

NOC GEM & MINERAL SOCIETY NEWS

Vol, 20 No. 1

January 2001

President's Message

by *Don Warthen*

I want to wish everyone a happy New Year. We have a lot planned for this year, we have the Youth Science Workshop in Hacienda Heights Saturday January 13, Quartzite and of course the show.

We will be having some great field trips this year and some new activities that should be of interest to everyone. We hope to be working with the BLM to open more land up for collecting and maybe some more youth activities.

I hope to see everyone at the meeting January 9, 2001 and lets all have a great time this year.

January Meeting

Date: January 9
Time: 7:30 p.m.
Place: La Habra Community Center
101 W. La Habra Blvd
Program: Surprise

Refreshments

by *Oscar Veloz*

Don and Loretta are on the refreshment list to bring goodies for our January 11 meeting.

Thanks to Jane Livezey for arranging the Christmas Party, and to all that came and brought presents and food for Operation Santa.

NOC Club Activities

Cab Classes at Walt Messemer's — 7-10 p.m.
every Tuesday Evening.

Classes for the Youth Science Center Junior
Wedgeworth Elementary School
16949 Wedgeworth, Hacienda Heights
January 13, 9:30 am till 1:00 p.m.

Board Meeting — January 4, 6:00 p.m.

Regular Meeting — January 9, 7:30 p.m.

Quartzsite Field Trip — January 23-28

Deadline for NOC News — January 25

Board Meeting

by *Don Warthen*

2001 Officers of NOC Gem & Mineral Society, Inc.

The New Year is already here and we are about ready to get underway. We have a lot to do this year.

I think that we should keep the officers meeting on the second Tuesday of the month before the regular meeting when ever possible however I would like to get to gether before the Jan. 9 meeting so I am planing a meeting at my house on Thursday January 4 at 6 p.m. I hope you can all make it (I know that this is a change in routine but I hope everyone can make it)

Please bring your ideas and we can discuss them. Please call if you cannot attend.

Members in the News

HAPPY BIRTHDAY and have a wonderful day all of you who were born in January.

Alice Livezey - Jan 16

Don Livezey - Jan 17

Pat Maggs - Jan 23

Jane Hendrixson - Jan 27

Your gemstone is Garnet.

Your flower is Carnation or Snowdrop.

Shows and Events

via CFMS Web Page

January 13-14 Exeter, CA
The Tule Gem & Mineral Society
Veterans Memorial Building
324 North Kaweah St. (State Hwy. 65)
Hours: 10-5 both days
George Thrasher (559) 686-5669

February 16-25 Indio, CA
San Gorgonio Mineral & Gem Society
Riverside County National Date Festival
Gem & Mineral Building
46-350 Arabia
Hours: 10-10 daily
Don Grisham (909) 845-9361 or
Bert Grisham (909) 849-1674

February 24-25 N. Hollywood, CA
Del Air Rockhounds, Sierra Pelona Rock Club,
VIP Gem & Mineral, Woodland Hills Rockchippers
San Fernando Valley Gem Fair
Valley Plaza Recreation Center
12240 Archwood St.
Hours: 10-5 both days
Julie & Oscar Marin (818) 886-7190
E-mail ohmarin@flash.net

March 3-4 Arcadia, CA
Monrovia Rockhounds
The Arboretum of LA County
201 North Baldwin Ave., Arcadia
Hours: 9-4:30 both days
Jo Anna Ritchey ((626) 359-1624

March 3-4 Ventura, CA
Ventura Gem & Mineral Society
Ventura Co. Fairgrounds
10 W. Harbor Blvd. (Seaside Park)
Hours: Sat. 9-5 Sun. 9-4
Richard Jiaras (805) 646-7184
Kathryn Davis (805) 658-2606

March 10-11 San Marino, CA
Pasadena Lapidary Society
San Marino Masonic Temple
3130 Huntington Drive
Hours: Sat. 10-6 Sun. 10-5
Alex Sergienko (323) 258-1394

March 17-18 Hawthorn, CA
Northrop Grumman Gem & Mineral Club
NGRC Clubhouse
12329 Crenshaw Blvd., Gate 16
Hours: Sat. 10-6 Sun 10-5
Jimmy Lapham (310) 331-1406

March 24-25 Torrance, CA
South Bay Lapidary & Mineral Society
Torrance Recreation Center
3341 Torrance Blvd.
Hours: Fri. & Sat. 10-6 Sun. 10-5

March 31-April 1 La Habra, CA
NOC Gem & Mineral Society
La Habra Clubhouse
200 W. Greenwood
Hours: Sat 10-6 Sun. 10-5
Jeff Parker (562) 946-0057

April 7-8 Boron, CA
Mojave Mineralogical Society Inc.
Boron High School - Multi-purpose Room
Hours: Sat. 9-6 Sun. 9-4
David Eyre (760) 762-6575 or
Roy Eyre (760) 762-6555

May 5-6 Anaheim, CA
Searchers Gem & Mineral Society Inc.
Brookhurst Community Center
2271 W. Crescent Ave.
Hours: Sat. 10-7 Sun. 10-4
Connie Van Kampen (714) 993-2827

July 7-8 Culver City, CA
Culver City Rock & Mineral Club
Culver City Veterans Memorial Complex
4117 Overland Ave.
Hours: Sat. 10-6 Sun. 10-5
Gary Strickland (310) 676-4523 / g.strickland@prodigy.net
Brad Smith (310) 472-6490 / brad@greenheart.com

September 22-24 Downey, CA
Delvers Gem & Mineral Society
Woman's Club of Downey
9813 Paramount Blvd.
Hours: Sat. 10-5 Sun. 10-4

Did You Know?

By Bea and Sherm Griselle
Santa Lucia Rockhounds

During the Upper Pliocene Epoch, 5 to 7 million years ago, the Los Angeles Basin was mostly under water. Some islands protruded above the shallow bay, such as areas that we now know as the Palos Verdes Hills, Beverly Ills, Baldwin Ills, and Signal Kill. Bay waters supported a varied marine life, including many mollusks. Shells of these early mollusks can still be found throughout the Basin, if you know where to look.

As the bay receded, millions of years ago, shells along the water's edge were covered with soil and gravel debris carried down mountains by rainstorms and landslides caused by earthquakes. This material of shells and debris was cemented together through a limestone process, over millions of years, into beds of rock filled with fossil shells. You need to know where to look for exposed remnants of these ancient fossil beds in the Los Angeles Basin.

Major fossil beds have been discovered in downtown Los Angeles in excavations as deep as 80 feet below street level during foundation diggings for high-rise buildings. One such bed was unearthed in 1969 during construction of multi-story buildings at Sixth and Flower Streets. A paleontologist retrieved tons of "fossil stone" from the excavation site. Much of the material was turned into highly polished tabletops, bookends, and other objects. Very little rough material remained.

A specimen of rough material from this site will be on display during the 2001 CFMS Show in Paso Robles, June 22-24. Attend the Show and view this remnant of an ancient marine environment. It is a part of California's natural history you won't want to miss.

AFMS News

By *Isabella Burns, AFMS President*

Once again I must request that each club update the records as to whom you wish to receive the three AFMS Newsletters that are mailed to your club. It is necessary that each club update this information annually.

Someone suggests that the Executive Office should do this. Actually, that would delay the changes about six months. Our dues and new officers report is not late unless received after March 1 of the next year, and you receive your new roster at the Show and Convention each year.

So, again, I am requesting you to send to the AFMS Central Office the names and addresses of those whom your society wishes to receive on a regular basis the free AFMS Newsletter. Send the information to:

Dan McLennan
P.O. Box 26523
Oklahoma City, OK 73126-0523
Ph. (405) 682-2938

In addition to this, to gain some recognition for your club:

Send the name of a club member (or couple) for outstanding recognition to Colleen McGann.

Send your club's All American Award submission to Bob and Dot Beachler.

Encourage members to study the Uniform Rules and plan an exhibit for next year's competition.

Write articles for the club newsletter for next year's Club Publication recognition.

Plan to create a slide or video program for AFMS Program Competition.

Plan to attend local shows, the CFMS Show in Paso Robles, California, and the AFMS Show in Arlington, Texas.

Check out the AFMS Website, CFMS Website and other Federation Websites.

Smithsonian to Display Ramuara Cultured Ruby

Reprinted from the Northrop Grumman Gem and Mineral Club's Rockatier, December 2000

Editor's Note: While visiting with Virginia Carter at the J.O. Crystal booth at the recent Santa Monica International Jewelry Show, she mentioned the following news release and gave me a copy for the Rockatier:

The J. O. Crystal Co., Inc. has donated a selection of unique Ramuara™ Cultured Ruby crystals to the Gem and Mineral Collection of the Smithsonian Institution. Jeffrey Post, curator of the collection, had asked for the donation after first seeing Ramuara crystals at the JCK Show in Las Vegas last June. Judith Osmer, CEO of the J. O. Crystal Co., and creator of the Ramuara Cultured Ruby, states that "The crystal specimens donated today represent the finest and most unusual examples of ruby growth to have come out of my laboratory in the 18 years of my company's existence."

Because the Ramuara Cultured Ruby is self nucleating (no seeds are used to trigger or force growth), the Ramuara is free to grow many interesting shapes and patterns that, until now, have only been seen in a few rare natural ruby specimens.

Coming at the end of a long career as a crystal grower, Ms. Osmer expressed her pleasure at having her Ramuara Cultured Ruby represent the first synthesized gemstones to enter the exalted company of gems in the Smithsonian collection. "Nothing has given me more satisfaction than to have my Ramuara Ruby displayed in the same mineral collection with the Hope diamond!"

Ms. Osmer has recently placed her company, J. O. Crystal Co., Inc., the producer of the Ramuara Cultured Ruby, on sale. With time ahead to train the, as yet to be identified new owners, in the delicate and secret art of growing the Ramuara, "It is time now to lay plans for retirement" she stated. "What better time to pass the torch than with the Ramuara joining the world famous gems of the Smithsonian."

Pacific Micromount Conference

San Bernardino County Museum 2024
Orange Tree Lane, Redlands, CA

Fri.-January 26, 3:00 - 9:00

Sat., January 27, 9:00 - 9:00

Field Trip Sun., January 28

The Southern California Micro-Mineralogists welcome you. Theme: New California Minerals. Bring your microscope. Register at 3:00 p.m. on Friday or contact:

Beverly Moreau

(714-577-8038) / bcmoreau@4dnet.com.

Field Trips

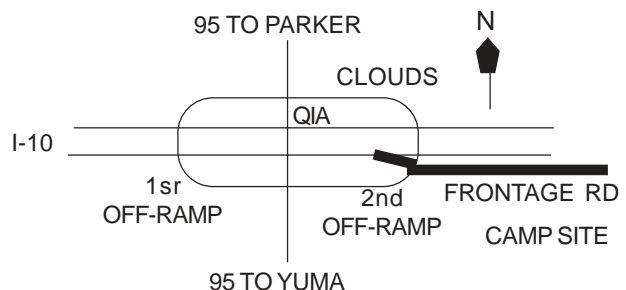
by Don Ogden

January 23-28 - Our January field trip will be combined with the Delvers to Quartzsite.

The QIA show is scheduled from January 23-28. Cloud's will also be open but we **can not** camp there. Some go the week before so that they can pick up bargains at the Main Event on the West end of town.

We will camp in an area just past Quartzsite and south of the frontage road which parallels the I-10. The easiest way to get to the campsite is to take the second offramp, turn right, then left and drive east on the frontage road parallel to I-10. The camp area is south of the Frontage Road., just past the culvert. There are many camped here, so please put out pie plate signs or NOC signs to help our members find each other.

Bring firewood as we usually have some beautiful evening for campfires. Be prepared for cold nights. Weather permitting, we will have a potluck dinner Saturday evening at 4:30 p.m. California time.



Beleve It or Not

*Reprinted from
Northwest Newsletter, December 2000*

It may be hard to believe that a **scant 100 years ago:**

The average life expectancy was forty-seven
Only 14% of the homes in the United States had a bathtub.

Alabama, Mississippi, and Tennessee were each more heavily populated than California.

With a mere 1.4 million residents, California was only the 21st state in the union.

The average wage in the U. S. was 22 cents per hour.

More than 95% of all births in the U. S. took place at home.

Sugar cost 4 cents a pound, eggs were 14 cents a dozen, coffee cost 15 cents per pound.

The population of Las Vegas was 30.

Marijuana, heroin, and morphine were all available over the counter at the corner drugstore.

Coca-Cola contained cocaine instead of caffeine.

There were about 230 murders in the U. S. annually.

Excerpted from an internet file via Rock Chipper, 4/00, and Yakima Gem & Mineral News, 9/00



Christmas Party

Registration/Renewal Fee- Report Registry of Charitable Trusts

*By Mike Kokinos
Tax Advisor*

Warning:

If your Society is exempt from California income tax under California Revenue and Taxation Code Section 23701d or 23701f, you are required to file Form RRF-1 annually. Failure to file the form can result in substantial penalties and revocation of exempt status.

Will wonders never cease? I wrote a letter to Attorney General Lockyer recommending they change the filing date of the RRF-1 Form to coincide with the filing of federal form 990 and California form 199. I also recommended they mail the RRF-1 form to all the corporations on their database.

Saturday I received the RRF-1 package for one of our Societies. It has all the pertinent information regarding filing requirements. If you have any questions, I will be pleased to answer your questions.



Izzie Installing Don as NOC President

Preliminary NOC Calendar 2001

Jan	??	Old and New Board Meeting
	13	Youth Science Workshop in Hacienda Heights
	9	Board Meeting at 6:30 p.m. General Meeting at 7:30 p.m.
	23-28	Quartzsite AZ Field Trip
	27	SCRIBE Annual Workshop and Symposium at Wuartzsite
	??	Wiley Well District Field Trip
Feb	13	Board Meeting at 6:30 p.m. Board General Meeting 7:30 p.m.
	24-25	Field Trip - Lavic Siding
Mar	13	Board Meeting at 6:30 p.m. General Meeting at 7:30 p.m.
	??	Stoddard Wells Field Trip
	30	NOC Show Setup
	31-4/1	NOC Show
	25-4/1	ZZYZX
Apr	10	Board Meeting at 6:30 p.m. General Meeting at 7:30 p.m.
	??	Field Trip with Delvers - Paul Bunion (NW of Barstow)
May	8	Board Meeting at 6:30 p.m. General Meeting at 7:30 p.m.
	26-28	Field Trip (Memorial Day)
Jun	12	Board Meeting at 6:30 p.m. General Meeting at 7:30 p.m.
Jun	13-15	AFMS/South Central Show in Arlington, TX
Jun	22-24	Field Trip to CFMS Show & Convention (Paso Robles, CA)
Jul/Aug		No Meetings
Sep	??	Camp Paradise
	11	Board Meeting at 6:30 p.m. General Meeting at 7:30 p.m.
	22-23	Field Trip
Oct	9	Board Meeting at 6:30 p.m. General Meeting at 7:30 p.m.
	20-21	Field Trip
Nov	13	Board Meeting at 6:30 p.m. General Meeting at 7:30 p.m.
	??	CFMS Business Meeting
	22-25	Field Trip (Thanksgiving)
Dec	11	Annual Christmas Dinner and Officer's Installation

Christmas Party

By Don Ogden

Twenty-three members came to the annual Christmas Party at the Four Points Sheraton in Fullerton. The food was very good, especially the salmon. Entertainment was provided by a Barber Shop Quartet. We had the privilege of Isabella Burns, the AFMS President, to install our officers for 2001.

The donated food and toys were delivered the next day to the La Habra Project Santa Claus. When delivering the donations I found out that Greg Kind is retiring in December. We will miss him as he provided great support for our club this year.

Helpful Tips

Adding one can of STP to every five gallons of your cutting oil will prevent misting in your slab saw. (Jim Neufeld of Manteca via Breccia 2/99 and Moroks 10/00).

Try crepe rubber as a cleaner for lapidary sanding cloth. A small thick sheet of crepe rubber held against the sanding cloth, while in motion, acts as an eraser to remove the accumulation of debris and expose the abrasive cloth for better work. (Original source unknown via Breccia 2/99 and Moroks 10/00).

Cleaning Saw Oil - I have read various articles on cleaning the sludge from slab saws. Some suggest putting the oil in plastic containers and letting sit a few days until the "bad stuff" settles to the bottom, then carefully putting only the clean oil back in the saw. My method is to carefully scrape the sludge from the bottom of the saw and place in a five gallon bucket. After a few days, a small amount of oil will work its way to the top. Carefully pour that back into the saw. This method isn't perfect and the fastidious will immediately discard it, but **it works!** Getting rid of the sludge is the "fun part." (Jon Fults, Delvers).

Washington Geology

Vol. 28, No. 1/2 September 2000

HOLOCENE GLACIER PEAK LAHAR DEPOSITS in the Lower Skagit River Valley, WA.

Glacier Peak, unlike other Cascade volcanoes in Washington, does not stand as a prominent backdrop to metropolitan centers. Glacier Peak's attractions, as well as its hazards, thus tend to be overlooked. Yet like most other Cascade volcanoes, glacier Peak has erupted several times since the Ice Age glaciers retreated 15,000 years ago, most recently around the eighteenth century. Since glacial times, Glacier Peak has had larger and more explosive eruptions than any Washington volcano except Mount St. Helens. If similar eruptions took place today, they could place nearby communities at serious risk. [Download from USGS/Cascades Volcano Observatory, Vancouver, WA. Website Aug. 18, 2000] [<http://vulcan.wr.usgs.gov/Volcanoes/GlacierPeak/framework.html>]

LAHARS AND LAHAR RUNOUTS - Lahars are debris or mudflows that originate on the slopes of a volcano. The driving force of a lahar is gravity. In a normal river flood, water carries individual rock particles along. In a lahar, particles are so concentrated that they flow down slope on en masse, carrying the water. Lahars are generally restricted to stream valleys, although large-volume lahars have been known to pass over topographic barriers under rare circumstances. Non-cohesive lahars have low clay content [$<3\%$] and typically begin as a flood surge that incorporates enough sediment to become a debris flow. They can transform downstream to more diluted flow types such as a lahar runout flow.

[This Sept. issue has a lot of information on the Cascades, Volcanic Activity, Earthquakes etc.].O,

Book Review: Geology of the North Cascades — A Mountain Mosaic, by Rowland Tabor and Ralph Hangerud.

FOSSILS ON FEDERAL AND INDIAN LANDS - The U.S. dept. of interior has delivered a report on "Fossils on Federal and Indian Lands" to Congress. The entire report can be seen at www.doi.gov/fossil/fossilreport.htm.

HOW SILICON CHIPS ARE MADE -

How does silicon dioxide (beach sand] become an integrated circuit, one of man's most intricate and finely crafted devices?

Growing silicon crystals from a single seed crystal is the most important part of the process. This takes place in a furnace which is heated to about 1,500 degrees celsius. In the furnace is a container filled with molten silicon and a secondary element such as phosphorus or boron. The seed crystal is dipped into the molten material. It is then withdrawn with a rotating motion, similar to making candies by dipping them in hot wax.

Solidifying on the seed, the molten material takes on the same atomic structure as the seed. This molecular symmetry distinguishes a single crystal from unstructured or non-symmetrical material. Each finished crystal cylinder is approximately six inches in diameter and about four feet long. Using a high speed diamond edged saw, the cooled glass-like cylinder is sliced into wafers. All silicon wafers are not the same, each manufacturer's wafer varies in thickness and surface finish due to their unique specifications.

It takes about 50 complex steps to convert wafers into integrated circuits. The final step is cutting the wafer into hundreds of tiny circuit chips.

[Courtesy of Gems Galore Mountain View, Ca. (Silicon Valley) Via Mineral Mite 11/95

TIP — Put reflector tape or fluorescent paint on your tool handles. It makes them easier to see. Your tools won't rust if you spray them with PAM or WD-40.

TIP — For a gloss finish on your stone, polish once, dry, then put a drop of vinegar on it. Let it set for a couple of minutes, then give it another polish.

From Breccia 3/99 - Via The Rock Bag]

NOC DUES ARE DUE

Please send your dues: \$10 Individual; \$15 Family; Juniors, \$3 to:
Don Livezey
1722 Virginia Place,
Placentia, CA 92870

Silicon, Silica, Silicates, and Silicone

Dr. Bill Cordua, U. Wisconsin - River Falls
Leaverite News, St. Croix Rockhounds

People get confused about the differences between silicon, silicate, silica and even silicone. What is it exactly that we collect cut and polish?

Silicon is a chemical element, one of the 97 natural building blocks from which our minerals are formed. A chemical element is a substance that can't be subdivided into simple substances without splitting atoms. Silicon is the second most abundant element in the earth's crust, making up about 27% of the average rock. Silicon links up with oxygen (which makes up 55% of the earth's crust) to form the most common suite of minerals, called the silicates. Quartz, feldspars, olivine, micas, thomsonite, jadeite, and prehnite are all silicates. There is so much oxygen around that pure native silicon is almost never found naturally.

Silica is a bit trickier concept. It refers the combination of silicon plus oxygen. The mineral quartz is silica. But so are the minerals tridymite, coesite, cristobalite and stishovite which are mineral forms of silica that are stable at high temperatures and pressures. All these minerals are also silicates. In other words, quartz is a silicate made of pure silica. But feldspars contain sodium, aluminum, potassium and calcium in addition to silicon and oxygen. Thus feldspars are silicates but they are not pure silica

Geochemists also use the term *silica* to refer to the overall silicon and oxygen content of rocks. This is confusing, but stems from the fact that in rock analysis and sample is dissolved, the solution treated, and the amount of silicon present is determined by precipitating it as silica. So a geologist may say "*This rock is 48% silica.*" A rockhound will look at the rock and say "*How can that be? I don't see any quartz in it!*" Both are right. The rock will not have the mineral quartz because the silicon and oxygen are tied up with other elements to make silicate minerals like feldspar. It's a bit like looking at a cake and saying, "I don't see any eggs in there!" "The eggs are cake ingredients but are present now in different forms.

Now, what is silicone? It's a synthetic polymer of silicon with carbon and oxygen that could be in solid, liquid or gel form. It has all kinds of medical uses, such as in antacids, artificial joints, pacemakers and implants of various notoriety, but is not, as far as anyone knows, found in rocks.

Can pure silicon be found in Nature? Yes, rarely. Recently Russian geologists were sampling gasses from Kudriavy volcano on the Kamchatka Peninsula. Here they drove quartz tubes into vents jetting out gases of over 900 degrees C. Their tubes filled with minerals precipitating from this gas. Among them were pure silicon metal embedded in masses of salts such as halite. The silicon formed crystals up to 0.3 mm across. It was associated with pure aluminum metal, Si-Al alloys and other rare minerals. This find was unusual enough to warrant a note in the prestigious science journal, *Nature*.

So unless you are in Russia sampling hot volcanic gases, you can be sure that what you are finding are silica and silicates, but not silicon or silicone.

Reference.: Korzhinsky, M.A., et. al., 1995, "Native Al and Si Formation", *Nature.*, vol. 375, p. 544.

Birecein

November 2000 Santa Clara Vallev Gem and Mnead Society San Jose, CA

Ode to a Geode

by George Chicaek
from *Moroks*, October 2000

A solid rock I know about,
Its makeup doesn't faze me.
A hollow one is something else,
Its structure does amaze me.
Is it a hole within a rock?
This fact I often ponder.
Or is it a rock around a hole?
I'll never cease to wonder!