

St. Croix Rockhounds
Community Education & Recreation
Independent School District #834
1875 Greeley Street
Stillwater, MN 55082



October, 2000

First Class

Please send exchange bulletins to:

Doug Olson, Editor
211 Interlachen Way
Stillwater, MN 55082

Meetings are held 7:15 PM at the Stonebridge Elementary School on W. Elm St., Stillwater, MN.



October 17th - is this month's meeting date

The Program is:

**Copper Lodes of the
Keweenaw Peninsula**

St. Croix Rockhound's

LEAVERITE NEWS

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Member of:



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ST.CROIX ROCKHOUNDS

MEETINGS: Club meetings are held the third TUESDAY of each month, with the one time exception of the March, 2000 meeting, at Stonebridge Elementary School on W. Elm. St. in Stillwater, MN at 7:15 P.M.. Everyone is welcome.

MEMBERSHIP: Full membership for a single person over 16 is \$7.50 per year. Family membership is \$10.50 per year.

OFFICERS:

President	Freya Kask	(651) 777-6371
Vice President	Dick Blom	(651) 735-2323
Secretary	Elaine Martinson	(715) 247-3700
Treasurer	Vic Martinson	(715) 247-3700
Program Chairperson	Pete Rodewald	(715) 425-5561
Show Chairperson	Bill Cordua	(715) 425-9544
Refreshments	Helen Betlach	(715) 425-5948
Librarian	Jeanne Blom	(651) 735-2323
Historian	John Parsons	(651) 257-2724
Sunshine Committee	Marie Newlander MN	(651) 439-7809
	Esther Rodewald WI	(715) 425-5561
Tour Director	Vi D'Angelo	(651) 665-9067
Liaison Officer	Freya Kask	(651) 777-6371
Newsletter Editor	Doug Olson	(651) 430-9035

The purpose of our organization is to bring together rock and mineral enthusiasts on a regular basis through membership and through pooling of individual knowledge, talents and skills, to improve the lapidary skills of participating members. Affiliation: American Federation of Mineralogical Societies and Midwest Federation of Mineralogical and Geological Societies.

COMING UP!

October 17th – The Saint Croix Rockhounds meeting starts at 7:15 pm at the Stonebridge Elementary School in Stillwater. The program is **Copper Lodes of the Keweenaw Peninsula**. Pete Rodewald will give a presentation on the geology of the Upper Peninsula's Keweenaw Peninsula through his extensive specimen collection.

Coming Attractions

October 21st: St Croix Rockhounds Gem and Mineral & Rock Exhibit at the Econofoods Mall, on South Main Street in River Falls, WI – 9 am to 5 pm.

October 20-22nd: Central WI Rock and Mineral Club annual show at Cedar Creek Mall, 10101 Market, Wausau WI.

November 21st: St Croix Rockhounds' November meeting date.

November 25-26: Anoka County G&M Show at the Apache Plaza.

Minutes of the Saint Croix RockHounds September 19th , 2000

The meeting was called to order by the President, Freya Kask.

The Minutes were approved and seconded as it appeared in the Newsletter.

Victor Martinsen read the Treasurers report. A motion was made and seconded to approve the Treasurers report. Freya received a bill from the school district for \$112.50 for use of the room for our meetings and paid it. Victor wrote out a check for this amount to reimburse Freya. Dues are due (\$10.50 for families and \$7.50 for individuals).

Bill Cordua, show chairperson, reported that the Fall Rock Show would be October 21st at the mall by EconoFoods in River Falls. He passed out Flyers to who ever wanted one.

Jeanne Blom reminded us that books are available to take out.

Refreshments for the October meeting will be Freya Kask and Jeanne Blom.

The next meeting will be Tuesday October 17th. A motion was made and seconded to adjourn the meeting.

A Silent Auction followed with LeRoy Betlach in charge. Refreshments followed

Respectfully submitted, Elaine Martinsen,
Secretary

Celebrate!

October's birthstone is opal which is considered one of the luckiest stones and is a symbol of hope.

October birthdays:

LeRoy Betlach – 3rd

Floyd Kimball – 10th

Roslynn Runia – 24th

Vi D'Angelo – 26th

October Anniversaries:

John and Sandy Parsons – 11th

Handy Conversions (from AFMS Newsletter 9/200)

ENGLISH CONVERSIONS

Ratio of an igloo's circumference to its diameter = Eskimo Pie

2.4 statute miles of intravenous surgical tubing at Yale
University Hospital = 1 I.V. League

2000 pounds of Chinese soup = Won Ton

1 millionth mouthwash = 1 microscope

Speed of a tortoise breaking the sound barrier = Mach Turtle

Time it takes to sail 220 yards at 1 nautical mile per hour =
knot-furlong

365.25 days of drinking low-calorie beer because it's less
filling = 1 lite year

16.5 feet in the Twilight Zone = 1 Rod Sterling

½ large intestine = 1 semicolon

1000 aches = 1 megahertz

Weight of evangelist carries with God = 1 billigram

Basic unit of laryngitis = 1 horsepower

Shortest distance between two jokes = a straight line

Time between slipping on a peel and smacking the pavement =
1 bananosecond

½ bath = 1 demijohn

453.6 graham cracker = 1 pound cake

METRIC CONVERSIONS

1 million microphones = 1 megaphone

1 million bicycles = 2 megacycle

365.25 days = unicycle

500 millionaires = 1 seminary

2000 mockingbirds = two kilomockingbirds

10 cards = 1 decard

1 kilogram of falling figs = 1 Fig Newton

1000 grams of wet socks = 1 Liter Hosen

1 millionth of a fish = 1 microfiche

1 trillion pins = 1 terrapin

1 million billion piccolos = 1 gigolo

10 rations = 1 decoration

100 rations = 1 C-ration

Feeling Minerals

Most of us are sight oriented when we study rocks and minerals. Once, though, I was asked to give a program on minerals for the Minnesota Society for the Blind. As I was preparing this, I was impressed by the number of properties minerals have that can be sensed with the hands. It's worthwhile reviewing some of these as they are good identification tools for any one.

Density (or specific gravity) is one of the more familiar ones. This is the mass per volume. As an example, think of suitcases. They have a certain volume. When they are empty, they have little mass, thus a low density. Put clothes in them and they get heavier for their volume. If you're a typical rock collector, you have probably put rocks in your suitcases and increased their density immensely, much to the annoyance of airport luggage handlers. Mineral densities can be evaluated the same way - but "hefting" them. If they have a medium density, they will feel about normal in mass for their size. If they are low density, like pumice or muscovite, they will feel light. If they are higher density, like garnet, galena, copper, barite or magnetite, they will feel heavy for their size. There are, of course, many ways to measure this density precisely, but "the heft test" still is a useful field test requiring no expensive instruments. You can fine-tune your approach by practicing hefting known minerals.

Another property that can be appreciated with the hand is tenacity - the resistance of a mineral to mechanical crushing or bending. Brittle materials will break when stressed. Most minerals are brittle. Malleable minerals, such as copper or gold can be flattened into sheets. Those who collect on the old copper mines in Michigan's Keweenaw Peninsula are aware of the resistance of copper-bearing rocks, and the spiny feel of the broken copper edges. These minerals are also ductile, meaning that they can be drawn out in the form of a wire. Some minerals like chalcocite or gypsum are sectile, meaning they can be cut with a knife. Gypsum is soft enough to be cut by a fingernail. Some minerals, like the micas, are elastic and can return to their original shape after being bent. Some mineral like talc are flexible. Once bent, these minerals stay bent after the pressure is released.

The smoothness or slipperiness of a mineral's surface can also be used as a tool. Talc feels slippery. Serpentine feels greasy. The fibrous character of splintery or asbestiform minerals can also be sensed.

Other minerals have distinct surface properties related to their wettability. This has to do with the way particular atoms on the surface of a mineral interact with water or other materials. Chrysocolla becomes sticky when moist, as do many clay minerals. Some clay minerals, such as those in the smectite group, actually swell when they absorb water and lose their strength. This is one reason why so many Western roads (where smectites are common in the soils) are good when dry, but become slippery mud holes after a rain. Diamonds do not wet with water. If a pile of crushed minerals is saturated with water to become a slurry, then run over a grease (such as Vaseline) the uncoated diamonds will stick to the grease while the well-wetted gangue minerals will slide right by. Beryl, corundum, rutile, spinel, topaz and zircon are other minerals that wet with difficulty. The capacity of dirt to slide off of mineral surfaces also affects their cleaning. People who remark to me that datolites can be recognized on the mines dumps of the Keweenaw by the way the dirt seems to slide off of them are using this property.

Minerals are great to look at, but the enjoyment of their properties span all the senses.

-Dr. Bill Cordua, U. Wisconsin- River Falls

References:

- Frye, Keith, 1993, Mineral Science. An Introductory Survey, Macmillan Pub., 360 p.
Hurlbut, C. S. and W. E. Sharp, 1998, Dana's Minerals and How to Study Them, 4th Ed., John Wiley and Sons Pub., 328 p.

Stolen Gems

Secrets and Tips by Dan Ashbury

Is it CZ or diamond? If the stone is loose, turn it upside down on its table and slide it over a thin black line on a piece of paper. When looking straight down through a CZ (cubic zirconium), you will see a circle in the center of the stone. A diamond won't do this.

Is it Citrine or Topaz? Clean the stone, then, using a toothpick, put a drop of water on the table of the stone. The water will form a high "bubble" on real topaz. On quartz, the water flattens out.

If you are cutting a star stone and are looking for the "star", a white Karo syrup works better than anything. A single drop on the stone, under a strong light, will show you where the star is.

Finally, it was late one night, when I ran out the the chemical (at \$23 per gallon wholesale) used in the ultrasonic bath to remove the investment from fresh castings. Believing something else had to work, I tried everything around the shop. If it weren't for the fact I like cider vinegar on my sardines, I never would have found out that vinegar not only works, but it worked better than the stuff I had. It also leave gold castings almost shiny and it's a lot less expensive than \$23 per gallon. *from the Opal via the Gemrock via Trilobite*

Chrysocolla: if you have some chrysocolla and would like to bring out the green and blue, also any copper, put the specimen in full strength liquid bleach for as long as it takes. This really works well and will result in some good colors. Remember the hazard of mixing bleach with acid. It releases a poisonous gas. Do this outside with the wind blowing away from you *from Serendipity Gems 9/91 via Rock Rustler's News 1/93*

Processing Turquoise: chalk turquoise is far too soft for use. It may be processed to harden as follows: Obtain some sodium silicate – also known as water glass – at the store. Mix with an equal amount of water and cover the turquoise with the solution in a glass jar. Place a lid on the container and let sit for 5 to 7 days. When the solution turns milky, it's time to remove the turquoise. Place them in the sun and let dry completely – about 5 days. Then place in the oven at 225 degrees for about an hour (if they're not dry, you may get an explosion. For safety, start at about 150 degrees and slowly increase the temperature.) Turn the oven off and let cool overnight without opening the oven. Watch out for sharp crystals formed around the jar top – they can cut you badly. *from Serendipity Gems 9/91 via Rock Rustler's News 1/93*

Notes concerning the upcoming show in River Falls.

The next show of the St. Croix Rockhounds will be 9 A.M. to 5 P.M. October 21 in River Falls, Wisconsin. The show will be held in the small mall adjoining the EconoFoods grocery store in River Falls. The grocery is easy to find. Come south on Route 35 from I-94. About 9 miles south of the Interstate, take the exit for "Main Street - downtown River Falls". Follow this road into town about a mile. The Econofoods and mall is on the right, about half way between the second and third traffic light. We will be coming in to the south side of the building (on the far side of the building away from the EconoFoods). I will be there by 7 AM to start the set-up. We will get the tables up and the electrical outlets set the night before. There are still table spaces available. I encourage people who haven't signed up to do so. Many people truly underestimate how interesting their stuff is. Your display doesn't have to be super-duper museum quality stuff. Just a display of your favorite rocks or some of the things you've done with your lapidary will be great. It's a lot of fun to do, and you get to meet a lot of nice people. If you can't do a table or don't want to stay all day, but still want to participate, you can spend a short stint at the club table. I'll have a sign-up available at the October club meeting. People with questions can call me at 715-425-3139 or 715-425-9544. -- Bill Cordua