

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



October 2009

First Class

Please send exchange bulletins to:

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Stillwater, MN 55082

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a presentation by Bill
Rusterholz about his trip to
Germany.



St. Croix Rockhound's
LEAVERITE NEWS

Vol. 34, Issue 8; October, 2009

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	Victor Martinsen	(715) 247-3700
Vice President	Ron Lewis	(715) 246-5118
Secretary	Bill & Thomas Fernholz	(651) 430-9039
Treasurer	Carol Jensen	(715) 483-1047
Program Committee	Bill Cordua	(715) 425-9544
	Victor Martinsen	(715) 247-3700
Show Committee	Bill Cordua	(715) 425-9544
Refreshments	Freya Kask	(651) 777-6371
Librarian	June Young	(651) 429-3887
Historian		
Sunshine Committee	Marie Newlander MN	(651) 439-7809
Tour Director	Susan Dustin	(651) 430-3933
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 20th : St. Croix Rockhounds club meeting will be held at Stonebridge Elementary School in Stillwater MN at 7:15 pm. The program will be a presentation by Bill Rusterholz about his trip to Germany.

COMING ATTRACTIONS

October 17-18th: Minnesota Mineral Club's annual show; National Guard Training & Community Center, 8180 Belden Blvd.; Sat 10-5, Sun 10-4; Contact: Sandy Fuller, 651-459-0343, rockbiz8@cs.com

October 20th: St Croix Rockhounds club meeting at Stonebridge Elementary School in Stillwater, MN at 7:15pm

October 3-4th: Jefferson WI - Rock River Valley Geological Society's Annual Show; Jefferson County Fair Park, 503 N. Jackson; Sat. 9-5, Sun. 10-4; CONTACT: Robert Schweitzer, W. 4240 Hwy. 18, Jefferson, WI 53549, ywses@idc.net.

November 17th: St Croix Rockhounds club meeting at Stonebridge Elementary School in Stillwater, MN at 7:15pm

November 21-22nd: Rosedale, MN - Anoka County Gem & Mineral Club's Sales Show; Har Mar Mall, Snelling & Co. Rd. B; Sat. 10-6, Sun. 12-5; CONTACT: Martha Miss, 8445 Grange Blvd., Cottage Grove, MN 55016, (651) 459-0343, rockbiz8@cs.com.

Minutes of the St Croix Rockhounds September 15th, 2009

Vic Martinsen, president presides.

Minutes were approved as published in the Leaverite News.

Treasurer's report was approved as given: beginning balance totalled \$1300.95. Last month lunch donations were \$6.50. Interest was \$0.43 and room rental cost \$169. Ending balance is \$1038.94.

Motion was passed to donate money for a book to be given Peter Rodewald.

Motion was passed to cover \$10 shipping limit for rocks to be given to Oklahoma youth for his Minnesota collection.

Lin's wife e-mailed to tell us that there is a memorial brick in the Woodbury Veteran's Memorial Garden.

7:45: Meeting was adjourned for the Silent Auction program.

Guest welcomed: JoLene Ja-Sun from River Falls.

Minutes submitted by Bill Fernholz, secretary.

Pete Rodewald is having an auction of his worldly goods Saturday the 24th of October, 2009

The auction will be held at his farm:

N7604 County Qq Rd
River Falls, WI 54022

Rockhound related items include: display cases (corner or square shelving); 24 Inch rock saw; vibratory flat lap; small vibratory tumbler; 3 hammers, 2 chisels, 2 hoe-picks; ~5# bags of grit/polishing; power washer, snow blower, lots of tools.

Mike Carlson and a couple of guys went down and gave Pete the book a couple of weeks ago for which the club had donated some money.

Longtime St Croix Rockhounds club member David Klinkhammer has died recently. Our sympathy to his family and friends.

Our condolences also to Brad Bonse whose mother died recently.

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



Celebrate! October's birthstone is

opal: Opal has been called the Queen of Gems. Few descriptions are adequate to describe the finest opals: a white, snowy landscape dotted with fireflies of red, gold, blue, purple, and green; a black night streaked with rainbow lightning; the aurora borealis captured in stone.

Mysterious, elusive, varied, and delicate, opal has been treasured since ancient times for its unique properties and beauty.

Opal is a silicon oxide, and thus closely related to chalcedony. But while chalcedony is just silica, opal contains a variable amount of water in its structure. Opal is softer than quartz gems, about 5.5 to 6.5 on the Mohs scale, and is much more fragile and brittle than chalcedony. But what makes opal distinctive is its unique play of color, called "fire." There are four types of gem opal:

White opal is opaque, white material that looks much like porcelain. The colors appear as flashes, speckles, or sheets of rainbow colors. White opals are the kind most commonly seen in opal jewelry.

Black opal also contains fire, but the body color is dark gray or black. This accentuates the color play, producing a dramatic effect. Black opals are extremely rare and costly.

Water opal is transparent, colorless opal that contains brilliant flashes of color swimming within it.

Fire opal is transparent or translucent opal with an orange or red body color. It may or may not display fire. The term "fire opal" is frequently misused. Opal that has color play is called precious opal. The color play itself is called fire. Fire opals are simply reddish or orange opals, usually turbid, that may not have any fire!

October birthdays:

LeRoy Betlach – 3rd
Floyd Kimball – 10th

What determines an Opal's value?

Generally, boulder, matrix, assembled (doublets, triplets), man-made, and imitation opals are much less valuable than natural solid precious opal. Below are some factors that influence the price of natural precious opals.

1. Blind Angles: When an opal is rotated, if the color disappears at any angle, that angle is a blind angle. Many blind angles will depreciate the value of the opal no matter how bright the fire is from one particular angle. The worst blind angle is when the viewer is looking directly at the front of the opal.

2. Blind Spots: When an opal is stationary, the areas of the opal not displaying colors are blind spots. An opal with a smaller percentage of blind spots will generally be more valuable than one with a larger percentage. A valuable opal will have fire that covers most of the opal from all angles.

3. Brightness of Fire: The value of an opal goes up as the brightness of its fire increases.

4. Color Range: The kind of color the opal displays affects its value. Opals that display red fire are the most valuable. Opals that display blue-green fire are less valuable than those with red fire. Opals that only display blue fire are least valuable.

5. Fire Pattern: Opals with larger flakes of fire are more desirable than opals with smaller flakes.

6. Cutting Quality: Thicker opals will carry a premium because of increased durability. Regular shaped opals (oval) are more valuable than irregular shaped opals.

7. Background Color: White opals are the most common opals and typically less valuable than the rarer black opals. Black opals are the most sought after color.

from <http://www.gbjewelers.com/education/opals/opal-information.html> via Emerald Gems 10/07



The Whole “Opals-as-bad-luck” Myth *by - Douglas Touret*

Question: I heard that opals are very fragile and could break when manipulated; did bench jewelers invent the bad luck myth to avoid setting the opal?

Answer: Actually, believe it or not, the whole “opals-as-bad-luck” myth got its start about 300 years ago, when a “novelist” famous for the equivalent of dime-store romance novels (Sir Walter Scott) wrote a widely-read piece of rubbish (Anne of Gierstein).

Prior to that, as Pliny the Elder wrote, opals were seen as “the Queen of all gems, vastly superior to all others, because in Opal are the colors of all other stones.” (I’m paraphrasing Pliny, but that was the gist of it.) Anyhow, as the story of Anne develops, she’s an illegitimate child who’s unfortunately been marked for life, as a result of her philandering father’s ways, and subsequently becomes the recipient of a witch’s curse (like I said, great writing, here ...), through which she’s forced to wear a magical opal brooch from early childhood until adulthood. The opal, according to the book, had fire which mirrored Anne’s own mood swings, such that the opal glowed brightly when she was happy, but “shot out baleful sparks of colour” when she was angry or melancholy. (Aha ! Our plot thickens!)

...continued on next page

“Opals-as-bad-luck” cont..... Pivotal to the tale, Anne was specifically ordered never to allow holy water to come in contact with either her own body or that of the opal ... or else. As the story progressed, Anne was swept off her feet by a handsome prince, who asked for and received her hand in marriage. But, while at the altar, the priest accidentally sprinkled Holy Water on both Anne and her magical opal, which apparently shot out its “most baleful spark” ever, then went colorless! Suddenly, Anne passed out and collapsed, whereupon her groom and handmaidens carted her off to a side chamber to rest. When they return several minutes later, all that remained of either Anne or the Opal were her clothes and a small pile of ashes!

Like I said when I began the retelling of this “legend”, it’s pretty farfetched stuff, by today’s standards - a real Believe It Or Not story. Unfortunately, the ladies of the 17th century weren’t as well educated or worldly as those of today, so a great many of them took this book at face value, and the opal immediately fell out of favor.

Ironically, since this “tragic tale” became a bestseller at just about the same time as the original (comparatively, rather dull) European sources for precious opal played out, but before the Australian finds were discovered, there weren’t many reasons to argue the book’s point (other than its blatant stupidity). *from The Pegmatite 11/03 via Calgary Lapidary Journal 10/09*

Bones of the Gods *by Bryn Nelson of Newsday via Stoney Statements*

Fossils of prehistoric creatures may have been the seeds of ancient myths.

Long ago in a land of giants and heroes and gods and monster, brave Heracles rescued the King’s daughter Hesione, from the gaping jaws of the gruesome Monster of Troy. Sent as a sacrifice to appease the fearsome creature, Hesione fought back with rocks while Heracles’ arrows found their mark.

The heroics of mythic Heracles are chronicled on a Corinthian vase from the sixth century B. C. the earliest depiction of the Monster of Troy story and a prized artifact at Boston’s Museum of Fine Arts. But for years, art historians have deemed the interpretation of the sea monster woefully inadequate, amateurish even, not at all like the undulating bodies, piercing eyes and upturned snout of similar creatures rendered by the artist’s contemporaries. Instead, the hideous and curiously white head of the beast emerges from a cave or cliff; it’s hollow eyes and forward-leaning teeth giving it a ghastly countenance.

When classical folklorist Adrienne Mayor studied the vase, however, she saw something else entirely – something immediately familiar about the monster’s disembodied head and something historians had long overlooked.

“I had been looking at so many fossils from the coast of Troy, it just jumped out at me that it had to be a fossil skull,” she says. “They thought it was a poorly drawn sea monster, but actually it is a very well drawn fossil skull.”

A number of paleontologists agreed, and the vase is now the cover illustration for Mayor’s new book on the connections between mythology and early paleontology in Greece and Rome titled “The first Fossil Hunters.” The vase, Mayor argues, is most likely “the earliest artistic record of a vertebrate fossil discovery.”

Merging the fields of paleontology, which focuses on prehistoric life or archaeology (which concentrates on ancient peoples, and classical literature) Mayor’s research has uncovered striking correlations between modern fossil finds and many of the myths and folklore that sprang up in early Western civilization. Bolstered by evidence linking contemporary dig sites to the origins of monsters and heroes in ancient texts, Mayor theorized that these myths contain at their core, a surprisingly sophisticated attempt to explain bones of immense proportions.

“As a classical folklorist, I believe that legends about nature are usually based on something real,

Bones of the Gods can'teven if it is exaggerated or has elements of fantasy," Mayor says. "There is usually a core of truth, or they wouldn't be so widely told."

As much as we hated to leave, we took lunch and went to Lowe's Highport Marina to fill out the day. The area is all Duck Creek Formation and contains lots of ammonites of all sizes. The echinoids found here are *Holasters* and several types of *Macrasters*. I didn't see everyone's finds that day, but I am sure there were some nice ones. I know that Gary picked up an echinoid that appeared to be *Globator inaudita*; Mike got his long sought after *Trigonia clavigera*. I picked up a really nice *Holaster simplex* and a large but not perfect *Macraster elegans*.

At the close of the day, we all spruced up a bit and went across the dam into Oklahoma for our traditional dinner at Wendy's. To me, sitting around talking and laughing over dinner is simply a much anticipated part of the Texoma experience. I was sorry that some of the usual faces were missing from around the table that night.

Sunday morning most of us ate at the new and very close by I-Hop. (A new tradition?) We then went hunting by the dam. This Duck Creek Formation site has a wealth of fossils. There, a few areas where shark teeth can be found. There are a large number of small to medium sized ammonites to be found including Mortoniceras, Drakeoceras, Idiohamites and the truly large Eopachydicus. Though I have never found any of the large *Macrasters* here, there are quite a few of the small to moderate sized ones. There is so much area to collect in. The Doerzbachers had to leave to drive back to Tennessee and Rich back to East Texas. One by one everyone left. I stayed until five, partly because I'm hard headed and partly because this is one field trip I always hate to see end. To anyone who missed it, I can only say, "Don't miss it next year!"

Mayor, an unaffiliated researcher whose analyses of ancient natural history have appeared in a number of scholarly journals, first became interested in how people of Greek and Roman times viewed unfamiliar fossils when she traveled to the Greek Island of Samos in 1979. Her husband, Josh Ober, was compiling topographical histories of military sites in Greece at the time. Mayor, a free-lance editor and artist, drew the accompanying illustrations.

An obscure reference in an old tour book led them to the island, where they planned to view giant fossils dug up from a dry local streambed known as the "Elephants' Cemetery". Arriving at the island's harbor, they ducked into another museum displaying local archaeological finds, and Mayor was immediately intrigued by the ubiquitous bronze statues of griffins. The mythological beasts, with the bodies of lions but the beaks and wings of eagles, were said to guard the gold caches of Central Asia. To Mayor, however, the griffin statues resembled modern reconstruction of dinosaurs.

Suddenly overcome with curiosity about whether she would find evidence of the statues' inspiration in the island's paleontology museum, Mayor and her husband rented motorbikes and headed to the small bone room, located above a post office in the village of Mytilini.

Although the glass display cases revealed no trace of the griffin's origins, they presented colossal bones unearthed by farmers from the nearby fossil bed.

"It just struck me that ancient farmers must have dug these up and that they couldn't have just thrown these aside without coming up with some kind of explanation," Mayor says. "It was kind of an epiphany. That's where it struck me that you could put together and maybe come up with something."

The griffin statues and the huge bones of prehistoric beasts led Mayor to delve into the origins of the griffin legend and ancient accounts of the Samos fossils. Huge fossil beds on mainland Greece became widely known to scientists after 1839, when paleontologists converged on a dry creek bed near Athens that yielded scores of prehistoric species, including enormous elephants, three-toed horses, and "immense tortoises the size of a Volkswagen Beetle," Mayor says.

In 1885, paleontologist Charles Forsyth Mayor tracked down a similar fossil bed near Mytilini with the help of descriptive clues from the ancient Greek scribe Plutarch and directions from the village doctor.

Barnum Brown, a famous fossil hunter and former curator of the American Museum of Natural History in New York, later dug on Samos in the 1920s and brought back about 5,000 fossils. Fossils unearthed there and from nearby locales in Greece and Turkey include the 7 million to a million year old remains of huge animals such as mastodons, giant rhinoceroses and giant giraffes.

Long before the Aegean Sea encircled the island, a land corridor joined Europe, Asia and Africa, providing abundant grazing land for the prehistoric behemoths. The Samos fossil bed, one of the richest in Europe, contains the ancestors of animals now found on all three continents.

For millennia, fossils in the area have washed out of gullies during rainstorms, emerged from eroding hillsides and coastlines and appeared after earthquakes. More recently, farmers plowing their fields have made surprising finds and in some cases have come to rely on their new cash crop, the mysterious bones of huge beasts.

Mayor maintains that scholars of classical literature dismissed the ancient mention of these big bones as little more than poetic license.

“They just assumed that it was pure fantasy or fiction,” she says. Most scholars were unaware of modern fossil finds in the area, and paleontologists studying the bones were largely unaware of the local myths.

“I was kind of an outsider who put the two parts together,” she says. “But of course, I couldn’t do it without the help of both classicists and paleontologists.”

Desert Guardians

Where did the idea of the griffins come from? Aristeas, a seventh-century BC traveler, wrote of gold-seeking Scythians who fought creatures in Central Asia’s Gobi Desert that resembled “lions but with the beak and wings of an eagle.”

After consulting with paleontologists, Mayor linked the legend to the fossilized remains of Protoceratops; a beaked, lion-sized dinosaur whose fossilized bones litter the Gobi might well have been observed by ancient nomads. Similarly, several paleontologists told Mayor that the Monster of Troy might represent an artist’s interpretation of a fossil skull commonly found in the area, such as those of the giant giraffes of the Miocene Epoch. Another especially popular and widespread myth among the Greeks concerned a supposed battlefield of giants and gods in southern Greece, where the ancients discovered blackened bones jutting up from a scorched field named Megalopolis, which means “giant city.”

In reality, the bones had been blackened from the surrounding lignite, a soft, brownish-black coal. But according to the myth, Zeus sent lightning bolts to destroy the giants; an explanation that Mayor says wasn’t as far-fetched as it might appear.

“The myth is obviously based on a pretty good observation of nature,” she says. “If lightning does strike lignite and the conditions are right, it can actually burn for hundreds of years, contributing to the blackened earth and bones and even smoke emanating from the ground.” “It’s a pretty plausible theory that these were giants struck by lightning,” says Mayor.

Mayor’s original fieldwork has blossomed into a number of related research ventures, such as her recent collaboration with William Sarjeant, a professor of geology at the University of Saskatchewan. Sarjeant, whose interest in fossils ranges from tiny dinoflagellates to enormous dinosaurs helped Mayor assess the relationship between fossilized dinosaur footprints and folklore—including an analysis of fossil prints in Germany’s Rhine Valley and their potential influence on the popular local legend of Siegfried and the Dragon. Richard La Fleur, head of the department of classics at the University of Georgia, invited Mayor to submit a condensed version of her analysis to a journal he edits after hearing about her research through a newspaper article several months ago. “I really think she is on to something here,” La Fleur says. “She has me convinced.”

Stolen Gems *St Croix Rockhounds Leaverite News*

To remove fingerprints, oil or smudges from crystals of polished pieces, carry a small fluff of Lamb's wool when showing specimens or handling them. When you see a dulling film collecting, rub the stone briskly with the wool and instantly the polish returns. *from Serendipity Gems 09/91 via Hidden Gems 05/93*

A little graphite added and mixed with chrome oxide and applied to ordinary buffs makes a wonderful jade polishing agent. It also works on some hard to polish agate. *from Oregon Rockhound via Hidden Treasures 05/93*

Chrysocolla: if you have any chrysocolla and would like to bring out the blue and the green, also any copper material, put it in some full strength Purex for as long as it takes. This really works, and you will get a good color. Remember the hazard of mixing bleach with any acid. It releases a poisonous gas. Do this outside with the wind blowing away from you. *from Serendipity Gems 09/91 via Hidden Gems 05/93*

Tumbling abalone – abalone may be tumbled in very fine quartz sand. Put sand and abalone in barrel (amount determined by size of tumbler) with enough water to just cover and rotate for 1 or 2 days. Wash thoroughly and put in barrel with 2 ounces tripoli for each 6 pounds of shells. Tumble for 12 to 15 hours. Wash and dry thoroughly. Fill barrel half full with shells, then add sawdust from a hardwood for cushioning. Add polish of your choice at the ratio of 2 ounces to 6 pounds of shells. Run dry for 2 to 3 hours. Wash and admire. Caution: remember when tumbling abalone (or any shells) that they emit a poisonous gas. Release the gasses every day and do it outdoors. Do not inhale gas fumes from abalone. *from Serendipity Gems 04/90 via Hidden Gems 05/93*

Hunting fossils? A geology student asked the farmer if it would be ok to hunt fossils on the farm. Said the farmer, "I guess it will be ok so long as you don't shoot towards the house." *from Petrified Digest 06/05 via the Roadrunner 04/09 via Emerald gems 09/09*

Dopping: present your stone to the moving grinding wheel slowly and gently without bumping and as near to the horizontal center of the grinding wheel as possible. Placing the stone above the center of the wheel will cause tearing of the stone as you pull down and prevent good control of the stone as you grind. Below center tends to push your work away from the grinding wheel, creating bumping or chattering, and perhaps knocking your stone off the dop stick. *by Bill White from Hidden Treasures 11/93*

Talc Tips: In icy weather, rub talc on your automobile door seals to prevent the doors from frosting up. *from The Glacial Drifter, 9/9 via Pick and Pack 10/09*

- If you have problems with rabbits getting into your garden, spread a band of scented talcum powder around the garden border; they don't like the smell and will not cross the powder. It really works!
- Grease on upholstered furniture can be removed by sprinkling talcum powder over the mark. Let stand for 15 minutes or until grease is absorbed. Brush off the powder; repeat if necessary.
- Stop floor boards from squeaking by sprinkling liberal amounts of talcum powder over the area and cover with a cloth. Walk over the area repeatedly to work the powder into the cracks. Add more powder and repeat.
- To keep scissors from getting sticky when you are cutting a sticky surface, dust the blades with talcum powder before cutting.
- If your automobile engine is leaking oil and you can't find the source, try dusting the clean engine surfaces with talcum powder. The powder will absorb the oil, and you'll be able to follow the oil trail in the talc.