

THE BULLETIN OF THE COLORADO SPRINGS MINERALOGICAL SOCIETY Published Since 1960

An Ode to a Rock

By Kurt Lahmers

Colorado Springs Mineralogical Society / Pebble Pups/Junior Member Program

From a presidential mountain face, to the far reaches of outer space; lays boundless, amazing discoveries, as rocks yield their secrets in all countries.

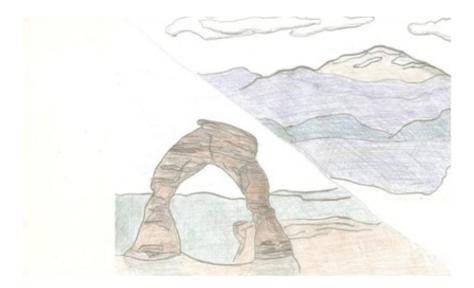
Some rocks can reach massive sizes, while others fit through needle eyes; some are shiny, and others are not. But all are remarkable, when put to thought

The sandstone arches in the Utah sun is a rock landscape that can't be outdone. The relentless, ever-changing weather brings rain, snow and ice altogether.

The granite peaks through Colorado Create a large elongated shadow show While they slowly erode, silently away but is unnoticeable in our daily fray

Through craters and volcanic plains along the orbit where the moon reigns, are fields of extraterrestrial moon stone that every geologists would love to own

Rocks are seemingly everywhere; over here and surely over there, From mountaintops to the forest floor— In outer space, and right outside the door.



September 2012 PICK&PACK

Volume 52 Number 07

CSMS is an incorporated nonprofit organization with these goals:

- To promote and disseminate knowledge of the earth sciences, especially as they relate to mineralogy, lapidary, and fossils.
- To encourage study, collection, and fashioning of minerals.
- To accomplish the same through social meetings, lectures, programs, displays, shows, and field trips.
- The Pick & Pack is published 10 times each year to assist and promote the above.

Proud Members of:

American Federation of Mineralogical Societies (AFMS) www.amfed.org

Rocky Mountain Federation of Mineralogical Societies (RMFMS) www.rmfms.org

Colorado Federation of Gem & Mineral Societies (CFGMS)

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September 201	2 CSMS Calendar
Tue., Sep 4—Fossil Group,	Thurs., Sep 6—Board Meeting,
7 p.m., Senior Center.	7 p.m., Senior Center.
Mike Nelson, Leader, csrock- guy@yahoo.com	
Tues., Sep 11— <i>Micromounts</i> , 7 p.m., Senior Center.	Thurs., Sep 20— <i>General Assembly</i> , Mike Nelson TBD
Dave Olsen, Leader,	7 p.m., Senior Center.
719.495.8720	6:30 p.m. to 7:15 p.m. Pebble Pups & Juniors. Steven Veatch, Leader, 719.748.5010
Thurs., Sep 27— <i>Crystal Group</i> , 7 p.m., Senior Center.	Sep, <i>Jewelry Group</i> , By appointment only. Please call, Bill Arnson, Leader, 719.749.2328 to schedule a
- Program TBD, Kerry	mutually agreeable time.
Burroughs, Leader, 719.210-6389 Faceting Group, 7 p.m., Senior	15610 Alta Plaza Cir., Peyton.
Center. Paul Berry, Leader,719.578.5466	
Sat., Sep— <i>Lapidary</i> —RSVP please. If you would like to cut stones, call Sharon Holte at 217.5683 for an appointment.	
Project Group—TBD—contact Ron "Yam" Yamiolkoski, yamofthew- est@gmail.com	Camera Club is looking for a leader and meeting place, date and time. Interested? Contact Roger Pittman.
For more information on any of the sub-groups, meetings, and other CSMS valuable information, go to our website, csms.us	The Senior Center is located at 1514 North Hancock in Colorado Springs.

October 201	2 CSMS Calendar
Tue., Oct 2—Fossil Group,	Thurs., Oct 4—Board Meeting,
7 p.m., Senior Center.	7 p.m., Senior Center.
Mike Nelson, Leader, csrock- guy@yahoo.com	
Tues., Oct 9—Micromounts,	Thurs., Oct 18— <i>General Assembly</i> , Pete Modreski – Colorado Dia-
7 p.m., Senior Center.	monds 7 p.m., Senior Center.
Dave Olsen, Leader, 719.495.8720	6:30 p.m. to 7:15 p.m. /
	Pebble Pups & Juniors. Steven Veatch, Leader, 719.748.5010
Sat., Oct 20-22—FieldTrip, YELLOW CAT/CISCO, UTAH &	Thurs., Oct 25— <i>Crystal Group</i> , 7 p.m., Senior Center.
GRAND JUNCTION MINERAL SHOW FIELD TRIP, Contact Marge Regel (719) 650-8148	- Program TBD, Kerry Burroughs, Leader, 719.210-6389
	Faceting Group, 7 p.m., Senior Center. Paul Berry, Leader, 719.578.5466
Sat., Oct— <i>Lapidary</i> —RSVP please. If you would like to cut stones, call Sharon Holte at 217.5683 for an appointment.	Oct, <i>Jewelry Group</i> , By appointment only. Please call, Bill Arnson, Leader, 719.749.2328 to schedule a mutually agreeable time.
	15610 Alta Plaza Cir., Peyton.
Project Group—TBD—contact Ron "Yam" Yamiolkoski, ya- mofthewest@gmail.com	Camera Club is looking for a leader and meeting place, date and time. Interested? Contact Roger Pittman.
For more information on any of the sub-groups, meetings, and other CSMS valuable informa- tion, go to our website, csms.us	The Senior Center is located at 1514 North Hancock in Colorado Springs.

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SECRETARY'S SPOT

by Jean Miller, CSMS

COLORADO SPRINGS MINERALOGICAL SOCIETY

COLORADO SPRINGS MINERALOGICAL SOCIETY

CSMS General Meeting 19 July 2012

Roger Pittman called the meeting to order at approximately 6 pm with the Pledge of Allegiance.

One guest, who is actually a returning member, has rejoined after 6 years. Welcome.

Renee Swanson and Allen Mashger made a motion and second to approve the June minutes as printed in the Pick and Pack.

For tonight's program leaders of the club subgroups set up displays show members what they do in their particular subgroup.

- Yam discussed the many field trips already scheduled this year. Field trips range in difficulty from an easy walk and walks suited for the more rugged among us. Yam asks members who have not yet led a field trip to learn how simple it really is and volunteer. See the CSMS website for field trip listings. See Yam for instruction and encouragement to be a leader.
- Sharon Holte is in charge of the lapidary subgroup. She offers 34 years of experience to beginners and experts to continue mastering this artistic activity. Call Sharon to arrange a time to visit her house for instruction and to use the club's equipment there.
- Kevin Witty introduced the crystal group. The crystal subgroup is dedicated to learning about all crystalline minerals. The crystal group will occasionally offer their own specially arranged field trips for the subgroup's members. The crystal subgroup meets on the fourth Thursday of each month (except summer) and will reconvene in late September. Meetings are held at the senior center.
- Jack Null runs the fossil study group with Mike Nelson. The fossil subgroup meets at the senior center the first Tuesday evening of each month. The fossil group also plans exclusive, action packed and exciting field trips, often with limits in number of participants. Join this subgroup to get the inside scoop on cool field trips.
- Tom Bovin presented for the micromount group. This group meets on the second Tuesday each month, with meetings recommencing in September. Tom recited the top ten reasons for practicing micromounting, including easier storage and lots of free stuff to be had from other micromounters. This secretary cannot remember if he listed that you get to play with expensive scientific instruments, which might be all the more fun if you don't have to buy your own fancy microscope.

Other Business:

Dave Olsen, leader of the micromount group, thanked all of the generous people who brought break-time goodies to-night.

Steven Veatch runs, well mostly walks, the Pebble Pubs group during the school year. He is very organized and gives kids a fun place to learn about some pretty sophisticated stuff. Steve will start a new program this school year with students from Helen Hunt Elementary School. His goal is to lead the students to earn a merit badge in this field. Steve will request that the students be granted complimentary CSMS membership to each student as this is a requirement for the merit badge sponsoring organizing.

Brad Paulson of WMMI and CSMS congratulated the club for producing the 2012 show. Mr. Paulson appreciates that the show and its displays provide rich opportunities to teach and learn about the mining industry, rocks, shiny crystals and the like. Mr. Paulson states that approximate 1,200 persons were in attendance.

The club financials regarding the show are not yet finalized. There are a few ps and qs and ones and twos waiting to be placed in their particular column.

The CSMS manned a booth at Spring Spree in Memorial Park, held on the weekend directly before our show. Although many persons stopped by and the Mining Museum distributed discount coupons it is unclear as of yet if this activity and its expenses were cost efficient. One club member reminded us that the show weekend was during the height of the Waldo Canyon fire and likely prevented many people from attending.

Kim Pachon and Body Pachon (sp.) have graciously volunteered to be Rock Fair show directors for 2013. Of note, Kiim Pachon also organizes the Woodland Park show, which allows us to benefit from her experience.

As a reminder, there will be no Pick & Pack during August.

The picnic proposal, that allows the Executive Board to be somewhat flexible in choosing dates, was read aloud for the 2nd time. The proposal was passed. This year's picnic will be held at the WMMI on August 18, 2012, at 11:30 am. The menu is "pot luck." Some people will bring items to sell and will tailgate during the event.

Don Bray of the Gold Prospectors' Club announced that the state gold panning competition will be held in Breckin-ridge, CO, in August.

The meeting concluded with the always fun door prizes given to lucky winners.

The meeting adjourned at approximately 8:45 pm.

Respectfully submitted by Jean Miller.

IF YOU DON'T KNOW WHERE YOU'RE GOING,

YOU'LL END UP SOMEPLACE ELSE

Mike Nelson: csrockguy@yahoo.com

"I have a dream" is perhaps an overused phrase, but never-the-less a most appropriate term for this **opinion piece**. My personal dream is reoccurring, similar to my "not studying for the math exam dream", but always appears after attendance at club or Federation meetings. I have named the dream YB and most time it is in living color and quite vivid – I can almost reach out and touch the characters. At other times of the year, between meetings, the dream is in black and white and often fuzzy. However, all of the YB dreams have a common denominator – I wake up before the ending without the answers. This action is not unlike the math dream – did I pass the test?

The YB dream is named after my favorite philosopher, Yogi Berra, who sums up my life journeys by stating: When you come to a fork in the road, take it (as well as the title quote). The dream, like most modern movies, has plots and subplots complete with a long list of stars and supporting characters. The stunts are quite mild, compared to current movies, and the scenery seems fairly benign – senior centers, meeting rooms, church basements, and PowerPoint presentations. The YB dream also has a G rating for there are no villains, no monsters, and no cursing, and only good people working hard to enjoy their hobby and teach others. However, even with the G rating, children would not understand the dream since it is full of political intrigue, an uncounted number of Board meetings, and unending discussions which rarely produce final resolutions – not unlike our city council meetings! In both instances I think of Ernest Hemingway who admonished us to never mistake motion for action.

There are two major plots in my YB dream. The first plot is best described as "will rock and mineral clubs, as we currently know them, survive for the next generation"? *Of course*, most members will answer. But I have serious reservations. I base my somewhat lack of confidence on a couple of reasoning points. Clubs of any sort are based upon a mutual interest of members in a subject—that is easy to understand. But clubs also depend upon a constant supply of new members as others "pass on" or drop out. After the Civil War the Grand Army of the Republic (GAR) had tens of thousands of members in the Union states but as members aged and "passed on" the GAR simply faded into obscurity. In the early 1900's literary societies and bands "was the big deal". How many community bands do you know about today? As World War II ended and our veterans (my father among them) came home to work and raise families they often remembered service to their country by joining the American Legion or Veterans of Foreign Wars. Today the Memorial Day service at my hometown local cemetery is marked by a few struggling Vietnam veterans trying to hold down the tradition. Younger vets mostly are not interested. And as a final example, in the more affluent 1950's-70's these same WWII vets populated fraternal organizations in great numbers; not so today.

So how does this entire banner about WWII vets relate to rock and mineral clubs? Well, it appears to me that many clubs are not replacing members who "pass on" or drop out. So to me, the question becomes "how do we (the clubs) attract a new cadre of members, but especially "younger" members"?

I certainly don't know the answers to this multifaceted question, and my opinion plus \$2.50 will buy you a small coffee at Starbucks and little else. But I want to give it a try and throw out some possibilities. And, this leads into my second plot of the YB dream---ideas flowing from members and shared with all—how to grow and improve the clubs, and by association, the Federation?

In one subplot part of the dream, members from all types of clubs in the Federation learn from each other, and at times, share resources and people. In the "learning from members" aspect I suggest the Federation construct a survey and request, well actually beg, each club to answer and offer advice. IMHO, the survey should focus on "what do clubs really want from the Federation, and what can clubs and members offer to each other"? Do we know the answer to the first part? I suspect most clubs want the insurance aspect, but what else? Are Federation meetings each year important for clubs? Could Federation meetings be held at other times of the year, for example the RMFMS holding a meeting at either the Tucson Show or the Denver Show? Would that sort of a venue attract more participants? How may the shows attract additional "judged" cases? Do members believe the judging rules are sort of like the biblical Old Testament—lots of laws with little room for imagination and innovation? Perhaps we need to be more cognizant of Albert Einstein's warning that not everything that can be counted counts and not everything that counts can be counted.

In the Utopia Federation the Pebble Pups are above average, the members are strong, and the Officers are good-looking (apologies to Garrison Keillor). The goals of the club subgroups are teaching and learning while the final product presented for review is personal satisfaction AND display in a meeting case. At any rate, I would like the Federation to fully understand what the clubs "want" from the mother organization, and in turn what could clubs offer to the Federation. Perhaps we could all learn!

I also believe that clubs could easily learn from each other if all club newsletters were available, in a timely manner, on the RMFMS web site. This would seem like an easy project; however, many newsletters are out of date, some just don't seem to be submitted, while others are considered "private" and only for the eyes of members. Personally I learn much, and get numerous ideas, from reading club newsletters. I feel as though I really

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PRESIDENT'S CORNER

by Roger Pittman, CSMS



We've had August off, at least from meetings. Our CSMS picnic was attended by about twenty-two members who all had a good time visiting. I saw many CSMS members at both the Woodland Park and Lake George shows which were the same weekend. I obtained the second piece of fossil wood ever in my life that I paid for (remember I'm a crystal guy) the first is wood replaced by copper and this is wood replaced by barite roses. Many years ago when I was heavily involved with the RMFMS, I saw a fossil wood case that had won first place and it contained a piece of wood replaced by barite roses. I've always thought that I would like to have one of those fossil wood specimens. This was the first time I had ever seen any for sale and the dealer had several.

I led a field trip to Leadville for the Pebble Pups and crystal group, that I barely remember as I was feeling under the weather but my wife says it was well attended. As for my other rock hounding, it mostly has been done at the local landscaping yards, obtaining five tons of glacial till erroneously sold as river rock that my wife and I have been replacing mulch with in an effort to enhance the defensible space around our house.

September brings the Denver Gem and Mineral show and many satellite shows that will keep me and most of you occupied for at least for a week. Mike Nelson is scheduled to speak to us about his summer adventures; hope to see you all there!

The End

Jewelry Tips By Brad Smith

PICKLEPROBLEMS

Dropping a hot item into the pickle after soldering causes a hiss that sends small droplets of the acid pickle into the air. This will rust your nearby tools and can't be all that good to breathe either. My solution is to use a coffee cup of water next to my solder block to quench the piece before dropping it in the pickle. Also, a hot pickle pot gives off fumes that bother me in my home workshop. I get around that by using my pickle cold. I mix it a little stronger than with a hot pot so that it works about as quickly. I keep it in a large-mouth peanut butter bottle and cap it off whenever I'm done using it.

MODIFY TOOLS FOR PRONG SETTING

When setting stones in a prong mount avoid slipping by grinding a groove in the face of your prong pusher or one jaw of your flat-nose pliers. Easiest way to cut the slot on the pusher is with a file, and the easiest way to cut the slot on your pliers is with a cutoff wheel in the Foredom.

USE A SPRAY BOTTLE

Those little spray bottles you can find at the drug store are great for firescale preventers and debubbling solutions. A quick firescale preventor is liquid flux, and a homemade debubbling solution is a little Dawn liquid in rubbing alcohol.

BROKEN DRILLS

Have you ever broken a drill bit off in a hole? Sometimes you can grab it with pliers, but other times the steel piece is below the surface in the hole. If this happens, you can usually dissolve the steel in a solution of alum. Alum is typically available from a food store or a drug store. Use about a teaspoon per cup of warm water. Submerge your piece so that the partially drilled hole is facing up to let the bubbles float free and not block the hole.

To be used only for non-profit. // brad@greenheart.com // See more BenchTips by Brad Smith / Santa Monica, CA

know the people in Tulsa since their wonderful newsletter is freely available. Someday I would like to visit their meeting.

Sharing field trips is another way to learn from member clubs. Some of this is taking place but how much—I don't know? Could additional sharing take place with notice on the Federation web site? Why not?

I would like to see club members volunteer for a speaker's bureau. The Federation web site could list these volunteers, and their chosen subjects, with an appropriate email address. Host clubs would likely need to pay travel expenses for visiting speakers but in a location like the Front Range here in Colorado, clubs are relatively close. This certainly might make the job of the club program chair an easier task!

I have always been fond of field trips and geology road logs. These trips need not be organized but members might be interested in understanding the geology along the route to the wedding of their second cousin's, twice removed, son. I would like to see the Federation have a hot link button on their web site relating to geology road logs of the various Federation states. Each of us could contribute as we came across web resources. The same goes for geology/mineralogy/fossil resources of a state. It would be nice if the Federation maintained a hot button site with a bibliography of resources. I want the Federation web site to be the "go-to" site for anyone, club member or not, interested in the geology (general term) of the RMFMS states.

I have an avid interest in land use policies of both federal and state governments. Unfortunately the rules of the federal government often change from state to state and certainly the individual states have their own rules. The Federation could become a clearing house for correct information (not opinions) about collecting activities in every RMFMS state. I have seen too many opinion pieces about collecting rights, or perceived non-rights, that often distort the correct collecting regulations. Every member should be concerned about collecting rights but members also need to accept some facts, i.e. vertebrate fossils and commercial collecting on public lands are off limits. Our energies need to concentrate on other possibilities, i.e. colleting on state "school sections". Perhaps we could learn from other clubs about how to work with federal and state land-managing agencies. Could clubs sponsor a "fill in the digging holes" Saturday, or a trash pickup day? Who knows what sort of possibilities might arise from these meetings. And don't forget to try and join a citizen's advisory committee sponsored by the BLM. If you do, or don't, like a particular piece of proposed legislation, contact the appropriate agency and/or your senator or congressman---in a non-confrontational manner. Perhaps the Federation could offer advice on writing appropriate letters.

That brings me back to the effort of attracting new club members, especially those somewhat "younger" (whatever that means) than I am! Are there clubs out there in the Federation that are successful in this endeavor? We need to hear from you. Share your ideas. Are club meetings at least somewhat vibrant and partially aimed towards "younger" members? What about timing of meetings---nights, weekends? I don't profess to know the answers. The Lake George (CO) club meets on Saturdays and in the summer their meetings are quite short and members head out on a field trip. However, that idea may not work for all clubs. And perhaps rock and mineral clubs will always be populated by "mature" citizens who have a more established life?

I also believe the Federation, and the clubs, must move (probably rapidly) into the electronic age. Facebook© seems the preferred choice of social media and I encourage the Federation and especially CSMS to explore opportunities. Blogs are another possibility, but perhaps not on the same "cutting edge" as Facebook. YouTube© might be a place to download field trip highlights. Some social media outlets are good places to advertise clubs activities, keep members up-to-date, etc. However, all sites are places to advertise your club, and the Federation, to prospective members. I have a small blog, nothing special, at www.csmsgeologypost.blogspot.com. It has a couple of purposes—to allow me to comment, in a fun sort of way, on all things geological, and to help publicize the Colorado Springs Mineralogical Society. A Federation blog could be used to "spotlight" activities of both the RMFMS and the member clubs.

Another possibility is to have Federation clubs work with "geology clubs" at local colleges and universities, and perhaps even high schools—possibly a great source of energetic new members. Invite geology club members on field trips, and certainly extend personal invitations to local meetings and subgroups.

And the list goes on and on, but most of all the RMFMS needs to hear from you, the Federation clubs and members. I believe this action could be accomplished by the use of a Federation-sponsored survey allowing room for appropriate comments.

The RMFMS has evolved into an organization working for the local clubs and their many members. What brings us all together is an embracement of the commonalities of our hobby---our love of lapidary, collecting, fossils, and all things geological. All organizations have their strengths, their weaknesses, their capabilities, and all of them engage *every so often of [as the dog] battling the bear just so he can call himself a dog again* (Wm. Faulkner). All organizations must endure change and evolution, however painful that might seem in the short term. Is it time for some change in the Federation and member clubs? I have my opinion but I can certainly live with whatever the officers and members decide.

So here is where the YB dream begins to fade and becomes very fuzzy. The Federation is successful, but will it continue? Does the Federation really know "where it's going"? And I keep dreaming about "what could happen scenario" - - if the Federation could fully utilize the collective energies of members and their clubs, if we followed the advice of Erica Jong who noted that *everyone* [the organization] has talent. What is rare is the courage to follow the talent to the... places where it leads. Where could the combined talents of our quality organization lead us? As I said, the dream is fuzzy and broken up at this point. However, one face is still clear, Albert Einstein, who keeps telling me in the middle of difficulty lies opportunity.

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But before I wake up each time and the dream is completely gone, numerous and continuous zingers fly in from all directions. Is this a bit of subliminal advertising? Bits and pieces - such as: Mike, what are you trying to tell the Federation and the clubs? Just let them run their own organizations. Keep out of it. You are not an expert in organizational psychology. You don't know the answers. My brain is being bombarded by ideas and thoughts - and then I wake up, un-rested and in a state of confusion.

Needing help, I talked to the noted "dispenser of advice", Charlie Brown's counselor Lucy Van Pelt, and asked her to help me interpret my dream. After listening to my questions for nearly an hour, she finally tired and told me to remember Robert Collier who said, or almost said, The *great successful organizations of this world have used their imagination. They think ahead and create their mental picture in all its details, filling in here, adding a little there, altering this a bit, and that a bit, but steadily building – steadily building. That will be \$.05 please.*

I learned much from my father and he often told me, upon asking, that he enlisted "for the big war" to make certain his sons could live in freedom, but with this freedom came responsibility. He was always full of ideas and never shy to express them. Later in life he lost his seat on the local school board for talking about this new idea (at that time) of school unification—a "death sentence" (metaphorically speaking) in a small rural town. So I come by it naturally—I usually say what I think (but without malice) and have probably ruffled some feathers with this opinion piece, but as I am fond of saying, *life goes on.* If I provoke some thought and conversation, it is a win-win situation. And, if you believe anything in this article, please contact the Federation. If nothing happens, well, *life goes on!* But I will continue to think about the words of George Bernard Shaw (and paraphrased by others): You see things; and you say, Why? But I dream things that never were; and I say, Why not?

I ask the CSMS members to simply substitute "club" for "federation" in this article and see what I am requesting. I also am especially interested in having CSMS examine the use of social media to contact members and keep them apprised of club activities. But, whatever the outcome, *life goes on*.

And finally, have you thanked Federation and local club officers for dedicating so much of their prized time to "the cause". We have a strong cadre of Federation officers lead by President DeLane, and locally by Roger Pittman. Our RMFMS newsletter under Editor Betty is the best in the AFMS, and the CSMS Pick n Pack with Editor Sharon---well, just outstanding. Brian did a great job with the CSMS website and now passes on the torch to Gary. Please, drop them an email; you need to say nothing more than "thanks".

As always, the **opinions** expressed in this op-ed piece are mine alone and do not reflect the thoughts and opinions of the RMFMS or the CSMS.

The End

Author's Bio: Zach is a junior member of the Colorado Springs Mineralogical Society and helps instruct the Pebble Pup program. His science papers and poetry has been published in a variety of newsletters and magazines.

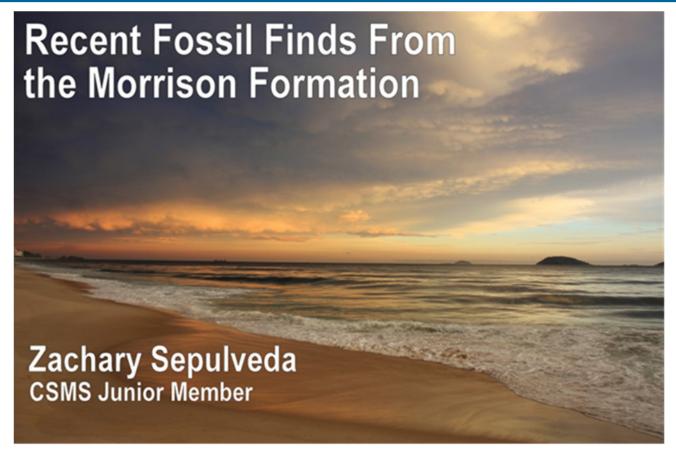


Smilodon By Zachary Sepulveda

The frigid bite of winter's light Shines on sabers sharp and bright Speeding towards you through the snow Your heart and mind fill with sudden woe You turn to run but it's too late Those flashing sabers seal your fate Then a sudden blinding pain So much blood it looks like rain

The final image sears your brain Those gleaming sabers, *Smilodon's* claim to fame

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The subject matter of this short essay is a rare, agatized snail fossil from the Jurassic Period that was found in the Morrison Formation, and a dinosaur bone of an unknown species, also from the Morrison. Both specimens are from Colorado. The Morrison Formation is a sequence of sedimentary rocks that contains many Late Jurassic fossils. Iconic dinosaurs such as *Allosaurus fragilis*, *Diplodocus longus*, *and Brachiosaurus altithorax* have been found in this layer of Jurassic sediment.

The aquatic gastropod (Figure 1) is about 165 million years old, and is assigned to the Valvatidae, a taxonomic family of small, fresh water gastropods known as the valve snails. These have an operculum ("The gastropoda"). The operculum is like a trapdoor attached to the upper surface of the foot and closes the opening of the shell when the soft parts of the snail are retracted inside. The snail is assigned to the species *Valvata scabrida* ("Humboldt State University," 2002). This snail lived in a Jurassic freshwater pond or lake.

The dinosaur bone (Figure 2) is from an unknown species, and yields clue as to where the dinosaur died. The dimensions of the gastropod fossil and dinosaur bone are shown in Table 1.

Та	ble 1: The dimen	sions of the foss	sils
Fossil	Length	Width	Height
Valvata scabrida	43.18 mm	22.86 mm	45.72 mm
Dinosaur Bone	~ 145 mm	~ 43 mm	~ 40 mm



Figure 1:

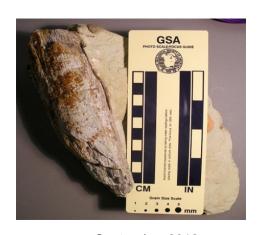
Photomicrograph of a *Valvata scabrida*. Gastropods are characterized by the possession of a single (often coiled) shell.
Photo ©2012 by S. Veatch.

Figure 2:

The unidentified dinosaur bone.

Photo ©2012 by S. Veatch

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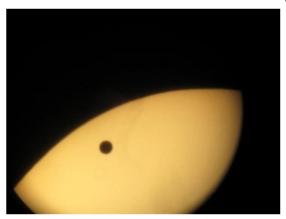


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EARTH IN SPACE MERIT BADGE: COMPLETED JULY 2012 Jack Shimon, Colorado Springs Mineralogical Society Pebble Pup Julie Shimon, program assistant and Jack's Mom

Jack Shimon completed his Earth in Space merit badge with the following four activities. Jack really likes space and is lucky that his dad and Grandpa both have telescopes. Most recently we watched the transit of Venus across the sun while in Austin. Jack also did an Astronomy merit badge for Cub Scouts in January so this was a lot of review:

Activity 11.1: Modeling the solar system- Jack drew a picture of the solar system. We also took these photos of the transit of Venus.



Left- Venus crossing the sun shortly after ingress (photo date June 2012 © Jack Shimon) **Right-** (photo should be rotated left 90 degrees)- final photo of transit taken shortly before sunset in Austin, pink color due to low light conditions (photo date June 2012 © Jack Shimon). Note the sunspots.

Activity 11.2: Learning about visitors from Space- in addition to the childhood fixation on "little green men", Jack learned what these other visitors



are. Jack also owns both a meteorite (from a not so silent auction at the Western Museum of Mining and Industry when someone outbid him at the last minute and he burst into tears, so the man scratched out his bid and Jack won) and a tektite from Pebble Pups (thanks Steve).

Jack's definitions when first asked:

Meteorite- a rock from space that makes a crater in the ground

Tektite- what happens to the ground when a meteorite hits

Asteroid- a piece of rock in space

Comet- a shooting star (and his "rock-hound") [**Pebble Pup Leader's note:** Comet is a cute little dog that comes to every Pebble Pup meeting. He brings calm and peace to the proceedings].

Activity 11.3: Effects of meteorites and famous craters- with friends Ty and Hailey we made some craters by dropping two different sized balls from our bocce ball set into the sandbox. The photos of the craters did not come out well but Jack made the following hypotheses:

The bigger sized ball made a bigger crater

Dropping the same large ball from a greater height makes a bigger crater (trying to simulate speed of fall... i.e., the faster the ball traveled to impact the bigger or deeper the crater)

The small ball seemed to make a similar crater regardless of height dropped

Activity 11.4: Collecting meteorites and tektites- among his ever growing "rock" collection Jack is lucky to have both a meteorite and tektite. He gave a show and tell about them to his Cub Scout Den when they did their astronomy badge in January.

Crater Report, Activity 11.3

Chicxulub: Ground Zero for Dinosaur Extinction

By Jack Shimon, Pebble Pup, $2^{\rm nd}$ Grade with technical help from Julie Shimon

My family and I are used to looking at craters on the moon through our telescope so when we began researching craters on Earth we thought about where we should look to learn about them. We didn't want $_{\text{Cont. Pg }10}$

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to go straight to Google so we thought about a geocache puzzle we had solved called Effaith (the title being a hinteffaith means "impact" in welsh). The puzzle was based on the distances across craters listed on the geocache page, and that is how we found Chicxulub (Tom.dog, 27 March 2012).

We were interested in Chicxulub the most because our research suggested it is partly responsible for the extinction of dinosaurs! Chicxulub is an impact crater under the Yucatan Peninsula in Mexico ("Chicxulub crater," 23 July 2012). If you don't know where that is then you can look at a globe like we did. An impact crater forms when a circular depression is made when something smaller than the planet hits it at a fast speed. I practiced making impact

craters by dropping bocce balls into a largest known impact craters, measurwould think something that big would first discovered in the late 1970's by a he thought it was a crater but had diffitained shocked quartz and tektites to ("Chicxulub crater," 23 July 2012).

Even though the crater was disactually happened about 65 million July 2012). Scientists learned that from the end of the Cretaceous when dinowere many large inland seas filled with creatures. My Grandpa lives in Austin, ing for many of these marine creatures thing as big as a dinosaur fossil (yet). happened way back then and it is intersils were found after the date of the imthat the impact at Chicxulub was at extinction of dinosaurs.



sandbox. Chicxulub is one of the ing 110 miles in diameter. You be easy to find but when it was geophysicist named Glen Penfield culty proving it . He finally obshow it was in fact a crater

covered less than 40 years ago it years ago ("Chicxulub crater," 23 the age of the rocks. That was at saurs ruled the Earth and there rudists, ammonites and other sea TX and has taken me fossil collectalthough I have never found some-But the land tells a story of what esting to note that no dinosaur fospact. This makes a good argument least partially responsible for the

How did the experiment Pebble Pup **Jack Shimon** working on his cratering experiment. tinction occur? I hypothesize that when the asteroid hit it changed the climate of the Earth so most creatures, including dinosaurs, could no longer survive. The impact itself, while making a big crater and creating tidal waves that probably drowned coastal dinosaurs, did not kill them all but the effects of the impact did. I imagine that right after impact there were tidal waves, high winds, and a lot of heat that immediately killed dinosaurs in their path. The dinosaur extinction then happened because there was a big dust storm, so much dust that the sun was covered and it was dark like night all the time. No sun means the plants would not grow so many dinosaurs would starve, and they would all probably get very cold. The extinction was probably a slow event, taking many months for all the dinosaurs to perish in this new inhospitable environment created by the impact at Chicxulub.

References:

Chicxulub crater. (23, July 2012). Retrieved from http://en.wikipedia.org/wiki/Chicxulub_crater

Tom.dog. (27, March 2012). *Gc3fn0q effaith*. Retrieved from http://www.geocaching.com/seek/cache_details.aspx?guid=1103bd2e-4cb5-437a-a4d0-b51ce62b2481

Geocaching.com Wikipedia

Grandpa (personal communication)

Merit Badge Earth in Space Completion Certification

By Julie Shimon, parent

By Steven Wade Veatch, Pebble Pup Chair, CSMS

Awarded this day: July 28, 2012

AFMS Merit Badge Program

Pebble Pups Take a Field Trip to the Denver Gem and Mineral Show

Several CSMS teen pebble pups, now called Earth Science Scholars (ESS), met Steven Veatch (program leader) and Roni Poteat at the Denver Gem and Mineral Show for a day of exploration, looking closely at the educational cases, taking a break for lunch together, and then looking at the dealers. Two of the ESS got to meet and pose for a picture with Dr. Robert T. Bakker. Later one of the ESC talked with Dr. Kirk Johnson of the Denver Museum of Nature and Science.





Blake (L) and Gavin (M) pose for a picture with Dr. Bakker, who is an important paleontologist who famously wrote the warm-bloodedness of dinosaurs. Photo by S. Veatch.

> Blake calmly waits to be eaten by a dinosaur who was running amok. Photo by

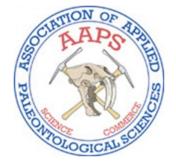


The year the theme was copper and copper minerals. All of the ESS enjoyed the day—one said it was "the best day of his life so far" and another ESC declared the day was a real winner! This is the second year that this tour has been conducted for the pebble pups, junior members, and ESS from the Colorado Springs Mineralogical Society and the Lake George Gem and Mineral Club.



Za. Au On

Zachary Sepulveda Author of *Smilodon* On Page 7 Gavin's head is in the vice-like jaws of a theropod dinosaur. The pressure is so intense it is forcing his tongue out. Luckily, Gavin was able to escape this perilous situation and quickly recovered from his wounds and bought a fossil sea dollar. Photo by Laura Harmon.



AAPS, Association of Applied Paleontological Sciences

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Special Denver Newsletter

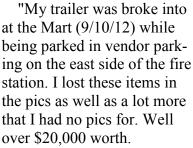
Denver Fossil Theft

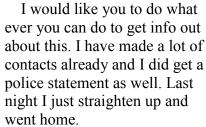
Dear Evan,

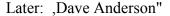
Please see email below and attached pictures. These items were stolen from Dave Anderson's trailer at the Denver Merchandise mart. If you are approached by someone trying



to sell these these specimens in Denver, attempt to stall and call your show or hotel security, or get contact information from the person.















If you have any questions, please call me at 435-757-6017 George F. Winters, AAPS Administrative Director

Hi:

Late last night after most of the Pick and Pack was complete, I received this e-mail and thought I should include it in this issue. I know I would be just heart-sick if someone stoled part of my collection. Maybe one of us will see something that can help!

2012 CSMS Officers

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To contact an officer or chairperson, go to csms.us, click on Board Members, and, if their name is underlined, click on it.

As shown in Figure 1, the gastropod shells are replaced by agate, in a process known as agatization, which also occurs in other types of fossils. Agate is a beautiful material that is often used in jewelry.

The dinosaur bone has not been identified or dated, as of the writing of this paper, but it appears to be a fragment of a large bone, and it is attached to an extremely fine-grained sandstone, which may give clues about how the bone was preserved. The dinosaur bone is shown in Figure 2. Agate has formed within the Haversian canals and can be seen at either end of the fossil bone. Haversian canals are the tiny, interconnecting, longitudinal channels in bone tissue through which blood vessels, nerve fibers, and lymphatic vessels pass.

Overall, these are two magnificent fossils and fascinating finds that help us reconstruct ancient worlds that have long since passed into deep time.

References Cited:

The gastropoda. (n.d.). Retrieved from http:// www.ucmp.berkeley.edu/taxa/inverts/mollusca/ gastropoda.php

Humboldt State University Natural History Museum: Jurassic Period. (2002, October 15). Retrieved from http://www.humboldt.edu/natmus/Case_indexes/Case_jpgs/Jurassic.web/

Sub-Group Re	sponsibilities for Re Assembly Mee	freshments for General tings
Feb.—Crystal	Mar.—Faceting	Apr.—Fossil
May—Jewelry	September— Lapidary	September— Micromounts
Aug.—Picnic	Sept.—Projects	Oct.—Board

September 2012



Our Staff...

Sharon Holte & Ellie Rosenberg— Co-Editors

CSMS Members *Reporters*

We encourage everyone to submit articles, photos, illustrations or observations.

Share your experiences, trials and tribulations, your new finds, or simply your experience at our last field trip.

The ability to write well is NOT a requirement. We will fix the grammar while keeping the author's voice, style, and work intact.

Handwrite it, type it, or email it. Format does not matter. All submissions are welcomed.

DEADLINE for items to be included is the **Saturday after the Board Meeting** - first
Thursday of each month

To submit an item, please use the following:

For hardcopy photos or articles, mail to the address below or bring them to the General Assembly Meeting. All hardcopy photos remain the property of the submitter and will be returned. Electronic photos should be submitted at resolutions above 200 dpi in TIF, BMP, JPG, or PIC format. Articles are preferred in word. Editors will correct font and type.

All articles not shown with an author are provided by the Editor.

E-Mail to: preferred

SharonRocksCo@gmail.com

Mail to:

Pick & Pack Editors

CSMS Field Trips

Sept 22 / 23, 2012—Saidella Copper Mine & Calumet Iron Mine—Salida, Co / Safeway Parking Lot // 9:00 a.m. each day. Don Bray@copper.net

Oct 20 / 22 , 2012 - Yellow Cat, etc / Yellow Cat/CISCO, Utah & Grand Junction Mineral Show - Leader Marg Regel

Classifieds

CSMS

T-Shirts, Badges, and Pins

Are available for sale.

See Store Keeper, Ann Proctor.

Hurry! Hurry!! Hurry!!

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APPLICATION FOR MEMBERSHIP

- All memberships run from <u>January 1 to December 31</u>.
- Any person or corporation joining the CSMS as a new member after June 30th shall pay half of the yearly rate. Corporate Membership grants up to
 five (5) Individual Memberships. Any person or corporation joining as a new member after October 1st receives membership for November and
 December plus the following year beginning January 1. The partial year membership shall not apply toward the 25 year Lifetime Membership.
- 3. Anyone who has previously been a member MUST pay the full rate each year REGARDLESS of the time of the year they pay their dues.
- Members who have paid their dues for 25 years will be awarded a Lifetime Membership on their 26th year. Lifetime Members receive all of the CSMS benefits and no longer have to pay the annual dues. Individual Memberships provided by Corporate Membership are excluded from Lifetime Status.
- 5. Corporate membership grants up to 5 individual memberships and one Yearly (10 issues) 3.5 x 2" advertisement in the CSMS Pick & Pack.
- 6. Members in good standing receive the following benefits: 10 electronic issues of the CSMS Pick&Pack newsletter, right to participate in all field trips (additional fees may be required on some field trips and members are responsible for all transportation to and from), participation in one or all Satellite Groups (some groups may request additional fees to help cover resource costs), free admission to the Western Museum of Mining and Industry, a year of learning and enjoyment, plus a lifetime of memories.

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General Assembly meetings are held the third (3rd) Thursday of each month, except January & August, (picnic) beginning at 7:00 p.m. at the Colorado Springs Senior Center, 1514 North Hancock Blvd., Colorado Springs, CO. Visitors are always welcome.

CSMS also offers Satellite Group meetings that allow more focused attention in specific areas of our members' interests. Our current Satellite Groups consist of the following: Crystal Study Group, Faceting Group, Fossil Group, Jewelry Group by RVSP, Lapidary Group by RVSP, Micromounts Group, and Pebble Pups/Juniors. For details on Satellite Group meetings, check out the calendars on page 2 and the web-site.

Yearly dues include 10 issues of the PICK&PACK, all field trips (additional fees may be required on some field trips, and members are responsible for all transportation to and from), participation in all Satellite Groups (some groups may request additional fees to help cover resource costs), free admission to the *Western Museum of Mining & Industry*, a year of learning and enjoyment, plus a lifetime of

Individuals—\$30 Family—\$40 Juniors—\$15 Corporate—\$100 *******Application is on the web-site.

If you are interested in joining CSMS or would like more information, we encourage you to attend our next General Assembly meeting or visit our web site: www.csms.us.