

The Mineral Newsletter Meeting: May 19 Time: 7:45–9:00 p.m.

Long Branch Nature Center, 625 S. Carlin Springs Rd. Arlington, VA 22204

Radioactive Rocks, Part 1 May 19 Meeting



Jim Kostka will present an introduction to radiation and radioactive minerals. Jim ("if it doesn't click, I don't collect it") is a long-time member of NVMC who joined to find radioactive minerals, only to discover that there aren't any in the mid-Atlantic area.

Jim first joined the Gem and Mineral Hunters club, which met at the time in Manassas, VA. In addition to belonging to NVMC, he is now a mem-

ber of the Gem, Lapidary, and Mineral Society of Montgomery County and the Micromineralogists of the National Capital Area. Jim has found his niche, and he has also found radioactive minerals in our area—not in the ground, but in the basements of club members and estates.

Jim works in Radiation Safety at IBA Molecular. The company has 13 sites around the country that produce fludeoxyglucose for positron emission tomography (PET) scans—that is, radioactive sugar water for cancer diagnostics. IBA Molecular specializes in radio-isotopes preparation for use as imaging compounds for PET scans. Jim specializes in radiation safety, radioactive materials transport, related training, and radiation compliance and licensing.

At the club's May 19 meeting, Jim will talk about his job and the future of cancer diagnostics and cancer cures. He will also discuss the

Volume 55, No. 5 May 2014 You can explore our club website: http://www.novamineralclub.org/

Northern Virginia Mineral Club members,

Please join our May 19 speaker, Jim Kostka, for dinner at the Olive Garden at 6 p.m.

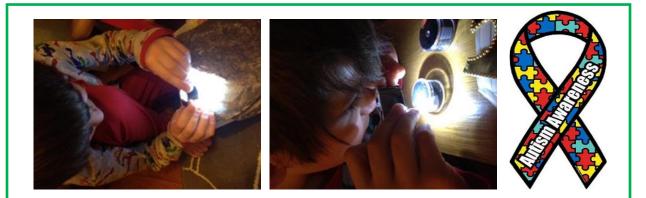
Olive Garden, Baileys Cross Roads (across from Skyline Towers), 3548 South Jefferson St. (intersecting Leesburg Pike), Falls Church, VA Phone: (703) 671-7507

Reservations are under Kathy Hrechka, Vice President, NVMC. Please RSVP to my cell at (703) 407-5393 or kshrechka@msn.com.

fundamentals of radiation and how they pertain to the mineral collector. Jim will talk about radioactive decay chains and the safety aspects of handling radioactive rocks.

Jim will also describe the wonder of radioactive minerals. Did you know that when you hold a piece of uranium in your hand, you are holding not just one element, but numerous elements on the periodic table—all in just one rock!

Jim likes to talk and enjoys this subject, so come prepared to listen and learn. There is just too much for one meeting, so Jim will present part 2 at a future club meeting. λ .



Child with autism loves his rocks!!

This 7-year-old budding geologist from Arlington has bins full of rocks and minerals under his bed! His family procured a complete rock tumbler package from NVMC member Jim Kostka, along with a lighted loupe.

The Prez Sez: Bits and Pieces

by Wayne Sukow

IS ANYBODY OUT THERE? DOES ANY-ONE CARE?

Maybe NVMC members don't read the club newsletter, because my April 2014 edition of "The Prez Sez" has not resulted in any return comments. So I might conclude that there's nobody out there—or, if there is, that nobody cares.

Well, I'll try again. "Bits and Pieces" is the centerpiece of May's "The Prez Sez."

#2 sez: We've some leftover business from the April meeting: to recognize members who received Certificates of Award at the B.E.A.C. awards breakfast at the EFMLC meeting at the end of March.

#3 sez: As I mentioned in my April 2014 comments, I keep up my membership in several other mineral clubs. It's a very nice way to keep in touch with old friends, and I sometimes get new ideas or a new outlook. As I was reading the minutes of another club's April meeting, I noticed that the club treasurer reported a balance of \$25,590 in the club's checking account and a



savings account balance of \$26,260. Wow! I plan to watch to see how they use some of that wealth. I like what the NVMC did, which was to support mineral/geology education in schools K-12.

#4 sez: I plan to appoint—an action I'm familiar with—a club official nominating committee for the NVMC in May 2014. I will begin by asking for three volunteers.

#5 sez: If you have an item that you would like the NVMC to consider for club action or discussion, please let me know and I'll

add it to the May NVMC agenda.

#6 sez: It's time for me to stop "sezzing" and place an order for some 2015 calendars I've just finished designing. The theme is Lake Superior agates. Then I need to prepare a presentation about copper replacement agates from Michigan's Keweenaw County. I love those pricey, little, and unique gems.

Your Prez ... λ

Copper replacement agates from Keweenaw County, MI.



Previous Meeting Minutes April 28, 2014

by Ti Meredith, Secretary

President Wayne Sukow called the meeting to order at 7:50 p.m. We started with the presenters first.

Presentations

Shelly Jaye, a professor of geology at Northern Virginia Community College's (NOVA's) Annandale campus, introduced Mercer Parker. Mr. Parker, a USGS intern, plans to transfer to the geology department at the College of William and Mary.

Mr. Parker said that geology has been a "life changer." "When I started in geology," he said, "I just took off." He likes to "stick his chest out" as a proud NOVA community college representative.

Professor Jaye also introduced Robin Rohrback-Schiavone. Ms. Rohrback plans to transfer to James Madison University to study igneous and metamorphic petrology.

Both students spoke proudly of their research at NOVA's Annandale campus. They work for both Professor Jaye and Professor Callan Bentley on the GigaPan M.A.G.I.C. project, thin section samples, and core samples taken from the Chesapeake Bay Impact Crater. They are interested in geophysical work and getting their work published.

After the students made their presentations, there were lots of questions. NVMC members voted to give each student a \$250 scholarship from the Fred C. Schaefermeyer Scholarship Fund (see the article below).

Business Meeting

This month, Ti Meredith provided the door prizes. Door prize winners included Logan Babcock, Linda Benedict, Barry Remer, Wayne Sukow, and John Weidner.

The club recognized past presidents in attendance, including Rick Reiber, Berry Remer, and Wayne Sukow. Certificates of appreciation are still available for pickup by volunteers at last November's GMU club show. Guests and new members included Linda and Tom Benedict and Erica Godfrey (Ti Meredith's daughter). Last meeting's minutes were approved, and there was no old business.

Conrad Smith was acknowledged for winning the Maryland state Science Olympiad together with his high school team (see the article below). He is headed to Florida to compete in the national competition, and Kathy Hrechka made a motion to award Conrad a scholarship from the Fred C. Schaefermeyer Scholarship Fund to help pay for his trip. We also passed the hat to help support Conrad and his team.

Jim Kostka announced that the NVMC is buying 150 posters for local nature centers to help teach basic geology and mineralogy, particularly to Scouts and other youth.

Kathy Hrechka attended the Science and Engineering Festival on April 27 at the Convention Center in Washington, DC. She collected free materials at the festival and brought them to the club meeting for anyone interested.

President Wayne Sukow attended this year's EFMLS conference in North Carolina as our club representative (see his report in the April newsletter). Unless someone else is interested, Wayne is willing to attend next year's EFMLS conference in March.

Sad News

Tom Taaffe announced that Marie Brown passed away due to complications related to pneumonia. Kenny Loveless made a motion to send flowers from NVMC for the funeral. The motion passed.

Marie has made many contributions to our club (see the article below). She went on numerous adventurous trips and loved to talk about fossils, minerals, and gems. Marie was 80 years old and our longest standing club member, having first joined NVMC more than 40 years ago. She was a very dedicated, active, and outstanding NVMC member, driving herself to most meetings.

Note: the next club meeting is on May 19, a week earlier than usual due to Labor Day. λ .

May 6, 2014

Dear Northern Virginia Mineral Club Members,

I was ecstatic to learn that I was the recipient of the Fred Schaefermeyer Scholarship. I am writing to thank you for this generous financial support towards my pursuit of a Bachelor of Science degree in geology here at James Madison University.

I am currently a sophomore here at JMU and plan to graduate in the spring of 2016. I was taking mineralogy fall semester of 2013 with Dr. Lance Kearns when I came up with the idea to 3D print wooden crystal models. Crystal models are used to teach the six crystal systems of minerals to geology students. The models cost thousands of dollars to make because they are wooden and have to be made to precise specifications. I had heard of 3D printing before and realized that it would be perfect for this application.

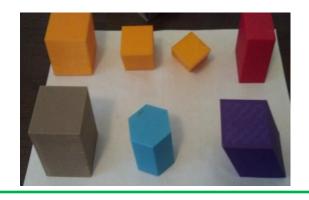
For those of you who are not familiar with 3D printing, it is an additive manufacturing process where successive layers of material are laid down to create a final object or shape. It has started to boom recently and has been used to create prosthetic limbs, bioengineer organs, and even the Aston Martin DB5 in one of the most recent James Bond movies, <u>Sky-fall</u>. I ended up learning that there was a brand-new 3D printing class here at JMU, and I decided to sign up for it in pursuit of printing the crystals. I ended up printing six different models for my final project which, for me, was a success.

By awarding me the Fred Schaefermeyer Scholarship, you have allowed me to focus on my education and worry less about outside financial distractions. Thank you for your generosity towards the community and towards students in the Earth sciences. I am not sure what career path I wish to pursue with my geology degree yet, but earning this scholarship has shown me that creativity is often rewarded and new, innovative ideas should be encouraged.

Respectfully,

Brandon C. Euker James Madison University Class of 2016

Below left: Brandon's crystal models. *Below right:* Brandon receiving his Fred C. Schaefermeyer Scholarship from Dr. Lance Kearns.





The Mineral Newsletter



Closing Weekend: Fossil Discovery at the Dinosaur Hall

by Kathy Hrechka, Vice-President

The Dinosaur Hall at the Smithsonian Museum of Natural History has been temporarily closed for re-furbishing.

On the final weekend, April 26–27, NVMC members Dr. Steve and Marga-

ret Noel took the opportunity to volunteer at the Dinosaur Hall. They demonstrated fossil discovery, using various fossil artifacts to engage museum visitors.

The halls of dinosaurs, fossil mammals, fossil plants, and Ice Age displays will remain closed until 2019. The completed renovation will feature the new Wankel *T. rex* from Montana, which has a skeleton that is 85 percent complete.

Fred C. Schaefermeyer Scholarships Awarded

Ms. Robbin Rohrback and Mr. Mercer Parker, geology students at Northern Virginia Community College in Annandale, each received a \$250 scholarship from the NVMC's Fred C. Schaefermeyer Scholarship Fund after speaking at our April 28 meeting. Robbin spoke about applying GigaPan computer technology to geology, and Mercer presented his research on the Chesapeake Bay Impact Crater. Their biographies can





be found in the April newsletter. We appreciated their presentations, and congratulations to them both!

From Robbin: Thank you, all of you, for your generosity to us. That was one of the best surprises I've ever gotten. The last time I was in school, I was an apathetic student. To find that I'm now the kind of student who gets scholarships is staggering. This isn't just money for school; this is also encouragement to continue being that kind of student. I can't say it enough: thank you! λ .

Murphy's Law: If Anything Can Go Wrong ...

Editor's note: The piece is adapted from Mineral Humor, a Website maintained by Larry Rush at <u>http://mineralhumor.homestead.com/</u>.

Laws of Weather

Five consecutive clear and sunny weekdays will be followed by rain, sleet, or snow on Saturday *and* Sunday.

Cloudless days will become overcast by the time you reach the mine access road.

The precipitation will begin when you reach the halfway point on the access road.

The intensity of precipitation will increase in direct proportion to the distance walked on the access road.

All precipitation will cease and the sun will come out the instant you return to the car. λ .

The Mineral Newsletter

NVMC's Educational Materials in Action

by Sheryl Sims



I was happy to be able to put on a mineral display at my church recently. During a fundraising dinner, I participated in the "talent" portion of the evening by showing off the display made up of the materials that Jim Kost-

ka shared with me from NVMC member Conrad Smith's Eagle Scout project.

I was briefly able to explain the cycle of rocks, minerals found in the home, and the use of minerals in many buildings around us. This tied in perfectly with the church youth group's mission trip to South Dakota, because Mount Rushmore appeared on one of the posters.

Having children from the audience come up to assist me and to pass the various mineral boxes around the room to show others was a huge hit! People enjoyed the fact that it was the typical thing that one would see at a talent show, and they loved the educational aspect.

The display piqued many people's interests. The next day at church, numerous people asked me about minerals and had questions about the club. I've invited them to visit one of our club meetings. Some of the parents were very interested and spoke about their own collections as children.

Although my knowledge of rocks and minerals is limited, the use of the charts and mineral boxes made it possible for me to pass along mineral information and my passion for our hobby to others. None of this would have been possible without Jim's generosity in providing the materials that I used and shared.

Remembering how members of our club so generously gave specimens to my daughter Amber and me, I brought samples from my collection to give my junior rockhound assistants and some pretty river rocks to pass around to the audience. Although I love collecting and satisfying my own interest in minerals, I also found deep satisfaction in creating an interest in Earth sciences, rocks, and minerals in others. This, as you know, is what our club is all about—and with the club's new educational materials, it doesn't have to be so hard! λ .

John Day Fossil Beds Bring in Millions

Thanks to Sue Marcus for the link!

John Day Fossil Beds National Monument in north-central Oregon draws more than 150,000 visitors a year,



injecting almost \$6.5 million into the local economy. Colorful rock formations at the beds preserve a world-class record of plant and animal evolution, changing climate, and past ecosystems over 40 million years. Although the 16day federal shutdown last October turned thousands of visitors away, the overall count for 2013 was more than 5 percent higher than the year before.

http://www.bendbulletin.com/localstate/environ ment/1877414-151/john-day-fossil-beds-bringin-millions

Evolutionary Link Discovered

Thanks to Kathy Hrechka for the link!

The paleontologist Neil H. Shubin recently published a book titled *Your Inner Fish* and hosted a series on PBS called "What Fish Teach Us about Us." Shubin discovered a 375-million-year-old



fossil of a fish in the Canadian Arctic. Known as the Tiktaalik, the fish is "the closest relative of all vertebrates on land today." Living in an ancient river delta, it could do pushups and walk on land. It breathed both air and water. You can find an interview with Shubin at http://www.nytimes.com/2014/04/08/science/wh at-fish-teach-us-about-us.html?emc=eta1&_r=0.



Flag Ponds Fossil Trip With Patricia Flavin, Our Infamous Gem Hunter of Fossil Sharks' Teeth

by Kathy Hrechka, Vice-President

On April 17, Patricia Flavin led an NVMCsponsored field trip to the beaches of Calvert County, MD, seeking fossil sharks' teeth. Park ranger Shannon Steele guided us to the best location for excavating sharks' teeth.

With the weather just right (sunny skies, 55 degrees, and a gentle breeze) and the tide low, we were set. We scoured the tidal area along with the dry sand in hopes of locating our treasures. We might not have found many teeth, but the camaraderie made for an enjoyable adventure on a beautiful afternoon away from the city.

Flag Ponds Nature Park is a nature preserve located in Lusby, MD, along the Chesapeake Bay. It is operated by the Calvert County Department of Natural Resources.

Millions of years ago, sharks, whales, crocodiles, and other creatures inhabited the waters and shores of the area. Sharks' teeth and other Miocene fossils can be found by sharp-eyed visitors along the park's shoreline.

If you missed the trip in April, you have another opportunity on May 14. For more information, contact Pat Flavin at 703-992-8345. A.



From left to right are Patricia Flavin, Bill Oakley, Kathy Hrechka, Bob and Carolyn Cooke, and Craig Moore. All photos: Kathy Hrechka.







The Mineral Newsletter



Science Olympiad Winner Conrad Smith: Congratulations!

Editor's note: The following is based on Linda Smith's description of her son Conrad's accomplishments in Maryland's Science Olympiad.

NVMC member Conrad Smith, a high school junior in Montgomery County's public school system, is on the team that just won the state championship in Maryland's Science Olmypiad.

Science Olympiad, begun 30 years ago, is a national competition involving displays of skills and knowledge in science, technology, engineering, and math. Teams of 15 students compete in pairs or trios in 23 different events. The events change every year; to see this year's events, go to <u>http://www.soinc.org/2014_div_c_events</u>.

Conrad's events were in rocks and minerals, geologic mapping, and elastic-launched glider. He medaled in every one. Conrad would be more than happy to talk about his experiences and show off his medals.

Conrad will be going with his team to compete in the national tournament in Orlando, FL, on May 17. To fund the trip, his team has been raising money, with a goal of \$8,000. The team has solicited donations as well as holding bake sales, car washes, and restaurant nights.

To help Conrad and his team, the NVMC voted in April to grant him a \$200 award from the Fred C. Schaefermeyer Fund.

Congratulations, Conrad—and good luck at nationals! λ .

NVMC Supports Community-Based Service Learning

Editor's note: Kathy Hrechka submitted a notice of a presentation by George Mason University professor Julia Nord, summarized below.

Julia Nord, a professor in the Department of Atmospheric, Oceanic and Earth Science at

George Mason University (GMU) in Fairfax, VA, recently gave a presentation related to her work with NVMC on the club's annual gem, mineral, and fossil show. GMU has been using the show as a form of learning for students.

Community-based service learning is a kind of experiential learning that brings together students and faculty in projects that benefit society. Since 2002, GMU has worked with NVMC to put on the annual show. The show connects GMU students to the general public as well as to nonacademic experts in mineralogy and to younger students ranging from kindergarten to high school, enhancing the educational environment for everyone.

Student service is essential for the show's success each year. The GMU show stimulates student interest in mineralogy, motivating students to apply their canonical learning in practical ways. It builds student understanding of the field and reinforces student knowledge.

The show has grown to about 1,400 visitors, including almost 600 children under 18. About half of the children who visit the show are in scouting. The show features special displays for Cub Scouts, including a set of educational materials developed by club member Conrad Smith as part of his Eagle Scout project.

This year, the partners will work with Boy Scouts of America to enable over 200 Cub Scouts to obtain their "Science Everywhere" Nova awards, a new initiative that gives Cub Scouts recognition for knowledge within the sciences. λ .



Scout Corner at the 2013 GMU show.

Wankel T. Rex: Smithsonian's New Dinosaur

by Kathy Hrechka, Vice-President



A *Tyrannosaurus rex* arrived at the Smithsonian's Museum of Natural History on April 15, shipped via FedEx from Bozeman, MT. It will become the centerpiece of a new Fossil Hall that will open in 2019.

As a museum volunteer, I had the opportunity to attend the ceremony welcoming the "Wankel *T. rex*" to the Smithsonian. The ceremony was presided over by Dr. Kirk Johnson, Sant Director of the Natural History Museum. Dr. Johnson welcomed various people, including Jack Horner, curator of paleontology at Montana State University's Museum of the Rockies; and Kathy Wankel, the rancher who first discovered the dinosaur's femur bone in 1988.

As Kathy Wankel explained, "I was just an ordinary rockhound always looking at the ground." One day, she noticed something unusual—a fossil protruding from the side of a cliff. Because the cliff was on federal property managed by the U.S. Army Corps of Engineers, Kathy reported the find to Jack Horner at the Museum of the Rockies.



One of 16 original crates containing T. rex bones during unpacking in the Rex Room at the Smithsonian.



Above: Dr. Kirk Johnson, Kathy and Tom Wankel, and a representative of the U.S. Army Corps of Engineers at the welcome ceremony for the Wankel T. rex at the Smithsonian. **Below:** Kathy Hrechka and Kathy Wankel.

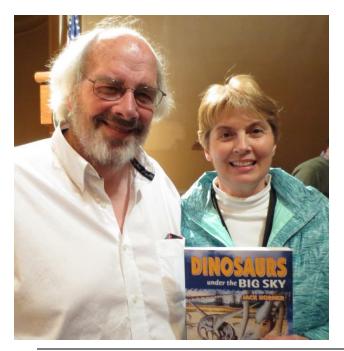
The dinosaur skeleton turned out to be 85percent complete. Named in Kathy's honor, for the past 20 years the Wankel *T. rex* has been displayed in the Museum of the Rockies just as originally found, lying on its side.

The Smithsonian will display the dinosaur upright. It will be held by specially designed braces that will allow scientists to remove individual bones for study. During renovation of the display hall, FedEx will transport the *T. rex* from Washington to Canada for the special work that needs to be done to hold the dinosaur upright.



3D-scanning and printing of a blue plastic Wankel T. rex *skull.*

At the end of April, visitors had a once-in-alifetime opportunity to see Smithsonian conservators unpack, prepare, and 3D-scan the *T. rex* bones in the "Rex Room," adjacent to the Rotunda. I got a chance to go into the Rex Room to view crates of the well-packed dinosaur bones. I also observed a 3D-scan and printing of a miniature Wankel *T. rex* skull in blue plastic. λ .





Author's note: Our family visited the Museum of the Rockies in 2005, where I purchased one of Jack Horner's books (left). Jack's book details the Hell Creek Formation in McCone County, MT, the area where the Wankel *T. rex* was discovered by Kathy Wankel. I was happy that Jack signed my book. Today I am grateful to be a volunteer at the Smithsonian, for it has provided extraordinary opportunities.

The Mineral Newsletter

"Geology 101" at Leisure World

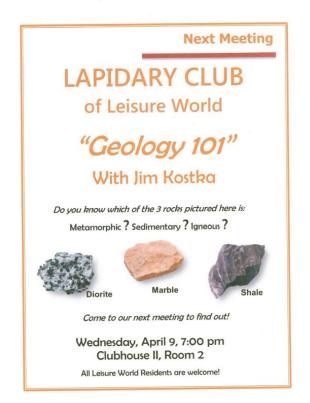
by Jim Kostka

On April 9, I had the opportunity to teach "Geology 101" at Leisure World, a retirement community in Silver Springs, MD. I was invited by the community's Lapidary Club. All residents were welcome to attend, and many took the opportunity to learn a little about geology.

Leisure World has a wonderful workshop full of lapidary machines, but the board was going to close the space due to declining club membership. Thanks to a membership drive, the club has grown to over 25 members, but few of the new members knew much about geology. So a course in "Geology 101" seemed overdue.

I brought teaching samples and gave a Power-Point presentation based on 15 posters developed by NVMC. As part of his Eagle Scout project, club member Conrad Smith had organized teaching rocks and displays in suitcases that are easily portable. His materials are designed for Cub Scout and youth instruction in basic geology. Thanks to Earl and Linda Smith for letting me borrow parts of Conrad's project!

Twenty-four energetic residents showed up, and there were lots of questions. The attendees now know the difference between a rock and a mineral as well as the three basic rock types (igneous, sedimentary, and metamorphic) and their



origins. In effect, they earned their Webelos academic pin for geology, and I left behind 20 actual Webelos pins.

If you have a PowerPoint presentation, I'm sure the Leisure World club would love to have you! It's a very vivacious group, and—unlike Cub Scouts—they didn't tear apart the mineral samples and peel the mica sheet to bits! λ .



Need Help Finding Micros!

by Ted Carver

In September, a nice Belgian couple that collects micros will be visiting. Here's what they wrote:

Harelbeke, Belgium, 13 December 2013

Dear Sir, Dear Miss,

My name is Rene Allegaert. I am a Belgian citizen. My wife Christiane and I are amateur mineral collectors with a special interest in microminerals. We will be in the U.S. in September 2014 for a visit to my brother-in-law, who lives in Hudson, Michigan. Our target is mineral prospecting in Virginia, where we plan to stay for two weeks.

We would be very grateful if you could help us set up a program. We would also appreciate it very much if somebody could guide us for a couple of days to do prospecting together.

I have many microminerals from France, Germany, Greece, and Belgium, including calcite, which I would like to give to show my gratitude for the help received.

Kind Regards,

Rene and Christiane Allegaert Coucke Rene Declercqlaan, 10 8530 Harelbeke Belgium

I don't know anything about micros. I never see them. I just hit rock with big hammer, make big noise, keep knuckles bandaged.

So where are these miniscule crystalline formations found? In the interest of international relations, let's compile a list of sites in the area. Anyone want to volunteer as a guide?



This is your PROUD PATRIOTIC DUTY! (Or possibly not; your call.)

The couple is primarily interested in the following sciencey things: phosphates, arsenates, wolframates, va-

nadinates, chromates, titanates, and microminerals containing zirconium, beryllium, and cobalt. So, are you a proud U.S. of A. type of person? Show us that ole can-do spirit and show these foreigners some bitchin' micros!

Thanks, and please send any responses you might have to <u>jtcarve@msn.com</u>. λ .

Looking for Good Cutting Oil

by Jim Kostka

Estate sales of minerals and related stuff often include old cutting oil. At an estate sale, if I'm lucky, I can find a partially full 5-gallon con-



tainer of Almag Cutting Oil, originally manufactured by Texaco.

Now that Texaco has merged with Chevron, I can't find new Almag oil anymore. I have old leftover Almag in my garage (Almag mists a lot, so not a single tool in my garage is rusted), but when I filled my new 18-inch saw, I noticed that I am now on the verge of running out of oil.

One potential replacement is laxative-grade mineral oil from Walmart Pharmacy, which costs as little as \$1.49 per pint. It keeps your hands soft—and keeps you regular, too!

I hear that food-grade mineral oil is good and low misting. This is the same kind of oil used at McDonalds to lubricate the milkshake machine. Southern States cooperative has a mineral oil used for veterinary purposes for less than \$20 per gallon. One person I know mixes 4 parts veterinary oil with 1 part cutting oil.

Another person uses diesel fuel out on his back porch. But I'm not sure if I really want to go that route!

Chevron offers a replacement for Almag oil called Bright-Cut NHG Metal Working Fluid (part number 233935). Another Chevron product is Superla #5 (part number 231013) or Superla #7. You can find Chevron product distributors at http://www.chevronlubricants.com.

If anyone has any other good ideas for cutting oils, please e-mail me at <u>jkostka@juno.com</u>. \geq

The Secret is Out! Wildacres—The Best Benefit from Your EFMLS Membership!

by Gerry Cox, EFMLS Secretary

When my husband Walter and I joined the NVMC, the club president, Wayne Sukow, first told us about Wildacres. My husband is very introverted and had to be persuaded to tag along with me for the first session. Once there, in self-defense, he took the geology class.

In our almost 49 years of marriage, Walter has dutifully accompanied me into quarries, antimony mines, and a salt mine in Poland. Once we crossed the continental divide in Colorado looking at gold mines. I was driving and looking at mines dotting the hillsides while Walter was white with fear, looking over the side of the road at the thousand-plus-foot drop.

I would say, "Look at that mine!"

He would reply, "Look at the road!"

We searched the deserts of the Southwest and toured more caverns than Walter cares to remember. Seeing that I would not give up on my interest in minerals, he decided to give in and get educated at Wildacres.

Once at Wildacres, Walter fell in love with the mountain environment, the wonderful campus, and the EFMLS members who shared our first experience. At the end of the week, after carving a soapstone turtle, he said, "Wildacres was the cheapest and most fun vacation we ever had."



Chilling out on the Wildacres porch.



View of Mount Rogers from the Wildacres porch. All photos: Gerry Cox.

Now Walter anticipates each session with enthusiasm, counting the days. Between us, we have learned:

- creating and casting silver using the lost wax process;
- silversmithing;
- creating cabochons;
- carving soapstone and scrimshaw;
- faceting stones;
- identifying gems; and
- photographing minerals, jewelry, and rock formations.

And we have not begun to exhaust the learning options. We still look forward to glass etching, pewter fabrication, fused-glass making, wire wrapping, chainmaille artistry, bead weaving, intarsia, and more.

Each EFMLS session at Wildacres features a keynote speaker who presents multiple lectures on topics related to his or her field of expertise. We have learned about diamond mining in South Africa, the unique geology associated with crystal formation in pegmatites, historic jewelry, pearls, Chinese minerals and fossils, the gem mines in Brazil and Colombia, and the photography of crystals and minerals, to mention only a few topics.

On our free day, scheduled in the middle of the week, we usually explore the many mineral stores in nearby Spruce Pines, go hunting for emeralds or aquamarines at local mines, go on a



Wildacres photography class.

special field trip to collect in mine piles, pan for gold, or pursue another geological interest. Workshop registrants can hike the trails at Lynn Falls and see the exposed rock left from the proto-African continental plate when it receded from the proto-North American plate during formation of the Atlantic Ocean.

Crabtree Falls is a less challenging hike, just south of Wildacres along the beautiful Blue Ridge Parkway. A short trip to Mount Mitchell, the tallest mountain east of the Mississippi River, provides breathtaking views of the Blue Ridge. Farther south is Ashland, with the wonderful Biltmore Estate. Or you can simply wander the many nature trails on the Wildacres compound.

On the afternoon of the free day, everyone gathers for a tailgate party. Teachers and students sell and/or swap their finds and creations to others at the Wildacres retreat.

At the traditional auction, attendees contribute items and then bid on donated items. But the auction is more comedy than serious auctioneering; I have even been known to bid on the item I brought because I liked the specimen so much. The proceeds go to the EFMLS to help defray the cost of Wildacres. The Blumenthal Foundation also subsidizes part of the cost.

As a result, each participant pays around \$380 for one week of room, board, and classes. In addition, most classes have costs for materials, depending on the class.

If you rise early, you can meet with the other early risers in the club room over a cup of coffee. Or you can take a short stroll to the deck of the auditorium to enjoy breathtaking views of the sunrise over Table Mountain.

Nature walks let you see wild iris; wild orchids, including the endangered trillium (don't pick it, it is against the law); and rhododendron, mountain laurel, and other flowers. Rafters of wild turkeys stroll across the Blue Ridge Parkway, and foxes, flying squirrels, and many birds (including the ruby-throated hummingbird) inhabit the area.

The EFMLS contingent shares the campus with other groups. Each fall, mycologists visit Wildacres to collect fungi in the area. Last time we were there, dulcimer players were meeting at Wildacres. They joined us for an impromptu jam session in the cafe after the evening lecture. What a blast!

Many members of EFMLS say they do not go to Wildacres because they do not feel artistic or do not want to work on the artistic side of our hobby. Classes always include an offering for those who believe they are not artistically inclined.

After seeing the products of those with no previous experience, I begin to believe that everyone has an artistic skill just waiting to be released through a Wildacres experience. I never thought that Walter could produce such beautiful scrimshaw with absolutely no experience and no previous indication of an artistic inclination.

Are you beginning to get excited? You should! Why not sign up for an adventure? I cannot think of a better way for a rockhound to spend a week's vacation.

So come unlock the hidden artist inside you! Join me and many others at the next Wildacres session on September 1–7. Just go to <u>http://www.efmls-wildacres.org</u> to register and

2

find more details.



Scrimshaw created at Wildacres.

Tremolite

by Hutch Brown, Editor

My parents left my brother a small rock collection, including the mineral shown here. They didn't keep good records, so I had no idea what the mineral might be.

So I brought it to an NVMC meeting and got lots of good hints as to what it might be. I came away thinking it might be green quartz.

My son Alex (14 years old, with his own mineral collection) tested the rock and found a hardness of about 5, ruling out quartz. The mineral made a white streak, and it didn't react to hydrochloric acid. It seemed to have a waxy or silky luster, reminiscent of talc.

Using these clues, I sifted through the little bits of paper my parents had left with their rocks. Most of the names I could rule out right away, but some I had to look up online.

One slip of paper said "chrome tremolite"—and, lo and behold, I found a photo of green tremolite online that looked just like our specimen!

According to Wikipedia, tremolite is a member of the amphibole group of silicate minerals and has a hardness of 5 to 6. It is rich in magnesium, with a chemical makeup of $Ca_2Mg_5Si_8O_{22}(OH)_2$.

Named in 1789 by Johann Georg Albrecht Höpfner for the Tremola Valley in Switzerland, tremolite results from contact metamorphism of sedimentary rock rich in dolomite and quartz. At higher temperatures, it becomes a mineral called diopside, green in color, sometimes cut into gemstones. Associated minerals include talc, calcite, and dolomite.

Iron can replace magnesium in tremolite, making it into actinolite and ferro-actinolite. Some forms of both tremolite and actinolite are asbestiform, strong and fibrous. Long-term inhalation of asbostos fibers can cause cancer—but that's not the case with our harmless rock.

Our chrome tremolite, according to my parents' notes, came from Balmat, NY. Tremolite comes in various colors, but chrome gives it an emerald hue. λ



Chrome tremolite from Balmat, NY.

Remembering Marie Brown

by Sheryl E. Sims

Editor's note: The article is adapted from the latest issue of Mineral Minutes (newsletter of the Mineralogical Society of the District of Columbia).

Sadly, Marie Brown passed away on Monday, April 28, after an extended illness. Marie was a long-time NVMC member, having joined the club around 1964. Today, she is missed.



Marie was a dedicated club member and a very sweet person. Possessed of a great lapidary talent, Marie was known as one of the club's "Lapidary Ladies." Karen Lewis and Lois Dowd completed the magnificent trio.

This tribute is based on an article that I wrote about Marie a few years ago for the NVMC newsletter.

Via a telephone interview, Marie told me that she joined the mineral club because of her lapidary interest. While stationed in Germany, Marie introduced lapidary work as a craft project to Cub Scouts. This was a result of her having seen a case of pretty jewelry while on post one day. She asked about it and learned that some GIs had made the pieces from stones.

One of the GIs offered to help Marie learn how to use the lapidary equipment. Even though she thought that it was not something she could learn to do, she did in fact learn! Before she knew it, she had made a bracelet! With that, she was hooked!

Later on, Marie tried to find out about polishing stones, but no one knew anything it. Fortunately, she found a small blurb in a local paper about the NVMC. She got in touch with a club member and attended her very first meeting, at the time in a local Baptist church. That first meeting featured a presentation on microminerals.

Marie said that there were only about 10 club members at the that time. And, believe it or not, dues were about \$1 per year.

Because there were so few members, it wasn't long before she was asked to serve as club treasurer. Happy to do her part, she served for several terms. She also served as secretary. Marie was also the club historian, and she served several times as a poetry judge for the EFMLS.

Marie taught scrimshaw at Wildacres and even served as an assistant field trip chairman. In addition, Marie found time to join the Gem and Mineral Hunters in Prince William County.

The NVMC member who started the club was eventually transferred to New Mexico. Club members could no longer meet at the Baptist church, so they met instead at the Annandale library. They continued to meet there for years. As the club continued to grow, it needed a larger space, and it began meeting at the Coca Cola building at Baileys Crossroads.

After a long while, a member joined the club who worked for the Arlington Park Association. As a result, the club was able to meet at Long Branch Nature Center, where it has met ever since. Over the years, the club's mineral shows were held at Tyson's Corner, the National Wildlife Center, and finally at George Mason University.

Marie and former member Jenny Smith (who now lives in Texas) started doing school programs and enjoyed introducing the world of minerals to students. They wanted to educate kids and spread the word about minerals, so they started giving presentations to first graders. Their program spread throughout Alexandria and Arlington County schools and even to a few Fairfax County classrooms. Eventually, they extended the program to fourth graders and also did programs for the Prince William County Parks Association. In addition, they shared their knowledge of minerals with schools on career day.

As time passed, Marie wanted to learn more about rocks and minerals in order to continue her lapidary work. Several club members had rock shops. One was Jim Leggett, who taught faceting at Wildacres and gave classes in his home. Fred Schaefermeyer—no stranger to NVMC—promoted minerals, so Marie began paying more attention to minerals.

As many of us know, Marie did indeed learn a great deal about minerals over the years. As her knowledge grew, so did her collection. I still remember admiring her beautiful lapidary work and the fun time that my daughter Amber and I had at a mineral yard sale that Marie held some years ago.

I will miss Marie. She was a real jewel! λ



Upcoming Events (of interest in the mid-Atlantic region)

May

- 14: Field trip, 1–4:30 p.m., to Flag Ponds Nature Center Beach, Calvert County, MD; best beach in the country for Miocene megasharks' teeth; \$35 for total group, including educational tour; for info about Flag Ponds, go to <u>http://www.calvertparks.org/Parks/FlagPonds/</u> <u>FPhome.htm</u>; for more information on the field trip, contact Pat Flavin at 703-992-8345
- **16–18:** Smithsonian Magazine presents: The Future Is Here—Science Meets Science Fiction: Imagination, Inspiration, and Invention; featuring scientists, Star Trek stars, and others; Ronald Reagan Building, Washington, DC; for more information and ticket sales, go to http://www.smithsonian.com/future
- 17–18: 46th Annual World of Gems and Minerals: Gemstone, Jewelry, Bead, Mineral and Fossil Show; Berks Mineralogical Society, Leesport Farmer's Market, Route 61, Leesport, PA
- 24: 25th Annual Show; Chesapeake Gem and Mineral Club; Sat. 10–4; admission free; Ruhl Armory, east side of York Road, Towson, MD http://www.chesapeakegemandmineral.org/

June

7: 62nd Semi-Annual Mineralfest; Pennsylvania Earth Sciences Association; Macungie Memorial Park, Poplar Street, Macungie, PA

July

11–13: 2014 AFMS/RMFMS Convention and Show; Central Park Hall, Tulsa Expo Square, 21st and Yale, Tulsa, OK; Theme: Rocks and Gems of the Indian Territory; Fri/Sat 9–6, Sun 10–5; \$6 for 1-day pass, \$10 for 2/3-day pass, children 12 and under free; Finis Riggs, 918-587-4400, Lriggs1331@cox.net

August

2: Morris Museum Mineralogical Society, 20th Annual Gem, Mineral, and Fossil Sale; Delbarton School, Morristown, NJ; contact John Sanfacon, 201-787-0545.

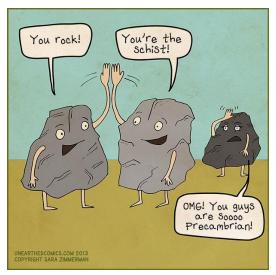
- 8–10: East Coast Gem, Mineral, and Fossil Show (commercial show); Better Living Center, Eastern States Exposition, 1305 Memorial Avenue, West Springfield, MA <u>http://www.mzexpos.com</u>
- **15–17:** Gem Miners Jubilee; Fri. 10–6, Sat. 10– 6, Sun 10–4; admission: \$6; Lebanon Expo Center, Lebanon, PA <u>http://www.gem-show.com</u>

September

- 1–7: EFMLS workshops at Wildacres Geology Retreat; Fall classes, tuition \$390 www.amfed.org/efmls
- **13–14:** 49th Annual Gem, Mineral, Jewelry Show; Central PA Rock & Mineral Club; Zembo Shrine, 3rd and Division Streets, Harrisburg, PA; <u>http://rockandmineral.org</u>
- **27–28:** 50th Annual Atlantic Coast Gem, Mineral, & Jewelry Show; Gem Cutters Guild of Baltimore; Howard County Fairgrounds, I-70 at MD 32; <u>www.gemcuttersguild.com</u>

November

- 1–2: 45th Gemarama; Tuscarora Lapidary Society; CFS, The School at Church Farm, 1001
 E. Lincoln Hwy, Exton, PA 19431
 http://www.lapidary.org
- 22–23: Northern Virginia Mineral Club Annual Show; George Mason University; Braddock Rd. and Rte. 123, Fairfax, VA



Source: Sara Zimmerman, Unearthedcomics.com, 2013.



PLEASE VISIT OUR WEBSITE AT: http://www.novamineralclub

2014 Club Officers President: Wayne Sukow d8olite@fastmail.fm Vice-President: Kathy Hrechka kshrechka@msn.com Co-Secretary: Ti Meredith ti.meredith@aol.com Co-Secretary: Laurie Steiger steigerlm@mail.nih.gov Co-Treasurer: Kenny Loveless kenny53@verizon.net Co-Treasurer: Rick Reiber mathfun34@yahoo.com Field Trip Chair: Ted Carver jtcarve@msn.com Webmaster: Casper Voogt webmaster@novamineralclub.org Communications: Jim Kostka jkostka@juno.com Editor: Hutch Brown hutchbrown41@gmail.com Show Co-Chair: Tom Taaffe rockcllctr@aol.com Show Co-Chair: Jim Kostka jkostka@juno.com Greeter/Door Prizes: Ti Meredith ti.meredith@aol.com

The Northern Virginia Mineral Club

You can send your newsletter articles to:

hutchbrown41@gmail.com

Visitors are always welcome at our club meetings!

RENEW YOUR MEMBERSHIP!

SEND YOUR DUES TO: Kenny Loveless, Treasurer, NVMC PO Box 10085, Manassas, VA 20108

OR

Bring your dues to the next meeting.

Purpose: To promote and encourage interest in and learning about geology, mineralogy, lapidary arts, and related sciences. The club is a member of the Eastern Federation of Mineralogical and Lapidary Societies (EFMLS, http://www.amfed.org/efmls) and the American Federation of Mineralogical Societies (AFMS—at http://www. amfed. org).

Dues: Due by January 1 of each year; \$15 individual, \$20 family, \$6 junior (under 16, sponsored by an adult member).

Meetings: Typically 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. (No meeting in July or August.)

*Changes are announced in the newsletter; we follow the snow schedule of Arlington County schools.