

St. Croix Rockhounds
Doug Olson, Editor
211 Interlachen Way
Stillwater, MN 55082

First Class



October, 2002

Please send exchange bulletins to:

Doug Olson, Editor
211 Interlachen Way
Stillwater, MN 55082

October 15th - Is this month's meeting date.

The program is: **When Dinosaurs Ruled**



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, 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	Vic Martinsen	(715) 247-3700
Vice President	Dave Klinkhammer	(651) 776-8046
Secretary	Susan Dustin	(651) 430-3933
Treasurer	Elaine Martinsen	(715) 247-3700
Program Committee	Pete Rodewald	(715) 425-5561
	Bill Cordua	(715) 425-9544
	Victor Martinson	(715) 247-3700
Show Committee	Bill Cordua	(715) 425-9544
	LeRoy Betlach	(715) 425-5948
Refreshments	Freya Kask	(651) 777-6371
Librarian	Helen & LeRoy Betlach	(715) 425-5948
Historian	John Parsons	(651) 257-2724
Sunshine Committee	Marie Newlander MN	(651) 439-7809
	Esther Rodewald WI	(715) 425-5561
Tour Directors	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 15th - The Saint Croix Rockhounds meeting is to be held at the regular time and place. The program is a video: "When Dinosaurs Ruled". See you there.

COMING ATTRACTIONS

October 15th: St. Croix Rockhounds meeting!

October 25-27th: St. Croix Rockhound field trip to Keokuk, Iowa – see notice on page 6!!!

October 26-27: Blackhawk Gem & Mineral show in Davenport, IA Mississippi valley fair grounds 4H building. Call Kellie Moore at 563-445-3034 for information.

Nov 30-Dec 1st: Anoka County Gem and Mineral Club show at the Apache Plaza Shopping Center – 38th Ave NE in St. Anthony, MN

December 14-15: Faribo West Mall Show of the Anoka County Gem and Mineral Club

February 22-23rd, 2003: South Central Federation Show at Pasadena, TX

June 5-8, 2003: California/AFMS Federation Show in Ventura, CA

July 11-13th, 2003: Northwest Federation Show at Kennewick, WA

August 15-17th, 2003: Mid West Federation Show at Cottage Grove, MN

October 5-6th, 2003: Southeast Federation Show at Cottage Grove, MN

Minutes of the Saint Croix RockHounds May 21st, 2002

The meeting was called to order by the vice-president, Dave Klinkhammer. Twenty three members were present. The treasurer's report was read by Elaine Martinson and approved as read. Secretary's report from the April meeting was approved as stated in the newsletter.

Committee reports: Historian-
John Parsons: no report

Librarian-Helen Betlach: A wide variety of books are available for check-out.

Sunshine-Marie Newlander: no report

New Business: Our annual picnic will be on Aug. 17, and the place is undecided as yet. A flyer will be sent in August. A visitor, Arnie Myla was introduced. Our upcoming trip to Thunder Bay over Memorial Day weekend to look for amethyst and agate was discussed, and about 12 members are interested.

The meeting was adjourned at 7:45, and we had a spectacular program of Pete Rodewald's slides on various agates with detailed descriptions and country of origin.

Respectfully Submitted, Susan Dustin,
Secretary

Celebrate! October's birthstone is opal

To ancient Romans, the opal was a symbol of love and hope. During the Medieval period, the opal was supposed to maintain a strong heart, prevent fainting, protect against infection, and cleanse foul-smelling air. The stone, as in ancient times, was still regarded as a symbol of hope. But the opal's reputation changed in the mid-14th century. The Black Death swept across Europe, killing one quarter of its population. The gem was believed to be the cause of death. Australian aborigines see the opal as the devil that lurks in the ground, a half-serpent and half-human with flashes of wicked magic that lures men to destruction.

October birthdays:

LeRoy Betlach – 3rd
Floyd Kimball – 10th
Vi D' Angelo – 26th

October Anniversaries:

John and Sandy Parsons – 11th

Minutes of the Saint Croix RockHounds September 17th, 2002

The first meeting of our new season was called to order by President, Vic Martinsen, at 7:20. The Treasurer's report was approved as read by Elaine Martinsen. Secretary's report from the May meeting was approved as read.

Committees: Historian-John Parsons-no report

Librarian-Helen Betlach brought several books and urged members to check them out.

Sunshine-Marie Newlander-no report

Refreshment-Freya Kask-

October's refreshments will be brought by Jeanne Blom and Helen Betlach

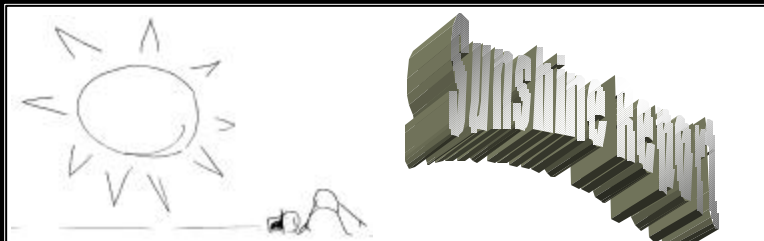
Show-Bill Cordua and LeRoy Betlach: The Spring show will be on March 15 with March 22 as a back up date. It probably will be held at the same location as last year.

Program-Pete Rodewald announced that our Oct. program will be a video titled "When Dinosaurs Ruled."

New Business: We'll have a Fall field trip to Keokuk, Iowa, to look for geodes. The date will probably be the weekend of Oct. 25. A sign up sheet was passed.

The meeting was adjourned at 7:35, and our annual Silent Auction and social time with refreshments followed.

Respectfully Submitted, Susan Dustin, Secretary



No news from Marie Newlander. If you have news – good or bad - please call Marie at (651) 439-7809.

Cave Spar

Travelers to Jewel Cave, near Custer South Dakota find them decorated not with the "normal" cave formations of stalactites and stalagmites but with abundant, well-formed, sparkling calcite crystals. These are usually several inches in diameter, and can get up to 10 inches long. Visiting this cave gives people an idea of what it would be like to walk around in a geode or vuggy vein. These are examples of cave "spar".

What is cave spar and how does it form? Cave spar is any relatively clear cave mineral with large, easy to see crystal faces. This is usually calcite or gypsum, but may be quartz, fluorite, barite, halite, or niter. There are several ways in which cave spar may form, all involving precipitation from water. Subaerial spar forms on the floors, walls and ceilings of caves above the water table. This is formed by water seeping into any type of opening and depositing its dissolved load as the water evaporates or degasses. Pool spar forms in lakes and ponds in caves. Phreatic spar forms in water-filled cavities below the water table. The growth of spar rather than other cave formations requires the following: a barely saturated solution left in a quiet stable environment for an extended period of time. Subaerial spar and pool spar crystals tend to be smaller, as stable conditions may be short-lived in those environments and the degree of water saturation gets too high. Phreatic spar has the best combinations of these conditions, so forms most of the large spar seen in caves.

Calcite is most frequently encountered as cave spar, and some of these crystals can be truly enormous. In a cave in Romania, calcite spar crystals are known with a length of 30 inches and an estimated mass of about 65 lbs. The record, however goes to Chicly Bowl Cave in Arkansas, where a calcite spar crystal has been measured at 157 cm long (about 5 feet). This narrowly noses out a 150 cm. long spar crystal in Cupp-Coutunn Cave in Turkmenistan.

The other common cave spar mineral is gypsum ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$), which takes the record for length. Its formation requires the presence of sulfur, which can enter the cave system in several ways. One way is from the breakdown of minerals such as anhydrite (CaSO_4). Anhydrite is often a component of limestones deposited from sea water. Also, the sulfur may come from the breakdown of metal sulfides left by hydrothermal veins. This is one reason why some of the most spectacular finds of gypsum cave spar is in caves intersected in commercial mining operations. The sulfur released from altering sulfides is oxidized to sulfate, which, when combined with lime to precipitate as gypsum.

A classic location for gypsum spar is the Cave of Swords near Naica, Mexico. Here a cave interested by mining was filled with bladed gypsum up to 2 meters long (about 6.5 feet). A reconstruction of part of the deposit has long been on display in the Smithsonian. In December 1999 collectors broke into a large cavity in an old lead-zinc mine in Almeria Province of Spain. They encountered a gypsum-lined vug capable of holding 10 people. An even more spectacular example of spar is the recent discovery, again in Naica, Mexico of euhedral gypsum crystals 50 feet long in a cavity whose depths have not yet been explored. The largest crystals likely weigh over 20 tons. Investigation of this extensive pocket is hampered by the 150 degree F temperatures and 100% relative humidity. It is hoped that these spectacular examples of cave spar will be saved for posterity.

Bill Cordua, U. of Wisconsin - River Falls

References:

Hill, Carol and Paolo Forti, 1997, Cave Minerals of the World, second ed., National Speleological Society, 463 pp.

Jones, Bob, 2001, "First look at a Cave of Dreams", Rock and Gem, v. 31, #2, p. 20-24.

Voynick, Steve and Dr. J. Garcia-Guinea, 2001, "Inside the World's Biggest Geode", Rock and Gem, v. 31, #5, p. 20-24



A Few Words About Jet by Lil Keck

Have you ever heard of “Jet?” It’s an organic material which, of course, is jet black in color.

It is fossilized wood from the English “Monkey Puzzle Tree.” It grew during the Jurassic Period. Trees fell into the water and then became fossilized.

It is a lightweight material with an average specific gravity of 1.18. It can be carved or cut, ground and polished and will be a glossy, deep black. It carves easily, but polishing jet creates dust and can cause a very dirty atmosphere in a workshop. In the Victorian era, workshops were small, dim and dusty. Some blew up when men smoked and sparks ignited the black dust.

The best specimens are found a few miles along the English coast in Yorkshire near the town of Whitby. Although this material can be found in other areas, Whitby jet is the hardest, being 3.5-4 on the Moh’s scale. In north Yorkshire, jet can be dug from the cliffs.

Historically, the Jet Age started over 4,000 years ago and achieved a boom in the 1800’s. The Victorian pieces were very large and chunky and probably would not be popular today.

Some “jet jewelers” use dentist-grinding tools, polish with jeweler’s rouge, and use aluminum polish to restore gloss to the pieces. Strangely, even walrus hide was used in those days of polishing.

There are only a few people who still produce and sell jet pieces. For the most part they are found in England. *Original source: the Opal 2/02 from an article entitled “Whitby Jet” by Sazann Thompson in Jewelry Crafts magazine via Chicago Pick and Dop Stick via the Trilobite 6/02*

Did you know there are Gemstones of the Hour???

from Agate Picker 5/02

<u>Gem</u>	<u>Hour</u>
Morion	1 am
Hematite	2
Malachite	3
Lapis lazuli	4
Turquoise	5
Tourmaline	6
Chrysolite	7
Amethyst	8
Kunzite	9
Sapphire	10
Garnet	11
Diamond	12 noon
Jacinth	1 pm
Emerald	2
Beryl	3
Topaz	4
Ruby	5
Opal	6
Sardonyx	7
Chalcedony	8
Jade	9
Jasper	10
Loadstone	11
Onyx	12

Correspondence of Gems to Metals and Planets

from Gem Magic by Cornelia M. Parkinson via Agate Picker 5/02

<u>Planet</u>	<u>Metal</u>	<u>Gemstones</u>
Sun	Gold	Diamond, ruby, chrysolite, hyacinth, opal
Moon	Silver	Emerald, opal, aquamarine, moonstone
Mercury	Mercury	Topaz, chrysolite, carnelian, agate, emerald, opal, turquoise, bloodstone
Venus	Copper	Light blue sapphire, agate, white pearl, chrysolite, coral, emerald, turquoise
Mars	Iron	Ruby, diamond, jasper, topaz
Jupiter	Zinc	Amethyst, turquoise, dark blue sapphire, jacinth, bloodstone
Saturn	Lead	Onyx, black pearl, chalcedony, topaz
Uranus	Platinum	Amber, amethyst
Neptune	Aluminum	Topaz and all iridescent stones

Copper Bracelets?: Is it true that copper bracelets relieve arthritis? This folk remedy has been in disrepute for several years, but now researchers have discovered there may be something to it. Copper, they have found, reacts with the skin chemicals to produce an anesthetic called “ethylene” which can be absorbed into the body. *Ozark Earth Science New via the Post Rock 5/02 via the Drift 8/02 via Achates 10/02*

Tips for Beaders: Silk thread is very strong and is great for stringing but it lacks abrasion resistance. Nylon thread has abrasion resistance, but is not as strong as silk and stretches with the tension required for beading. The solution: Use silk for non-abrasive materials such as pearls, turquoise, mother of pearl, and lapis. Use nylon for abrasive materials such as onyx, metal beads, amethyst, and rose quartz.

To eliminate stretching after you have carefully knotted a strand with nylon, suspend the cord on a doorknob (several loops are okay), then hang a pair of pliers from the loops and leave overnight. The nylon is now pre-stretched and will not become loose after being strung.

Soaping or waxing the thread keeps it from tangling. Placing a moistened paper towel on your flat surface while working is helpful. To remove unwanted beads from a row, break them with a pair of all-purpose pliers. *from the Mountain Gem 4/97 via Wasatch Gem Society Pegmatite 2/97 via Pebble Pusher 4/01 via Achates 8/02*

Find a Whetstone: Next time you find a deposit of chert, bring home a solid piece and slice it. You will have the finest whetstone for sharpening knives that you could possibly ask for. *from Al Cowan CM Nickel Basin Rockhound via Northwest Newsletter 02/03 via Calgary Lapidary Journal 2/99 via Surrey Rockhoulder 2/02 via Chip & Lick 05/02 via Achates 7/02*

Why men are not secretaries: Husband’s note on refrigerator to his wife: “Someone from the Gyna college called. They said Pabst beer is normal.” *from the Trilobite 6/02*

Need a Dopstick?: Use a split wooden clothespin. It has a large handle to grip, a flat area for your stone, and the slot can be slipped over the edge of a box to support the stone upright. *from the Trilobite 6/02*

When working with Malachite: saw about 10 degrees away from directly parallel to the grain. This way, when you are done with the stone you will get a bulls-eye effect. Malachite is a fairly soft stone, try to cut the slab a little thicker than other material. When grinding, always wear a breathing mask. This is a toxic material and can make you very ill. After grinding, sand first on a new 600 sanding belt. For polishing, on hard felt is recommended. Give the stone a little extra time and polish will come up better. *from Rockroller via the Gemrock via the Trilobite 6/02*

St Croix Rock Hounds Field Trip to Keokuk, Iowa October 25-26-27

Sheffler’s Geode Mine or other areas we find out about.

The Rock meeting is October 15th. We will discuss other details and give out maps at the meeting.

We will stay at the Econo Lodge, 3764 Main St., Keokuk, Iowa – (319) 524-3252

It is about a 6 hour drive.

If any one has any other ideas call Victor – RSVP (715) 247-3700