

MINERAL CLUB







Crystals are the flowers of the Mineral Kingdom

THE MINERAL NEWSLETT

VOLUME 49 No. 4 **APRIL 2008**

Diamonds - Out of Africa

Speaker, Denise Nelson, GG, NAJA will speak on the "Forbidden Zone", the restricted area along the Namibian coast of Africa. In this presentation, she will share a first-hand look inside the diamond mining operations of Namibia and South Africa. It is a journey rarely witnessed by other than De-Beers insiders. You will hear about major changes which will impact the diamond industry and possibly change

Please see page 7 for a brief biography about Denise.

it forever.

We would like to invite club members to get-together for dinner with Ms. Nelson before the meeting on the 28th at the Olive Garden on Route 7/King St. (near Bailey's Crossroads, accross the street from Skyline Mall). The dinner get-together is planned for 6:30pm.

The address for the Olive Garden is: 3548-52 S. Jefferson Street Falls Church, VA 22041 703-671-7507



_____ **NVMC** Schedule:

Club Meeting 28 April at 7:45 pm

May Field Trip on the 4th, Hunting Hill

GMMC May 15th in Manassas

May Meeting date is still TBD

Field Trip 04 June to







May Field Trip - The Hunting Hill Quarry

SUNDAY May 4th: May's field trip is to the Rockville Crushed Stone Inc Quarry for grossular garnets, quartz, calcite, serpentine, zoisite, and much more (these are what I've found in the past). The address is 13900 Piney Meetinghouse Road, Rockville, MD 20850.

IMPORTANT NOTES: This is a SUN-DAY field trip - John Boyer will not be attending this field trip. Robert Winsor has volunteered to lead this field trip. To sign up, email Robert or call Robert at 703-431-8547. The quarry manager has set a limit of 20 participants. There is a chance the limit will be increased, but please do not sign up for this field trip unless you are absolutely certain you will attend. To our

club members signed up for the Montgomery County Club field trip on May 18th, please be considerate and attend that field trip only to open up space for our non-Montgomery club folks.

New club members must supply your own safety gear, hammers, chisels, etc.

Club members only. Meet at the Manager's Office no later than 8:30 am. We will collect from 9:00 am to 3:00 pm. Kids are welcome if accompanied by a parent or legal guardian. This is a hard rock quarry and you will need heavy boots, hard hat, safety goggles, heavy work gloves, rock hammer, rock chisels, buckets/egg cartons and paper to wrap specimens. Don't forget plenty of water, snacks and sunscreen.

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The editor snapped a picture of John Boyer (top) snapping this excellent shot (bottom) of the club members attending the Manassas trip. John's camera stopped working shortly afterward....Coincidence??

Field Trip Report -**Manassas Quarry**

March 22nd, 2008

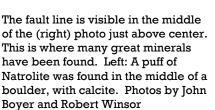
By John Boyer

35 intrepid adventurers braved the chilly morning on Saturday, March 22nd, to participate in the club's first field trip of 2008. Although the forecast called for temps in the 30's with a chance of rain and snow showers, we welcomed the Spring sun and temps in the upper 40s. 15 new members joined our veteran rockhounds to collect a variety of calcite, a bit of pyrite, chalcopyrite, apophyllite, not much prehnite though, a quartz pocket with just a faint trace

of purple tint (my find), and Eric Thompsen's lucky find, stellerite. Our newbies were the Gunnarson family. Tim Harazim and son Mike, Eric Kindahl and son Alex, Dave Tintinsky and son Michael, Catherine Eck, the Lester family, and Angela Goodhart and her daughter Rebecca. Once again, Mickey the quarry manager, was a gracious and enthusiastic host and every-

one was rewarded with new found treasures.







of his efforts - a nice panel with





Field Trip Report National Limestone Quarry

April 12th, 2008 By John Boyer

Of the original 40 people signed up, 17 members of the The NVMC visited the small Mennonite community of Mt. Pleasant Mills, PA on Saturday, April 12th to collect more calcite than I thought was possible from one location. The weather was terri-

fic, sunny and 64 degrees. Thunderstorms the previous night washed off the newly blasted rock exposing more crystal lined pockets than I've ever seen in 25 years of quarry collecting. Collectors filled boxes, buckets, pockets, trunks, front seats, back seats, and glove compartments with spectacular museum-quality, cabinet-size specimens.

Along with veteran club members Bob Eberle and family, Mark Schultz and family, and Sherrie Gossett, we were joined by new club members and first time field trippers Doug and Sue Redburn, Tim and Mike Harazin, Hank Brooks, Paul and Alec Brenner, and Eric and Alexandria Kindahl - yup the novices outnumbered the veterans. I was asked more than once "Is this what's it's like at all your quarries?" Don't I wish. Calcite was definitely the star attraction this trip. Last October it was Strontianite, but none

was found this time, and only a couple of wavellite and fossils specimens were found as well.

This quarry was definitely worth the three hour drive and we will visit it again in September to coincide with the bounty of fresh fruit and vegetables produced by the many farms in the area.

Photos: Top two photos show calcite crystals on the limestone pocket. Left: Some very purple fluorite found next to calcite. Bottom: A nice sunny morning, perfect for prospecting! All photos courtesy Doug Redburn

April Meeting Agenda

NVMC---AGENDA---04/28/08

- 1. Call to order at 7:45 pm.
- 2. Recognize Past Presidents & Guests...
- 3. Announcements & Reports:
- 4. May Executive Committee Meeting May 8th at 7 pm...at Sukow's
- March Auction...
- Field Trip...
- Show chair for Nov. '08 and volunteers to work at the show....
- Other short announcements from committee chairs or audience.
- 4. Old business...Action Items...
- 5. New business...Action Items...
- Approval of March meeting minutes.
- Other items
- 6. Adjourn meeting.
- 7. 10-minute Refreshment break
- 8. APRIL PROGRAM—Denise Nelson
- 9. END PROGRAM BY 9:50

The Prez Says

Wayne is out of town this week, and therefore unable to contribute to the "Prez Says" section of the newsletter.

When I first joined the club last year, it just so happened that I joined on the same night as the March auction. I was astounded at the array of specimens and items that were put on the auction block – and so disappointed I hadn't brought more money with me. This year's March auction was no different. Everyone bid enthusiastically, and more than a few bidding wars broke out. I would say that good times were had by all, and the auction went wonderfully – there was even a "happy dance" or two as a result of winning bids. Maybe I'll actually remember to bring more money with me to the next auction.

I would also like to put the word out to you all that I am interested in your inputs for potential meeting programs and speakers. Is there a particular speaker you would like to see? Perhaps a movie? Are there certain topics you are interested in hearing about. By all means – please let me know. I want club members to be as much a part of the programs as possible. Feel free to contact me for any inputs, or send a message through the Yahoo Northern Virginia Mineral Club Group, NVMinerals@yahoogroups.com.

-Jenn Hammond, Vice Prez cherryflamez@yahoo.com

April Speaker Denise Nelson Biography

Denise Nelson is the owner of INNER CIRCLE Fine Jewelry Sales and Appraisals. She is a member of WBO (Women Business Owners of Montgomery County), ISA (International Society of Appraisers), the Maryland Retailers Association and the GIA (Gemological Institute of America) Alumni Organization. Denise is a Graduate Gemologist (GIA), Graduate Diamontologist (GIA), and has received certificates of completion of the Gems and Diamonds Courses offered by the Diamond Council of America. Denise started her company the INNER CIRCLE fourteen years ago. Denise is an im-VALUES National Capital Area Chapter International Society of Appraisers, September 2006 porter of gems and pearls

and also serves as a consultant to Retailers, Auction Houses, Marketing firms, Trade Publications, Collectors, and Private Clients. Her contacts within the mining, cutting and Gemology circles, combined with her buying trips to Asia, Europe, and trade shows within the USA, allow her to stay on top of new jewelry related developments and issues. She is also a designer of unique Jewelry combining unusual gems and fine metals, and she has created many one-of-a-kind, custom designs for her customers.

Denise Nelson INNER CIRCLE 301 530 9266

e-mail: inner.circle@worldnet.att.net

March Meeting Minutes

From the Editor: The meeting minutes for March were somehow misplaced, so the minutes shown below are to the best recollection of Robert Winsor and Jenn Hammond. The actual meeting start and finish times may not be accurate.

Meeting Called to order at 7:45 pm

Recognition of Past Presidents was not performed in the interests of saving as much time as possible for the auction.

No old business was discussed.

Mark Schultz made an announcement about the General Mineral Miner Certification course being held at Long Branch Nature Center. This announcement was also posted on the club website. Mark appealed for people to sign up early, as there is a maximum head count of 20 allowed.

Schedule

Upcoming Events to plan for:

26 April: Trotter Diggg at Sterling Hill

27 April: GMMC at Long Branch Nature Center

28 April: NVMC Meeting

04 May: Hunting Hill Quarry Field Trip

15 May General Mineral Miner Certification in Manassas note error on this date in last months newsletter

14 June: Willis Mountain Kyanite Mine
Date for the May meeting is still TBD

Too late, Sorry

GMMC course at LBNC

Last month, the notification of the GMMC class being held at the Long Branch Nature Center was received a couple days late to include in the newsletter. If you manage to receive this newsletter in time, you may try to sign up for it, but it is being held on the 27th of April. Don't wait, there is a limit on attendance. For details, please see the club website.

The nomination committee reported on their nomination for Vice President, Jenn Hammond. Nominations were then accepted from the floor with no further nominations. The election for this Board position was then held with Jenn Hammond being elected as Vice President.

John Boyer made an announcement regarding the 14 April field trip to the National Limestone Quarry. He also indicated that over 30 people had signed up for the trip, and he expressed concern that field trips are starting to be quite heavily attended. He indicated that he may need to implement some sort of method of allowing all club members to attend field trips, not just the first to sign up, but he will be working on ideas in the mean time.

The meeting was adjourned at 8:00pm to allow for commencement of the auction.

Don't Forget!

The Sterling Hill Super Dig still has some open slots before it exceeds capacity of 200 people. You may still be able to register for the event and attend it. See http://uvworld.org for details.

ERRATA

Last month reported the General Mineral Miner Certificate course in Manassas being on 13 May, but it is on the 15th. Also, there is no paperwork needed prior to attendance. Just call the course instructor and remember to bring \$10 to pay for the certification. Please see the February newsletter for the information.

Go Emerald

Electronic Newsletter: You can save some paper by electing to have the electronic-only newsletter. Just send email to the editor to have your newsletter delivered by email only. It saves money, you get the newsletter sooner, and it is in full color. Send email to photech@comcast.net

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THE MINERAL NEWSLETTER



Congratulations, Alec, you ROCK!

Alec Brenner, one of the youngest members of the NVMC, is taking his rocks and minerals very seriously these days. Alec, a 7th grader at Longfellow Middle School in Falls Church, VA, is preparing for the Virginia State Science Olympiad (SO) competition

on April 26, and is a favorite to win the "Rocks and Minerals" event.

So far this year, Alec has taken first place in the "Rocks and Minerals" event at two regional SO tournaments, one in Ohio in January, and the other in Virginia in February. At each tournament, he competes against middle school students from 16-20 other schools.

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.

In the "Rocks and Minerals" event, students must identify and demonstrate their knowledge of nearly 100 different rocks and minerals. They have to know mineral groups, properties, composition and structure; formation and properties of igneous, metamor-

phic, and sedimentary rocks; and the economic importance and past environments of rock and mineral samples.

Alec competes in 2-3 events at each tournament. His favorite event, of course, is the "Rocks and Minerals" event, but he also has competed in solar

system/constellations; anatomy; amphibians and reptiles; and entomology (insects). Last year, as a 6th grader, Alec was the Virginia state tournament champion in entomology and took second place in "Rocks and Minerals."

If Alec's team wins the Virginia state SO tournament, the team will advance to the National SO tournament, which will be held May 30-31 at George Washington University.

See the May Mineral Newsletter for an update on Alec's accomplishments in the Virginia State Science Olympiad!

See the following website for the amazing list of minerals on the Official List.

http://www.soinc.org/events/rocksnmin/rockminlist08.htm

How well do YOU know these minerals!

Obituary NVMC PIONEER-Robert Mills

Robert M. Mills, known to everyone as "Bob" died in December 2007 at the age of 89. He was involved with rock collecting for many years going back to the 60's. He and his wife became involved with the Northern Virginia Mineral Club many years ago. His daughter remember him telling her about his special visit with the club to the Smithsonian "behind the scenes" exhibit and actually saw the Hope diamond among other beautiful treasures. They traveled extensively throughout the United States and Canada, going on "digs' with other Rockhounds. They had an old RV and would bring back so many rocks that some were amazed they made it back home. He really enjoyed going out and actually digging into these

"sometimes"-awful places looking for that perfect specimen. He and his wife could name every stone and where it was found. His daughter also remembers the stories he would tell about sharing their findings with other rock enthusiasts. He learned to slice, polish, and carve these rocks into amazing beautiful cabochons and sculptures. Then he learned to set his polished cabochons into jewelry, bolo ties, belt buckles and other pretty arrangements. His collection of petrified wood and geodes was extensive. In his later years, he could only talk about some of his exploits but never grew tired of his "rock collection. The family is now left with his rich collection of memories and treasures.

THE MINERAL

Tool of the Month

This month starts a new article feature in the Mineral Newsletter, "Tool of the Month". Each month, a particular tool of interest will be featured, along with an explanation of how it can be used to make the hobby of mineral collecting easier.

This month's tool is the Badger Mini Sandblaster Kit.

Have you ever found a nice crystal of a hard mineral and felt that it was so beautiful, except for that cruddy coating that won't come off!! I have encountered this a few times. Most recently, I brought home some Wavellite from the National Limestone Quarry. It looked fantastic other than the coating of hematite, which would just not come off at all, even with medium strength hydrochloric acid. I have had similar experiences with fantastic looking quartz crystals, but the coating of crud on the crystals make it look bland.

Then I saw the Badger Mini Sandblaster and had to give it a try. It really worked quite well, and the kit comes with everything needed to clean off small mineral samples.

In the kit is an airbrush that has a different tip on it—for blasting abrasive rather than paint. There is a small jar, just like most airbrushes, and there is a can of spray air to provide the propellant. The abrasive supplied is enough to cover maybe a good solid square foot of surface area if you recycle the abrasive.

So that you don't use up the abrasive too soon, you may want to perform your blasting into a box. The box will capture a lot of the abrasive and allow you to pour the used material back into the jar.

Following the instructions provided is simple and results are apparent rather quickly. However, you may want to experiment with a small part that you really don't care about before using this on a really nice specimen.



This kit is really likely

to scour minerals that are softer than 6 on the Mohs scale, so keep that in mind. The abrasive supplied is aluminum oxide, so it will scratch and etch most minerals if care is not exercised, even with harder minerals. However, I have found that if the distance is controlled well, the scratching can be nearly eliminated. After all, a hard mineral can only scratch a softer one if the pressure is high enough. Reduce pressure on your mineral specimen by increasing the distance between the sprayer tip and the part being cleaned.

When I tried this on my piece of wavellite, the piece transformed from a dirt-brown color to the characteristic lime-green wavellite color. I now have a beautiful wavellite sample that looks like a bundle of small green grapes.

Do you have a favorite tool? Send a write-up to the Editor! See the bottom of the last page of the newsletter for the address.

The Board of Directors

Welcome new Board Member, Vice President Jenn Hammond!

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.

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: Wayne Sukow

d8olite@fastmail.fm (703) 280-8108

Vice President: Jenn Hammond (703-585-3046)

cherryflamez@yahoo.com

Secretary: Kathy Hrechka

kshrechka@msn.com (703) 765-3187

Treasurer: Rick Reiber

rickgr3@comcast.net (703) 578-4224

THE MINERAL NEWSLETTER

Field Trip, 14 June 2008

FIELD TRIP – Saturday, June 14th: June's field trip is to the Willis Mountain Kyanite Mine, 30 Willis Mountain Lane, Dillwyn, VA 23936. The main mineral is kyanite and a host of other minerals which can be viewed on www.mindat.org - do a locality search for Willis Mountain Mine. You can also view the kyanite at www.kyanite.com and take notice of the special activities occurring at the mine that weekend.

Club members only. Meet at the Manager's Office no later than 9:30 am. We will collect from 10:00 am to 3:00 pm. Kids are welcome if accompanied by a parent or legal guardian. This is a hard rock quarry and you will need steel toed boots, hard hat, safety goggles, heavy work gloves, rock hammer, rock chisels, buckets/egg cartons and paper to wrap specimens. Don't forget plenty of water, snacks and sunscreen.



John Boyer must know of your plans to attend this field trip by email to jwskboyer@cox.net or call John's cell phone at 703-304-3489. Provide John with a good contact phone number to warn you of last minutes changes or cancellations. John will call you, not email you, to be sure of getting the message through.

Shortwave Lamps, Dissected by Robert Winsor

Have you ever wondered why shortwave UV lamps are so pricey? Some people think that there is special technology that makes them costly, that the bulbs are expensive or that a special power supply is needed to drive the bulb.

In fact, a shortwave lamp is a very low-tech device. It is as simple as any fluorescent lamp, but the part that makes it expensive is the filter. Actually, nearly all fluorescent lamps generate tremendous amounts of shortware UVC light, due to the strong photo-emission of mercury plasma at a wavelength of 265nm. But fluorescent lamps are different from shortwave lamps in that there is nothing fluorescent about a shortwave lamp. Fluorescent lamps have the inside surfaces of the glass coated with a "phosphor" that is fluorescent. It is this coating that absorbs the UVC and emits visible light, creating the light we know well. The glass is also chosen to completely absorb UVC, eliminating risk of exposing people to the damaging rays that may get through the phosphor.

So, to make a shortwave lamp, one needs a normal fluorescent type bulb, but without the phosphor coating and with a glass that allows the UVC to escape. These are commonly available these days, and are easily found by looking for "germicidal" bulbs. How-

ever, mercury vapor (and therefore the "germicidal bulbs) also emits a fair amount of blue and green light, of which our eyes are quite sensitive. So, in order to make a shortwave lamp output nearly exclusively UVC, a special filter is needed. This filter is the expensive part of the entire lamp assembly.

There are a couple of companies that make filters for this application, Schott Glass and Hoya Glass. Both of them charge a substantial price for the filter glass, and each of them perform a bit different. Hoya Glass filters of type U-325C is generally preferred, however, as it has the highest transmittance at 265nm, costs a little bit less than Schott Glass UVC filters, and has a longer "solarization rate".

Solarization is an alteration to the glass filter that occurs during use. Exposure to UVC rays actually decreases the transmittance of the filter over time. This effect takes hundreds of hours to develop, but after you have used the lamp for several hundred hours, this becomes an issue. Replacement filters are usually available to address this problem.

So, there you have it. Your shortwave lamp is nothing more than a fluorescent lamp ballast, a germicidal bulb and a light-tight housing to hold the filter.



NVMC Newsletter Editor Robert Winsor 35740 Roundleaf Ct. Round Hill, VA 20141

Phone: 540-751-0922 Please call between 7pm and 9pm E-mail: photech@comcast.net



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

The Northern Virginia Mineral Club

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)

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

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.

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



Please send articles to the newsletter editor! The deadline for submission is 10 days prior to the club meeting.

You can send your Newsletter articles to:

Robert Winsor 35740 Roundleaf Ct. Round Hill, VA 20141

Or via email: photech@comcast.net