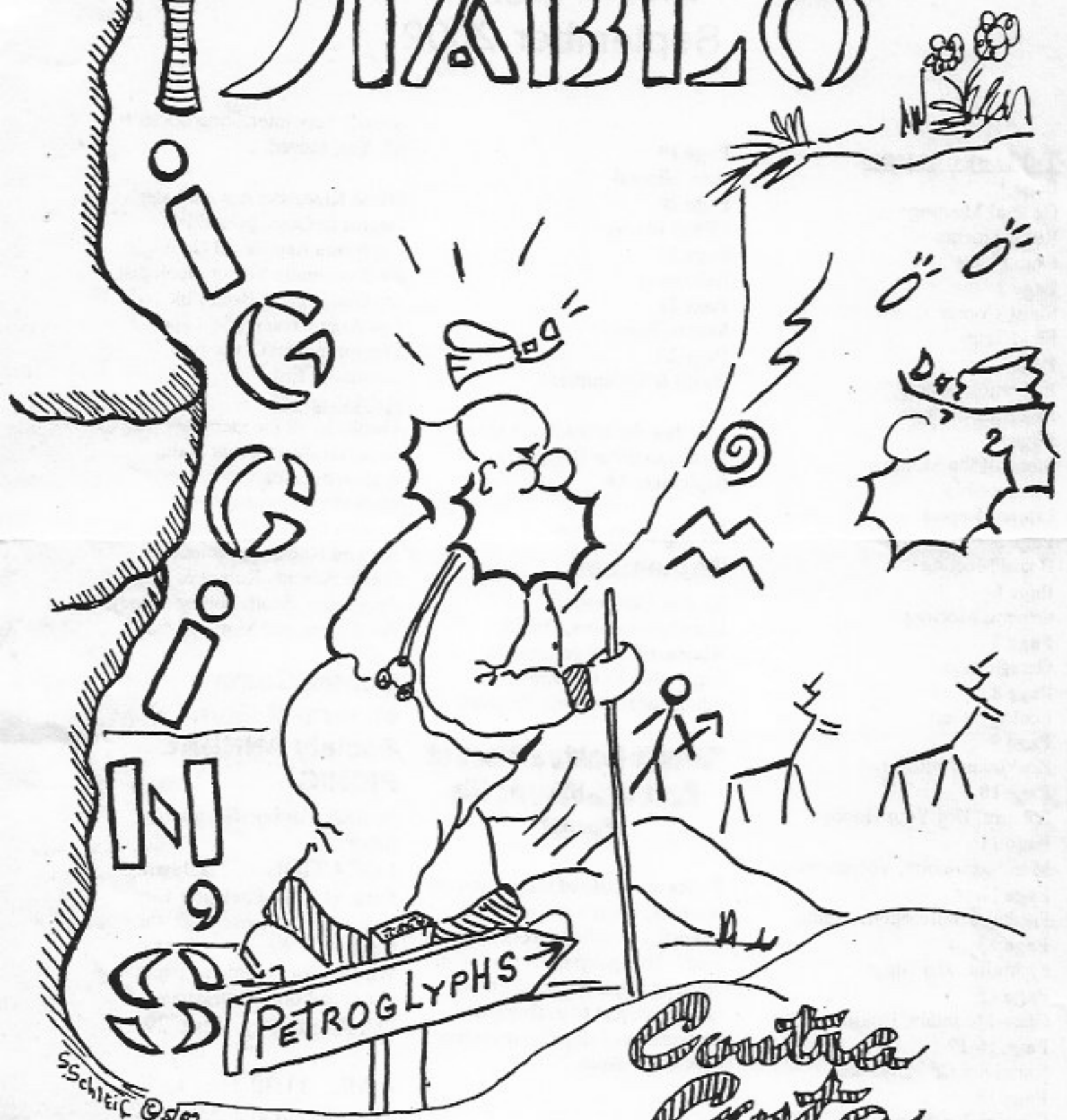


DiABLO



SEPT. '02

*Central
Costa*
MINERAL + GEM SOC.
WALNUT CREEK, CA.

Diablo Diggins September 2002

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Due date for articles and news for the October Diggins is September 18

Program for September

By Ann Matthews
Our own member, **David Kleesattel**, will present the September 13 General Educational Meeting Program,

"What's Inside a Piece of Coal, and Why do We Care?"

Rocks are made of minerals; coal is a rock, but it's not made of mineral...so what makes up coal? This program is part of an ongoing Department of Energy funded project to evaluate the low-rank coal (lignite) resources in North Dakota.

Sounds very interesting doesn't it? Yes, indeed.

David Kleesattel has a Master's Degree in Geology and is a California Registered Geologist. He is currently Senior Geologist for Treadwell & Rollo, Inc., a Bay Area Geotechnical and Environmental Geology consulting firm.

Refreshments

Thanks to all the members that brought refreshments to the August meeting. Members whose turn has arrived for treating the rest of us are Barbara Newman, Donald & Sheila Pallotta, Robert & Ann Pevahouse, Scott, Sherry & Joey Pevahouse, and Mario Piazza.

Contra Costa Mineral & Gem Society ANNUAL PICNIC

By Betty Pankey, Hospitality Chair

LOCATION: Baldwin Park at 2727 Parkside Cir. in Concord, across from the Concord Senior Center. Watch for orange paper plates and orange streamers.
DATE: Sunday, Sept. 29

TIME: 11:30 a.m. to ??
We will eat at 12:30.

The club picnic is this month, please come and join us. This is a great time to meet other club members and socialize. All that is required are your eating utensils, lawn chairs, a potluck dish to share with others and a few prizes for rock bingo. For new members that have never played rock bingo, anyone that plays needs to bring a few items for prizes, they don't have to be rock related, just something that you would like to receive for a prize. The club will furnish the drinks.

A good time to arrive would be 11:30 am. We plan on eating at 12:30 pm. I will be bringing a watermelon for dessert. There is a signup sheet that will be at the meeting, if you can't make the meeting, please call me at 439-7509.

Hope to see all of you at our picnic for a fun filled afternoon. Guests are welcome.

See MAP at end of newsletter for the exact location we are meeting at.

Show Corner

By Sam Woolsey

Remember to mark your calendars for this year's exciting Show. November will be here before we know it, so don't hold back another moment.

Also, we have a Show Committee meeting every month at Ann and Matt Matthew's home in Martinez. Come join us and help map our course and enjoy the delicious refreshments and snacks Ann prepares for us.

Sign up sheets will be at the General Meeting for those members who have not selected their favorite station. Be it the kitchen, security, front door greeter, or any of the other fun spots to meet people and share our hobby with, sign up now!

Sam Woolsey
925-837-3287
kr6at@ARRL.net

Field Trips

By Hazel Woolsey

Reminder: if you plan to go on a field trip, call the leader beforehand for further information.

Remember to wear your name badge. Field trip leaders are reminded to mark their vehicle with a club banner or CO-OP sign. CO-OP website also has

information:

www.coop.freesevers.com

COOP "Member Field Trips" for 2002

Sept. 7-8, Kettleman Hills, CA
For fossils. Sponsored by El Dorado Club and Fossils for Fun.
Debbie Bunn 916-929-6665.

Sept. 13-15, Broken Hills, Middlegate, Nevada. For opalized wood, fluorite. Sponsor Carmichael Club. Marlin Stewart at 916-781-8703.

Sept. 21-22, Ludwig, Nevada. Copper-related minerals and local minerals. Sponsor El Dorado Club. Steve Roberts at 503-644-8109.

Oct. 5-6 Clear Creek, CA. Jade, plasma agate, chromite, possible melanite garnet and uvarovite. Sponsor Contra Costa M&G. Sam & Hazel Woolsey, 925-837-3287. Let chem know so they can plan potluck dinner and breakfast.

October 11-13, Scarles Lake, Trona, CA. Lake minerals/crystals. Sponsor El Dorado Club. Fred Ott 530-677-8440.

Oct. 19, Goat Mt., near Stonyford Dam, west of Maxwell for moss agate. Sponsor El Dorado Club. Merryan O'Neil 530-622-4229.

Oct. 20, Black Butte Reservoir, CA (near Orland) for colorful jasper, petrified wood, some agate. Sponsor El Dorado Club. Merryan O'Neill, 530-622-4229.

Education Report

By Dick Pankey

There was a good turn out for **Glen Mackenzie's** wire art classes in July. The project for the first night was a pendant and a ring or bracelet on the second night. Several people brought their work in to the meeting for Show-n-Tell. They looked great. A **BIG THANK YOU** to **Glen Mackenzie**.

Unfortunately there were 5 no-shows for this class. When you sign-up and then are a no-show, you deprive somebody else from taking the class. Some of the no-shows were repeat offenders. If your plans change and you are unable to attend a class, please call the instructor as far in advance as possible so that an alternate can take your place. Please, **Don't be a NO-SHOW**.

Another dichroic glass class is scheduled for September. **Connie Klein** will teach us the fundamentals of glass fusing to make fused dichroic glass jewelry. **SPECIAL NOTICE!!** The class will be held at her home at 1885

¾ Farm Bureau Rd. in Concord on Wednesday evenings, Sept. 18th and 25th at 7:00 PM. Class size is limited to 8 people and preference will be given to first timers. This class is full. Tools and materials will be provided, but please bring the following if you have them: glass cutter, Sharpie pen, scissors, and a cork-backed ruler. This class is very popular and filled up fast.

Betty Pankey will teach another stained glass class in October. She will teach the copper foil technique using stained glass. Tools will be supplied, but bring your own glass cutter and soldering iron, if you have them. Class size will be limited to 8 people. Preference will be given to people who did not take a previous class. Please bring safety glasses if you don't wear glasses.

After 6 years as Education Chair and arranging our monthly classes I will be stepping aside. **Mary Ann King** has agreed to take on the job of arranging and coordinating our monthly member classes. Please continue your great support of this program with your attendance and ideas.

Please note: July is the start of a new school year at Mt Diablo Adult Ed. This means that we must again fill out the registration

forms. You only need to fill out the form at the first class you take of the new school year. Be sure to include your SS# or birth date which serves as your Student ID number.

Second notice: Dick Friesen has offered to teach a one-day, eight-hour class on gemstone carving for jewelry. The class will cost \$50 per student, six students maximum. Dick will supply all the tools and materials. Two people have already expressed their interest in the class. If you would be interested in this class or need more information, please call me at 925-439-7509. This class could be scheduled as early as December.

**Emeritus College,
Fall 2002, classes
for Older Adults.
Diablo Valley
College. (925)676-
8796. Instructor:
Barrie Bieler,
Ph.D.**

Barrie studied at Cal Tech and Penn. State. He worked for the USGS and for Dow Chemical before his retirement.

Bay Area Earthquakes

Monday, September 23,
1:30-3:30 pm. Concord
Senior Center. 1 class \$12.

The Bay Area has a long earthquake history. We will discuss the causes of earthquakes and the events of the 1906 San Francisco and the Loma Prieta quakes. Earthquake preparedness and safety tips will be shared.

effects of erosion in particular. We will discuss the wasting of mass by water, ice, wind and earthquakes. Topics include the effects of gravity, landslides, water flow, flooding, glaciers, and sandstorms. One optional local field trip will be discussed.

Crystals & Gems: Cuts & Identification.

Monday, September 30 &
October 7, 10 am to Noon.
Lafayette Community
Center, Elderberry Room. 2
classes \$20.

Join us for a lecture about crystals with a focus on their symmetry, color and hardness. We will also discuss many minerals that are often considered gemstones. There will be a demonstration on gemstone cutting. Participants are welcome to bring their own crystals and gemstones for identification and analysis.

Geology & Erosion

Tuesday, September 17, 14,
October 1, 8, 15. 2-4:00 pm.
DVC, Math Building, Room
107. 5 classes, 1 optional
field trip, \$40.

Explore the geology of the
Bay Area in general and the

Stone of the Month

By Douglas Rue

Joe Yarbrough for plume agate
cab, Texas material.
Barrie Bieler for faceted stone, a
Mt. St. Helen's glass gem.o

Memberships

By Jim Bufion

Birthdays

Ken Caudel
Marlow Hicks 9/2
Steve Pittman 9/4
John Rouze 9/9
Jim Kawano 9/9
Elaine Brown 9/10
Nate Sonnenthal 9/10
Jim Kanuck 9/11
Bob Pevahouse 9/12
Sam Woolsey 9/16
Mark Herrenkohl 9/16
Joey Pevahouse 9/19
Naomi Morgan 9/21
Bruce Naylor 9/25
Ron Fray 9/25
George Brown 9/29

Anniversaries

Bob & Jean Vetro 9/9
Mr. & Mrs. Dave
Cunningham 9/15
Ron & Leslie Fray 9/25

Library Report

By Marlow Hicks

Iowa Minerals by Paul Gavin

I found this book a wealth of information. Each County is discussed with the minerals, their locations, pictures and history. The underlying bedrock with its minerals overlaid with glacial deposits from Minnesota and Wisconsin and the results of the ancient sea deposits is interesting reading. I enjoyed the history of the "Cardiff giant hoax" and the amazing accomplishments of a young sand painter. This is a well written book revealing that Iowa is much more than a corn-producing farming state.

Do check out **IOWA MINERALS** and learn about the origins, the collecting, the occurrences, the mineral industries and the stories of Iowa's minerals.

This book is donated to our library by member **Dr. Walter Carr**.

Board Meeting

By Sharon Neuhauser, Secretary

President Joe Yarbrough opened the meeting at 7:30 pm with board members present. A motion of the "Kleesattel" name was corrected. No other corrections to the minutes noted.

Betty Pankey, Hospitality and Social Chair, hopes everyone will save September 29th for our Picnic Potluck, 11:30 am until ?. Eat at 12:30 pm. Bring your own utensils and plate.

Dick Pankey, Education Chair announced August 14th and 21st as Critter Night. Place to be decided at a later date. September will be Connie Klein and her Dichoric Glass class. New people who want to learn how it is done sign up fast. This class is popular and she can only take a few people. October will be Betty Pankey and Stained Glass. A carving class is offered by Livermore's Dick Friesan, charge is \$50. Sign up sheets at the General Meeting. Dick is excited that Mary Ann King has offered to take a charge of getting monthly classes which our club members can attend for free at the PHEC. Dick discussed awards won by our club at the Placerville CFMS Show which will be presented at our General Meeting.

1st V.P. of Programs, Ann Matthews announced the

Geology of Alaskan Highway will be our program for August. September Dave Kleesattel will present a program about the "Geologist". October is our Auction. November is our Show and December is the big Pot Luck Christmas Party.

Hazel Woolsey, 2nd Vice President of Field Trips has lots of dates. There is a free tailgate in Sacramento August 24th. Kennedy Mines dig in September, announcements on table at the General Meeting.

Property Chair Glen Hubbard says there will be a sale at Connie High's House in September date to follow. We discussed an old type writer and projector we've had for many years and decided to offer Barrie Bieler first choice if he wants it or if not we will put in auction or sale with Connie's sale.

Federation Chair Bob Pevahouse says next years CFMS show will be in Ventura, CA, June 5-8, 2003. They're looking for a host club for later year shows. Bob discussed the new legislation, "Rockhounds, no one can pick up any fossils and if caught there are stiff penalties. Our rockhound insurance will be going up again, more in October, November on this.

Connie Klein treasurer says the state sent us information on the non-profit raffle report.

Librarian, Marlow Hicks has over 357 books on interesting rock hound subjects. Jewelry making, wire wrapping and videos too. Thank you to Dr. Carr who donated a book on Iowa Rockhounding.

Jim Bufton, Membership had no new members this month.

Mary Bufton Publicity Chair is asking anyone who sees a notice of our club meeting or show in the paper or a magazine, to please save and give the article to her.

The board discussed the "Education For Sharing" award and other items that can be found on the web site of CFMS.

Under new business, we discussed the Rock Hound Sticker which sold at the CFMS Placerville show, 1,400 and 600 stickers sold in Washington at the AFMS. We will give our club a chance to buy the stickers and any left over we will give one to each new member. Voted and approved. We discussed other pins and patches we have in our possession and who will order more, so that all members may buy them. President Joe suggested we also check our safety deposit box for Diablo Dan pins and have one available at the Greeting table at meetings.

Joe stated he will not be available in September so there will be no board meeting. Club meeting is

September 13th due to a conflict at the Church meeting place.

Meeting closed at 8:35 pm for refreshments.

General Meeting

By Sharon Neushauer

August 9th, meeting opened at 7:35 pm with a count down by President Joe Yarbrough.

Betty Pankey greeted new guests Jose Hernandez and wife, Pauline Cortese, Casandra Avlonac and Ed Miller who arrived late. Both Birthday and anniversaries were acknowledged with the Morgan's many years together recognized and they received a cheerful applause. Picnic Pot Luck September 29th at Baldwin Park, 1130 to 1230 for lunch, bring eating utensils. Small gift for prizes on Rock Bingo, Refreshments will be furnished.

Smiling Al Schleif collected for badge pins not worn. The rock drawings went to 1st timer Jose Hernandez and ole timer Ann Matthews.

Connie Klein Treasurer had little to say, only that we are very solvent, as she was counting the money in for the show and writing in the

check book to keep it all straight.

Hazel Woolsey Field Trip Chair has a list for anyone who wants to sign up for outings, trips with other clubs, or rock swaps, like September 24 & 25 in Sacramento. October date for Clear Creek is October 26-27. The Wall Canyon trip with Lou Hamilton was mentioned as a great week.

Federation Chair Bob Pevahouse says the next California Federation Show will be in southern California Ventura area. June 5-8, 2003. (A little bird told me they may have a beach rock hunt outing and shells and an Indian Pow Wow may be near by). A great outing for families and your in proximity to Disneyland, Knox Berry Farm, Sea World, San Diego etc. There is a need for a new host for the CFMS show in 2004, are we interested? Our rate of insurance will be going up in October.

Membership Chair Jim Bufton announced our sale of patches and pins.

Publicity Chair Mary Bufton asked everyone to save articles if you see them in magazines or newspapers.

Ecology Chair Glen Mackenzie told us of a bill sponsored in part by Diane Feinstein that would limit fossil collecting in large wilderness areas in national parks. This will take away many rock areas, rivers and lots of land. Write your senators and tell them how you feel, we gladly want to preserve beautiful spots but we want to be able to adventure and save our hobby too. Tell them our strict and safe ways of hunting that could still save and protect our beautiful mountains and deserts.

Librarian Marlow Hicks brought videos for your pleasure. "Discover Earth's Treasures", "Road Side Geology" and "California Gem Trails", plus "Silver Smithing".

Show Chair Sam Woolsey first thing out of his mouth was "Lady is not spoiled." (This inside joke is about their cute little dog. His dog went on a rip with Bob, Joe, and Hazel and Sam and do they lover their pet!!) Need everyone to sign up for the show help, it's really fun! Make sandwiches, help serve, run wheel of fortune, do security, sell tickets at the door and prize tickets. It is lots of fun to get to know your club members and see how this show really works. Please we need men for set

up and take down, lifting tables and setting out the electrical cords. So save November 4, 5, 6 and give a hand.

Education Chair Dick Pankey thanked Mary Ann King and Glen Mackenzie for their excellent jewelry classes. Dick reminded everyone to help make Critters for our show by showing up Wednesday August 13 and 21 at Connie Klein's house off Farm Bureau Road. September will be Dichoric Glass class at Connie's. October Betty Pankey will have new ideas for stained glass class at PHEC. Dick Frieson, of Livermore club, will be teaching a Hard Rock Carving technique class. The class will be offered for 4-6 people at \$50 for a Saturday class. Let Dick know if you are interested. Mary Ann King will take over the Education Classes, so if you wish to do a class next year let her know. Dick announced the sale of Rockhound Stickers for club members. Big yellow round stickers with a long handled rock pick. Dick & Betty also traveled to Washington to the AF Show a week after our California Placerville show. On display Dick had petoski stone, pink limb casts, agate and petrified wood.

Lee King asked everyone to vote for cabs and faceted stones this time.

Ophelia Hicks had a display of the "Diablo Magazine" that carried an article of the East Bay Banjo Club of which we have 3 members who belong. Steve Pitman has played approximately 7-8 years and Shirley Schleif and Ophelia Hicks are long time members and very good too. You can see and hear them play Tuesday nights from 8-10 pm at the Round Table Pizza parlor in Pleasant Hill.

President Joe Yarbrough announced No Board Meeting in September. Regular meeting will be September 13th. Ann Matthews 1st Vice President will take over in Joe's absence. October Board meeting is October 14th. General meeting will be October 18th. Mark your calendars.

Garage Sale
Sept. 21 & 22
Connie High's home
3682 Hillsborough,
Concord, CA.
10am to 4pm,
absolutely no early
birds!!!!

Come and select something spectacular from the collection of rocks, findings, jewelry, performs, slabs, waxes, tools and much more.

Directions: From Hwy 4 take Port Chicago Hwy south to stop light at Bart Station, turn right and go up the hill and then turn left on first street, go to third street on left turn left on Hillsborough.

From Concord take Port Chicago Hwy north to Olivera at stoplight turn left to next stoplight, turn right on Hillsborough and go about four blocks.

From Highway 242, take Olivera off ramp to stoplight and go straight to Hillsborough about four blocks.

If you have any questions call Glen Hubbard at 925-228-9131 or Mary Ann King at 947-1550.

Education Chair Dick Pankey called up Ophelia Hicks to surprise her and presented her with an award. Her efforts in putting together a beautiful interesting note and picture book of our clubs outings and activities over the years paid off. We won a Gold winner, top scoring class in California and we won the silver award for the AF

class. She was so surprised and pleased. So if you take pictures on rock outings with the club or at the show, duplicated and give to the club as they are going into the book for history of our club.

Ann Matthews 1st Vice President and Program Chair introduced the program "Alaskan Highway". Mary Hicks ran the projector and Ophelia Hicks read a very informative script of the Alaskan Highway, the pictures are beautiful.

President Joe had visited Alaska only a few years ago and told us a story of dead tress standing in a field.

Everyone was encouraged to vote on cut stones and enjoy refreshments. Meeting adjourned at 8:55 pm.

ECOLOGY ALERT

Public Lands Advisory Committee Report

*By Jim Strain, Chairman,
PLAC. Submitted by Glen
Mackenzie*

Some of the information contained in the PLAC report in your packet is not correct. I had stated that Senator Boxer was attempting to add more land to the East Mojave National

Preserve. It actually would be added to the Death Valley National Park if the legislation passes.

The net result would be the same. The area would be lost for educational and recreational collector of rocks and minerals.

Please read the last CFMS Newsletter, if you haven't done so already, and take action. This is one of the most critical issues we have faced. PLEASE GET YOUR CLUB INVOLVED.

Letters, telegrams, phone calls, political pressure if you have the connections. Don't procrastinate, do it now!

The proposed bill is S.2535 - "California Wild Heritage Act of 2002" It would establish or enlarge 76 wilderness areas on BLM and Forest Service lands; designate three Salmon Restoration areas in the Shasta-Trinity National Forest; designate two wilderness study areas; and provide management provisions for each class of designation.

The act would designate 5 wilderness areas in existing National Parks and adjust the boundary of Death Valley National Park southward to take in prime rock collecting areas.

It would designate portions of 22 rivers as wild, scenic, or recreational rivers; would designate portions of 2 rivers as study rivers, and provide management provisions.

The act would designate 17,000 acres adjacent to the Sacramento river as the "Sacramento River National Conservation Area."

It would designate approximately 29,000 acres mostly within the Inyo National Forest as the "ancient bristlecone pine forest" and would provide management provisions.

The primary concern is the term "provide management provisions". At present, we have been able to work with BLM and the Forest Service in working out continued access under existing management restrictions. Considering the fact that Senator Boxer is working with the extreme groups, those new management provisions could really impact our activities in the future.

We must "get through" to Senator Boxer to help her understand our positions and why we need access to continue our educational and recreational use of public lands.

The Bureau of Land Management is asking for nominations to be appointed to the California Desert District Advisory Council starting January 1, 2003. We must work together to get a representative from CFMS appointed to the council. We will be discussing this at today's meeting.

Some of you and your clubs have been doing a good job communicating with the various management agencies to help them understand our needs. Some apparently have not. If you have not been involved in trying to protect our future, please do so. In checking with the agencies on the number of responses or comments from rockhounds, it is very discouraging as the extreme environmentalists outnumber our responses 50 to 1. Off road vehicle users are very active, however their access areas and needs are frequently different than ours.

PLEASE GET INVOLVED!!!

The Rockhound Sticker is now available!

By Richard Pankey, CFMS

The Rockhound Sticker was introduced at

the California Federation of Mineralogical Societies Show in Placerville, CA and at the combined American and Northwest Federation of Mineralogical Societies

Show in Port Townsend, WA in July. The bright yellow sticker is 3 and a half inches in diameter with a diagonal black rock hammer with the word "ROCKHOUND" underneath. The sticker was designed and developed to be an easily recognizable symbol for rockhounds to identify one another. And it is also a great way to promote the rockhound hobby. The Rockhound Sticker will be showing up soon all around the country. In addition to all of the individual stickers that were sold, people from Maryland, Idaho, Washington, California, Texas, Oregon, Nevada and Utah purchased stickers to take home to their club members. Some clubs are getting the stickers to give or sell to their members. Other clubs are buying stickers to sell at their shows or rock swaps.

The concept and development of the Rockhound Sticker was the outcome of a project of the CFMS Publicity/Public Relations Committee. It was

designed to be distinctive and readily identifiable by everyone, whether or not they were a rockhound. Because of its simple design and bright yellow color it can be recognized easily and from a distance.

The Rockhound Sticker is an easy way to identify oneself to others as a rockhound. It provides an easy way to recognize other rockhounds. The sticker not only promotes and publicizes rockhounding, it is a service to rockhounds to facilitate meeting one another. The sticker is an identifier for club members as well as unaffiliated rockhounds. It lets everyone know you are interested in collecting rocks, minerals, or fossils and you are willing to discuss collecting, to share rockhounding experiences and to help other rockhounds. It tells others that you are a rockhound friend.

This sticker is not intended to replace club or federation badges, it compliments them by saying "I am a Rockhound". No other words or mottoes are necessary. In short, everyone, rockhound or not, will recognize it, thus widening your circle of friends and helping you to learn of new locations and ideas.

Use it anywhere and in anyway to attract the attention of other rockhounds. Use it to advertise that a rockhound is present and willing to talk about rocks, minerals, fossils and related subjects. Look for the sticker where rockhounds may be present, such as campgrounds, potential collecting areas, craft shows, etc.

Frank Mullaney from the California Federation is handling the orders and distribution of the Rockhound Sticker. The stickers sell for 50 cents each for 1 to 59 stickers (minimum order - 10 stickers) or 30 cents each for quantities of 100 or more; price includes postage and handling. Frank will accept checks or credit cards. When ordering make check payable to: ROCKY FIVE. To order stickers, contact:

Frank Mullaney
5705 Begonia Dr.
San Jose, CA 95124-6535
E-mail:
rockyfiv@aol.com

Promote rockhounding.
Proudly display your
Rockhound Sticker.

Spheres of Antiquity:

Ref: Sci News, via Big Rock Trader, via Petrograph.

Rough quartz and limestone spheres about as big as a tennis ball have commonly been found at archaeological sites. They are apparently manufactured, but why? Guesses have included use as bone smashers, club heads, grinders for seeds, manufactured, leaves or roots, and weapons to be thrown, possible tied together like gaucho's bolas.

Chunks of quartz or calcite may be found with uniform texture and structure, lacking directional breakage. Such material makes excellent tools for shaping and flaking other stones to give them sharp edges for use as scrapers, lance heads, or cutting tools.

Anthropologists N. Toth and K. Schick of Indiana University have conducted field experiments in Zambia, where angular pieces of quartz are plentiful. The experiments showed that four hours of continual hammering as a chipping of flaking tool would reduce an angular piece of quartz to a sphere without necessarily any original intent to do so. The Stone Age spheres are usually found at archaeological sites where flaked tools are also

plentiful. Could these be the first "crystal balls"?

Fortune hunters dig their hobby.

Excerpt from the Contra Costa Sunday Times. August 11, 2002

Arkansas volcano erupts with an array of visitors hoping to find diamonds.

*By Melissa Nelson,
Associated Press*

A collector stops his activity for the interview. "This one here, just the stone, is worth about \$7,000. I have another one in the bank that's worth \$40,000." Said Donald Mayes, 671, of Springdale.

Crater of Diamonds is the eroded top of a volcano. The largest diamond found at the crater was a 40.23-carat stone known as the Uncle Sam. It was uncovered in 1927. At Bill Clinton's 1985 gubernatorial inaugural, Hillary Clinton wore the 4.25-carat Kahn Canary diamond, a yellow diamond found at the park in 1977.

IF YOU GO

Getting There- The Crater of Diamonds State Park is two miles southeast of Murfreesboro on Arkansas Highway 301.

Hours- The park is open year round with extended summer hours.

Lodging- There are several hotels and lodges near the park, including the American Heritage inn, the Queen of Diamonds Inn, the Swaha Lodge, the Little Shamrock Motel and the Riverside Cabins.

Information-
www.arkansas.com

Montmorillonite (or Bentonite)

By Peter Darling, Crystal Identifier via the Hy Grader 5/02

Montmorillonite is the chief constituent of the clay mineral bentonite.

Montmorillonite absorbs water especially water that has a high alkaline value-and swells accordingly. A liquefied clay like this is used in the oil drilling and construction industries due to its ability to suspend solids. It can also seal the pores of formations which normally accept fluids. Montmorillonite will become pumpable again when agitated (this is called being thixotropic).

Montmorillonite is also used as a purifying medium and as filler in the manufacture of paper and rubber. It is formed either in a

hydrothermal environment where volcanic ash has been altered or in a sedimentary tropical environment where feldspar has been altered. It is a micro crystalline material which is white, grey, or beige in color. It forms earthy masses which are greasy to the touch and crumble easily.

Range: Montmorillon is found in large masses in Montmorillon, France (hence the name), Germany, Japan, and in Alabama, California, and Florida. Moh's Hardness 1, Specific Gravity 1.2-2.7, Crystal Structure is Monoclinic.

Volcanoes and Volcanic Rocks Near Mount Shasta

By Hans Benesi, Marin Mineral Society via the Tumbler

As we drive north on Highway 5 past granitic Castle Crags, then past Dunsmuir, it always thrills us to see Mt. Shasta. This enormous volcano, which rises from a 3,000 foot plateau to over 14,000 feet, has a volume of 80 cubic miles with steep sides that were formed in a series of eruptions over the last million years. The most

recent eruption occurred in 1786.

Mt. Shasta is largest (in volume) of the Cascade volcanoes formed by subduction as the Pacific tectonic plate slides under the North American plate. The Cascades belong to a class called strato (composite) volcanoes.

They are largely andesitic and generate lava flows, mud flows, and ash falls-sometimes quietly and other times violently (e.g., Mt. St. Helens).

North of Mt. Shasta, Highway 5 skirts Black Butte, an interesting example of a plug dome volcano. This type of volcano is formed when stiff magma forms a vertical plug whose sides break off into talus slopes. Black Butte must have been formed within the past 10,000 years because there is no evidence of glacial carving from the last ice age.

Highway 89 branches off to the east at the foot of Mt. Shasta. About 30 miles from the intersection is Bartle, the gateway to Medicine Lake Highlands. These volcanic highlands rise from 3,000 to 7,500 feet over an area of 300 square miles and were formed from successive eruptions of fluid lava flows consisting largely of basalt.

The highlands cross-section has the shape of a shield so it is called a shield volcano. At the crest of this shield a huge crater of caldera was formed when the volcano was undermined in later eruptions. Medicine Lake partially fills the crater.

The basalt from the Mt. Shasta-Medicine Lake area (and the whole Modoc plateau) is fine-grained but full of bubbles; hence the name vesicular basalt. Boulders of basalt made attractive foundations of rock gardens. The obsidian from Little Glass Mountain (immediately west of Medicine Lake) is full of white specks that look like tiny snowflakes under a magnifying glass. Obviously, this represents a young snowflake obsidian. Local Indians didn't use this type of obsidian to make their arrow and spearheads because it didn't chip evenly. The obsidian from Big Glass Mountain (east of Medicine Lake) contains no tiny "snowflakes" and chips uniformly; therefore it was favored by the Indians.

The Faceter's Wife

By Bettie Johnson from the Roadrunner via the Backbenders Gazette.

Oh sad is the life

For a faceter's wife
As she watches TV all alone
While he hopes and he schemes
For the gem of his dreams,
For the 100 score perfect stone.

He must never be told
That dinner's grown cold,
Or asked to do some household chore.
It might make the lap
Cause some awful mishap.
And scratch up the table-or more.

It must never be said
"Dear, please come to bed."
Although the clock has struck two.
While the culit is done.
And the mains – all but one,
He still has the girdle to do.

Then disaster appears,
Neighbors cover the ears.
Blue comes from under the door.
He had just finished the top
When it fell off the dop
And got lost in the junk on the floor.

But after the pain,
He'll try it again.
At least he'll never get bored.
He'll try a new cut
She's alone again, but
This one may win an award.

'So it's all been worth while,"
I can say with a smile

As I look at his case in a show.
Each stone passed his test
He just did his best.
As a faceter's wife, I should know.

Native American Stone Points – The Dove Tail or St. Charles Point

By Jerry Elliston from the Rockcollector

These points, ranging up to six inches in length, are named from types found in central Illinois and eastern Missouri. They are the work of highly skilled craftsmen. The dates were determined from data collected at Graham Cave in Missouri where Dove Tail points were found in levels dating from 8,830 to 9,700 years ago. This makes the Dove Tail a very ancient Archaic projectile point. They are not an infrequent find in southern Illinois and are of sufficient age to warrant respect from the collector. From SIES Club News 2/00

Ingredients of an Arrowhead
The American Indian wasn't fussy about what he used to make an arrowhead as long as the material would suit his need.

Throughout the ages, the Indian's choicest material for

arrowheads was flint and the flint related rocks such as chalcedony, agate, novaculite, jasper, opal, etc. He liked obsidian too. These are silicon dioxide glass rocks of nature and, like glass, they flake beautifully in conchoidal fractures and shape easily into sharp cutting edges. Quartzite, which is more granular silica, was used quite extensively, but was more difficult to shape.

The Indians of the eastern seaboard were starved for good flint-like rocks and their arrowheads are the ugliest of all since they are made of slates, quartzite, traprocks, schist and other forms of rocks that a Wyoming Indian would have written off as junk.

There are rumors of Wyoming jade arrowheads, but they probably aren't true. The Indians of the Valley of Mexico made beautiful jadeite sacrificial knives, but they weren't flaked. They abraded, honed and polished them into shape.

Probably the most spectacular arrowhead ever found was a fabulous fluted early -man Clovis Point struck out of a large quartz crystal. This diamond clear point was found by a farmer in North Carolina who then took it home and used it to

strike against steel to start kitchen fires. The now damaged point rest in the Smithsonian.

The Footprint of a Giant

From USGS, courtesy of Bob Horning. Via the Obsidian Observer, 2001, via the Rocky Mountain Federation News Feb. 2002.

The only undisputed fossilized footprint of a Tyrannosaurus Rex dinosaur is in North Ponil Canyon on the Philmont Scout Ranch near Cimmaron, New Mexico. The track, made by the dinosaur's left hind foot was discovered in northeastern New Mexico in 1983 by Charles Pillmore, a research geologist with the U.S. Geological Survey in Denver, CO. It was identified 10 years later as a footprint made by the giant T-rex, and presently is recognized as the only known fossilized track made by the creature. Although several nearly complete fossil skeletons of the large dinosaur have been found, until 1993 no tracks attributable to this creature had been reported.

DISCOVERY. Pillmore recalls chancing upon the track while he was mapping geology and tracing the K/T boundary in north Ponil

Canyon. He noticed an unusual shape on a large block of sandstone a short distance above the creek, and observed that it resembled the footprint of a large three-toed animal; probably a dinosaur. The block appeared to have fallen from a ledge higher up on the slope and to have rotated as to move down the hill, so that the bottom of the block now faces upward. He noted the discovery in his field notebook and took some samples of the sandstone, but didn't suspect it was anything particularly "unusual".

IDENTIFICATION:

Several years later Pillmore showed pictures of the Philmont track to Dr. Martin Lockley, a dinosaur track specialist at the University of Colorado at Denver. Lockley agreed that it was the footprint of a dinosaur and proposed that the animal that made the track was probably a large hadrosaur. He agreed to accompany Pillmore to the Philmont site and confirm the identification. In late summer of 1993 the two men made the trip to New Mexico to examine and make a mold of the track. As they began to clear away the leaves and dirt that partly covered the track, Lockley noted that it was too big for a hadrosaur and that its heel was much

larger than any hadrosaur heel he could recall. He then noticed a distinctive shape on the side of the track and speculated that it might have been made by a fourth digit call a hallux. (editor's note: a hallux as described in Webster's as "the intermost digit (as the big toe) of a hind or lower limb.") He then proposed that the size and shape of the track of the track and the presence of the fourth digit were convincing evidence that they were looking at possibly the first Tyrannosaurus rex track ever seen. After sketching an outline of the track on clear plastic the scientists made a latex mold of the track.

POSITION IN THE

ROCKS: Dr. Farley Fleming, then a USGS fossil pollen specialist, helped to establish the relative age and stratigraphic position of the track layer. He determined that the track was made in Late Cretaceous time 65-70 million years ago, the proper age for a T-rex, and that the dinosaur was walking across a vegetated wetland mudflat, dominated by palm trees and ferns.

SIGNIFICANCE

The discovery of the natural cast of the T-rex provided much important information: (1) the shape of the bottom of the dinosaur's foot

contributes to knowledge of the soft tissue and the probable muscle structure of the foot and how it supported the animal's great weight; (2) the position of the hallux on the foot is apparent in the footprint. The track indicates that the hallux was fairly high on the foot and well back on the heel, which could assist in skeletal reconstruction; (3) the presence of claw marks suggest the foot had large claws, which may indicate a predatory way of life; (4) the range of the T-rex is extended south about 250 miles from the nearest known occurrence to the north; and (5) sixty-five to seventy million years ago, T-rex roamed across a broad river floodplain in a sub-tropical wetlands environment, as indicated by palm leaves and other fossils in rocks nearby and by fossil palm pollen and fern spores noted in samples of the mud he/she walked in.

PRESERVATION:

A number of circumstances occurred that enabled the T-rex track to be preserved. First, the mud that the dinosaur was walking across had to be of a particular consistency and character-firm enough to preserve the shape of the foot, but not so soft or fluid as to allow mud to flow back into the cavity, destroying the footprint.

Second, the footprint had to remain open until a nearby river flooded and sand-laden water flowed across the mudflat, filling the footprint and depositing a three-to five-foot layer of sand on the mud surface. The flood current had to be strong enough to carry the sand sediment that filled the footprint yet gentle enough not to wash away the mud containing the track. This sand layer was later covered by several thousand feet of sediment layers that solidified into rock. These layers of rock were eventually eroded away by streams to form the valleys and ridges that we see today, finally exposing the sandstone bed that contained the footprint.

VITAL STATISTICS:

The footprint on the rock is 33 inches long by 28 inches wide. The depth of the infilling was about nine inches. Lockley determined from it's position on the block that the animal's stride was at least nine feet. He estimated from the size of the footprint and the stride of the animal that it was probably moving at least six to seven miles per hour. When mature, T-rex reached a length of about 60 feet, stood nearly two stories tall, and weighed approximately 8000-12,000 pounds.

OFFICIAL NAME:

In 1994, a paper proposing the name *Tyrannosauripus pilomorei* for this track was submitted by Lockley and associate Adrian Hunt to honor Pillmore's discovery. The paper was published later that year in *Ichnos* (volume 3, pp 213-218) an international journal for plant and animal traces, assuring that the name will be an official part of the scientific record.

**Glass Mountains-
Mountains that
Glow**

From the CHIPS 12/00, originally from the Tumbler 11/00

In Northwest Oklahoma you can weave 24 miles through the mountains that glisten like diamonds. They are referred to as "Glass Mountains". Their eroded buttes and mesas send flashing lights across their valleys like signal lights from a ship. Thomas James, in one of his journals, called the region "one of the greatest curiosities of our country." He referred to them as Shining Mountains.

The reflection's quality is attributed to layers of gypsum that thread through the hill. Three types of gypsum are stratified here. 1) alabaster, which may be

pink, gray or black 2) selenite, which is clear and colorless, giving the mountains their glassy reflections and 3) satin spar, a more fibrous gypsum that creates miniature diamond-like sparkles.

The gypsum strata there were deposited millions of years ago when the region was an inland sea. The sea evaporated, the land heaved upward, and erosion began to carve the forms we see today. Wind and water working over the eons have revealed the layers of gypsum. Some of the pinnacles are horizontally striped like a layer cake. In others, such as the exposed rock reflects the light with blinding intensity. Depending on the type of rock the rays stride, you see a pure flash of light on the mountain that looks like a rainbow of colors. Oklahoma claims this area as one of its "wonders".

**Boiling water
makes Rocks**

By Ed Montgomery,
American Opal Society via
the CHIPS 12/00

Water is a solvent if it is hot enough or acidic enough. In the acid scenario, rainwater meets carbon dioxide, seeps down, encounters sulfides and bingo, sulfuric acid.

This liquid roams and dissolves minerals and puts in motion mineral substances to travel and interact with other substances. Malachite is formed this way. The bumps on turquoise indicate dissolved minerals flowing in cool water.

In the hot water scenario, rainwater seeps into the ground and goes deep enough to be heated by magma or already boiling water. Now heated, this water moves back up by a process of steam and condensation—dissolving minerals and re-depositing their constituents along the way. Cooled, the water sinks, again encounters the heat source, moves upward, and repeats the dissolving and depositing. This repetition gives agate its layered look. Amethyst crystals can form once the silica content of the water thins out sufficiently.

Perhaps the oldest, certainly for jewelers the most fortuitous, case of raindrop to rock is the formation of opal, in yet another scenario.

In a dry desert area, the rainwater goes down through permeable rocks rich in silica. The down going water carries silica to the underground water table, raising it. Being raised, it

spreads out to fill fissures and such. The rain stops, the dry desert eventually drops the water table down by evaporation, but the ledges and fissures are left high, and not completely dry. Within these fissures, the silica-rich water gets richer by evaporation. When the silica-to-water ratio is just right, spheres form (bubbles). These spheres are what make opal opal. With further evaporation, the spheres become gelatinous, eventually harden, and like adding ball bearings to a cup, they layer the cavity in an orderly fashion. Water is trapped between the spheres.

The orderly arrangement of the spheres diffracts light (segments and moves it around). This light movement, in combination with the varying amount of water inclusions, gives the light play of precious opal. Water here acts as a sort of music to the spheres.

Yes, water is a solvent. Find enough opal and many of your financial problems will be solved.

Kartchner Caverns State Park

From the Tumbler via the park's web site at

www.pr.state.az.us/parkhtml/kartchner.html

Cave History

In November 1974 two young cavers, Gary Tenen and Randy Tufts, were exploring the limestone hills at the base of the Whetstone Mountains. In the bottom of a sinkhole they found a narrow crack leading into the hillside. Warm, moist air flowed out, signaling the existence of a cave. After several hours of crawling, they entered a pristine cavern. It wasn't until February 1978 that Tenen and Tufts told the property owners, James and Lois Kartchner, about their amazing discovery. During the four years of secret exploration, the discoverers realized that the cave's extraordinary variety of color and formations must be preserved. The cave's existence became public knowledge in 1988 when its purchase was approved as an Arizona State Park. Extraordinary precautions have been taken during its development to conserve the cave's near-pristine condition.

Nature's Creation

It all began with a drop of water. A shallow inland sea covered this area 330 million years ago, depositing layers

of sediment that eventually hardened into limestone. Millions of years later this Escabrosa limestone containing the cave down-dropped thousands of feet relative to the mountains above. Rainwater, made slightly acidic by absorbing carbon dioxide from the air and soil, penetrated cracks in the down-dropped limestone block and slowly dissolved passages in it. Later, lowering groundwater levels left behind vast, air-filled rooms. Kartchner Caverns' wide variety of decorations, called "speleothems", began forming drop by drop over the next 200,000 years. Water seeping from the surface dissolves minerals on its trip through the limestone. Once it reaches the cave, the trapped carbon dioxide escapes from the water. No longer able to hold the dissolved calcite, the drop deposits its tiny mineral load. Over time, these minerals have created the beautiful speleothems and variety of colors found in the cave. Kartchner Caverns is a "living" cave; the formations are still growing!

Bats and Other Cave Creatures

During the summer months, the cave's Big Room serves as a nursery roost for over 1,000 female cave myotis

bats. The pregnant females return to Kartchner Caverns from Mexico around the end of April, where they give birth to a single pup in late July. The babies remain in the roost each evening while their mothers forage for insects in the surrounding countryside. During the summer the colony consumes about half a ton of insects, consisting of moths, flying ants, beetles, mosquitoes and termites. Mothers and their offspring will leave mid-September, to begin their migration back to Mexico for their winter hibernation. These bats provide the only link between the ecosystem of the cave and the surface. After returning to the bat roost from their nightly forays, the bats excrete waste, forming large guano piles. Most of the other life forms found in the cave depend on the guano piles for their food. Fungi and bacteria consume the guano first. These are in turn eaten by nematodes, mites, isopods, amphipods and book lice. These are then eaten by spiders, scorpions, mites, millipedes and centipedes. Scavengers, like crickets and beetle larvae, clean up the leftovers. The bats' guano provides the energy needed to run this complex food chain.

Paleontology of the Cave

While exploring the cave, paleontologists, those who study prehistoric life, uncovered an 86,000 year old Shasta ground sloth, a 34,000 year old horse and an 11,000 year old bear, as well as terrestrial snails, a clam, a toad, lizards, rabbits, snakes, a coyote, a ringtail, and many species of rodents. These discoveries have lead paleontologists to declare Kartchner Caverns a treasure house of information on the local fossil history of the uplands around the San Pedro River Valley.

Cave Formations

The formations that decorate caves are called "speleothems." Usually formations are composed of layers of calcite called travertine deposited by water. The form a speleothem takes is determined by whether the water drips, flows, seeps, condenses or pools. Kartchner Caverns is home to:

- the longest soda straw formation in the U.S. (second longest in the world) 21 feet 2 inches (Throne Room)
- the tallest and most massive column in Arizona, Kubla

Khan: 58 feet tall (Throne Room)

- the world's most extensive formation of brushite moonmilk (Big Room)
- the first reported occurrence of "turnip" shields (Big Room)
- the first cave occurrence of "birdnest" needle quartz formations
- many other unusual formations such as shields, totems, helectites and rimstone dams.

Many of the formations have been continuously growing very slowly for tens of thousands of years and are extremely fragile. Visitors to Kartchner Caverns are reminded that the slightest touch will cause a formation to stop growing.

Park Information

Cave tours are approximately 75 minutes long, 45 minutes are underground. All tours are guided by a trained tour guide. The cave averages 68 degrees F and 98% humidity year round. All cave trails are barrier-free. Due to wet surfaces and changes in grades, stroller and walkers are not allowed on the tours. Reservations are strongly recommended. You can reserve a space on the tour

only by calling 520-586-CAVE. A number of walk-up tickets are available each day on a first-come first-serve basis, but they are in high demand. The park is open every day of the year except Christmas Day.

There are also several surface trails in the State Park that visitors may walk unguided and at their leisure. Elevations range from 4900' at the park trailhead to over 7000' in the summits along the crest of the Whetstone Mountains. The Whetstones are a fault-block mountain range with a variety of exposed geological formations. Vegetation is mesquite-invaded Chihuahuan semi-desert grassland at the lower elevations and open oak-juniper woodland on the higher slopes.

Spotlight on Guatemalan Jade

Reprinted from the Lapidary Journal via Matrix 8/02

Until recently, serious gem and jewelry collectors and buyers looked to Asia for the purchase of fine jadeite. Traditionally thought of as a Chinese product, but principally from Myanmar (formerly Burma), jadeite has been cut and shipped from Hong Kong to the west for decades. Today, North

American jade enthusiasts are finding jadeite is being mined and cut closer to home. Fine Jadeite material in natural colors ranging from a bright, intense green to soft lilac, blue, pink, white, and yellow is available from Guatemala, in Central America. Although jadeite occurs in several locales around the world, Guatemala has been the least-known as a producer of this material.

"Jade" is generic term describing two distinct stones: nephrite and jadeite. While the two are visually similar, they are different in mineralogical characteristics. Nephrite and jadeite are both white in their pure state, with all colors caused by inclusions of other minerals. Jadeite is the harder and denser of the two, with a richer, more brilliant range of colors. For these reasons and because of its scarcity, jadeite is the most precious and sought-after type of jade. Guatemalan jade is jadeite.

That jadeite in serious quantity and in a rainbow of natural colors (no heat treatments or other enhancements are used in the Guatemalan jadeite) is being mined in Guatemala comes as no surprise to researching geologists and archaeologists who have long believed that the native Central American

ancient cultures -Olmec, Toltec, Mixtec, Zapotec, Aztec, and Maya-got their jadeite from Guatemala.

In Jades of Mesoamerica, author and jade expert Fred Ward as compiled exhaustive research on Guatemalan jadeite used in the ancient Maya culture. He writes that discoveries of jadeite in the Motagua Valley area of Guatemala (also known as the Motagua Fault Zone) confirm the country as the source for most if not all of the jadeite used by Mesoamericans for three thousand years.

There are some visual differences in the jadeites of Myanmar and Guatemala, the most obvious of which is color. Although some individual pieces of Guatemalan jadeite cannot be separated from their Burmese counterparts (particularly after they are worked into jewelry), the majority of materials have distinct color and highly saturated Imperial green of Burmese jadeite is not often found in the Guatemalan material. This does not mean it doesn't exist in Guatemala, rather it simply means that at this time, ongoing exploration has failed to produce any sizeable quantity of this highly desirable color.

What is abundant is jadeite in natural colors of lilac, blue, pink, white, yellow, black, and a unique black with natural precious metal inclusions, along with many shades of green. Guatemala is now producing the world's newest jadeite colors, including "rainbow jadeite" (several colors in one slab or boulder).

Ward is particularly fond of the black jadeite. "Black jadeite from the Motagua Valley area," he says, "represents the creamiest, richest, and best black jadeite in the world, far exceeding Burma's darkest, which is gray and can only be sold as charcoal." As far as the textural differences in the jadeites of Burma and Guatemala, a high percentage of Guatemalan material has a coarse, granular crystalline structure, whereas the Burmese material generally exhibits a finer texture.

Galactic Gold is the name given to this black jadeite with natural inclusions of precious heavy metals. Laboratory analysis has confirmed the identity of gold, silver, pyrite, and platinum, among others. Precious black jadeite with heavy metal inclusions had never been seen before this material was discovered by the Ridingers in 1987.

Photo: Juan C. Menendez. For most people, the word "jade" evokes exotic images of richly laden Chinese emperors. Few people realize the rich jade history of the Americas. To the Pre-Columbian people of Mesoamerica, jade meant life, fertility, and power; it was revered above gold. The association of the aristocracy with the brighter greens indicated that they valued jade above all other materials. Just as bright green jade was reserved for Chinese emperors, in Mesoamerican, bright green jadeite was reserved for kings and royalty. As an example of its desirability, the Spanish conquistador Cortes was given four jade beads as tribute by Aztec leader Montezuma, with the counsel that each bead was worth two loads of gold. The Spanish conquistadores, lusting only for gold, dismissed these treasures as nothing more than green rocks.

Following the Spanish conquest of the native culture and religion, and in order to hide the jadeite from the conquerors, Indians withdrew from jade mining and carving for generations. So much time lapsed and so many generations passed that no one knew where to find jade; the mines were lost to

the world from the 1500s until the late 20th century.

The rediscovery of the Maya jadeite source is as exciting as any Indiana Jones movie. In the 1960s archeologists followed scientific work began after World War II by William Foshag, the Smithsonian's curator of geology. They were all searching for the source of Mesoamerican jadeite. Jade is found in several locales in Guatemala: in the provinces of Izabal, El Progreso, Zacapoa, Baja Verapaz, and El Quiche. It takes an expert's eye to find jade because the boulders are generally covered with thick, black-brown, or gray rind, making it almost impossible to distinguish jade from ordinary rock.

New Mineral?

By Giovanna Fregni, via the Quarry Quips, June 2002

Although there's not supposed to be anything new under the sun, previously unknown minerals are still found under the ground. That's exciting for all of us, but unfortunately some of the "new" minerals showing up lately are really lesser known minerals given a more familiar name.

For instance, a friend of mine called up and said

she'd seen a ring in a local store with a 'rare white turquoise' set in it. She's never heard of it before and wanted to see if I knew anything about it. I remembered having read something about this on the internet and checked it out.

There is a mineral in the turquoise group call Foustite that could be the mineral in question. However, howlite and magnesite are white minerals that are often dyed to resemble turquoise. The problem is that none of these minerals are rare or expensive. When closely examined, it turns out that this is probably a clever marketing ploy to make a few bucks off an unsuspecting buyer.

Another example that's been hotly debated on the web is the rare "white aqua" being sold on the home shopping networks. The natural assumption would be that aqua = aquamarine. In that case the white aqua would be white beryl (aka Goshenite). OK, I'll admit there's no way I can think of to make the word Goshenite sound glamorous. Calling it white aqua is stretching things a bit. The problem arises when they start calling it 'rare'. Goshenite is not a rare stone. Up 'til now, there's been no market for it, since it was common and not

too pretty (all beryls have an annoying habit of being full of inclusions and fracture planes). Again, we have the marketers creating a niche for a mineral by telling consumers it is rare.

Of course, this is nothing new. Stones have been confused, misnamed, dyed, radiated and manipulated ever since man discovered that the rocks in the river were shinier than the ones that weren't. I just become concerned when a friend needs to know if she should append the money on a rare gemstone that no one's ever heard of before. So, if I offer any advice at all, it would be to check out any new or unusual gems before you buy. There are a lot of good reference books on gems and minerals, plus there is a wealth of knowledge right here in the club.

CFMS 2002 Shows

September 21-22; Fontana, CA.
Kaiser Rock Club, California Speedway; 9300 Cherry Ave., Hours; 9-5 both days.
Jo Ann Watson (909)355-7455

September 21-22; Paso Robles, CA.

Santa Lucia Rockhounds, Pioneer Museum; 2010 Riverside Ave. Hours: 10-5 both days. Harry Kuffel (805)467-3457
Harrykuffel@hotmail.com

September 21-22; Jackson, CA. Kennedy Mine, 9am-5pm. 2nd Annual Tailgate Gemboree, Fossils for Fun. Debbie Bunn, (916)929-6665.

September 20-21; Redwood City, CA
Sequoia Gem & Mineral Society, Community Activities Bldg., 1400 Roosevelt Ave., Hours: 10-5 both days. Carol Corden (650)776-5990.

September 28; Los Altos, CA Peninsula Gem & Geology Society, Rancho Shopping Center, Foothill Expressway & S. Springer Rd. Hours: 9:30am-4:45pm. Frank Dina, (650)967-3424

September 28-29; Downey, CA. Delters Gem & Mineral Society, Woman's Club of Downey, 9813 Paramount Blvd. Hours: Sat. 10-5; Sun. 10-4. Chuck Pierce (714)526-5614.

September 28-29; Monterey, CA. Carmel Valley Gem & Mineral Society, Monterey Fairgrounds, 2004 Fairgrounds Road, Hours:

Sat. 10-6; Sun. 10-5. Sky
Paxton (831)663-6978

October 2-13; Fresno, CA.
Fresno Gem & Mineral
Society, Big Fresno Fair,
1121S. Chance Avenue,
Hours: 11 am to 10 pm.

October 5-6: Vista, CA.
Vista Gem & Mineral
Society, Brengle Terrance
Community Recreation
Center, 1200 Vale Terrance.
Hours: 10-5. Mary Anne
Mital (760)758-4599

October 11-13; Moab, Utah.
43rd Gem & Mineral Show,
Spanish Trail Arena, 3641 S.
Hwy 191, Moab, Utah. Fri.
& Sat. 10-6, Sun. 10-5.
www.geocities.com/moabrockclub

October 12-14; Antioch, CA.
Antioch Lapidary Club,
Contra Costa County
Fairgrounds, 10th & L Street.
Dave Zabaldano (925)516-
0651

October 12-13; Trona, CA.
Searles Lake Gem &
Mineral Show Building,
13337 Main Street. Hours:
Sat. 8-5; Sun. 8-4. Bonnie
Fairchild (760)372-5356.

October 19; Canoga Park,
CA. Woodland Hills Rock
Chippers, Canoga Park
Community Center, 7248
Owensmouth Avenue.

Hours: 10-5. Thalia
Goldsworthy.
WWROCKShow@aol.com

October 19-20; El Cajon,
CA. El Cajon Gem &
Mineral Society, El Cajon
Valley Masonic Hall
Association, 695 Ballantyne.
Hours: 10-5 both days.
Mikki Santens (619)440-
3201.

October 20; Fallbrook, CA.
Fallbrook Gem & Mineral
Society, "Fall Festival of
Gems" Fallbrook Mineral
Museum, 123 W. Alvarado
Street, Hours: 10-4. Karen
Dawes & Mary Fong
Walker, (760)728-1130.

October 19-20; Whittier,
CA. Whittier Gem &
Mineral Society, "Rocks in
Our Back Yard". The 53rd
show. 7630 Washington
Ave. (Corner of Mar Vista
& Washington Ave.).
Hours: 10-5. Jay Valle
(628)934-9764.

1st Annual Rock and Mineral
Rendezvous, Bakersfield,
CA. The Rendezvous, Kern
County Fair Grounds, 1142
P. Street, Bakersfield. Held
same time as the Central
Valley Boat and R.V. Show.
Lewis M. Helfrich.
(661)323-2663.

Club Exhibitors, Now's the Time!

By Ann Matthews

Please, Club Members, consider putting in a display for our show. We have the cases and room for our members and you will really like our special trophies we have for exhibitors this year. Get hold of me or just fill out the application. Thanks

Display Fun

By Editor

Here is another idea for displaying. Ann and Matt Matthews have put a petrified wood display in a lighted case in their church lobby for people to see what they do for fun. They have in the case petrified wood collected from the states of California, Nevada, Washington, Oregon, Utah, Arizona, and Wyoming. Ann says, "I am always amazed at the variety and colors of the wood we have found and we enjoy the pleasant memories of all these different field trips with our special rockhound friends." How about sharing some of your treasures at the show, at your place of work, or maybe there is a waiting room just waiting for your adornment.