

Mineralogical Society of the District of Columbia



MINERAL MINUTES

The Mineral Minutes is the bulletin of The Mineralogical Society of the District of Columbia, Inc.

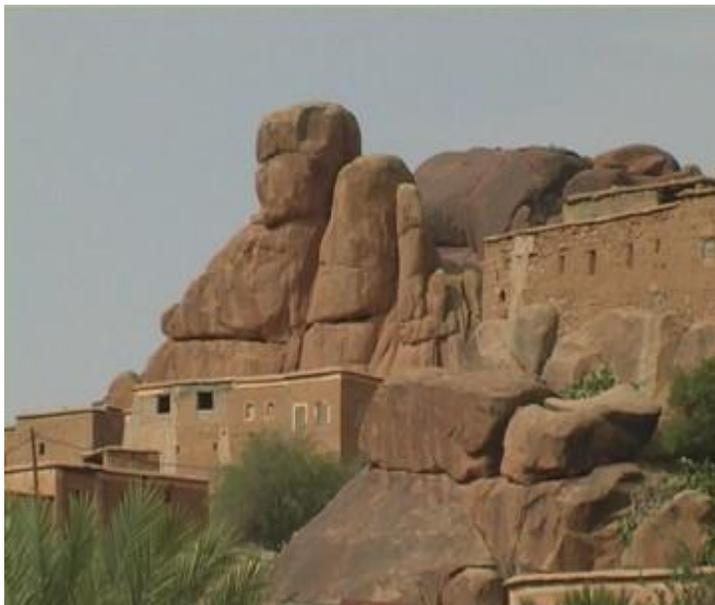
The purpose of this Society is to promote interest in mineralogy, geology, and related earth sciences and to encourage mineral collecting. An annual scholarship is awarded to a deserving student in the related field.

The Mineralogical Society of the District of Columbia is one of the founding Societies of the Eastern Federation of Mineralogical and Lapidary Societies.

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March 2013



(Photo credit: Granites of Tafraoute, <http://www.sevencontinents.com/morocco.htm>)

**Please Join Us on March 6, 2013 for
Casper Voogt's Presentation on
His Geology Trip to Morocco!**

TABLE OF CONTENTS

	<i>Page</i>
<i>The Prez Says</i>	2
<i>Tom's "Geology from the News"</i>	3-4
<i>Thin Section Field Trip to NVCC</i>	4
<i>Geologists Bring Us "Big History"</i>	5
<i>Box O' Rocks</i>	6-7
<i>Linked-In</i>	7
<i>Rocks Get Brains</i>	8
<i>Secretary's Report</i>	9
<i>Upcoming Events</i>	10
<i>2013 Officers & Board Members</i>	11
<i>Treasurer's Note</i>	12
<i>Speaker Flash Back</i>	12
<i>Photos: February's Presentation</i>	13-14
<i>Membership Application</i>	15



THE PREZ SAYS...

By Stephen Johnson

Well, hope everyone is doing well. Have started the process of scanning our old newsletters! Was kind of eerie holding the one that was published the month I was born!! Last meeting Tom handed off a box full of binders – probably about 10 total binders. One binder is now down. It is fascinating looking at the variety of paper formats that were used. The flying “A” on the typewriter used to type them up. Mimeographed versions of the newsletter – mimeos used to be big in the military when I first came on active duty, so appreciate the work that went into generating them – and the smell associated with them! Hopefully we can start getting them posted on the website once I have several binders scanned and organized.

At the next meeting will again discuss upcoming events. The trip to JMU is the 23rd of Feb. Also coming up will be the trip to W&M in late March; thin sections at Northern Virginia Community College in April; spelunking with Tom in April; Rochester in March and the Montgomery County Show also in March.

Pretty cool planetary stuff going on right now. As I’m writing this, the 10 ton meteorite crashed in the Urals this morning and we’re having the asteroid fly-by this afternoon. I’m sure Jeff is pretty excited. Wonder how long it will take for Ural specimens to start appearing on the market. The geek in me came out at work – had to sit down and figure out how big the meteorite that hit in the Urals probably was. By my calculations (based on 10 tons) and assuming it was a perfect cube – it was anywhere from 2.5 feet to 4 feet on a side, depending on the composition (heavy irons being 2.5 and if it was a low density chondrite then around 4). And, now I’m reading reports that are saying 10,000 tons and stony – so that would actually put it above 97 feet cubed. I truly do hate it when English majors write about science when they don’t know anything about it.

Well, going to keep it relatively short and get back to my scanning.
Hope to see everyone at March’s meeting!



*Rockhound, Brice Trinidad, visited the Museum of Natural History recently, where he announced to his mother that he wanted to buy his BFF, Ms. Sheryl, **The Hope Diamond!** (Editor’s Note: Thanks, Brice! I’d like that!)*

CHECK US OUT ON FACE BOOK!

Visit “Mineralogical Society of the District of Columbia” to share your comments, links, and photos. (Administrators are: Steve Johnson, Betty Thompson, Bob Simonoff and Sheryl Sims.)



Tom's "Geology from the News" But We Won't Spend Time on it in a Meeting

By Tom Tucker

Silver from Batopilas Chihuahua Mexico (photo credit: Susan Fisher)

In the Christmas Day issue of the Washington Post, John Kelly, who generally has one of the most interesting continuing series of "newsy" or educational commentaries about obscure or quirky history of the District, presented his annual "District Trivia Quiz". His question number 11:

"In 1898, the New York Times estimated that controversial former District governor Alexander "Boss" Shepherd had accumulated a fortune worth \$ 12 million. How did Shepherd become so wealthy?"

Of course, all of our members would have known that the correct multiple choice answer was: "d. He owned the largest silver mine in Mexico."

Not to dispute the factual details, but Shepherd was a partial owner and manager of properties in the colonial era silver mining district at Batopilas, Chihuahua, Mexico. He had been head of the DC Board of Public Works from 1871 to 1873 and Governor of The District for just nine months in 1873 to 1874. Following his stint as Governor his real estate endeavors lead to bankruptcy. So, he invested in far off mining properties and made the journey with his family to Batopilas in 1880. The adventures that followed are well chronicled by his son Grant in the book *Silver Magnet*. This used to be a hard to find, "nice read," mining history book, priced at over \$ 100 on the used market, but then someone reprinted it in 1999, and its value plummeted! So much for old books. (Actually, I just looked it up on an old book website, and a good copy is still going for \$375 - well, someone is ASKING \$375. Dream on.)



The story of the family's journey from DC to Batopilas is right out of the "old west". They took the Kansas City, Mexico and Orient Railroad to the end of the line, then, in Trans-Pecos Texas, or at least west Texas, I don't remember the exact terminus. (I did do a little checking and the KCM&O railroad hadn't been constructed in 1880, so

obviously, they took some other railroad to the end of the line.) From there it was a pack-train across the Chihuahua desert to the city of Chihuahua, where he had to arrange accommodations for his family, while he proceeded on to Batopilas to secure housing for himself and his family. Even in the early 1970's when I lived in West Texas, it required a full day in a four-wheeled drive vehicle to get from the very edge of civilization to Batopilas, if you dared. The roads were not good. Today, Forder suggests using a professional guide, and allowing at least four hours to get there over a road you'd rather not be on. And of course now you have to deal with the security issues in northern Mexico—a very sad time.

Why do we care, other than the connection to the District? Batopilas is the locality of those fabulous dendritic, or is it arborescent, crystallized native silver specimens that have been common in the markets for several decades now. Wish I had one. One of the men who made it "happen" 130 year ago had been Governor of The District of Columbia.

Depending on the authority you read, Shepherd either became rich in Batopilas, or he again went bankrupt, or perhaps he did both. In any event



he died there as a result of peritonitis following surgery to remove his appendix, on Sept. 12, 1902 . He was returned for burial in Rock Creek cemetery here in the District, where you may visit him today.

The photo on the previous page was taken by Susan Fisher, of a silver specimen from Batopilas that is in her collection. The specimen was apparently collected prior to 1820, so it well predates Gov. Shepherd's stint in Batopilas.

Mindat includes 33 separate localities within the Batopilas mining district which have produced silver specimens. The silver bonanza was first recorded in the early 1500's, and is apparently still capable of producing fine specimens.

Silver from Batopilas Chihuahua Mexico. (photo credit: Ed & Susan Fisher)
Picture taken through a digital microscope of a 10 mm section (at 20x magnification).

April 6th, Saturday: Thin Section Field Trip to Northern Virginia Community College From 2 pm until you get tired of thin sections (never!) or get hungry (or both). Meet in the Geology Lab, CS Building, Room 217. Annandale Campus of Northern Virginia Community College parking is best accessed off Wakefield Chapel Road. Maps and parking instructions will be available in the next newsletter and at the April meeting.



If you have never looked at a thin section, we'll guide you thru the first steps. You will see why we think they are so neat.

If you are an expert, peruse our collection of 1060 rock & mineral thin sections. Our mineralogist, Prof. Shelley Jaye, will be there to discuss and delight in the wonders of what you see.

If you are between beginner and expert, well, come and enjoy!

Bonuses:

- Our collection of rusty rocks from all over the world (see photo)
- Our Wards rock & mineral hand sample collections (see photo)
- A display of how we make a thin sections

Please let us know what we can do to make this more attractive and interesting for you. Contact John Weidner (jfwidner42@gmail.com) or Dave Nanney (DNanney@cox.net)



(Photos by John Weidner)

Geologists Bring Us “Big History” A New Way Of Thinking

By Andy Thompson



Luis and Walter Alvarez (L-R) at the K-T Boundary in Gubbio, Italy 1981. (Photo credit: <http://en.wikipedia.org>)

Walter Alvarez is a renowned geology professor at the University of California, Berkeley and he continually broadens our vision of earth science. You may remember him as the researcher, who, with colleagues, discovered the significance of the K-T Cretaceous Tertiary boundary. With his

Nobel Prize winning physicist dad, he developed and arguably proved that the formation of the K-T boundary coincided with the meteorite impact and dinosaur extinction event of 65 million years ago. You'll recall that below the boundary, in the Cretaceous layer, there were lots of dinosaur bones. Above that one centimeter thick layer of clay, in the layer now named the paleogene, there were no dinosaur remains. Now, once again, Walter is making geological history, or, more correctly, is promoting geological “Big History.”

Readers of *Mineral Minutes* may remember a review of his most recent book, *The Mountains of St. Francis: Discovering Geological Events that Shaped Our Earth* (2009). It appeared in the 2010 February issue of this newsletter which noted the book had nothing to do with St. Francis of Assisi other than that he travelled the Tuscan hills of Italy. Rather, the book told the story of how researchers figured out the mysterious geological history of Italy. As with most of Alvarez's research, he helped students and readers move from the specific to the general. So, in that book he began by unpacking the structural geology of Italy, but then led readers toward understanding the geology of the entire earth.

His more current research continues to expand our vision of geological history. Simply put, “Big History” refers to the events and processes which span the period from the Big Bang to today's modern history, roughly 13.7 billion years. He, along with colleagues at Russia's Moscow State University, at Berkeley, and elsewhere, have worked together to tease out and then use groundbreaking, interactive computerized imagery to illustrate common themes and patterns. By studying their graphics, the rest of us can gain a better understanding of the cosmos, planets, life, people, civilization and humanity's place in the universe.

One way to get a handle on this new approach to geology and history is to enroll in any course which includes the words “Big History”. A dozen or so universities currently offer such. Short of matriculating, a more practical approach for many of us would be to get started by investing an hour to watch Walter Alvarez's presentation, “Geology in the Broadest Possible Context”. This is an illustrated talk he gave as the 97th annual faculty research lecture in 2010. The link is listed below and takes 67 minutes to view. Then, with that introductory background in mind, visit the website of the Big History Project, also listed below, to experience breakthrough graphics constructed in collaboration with Microsoft. All of this effort is being expended in order to help viewers grasp the big picture, historically speaking. To date, the interactive computer graphics project, also known as ChronoZoom, is only partially completed. But for committed science nerds, even a short visit to these two sites will be rewarding. They will convey a sense of how some top notch geologists are reimagining their discipline and integrating its findings with chemistry, biology, agriculture and the modern world.

Readers can tap into this Big History geological world by visiting the following web sites:

For Alvarez's 2010 Berkeley lecture, see:
<http://www.youtube.com/watch?v=cPslAV7LZgA>

For ChronoZoom Project with mind-blowing graphics see: <http://www.chronozoomproject.org/#/t55>

Box O' Rocks

By John Weidner



About 35 million years ago, a three-mile-diameter asteroid or comet hit just off the Atlantic coast at the end of Chesapeake Bay. Although not as big as the famous Chicxulub asteroid that sealed the fate of the dinosaurs, it was big enough to shatter the local rock and allow major salt water incursions under the Tidewater area.

About 11 years ago, the United States Geologic Survey (USGS) drilled one of several holes in the area, bringing up 2,390 feet of core sample. The core is a series of three-inch-diameter cylinders of the soil and rock, starting with surface soil and ending deep down in the bedrock.



In January, the NOVA Geology Department brought boxes containing the bottom-most 14 feet of that sample to the Annandale Geology prep room, on loan for two months from the USGS. Analysis of this part of the core will be the subject of a directed studies class under Instructor of Geology Shelley Jaye, who made the contacts and set up the loan. (The class includes MSDC members Dave Nanney and John Weidner.) Ms. Jaye said, "Really neat! It's quite a compliment to the college that the USGS trusts us with the sample and respects our students' ability to describe the rock."

The opportunity is a direct outgrowth of two NOVA initiatives. First, two years ago, Ms. Jaye organized and began offering a mineralogy class at the Annandale campus. Traditionally, mineralogy is the third geology course for geology majors in a four year college. Offering mineralogy is in itself a distinction for NOVA. An informal survey of over 100 community colleges across the country revealed that NOVA is unique among US community colleges in offering this course.



Second, NOVA is developing a new Associate of Applied Science degree in Physical Science Technology, part of NOVA's offering new opportunities in STEM (science, technology, engineering and mathematics) careers for our

students. For this degree, we are working with the USGS to prepare our students for internships and employment as physical science technicians at the USGS headquarters in Reston. The program involves cooperation between several NOVA campuses and the USGS. Seven NOVA students were offered paid internships at the USGS last summer; three of them continue as part-time employees at the Survey while they finish their studies at NOVA.

This summer, NOVA will offer five new classes in geological techniques covering field techniques, core description, sediment size analysis, micro-paleontological techniques, and hard rock techniques. The classes will be taught

at the Annandale and Loudoun campuses and at the USGS headquarters in Reston, by our instructors and USGS employees, several of whom are already NOVA adjunct faculty. Ms. Jaye's directed studies course serves as a pilot for the hard rocks techniques course to be taught this summer.

"We don't expect to make any major, new discoveries in analysis of the core, at least not this semester," said Ms. Jaye, "but the USGS doesn't have the staff to analyze the entire core they have. This is a wonderful opportunity for our students to become involved in real research and to contribute to the geologic record."

Linked-In:

- http://www.cnn.com/2013/01/18/business/australia-gold-nugget-discovery/index.html?hpt=hp_c3
[Erich Grundel]
- JMU Geology website to: <http://csm.jmu.edu/minerals>
- The Smithsonian has an Associates program and for the price of admission, you can attend various lectures or outings. For additional information, call Smithsonian Associates at: (202) 633-3030.

AFMS Club Rockhounds of the Year for 2012

California Federation: Ray and Jo Anna Ritchey; Manuel Valdez; Steve and Susan Mulqueen; Barbara Hartman; Tina Anderson; Dave Kleesattel; Ed and Cyndy Burchard. **Eastern Federation:** Dr. Edward Force; Maxine and Jim Nicholas. **Midwest Federation:** Gene Willis. Please see the February 2013 issue of the AFMS Newsletter, p. 5-6 for more detailed information.

AFMS Officers for 2012-13

President - Don Monroe (SFMS) President-elect - Richard Jaeger (RMFMS)
1st Regional Vice President – Marion Roberts (CFMS)
2nd Regional Vice President–Matt Charsky (EFMLS)
3rd Regional Vice President – Ann James (SCFMS)
4th Regional Vice President – Sandy Fuller (MWF)
5th Regional Vice President – Doug True (NFMS)
Treasurer – Pat LaRue (2 year term)
The position of Secretary was not up for election this year. Anne Cook will complete the 2nd year of her 2 year term

EFMLS Officers for 2012 - 2013

President - Cheryl Neary, ciervo.neary@gmail.com
1st VP - Hazel Remaley, northridge5@verizon.net>
2nd VP - Merrill Dickinson, medsearchnorth@comcast.net>
Secretary, Gerry Cox, gerryannec@verizon.net>
Treasurer, Lou Budell, labudell@windstream.net>
Asst. Treasurer - Michael Patterson, Michael.Patterson@pgparks.com>
Editor, Carolyn Weinberger, PO Box 302, cscrystals2@gmail.com>

ROCKS GET BRAINS

By Erich Grundel

When you think about rocks, what crosses your mind? Chances are you have an image of something that conjures up words like inanimate, inarticulate, indestructible, inert and, not infrequently, immovable. They are the epitome of the inorganic world. Rocks may look different but they are all the same passive lumps. If this is your image of a rock you are not keeping up with the times.

Welcome to the world of "smart rocks". There are two types of smart rocks: natural and man-made. The man-made ones, the supposedly truly smart rocks, are made of aluminum and are peeked with electronics. They have a rounded shape, more about which shortly, relatively flat and cost around \$800 each. There are at least four of these rocks in existence, although for some their whereabouts is not known, more about this shortly too. The natural ones, the somewhat dumber siblings, have holes drilled into them into which are placed radio tags. These rocks are then painted bright colors like yellow and orange so they can be visually spotted. These cost about \$5 each. The man-made rocks are about six inches across while the natural ones are more variable in size but not much bigger than their synthetic relatives and all are rounded.

What is the purpose of smart rocks? They have been developed to improve our understanding of how rivers and streams move rocks and sediments. The amount of material moved globally in this manner is staggering: an estimated 13 gigatons/year! Models of how rocks are transported and where they will end up are based on equations developed in the 1950's by Hans Einstein (yes, Albert's son). The results though are not very accurate. This is not an academic exercise. Critical infrastructure; bridges, canals, dams, levees and tunnels, are affected by transport of rocks and sediments. By putting the smart rocks into streams (why the rounded shape) scientists are for the first time literally (or is that littorally?) getting a rock eye view of what happens as rocks are moving downstream. Some of the results have been surprising.

Joel Johnson is a geomorphologist at the University of Texas at Austin. In April, 2011 he and one of his graduate students, Lindsay Olinde, placed their four man-made smart rocks and hundreds of their brightly colored natural ones into Reynolds Creek in southern Idaho. The melting snow from the Owyhee Mountains created a large and long lasting flood. In July, 2011, Olinde and an assistant returned and began a five month search for the rocks. Previous studies predicted the rocks would move about 100 meters. They were not close. About 150 of the natural smart rocks were found. More than half moved over 2500 meters. The furthest distance any of these moved was over 6440 meters. The expensive man-made ones were another story. So far only two have been retrieved; one at 900 meters and the other at more than 2000 meters. The other two are currently described as MIA.

The bad news is that the batteries in the \$800 rocks lasted only 40 hours. This, of course, was a period of time before the snow started melting and the transportation process began. Never the less the rocks accurately recorded what happened...no movement. The Johnson team has developed newer, less expensive concrete smart rocks, which were released last year into Reynolds Creek. The data is still being analyzed.

Other groups are using smart rocks too, including plastic ones made with 3-D printers, for similar studies. Smart rocks are in their infancy but they promise to deliver big results.

Reference: Underwood, Emily, *How to Build a Smarter Rock*, SCIENCE, v.338, 14 December, 2012, pp.1412-1413.

Crystals are grouped into how many systems according to their symmetry? A. 5, b.7, c.9, d.10

Where are Gem-Quality Crystals Found? A. North America, B. France, C. South Africa, D. All of the above.

True or False? All sapphires are blue.

(Answers on p. 11.)



Secretary's Report

By Patricia Flavin

Meeting Date: February 6, 2013

Meeting Place: Cathy Kerby Rm.-CE 340, The Smithsonian National Museum of Natural History

Attendees: 22

Agenda Club President Steve Johnson recognized past presidents, Ed Fisher, Eric Grundel, Tom Tucker.

Minutes Approved: January 2013

Visitors: Bob Dennig (also new member), Holly McNeal.

Treasurer's report: Rebecca Siegal accounted for the club funds.

Old Business: Reminder-Club trip to James Madison University, Harrisonburg, Va. February 23, 2013 Dr. Lance Kerns-Professor, Mineral Museum Curator, and SEM Regional Facility Director, Geology Dept. JMU, will provide our annual tour of the JMU Geology Museum, as well as view & discuss minerals. Bring money for purchasing minerals, donate pieces from your own abundant collection, bring minerals that need identification.

William and Mary College, Williamsburg, VA Trip March 23rd was announced as a spring field trip to the Mineral Museum & Geology Dept. Our club president and alumni, Steve Johnson, is coordinating the event.

New Business: March 6 meeting program speaker will be Casper Vogt, our own club member, who will discuss his recent trip to Morocco.

Tom Tucker will lead a club field trip to local caves. A morning and afternoon trip is planned, with different levels of danger. April 27th was suggested.

John Weidner invited our club members to attend a special program at the Geology Department of Northern Virginia Community College, Annandale Campus, Saturday April 6th at 2:30pm until, subject-"Thin Sections".

Upcoming Geology Shows:

February 16th Southern Md. Rock Club & Mineral Club-23rd Annual Mineral, Jewelry & Fossil Show, at The Show Place Arena, Upper Marlboro, Md. Saturday 10am-5pm.

March 16/17 Gem, Lapidary and Mineral Society of Montgomery County Maryland, Inc., Montgomery County Fairgrounds., Gaithersburg, Md.- 49th Annual Gem, Mineral & Fossil Show- Sat. 10am-6pm, Sun. 11am to 5pm.

Club Member Concerns & Announcements-We wish Betty Thompson a quick recovery.

Announcements: Please check out our Facebook page.

Motion to Adjourn to the Program: "Granitic Pegmatites: Characteristics and 7 Localities in the USA" Cathleen Brown, speaker, Mineral Sciences Department, Smithsonian Institute.

Refreshments: *Thank You* Susan & Ed Fisher and John & Susan Weidner!

Meeting concluded at 9:45 pm.

Upcoming Events

February:

23-24: 20th Annual James Campbell Memorial Gem, Mineral & Fossil Show & Sale sponsored by the Capital District Mineral Club and NY Academy of Mineralogy. New York State Museum, Empire State Plaza, Madison Ave, Albany, NY

March:

2 – 3: 50th Annual Earth Science Gem & Mineral Show sponsored by the Delaware Mineralogical Society. Delaware Technical & Community College, Newark, DE.

8-10: 25th Annual Aiken-Augusta Gem, Mineral & Fossil Show sponsored by the Aiken Gem, Mineral & Fossil Society and Augusta Gem & Mineral Society. Julian Smith Casino, Augusta, GA.

23-24: 44th Annual Gem & Mineral Show sponsored by the Che-Hanna Rock & Mineral Club. Athens Township Volunteer Fire Hall, Sayre, PA.

23-24: 45th Annual Gem, Mineral, Fossil Show sponsored by the Buffalo Geological Society. The Fairgrounds, Hamburg, NY.

23-24: 43rd Annual Uniflour Gem, Mineral, Bead, Fossil & Jewelry Show sponsored by the Catawba Valley Gem & Mineral Club. Hickory Metro Convention Center, Hickory, NC.

23-24: Western Mass Mineral, Jewelry & Fossil Show sponsored by the Connecticut Valley Mineral Club. Clarion Hotel & Conference Center, 1 Atwood Dr; Northampton, MA (Exit 18 off I-91).

April:

6 – 7: Mineral Treasures and Fossil Fair co-sponsored by the Philadelphia Mineralogical Society and Delaware Valley Paleontological Society. Lulu Temple, 5140 Butler Pike, Plymouth Meeting, PA

6 – 7: Annual Spring Gem, Mineral and Bead Show sponsored by the Central Florida Mineral & Gem Society. Central Florida Fairgrounds, 4603 W Colonial Dr.; Orlando, FL.

May:

4-5: 10th Annual Treasures of the Earth Show & Sale sponsored by the Mineralogical Society of Northeast Pennsylvania. St. Joseph Oblate Seminary, 1880 Rt 315, Pittston, PA.

10: 8:30 P.M. The Philosophic Society of Washington will host a lecture on the Mars Curiosity rover by the Chief Mission Scientist. <http://www.philsoc.org/2013Spring/index.shtml> <http://www.meetup.com/philsoc/events/96028302/>
John P. Grotzinger, Fletcher Jones Professor of Geology, Chief Mission Scientist, Mars Science Laboratory, a/k/a "Curiosity". John Wesley Powell Auditorium, 2170 Florida Avenue NW, Washington DC 20008.

EFMLS Convention & Show hosted by the Island Rockhounds and Suffolk Gem & Mineral Club. Smithtown, NY.

May 31 - Jun. 1-2: **(EFMLS Mtg. May 31.)** EFMLS Convention & Show. Hosts: The Island Rockhounds & Suffolk Gem & Mineral Club, Plainview, NY.

Wildacres Spring Classes – April 8 – 14, 2013. [From: EFMLS NEWS Feb. 2013.] Speaker in Residence - Bob Jones; Wildacres Fall Classes – September 2 – 8, 2013. Speaker-in-Residence – Willow & Quintin Wight



Dave & Leslie's granddaughter, Kate, has an eye for minerals; and, Patrick Haynes was spotted by the Nanneys at the Tucson Show! (photo credit: Dave Nanney)

2013 Officers and Board Members



(left to right: Steve Johnson, Rick Reiber, Patricia Flavin, Rebecca Siegal, Dave Hennessey, Dave Nanney, Andy Thompson, & Sheryl Sims)
(photos provided by B. Thompson, A. Cameron Siegal, & S. Sims)

OFFICERS & BOARD MEMBERS CONTACT INFORMATION

President: Steve Johnson - StevikJ@gmail.com; **Vice President:** Rick Reiber - Mathfun34@yahoo.com
Secretary: Patricia Flavin - pattiflavin@gmail.com; **Treasurer:** Rebecca Siegal - dcmineralclub@gmail.com
Directors: Dave Hennessey - dhennessey@spa.com; Dave Nanney - DNanney@cox.net;
Andy Thompson - thompson01@starpower.net; **Editor:** Sheryl Sims - sesims4@cox.net

Thank You to all who donated door prizes last year, provided refreshments, took photos, brought guests, shared mineral news, and made our club a great one by attending our meetings!

Thank You to Andy and Betty Thompson for graciously helping me proofread the *Mineral Minutes*!

Please continue to support our club bulletin by sending me your mineral-related news, articles, photos and/or links. The *Mineral Minutes* newsletter deadline is the 15th of each month. You may email your submissions to me at <sesims4@cox.net>. Thank you! (Note: The Editor reserves the right to edit all submissions as necessary.)

Answers to quiz questions on page 8.

1. B. Crystals are made up of orderly arrangements of atoms and can exhibit various types of symmetry. Depending on the symmetry it exhibits a crystal is classified into one of seven systems: triclinic, monoclinic, trigonal, orthorhombic, tetragonal, hexagonal, or cubic.
2. D. Gem-quality mineral crystals are found on all of the earth's continents, but some countries, such as Brazil, Sri Lanka, Burma, and Madagascar are noted for finds of exceptional crystals. Only attractive crystals that are of sufficient size and hardness are cut into gems.
3. False. Sapphire, a gem variety of the mineral corundum, can be found not only in blue, but in every color but red. (Red corundum gems are known as rubies.) Sapphires can be "fancy colors" such as pink, green, yellow and purple. One of the most prized sapphire colors is a pinkish orange known as padparadscha. It's named for a lotus flower.

Credit: (What Do You Know About Rocks, Minerals And Gems? Knowledge Cards Quiz Deck. Smithsonian Institution. Published by Pomegranate Communications, Inc.)

Treasurer's Note: Treasurer, Rebecca Siegal



2013 Dues! \$20 for single memberships. \$25 for family memberships. Why not invite your friends and family to join MSDC?

Please send all treasurer-related emails to:
dcminalclub@gmail.com

MORE REFRESHMENTS, PLEASE! Please contact Susan and Ed Fisher, or Betty Thompson, if you are able to bring refreshments to our monthly meetings. Susan, Ed, and Betty, along with a few other committed members, are the sources of the tasty treats that we enjoy at each of our meetings. If you are able to help, please seek out the friendly faces below and coordinate with them. Your contribution will be greatly appreciated!



(photos provided by B. Thompson)

WELCOME! WELCOME! WELCOME! Guests are always welcome to attend MSDC meetings. Please continue to invite your friends!



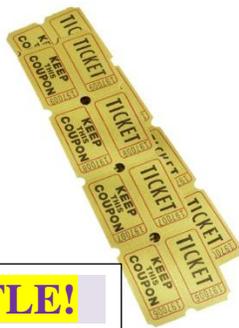
Guests & New Members: Holly McNeal and Bob Dennig
(Bob is a new member.)

2013 Speaker Flash Back:



(Microsoft Clipart)

- January 2013: Michael A. Wise, Ph. D, geologist in the Division of Mineralogy, for The Smithsonian National Museum of Natural History, gave a very interesting presentation on cathodoluminescence.
- February 2013: Cathleen Brown, Museum Specialist Rocks and Ores Division, for The Smithsonian National Museum of Natural History, addressed MSDC members on the topic of Pegmatites: What they are and where to find them.



MSDC RAFFLE!



Thank you for your mineral donations. They will be used as door prizes.

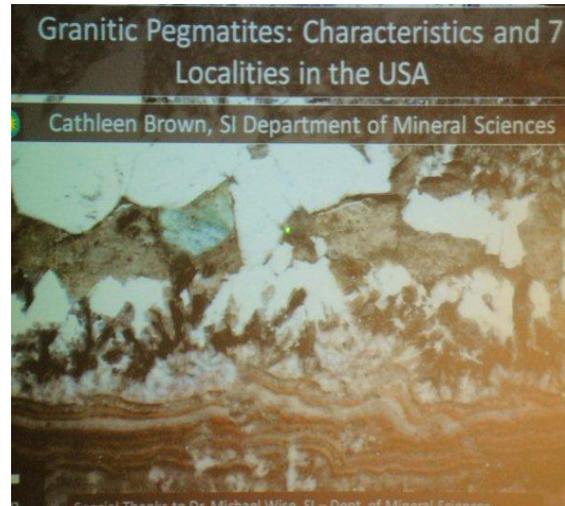
(photos by S. Sims)

We have your winning ticket in the bag!

MSDC's February Speaker: Cathleen Brown

Museum Specialist, Rocks and Ores Division, Smithsonian Institution

(slides by Cathleen Brown and Dr. Mike Wise)



Two Basic types of Granite Pegmatites

1) Mineralogically and Texturally Simple



2) Mineralogically and Texturally Complex



Fun Characteristics of Granitic Pegmatites for Mineral Collectors

1. Large grain size
2. Unique textures
3. Pockets with "goodies"
4. Industrial minerals
5. Rare mineralogy
6. Gem Minerals

MINERAL MINUTES



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Pre-Meeting Dinner: Join us for dinner at the Pier 7 Restaurant at 6:00 PM for dinner before the club meeting.
650 Water St SW, (at S L St), Washington, DC 20024, (202) 554-2500, www.pier7restaurant.com/Menu.

Please call Susan Fisher at 703-830-9733 to make a reservation if you wish to attend.

Visitors are always welcome at our monthly meetings and dinners!
MEMBERSHIP APPLICATION OR RENEWAL
THE MINERALOGICAL SOCIETY OF THE DISTRICT OF COLUMBIA (MSDC)

Family ~ \$25.00 per year. One address.

Individual ~ \$20.00 per year.

New * Renewal Dues are for Year _____ *

For new members who join in the last months of the year, membership will extend through the following year with no additional dues.

ANNUAL DUES – PLEASE PAY YOUR DUES PROMPTLY.

Pay at next meeting or mail to:

Mineralogical Society of DC

P.O. Box 9957

Alexandria, VA 22304

Name(s) (First and Last)

Address _____

City _____ State _____ Zip _____

Phone(s): Home/Work/Mobile _____

Email(s) _____

OK TO INCLUDE YOU ON CLUB MEMBERSHIP LIST? Distributed to Club members only.

Yes – Include name, address, phone, email.

If you want any information omitted from the membership list, please note:

Omit my: Email, Home phone, Work phone, Mobile phone, Address, Name

SPECIAL CLUB-RELATED INTERESTS?

MINERALOGICAL SOCIETY OF THE DISTRICT OF COLUMBIA

(2013 Officers & Board Members)

President: Steve Johnson, stevikj@gmail.com

Vice President & Program Chair: Rick Reiber, Mathfun34@yahoo.com

Secretary: Patricia Flavin, pattiflavin@gmail.com

Treasurer: Rebecca Siegal, dcmineralclub@gmail.com, (mail: c/o MSDC, P.O. Box 9957, Alexandria, VA 22304)

Director: Dave Nanney

Director: Dave Hennessey

Director: Andy Thompson, thompson01@starpower.net

Editor: Sheryl Sims, sesims4@cox.net

Co-Web Master: Betty Thompson & Casper Voogt, www.mineralsocietyofDC.org

Meeting Dates, Time, and Location: The first Wednesday of each month. (No meeting in July and August.) The National Museum of Natural History, Smithsonian Institution, 10th Street and Constitution Ave, Washington D.C. We will gather at the Constitution Avenue entrance at 7:45 PM to meet our guard who will escort us to the Cathy Kirby Room. Street parking: **THERE ARE NOW PARKING FEES, PAYABLE AT THE KIOSKS, AND ENFORCEMENT UNTIL 10 PM.**

MINERAL MINUTES



Newsletter of the Mineralogical Society of the District of Columbia



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P.O. Box 9957
Alexandria, VA 22304
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