



MINERAL CLUB



Crystals are the flowers of the Mineral Kingdom

THE MINERAL NEWSLETTER

Cave Minerals

some crystals we DON'T collect

By Tom Tucker

Caves have long been a source of shelter, awe, and trinkets for man or beast, but in this era of conservation and preservation we have come to understand that they present an irreplaceable resource that is best protected for all, now and in the future, to enjoy and appreciate.

Most of us probably have some form of "cave formation" in our collections,

but I would suggest that these specimens would look better back in their original environment. Of course this isn't usually possible, so I only implore us to refrain from future "cave" collecting. I'll briefly discuss the "Cave formation protection laws" of which some of us fear running afoul.

This long program of slides, most over 30 years old, explores a variety of cave minerals and formations, some common and some very rare, for your contemplation and enjoyment. I leave you with the admonition - "take nothing but pictures, leave nothing but footprints".

Join us February 23rd at 7:45 pm for this program as part of our meeting. As always, guests and potential new members are welcome!



Field Trip Chairman

John Carver has announced his willingness to head up efforts for organizing field trips.

This is recent news, and as of publication of this newsletter a field trip has not been planned, but one is currently in the works for sometime in early March.

Reminder! Renew Your Membership

It is time to renew your membership in the Northern Virginia Mineral Club if you have not already done so. Please send your membership dues to the following address:

NORTHERN VIRGINIA MINERAL CLUB PO Box 9851 ALEXANDRIA, VA 22304

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Find information also on our Club Website: http://www.mineralclub.org

NVMC Schedule:

23 Feb NVMC Meeting at LBNC

07 Mar Del. Gem Show

23 Mar NVMC Meeting

25 April Ben Clement Mineral Dig (Kentucky)

25 April Sterling Hill Super Dig (New Jersey)

27 April NVMC Meeting

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February Meeting Agenda

Informational Agenda...Neither Action Nor Discussion Are Needed...Please Email the NVMC President at d8olite @ fastmail.fm with names and/or suggestions.

Nancy Weiser's Memorial.... A \$50 check has been sent to Heartland Hospice in Fairfax, VA.

Committee chairs are STILL needed: Volunteer or nominate someone you know who can make a good contribution to the club by serving in one of the activities/programs listed below.

NVMC Rockhound of the Year (2009)...

Audit Committee Chair...Needed Immediately. The club cannot move forward without the required financial audit.

Historian...

Hospitality...Karen Lewis

Each-One-Teach-One Committee Chair...

Junior Activities...

Ways and Means...Rob Robinson

Webmaster...

Field Trip Chair...Ted Carver

Delegate to 2009 EFMLS Annual Meeting...If the NVMC is to be represented consideration should be given to providing some club support to attend. Again, have a motion prepared for the February meeting

NVMC---ACTION AGENDA---02/23/09

Call to order at 7:45 pm.

Recognize guests...

Recognize Past presidents

Announcements:

REMEMBER, the March meeting is one of our two AUCTION MEETINGs. Bring good material, a good friend, and bid...bid!

Short, time-sensitive announcements from committee chairs or the audience

Call for nominations for NVMC Vice President-2009. Election in March.

Old Business...

Status of report regarding the 2008-appreciation gift for Long branch Nature Center. Barry Remer will have a motion prepared including a dollar amount to purchase the "outdoor tent roof" (pavilion canopy).

With no support at the January meeting to proceed with a 2009 nominee for the Fred Schaefermeyer consideration should be given to closing the scholarship account and placing the residual money in the NVMC general account.

New Business

Approval of minutes of January '09 NVMC meeting.

Presentation and approval of 2009 budget.

Other items???

Adjourn for February program. Speaker Tom Tucker will provide a presentation regarding cave formations.

Board Positions Open

Currently our Club President, Wayne Sukow is acting President as the club currently does not have a Vice President and Wayne is seeking a replacement to assume the role of President. Our club Vice President officiates the meetings in the absence of the President, and is typically responsible for planning the program presentation at the meetings (8 meetings per year, since there are no meetings in July and August and March and November are reserved for club Auctions). The club President organizes the meeting

of the Board of Directors and manages the agenda for each club meeting.

These are important positions within the club. Please consider serving the club in one of these positions if you have time.

To volunteer for one of these positions, please contact the newsletter editor, Robert Winsor.

January Meeting Minutes

Recorded by Kathy Hrechka, Secretary

26 January, 2009

President, Wayne Sukow called the club meeting to order at 7:50 p.m. Past President, Rob Robinson was recognized.

Club member and Congressman, John Culberson gave a brief presentation on a bill about to pass concerning fossil collecting. He urged us to contact our local representatives and "Strip out the paleontology section of S22". www.house.gov. He stated that if this bill were to pass it would eliminate fossil collecting to hobbyists like us.

Sukow presented his "President's Award" to our editor, Robert Winsor. Sukow was grateful for Winsor, as he said, "Communication is the key to our success".

Announcements:

Nominating Committee, Barry Remer announced that Sukow is pro-tem president, and he is still looking for a vice-president for our club. He also informed us that the nature center is in need of an 8x8' outdoor canopy, which would be a nice gift from our club, since we meet at no charge.

Tom Tucker, President of the Micromineralogists of the National Capital Area, MNCA invited any members on a field trip to meet geologists, Dr. Lance Kearns at JMU Sat. Jan. 31. 9 a.m. – 3 p.m. 3dogtom@earthlink.net.

Tom Taaffe informed us that he reserved GMU through Julia Nord Cooper in January for our next club show to be held on Nov. 21-22, 2009.

Ann Cameron Siegal, writer from the Washington Post informed us that she has been working on a Kids Page featuring geology, including Alec Brenner. The feature should appear this spring.

Sara Brenner announced that her son, Alec, age 13 recently competed in a regional Science Olympiad tournament, and finished 3rd in the Fossil event out of 41 teams.

Guests were welcomed: 1. Dan Brown, Geology major from Clemson University, SC.

2. Brian & Connie Frank. 3. Sonia Wright, Julien Ueda (9yrs old), and Patricia Rhodes.

Rick Reiber asked if anyone had the VA state fossil, Chesapecten jeffersonius (Say) for a person in an out of state club.

Committee Reports: None

Old Business: None New Business: None

The minutes of the December 2008 newsletter were approved as published.

Sukow announced that the board has approved a \$50. honorarium for Nancy Wiser.

Treasurers Report: Rick Reiber called for members to approve the 2009 budget. Approval was rescinded due to the fact that members need be included to view the proposed budget. Copies will be available at the Feb. 23 meeting for approval.

Karen Lewis, Hospitality Chair invited members for refreshments.

Program: Rob Robinson, Professional Geologist of the USGS, gave an informative presentation concerning blue minerals.

Meeting Adjourned at 9:25 p.m.



Wayne Sukow presents Robert Winsor with the President's award.



Alec Brenner, one of the youngest members of the NVMC, competed in a regional Science Olympiad (SO) tournament on January 24 in Dayton, Ohio, and finished 3rd in the "Fossils" event out of 41 teams.

Alec, an 8th grader at Longfellow Middle School in Falls Church, VA, is preparing for the Virginia State SO competition on March 21.

In the "Fossils" event, students must identify and demonstrate their knowledge of 125 fossil animals, plants and other organisms. Students are tested on their knowledge of modes of preservation; geologic time scales; fossil-bearing rocks; past environments; modes of life; classifications; index fossils; dating methods; adaptations; minerals components of skeletons; and important paleontological discoveries and events.

Alec competed in 4 events at the Ohio regional tournament, taking 3rd place in "Fossils," 3rd place in "Dynamic Planet," 2nd place in "Amphibians & Reptiles," and 1st place in "Anatomy."

If Alec's team wins the Virginia State SO tournament, the team will advance to the National SO tournament, which will be held at Augusta State University in Georgia on May 15-16, 2009.

Science Olympiad (www.soinc.org) is a nationwide organization that runs competitive tournaments across the country. Each tournament consists of a series of team events, which students research and prepare for during the year. Events require knowledge of many science disciplines, including biology, earth science, chemistry, physics, and engineering.

Club Members: Feel free to bring sample fossils to the February meeting and quiz Alec on them!

Congressional Bill S.22

At our January meeting, John Culberson gave a brief talk about congressional bill S.22, the "Omnibus Public Land Management Act of 2009". This bill passed in the Senate on January 15th, but as of publication of this newsletter, it appears that the bill has not yet been up for vote in the House, but has been up for discussion.

This bill enacts sweeping restrictions on paleontological finds on public lands, effectively turning the practice of amateur fossil collecting (on public lands) into a crime with stiff punishments. Furthermore, it provides reclamation powers to the government for fossil found on private land.

Representative Culberson wants to strongly urge us all to contact our representative in the House and urge them to vote NO regarding the paleontology sections in this bill.

Visit http://www.house.gov to find your representative and send mail!

Reimherr finds Stellerite at Hunting Hill

By Robert Winsor

During the trip to the JMU Geology department, George Reimherr brought in a mineral brought in from the Rockville, MD Hunting Hill Quarry. The mineral was identified as Stellerite (not previously associated with that locality according to the website mindat.org) and was identified using the JMU scanning electron microscope.

Congratulations, George!

Ben Clement Mineral Digs

The Ben Clement Mineral Museum has announced their planned digs for 2009. This Museum located in Marion, KY is known for its spectacular Fluorite samples not only on display in the museum but also for the quality of fluorite that can be obtained from the abandoned mine nearby. Several times a year they open the mine for collectors to dig through the dumps, or if you are so inclined there are locations where ambitious collectors can dig out some untouched veins.

The digs for 2009 are scheduled for April 25, May 23, June 6th & 7th, July 25, August 22, September 19, October 17. June 6th and 7th is also the weekend of their Gem, Mineral, Fossil and Jewelry Show. Contact the Editor for more information.

Please see the Nov. 2008 Mineral Newsletter for an article about the trip that the Editor and his daughter took to this location. It was a lot of fun!

Culberson appeals to NVMC members regarding S.22 at the Jan mtg. Photo by Sheryl Sims



The Prez Says.... 'U'per or Y'uper Agates

U'per or Y'uper Agates, whatever you call them they are SUPER. They are all the latest rage among collectors world wide! Though small from pin-head size (1mm) to 50mm they balance their size by their price :>) The Wolverine #2 Mine Dump is the collecting location for them. What makes them different, perhaps unique, is the massive native copper which perfuses them to mimic fortification bands, copper eyes, and other marvelous shapes. I understand that one fellow working for NASA collects and halves the pin-head size to small pea size; you need special gear to cut and photograph those. I'm kinda working on a program using them as the topic.



Knowing a great digital photographer who worked cheap would help. How about a field trip????

We had a great January meeting. It was spirited, views were shared, the 2008 NVMC President's Award recipient was surprised, and the program by Rob Robinson was blue but excellent!. Those who weren't there missed a good one. Join us on February 23rd. The 2009 budget will be presented and voted on. Thanks for the work needed to prepare it Rick.

DUES ARE DUE. To participate in NVMC activities you need to be a NVMC club member so remember that our Treasure, Rick Reiber, is collecting NVMC 2009 membership dues. He'll



take cash or checks at the February meeting. No increase this year.

Plan ahead. The March meeting is the NVMC Auction. Bring doubles of your extra-good stuff. There will be many triple winners that night: the high bidder on the item, the seller, and the NVMC, which gets the "house percentage." It'll be an entertaining and spirited evening. Y'all Come.

As I said in my 2008 February Prez Says message, "Is anyone listening" or "Is anyone reading?" Please let me know...Do you like the Informational Agenda, which shortens our meeting time? Do you miss the pictures? Those questions are still valid for the NVMC and many other mineral and lapidary clubs across the nation. I read a lot of "Prez Says" articles each month and still not solution. Send me an email, my address is d8olite @ fastmail.fm.

Wayne Sukow, Prez.

Field Trip to James Madison University

By Robert Winsor

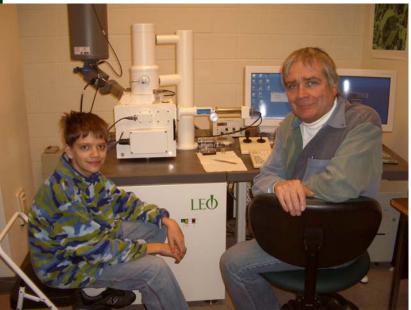
Photos by Kathy Hrechka

At the January meeting, Tom Tucker announced that the Micromounters were planning a trip to James Madison University. He was gracious enough to invite members of the NVMC to join along. The trip occurred on the morning of the 31st from 9am until about 3pm. In attendance at the event were Wayne Sukow, George Reimherr, Tom Tucker, Kathy Hrechka, Alec Brenner, Paul Brenner, David Maclean, George Loud, Robert Winsor (and kids Brooke and Isaac), and Eric and Melissa Thompson.

The fun began in the X-ray diffraction lab, which has desks and binocular microscopes to accommodate roughly 15 people. This provided a great opportunity for people who don't normally have a microscope to bring in small samples (especially from mine or quarry field trips) and have a means to look at them in detail.



George Loud and Dr Kearns stand in front of the Virginia Minerals display cabinet while Brooke and Isaac Winsor are wowed by the minerals in the cabinet.



Alec Brenner and Dr. Kearns take a moment to smile for the camera after discussing samples tested in the SEM.

While many people started looking at their micro-mineral specimens, Dr. Lance Kearns, our Host, was collecting small samples from people wishing to have their unknown samples become known substances via X-ray diffraction analysis. Several samples were tested prior to leaving for lunch, with no real surprises. In fact, one of the identified minerals was none other than calcite!

Shortly before lunch, most attendees headed up to the Mineral Museum. This museum holds some specimens that are nothing short of spectacular. One of the display cases holds a selection of minerals that were all found in Virginia, and include excellent examples of prehnite, datolite, stellerite, amazonite, mica books, calcite and turquoise to name a few. Also in the museum is a nice fluorescent mineral display containing many nice samples from the Sterling Hill and Franklin region of New Jersey.

Field Trip to James Madison University (cont)

We all enjoyed lunch at a local Italian eatery down the road, proving a rare but nice opportunity to sit down and chat with fellow club members and get to know them better.

After lunch, we headed across campus to a building near the recreation center so that we could use the scanning electron microscope (SEM). This microscope not only provides imagery of samples, but also detects energy levels of atoms within the sample as they are bombarded with high-energy electrons. These energy levels act like a fingerprint to identify the constituent atoms within the sample. From this, a determination of the mineral being observed can be made.

A tray containing roughly 12 samples was placed into the vacuum chamber of the microscope. These samples came from various individuals attending, and were mostly minerals that were well known. One sample was well known, but when taking the locality from where it was recovered, it was unusual. This was a sample of stellerite brought in by George Reimherr, which he collected at the Hunting Hill quarry in Rockville, MD.

This was a very enjoyable and educational experience, even for the little kids that came along!

Next year, if the Micromounters are as generous as they were this year and invite the NVMC again, we will try to get club members informed of this at an earlier date. For this event, if you weren't at the club meeting, you probably didn't know it was going to happen.



Thank-You from Milton Wiser

In February, the NVMC sent a \$50 memoriam to the Nancy Wiser Memorial fund.

Milton Wiser has sent a Thank-You card to the Northern Virginia Mineral Club. The card will be on display at the February meeting.

Geologists Request Samples

The Editor received the following request:

Jane Jennes (703-406-0651) is requesting members to send scraps of prehnite to Ruth Deike for her educational program (see http://www.rockdetective.org). One of the 'mysteries' is about the mineral prehnite. Jane works at the USGS in Reston and can coordinate the pick-up of scraps. Ruth's program is non-profit and can provide receipts for donations.

For IMU:

While at the James Madison University field trip, Dr. Kearns requested that if anyone has small wavellite spheres from the National Limestone quarry in Mt. Pleasant Mills, PA, that he could use some sample for a study he is doing. Please contact the Editor for more information on getting samples to Dr. Kearns.

For Sale

Mr. Dave Flemming contacted the Editor regarding some estate lapidary equipment for sale:

Arlington location for mineral equipment includes 10-12" standalone slab saw, trim saw, band and disc sanders buffers, blow torch, over 40 cartons of beautiful stone and geodes, dozens of textbooks and lots of accesories. Note: Motor on slab saw requires 40 Amp circuit, may require bushings. A 'quick-assembly' trailer is included for transport. Original investment of \$12,000, now \$1,200 takes all. Call nights: 615-642-8961.

Growing Crystals part 2

By Robert Winsor

Last month the growing of hydrated sulfates was covered, mainly because they are very easy crystals to grow. This month, the growth of salt crystals is covered, arguably somewhat more challenging, but still easily done. Although visions of rock salt being thrown out onto frozen walkways may come to mind, it is a good idea to stick with regular table salt for this.

When buying salt for crystal growing, also make sure that the salt is pure sodium chloride. Do not use salt that is iodized or "low sodium". The impurities found in rock salt and other forms of salt can easily degrade crystal growth.

To get good results growing salt crystals, it is important to have a container that can be covered, preferably with a lid that seals, even though the lid will have a hole cut in it. A lid that seals is needed because as water in solution evaporates, a crust will start to grow up the side walls of the container. This crust will achieve exponential growth rates (in fact, something that makes an excellent science project for high-school students all by itself) because as it

grows, it wicks solution up to the top edge of the crust. This increases surface area for evaporation and deposits more micro-crystalline salt crust. By using a container with a sealed lid and a small hole in the center of the top of the lid, the evaporation rate is slowed and the humidity level near the surface is increased, reducing the rate of crust growth (and it may in some cases prevent it completely). Make sure this container is made to hold boiling hot liquids!

Start by filling your container 1/2 full with distilled water and boiling it in a pan with salt. The amount of salt should be such that there is always some undissolved salt at the bottom of the pan, even when boiling. Start-

ing with a ratio of 1 cup water to 1/2 cup salt is a good starting point. Once the solution has started to boil, reduce heat to *barely* maintain a mild simmer. Leave the pot uncovered. Continue to simmer for about 10-20 minutes, stirring frequently. Add more salt as needed if the initial amount completely dissolves.

Pour the solution into the container (avoid transferring undissolved salt) and place the lid on top. Put the container in a location where it can remain undisturbed for the next couple months. The evaporation process will be slow, and this is important for good growth of salt crystals. The result will be crystals with smooth faces and nice cubic shapes.

Hopper growth of Halite crystals from Searles Lake, CA

There is another form of salt crystal growth that can be achieved easily in the home, and that is "hopper" growth. Such growth is characterized by fast crystal growth at the edges and slower growth at the center. The faces appear similar to a stair-step series of ridges going down toward the center of the face. This type of growth is represented by only a few types of crystals, so it is worth making a second batch of salt solution specifically for making hopper-growth crys-

To grow salt crystals with hopper growth, do not place a lid on the container in which the crystals are growing. Also, because of the growth of crust on the side walls of the con-

tainer, eventually it will become necessary to place this container within another larger container, because the crust will grow over the edge of the container and travel back down the outside! Ideally, the entire thing should not be disturbed until the crystals that have grown are removed from solution. The crust will easily break off and fall into the solution if disturbed. The microcrystals of salt from the crust will instigate new undesirable growth. So it is good to plan ahead and make sure the setup is such that it won't be disturbed for a time period of several weeks to a few months (depending on the amount of growth desired.

Next month: Sugar crystals!

Gem & Mineral Show

Saturday March 7, 2009 and Sunday March 8, 2009

The Delaware Mineralogical Society, Inc. will hold its 46th Annual Earth Science Gem and Mineral Show @ Delaware Technical and Community College @ I-95 Exit 4B, Churchmans Road (Rt. 58) Newark (Stanton), DE 19713. Hours Saturday are 10:00 a.m. to 6:00 p.m. and Sunday 11:00 a.m. till 5:00 p.m. The show features educational exhibits of mineral, lapidary and fossil specimens, displays from regional and university museums, an expanded roster of fine dealers of minerals, fossils, gems, jewelry and lapidary supplies, door prizes, demonstrations of gem cutting and polishing and a children's table, where youngsters may purchase inexpensive mineral and fossil specimens. Admission is \$5.00, \$4.00 for seniors, \$3.00 for young-

sters between 12 and 16, and free for children under 12 accompanied by an adult. The Delaware Mineralogical Society is a non-profit organization, affiliated with the Eastern Federation of Mineral Societies, and dedicated to learning and teaching about the earth sciences, rocks, minerals, fossils and the lapidary arts. Membership is open to all who are interested in these areas. Info and Coupons at www.delminsociety.net or contact gene@fossilnut.com.

For further information, contact:

Gene Hartstein, (E-Mail- gene@fossilnut.com) (Publicity)

Wayne Urion (302) 998-0686 (E-Mailwurion@aol.com) (Show Chair)

Schedule

Upcoming Events to plan for:

23 Feb NVMC Meeting

07 Mar Del. Gem Show

23 Mar NVMC Meeting

25 April Ben Clement Mineral Dig (Kentucky)

25 April Sterling Hill Super Dig (New Jersey)

27 April NVMC Meeting

Go Emerald

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The Board of Directors

Do you have a question for one of our Board members? To the right you can find email addresses and phone numbers for club officers (Note imminent changes for Prez and Vice Prez!).

Also, if you would like to attend a meeting of the Board of Directors, please contact Wayne Sukow and let him know ahead of time. All club members are welcome at Board meetings!

Board Meetings are held the second Thursday of each month at 7:30pm at Wayne's home in Fairfax. Please contact Wayne for directions.

President (Interim): Wayne Sukow d8olite @ fastmail.fm (703) 280-8108

Vice President: Vacant

Secretary: Kathy Hrechka

kshrechka @ fastmail.fm (703) 765-3187

Treasurer: Rick Reiber

rickgr3 @ comcast.net (703) 578-4224



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PLEASE VISIT OUR WEBSITE: HTTP: \\www.mineralclub.org

The Northern Virginia Mineral Club

You can send your Newsletter articles to:

Robert Winsor 35740 Roundleaf Ct. Round Hill, VA 20141

Or via email: photech @ comcast.net

<u>Visitors are Always Welcome at our Club</u> <u>Meetings.</u>



TIME TO RENEW!

Renew your
membership in the
Northern Virginia
Mineral Club!

NORTHERN VIRGINIA MINERAL CLUB PO BOX 9851 ALEXANDRIA, VA 22304 **Purpose:** To promote, educate and encourage interest in geology, mineralogy, lapidary arts and related sciences. The society is a member of Eastern Federation of Mineralogical and Lapidary Societies (EFMLS)

<u>http://www.amfed.org/efmls</u> and American Federation of Mineralogical Societies (AFMS)
<u>http://www.amfed.org.</u>

Dues: Due by 1 January of each year; \$15.00 Individual, \$20.00 Family, and \$6.00 Junior (under 16, sponsored by an adult member).

Meetings are held at 7:45 p.m. on the fourth Monday of each month (except

May and December*) at Long Branch
Nature Center, 625 Carlin Springs Road,
Arlington, VA 22204. Phone (703) 228-6535.
(No meeting in July & August.)

(*Changes announced in the newsletter.) Snow schedule - Arlington county schools.