, program director in NSF's division of earth sciences, which funds SAHRA. "Duffy has developed a means of quantifying recharge locations and rates to determine impacts of land use and river management. The results will be used to guide planning for sustained aquifer management in the decades ahead."

In the Llano de Sandia in New Mexico, the Los Pinos Mountains are about 9,000 feet high while the area below in which the river runs is at an elevation of about 4,800 feet. About a mile separates the mountains from the river. Precipitation in these mountains doesn't all run downslope, nor does it all seep into the mountains. Some of the water goes deep into fractured rocks beneath the mountains.

"The time between rainfall on the mountains and ultimate recharging of the riverine water table is about 50 years," says Duffy. "The seven-year, 1950s drought in the area is what is now affecting the Rio Grande and the water table."

"Developers of New Mexico's mountains and bajada regions need to consider a longer time horizon than a decade when planning to alter the natural environment. It may require a forward view of tens of decades to ensure sustainability. Even if no obvious year-round streams run from the mountains, they are still very important for the recharge of the water table and river."

(Ref: NSF P R 04-069 - May 18, 2004
<http://www.nsf.gov/od/lpa/newsroom/pr.cfm?ni=97>)

June 2004

Green Amber –

Green amber is found in the Baltic, Mexico and the Dominican Republic. If Baltic amber is green, the cause is probably turbidity, i.e. light rays are scattered by striking air bubbles, making the amber transparent). In Mexican green amber, the green color appears under reflected light and is associated with a surface phenomenon. In green amber from the Dominican Republic, the green color radiates from the matrix. Dominican green amber usually has few inclusions. Both Dominican and Baltic green amber may gradually fade to yellow-brown over time.

From *Life in Amber*, by George O. Poinar, Jr., Stanford University Press, 1992, pp. 9-11 via The Pegmatite April 2004.

How Opal is Graded and Sold --

Rough opal parcels are sorted into three grades: tops, middle, and low. Each tops parcel has a King stone, which is the best stone in the parcel. Some parcels have several King stones. Colour is the primary criteria for grading, but the graders also take into consideration the number of imperfections and faults, and whether a stone is the right shape to be cut into an oval or one of the other popular shapes. You can buy rough opal in several different conditions.

Mine Run. Direct from the mine. The stones have not been cut or ground down. This means that there is more guesswork in the cutting. Purchasing mine run opal can be risky if you are not very experienced.

Off Cuts. The miner has removed whatever opal he has a market for and sells you what's left. With off cuts, you can usually tell what you are going to be able to cut. You must still watch for cracks in the

opal because once a crack becomes obvious, a stone can lose half its value.

Rubs. This can often be the best way of buying rough if you are not very experienced. The miner has cut and ground the stones into basic shapes, after having removed most of the rubbish. What you have left is the stone nearly ready for the dopping and polishing process. You have the satisfaction of cutting your own stones without the high risk of buying mine run rough.

Opal is officially sold in troy oz. there are 20 d.w.t pennyweights to a troy oz. There are approximately 30 grams to a troy oz and approximately 30 oz to a kilo.

Hints and Tips

Here's an eclectic assortment of hints and tips you may find helpful when buying or working with opal.

1. Not all opal is valuable. Potch, sometimes called "common opal" does not reflect colours. Potch does have its use, however, as a backing for doublets and triplets. When there is color mixed with potch it's called "potch and color."
2. Some classes of rough opal are unsuitable for making gemstones. Some are very porous. Others have a chalky appearance. Still others can lose their colour in a short period of time. And yes, it is common for certain types of opals to shatter in a dry atmosphere when the water from the gel evaporates. The best protection for buyers is to purchase opal from a knowledgeable and reputable dealer who accurately details exactly what you are purchasing and is willing to guarantee the stones. **Note:** If you buy rough opal, there is no guarantee that it will not crack. This is the calculated risk you take and is part of the "excitement" of opal cutting.

June 2004

3. When examining opal jewelry, look at the stone from the side to determine whether it's a triplet. Solid and doublet opal domes are simply the opal formed into a curved dome shape. Triplets have clear crystal domes to protect the flat opal surface.

4. It is very difficult to tell whether a stone is a doublet or a solid if it is in a setting. It helps if the back of the setting is open, but it is still no real indication because the back of a doublet and a solid looks very similar, although a doublet is usually perfectly black on the back whereas a solid black opal usually has some imperfections. So if the back of a stone looks too perfect, you have to be a little suspicious. For this reason it's best to buy opal from reputable dealers who know what they are doing because, unfortunately, many jewelers also are not experienced in opal.

5. When buying opal over the net, ask the seller to give you a summary of how close the graphic sample is to the real thing. Opal is very difficult to photograph and the appearance on the computer screen may give it a different look. Particularly is this the case in regards to size. Graphics come out in all different sizes, usually a lot larger than actual...so make sure you get your ruler out and actually draw the size on a piece of paper so that you will know in your own mind's eye the actual size of the stone.

6. The same thing applies to the colour of the stone. Make sure you get the supplier to give a commentary on the colour so that you will know pretty well what you are getting. The camera sometimes picks up colours that are only minimal, while ignoring the feature colours.

Cutting Tips

Opal is one of the easiest stones to cut. The trick is chasing the colour to make sure you approach the colour from the right direction. Lapidary clubs are a

good resource for new opal cutters. Ask experienced members for advice on the basics of cabochon cutting.

Your first task is to search an opal for any hint of colour. Then, you use a wet grindstone to grind off the potch until you can see where the colour is going. When you've exposed enough colour, you can choose the top and bottom for your stone based on where you see the best colour contrasted against the background colour.

Let the stone dry then check for cracks and imperfections. Everyone wants to cut a big stone, but two or three smaller perfect stones are a better choice than one big stone with imperfections.

Remember too, if you're planning to make a jewelry piece, settings come in standard, calibrated sizes. Unless you'll be making a completely custom setting, you're better off sticking with a common size. A diamond blade, 10 thousandths thick is a good choice for cutting an opal stone to size. Many lapidaries will tell you to run the diamond blade slowly with opal. This is a big mistake. Opal is not a hard material like agate, for example. Opal slicing is best done either in water or with water passing over it at the speed achieved from an ordinary 1440 RPM, 1/4 H.P. motor with a 6" pulley on the motor and a 1 & 1/2 pulley on the shaft. If you don't force the stone and you have plenty of water passing over it, you will not cause any damage. In fact your diamond blades will last longer because they will not buckle as easy. After you've cut the stone into the basic shape, use a wet grinder to finish shaping and remove rough edges.

The final step is sanding. Begin sanding with a 320 grit paper. If the paper is new, you may rub it on some potch* or a sheet of glass to dull its sharpness a bit. You can then use either a 600, 700, or 800 grit wet and dry sandpaper to gradually take out the finer scratches and

June 2004

bring up a matte polish. Finally, on a leather lap, use a paste of cerium or tin oxide (mix with water) to bring up the final polish. Your finished opal should have a nice, high dome for easy mounting.

Save the chips! You can use those bits of opal to create stunning mosaic patterns.

If you have a piece of opal jewelry that has become scratched or dull, just use the finer papers (700 or 800 grit) you can try to work the above process by hand by cutting small strips of the sandpaper and just rubbing them back and forth across the stone until the scratches are taken out.

If the paper is too harsh, just tone it down by rubbing it on a piece of glass. Next step is to get a piece of old sheet or pillow slip (cloth) and vigorously polish with tin oxide or cerium oxide.

If you want to polish the gold or silver at the same time, use some metal polishing paste. Most of these items can be purchased from the hardware store, with the exception of the oxides, which may only be available at Lapidary supply stores or at workshops that polish gravestones. (Stone masons) (Check in your yellow or pink pages on the telephone directory for locations.) *Potch is unformed opal

*Dolores Wheeler, not only are you our resident artist, photographer but also our musical director.
Thank you again!*

MY CHANCE!

(sung to the tune of "Home On The Range.")

Oh, lend me a mine or a hillside or plain,
Almost anywhere I can explore.
My sensitive pick, my far-seeking eyes
May find what no one's seen before.

Down, down on my knees —
And this time I don't want to pray.
My motive's pure greed,
not to help one in need.
I want loot I can carry away.

This object may look upon the first sight
Like a drab-colored, plain old field
stone.

But I knock off a tip and wet it a bit,
To reveal something I'd like to own.

I search, search on some more,
For crystals, for rock or for wood.
And then, suddenly, —
a prize waiting for me
Is right there where you have just stood!

Myrl Pope Jennings 1969

