

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



November, 2003

First Class

Please send exchange bulletins to:

Doug Olson, Editor
211 Interlachen Way
Stillwater, MN 55082

November 18th - Is this month's meeting date.

The program is: **Fluorescent Minerals**

(this is not a typo, October's meeting was on fluorescent agates).



St. Croix Rockhound's

LEAVERITE NEWS

Vol. 28, Issue 8; November, 2003

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	Peter 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!

November 18th: The St. Croix Rockhounds club meeting at the Stonebridge Elementary School in Stillwater, MN starting at 7:15 pm. The program will be on Fluorescent Minerals. Refreshments are potluck.

COMING ATTRACTIONS.

November 2003: Hinshaw Rock 'n Gems grand opening, 1232 South County Road 650 West, French Lick, IN. Phone: 812-936-7255. Open from noon- 6pm seven days a week.

November 22-23rd: Madison Gem & Mineral Club Show at Alliant Energy Center Way. Call Nevin Frank 608-251-2601 or e-mail burniescrock@earthlink.net for information

December 9th: St. Croix Rockhounds special meeting at Old Country buffet at 6 pm

December 13-14th: Anoka County Gem & Mineral Club Faribo West Mall Show in Faribault, MN

February 28-29th: Anoka County Gem & Mineral Club show at the Har Mar Mall

April 3rd: St Croix Rockhounds show at the Valley Creek Mall

April 23-25th: 2004 Midwest Federation Convention and Show in Cedar Rapids IA. See www.angelfire.com/ia3/cvrms for information



Minutes of the Saint Croix RockHounds

October 21st, 2003

The meeting was called to order by President, Vic Martinsen at 7:15. The **Treasurer's report** was approved as read by Elaine Martinsen.

Minutes from the September meeting were approved as published in the Leaverite News.

Committee Reports:

Library-Helen Betlach continues to invite members to contact her with requests, and she'll bring the books/journals to the next meeting.

Program-Next month's program will cover the topic of fluorescent minerals and will be presented by Pete Rodewald.

Refreshments-Thanks to Susan Dustin and Elaine Martinsen for bringing snacks to this meeting. For the November meeting all members are invited to bring a snack item for a "potluck".

Show-Bill Cordua reported that the date has been set for April 3, 2004, and ads have been inserted in two journals.

New Business- Members gave input on a Midwest Federation survey that was sent to the President.

We also decided to have our annual Christmas party again be at Old Country Buffet in Maplewood on Dec. 9 at 6:00 if that date is available. Freya Kask will make the arrangements.

The meeting was adjourned at 7:45 pm.

Respectfully submitted,

Susan Dustin, Secretary

X-mas Party

December 9th: 6pm at the old Country Buffet in Maplewood. NOTE: this will be the St. Croix Rockhounds club meeting for December.



Celebrate! November's birthstone is Topaz.

In ancient lore, it could be used to control heat. It was said to have the power to cool boiling water, as well as excessive anger. As medication, topaz was used to cure fever.

During the Middle Ages, the topaz was used mostly by royalty and clergy. A 13th century belief held that a topaz engraved with a falcon helped its wearer cultivate the goodwill of kings, princes and magnates.

Topaz was once thought to strengthen the mind, increase wisdom, and prevent mental disorders. It was thought to guard against sudden death. Powdered topaz added to wine was used to prevent asthma and insomnia. A cure for weak vision called for immersing the stone in wine for three days and nights, then rubbing the liquid on the eyes.

November birthdays:

Mike Frankenburg: 16th

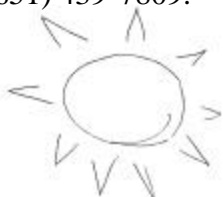
November Anniversaries:

None known

Avis Klinkhammer is recovering from by-pass surgery. Marie Newlander's daughter was in the hospital with a lung problem and is doing better.

We wish them well.

If you have news – good or bad - please call Marie at (651) 439-7809.



[In last month's article on types of fluorescence, one type was neglected as pointed out by Pete Rodewald in the following article. -ed.]

Tenebrescence by *Pete Rodewald*

The phenomenon is presented in a select few minerals. Specifically and notably in the sodalite subspecies: **hackmanite** and **tugtupite**. When the radiance of shortwave ultraviolet light is emitted upon them, they, in 60 seconds or less, may change from white normalcy to deep red-brown under daylight. Then just as quickly revert back to white under sunlight (or incandescent light).

The most notable occurrence of these sodalite minerals is from Kvanefjeld, Ilimaussaq mining complex in Greenland. One of these, tugtupite, is quite rare, hence relatively pricey to purchase. Both will be demonstrated at the next St Croix rockhounds meeting in November.

They owe their fluorescent and tenebrescent capabilities to disulphide (S_2) which is the activator of this astonishing color alteration.

Tenebrescence can be cycled repeatedly, indefinitely. The magnitude of these observances is directly related to the ultraviolet intensity of the lamp source utilized. Even more interestingly, longwave UV provides brighter fluorescence but no tenebrescence is seen.

Reference: "Ultraviolet Light and Fluorescent Minerals" by Thomas S. White, Sterling Gleason, Richard C. Bostwick, and Earl R. Verbeek.

Fluorescent Minerals Websites:

<http://mineral.galleries.com/minerals/fluoresc.htm>

<http://www.users.interport.net/~kenx/fms.txt>

<http://www.users.interport.net/~kenx/>

<http://www.swcp.com/~tasaminlinks.html#Museums>

<http://www.mjt.nu/mineral.htm>

The Rockhound & Lapidary Hall of Fame

from Carolyn Weinberger

Do you know about the National Rockhound & Lapidary Hall of Fame? It's housed in Murdo, South Dakota within the Pioneer Auto Museum and it's a very special place.

Begun in 1987 by June Culp Zeitner, one of our hobby's "national treasures", the Hall of Fame recognizes individuals who have made major contributions to the hobby in the fields of lapidary, minerals, fossils, education, and jewelry. There is also a category for honoring deceased individuals. Six people are inducted into the Hall each year and are chosen from nominations received from individuals and clubs throughout the US.

Those chosen for inclusion in the Hall of Fame have their photograph and a brief biography placed on a wall in the room which is shared with a portion of the Zeitner collection of gems, minerals and fossils. Some of the inductees have also donated examples of their work to the museum and these are displayed in a showcase opposite the photographs. It's a very impressive display!

Past inductees include Jay Lininger, publisher of Matrix Magazine, Fred Schaefermeyer, an AFMS past president, Olive Colhour (she made those wonderful gemstone pictures), Art Grant, Henry Graves, Louellen Montgomery, Dorothy & Glenn Lee, John Sinkankas, Harold & Erica Van Pelt, Bob Jones and Paul Desautels.

Two of the 2002 inductees are Dr. Steven Chamberlain of Syracuse University, and Helen Serras-Herman, renowned glyptographer. The remainder of the inductees will be announced in an upcoming fall issue of Lapidary Journal Magazine.

Do you know someone who you think should be recognized by the Rockhound Hall of Fame? Official nomination forms will be sent to your club shortly by Lapidary Journal, but you don't need an official form to nominate someone. Write the name, address, club and federation affiliation (if there is one), phone number and e-mail of the person you wish to nominate on a piece of paper. Then tell as fully as you can why this person should be considered for election. Write your reason in a narrative style. Be sure to include the accomplishments of the individual, honors received if you know them. Be as complete as you can.

Nominations should be mailed to June Zeitner at the address shown on the nomination form your club receives. Or, you can mail them to the AFMS Editor and they will be forwarded to June. *from the AFMS Newsletter 09/03*

Long-ago Extinction Linked to Drop in Oxygen

by Richard L. Hill, *Portland Oregonian* via *St Paul Pioneer Gazette*
September 14, 2003

Researchers taking the pulse of Earth's worst mass extinction 250 million years ago say they have diagnosed the ailment that doomed most animals: altitude sickness.

A drop in oxygen and a rise in carbon dioxide wiped out invertebrates that weren't biologically equipped to deal with the atmospheric change, says Gregory J. Retallack, a professor of geological sciences at the University of Oregon.

"They suffered from mountain sickness, which is a nasty way to go," said Retallack, who has experienced it himself in high altitudes. He said the animals at sea level found themselves with a shortage of oxygen comparable to that found at elevations of about 16,000 feet today.

Retallack is a leading researcher into the die-off, which annihilated about 90 percent of marine species and 70 percent of land vertebrates. Known as the Permian-Triassic extinction, it was a key event in Earth's history. It opened the door to the age of dinosaurs, which went extinct themselves 135 million years later.

Retallack, along with Roger M. H. Smith, curator of geology at the South African Museum in Capetown, South Africa, and Peter D. Ward, a University of Washington paleontologist, report their findings in the September issue of the *Geological Society of America Bulletin*.

The scientists, who conducted their studying the rich

fossil beds of South Africa's Karoo Basin, report that the mammal-like reptiles that survived had short snouts, barrel chests and other characteristics of animals that live in the rarified air of high altitudes. Some also have been found to be burrowing animals, Retallack said.

"In a burrowing environment, you're living in your own carbon dioxide quite a bit, so I think this burrowing habitat pre-adapted them to this atmospheric crises that came along."

A specialist in fossil soils, Retallack took samples of ancient sediment found at the boundary between the Permian and Triassic periods from the Karoo Basin. Studies at his University of Oregon lab indicated an abrupt, but not dramatic, ecosystem shift that changed the dry region to a semiarid one.

Exactly what triggered the planet's life crisis is a mystery.

The lethal chain of environment-altering events could have been launched by an asteroid hitting the planet; massive flows of molten rock in Siberia that pumped huge amounts of carbon dioxide into the air; an enormous, explosive burp of methane released from the deep ocean; or a combination of events.

Gregory Ryskin, a chemical engineer at Northwestern University, proposes in the September issue of the journal *Geology* that an explosive release of methane that had accumulated in stagnant ocean water could have doomed much of the planet's life. The eruption would have brought oxygen-free water to the surface that would have killed marine life, with extinctions on land caused by explosions and fires following the release of the methane into the air.

Tracks From a Primordial Sea are Found in Canada

by William J. Broad, *New York Times* 06/02

Scientists investigating an abandoned quarry in Canada have found what appear to be the oldest known footprints of terrestrial creatures – footlong critters resembling modern bugs that crawled from the sea onto land and left tracks in sandy dunes.

The sandstone is 480 million to 500 million years old. Scientists believe the discovery region – just north of Lake Ontario outside Kingston, Ontario – was a sandy beach on a primordial sea.

The find, the scientists say, pushes back the colonization of land by about 40 million years and puts it in or near the late Cambrian period, when the seas were starting to boil with large creatures.

The tracks were saved from oblivion when quarry crews shunned the sandstone as unsuitable for commercial use.

What kind of creatures made the marks? The scientists suspect they might have been euthycarcinoids – rare fossil organisms whose segmented bodies included protective outer shells and long legs. *via Loess Bulletin* 6/02 *via Pebble Pusher* 11/02
via Achates 9/03

Stolen Gems *St Croix Rockhounds Leaverite News*

When polishing hard to reach places with your flex shaft, take a Q-tip, cut it in half, insert it in the hand piece, and charge it with polishing compound. The cotton ends will produce a very high polish and will last an amazingly long time. *from MWF Newsletter 5/03 via Achates 5/03 via Agate Picker 5/03*

If you are running into difficulty getting a good polish on turquoise, use a piece of organdy on the wheel. It seems to be more effective than felt. *from MWF Newsletter 5/03 via Achates 5/03 via Agate Picker 5/03*

Do you know that at military funerals, the 21-gun salute stands for the sum of the numbers in the year 1776? *from Arlene Beem OFN publication via Rock Chips 5/03*

Do you know the difference between a fossil limb section and a limb cast? Some call a specimen by either name, not realizing there is a difference.

A limb cast occurs when a buried limb has decayed and the resulting void was filled with agate or some other material. The cast is in the form of the original limb, but no cell or ring patterns have been preserved.

A fossil limb section is a portion of petrified wood. As the wood decayed, it was gradually and completely replaced by mineral deposits, cell by cell. Thus, part of the wood structure – cells & rings – has been preserved. *unknown author from The Petrified Digest 6/99 via Quarry Quips via Agate Picker 10/03*

Cutting Geodes in the right place can be tricky. Try rolling the geode on a flat floor several times and mark the “up” side each time. Then cut on a plane parallel with the floor. Crystal growth inside the geode is probably most developed at the top and bottom of its resting position. *unknown author from Toledo Bend Gems 1/2002 via Quarry Quips via Agate Picker 10/03*

EVER WONDER~~~~~

Why the sun lightens our hair, but darkens our skin?

Why women can't put on mascara with their mouth closed?

Why don't you ever see the headline “Psychic Wins Lottery”?

Why is “abbreviated” such a long word?

Why is it that doctors call what they do “practice”?

Why is it that to stop Windows 98, you have to click on “Start”?

Why is lemon juice made with artificial flavor, and dish washing liquid made with real lemons?

from Achates 9/03

More Tumbling Tips *by Don Shurtz* Although my tumbled rocks looked OK after the polish stage, I was not pleased with the results I was getting with the clean and burnish stage. I had been using only Ivory Snow Flakes in the final run, so as an experiment, I added a dollop of car wax. The rocks came out cleaner, and had a really bright finish. I have tried this on several batches, and it has helped every time. For the record, I used about two teaspoons of Turtle Car Wax, cream, not liquid, in my 5 pound tumbler. *from Golden Spike News 5/03 via Rock Chips 6/03*

Treat wood dopsticks with a light coat of shellac. This prevents wood from absorbing water, which causes wood to swell and eventually crack the dop wax, thus loosening the stone. *via Breccia, via Tektite via Rock Chips 6/03*